Village of Mukwonago

Notice of Meeting and Agenda

PLAN COMMISSION MEETING
Tuesday, May 13, 2025

Time: **6:30 pm**
Place: **Mukwonago Municipal Building, Board Room, 440 River Crest Ct**

1. Call to Order

2. Roll Call

3. Comments from the Public

Please be advised, per Wisconsin Statute Sec. 19.84(2), information and comment will be received from the public by the Plan Commission. The Public Comment Session is granted to the public at the start of each Plan Commission meeting. The Public Comment Session shall last no longer than fifteen (15) minutes and individual presentations are limited to three (3) minutes per speaker. However, these time limits may be extended at the discretion of the Chief Presiding Officer. The Plan Commission may not respond to or have any discussion on information received during the public comment session unless it is placed upon the Agenda for a subsequent meeting. Public comments should be addressed to the Plan Commission as a body. Presentations shall not deal in personalities personal attacks on members of the Plan Commission, the applicant for any project or Village Employees. Comments shall not be used to engage others in a debate in this forum. All comments, questions and concerns should be presented in a respectful professional manner. Any questions to an individual member of the Plan Commission or Staff will be deemed out of order by the Presiding Officer.

4. Approval of Minutes

4.1 Discussion and possible approval of Planning Commission minutes from April 8, 2025
20250408 Minutes draft.docx

5. Public Hearings

All persons interested in making comments about any of the public hearing items will be heard. Formal petitions and written comments regarding any of the public hearing items may be submitted tonight. During the public hearing(s), if you wish to be heard, the Plan Commission asks that you begin by stating your name and address, speak for no more than three minutes and attempt to avoid duplication. Each person speaking at the public hearing must sign the Public Hearing Appearance sign-in sheet before speaking. The sign-in sheet is available on the table located at the back of the room.

5.1 Public hearing on Conditional Use Permit for an expansion and modifications to Park View Middle School, located at 930 N Rochester St, Parcel MUKV1964992, applicant (Mukwonago Area School District)
Public Hearing Notice-Conditional Use-Park View Middle School.docx

6. New Business

Discussion and Possible Action on the Following Items

6.1 Discussion and possible recommendation to approve **Resolution 2025-09** for a Conditional Use Permit for an expansion and modifications to Park View Middle School, located at 930 N Rochester St, Parcel MUKV1964992, applicant (Mukwonago Area School District)

Staff Report-20250507-Park View Middle School Expansion-SPAR and CU.pdf
RESOLUTION 2025-09 - Park View Middle School Expansion CU.docx
1 CUP App Signed_25 0402.pdf
2 SPAR App Sign_25 0402.pdf
3 Plan of Operation_25 0409.pdf
4 VILLAGE SUBMITTAL REV_RED_DWG_25 0507.pdf
5 Mukwonago Park View MS Site Lighting Fixture Cutsheets.pdf
6 Emergency Access Exhibits - 04-03-2025.pdf
7 Preliminary SWMP Report - 04-03-2025.pdf

6.2 Discussion and possible approval **PC Resolution 2025-10** for a Site Plan and Architectural Review (SPAR) for the Park View Middle School, located at 930 N Rochester St, Parcel MUKV1964992, applicant (Mukwonago Area School District)

Staff Report-20250507-Park View Middle School Expansion-SPAR and CU.pdf
PC RESOLUTION 2025-10 - Park View Middle School Expansion SPAR.docx

6.3 Discussion and possible approval of **PC Resolution 2025-09** for a Site Plan and Architectural Review (SPAR) for the Historical Society Log Cabin Trading Post located at 103 Main Street, Parcel MUKV1976100

Staff Report-20250505-Historical Society Log Cabin Trading Post-SPAR.pdf
PC RESOLUTION 2025-09 - Historical Society Log Cabin Trading Post-SPAR.docx

6.4 Discussion and possible approval of **PC-Resolution 2025-11** for a Site Plan and Architectural Review (SPAR) for a revised site plan approval for Tsunami Car Wash, Parcel MUKV 2013-995-001

Staff Report-20250507-Tsunami Car Wash-Revised SPAR.pdf
PC RESOLUTION 2025-11 - Tsunami Car Wash Revised SPAR
1 SPAR App-Tsunami executed.pdf
2 Tsunami Carwash Mukwonago Resubmittal Drawings-20250422.pdf
3 EMERGENCY VEHICLE TRACKING (4-7-2025).pdf
4 SIGNED SWMP (4-11-25).pdf

6.5 Discussion and review of a conceptual plan for St James Church for possible rezoning and improvements.

Staff Report-20250506-St. James Concept Review.pdf

6.6 Status update on Zoning Code

7. Adjournment

Membership:

Eric Brill, John Meiners, Karl Kettner, Tim Rutenbeck, Jason Wamser, Fred Winchowky, VACANT SEAT, and Village Planner (Advisory)

It is possible that a quorum of, members of other governmental bodies of the municipality may be in attendance at the above stated meeting to gather information. No action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice. Please note, upon reasonable notice, efforts will be made to accommodate the needs of individuals with disabilities through appropriate aids and services. For additional information or to request this service, contact the Municipal Clerk's Office, (262) 363-6420.

MINUTES OF THE PLAN COMMISSION MEETING
Tuesday, April 8, 2025

Time: **6:30pm**
Place: **Mukwonago Municipal Building/Boar Room, 440 River Crest Court, Mukwonago, WI 53149**

Call to Order
Meeting Called to order by President Winchowky at 6:30pm

Roll Call
Commissioners present:
Fred Winchowky, Village President
Eric Brill
Karl Kettner
John Meiners
Tim Rutenbeck
Jason Wamser

Also present:
Diana Dykstra, Clerk/ Treasurer/ Administrator
Peter Gesch, Village Planner
Shay Zerfas, Deputy Clerk/ Treasurer

Comments from the Public
No Comments
Closed 6:31pm

Approval of Minutes
Meiners/Rutenbeck motion to approve minutes from March 11, 2025, regular meeting. Unanimously carried.

Public Hearings
Public hearing on Conditional Use Permit for an expansion and modifications to the Mukwonago Police Station, located at 625 S. Rochester Street, Parcel MUKV1976936 and MUKV1976933, applicant (Village of Mukwonago).

No Comments
Closed 6:35pm

New Business
Discussion and possible recommendation to approve Resolution 2025-05 Village of Mukwonago Order Granting a Conditional Use and Prescribing Conditions for a Public Safety Facility (Village of Mukwonago Police Department) on Parcel MUKV1976936, Mukwonago, WI, applicant (Village of Mukwonago)

Planner Gesch gave an overview of the project.
Public Works Director Bittner explained why village is applying for conditional use permit. Gave overview of addition and work to be done and no trees will be removed and that the Veteran Memorial is going to be moved but location and details of memorials new location are still being worked out.

DRAFT

Meiners/Brill motioned to recommend to Village Board to approve **Resolution 2025-05** Village of Mukwonago Order Granting a Conditional Use and Prescribing Conditions for a Public Safety Facility.
Unanimously Carried.

Discussion and possible approval of PC Resolution 2025-07 for a Site Plan and Architectural Review for the Mukwonago Police Station Garage Expansion, Parcel MUKV 1976-936 and MUKV 976-933, applicant (Village of Mukwonago)

Planner Gesch explained that this is the site plan related to Resolution 2025-05 that they just discussed.

Meiners/Kettner motion to approve **PC-Resolution 2025-07** for a Site Plan and Architectural Review for the Mukwonago Police Station Garage Expansion.
Unanimously Carried.

Discussion and possible approval of PC Resolution 2025-08 a Site Plan and Architectural Review for Journey Salon, Located at the West/Southwest Corner of CTH ES and Phantom Woods Road. Parcel MUKV 2011-991, applicant (Ford Construction

Planner Gesch explained the project and that this location is currently a heavily wooded area and that a current site survey plan is being developed regarding the removal and location of trees. The site plan needs corrected setbacks to meet the site plan zoning requirements. Currently working on their storm water requirements. Recommend landscaping or buffer of some kind on the west side of the property because of removal of large number of trees. That this properties driveway goes down to Phantom Woods Rd and sees minimal work for blending into the village right away. The utilities director asked for a small, dedicated easement on the south corner of the property for sanitary lateral access.
Mike Ford with Ford Construction for Journey Salon explained roofing and siding choices. Explained that buffer/screen regarding the west side of the property they are adding 10 evergreen trees and preserving 7 preexisting trees. The land survey was just completed and waiting for a review from the forester regarding tree removal.
President Winchowky addressed access being available for the continuation of the multiuse trail along Cty ES and sidewalks along side Phantom Woods Rd in the future and that land/space is available. Phantom Woods Rd is scheduled for work in the future and there will be no ditch but a curb into their property.
All Board Members agreed to that the East side of the building needs to have 3 windows equally spaced to match other side of building.
Karen Wember W296S10845 Phantom Woods Rd is the neighbor behind property on Phantom Wood Rd and has concerns regarding the removal of trees and pond. She is concerned about privacy if trees are removed and not replaced and the bugs from the pond.
Mike Ford for Ford Construction explained that trees/shrubs would be planned along lot line and that the pond is a “dry” pond and there for overflow/drainage.

Meiners/Brill motioned to approve **PC-Resolution 2025-08** for a Site Plan and Architectural Review for Journey Salon, Located at the West/Southwest Corner of CTH ES and Phantom Woods Road, with addition of 2 windows for total of 3 on East side. Unanimously Carried

DRAFT

Discussion and possible recommendation to approve Resolution 2025-06 approving a certified survey map for the property located at S103W30209 Lakeside Drive in the Town of Mukwonago, Waukesha County

Planner Gesch gave an overview of the survey map.

Meiners/Brill motioned to approve **Resolution 2025-06** for approving a certified survey map for the property located at S103W30209 Lakeside Drive in the Town of Mukwonago, Waukesha County.
Unanimously Carried.

Status Update regarding Zoning Code

Building Inspector Rutenbeck provided an overview and that is still a work in progress.

Adjournment
Meeting adjourned at 7:21 pm

Respectfully Submitted,
Shay Zerfas
Deputy Clerk/Treasurer

DRAFT

NOTICE OF PUBLIC HEARING

VILLAGE OF MUKWONAGO PLAN COMMISSION

The Village of Mukwonago Plan Commission will conduct a public hearing on Tuesday, May 13, 2025, for the following:

> Conditional Use Permit for an expansion and modifications to Park View Middle School, located at 930 N Rochester St, Parcel MUKV1964992, applicant (Mukwonago Area School District).

The meeting will be held in the Board Room of the Village Hall located at 440 River Crest Court, Mukwonago, Waukesha and Walworth Counties. The meeting starts at 6:30PM and the public hearing will be conducted in the order listed on the meeting agenda.

For information regarding this public hearing, contact the Village Planner at planner@villageofmukwonago.gov or 262-363-6420 during regular office hours. All interested parties will be heard.

Notice was sent to property owners within 250 feet of the property and surrounding municipality Clerks within 1000 feet of the Village of Mukwonago boundary.

Upon reasonable notice, efforts will be made to accommodate the needs of individuals with disabilities through appropriate aids and services. For additional information or to request this service, please contact Shay Zerfas, at 262-363-6420.

> VILLAGE OF MUKWONAGO
> Shay Zerfas, Deputy Clerk-Treasurer

Legal notice to be published in the *Waukesha Freeman* on April 29, 2025 and May 6, 2025.

PLAN COMMISSION STAFF REPORT

TO: Village of Mukwonago Plan Commission

FROM: Peter Gesch, P.E., Ruekert & Mielke, Inc.

REPORT DATE: May 7, 2025

MEETING DATE: May 13, 2025, 6:30 P.M.

SUBJECT: Park View Middle School – Site Plan & Architectural Review & Conditional Use

BASIC INFORMATION	
Project:	Park View Middle School Expansion
Applicant:	Mukwonago Area School District
Consulting Engineer:	Kapur & Associates, Inc.
Consulting Architect:	Bray Architects
Request:	Site Plan & Architectural Review & Conditional Use
Staff Recommendation:	Approve with Conditions

PARCEL DATA/CHARACTERISTICS	
Tax Key:	MUKV1964992
Acreage:	36.88 Acres
Current Use:	Institutional – Middle School
Proposed Use:	Institutional – Middle School
Reason for Request:	Expansion to Existing Middle School
Land Use Classification:	Public/Semi-Public – Institutional Use
Zoning Classification:	P-1 – Public and Semipublic District

Project Summary & Overview

The Mukwonago Area School District is planning an expansion of Park View Middle School located at 930 N Rochester St. The project entails the demolition of much of the existing Park View middle school building, renovation of the most recent portion of the existing building and a major addition to the East of the existing building. The building expansion will bring the footprint to approximately 120,000 square feet and will be comprised of one-story, two-story, and three-story buildings.

The scope of site development will include new drive lanes and parking surrounding the remaining existing building and addition.

In addition to the site plan and architectural review, the modifications and expansion of the current use requires a re-application for a conditional use permit. Middle schools are a conditional use in the P-1 District provided that they have more than 50 on-site students and are located on a parcel larger than 2 acres and the principal building is more than 50-FT from any lot line, all of which are true.

The conditional use permit in the P-1 District shall take into account any special considerations or conditions or setbacks, height restrictions, lot coverage, etc. that are historically outlined in other zoning districts. The height of the proposed building is similar to the recent MASD High School expansion. All paving and parking lots are located beyond 50-FT from any lot line, except along CTH NN where a 25-FT paving setback was implemented – this mimics the high school parking lot along CTH NN.

Access coordination and improvements on CTH NN and STH 83 are being coordinated with Waukesha County and WisDOT through a TIA that was completed by the applicant. Improvements will address comments made for requirements from WisDOT and Waukesha County.

Conditional Use Request

Attached to this staff report is the justification questions for a Conditional Use Permit that have been answered by the applicant. The Planning Commission shall take these into consideration when making their decisions.

Conditional Use Process / Findings

The established review procedures are that the Plan Commission shall hold a public hearing and make a recommendation to the Village Board whom makes the final decision.

Following the close of the public hearing, the Plan Commission may recommend (1) approval, (2) approval with conditions, or (3) denial.

If approval is recommended, the Plan Commission can recommend conditions deemed necessary to protect public health, safety, and welfare. The Plan Commission, in passing on the matter, will need to make the following determinations consistent with Section 100-354 of Mukwonago's Zoning Regulations:

1. The establishment, maintenance or operation of the conditional use will not be detrimental to or endanger the public health, safety or welfare of the Village.
2. The uses, values and enjoyment of other property in the surrounding neighborhood that are already permitted shall be, in no foreseeable manner, substantially impaired or diminished by the establishment, maintenance or operation of the conditional use.
3. The establishment, maintenance or operation of the conditional use is compatible with surrounding properties, whether in the same or different zoning districts. In making this determination, the Plan Commission and Village Board must determine whether the petitioner has demonstrated there are no adverse effects on surrounding properties or that potentially adverse effects have been eliminated or reduced to an acceptable level. Approaches that could be employed to mitigate potentially adverse effects will depend on the particular circumstances but may include:
    a. Adjusting the location of the use, or parts thereof, on the subject property;
    b. Limiting hours of operation;
    c. Limiting the size or scope of the use, or parts thereof;
    d. Controlling how the use is managed on an ongoing basis;

e. Providing additional landscaping;
f. Providing additional screening; and
g. Limiting operations conducted out-of-doors, if otherwise allowed

4. The establishment of the conditional use will not impede the normal and ordinary development and improvement of the surrounding property for uses permitted within the district and/or which are consistent with the standards in the Comprehensive Plan.
5. Adequate utilities, access roads, drainage and other necessary site improvements have been or are being made to accommodate the use.
6. Adequate measures have been taken or will be taken providing ingress and egress to minimize traffic congestion on public streets so as not to diminish the level of service of any intersection which is impacted by traffic arising from the conditional use.

In addition, the property owner / tenant has shown compliance with the requirements set forth in the Village's zoning regulations for specified use.

The Village Board will carefully review the recommendation of the Plan Commission and concurs with the Plan Commission's findings set forth above, provided the conditional use is operated pursuant to the conditions of approval set forth in this order.

These findings are incorporated into the draft conditional use order which is attached.

The Plan Commission shall approve a conditional use application if the terms and conditions of the zoning regulations are met. However, in the event the terms and conditions of the ordinance are not consented to and complied with by the applicant, the Commission may deny the application. In addition, the Commission may deny the application or place conditions on it if substantial evidence, as defined in §62.23(7) Wis. Stats. is presented. That evidence must demonstrate the inability of the applicant to comply with or meet the conditions of the zoning regulations or that the conditions to be applied by the Plan Commission are necessary to protect the public health, safety or welfare of the community based upon the presentation of substantial evidence. Potential motion for approval to Recommend to the Village Board approval of the project as a conditional use as set forth in the attached conditional use order as drafted, provided the Village Attorney approves the final form of the conditional use order.

Staff Review

Engineering:	See attached comment letter.
Public Works	See attached comment letter.
Utilities	See attached comment letter.
Police	See attached comment letter.
Fire	See attached comment letter.
Building Inspection	See attached comment letter.
Planning	See attached comment letter.

Recommended Action

Conditional Use Permit
Staff recommends the Planning Commission recommend to the Village Board approval of a conditional use permit as set forth in the provided resolution.

To – Grant a Conditional Use Permit for a Middle School with the following on-going conditions deemed necessary to protect the health, safety, and welfare:

1. Ongoing conditions of approval. The following conditions shall constitute an ongoing obligation:
    a. Any modifications to the site, buildings, site improvements, shall require the conditional use application being updated.
    b. 25-FT pavement setback shall be maintained on all perimeters.
    c. Max Principal Structure height shall not exceed 46-FT.
2. The following conditions are also true and are consistent with Section 100-354 of Mukwonago's zoning regulations:
    a. The establishment, maintenance or operation of the conditional use will not be detrimental to or endanger the public health, safety or welfare of the Village.
    b. The uses, values and enjoyment of other property in the surrounding neighborhood that are already permitted shall be, in no foreseeable manner, substantially impaired or diminished by the establishment, maintenance or operation of the conditional use.
    c. The establishment, maintenance or operation of the conditional use is compatible with surrounding properties, whether in the same or different zoning districts.
    d. The establishment of the conditional use will not impede the normal and ordinary development and improvement of the surrounding property for uses permitted within the district and/or which are consistent with the standards in the Comprehensive Plan.
    e. Adequate utilities, access roads, drainage and other necessary site improvements have been or are being made to accommodate the use.
    a. Adequate measures have been taken or will be taken providing ingress and egress to minimize traffic congestion on public streets so as not to diminish the level of service of any intersection which is impacted by traffic arising from the conditional use.

Site Plan and Architectural Review
Staff Recommends the Planning Commission Approve a resolution for the Site Plan and Architectural Review, as set forth in the attached resolution with the included conditions.

Attachments

1. Staff review comments
2. Application and Development Information
3. Plans and Site Drawings

May 1, 2025

Mr. Chris Eger
Bray Architects
829 S 1st Street
Milwaukee, WI 53204

Re: Park View Middle School
Staff Comments

Dear Mr. Eger:

We have reviewed the Plan Commission submittal documents submitted for review on April 2, 2025. The Plan Commission set is dated April 2, 2025 and the storm water management plan is dated April 3, 2025. We offer the following comments:

1. The walkway/emergency access route on the south side of the school needs to be 24-FT wide to accommodate outrigging on the Fire Department's aerial apparatus.

2. Clearly show and label the FDC location. A dedicated hydrant must be provided within 150-FT of the FDC and needs to be counted separately from the hydrants surrounding the building provided at 300-FT max spacing.

3. The distance between the northwestern-most hydrant and the southwestern-most hydrant exceeds the 300-FT maximum spacing requirement. An additional hydrant will need to be added on the west side of the building. Presuming the FDC is located at the northwest side of the building by the mechanical/riser room, two additional hydrants may be needed at the west side of the building. This should be coordinated directly with the Fire Chief.

4. All on-site water main should be private as it is not needed to benefit the Village's water supply system and serves the purpose for fire protection of this site. Additionally, a check valve will need to be provided at each end of the water main loop. This should be further coordinated with the Utilities Director. Public water main sheets also reference the "Village of Pewaukee".

5. Please develop a plan and provide applicable notes regarding the existing storm sewer on-site and how flow from the neighborhood to the south will be managed during the construction of the new storm sewer improvements, such that flooding is not caused and storm water runoff makes it to the north side of CTH NN.

6. Provide updated drawings as necessary to address WisDOT requirements from TIA.

7. Construction sequence indicates construction of building foundations prior of site utilities. How will this work with the existing utilities that cut through the site?

8. A sequencing plan shall be developed for on-site safety, traffic control, protection, phasing, etc. for installation and removals of existing and proposed driveways, site security fence, separation of construction activities from active school activities, contractor access and parking locations, etc. It is not clear how construction activities will coincide with existing school activities, how safe vehicular and pedestrian access will be maintained.

9. With permission of Waukesha County, the primary construction access should be off of CTH NN at the proposed entrance. The Village desires to limit construction access to a single ingress/egress point to limit possibility of tracking from the site.

10. Provide location of topsoil stockpile and measures to protect it.

11. Recommend calling out type of inlet protection on plans such that proper inlet protection is installed in the correct locations – importantly, Type D inlet protection in low lying areas.

12. Silt fence is not shown on the erosion control plan drawings. Will silt fence be installed and if so, where? While the site drains away from adjacent properties and roads in most areas, existing/interim grading conditions may warrant it to be installed in several locations.

13. Please provide details/cross sections for the on-site bioretention basins.

14. Provide Phosphorus modeling results in the SWMP summary tables. This data also needs to be provided in the water quality summary in the Maintenance Agreement.

15. There appear to be minor errors/discrepancies in the totals for peak outflow rates for each bioretention basin and the total summary table for pre-developed vs. post-developed and the hydroCAD modeling outputs. Please review all parts and make sure all numbers match. It appears the site can meet the requirements of the ordinance, but all numbers should be aligned.

16. It appears that the intent is for the public storm sewer through the site to strictly carry the off-site pass-thru flows and pick up the discharge from each bioretention basin after treatment and that the public storm sewer won't be picking up any on-site runoff that isn't first treated by a bioretention basin.

17. Please provide construction details for the on-site utility and pavement improvements.

18. Provide location and details for proposed dumpster enclosure, to be constructed of masonry, meeting Village Code requirements.

19. Provide details for proposed monument signage.

20. All construction shall meet the requirements of the Village's Standard Specifications.

21. Please provide copies of all Waukesha County and WisDOT approvals and permits prior to beginning work. Please also provide copies of any additional drawings associated with the approvals.

22. Provide copy of approved NOI prior to construction.

23. A storm water maintenance agreement will need to be implemented for on-site BMPs and conveyance systems prior to construction. An updated copy of the Village's standard form will be provided to applicant.

24. Provide final storm water management plan for complete review following the development of all additional appendices and attachments.

25. A letter of credit will need to be provided for any public improvements and for all storm water BMP and conveyance systems.

26. Provide copies of all vacated and new easements as part of this project.

27. Final Drawings and Storm Water Management Plan will need to be stamped and signed by a Professional Engineer licensed to practice in the State of Wisconsin.

As plans are developed and finalized, additional comments may be forthcoming prior to final staff approval.

If you should have any questions regarding this, please feel free to contact me at (262) 542-5733.

Respectfully,

RUEKERT & MIELKE, INC.

Peter W. Gesch, P.E., (WI)
Municipal Services Team Lader
pgesch@ruekert-mielke.com

PWG:pwg
cc: Diana Dykstra, Village of Mukwonago
Wayne Castle, Village of Mukwonago
Ron Bittner, Village of Mukwonago
Jeff Stien, Village of Mukwonago
Tim Rutenbeck, Village of Mukwonago

RESOLUTION 2025-09

Village of Mukwonago Order Granting a Conditional Use and Prescribing Conditions for a Middle School Expansion on Parcel MUKV1964992, Mukwonago, WI

WHEREAS, VILLAGE OF MUKWONAGO (hereinafter "property owner") owns the property identified MUKV1964992 (hereinafter "subject property") in the Village of Mukwonago, more particularly described as follows:

PT SE1/4 SEC 23 T5N R18E :: ALSO PT SE1/4 & SW1/4 SEC 23 T5N R18E :: ALSO PT SW1/4SE1/4 SEC 23 T5N R18E; COM S1/4 COR; W 319.4 FT; N20°36'W 954.4 FT; S87°E 1615.7 FT; S 809.4 FT; W 968.8 FT TO BGN :: ALSO DIVISION ST ADJ LOT 1 BLK 1 CRAIGS ADD :: EX W 16 FT :: EX DOC# 2672831 :: EX COM SW COR SE1/4 SEC 23; N00°09'08"W 826.12 FT TO SLY R/W CTH NN; S86°33'17"E 452.05 FT THE BGN; S86°33'17"E 713.33 FT; S86°48'39"E 486.28 FT TO WLY R/W LI CLARENDON AVE; S00°02'32"E 44.66 FT; N54°32'08"W 61.03 FT; N86°48'39"W 300.00 FT; N03°11'21"E 5.00 FT; N86°48'39"W 137.24 FT; N86°26'59"W 713.00 FT; N03°26'43"E 6.05 FT TO BGN :: VOL 514/143 DEEDS & VOL 663/303 DEEDS & R998/792

Return to:
Lana Kropf, Clerk-Treasurer
Village of Mukwonago
440 River Crest Court
Mukwonago, WI 53149

Parcel Number: MUKV1964992

WHEREAS, the property owner has, consistent with the Village of Mukwonago's zoning regulations, submitted a conditional use application for the expansion of an existing Middle School per Section 100-251, and

WHEREAS, upon receipt of the petition submitted by the property owner and future purchaser, the Village Clerk properly referred such petition to the Plan Commission; and

WHEREAS, allowing for required public notice, the Plan Commission conducted a public hearing on May 13, 2025, to consider the petitioner's request; and

WHEREAS, members of the public in attendance were given ample opportunity to provide comment regarding the petitioner's request; and

WHEREAS, the Plan Commission passed a motion recommending to the Village Board that the conditional use be approved subject to certain conditions; and

WHEREAS, the Plan Commission, in passing on the matter, has made the following determinations consistent with Section 100-354 of Mukwonago's zoning regulations:

1. The establishment, maintenance or operation of the conditional use will not be detrimental to or endanger the public health, safety or welfare of the Village.

2. The uses, values and enjoyment of other property in the surrounding neighborhood that are already permitted shall be, in no foreseeable manner, substantially impaired or diminished by the establishment, maintenance or operation of the conditional use.

3. The establishment of the conditional use will not impede the normal and ordinary development and improvement of the surrounding property for uses permitted within the district and/or which are consistent with the standards in the Comprehensive Plan.

4. Adequate utilities, access roads, drainage and other necessary site improvements have been or are being made to accommodate the use.

5. Adequate measures have been taken or will be taken providing ingress and egress to minimize traffic

congestion on public streets so as not to diminish the level of service of any intersection which is impacted by traffic arising from the conditional use.

In addition, the property owner has shown compliance with the requirements set forth in the Village's zoning regulations for the specified use.

WHEREAS, the Village Board has carefully reviewed the recommendation of the Plan Commission and concurs with the Plan Commission's findings set forth above, provided the conditional use is operated pursuant to the conditions of approval set forth in this order.

NOW THEREFORE, IT IS HEREBY DETERMINED AND ORDERED AS FOLLOWS:

1. **Authorized uses**. Subject to the terms and conditions of this approval and the sections of the zoning code that apply, the property owner is authorized to construct a building expansion of an existing Middle School.

2. **Issuance of permit required**. The zoning administrator is authorized to issue the property owner a conditional use permit when all conditions enumerated in section 3 have been satisfied to his or her satisfaction. Such permit is the last approval before the property owner/tenant can begin to establish the use as authorized herein.

3. **Initial conditions of approval.** The following conditions shall be satisfied prior to the issuance of the conditional use permit:

a. The property owner must submit site/architectural plans to the Village for review and obtain approval of the same within 9 months of the date of this decision.

b. The property owner must accept the terms and conditions of this conditional use order in its entirety in writing within 6 months of the date of this decision. Prior to such expiration, the property owner may request an extension to this time period and the Village Clerk may approve an extension with good cause.

c. This order must be recorded against the subject property in the Waukesha County register of deeds office (only if subsections 3(a) through 3(b) have been satisfied).

In the event the requirements enumerated in subsections 3(a) and 3(b) above are not satisfied, this order shall automatically be null and void without any further action by the Village of Mukwonago on the aforementioned date.

4. **Ongoing conditions of approval**. The following conditions shall constitute an ongoing obligation:

a. Any modifications to the site, buildings, site improvements shall require the conditional use application being updated.
b. 25-FT pavement setback shall be maintained on all perimeters.
c. Max Principal Structure height shall not exceed 46-FT.

5. **Expansion or changes.** The conditional use hereby authorized shall be confined to the subject property without extension or expansion. Any expansion or change in use shall require issuance of a new conditional use approval pursuant to the requirements in effect at the time of application.

6. **Modification of property boundary lines**. The property owner shall not change the size and/or shape of the subject property by any means without the approval of the Village Board. If the Village Board determines that a proposed change is substantial with regard to the overall size of the parcel and/or configuration, such change shall require issuance of a new conditional use approval pursuant to the requirements in effect at the time of application.

7. **Plans and related matters**. Unless otherwise expressly stated herein, plans that are specifically required by this conditional use order may be amended upon the prior approval of the Plan Commission if the

Plan Commission finds the amendment to be minor and consistent with the conditional use order and permit. Any change in any plan that the Plan Commission feels, in its sole discretion to be substantial, shall require a new conditional use approval and all procedures in place at the time must be followed.

8. **Inspection**. The property owner shall allow Village of Mukwonago staff, officials, and other authorized agents to inspect the subject property, at any reasonable time and for any proper purpose related to compliance with this conditional use order.

9. **Discontinuance**. Should the conditional use be discontinued in use for 365 consecutive days the use shall be terminated as set forth in the Village of Mukwonago's zoning regulations.

10. **Private rights**. This approval is given under the Village of Mukwonago's zoning regulations and is not to be interpreted to abrogate any private rights other property owners may have pursuant to deed restrictions or restrictive covenants.

11. **Interpretation**. If any aspect of this conditional use order is in conflict with any other aspect of the conditional use order, the more restrictive provisions shall be controlling, as determined by the Plan Commission.

12. **Other permits**. This order shall not be deemed to constitute a building permit, or constitute any other license or permit required by Village ordinance, or other local, state, or federal law.

13. **Severability**. In the event a court of competent jurisdiction determines that a paragraph or phrase of this conditional use order is unlawful, illegal, or unconstitutional, said determination as to the particular phrase or paragraph shall not void the rest of the conditional use order and the remainder shall continue in full force and effect.

14. **Heirs, successors, and assigns**. This conditional use order shall be binding upon the property owner and their heirs, successors, and assigns. Upon a change in ownership, the property owner shall notify the Village Clerk.

15. **Ongoing review**. This conditional use may be reviewed by the Plan Commission with notice to the property owner at any time upon complaint or upon Plan Commission initiative. If it is determined that the authorized use is no longer compatible, or that the provisions of this approval have not been complied with, the Village Board may revoke or amend this order after recommendation by the Plan Commission and holding of a public hearing.

16. **Amendment**. The property owner may propose an amendment to this conditional use order at anytime by submitting a written petition to the Village Clerk, which shall be reviewed pursuant to the requirements in effect at the time of application.

17. **Violation**. Any violation of this order may be treated as a violation of Mukwonago's zoning regulations and each day of each violation of each condition herein shall be treated as a separate violation.

18. **Acceptance.** GRANTEES hereby accept the said Conditional Use Grant and covenant strictly to comply with all the terms and conditions thereof. GRANTEES acknowledge that, in accordance with the provisions of the Zoning Code, failure to comply with any conditions of the Conditional Use Grant is cause for the termination of said Grant by the Village. GRANTEES also acknowledge that approval of the Conditional Use Grant allows the appropriate Village officials to conduct reasonable and routine inspections of the property. This Covenant shall run with the land and shall be binding on the GRANTEES and all persons claiming any estate or interest in the Premises by, through or under the GRANTEES, as long as the said Premises are used as described in the Conditional Use Grant

Approved this 21st day of May, 2025.

BY THE VILLAGE BOARD OF THE VILLAGE OF MUKWONAGO

_____
Fred Winchowky, Village President

Attest:

_____
Lana Kropf, Village Clerk-Treasurer

STATE OF WISCONSIN, WAUKESHA COUNTY

Personally came before me this ____ day of _____ 2025, the persons described above, Fred Winchowky, Village President, and Lana Kropf, Village Clerk, to me known to be the persons who executed the foregoing instrument and to me known to be such Village President and Village Clerk of the Village of Mukwonago and acknowledged that they executed the foregoing instrument as such officers of said municipal corporation by its authority and pursuant to the authorization by the Village Board from their meeting on the ____ day of _____, 2025.

_____
NOTARY PUBLIC

_____
My Commission Expires:

The remainder of this page left intentionally blank.

Acceptance by Property Owner

I, _____ verify that I am an authorized agent for MUKWONAGO AREA SCHOOL DISTRICT accepts the terms stated herein.

Dated this _____ day of _____, 2025

_____
_____, agent

STATE OF WISCONSIN, WAUKESHA

Personally, came before me this ____ day of _____, 2025, the above-named person, _____ to me known to be the person who executed the foregoing instrument and acknowledged the same.

_____
NOTARY PUBLIC

_____
My Commission Expires:

Drafted by Peter Gesch, Contracted Village Planner at the direction of the Mukwonago Village Board.

Village of Mukwonago
440 River Crest Ct
Mukwonago, WI 53149
Phone: (262) 363-6420
Fax: (262) 363-6425
www.villageofmukwonago.com

VILLAGE OF MUKWONAGO

CONDITIONAL USE PERMIT APPLICATION

Application Fee: $475

Date Submitted: 04/02/2025 Complete, accurate and specific information must be entered. Please Print.

CONTACTS

Village Building
Contact: Tim Rutenbeck, Supervisor of Inspection
Email: trutenbeck@villageofmukwonago.gov
Phone: (262) 363-6419 option 1

Zoning and Planning Department
Contact: Peter Gesch, Planner
Email: pgesch@ruekert-mielke.com
Phone: (262) 542-5733

APPLICATION INFORMATION

Request: The undersigned petition is to consider a request, as stated herein, for the specified parcel(s) of land and will be reviewed by the Plan Commission and Village Board of the Village of Mukwonago.

Meeting Dates: Plan Commission meets on the second Tuesday of each month at 6:30 p.m. A schedule of meeting dates can be found at our www.villageofmukwonago.gov

Application Deadlines: Applications deadlines are approximately 5 weeks prior to the scheduled meeting.

Public Hearing: Conditional use applications require a public hearing. To ensure the public hearing will be properly advertised, the application must be submitted **on the application deadline** to allow staff time to process and meet newspaper deadlines.

Application Completeness: Materials listed on page 3 must be provided to the Village of Mukwonago in accordance with Village Municipal Code Chapter 100-354 and other pertinent sections of Village ordinances, WI Stats. 62.23, and as necessary to permit review that is consistent with proper planning practice.

Pre-Application Meetings: The Village will strive to accommodate reasonable requests for informal preliminary staff review; however the Village shall not place any items on the agenda for Plan Commission consideration until such time as the application is complete in accordance with all requirements specified on this and other attached application forms.

Application Submission: Applications must be submitted Electronically through the Village on-line permit system. The system may be accessed through this link. Once you arrive to the site you will need to apply for a "Planning, Zoning, or Engineering Process". This link can be found on the left side of the screen under Building Department. The program will allow you search by the address, apply for a conditional use, input various information and upload documents.

Fees: Fees may be paid in one of three ways.

1. You may pay your fee online. After the application is submitted staff has received and reviewed the application an email will be sent to the applicant (email that is provided) letting you know that you can pay the fee online. There is a credit card fee associated with this option.
2. You may pay with cash or a check by mailing or brining the check to Village Hall. There is not a transaction fee associated with this option.
3. You may pay with a credit card at Village Hall during normal hours and in person. There is a transaction fee association with this option.

Paper Copies: Any Application that involves larger format copies (larger than 8 ½ x 11) shall have two copies of the application provided to the Village in printed form.
Paper Copies can be sent to: Village Planner, ATTN: Conditional Use Permits, 440 River Crest Ct Mukwonago, WI 53149

APPLICANT IS REPRESENTED BY *(Full Legal Name)*

Name: Chris Eger
Company: Bray Architects
Address: 829 S. 1st Street **City:** Milwaukee **State:** WI **Zip:** 53204
Daytime Phone: 414-226-0200 **Fax:**
E-Mail: ceger@brayarch.com

ARCHITECT

Name: Chris Eger
Company: Bray Architects
Address: 829 S. 1st Street **City:** Milwaukee **State:** WI **Zip:** 53204
Daytime Phone: 414-226-0200 **Fax:**
E-Mail: ceger@brayarch.com

PROFESSIONAL ENGINEER

Name: Michael Froehlich, PE
Company: Kapur
Address: 788 N. Jefferson Street **City:** Milwaukee **State:** WI **Zip:** 53202
Daytime Phone: 414-751-7245 **Fax:**
E-Mail: mfroehlich@kapurinc.com

REGISTERED SURVEYOR

Name: Brian Sandberg
Company: Kapur
Address: 788 N. Jefferson Street **City:** Milwaukee **State:** WI **Zip:** 53202
Daytime Phone: **Fax:**
E-Mail: mfroehlich@kapurinc.com

CONTRACTOR

Name: Jasun Berka
Company: J.P. Cullen
Address: 104 E. Pleasant Street **City:** Milwaukee **State:** WI **Zip:** 53212
Daytime Phone: 414-988-0088 **Fax:**
E-Mail: jasun.berka@jpcullen.com

PROPERTY AND PROJECT INFORMATION

Present Zoning: P-1 **Tax Key No(s).:** MUKV 1964.992

Address/Location: 930 N. Rochester Street

A. I/We request a conditional use permit for:
Park View Middle School Addition and Renovation

B. The property is presently used as:
Public Middle School

C. Name of Architect, Professional Engineer, or Contractor: Bray Architects/ Kapur/ JP Cullen

D. Project Timetable: Start Date: 9/2025 Completion Date: 8/2026

E. All of the Proposed Use(s) of the property will be:

Principal Use Park View Middle School

Secondary Use N/A

Accessory Use N/A

F. I/We represent that I/we have a vested interest in this property in the following manner:

☒ Owner

❑ Leasehold. Length of Lease: _____

❑ Contractual. Nature of contract: _____

❑ Other. Please explain

PROCEDURAL CHECKLIST FOR CONDITIONAL USE REVIEW AND APPROVAL

This form is designed to be a guide for submitting a complete application for a conditional use.

Application Submittal Packet Requirements for Village and Applicant Use (Check off List)

Application:

- ☒ Completed application form including the procedural checklist and justification of the proposed conditional use.
- ☒ Application fee: $475
- ☒ Agreement for Reimbursable Services (separate application)

Required site drawings:

- ☒ Survey of the property
- ☒ Landscape plan
- ☒ Parking plan (including parking computations)
- ☒ Lighting plan (including photo metrics)
- ☒ Proposed location and connection to the sanitary sewer and water mains
- ☒ Drainage plan (if applicable)
- ☒ All building elevations
- ☒ Floor plans

Other Documents:

- ☒ Plan of operation/proposal
- ☒ Overview of the adjoining lots (including list of parcel identification numbers and names and mailing addresses of the current owners for all properties within 300 feet of the subject property)
- ☒ **Electronic Submittals are required.** Email (or CD ROM) with all plans and submittal materials in Adobe PDF to trutenbeck@villageofmukwonago.gov.
- ❑ Any additional information as determined by Village staff

JUSTIFICATION OF THE PROPOSED CONDITIONAL USE

The Plan Commission and Village Board of the Village of Mukwonago will base their decisions on the category standards listed below. It is in the best interest of the applicant to base their presentation on the same applicable set of standards when presenting their petition. **Applicant: Please fill out ALL of the questions. Use additional sheets of paper if needed.**

A. How is the proposed conditional use (the use in general, independent of its location) in harmony with the purposes, goals, objectives, policies and standards of the Village of Mukwonago Comprehensive Plan, the Zoning Ordinance, and any other plan, program, or ordinance adopted, or under consideration pursuant to official notice by the Village?

Park View Middle School has already been a part of the community and the use and building type will not change.

B. How is the proposed conditional use, in its specific location, in harmony with the purposed, goals, objectives, policies and standards of the Village of Mukwonago Comprehensive Plan, the Zoning Ordinance, and any other plan, program, or ordinance adopted, or under consideration pursuant to official notice by the Village?

Park View Middle School has already been a part of the community and the use and building type will not change.

C. Does the proposed conditional use, in its proposed location and as depicted on the required site plan (see Section 100-354 (a) , (b), and (c)), result in any substantial or undue adverse impact on nearby property, the character of the neighborhood, environmental factors, traffic factors, parking, public improvements, public property or rights-of-way, or other matters affecting the public health, safety, or general welfare, either as they now exist or as they may in the future be developed as a result of the implementation of the provisions of the Zoning Ordinance, the Comprehensive Plan, or any other plan, program, map ordinance adopted or under consideration pursuant to official notice by the Village or other governmental agency having jurisdiction to guide development?

The new site changes for the parking and for the onsite flow will add some vehicle traffic with the change to 6 thru 8th grade at the Middle School as opposed to just 7 and 8. However the entrances to the site will be better separated from each other and better separated from the main intersection at NN & 83. The TIA also suggests the addition of a light and a deceleration lane at the main drop off entrance at Hawks Ridge Drive which along with the area within the site will allow for less back-up onto NN.

D. How does the proposed conditional use maintain the desired consistency of land uses, land use intensities, and land use impacts as related to the environs of the subject property?

Park View Middle School has already been a part of the community and the use and building type will not change.

E. Is the proposed conditional use located in an area that will be adequately served by and will not impose an undue burden on, any of the improvements, facilities, utilities or services provided by public agencies serving the subject property?

The new building will require new water service and new electrical utilities however none of the new services will affect the surrounding area.

F. Do the potential public benefits of the proposed conditional use outweigh all potential adverse impacts of the proposed conditional use (as identified in Sections 100-354 (e)(1) and (2)), after taking into consideration the Applicant's proposal and any requirements recommended by the Applicant to ameliorate such impacts?

The building type in itself as education, certainly outweighs any adverse traffic impacts the the site.

CERTIFICATION

Applicant hereby certifies that:

1. All of the above statements and other information submitted as part of this application are true and correct to the best of his or her knowledge.
2. Affirms that no Village of Mukwonago elected or appointed official or employee has a proprietary interest in the above referenced property for which this applications being filed (except as stated below under "Exceptions").
3. None of the above referenced individuals has been promised or given any contract for consultation, planning or construction in relation to this project (except as stated below under "Exceptions").
4. Applicant has read and understands all information in this packet.

Applicant further understands the policies of the Village regarding change of zonings and property development. Conditions of the resolution regarding all approvals are strictly followed. Certificates of Occupancy are not given until all conditions of approval have been met

By the execution of this application, applicant hereby authorizes the Village of Mukwonago or its agents to enter upon the property during the hours of 7:00 am to 7:00 pm daily for the purpose of inspection. Applicant grants this authorization to enter even if this land has been posted against trespassing pursuant to Section 943.13 WI Stats.

(The applicant's signature must be from a Managing Member if the business is an LLC, or from the President or Vice President if the business is a corporation. A signed applicant's authorization letter may be provided in lieu of the applicant's signature below, and a signed property owner's authorization letter may be provided in lieu of the property owner's signature[s] below. If more than one, all of the owners of the property must sign this Application).

Signature - Property Owner

Andrew Wegner
Name & Title (PRINT)

4/02/2025
Date

Signature - Applicant

Chris Eger, AIA
Name & Title (PRINT)

4/02/2025
Date

Signature - Property Owner

Name & Title (PRINT)

Date

Signature – Applicant's Representative

Name & Title (PRINT)

Date

FOR OFFICE USE ONLY			
Date Paid	**Receipt #**	**Date(s) Notice Published**	**Date Notices Mailed**
Public Hearing Date	**Plan Commission Date(s)**	**Village Board Date(s)**	**Resolution Number**
Escrow Required? ❑ Yes ❑No		**Escrow Amount**	
Plan Commission Disposition			
Village Board Disposition			

VILLAGE OF MUKWONAGO

SITE PLAN, ARCHITECTURAL, AND PLANNED UNIT DEVELOPMENT (PUD) APPLICATION

Application Fee: Below

Date Submitted: 4.01.2025

FEES

(Please check one)

- ❑ Minor Site Plan (No Building): $160.00
- ☒ Major Site Plan; New Building/Addition (> 600 sq. ft.): $475.00 plus $.02 per sq. ft.
- ❑ Planned Unit Development (PUD) Review: $225.00 plus $50.00/unit
- ❑ Other (See Current Fee Schedule)_____

CONTACTS

Building Department
Contact: Supervisor of Inspections
Tim Rutenbeck
Phone: (262) 363-6419 Option 1
Fax: (262) 363-6425
Email: trutenbeck@villageofmukwonago.gov

Zoning and Planning
Contact: Village Planner
Peter Gesch
Phone: (262) 542-5733
Fax: (262) 363-6425
Email: pgesch@ruekert-mielke.com

GUIDELINES

The undersigned petition is to consider a request, as stated herein, for the specified parcel(s) of land and will be reviewed by the Plan Commission and Village Board of the Village of Mukwonago. The application packet must be filed with the Village Clerk **at least 30 days prior to the meeting** of the Planning Commission at which action is desired. The Plan Commission meets on the second Tuesday of each month at 6:30 p.m.

Materials listed below must be provided to the Village of Mukwonago in accordance with Village Municipal Code Chapter 100 Article IX. Section 100-601(f) and other pertinent sections of Village ordinances, and, as necessary, to permit review that is consistent with proper planning practice. The Village will strive to accommodate reasonable requests for informal preliminary staff review, however the Village shall not place any items on the agenda for Plan Commission consideration until such time as the application is complete in accordance with all requirements specified on this and other attached application forms.

Mail completed applications to: Village Planner
440 River Crest Ct
Mukwonago, WI 53149

Deliver to: Village Clerk's Office
440 River Crest Ct

Email to: trutenbeck@villageofmukwonago.gov

Complete, accurate and specific information must be entered. Please Print.

APPLICANT *(Full Legal Name)*

Name: Andrew Wegner

Company: Mukwonago Area School District

Address: 385 E. Veterans Way **City:** Mukwonago **State:** WI **Zip:** 53149

Daytime Phone: 262-363-6300 Ext 24300 **Fax:**

E-Mail: wegnean@masd.k12.wi.us

APPLICANT IS REPRESENTED BY *(Full Legal Name)*

Name: Chris Eger
Company: Bray Architects
Address: 829 S. 1st Street **City:** Milwaukee **State:** WI **Zip:** 53204
Daytime Phone: 414-226-0200 **Fax:**
E-Mail: ceger@brayarch.com

ARCHITECT

Name: Chris Eger
Company: Bray Architects
Address: 829 S. 1st Street **City:** Milwaukee **State:** WI **Zip:** 53204
Daytime Phone: 414-226-0200 **Fax:**
E-Mail: ceger@brayarch.com

PROFESSIONAL ENGINEER

Name: Michael Froehlich, PE
Company: Kapur
Address: 788 N. Jefferson Street **City:** Milwaukee **State:** WI **Zip:** 53202
Daytime Phone: 414-751-7245 **Fax:**
E-Mail: mfroehlich@kapurinc.com

REGISTERED SURVEYOR

Name: Brian Sandberg
Company: Kapur
Address: 788 N. Jefferson Street **City:** Milwaukee **State:** WI **Zip:** 53202
Daytime Phone: **Fax:**
E-Mail: mfroehlich@kapurinc.com

CONTRACTOR

Name: Jasun Berka
Company: J.P. Cullen
Address: 104 E. Pleasant Street **City:** Milwaukee **State:** WI **Zip:** 53212
Daytime Phone: 414-988-0088 **Fax:**
E-Mail: jasun.berka@jpcullen.com

PROPERTY INFORMATION

Property Owner (s) *(if different from applicant)*: Mukwonago Area School District - Andrew Wegner

Address: 385 E. Veterans Way **City:** Mukwonago **State:** WI **Zip:** 53149

Daytime Phone: 262-363-6300 Ext 24300 **Fax:**

E-Mail: wegnean@masd.k12.wi.us

Present Zoning: P-1 - Public **Tax Key No(s).:** MUKV 1964.992

Location/Address: 930 N. Rochester Street

Present Use: Public Middle School **Intended Use:** Public Middle School

PROCEDURAL CHECKLIST FOR SITE PLAN/ARCHITECTURAL PLAN/PUD REVIEW AND APPROVAL

Submittals for review must include and be accompanied by the following:

Application:

- ☒ Completed application form including the procedural checklist.
- ☒ Application fee: See page 1.
- ☒ Agreement for Reimbursable Services (separate application).

Other Documents:

- ☒ One(1) complete set of Application and materials, in addition to the original, for Village of Mukwonago review.
- ☒ Project Summary: Please attach a statement detailing the reasons and background for this request including: details of proposal, services provided, wares sold, plans and hours of operation, number of employees, frequency of customer visits, frequency of deliveries to site, description of any interior/exterior modifications or additions to be made to property, any outside storage (dumpsters, trucks, materials…), number of parking stalls, screening/buffer type, any other information available. ***PLEASE EXPLAIN IN DETAIL.***
- ☒ **Electronic Submittals are required.** Email (or CD ROM) with all plans and submittal materials in Adobe PDF to trutenbeck@villageofmukwonago.gov .
- ☐ Any additional information as determined by Village staff.

- **Upon receipt of a complete submittal, staff review will be conducted within ten business days.**
- **All Site Plan, Architectural, and Planned Unit Development review requests require Plan Commission review and Village Board approval.**

CERTIFICATION

Applicant hereby certifies that:

1. All of the above statements and other information submitted as part of this application are true and correct to the best of his or her knowledge.
2. Affirms that no Village of Mukwonago elected or appointed official or employee has a proprietary interest in the above referenced property for which this applications being filed (except as stated below under "Exceptions").
3. None of the above referenced individuals has been promised or given any contract for consultation, planning or construction in relation to this project (except as stated below under "Exceptions").
4. Applicant has read and understands all information in this packet.

Applicant further understands the policies of the Village regarding change of zonings and property development. Conditions of the resolution regarding all approvals are strictly followed. Certificates of Occupancy are not given until all conditions of approval have been met

By the execution of this application, applicant hereby authorizes the Village of Mukwonago or its agents to enter upon the property during the hours of 7:00 am to 7:00 pm daily for the purpose of inspection. Applicant grants this authorization to enter even if this land has been posted against trespassing pursuant to Section 943.13 WI Stats.

(The applicant's signature must be from a Managing Member if the business is an LLC, or from the President or Vice President if the business is a corporation. A signed applicant's authorization letter may be provided in lieu of the applicant's signature below, and a signed property owner's authorization letter may be provided in lieu of the property owner's signature[s] below. If more than one, all of the owners of the property must sign this Application).

Signature - Property Owner

Andrew Wegner

Name & Title (PRINT)

4/02/2025

Date

Signature - Applicant

Chris Eger, AIA

Name & Title (PRINT)

4/02/2025

Date

Signature - Property Owner

Name & Title (PRINT)

Date

Signature – Applicant's Representative

Name & Title (PRINT)

Date

FOR OFFICE USE ONLY	
Date Paid	**Receipt #**
Plan Commission Date(s)	**Village Board Date(s)**
Escrow Required? ❑ Yes ❑No	**Escrow Amount**
Plan Commission Disposition	
Village Board Disposition	

PVMS site plan project summary

Mukwonago Area School District

BRAY PROJECT NUMBER | 3526

Project Name	Park View Middle School – MUKV 1964.992
Project Location	930 N. Rochester Street, Mukwonago WI 53149
Submittal Date	April 2, 2025
Submittal	Village of Mukwonago - Site Plan & Architectural Review/ Conditional Use
Owner	Mukwonago Area School District Andrew Wegner – wegnean@masd.k12.wi.us 385 E. Veterans Way, Mukwonago WI 53149
Architect	Bray Architects Chris Eger, AIA – ceger@brayarch.com - 414-290-1986 829 S. 1st Street, Milwaukee, WI 53204
Civil Engineer	Kapur and Associates Michael Froehlich – mfroehlich@kapurinc.com - 414-659-8193 788 N. Jefferson Street, Milwaukee WI 53202
Electrical Engineer	MSA Professional Services, Inc. Dave Schulze – dschulze@msa-ps.com 116 Freemont Street, P.O. Box 235, Kiel, WI 53042
Construction Manager	JP Cullen Jasun Berka – jason.berka@jpcullen.com – 414-988-0088 104 E. Pleasant Street, Milwaukee WI 53212

Project Description:
This project includes the demolition of much of the existing Park View middle school building, renovation of the most recent portion of the existing building and a major addition to the East of the existing building for the Mukwonago Area School District as part of the successful November 2024 referendum supported by the community. The scope of site development will include new drive lanes and parking surrounding the remaining existing building and addition.

Property:
The property at 930 N. Rochester Street on the corner of HWY 83 and NN, is currently zoned as a P-1 Public and Semi-Public district and will require a conditional use permit. The project will disturb approximately 25 of the 37 acres on the parcel for the addition, stormwater areas and parking. Traffic Analysis and Design has completed a traffic impact analysis and is recommending an additional deceleration lane and traffic signal on Veterans Way (NN).

Building:

The addition to the existing Park View Middle School building will have an approximate footprint of 120,,000 square feet and will be comprised of one-story, two story and three story buildings. The building has been designed to align with the High School design. The third story will be 47 feet to the top of the parapet. There will be HVAC equipment screened to the West of the third story that will be above the 47 foot parapet, but will be screened by the building from the street.

The North elevation of the new addition will highlight the new cafeteria and main entrance which will both be double height two story areas with wood look and metal panel picture window surrounds with large amount of storefront window systems providing daylight and drawing attention to the spaces within. The main base material at both areas will be stone. For the rest of the building, the base material will be brick masonry veneer with some metal panel infill and storefront window openings. The athletic entrance will be a similar design as the main secure entrance and will also have a canopy and signage.

The materials for the project are warm and inviting and are meant to be a timeless skin that will stand the test of time.

All mechanical rooftop equipment will be screened from view either using proper placement behind buildings and parapets or with metal panel screening designed specifically to hide the equipment.

Typical school day hours of operation will be the same as the existing middle school where the school day currently starts at 7:30am and ends at 2:30pm. The building and site will be active on nights and weekends with various school groups, music events, and athletic practices and competitions.

Building Areas	
Existing Middle School to remain =	38,600 square feet
Addition to Middle School First Floor =	118,250 square feet
Addition to Middle School Second & Third Floors =	86,650 square feet
Total area of all buildings & additions =	243,500 square feet

Site Plan:

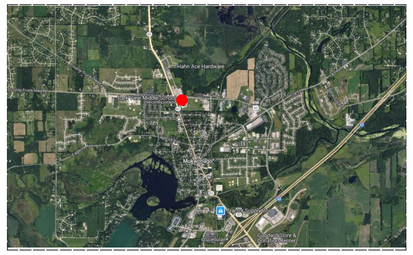
The site plan has been developed in response to the building addition which must be completed prior to the existing building being demolished. Therefore the addition has been placed in the only location that it can be. There will be new sidewalks added for safety to several new building entrances for students walking from the neighborhood. We have added bicycle racks to the West part of the building. The receiving area, generator, and transformer will be heavily screened with landscaping. Along with landscaping the trash area will be screened with a masonry enclosure with cedar doors. The existing pavilion on the site will be relocated to South of the addition. Outdoor athletics including a refinished track, new basketball hoops, and throwing and running events will be added to the South portion of the site as well. The district has asked for a design at the NorthWest corner of the site that allows for seating, flag poles, and views of the park to the West with a well-designed connection to the main intersection of NN and 83. There will also be a new ground mounted sign located at this intersection to replace the existing sign on Hwy 83. It will be designed as a digital sign on a masonry base.

A new drive and parking layout has been designed in two parts. They are separated at the North using gates and a large drop off area in order to keep parent drop-off and bus parking separate. The visitor parking and drop off lanes will be located at the North of the property near the main entrance and will be entered from a new mid-block traffic signal on Veterans Way (NN). There is an entrance and exit to the existing Clarendon Avenue elementary school parking lot to the East of the property. There is an athletic event and staff parking lot to the East and South of the new addition. The parking lot to the West will have bus parking and staff parking along with parking and an entrance for music events. The district is seeking an exemption/variance from the required parking count of 1 space per 2 students and 1 stall for each staff member. With a maximum enrollment of 1,200 students and 150 staff that would result in a requirement for 750 parking spaces. For the current school there would be a requirement for 461 spaces and there is currently enough parking for needs with only 236 spaces. The new lots will hold 482 parking spaces doubling the current amount, with fewer than double the amount of students and staff. Unlike at the High School, 6-8 grades do not require vehicle parking. We do provide bike parking near the bus entrance for anyone travelling from the neighborhood. The gymnasium at full spectator capacity would allow for 1300 people and along with the cafeteria which could be used for 400 additional seats simultaneously for a total of 1700 occupants for night events. That would equate to less than 4 occupants per car. There is also additional parking at Clarendon Elementary School. The district has provided overflow parking for the Field Park on the West side of the site. The site lighting in parking lots and along drives will be LED with cut-off fixtures that meet all Village of Mukwonago standards.

Existing Park View Middle School Occupant Count	
Existing enrollment (7th & 8th) =	+/- 722 students
Projected teachers/staff =	+/- 100 teachers/staff
Existing PVMS Parking	
Middle School West Lot	12 parking spaces
Middle School NorthWest Lot	157 parking spaces
Middle School NorthEast Lot	67 parking spaces
Total existing parking spaces	236 parking spaces
New Park View Middle School Occupant Count	
Existing enrollment (6th thru 8th) =	+/- 1200 students
Projected teachers/staff =	+/- 150 teachers/staff
Proposed PVMS Parking	
Middle School North Lots	88 parking spaces
Middle School South Lots	118 parking spaces
Middle School West Lot	169 parking spaces
Middle School East Lot	107 parking spaces
Total proposed parking spaces	482 parking spaces

Landscaping will be provided throughout the development in compliance with landscaping requirements in the zoning ordinance. The south side next to the parking lot and neighborhood will include heavy tree screening.

Schedule:
An early site civil package and foundation bid package are anticipated to be issued in August for a September 2025 construction start. The balance of construction documents for the project are scheduled to be issued in November 2025. The district's construction manager, JP Cullen, is planning to complete the new building by February 2027 so that the students can move over from existing to new in March of 2027. The existing building will then be demolished, and the rest of the site will be completed by August 2027 for the start of the 2027-2028 school year.



RENOVATION AND ADDITION TO:

Park View Middle School

Mukwonago Area School District
930 N Rochester St,
Mukwonago, WI 53149

PLAN COMMISSION SUBMITTAL

4/2/2025

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Civil

Kapur & Associates, Inc.
7711 N. Port Washington Road
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Landscape

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Structural

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Cedarburg, Wisconsin 53012
(262) 377-7602

Food Service

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Milwaukee, Wisconsin 53212
(414) 967-4204

Mechanical

MSA Professional Services, Inc.
220 East Buffalo Street, Suite 201
Milwaukee, WI 53202
(414) 296-4333

Plumbing & Fire Protection

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Milwaukee, WI 53202
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www.brayarch.com

Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St,
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number:
3526

Issued For:
PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
COVER SHEET

Sheet Number:
PC0.0

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Autodesk Docs://3526-MSD Master Plan/3526_MASD_New Middle School.rvt
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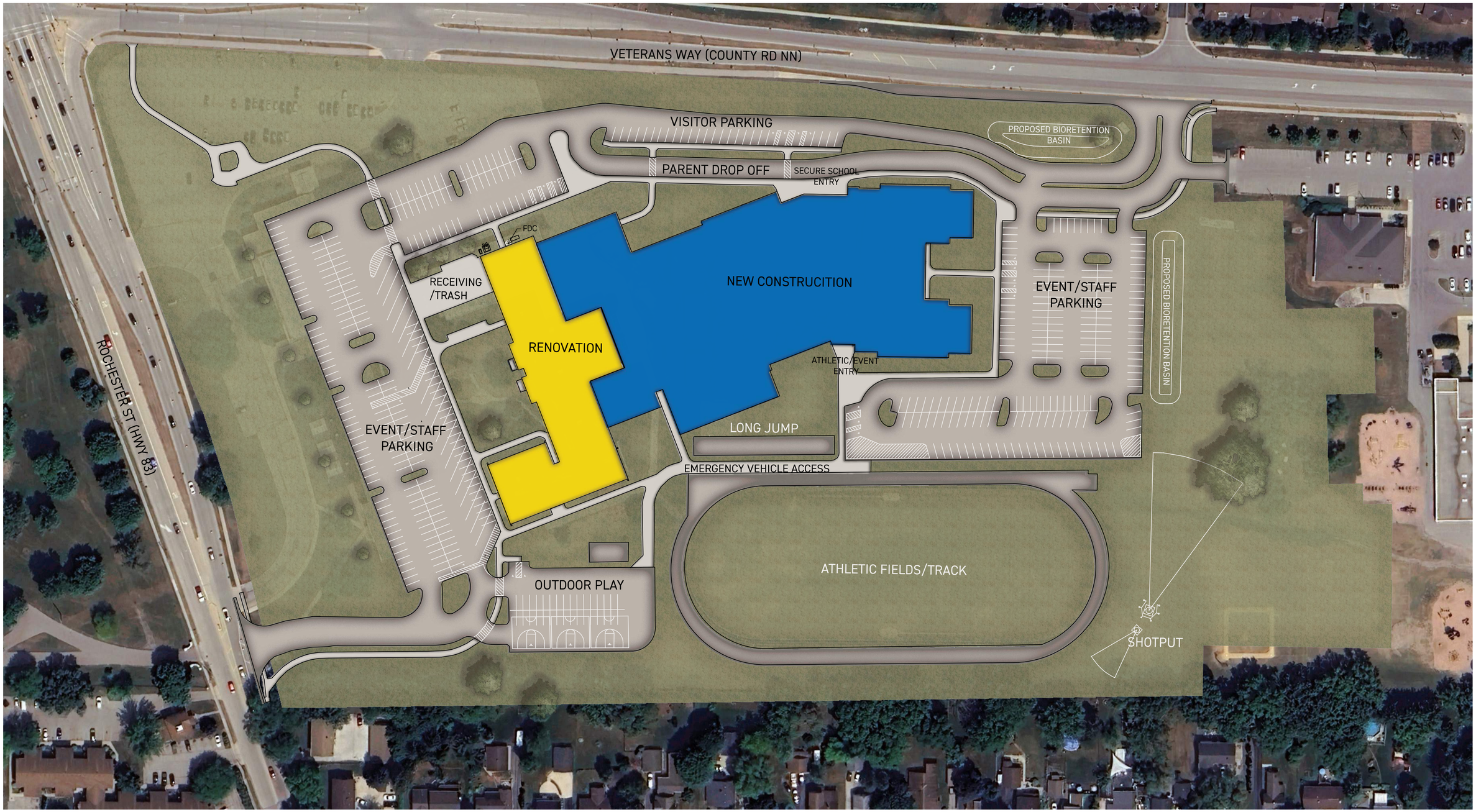

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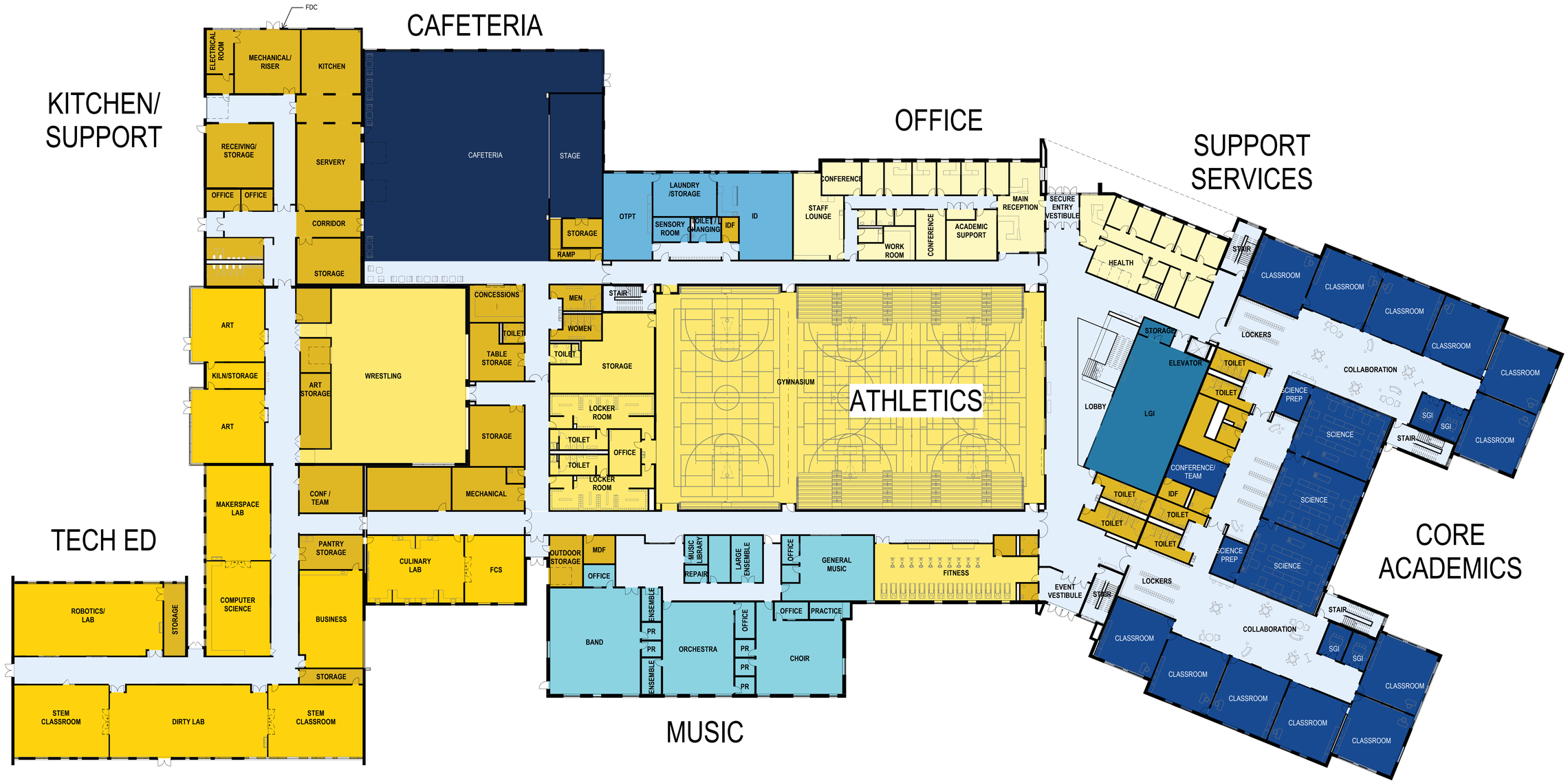

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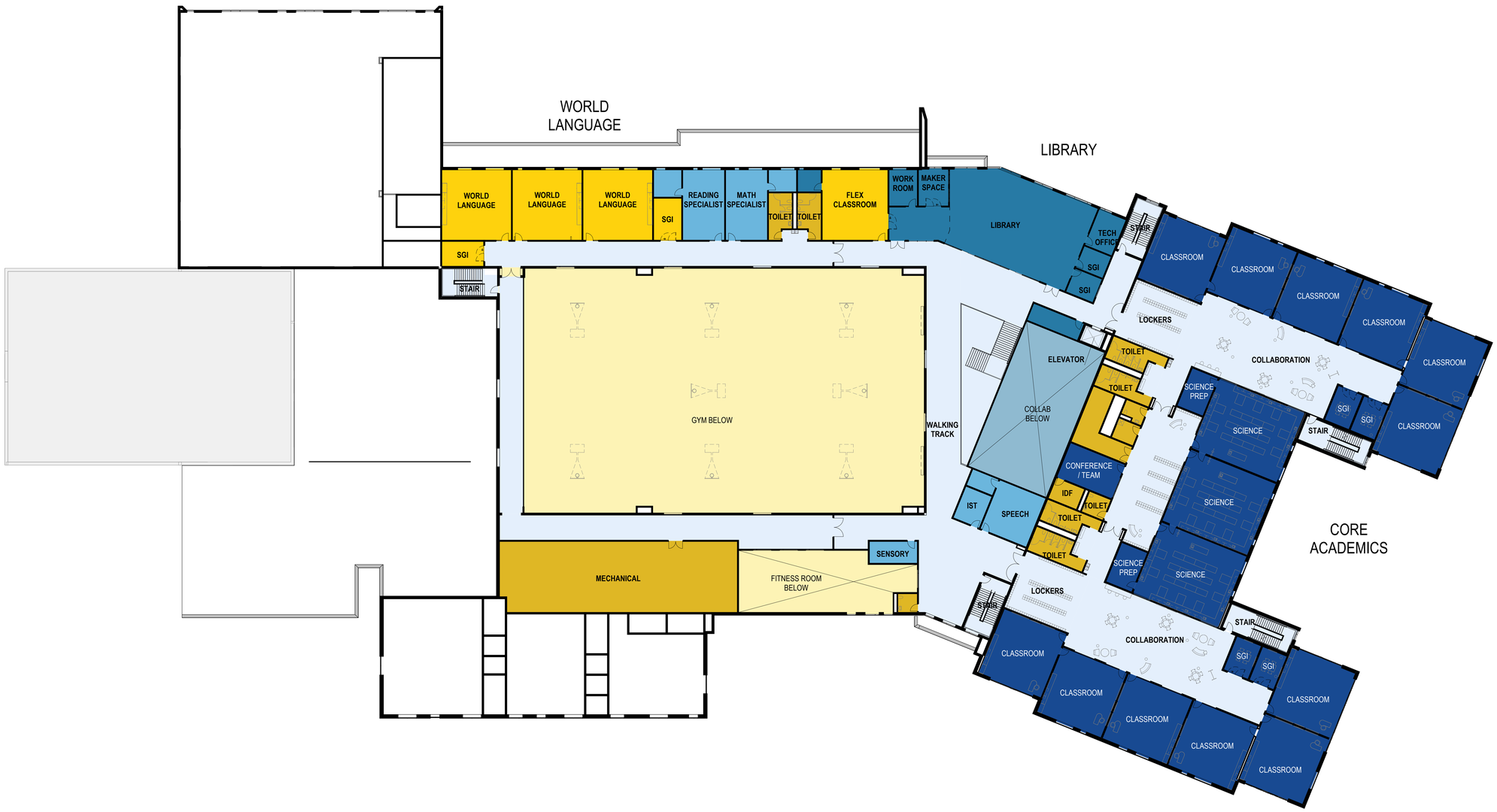

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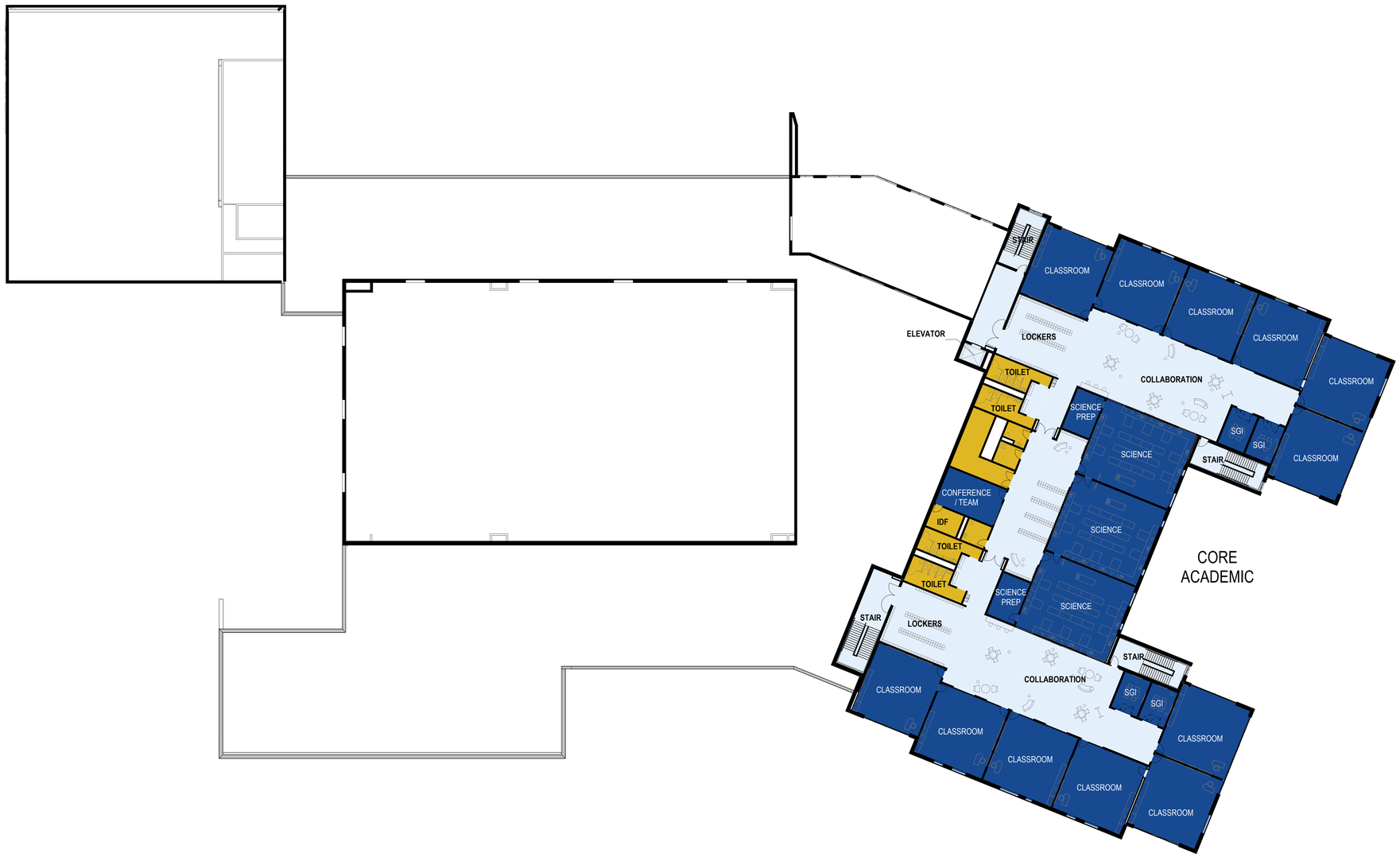

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ELEVATION MATERIAL LEGEND

- FACE BRICK - DARK
- FACE BRICK - LIGHT
- FACE BRICK - EXISTING
- ANCHORED STONE VENEER
- INSULATED GLAZING UNIT - CLEAR
- MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
- MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
- MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
- MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
- INSULATED GLAZING UNIT - SPANDREL

KEYNOTE LEGEND

FB-1	FACE BRICK - DARK
FB-2	FACE BRICK - LIGHT
FB-3	FACE BRICK - EXISTING
IGU-1	INSULATED GLAZING UNIT - CLEAR
IGU-4B	INSULATED GLAZING UNIT - SPANDREL
MWP-1	MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
MWP-2	MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
MWP-3	MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
MWP-4	MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
STNV-1	ANCHORED STONE VENEER

6C PC3.1 NORTH BUILDING ELEVATION
Scale: 1/16" = 1'-0"

6B PC3.1 UNIT A - EAST
Scale: 1/16" = 1'-0"

3B PC3.1 UNIT A - NORTH
Scale: 1/16" = 1'-0"

3A PC3.1 UNIT B - SOUTH
Scale: 1/16" = 1'-0"

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OVERALL EXTERIOR ELEVATIONS | Park View Middle School

ELEVATION MATERIAL LEGEND

- FACE BRICK - DARK
- FACE BRICK - LIGHT
- FACE BRICK - EXISTING
- ANCHORED STONE VENEER
- INSULATED GLAZING UNIT - CLEAR
- MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
- MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
- MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
- MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
- INSULATED GLAZING UNIT - SPANDREL

KEYNOTE LEGEND

FB-1	FACE BRICK - DARK
FB-2	FACE BRICK - LIGHT
FB-3	FACE BRICK - EXISTING
IGU-1	INSULATED GLAZING UNIT - CLEAR
IGU-4B	INSULATED GLAZING UNIT - SPANDREL
MWP-1	MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
MWP-2	MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
MWP-3	MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
MWP-4	MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
STNV-1	ANCHORED STONE VENEER

5B PC3.2 SOUTH BUILDING ELEVATION
Scale: 1/16" = 1'-0"

6A PC3.2 EAST BUILDING ELEVATION
Scale: 1/16" = 1'-0"

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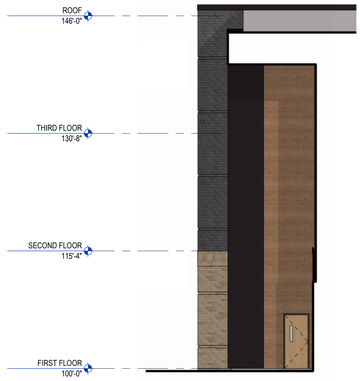
6D PC3.3 UNIT A - SOUTH
Scale: 1/8" = 1'-0"



4D PC3.3 UNIT A -PARTIAL - WEST
Scale: 1/8" = 1'-0"

ELEVATION MATERIAL LEGEND

- FACE BRICK - DARK
- FACE BRICK - LIGHT
- FACE BRICK - EXISTING
- ANCHORED STONE VENEER
- INSULATED GLAZING UNIT - CLEAR
- MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
- MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
- MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
- MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
- INSULATED GLAZING UNIT - SPANDREL

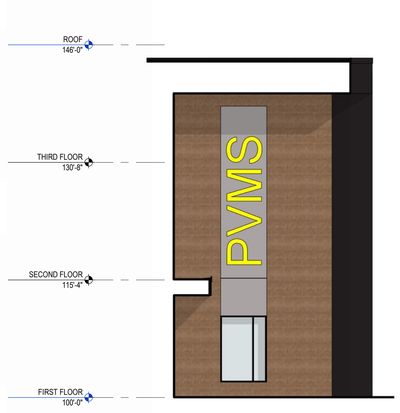
KEYNOTE LEGEND

FB-1	FACE BRICK - DARK
FB-2	FACE BRICK - LIGHT
FB-3	FACE BRICK - EXISTING
IGU-1	INSULATED GLAZING UNIT - CLEAR
IGU-4B	INSULATED GLAZING UNIT - SPANDREL
MWP-1	MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
MWP-2	MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
MWP-3	MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
MWP-4	MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
STNV-1	ANCHORED STONE VENEER

6B PC3.3 UNIT A - NORTH
Scale: 1/8" = 1'-0"

6A PC3.3 UNIT A - EAST
Scale: 1/8" = 1'-0"

3A PC3.3 UNIT A-PARTIAL - NORTH
Scale: 1/8" = 1'-0"



2A PC3.3 UNIT A-PARTIAL - EAST
Scale: 1/8" = 1'-0"

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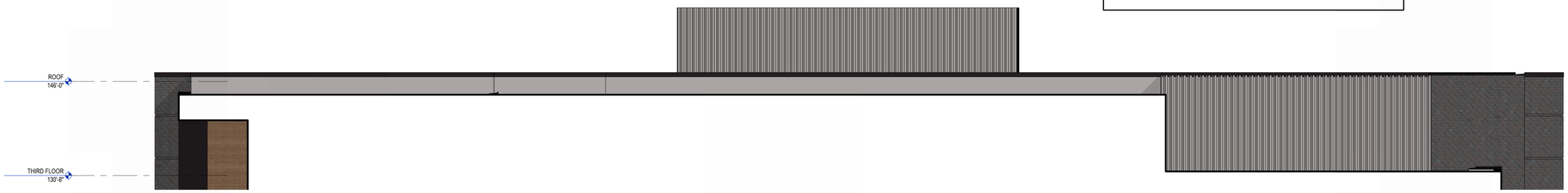
ELEVATION MATERIAL LEGEND

- FACE BRICK - DARK
- FACE BRICK - LIGHT
- FACE BRICK - EXISTING
- ANCHORED STONE VENEER
- INSULATED GLAZING UNIT - CLEAR
- MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
- MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
- MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
- MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
- INSULATED GLAZING UNIT - SPANDREL

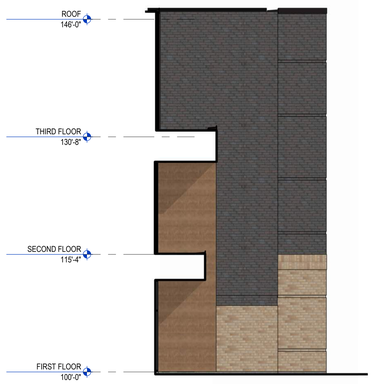
KEYNOTE LEGEND

FB-1	FACE BRICK - DARK
FB-2	FACE BRICK - LIGHT
FB-3	FACE BRICK - EXISTING
IGU-1	INSULATED GLAZING UNIT - CLEAR
IGU-AB	INSULATED GLAZING UNIT - SPANDREL
MWP-1	MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
MWP-2	MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
MWP-3	MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
MWP-4	MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
STNV-1	ANCHORED STONE VENEER



6D PC3.4 UNIT A/B PARTIAL WEST
Scale: 1/8" = 1'-0"

5B PC3.4 UNIT B - SOUTH
Scale: 1/8" = 1'-0"



6A PC3.4 UNIT B - PARTIAL WEST
Scale: 1/8" = 1'-0"

5A PC3.4 UNIT B -EAST
Scale: 1/8" = 1'-0"

2A PC3.4 UNIT B - NORTH
Scale: 1/8" = 1'-0"

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ELEVATION MATERIAL LEGEND

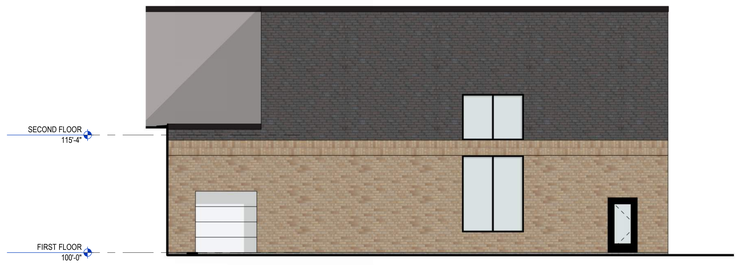
- FACE BRICK - DARK
- FACE BRICK - LIGHT
- FACE BRICK - EXISTING
- ANCHORED STONE VENEER
- INSULATED GLAZING UNIT - CLEAR
- MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
- MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
- MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
- MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
- INSULATED GLAZING UNIT - SPANDREL

KEYNOTE LEGEND

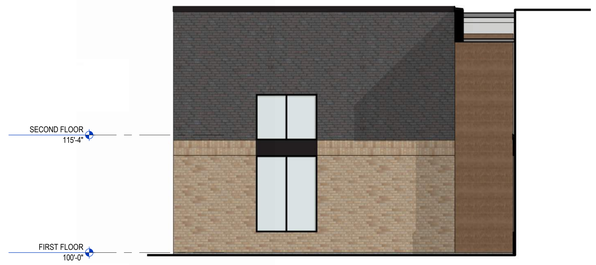
FB-1	FACE BRICK - DARK
FB-2	FACE BRICK - LIGHT
FB-3	FACE BRICK - EXISTING
IGU-1	INSULATED GLAZING UNIT - CLEAR
IGU-4B	INSULATED GLAZING UNIT - SPANDREL
MWP-1	MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
MWP-2	MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
MWP-3	MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
MWP-4	MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
STNV-1	ANCHORED STONE VENEER

6D PC3.5 UNIT C - PARTIAL NORTH
Scale: 1/8" = 1'-0"

6B PC3.5 UNIT C - SOUTH
Scale: 1/8" = 1'-0"



6A PC3.5 UNIT C - WEST
Scale: 1/8" = 1'-0"



4A PC3.5 UNIT C - EAST
Scale: 1/8" = 1'-0"

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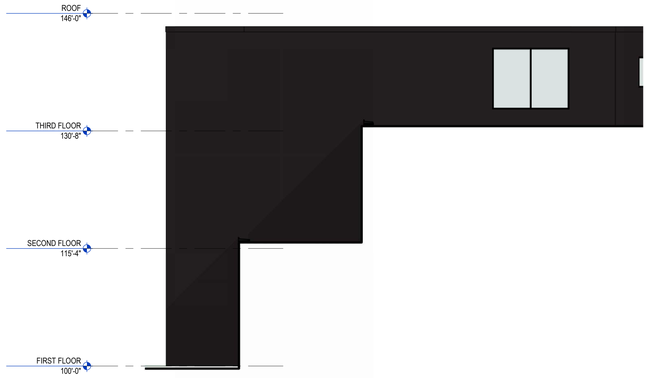
ELEVATION MATERIAL LEGEND

- FACE BRICK - DARK
- FACE BRICK - LIGHT
- FACE BRICK - EXISTING
- ANCHORED STONE VENEER
- INSULATED GLAZING UNIT - CLEAR
- MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
- MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
- MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
- MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
- INSULATED GLAZING UNIT - SPANDREL

KEYNOTE LEGEND

FB-1	FACE BRICK - DARK
FB-2	FACE BRICK - LIGHT
FB-3	FACE BRICK - EXISTING
IGU-1	INSULATED GLAZING UNIT - CLEAR
IGU-4B	INSULATED GLAZING UNIT - SPANDREL
MWP-1	MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
MWP-2	MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
MWP-3	MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
MWP-4	MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
STNV-1	ANCHORED STONE VENEER



6C PC3.6 UNIT C/A - PARTIAL WEST
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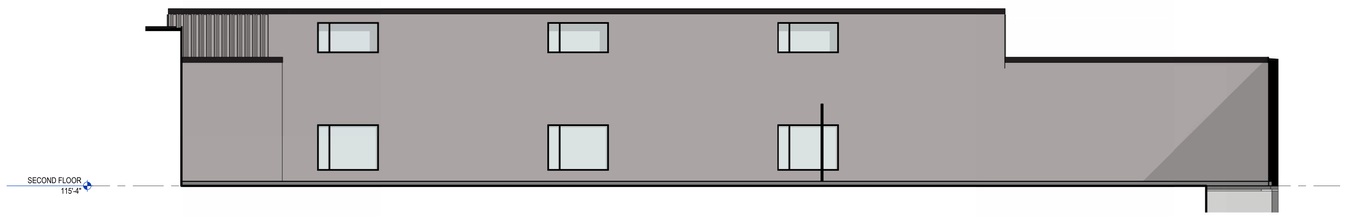
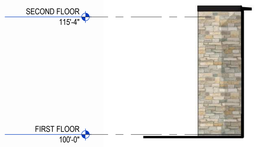


6B PC3.6 UNIT C - PARTIAL WEST1
Scale: 1/8" = 1'-0"

6A PC3.6 UNIT D - NORTH
Scale: 1/8" = 1'-0"



2A PC3.6 UNIT D - PARTIAL WEST
Scale: 1/8" = 1'-0"

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ELEVATION MATERIAL LEGEND

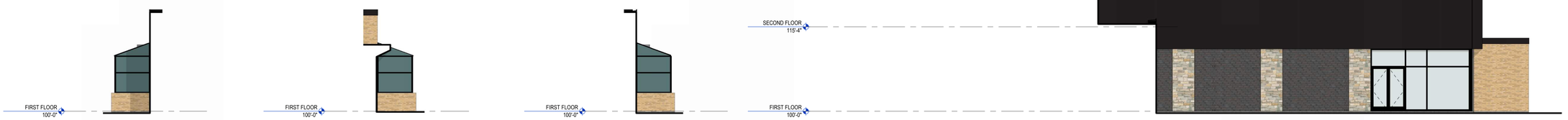
FACE BRICK - DARK	MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
FACE BRICK - LIGHT	MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
FACE BRICK - EXISTING	MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
ANCHORED STONE VENEER	MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
INSULATED GLAZING UNIT - CLEAR	INSULATED GLAZING UNIT - SPANDREL

KEYNOTE LEGEND

FB-1	FACE BRICK - DARK
FB-2	FACE BRICK - LIGHT
FB-3	FACE BRICK - EXISTING
IGU-1	INSULATED GLAZING UNIT - CLEAR
IGU-4B	INSULATED GLAZING UNIT - SPANDREL
MWP-1	MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
MWP-2	MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
MWP-3	MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
MWP-4	MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
STNV-1	ANCHORED STONE VENEER

6E PC3.7 UNIT E - PARTIAL SOUTH
Scale: 1/8" = 1'-0"

6C PC3.7 UNIT E - NORTH
Scale: 1/8" = 1'-0"



6B PC3.7 UNIT E - PARTIAL SOUTH
Scale: 1/8" = 1'-0"

5B PC3.7 UNIT E - PARTIAL NORTH2
Scale: 1/8" = 1'-0"

4B PC3.7 UNIT E - PARTIAL NORTH
Scale: 1/8" = 1'-0"

3B PC3.7 UNIT E - EAST
Scale: 1/8" = 1'-0"

6A PC3.7 UNIT E - WEST
Scale: 1/8" = 1'-0"

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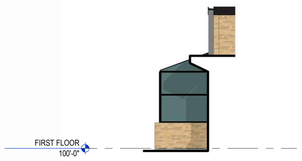
ELEVATION MATERIAL LEGEND

- FACE BRICK - DARK
- FACE BRICK - LIGHT
- FACE BRICK - EXISTING
- ANCHORED STONE VENEER
- INSULATED GLAZING UNIT - CLEAR
- MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
- MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
- MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
- MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
- INSULATED GLAZING UNIT - SPANDREL

KEYNOTE LEGEND

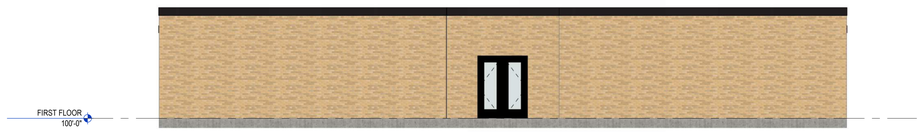
FB-1	FACE BRICK - DARK
FB-2	FACE BRICK - LIGHT
FB-3	FACE BRICK - EXISTING
IGU-1	INSULATED GLAZING UNIT - CLEAR
IGU-AB	INSULATED GLAZING UNIT - SPANDREL
MWP-1	MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
MWP-2	MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
MWP-3	MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
MWP-4	MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
STNV-1	ANCHORED STONE VENEER

3D / PC3.8 UNIT F - PARTIAL WEST_
Scale: 1/8" = 1'-0"



6C / PC3.8 UNIT F - PARTIAL SOUTH_
Scale: 1/8" = 1'-0"

4C / PC3.8 UNIT F - PARTIAL EAST_
Scale: 1/8" = 1'-0"



3C / PC3.8 UNIT F - WEST_
Scale: 1/8" = 1'-0"

6B / PC3.8 UNIT F - SOUTH_
Scale: 1/8" = 1'-0"

6A / PC3.8 UNIT F - NORTH_
Scale: 1/8" = 1'-0"

3A / PC3.8 UNIT F - EAST_
Scale: 1/8" = 1'-0"

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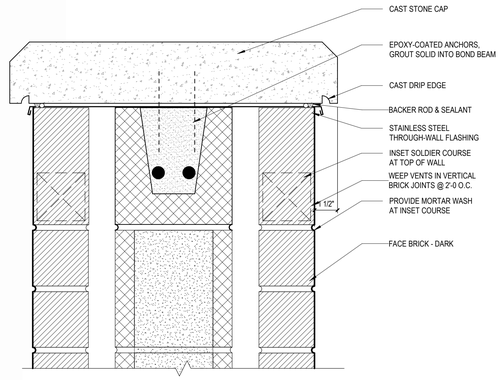
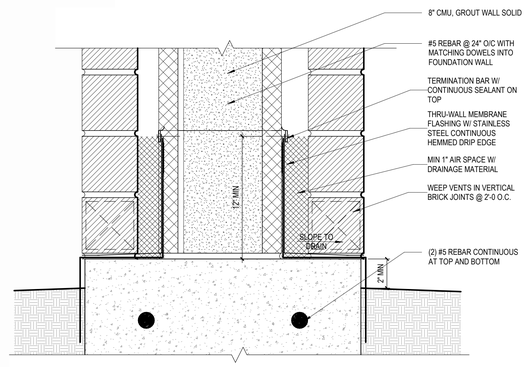
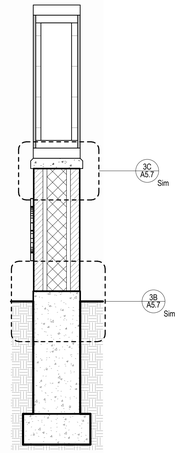


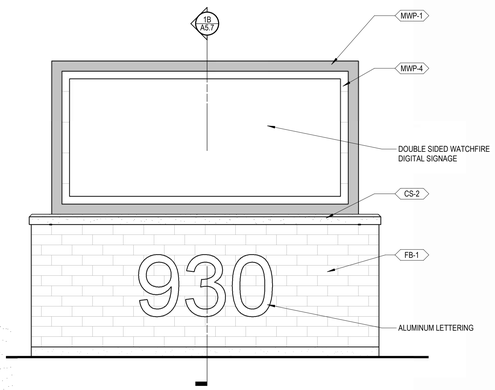
3C A5.7 DETAIL - MONUMENT CAP
Scale: 3" = 1'-0"



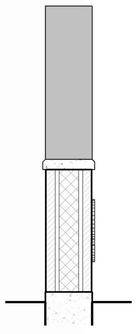
3B A5.7 DETAIL - MONUMENT BASE
Scale: 3" = 1'-0"



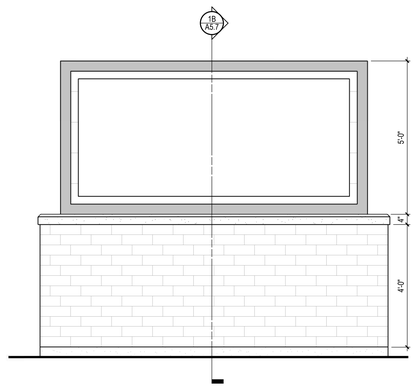
1B A5.7 SECTION MONUMENT SIGN
Scale: 1/2" = 1'-0"



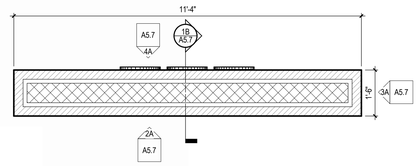
4A A5.7 MONUMENT SIGN ELEVATION 2
Scale: 1/2" = 1'-0"



3A A5.7 MONUMENT SIGN SIDE ELEVATION
Scale: 1/2" = 1'-0"



2A A5.7 MONUMENT SIGN ELEVATION 1
Scale: 1/2" = 1'-0"



1A A5.7 MONUMENT SIGN
Scale: 1/2" = 1'-0"

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829 South 1st Street
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www.brayarch.com

Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St,
Mukwonago, WI 53149

REVISIONS:

#	DATE	DESCRIPTION

Project Number:
3526

Issued For:

Sheet Title:
EXTERIOR DETAILS - SITE

Sheet Number:
A5.7

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Autodesk Docs://3526-MSD Master Plan/3526_MASD_New Middle School.rvt
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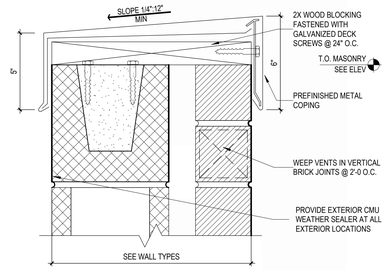
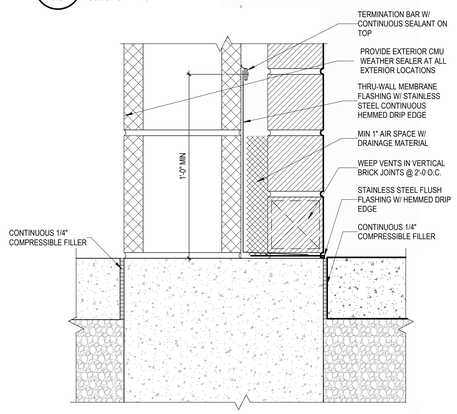


4E TOP OF WALL @ X#Bni

A6.5.1 Scale: 3" = 1'-0"



4C BASE @X#Bni

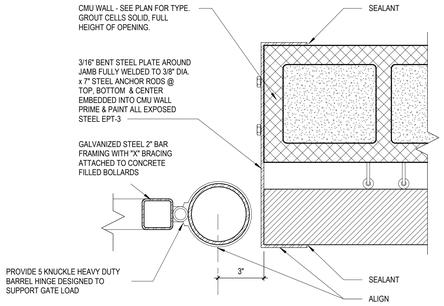
A6.5.1 Scale: 3" = 1'-0"

ELEVATION MATERIAL LEGEND

FACE BRICK - DARK	MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
FACE BRICK - LIGHT	MWP-2 - FORMED METAL WALL PANEL - EXPOSED FASTERNER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
FACE BRICK - EXISTING	MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
ANCHORED STONE VENEER	MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
INSULATED GLAZING UNIT - CLEAR	INSULATED GLAZING UNIT - SPANDREL

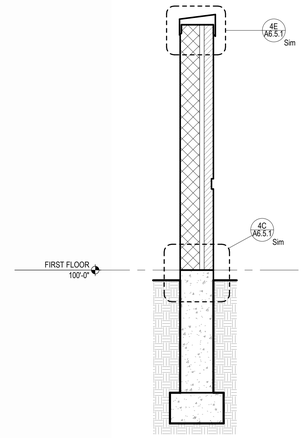
KEYNOTE LEGEND

07-02	2X WOOD BLOCKING FASTENED WITH GALVANIZED DECK SCREWS @ 24" O.C.
0330-04	CONTINUOUS 1/4" COMPRESSIBLE FILLER
0420-05	TERMINATION BAR W/ CONTINUOUS SEALANT ON TOP
0420-07	MIN 1" AIR SPACE W/ DRAINAGE MATERIAL
0420-08	WEEP VENTS IN VERTICAL BRICK JOINTS @ 2'-0 O.C.
0725-08	THRU-WALL MEMBRANE FLASHING W/ STAINLESS STEEL CONTINUOUS HEMMED DRIP EDGE
0762-02	PREFINISHED METAL COPING
0762-10	STAINLESS STEEL FLUSH FLASHING W/ HEMMED DRIP EDGE
FB-1	FACE BRICK - DARK
FB-2	FACE BRICK - LIGHT
FB-3	FACE BRICK - EXISTING
MWP-1	MWP-1 - METAL COMPOSITE MATERIAL WALL PANELS - MUZA - MZ-2000 - CHARCOAL
MWP-2A	MWP-2A - FORMED METAL WALL PANEL - EXPOSED FASTENER, LAP SEAM - MUZA - MZ 8 PANEL - PEWTER
MWP-2B	MWP-2B - FORMED METAL WALL PANEL - EXPOSED FASTENER, LAP SEAM - MUZA - MZ 5 PANEL - PEWTER
MWP-3	MWP-3 - METAL WALL PANEL - MUZA BLUE ZINC
MWP-4	MWP-4 - METAL WALL PANEL - MUZA WOOD LOOK
STNV-1	ANCHORED STONE VENEER



3C GATE JAMB DETAIL

A6.5.1 Scale: 3" = 1'-0"



1C TRASH ENCLOSURE SECTION

A6.5.1 Scale: 1/2" = 1'-0"

6B ELEVATION PARTIAL WEST

A6.5.1 Scale: 1/4" = 1'-0"

5B ELEVATION WEST

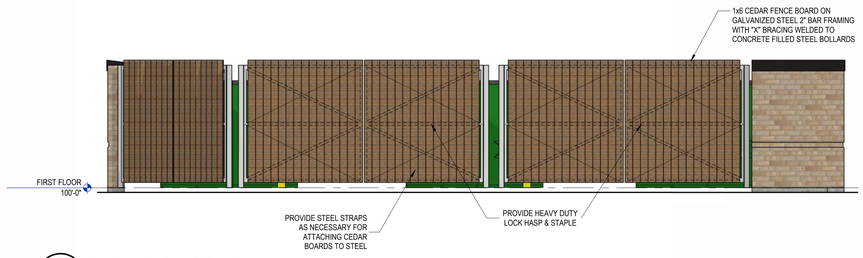
A6.5.1 Scale: 1/4" = 1'-0"

4B ELEVATION NORTH

A6.5.1 Scale: 1/4" = 1'-0"

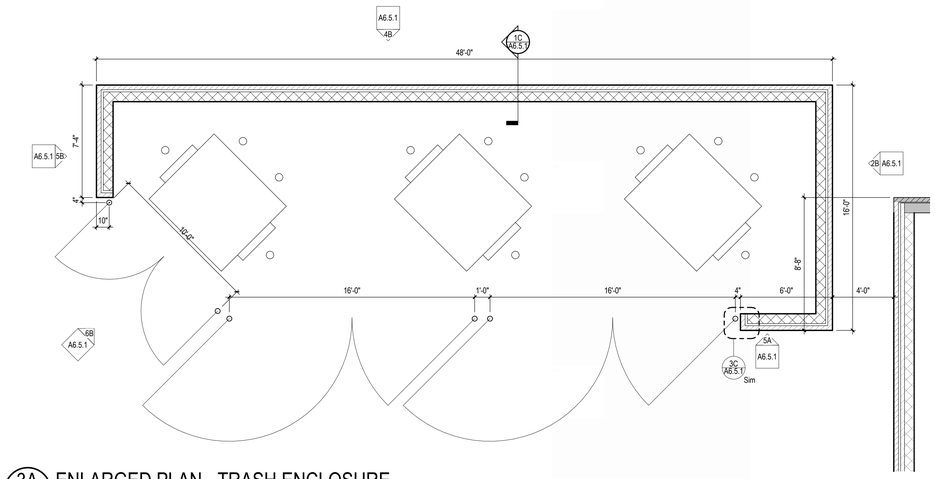
2B ELEVATION EAST

A6.5.1 Scale: 1/4" = 1'-0"



5A ELEVATION SOUTH

A6.5.1 Scale: 1/4" = 1'-0"



3A ENLARGED PLAN - TRASH ENCLOSURE

A6.5.1 Scale: 1/4" = 1'-0"

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Milwaukee, Wisconsin 53204
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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

#	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number:
3526

Issued For:
PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
ENLARGED PLANS - TRASH ENCLOSURE

Sheet Number:
A6.5.1

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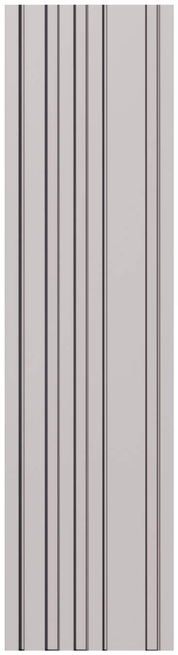
Autodesk Docs://3526-MSD Master Plan/3526_MASD_New Middle School.rvt
5/7/2025 11:22:03 AM

FACE BRICK - DARK

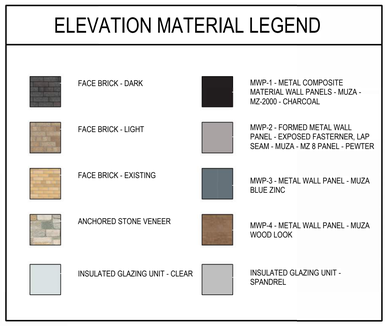
METAL PANEL - CHARCOAL

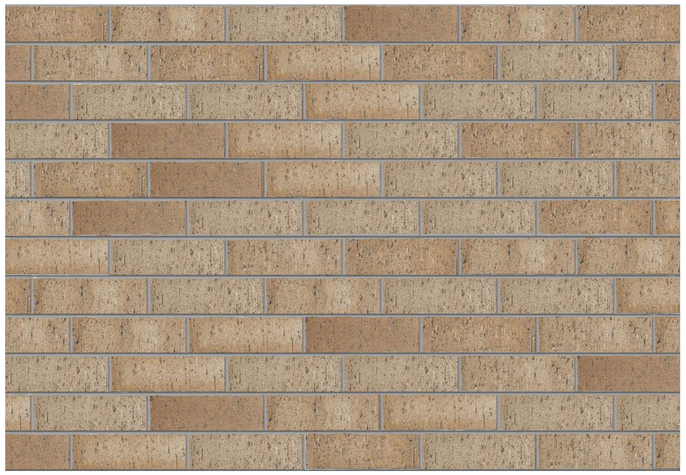


METAL PANEL WITH PROFILE - GREY

METAL PANEL - ZINC

METAL PANEL - WOOD LOOK





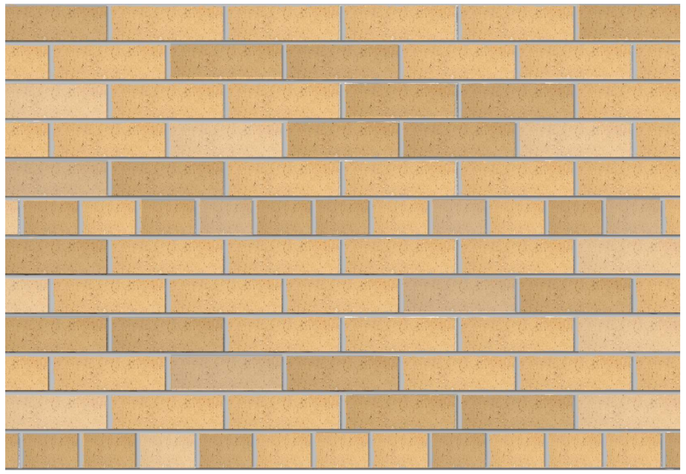
FACE BRICK - LIGHT

ANCHORED STONE VENEER

BLACK ANODIZED ALUMINUM FRAMING

INSULATING GLAZING UNIT - CLEAR

INSULATING GLAZING UNIT - SPANDREL



FACE BRICK - EXISTING

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VIEW FROM NORTHWEST INTERSECTION OF HWY 83 & NN

VIEW LOOKING SOUTH AT NEW CAFETERIA

VIEW LOOKING SOUTH AT MAIN ENTRANCE

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VIEW FROM SOUTH PARKING LOT LOOKING NORTHWEST TOWARDS ATHLETIC ENTRANCE

VIEW FROM WEST PARKING LOT LOOKING EAST AT 3-STORY CLASSROOM PORTION

VIEW LOOKING NORTH AT ATHLETIC ENTRANCE

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VIEW FROM WEST PARKING LOT LOOKING NORTHEAST TOWARDS EXISTING BUILDING

VIEW FROM SOUTH PARKING LOT LOOKING NORTH

VIEW LOOKING WEST TOWARDS EXISTING BUILDING AND NEW CAFETERIA

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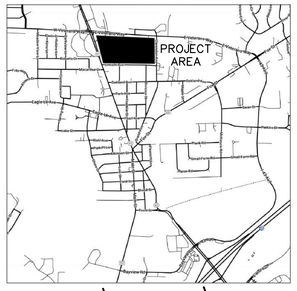
PLAT OF SURVEY WITH TOPOGRAPHY

PART OF THE SOUTHEAST 1/4 OF SECTION 23, TOWNSHIP 5 NORTH, RANGE 18 EAST, IN THE VILLAGE (FORMERLY IN THE TOWN) OF MUKWONAGO, COUNT OF WAUKESHA, STATE OF WISCONSIN.

BEARINGS ARE REFERENCED TO NAD83 WISCONSIN STATE PLANE – SOUTH ZONE VERTICAL DATUM IS NAVD 88

VICINITY MAP

NOT TO SCALE



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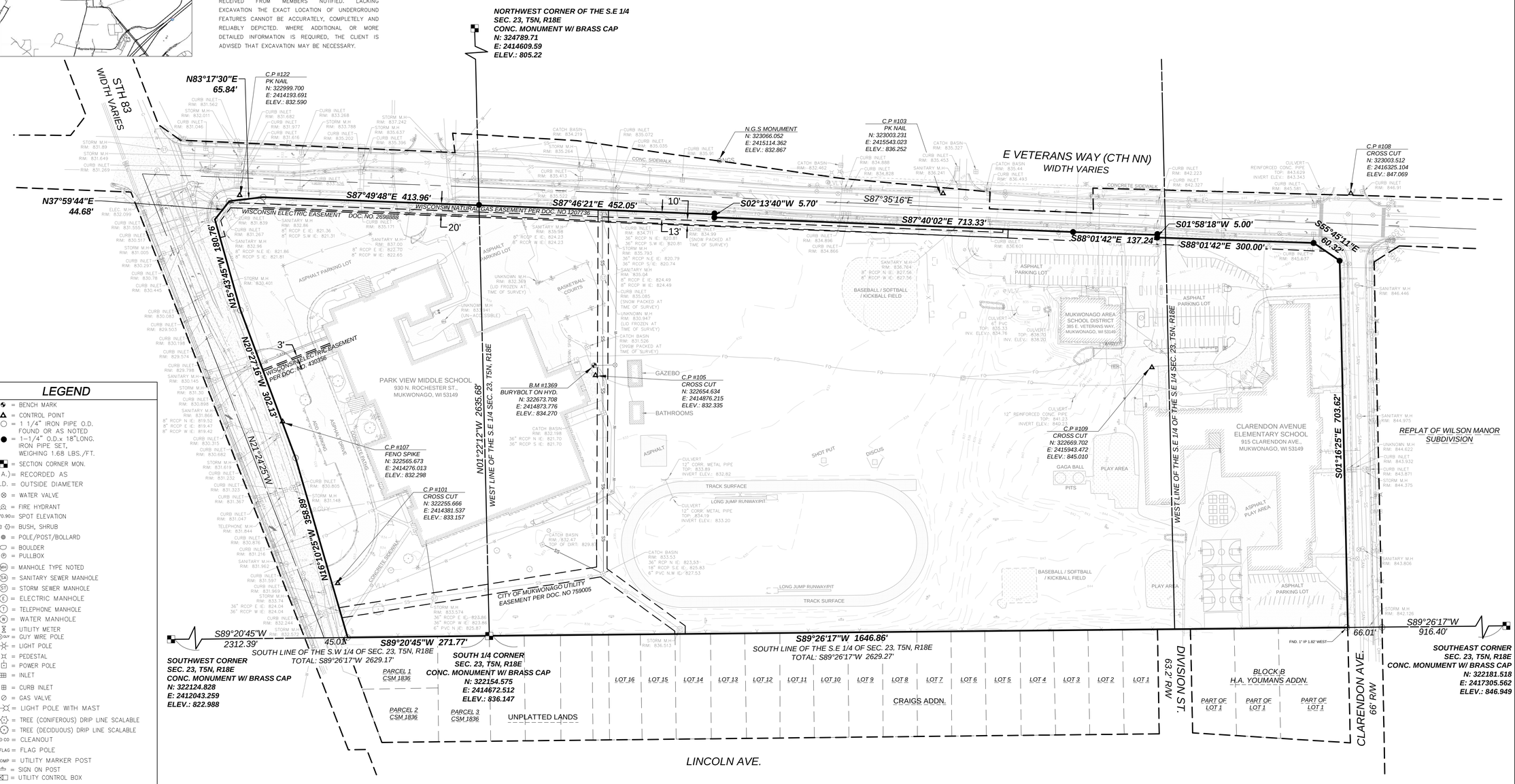
ALTHOUGH DIGGERS' HOTLINE WAS NOTIFIED THIS SURVEY DOES NOT GUARANTEE THAT ALL UTILITIES HAVE BEEN LOCATED ON SITE. SOME OF THE UTILITIES MAY HAVE BEEN DRAWN IN PER PLAN BASED ON MAPS RECEIVED FROM MEMBERS NOTIFIED. LACKING EXCAVATION THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION MAY BE NECESSARY.



LEGEND

- ⚒ = BENCH MARK
- △ = CONTROL POINT
- ○ = 1 1/4" IRON PIPE O.D. FOUND OR AS NOTED
- ● = 1–1/4" O.D.x 18"LONG. IRON PIPE SET, WEIGHING 1.68 LBS./FT.
- ■ = SECTION CORNER MON.
- (R.A.)= RECORDED AS
- O.D. = OUTSIDE DIAMETER
- ⊗ = WATER VALVE
- = FIRE HYDRANT
- 970.90= SPOT ELEVATION
- = BUSH, SHRUB
- = POLE/POST/BOLLARD
- = BOULDER
- = PULLBOX
- (MH) = MANHOLE TYPE NOTED
- (SA) = SANITARY SEWER MANHOLE
- (ST) = STORM SEWER MANHOLE
- (E) = ELECTRIC MANHOLE
- (T) = TELEPHONE MANHOLE
- (W) = WATER MANHOLE
- = UTILITY METER
- (GUY) = GUY WIRE POLE
- = LIGHT POLE
- = PEDESTAL
- = POWER POLE
- = INLET
- = CURB INLET
- = GAS VALVE
- = LIGHT POLE WITH MAST
- = TREE (CONIFEROUS) DRIP LINE SCALABLE
- = TREE (DECIDUOUS) DRIP LINE SCALABLE
- (CO) = CLEANOUT
- (FLAG) = FLAG POLE
- (UMP) = UTILITY MARKER POST
- = SIGN ON POST
- = UTILITY CONTROL BOX
- (VLV) = UNKNOWN UTILITY VALVE
- FL. EL. = FIRST FLOOR ELEVATION
- = BUILDING OUTLINE
- 3 = MINOR CONTOUR
- 5 = MAJOR CONTOUR
- = FENCE
- = BEAM GUARD
- = CHAINLINK FENCE
- = WOODED AREA/SHRUB EDGE
- W = WATER MAIN
- ST = STORM SEWER
- SAN = SANITARY SEWER
- G = NATURAL GAS MAIN
- T = UNDERGROUND TELEPHONE
- E = UNDERGROUND ELECTRIC
- OH = OVERHEAD UTILITY LINES
- FO = UNDERGROUND FIBER OPTIC
- TV = UNDERGROUND CABLE TV
- C = COMMUNICATION CONDUIT
- (P) = UTILITIES PER PLAN
- = ASPHALT SURFACE
- = CONCRETE SURFACE
- = GRAVEL / CRUSHED AGG. SURFACE

PROVIDED BY: KNIGHT BARRY TITLE GROUP
FILE #: 2310623. EFFECTIVE DATE: DECEMBER 20, 2024.

LEGAL DESCRIPTION:

All that part of the Southeast 1/4 of Section 23, Township 5 North, Range 18 East, in the Village (formerly in the Town) of Mukwonago, County of Waukesha, State of Wisconsin, described as follows: Beginning at a point on the South line of said Section 23 located 985 feet West of the Southeast corner of said Section 23; thence North 751.5 feet; thence North 86°30' West parallel to County Trunk Highway "EE" a distance of 678.3 feet; thence South 792.9 feet; thence East 677 feet to the place of beginning. The place of beginning can be further described as being 35 feet West of the intersection of the center line of Clarendon Street with the South line of said Section 23.

ALSO

All that part of the Southwest 1/4 and Southeast 1/4 of Section 23, Township 5 North, Range 18 East, in the Village (formerly in the Town) of Mukwonago, County of Waukesha, State of Wisconsin, described as follows: Beginning at the South quarter corner of said Section 23; thence 319.4 feet West on the South line of said Section 23 to the center line of State Trunk Highway 83; thence North 20° West on the center line of said State Trunk Highway 83, 954.4 feet to the intersection with the center line of County Trunk Highway "EE"; thence South 87° East along the centerline of said County Trunk Highway "EE" 1615.7 feet; thence South 809.4 feet to the South line of said Section 23; thence West on said South section line 968.8 feet to the point of beginning.

ALSO

All of Division Street adjoining the East line of Lot 1, Block 1, of Craigs Addition to the Village of Mukwonago, in the North 1/2 of Section 26, Town 5 North, Range 18 East, in the Village of Mukwonago, County of Waukesha, State of Wisconsin, EXCEPTING THEREFROM the West 16 feet thereof.

EXCEPTING THEREFROM those lands conveyed to State of Wisconsin, Department of Transportation as described in Document No. 1347347. FURTHER EXCEPTING THEREFROM those lands conveyed to the State of Wisconsin, Department of Transportation as described in Warranty Deed recorded as Document No. 2672831, as corrected by Affidavit of Correction recorded as Document No. 3389564. AND FURTHER EXCEPTING THEREFROM those lands conveyed to Waukesha County as described in Warranty Deed recorded as Document No. 4226126.

For informational purposes only:
Property Address: 385 East Veterans Way, Mukwonago, WI 53149
Tax Key Number: MUKV 1964.992

SURVEYOR'S CERTIFICATE:

I, Brian Sandberg do hereby certify that that under My direction and control the above described property was surveyed on 12/31/2024 in accordance with AE–7 of the Wisconsin Administrative Code and is correct to the best of my knowledge and belief.

Brian E. Sandberg S–2500
February 19th, 2025.

kapur
7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
MUKWONAGO AREA SCHOOL DISTRICT

LOCATION:
385 E. VETERANS WAY, MUKWONAGO, WI 53149

CLIENT:
BRAY ARCHITECTS

RELEASE:
FINAL

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1" = 80'
0 40' 80' 160'

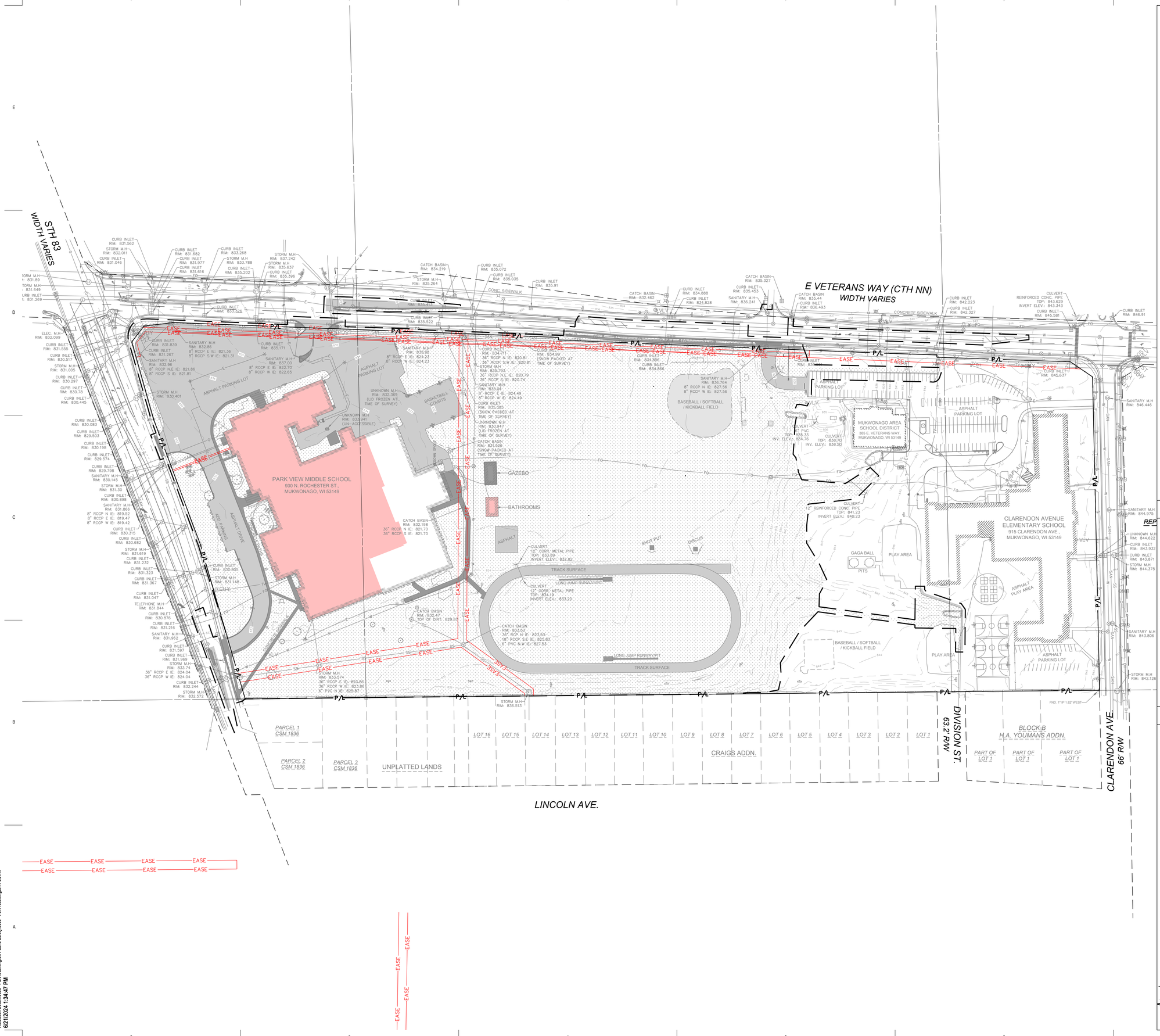
SEAL:
WISCONSIN
BRIAN SANDBERG
S-2500
PORT WASHINGTON
WISCONSIN
LAND SURVEYOR

SHEET:
PLAT OF SURVEY WITH TOPOGRAPHY

PROJECT MANAGER:	M.F
PROJECT NUMBER:	25.0140
DATE:	02/19/2025

SHEET NUMBER:
SU1.10

FILENAME: S:_SiteDsgn\Bray Architects\250140 Mukwonago SD Referendum 2024\Survey\DWG\250140_Plat.dwg



Scale: 0 40 80 160

Scale: 1" = 80'

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DEMOLITION NOTES

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- P/L — PROPERTY LINE
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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: OVERALL SITE DEMOLITION PLAN

Sheet Number: C1.10

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STH 83
WIDTH VARIES

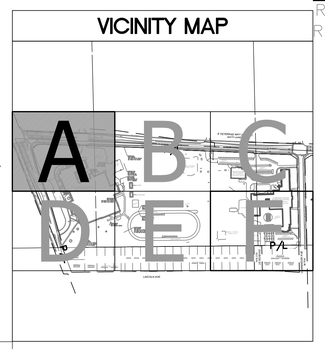
PARK VIEW MIDDLE SCHOOL
930 N. ROCHESTER ST.,
MUKWONAGO, WI 53149

ASPHALT PARKING LOT
ASPHALT PARKING LOT
ADD. PARKING
ASPHALT DRIVE
CONCRETE PATHS
BASKETBALL COURTS
SCHOOL
MATCHLINE
MATCHLINE
MATCHLINE
MATCHLINE

CURB INLET RIM: 831.562
STORM M.H RIM: 832.011
CURB INLET RIM: 831.046
CURB INLET RIM: 831.682
CURB INLET RIM: 831.977
CURB INLET RIM: 831.616
CURB INLET RIM: 833.268
STORM M.H RIM: 833.788
CURB INLET RIM: 835.202
STORM M.H RIM: 837.242
STORM M.H RIM: 835.637
CURB INLET RIM: 835.396
CATCH BASIN RIM: 834.219
STORM M.H RIM: 835.264
CURB INLET RIM: 833.326
CURB INLET RIM: 835.322
M M.H 331.89
RM M.H 31.649
3 INLET 331.269
ELEC. M.H RIM: 832.099
CURB INLET RIM: 831.555
CURB INLET RIM: 830.517
STORM M.H RIM: 831.005
CURB INLET RIM: 830.297
CURB INLET RIM: 830.78
CURB INLET RIM: 830.445
CURB INLET RIM: 831.839
CURB INLET RIM: 831.267
SANITARY M.H RIM: 832.96
8" RCCP N.E IE: 821.86
8" RCCP S IE: 821.81
SANITARY M.H RIM: 832.86
8" RCCP E IE: 821.36
8" RCCP S.W IE: 821.31
CURB INLET RIM: 835.171
SANITARY M.H RIM: 837.00
8" RCCP E IE: 822.70
8" RCCP W IE: 822.65
STORM M.H RIM: 830.401
SANITARY M.H RIM: 835.98
8" RCCP E IE: 824.23
8" RCCP W IE: 824.23
UNKNOWN M.H RIM: 832.369 (LID FROZEN AT TIME OF SURVEY)
UNKNOWN M.H RIM: 833.941 (UN-ACCESSIBLE)
CATCH BASIN RIM: 832.19
36" RCCP N IE: 821.7
36" RCCP S IE: 821.7
CURB INLET RIM: 830.083
CURB INLET RIM: 829.503
CURB INLET RIM: 830.198
CURB INLET RIM: 829.574
CURB INLET RIM: 829.798
SANITARY M.H RIM: 830.145
STORM M.H RIM: 831.30
CURB INLET RIM: 830.898
SANITARY M.H RIM: 831.866
RCCP N IE: 819.52
RCCP E IE: 819.47
RCCP W IE: 819.42
CURB INLET RIM: 830.315
CURB INLET RIM: 830.682
STORM M.H RIM: 831.619
CURB INLET RIM: 831.232
CURB INLET RIM: 831.323
CURB INLET RIM: 831.367
CURB INLET RIM: 830.805
STORM M.H RIM: 831.148

Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP



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- (2) REMOVE & DISPOSE OF EXISTING CHAIN-LINK FENCE INCLUDING POSTS & FOOTINGS
- (3) REMOVE & DISPOSE OF EXISTING BOLLARD
- (4) REMOVE & DISPOSE OF EXISTING LIGHT POLES. REFER TO SITE ELECTRICAL PLANS.
- (5) REMOVE & DISPOSE OF EXISTING SIGN INCLUDING POST & FOOTING
- (6) REMOVE & DISPOSE OF EXISTING CULVERT
- (7) REMOVE & DISPOSE OF EXISTING FLAG POLE INCLUDING POST & FOOTING
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- (10) REMOVE & DISPOSE OF EXISTING BASKETBALL HOOP, POST, & FOOTING.
- (11) SALVAGE EXISTING SHOT PUT AND DISCUS THROWING RINGS AND BACKSTOP FENCING FOR RELOCATION. REFER TO SITE LAYOUT PLAN FOR MORE INFORMATION.
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Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE DEMOLITION PLAN - AREA A

Sheet Number: C1.11A

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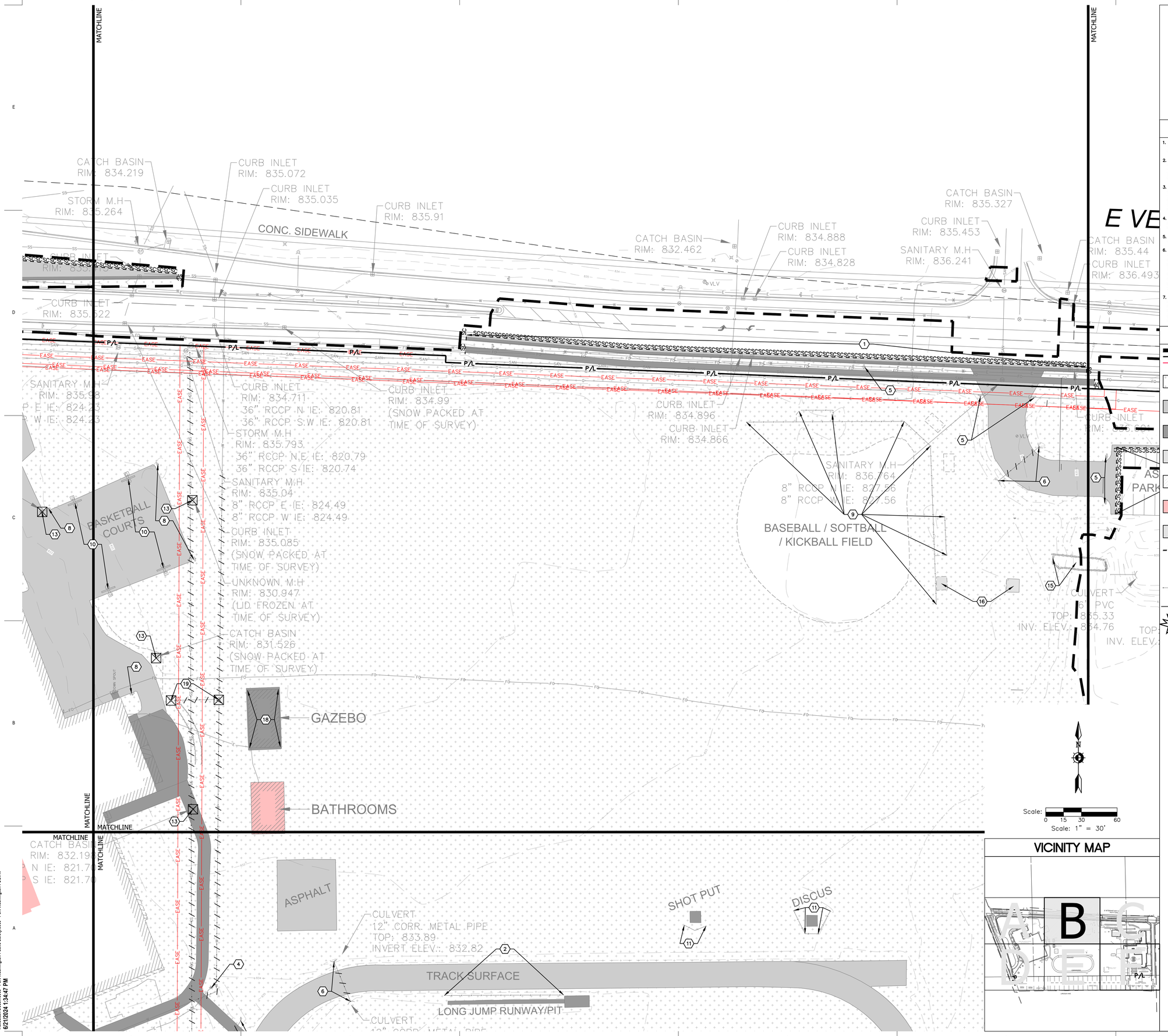

VICINITY MAP

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Sheet Title: **SITE DEMOLITION PLAN - AREA B**

Sheet Number: **C1.12B**

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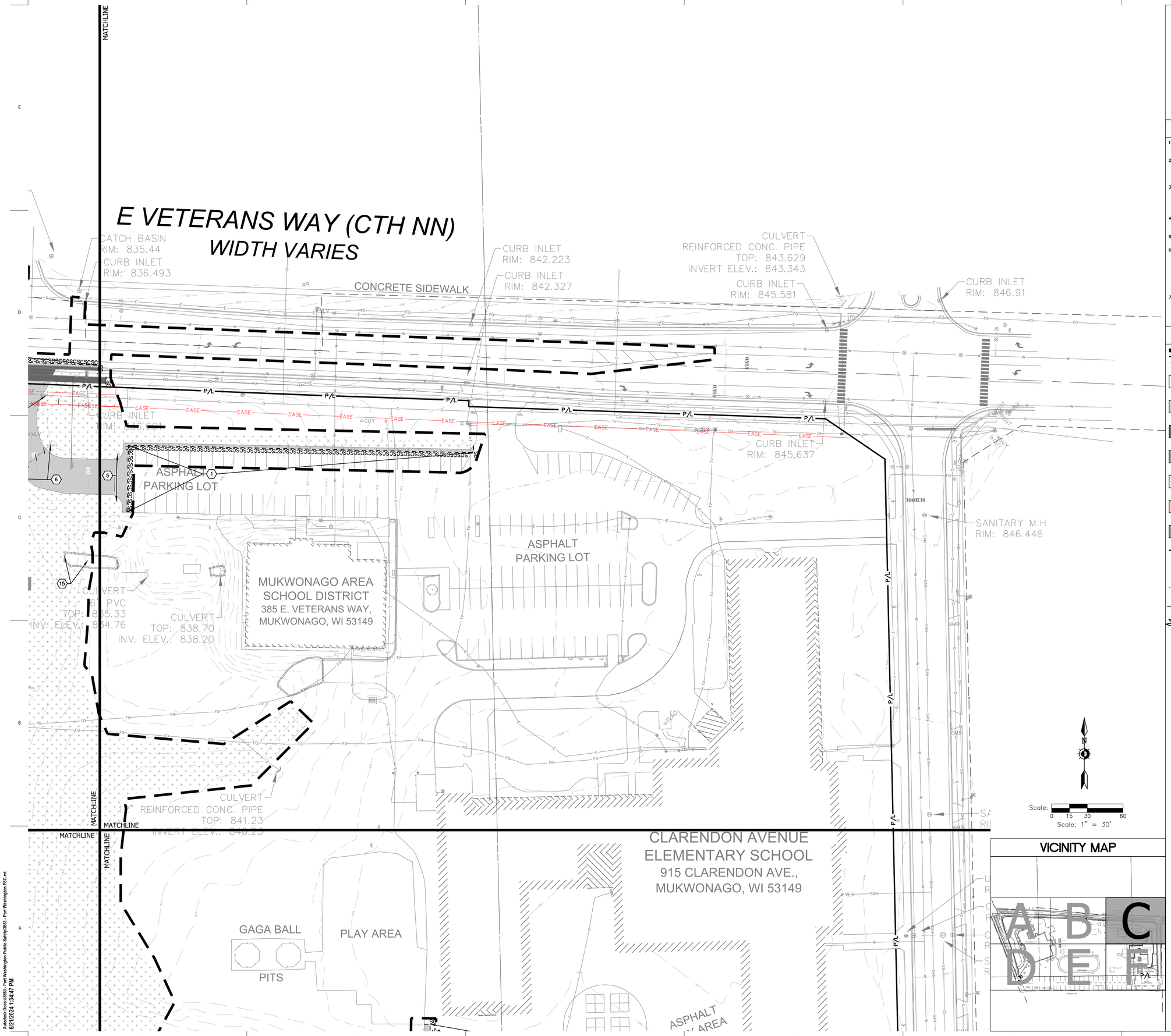

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kapur

Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St,
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE DEMOLITION PLAN - AREA C

Sheet Number: C1.13C

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PARK VIEW MIDDLE SCHOOL
930 N. ROCHESTER ST.,
MUKWONAGO, WI 53149

ASPHALT DRIVE
CONCRETE PATHS
ADD. PARKING
CONCRETE SIDEWALK

CURB INLET RIM: 830.198
CURB INLET RIM: 829.574
CURB INLET RIM: 829.798
SANITARY M.H RIM: 830.145
STORM M.H RIM: 831.30
CURB INLET RIM: 830.898
SANITARY M.H RIM: 831.866
8" RCCP N IE: 819.52
8" RCCP E IE: 819.47
8" RCCP W IE: 819.42
CURB INLET RIM: 830.315
CURB INLET RIM: 830.682
STORM M.H RIM: 831.619
CURB INLET RIM: 831.232
CURB INLET RIM: 831.323
CURB INLET RIM: 831.367
CURB INLET RIM: 831.047
TELEPHONE M.H RIM: 831.844
CURB INLET RIM: 830.876
CURB INLET RIM: 831.216
SANITARY M.H RIM: 831.962
CURB INLET RIM: 831.597
CURB INLET RIM: 831.969
STORM M.H RIM: 833.74
36" RCCP E IE: 824.04
36" RCCP W IE: 824.04
CURB INLET RIM: 832.244
STORM M.H RIM: 832.572

CURB INLET RIM: 830.805
STORM M.H RIM: 831.148

CATCH BASIN RIM: 832.19
36" RCCP N IE: 821.70
36" RCCP S IE: 821.70

CATCH BASIN RIM: 832.47
TOP OF DIRT: 829

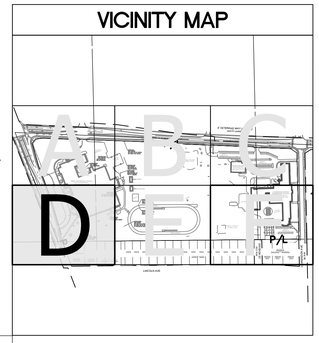
STORM M.H RIM: 833.574
36" RCCP E IE: 823.86
36" RCCP W IE: 823.86
6" PVC N IE: 825.87

MATCHLINE

PARCEL 1 CSM 1836
PARCEL 2 CSM 1836
PARCEL 3 CSM 1836
UNPLATTED LANDS

Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP



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Sheet Title: SITE DEMOLITION PLAN - AREA D

Sheet Number: C1.14D

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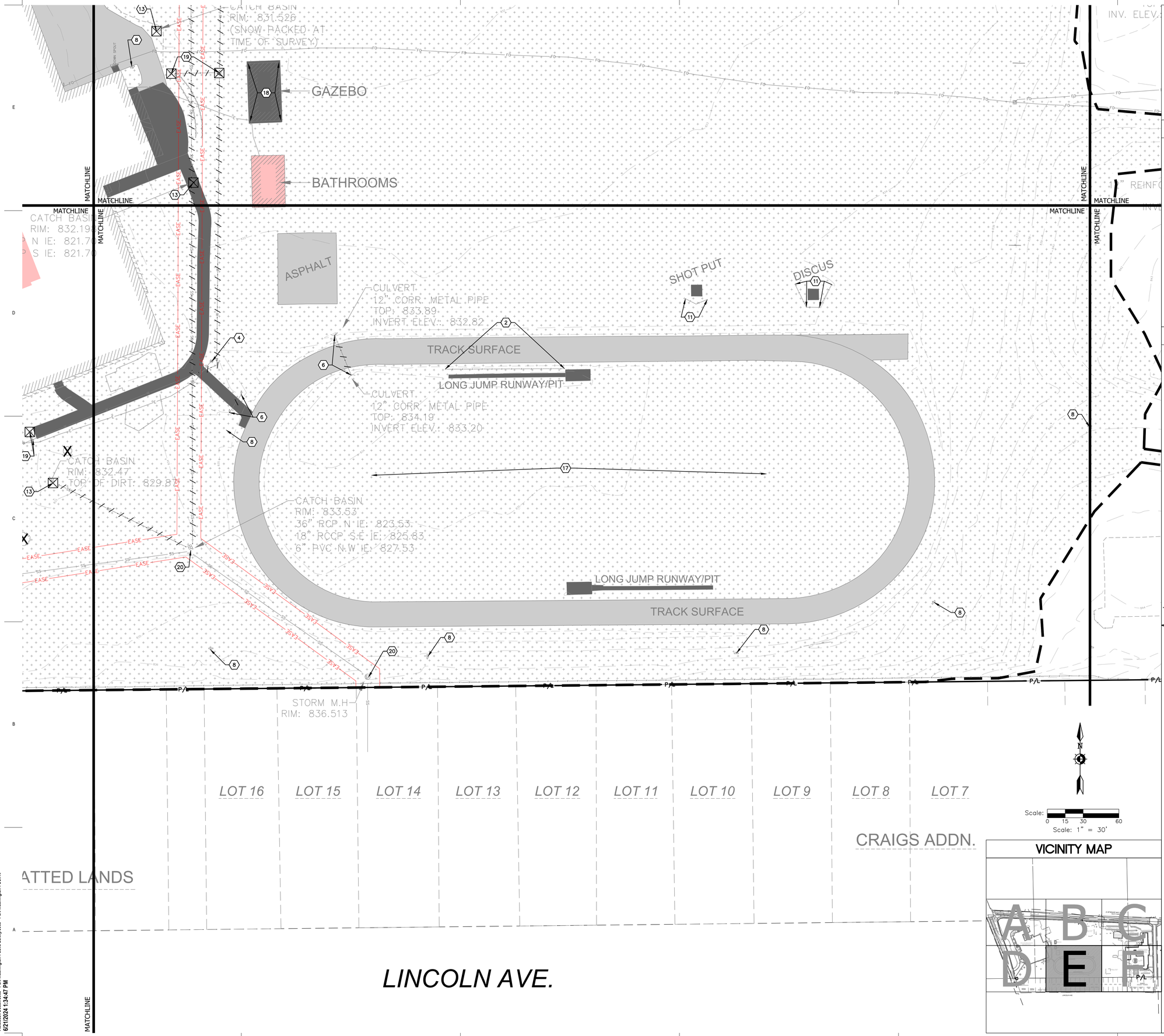

VICINITY MAP

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Sheet Title: **SITE DEMOLITION PLAN - AREA E**

Sheet Number: **C1.15E**

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INV. ELEV.: 838.20

CULVERT
15" REINFORCED CONC. PIPE
TOP: 841.23
INVERT ELEV.: 840.23

MATCHLINE

CLARENDON AVENUE
ELEMENTARY SCHOOL
915 CLARENDON AVE.,
MUKWONAGO, WI 53149

GAGA BALL
PLAY AREA
PITS

ASPHALT
PLAY AREA

BASEBALL / SOFTBALL
/ KICKBALL FIELD

PLAY AREA

ASPHALT
PARKING LOT

SANITARY M.H
RIM: 844.975

UNKNOWN M.H
RIM: 844.622

CURB INLET
RIM: 843.932

CURB INLET
RIM: 843.871

STORM M.H
RIM: 844.375

SANITARY M.H
RIM: 843.806

STORM M.H
RIM: 842.126

FND. 1" IP 1.82' WEST

REPLAT OF WILSO
SUBDIVISI

LOT 6 | LOT 5 | LOT 4 | LOT 3 | LOT 2 | LOT 1

BLOCK B
H.A. YOUMANS ADDN.

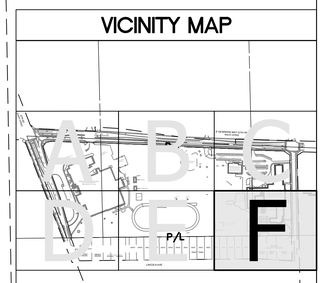
PART OF LOT 1 | PART OF LOT 1 | PART OF LOT 1

DIVISION ST.
63.2' R/W

CLARENDON AVE.
66' R/W

Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP



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- SCSCSCSC — SAWCUT FULL DEPTH
- X — TREES & STUMPS TO BE REMOVED
- DENOTES UTILITIES TO BE ABANDONED & REMOVED.
- AB — DENOTES UTILITIES TO BE ABANDONED IN PLACE.
- CAUTION — KNOWN UTILITY AND POTENTIAL CONFLICT EXIST
- -UTILITY STRUCTURE REMOVAL/ABANDONMENT
- 1 — SAWCUT APPROXIMATELY 2' OF ASPHALT PAVEMENT OFF THE EDGE OF THE ROADWAY TO PROVIDE A SMOOTH EDGE FOR INSTALLATION OF NEW PAVEMENT.
- 2 — REMOVE & DISPOSE OF EXISTING CHAIN-LINK FENCE INCLUDING POSTS & FOOTINGS
- 3 — REMOVE & DISPOSE OF EXISTING BOLLARD
- 4 — REMOVE & DISPOSE OF EXISTING LIGHT POLES. REFER TO SITE ELECTRICAL PLANS.
- 5 — REMOVE & DISPOSE OF EXISTING SIGN INCLUDING POST & FOOTING
- 6 — REMOVE & DISPOSE OF EXISTING CULVERT
- 7 — REMOVE & DISPOSE OF EXISTING FLAG POLE INCLUDING POST & FOOTING
- 8 — SALVAGE EXISTING SIGN FOR RELOCATION. REFER TO CIVIL SITE PLANS FOR NEW SIGN LOCATIONS OR COORDINATE RELOCATION WITH OWNER.
- 9 — NEW REMOVE & DISPOSE OF EXISTING BACKSTOP FENCING INCLUDING POSTS & FOOTINGS
- 10 — REMOVE & DISPOSE OF EXISTING BASKETBALL HOOP, POST, & FOOTING.
- 11 — SALVAGE EXISTING SHOT PUT AND DISCUS THROWING RINGS AND BACKSTOP FENCING FOR RELOCATION. REFER TO SITE LAYOUT PLAN FOR MORE INFORMATION.
- 12 — REMOVE EXISTING TRANSFORMER. REFER TO ELECTRICAL PLANS FOR MORE INFORMATION.
- 13 — REMOVE & DISPOSE OF EXISTING STORM/SANITARY SEWER STRUCTURE AND ANY CONNECTED PIPES.
- 14 — SALVAGE EXISTING BLEACHERS AND RETURN TO OWNER
- 15 — EXISTING RIP RAP TO REMAIN..
- 16 — SALVAGE EXISTING WARM-UP MOUND STRUCTURE AND RUBBER PLATES AND RETURN TO OWNER
- 17 — SALVAGE EXISTING GOAL POSTS & RETURN TO OWNER.
- 18 — SALVAGE EXISTING PAVILION STRUCTURE, TABLES, AND TRASH RECEPTACLES FOR RELOCATION. REFER TO SITE LAYOUT PLAN FOR MORE INFORMATION.
- 19 — SALVAGE AND RELOCATE EXISTING FIRE HYDRANT AND HYDRANT VALVE. REFER TO UTILITY PLAN FOR MORE INFORMATION.
- 20 — EXISTING STORM/SANITARY SEWER STRUCTURE TO REMAIN.
- 21 — REMOVE & DISPOSE OF EXISTING RIP RAP.

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St,
Mukwonago, WI 53149

REVISIONS:

#	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE DEMOLITION PLAN - AREA F

Sheet Number: C1.16F

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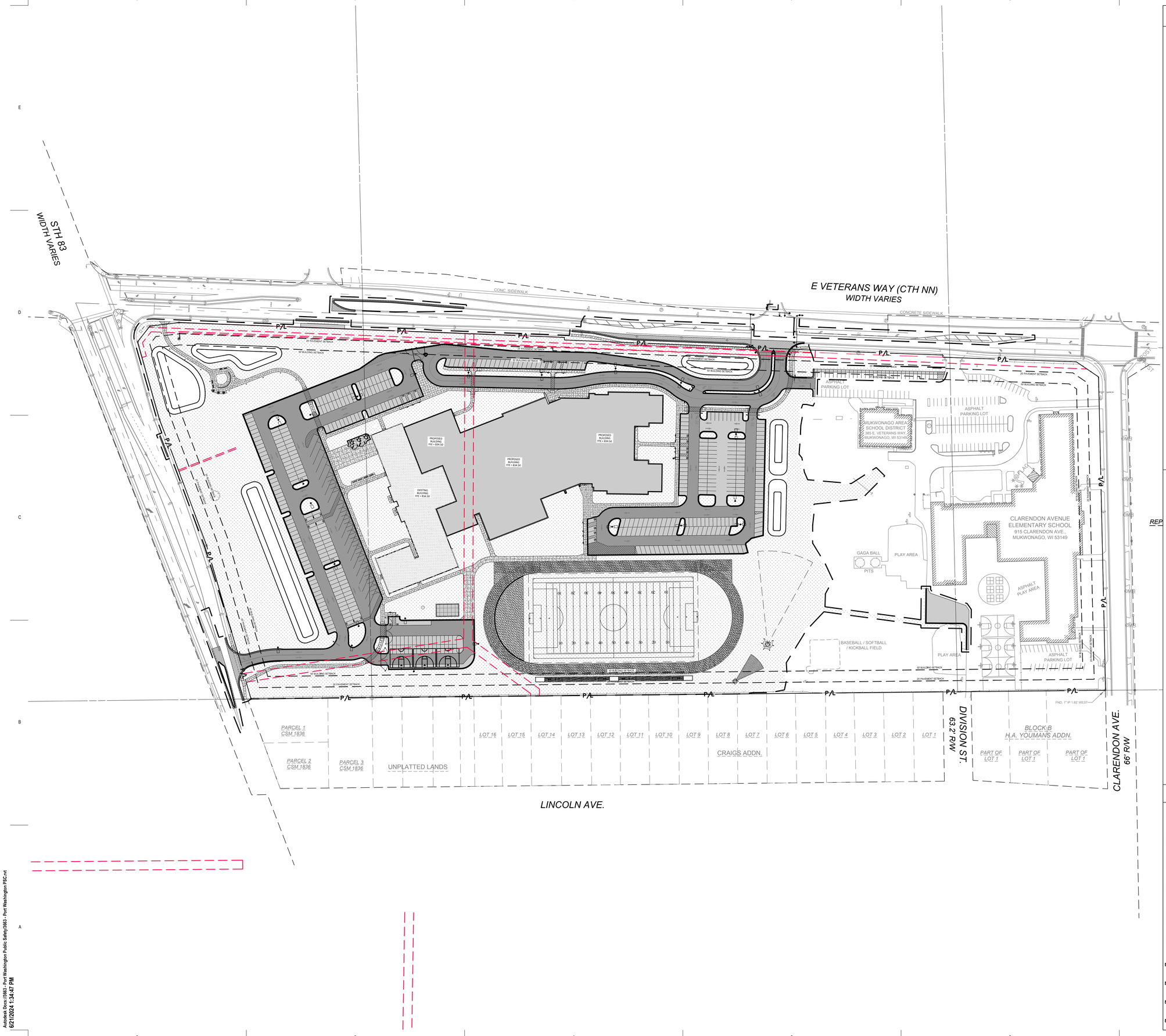

SITE STATISTICS
PARK VIEW MIDDLE SCHOOL

PARCEL ADDRESS: 930 NORTH ROCHESTER STREET
MUKWONAGO, WI 53149

PARCEL LEGAL DESCRIPTION: PART OF THE SOUTHEAST ¼ OF SECTION 23, TOWNSHIP 5 NORTH, RANGE 18 EAST, IN THE VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN.

PARCEL AREA: 1,612,646 SQ. FT. OR 37.021 ACRES

ZONING DESIGNATION – P–1 PUBLIC AND SEMIPUBLIC DISTRICT

PARCEL PERVIOUS AREA BEFORE IMPROVEMENTS: 28.650 AC. (77.39%)
PARCEL IMPERVIOUS AREA BEFORE IMPROVEMENTS: 8.371 AC. (22.61%)
PARCEL PERVIOUS AREA AFTER IMPROVEMENTS: 25.166 AC. (67.98%)
PARCEL IMPERVIOUS AREA AFTER IMPROVEMENTS: 11.855 AC. (32.02%)

NET INCREASE IN IMPERVIOUS AREA: 3.484 ACRES

PROPOSED AREA OF LAND DISTURBANCE ON PARCEL: 25.658 ACRES

PARKING SUMMARY

MINIMUM REQUIRED PARKING SPACES: 1 SPACE FOR EVERY 2 STUDENTS AT MAXIMUM ENROLLMENT AND 1 SPACE PER PERSON EMPLOYED AT THE SCHOOL. A PORTION OF THE PARKING MAY BE PROVIDED ON A SOLID SURFACE PLAY AREA, AS DETERMINED BY THE PLAN COMMISSION. (SECTION 100–402(A)(2) OF THE MUNICIPAL CODE)

EXISTING ENROLLMENT: 722 STUDENTS
EXISTING EMPLOYMENT: 100 PERSONS
MINIMUM REQUIRED PARKING SPACES PER CODE: 461 STALLS

EXISTING PARKING STALLS IN WEST PARKING AREA: 12
STANDARD PARKING STALLS: 8
ADA PARKING STALLS: 4

EXISTING PARKING STALLS IN NORTHWEST PARKING AREA: 157
STANDARD PARKING STALLS: 151
ADA PARKING STALLS: 6

EXISTING PARKING STALLS IN NORTHEAST PARKING AREA: 67
STANDARD PARKING STALLS: 67
ADA PARKING STALLS: 0

TOTAL EXISTING PARKING STALLS ON SITE: 236
STANDARD PARKING STALLS: 226
ADA PARKING STALLS: 10

PROPOSED MAXIMUM FUTURE ENROLLMENT: 1,200 STUDENTS
PROPOSED EMPLOYMENT: 150 PERSONS
MINIMUM REQUIRED PARKING SPACES PER CODE: 750 STALLS

PROPOSED PARKING STALLS IN SOUTHWEST PARKING AREA: 36
STANDARD PARKING STALLS: 34
ADA PARKING STALLS: 2

PROPOSED PARKING STALLS IN WEST PARKING AREA: 169
STANDARD PARKING STALLS: 135
OVERFLOW PARKING STALLS: 28
ADA PARKING STALLS: 6

PROPOSED PARKING STALLS IN NORTHWEST PARKING AREA: 60
STANDARD PARKING STALLS: 57
ADA PARKING STALLS: 3

PROPOSED PARKING STALLS IN NORTH PARKING AREA: 28
STANDARD PARKING STALLS: 24
ADA PARKING STALLS: 4

PROPOSED PARKING STALLS IN EAST PARKING AREA: 107
STANDARD PARKING STALLS: 102
ADA PARKING STALLS: 5

PROPOSED PARKING STALLS IN SOUTHEAST PARKING AREA: 82
STANDARD PARKING STALLS: 78
ADA PARKING STALLS: 4

TOTAL PROPOSED PARKING STALLS ON SITE: 482
STANDARD PARKING STALLS: 458
ADA PARKING STALLS: 24

PROPOSED PARKING STALL COUNT IS MORE THAN DOUBLE THE EXISTING STALL COUNT, WHEREAS THE MAXIMUM FUTURE ENROLLMENT WILL BE LESS THAN DOUBLE THE EXISTING ENROLLMENT.

Scale: 0 40 80 160
Scale: 1" = 80'

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- NEW ASPHALTIC CONCRETE (HEAVY DUTY) — 1 C2.11
- NEW CONCRETE SLAB (LIGHT DUTY) — 2 C2.11 / 3 C2.11
- NEW CONCRETE SLAB (HEAVY DUTY) — 2 C2.11 / 3 C2.11
- 18" BARRIER LOW–SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 4 C2.11
- 18" BARRIER HIGH–SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 4 C2.11
- 18" DEPRESSED LOW–SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 5 C2.11
- 18" DEPRESSED HIGH–SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 5 C2.11

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: **3526**

Issued For: **PLAN COMMISSION SUBMITTAL** 4/2/2025

Sheet Title: **OVERALL SITE LAYOUT PLAN**

Sheet Number: **C1.20**

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STH 83
WIDTH VARIES

MATCHLINE

BIO-RETENTION BASIN-3
TOP OF BERM 829.00
BOTTOM OF BASIN 825.00

NEW MONUMENT SIGN

P/L

25' PAVEMENT SETBACK

50' BUILDING SETBACK

WIDENED PAVEMENT TO FACILITATE FIRE TRUCK TURN MOVEMENTS

MANUAL SWING GATES TO CONTROL ACCESS

60 TOTAL PARKING STALLS
57 STANDARD STALLS
3 ACCESSIBLE STALLS

NEW BENCHES

NEW SEAT WALL

NEW FLAG POLES

BUS TURNAROUND

NEW UTILITY TRANSFORMER

NEW PAD MOUNTED CT CABINET W/ METER

NEW TRASH ENCLOSURE

MAINTENANCE & RECEIVING AREA

PROPOSED BUILDING
FFE = 834.50

EXISTING BUILDING
FFE = 834.50

NEW BIKE RACKS

169 TOTAL PARKING STALLS
135 STANDARD STALLS
28 OVERFLOW STALLS
6 ACCESSIBLE STALLS

169 TOTAL PARKING STALLS
135 STANDARD STALLS
28 OVERFLOW STALLS
6 ACCESSIBLE STALLS

BIO-RETENTION BASIN-4
TOP OF BERM 830.00
BOTTOM OF BASIN 826.00

ONLY/ONLY

ATKO

N

Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP

A B C D E

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- 18" DEPRESSED LOW-SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 5/C2.11
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1	NEW 30" BARRIER LOW-SIDE CONCRETE CURB & GUTTER	6/C2.11
2	NEW 30" BARRIER HIGH-SIDE CONCRETE CURB & GUTTER	6/C2.11
3	NEW 24" MOUNTABLE LOW-SIDE CONCRETE CURB & GUTTER	7/C2.11
4	NEW 24" MOUNTABLE HIGH-SIDE CONCRETE CURB & GUTTER	7/C2.11
5	10' TRANSITION FROM 18" BARRIER CURB & GUTTER TO 30" BARRIER CURB & GUTTER	4/C2.11, 6/C2.11
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7	3' TRANSITION FROM 18" BARRIER CURB & GUTTER TO ZERO FACE CURB & GUTTER	1/C2.11, 10/C2.11
8	3' TRANSITION FROM 30" BARRIER CURB & GUTTER TO ZERO FACE CURB & GUTTER	6/C2.11, 10/C2.11
9	3' TRANSITION FROM 24" MOUNTABLE CURB & GUTTER TO ZERO FACE CURB & GUTTER	8/C2.11, 10/C2.11
10	9' TRANSITION FROM 18" BARRIER CURB & GUTTER TO 18" DEPRESSED CURB & GUTTER.	9/C2.11
11	NEW ACCESSIBILITY RAMP WITH TRUNCATED DOME DETECTABLE WARNING FIELDS	13/C2.11, 12/C2.11
12	NEW ACCESSIBILITY RAMP	1/C2.12
13	NEW ACCESSIBILITY RAMP WITH TRUNCATED DOME DETECTABLE WARNING FIELDS	2/C2.12, 12/C2.11
14	NEW ACCESSIBILITY RAMP WITH TRUNCATED DOME DETECTABLE WARNING FIELDS	3/C2.12, 12/C2.11
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16	NEW ACCESSIBILITY RAMP	
17	NEW ACCESSIBILITY RAMP	6/C2.12
18	NEW ACCESSIBILITY RAMP	6/C2.11
19	NEW ACCESSIBILITY RAMP	6/C2.11
20	NEW ACCESSIBILITY RAMP WITH TRUNCATED DOME DETECTABLE WARNING FIELDS	8/C2.11
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23	NEW BIKE RACKS	3/C2.14
24	NEW BASKETBALL COURTS	1/C2.14, 2/C2.14, 6/C2.14
25	CONCRETE SHOT PUT/DISCUS THROWING PAD	4/C2.15
26	RUNNING TRACK RADIUS POINT	6/C2.15
27	LONG JUMP/TRIPLE JUMP RUNWAYS AND SAND PIT BOXES	1/C2.16, 2/C2.15

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

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NOT FOR CONSTRUCTION

Project Number:
3526

Issued For:
PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
SITE LAYOUT PLAN - AREA A

Sheet Number:
C1.21A

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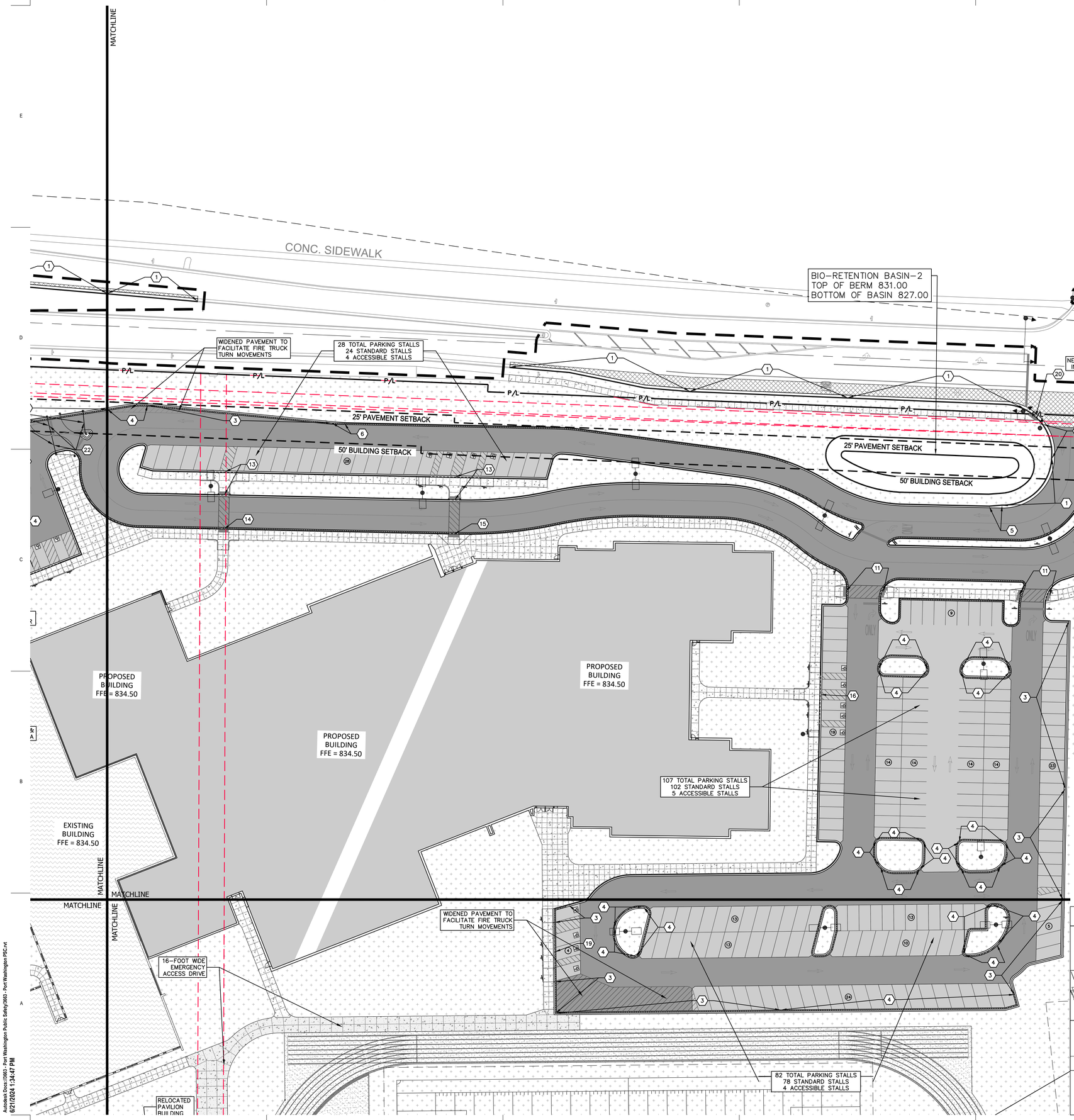
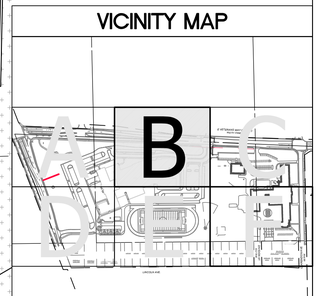


VICINITY MAP



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Project Number: **3526**

Issued For: **PLAN COMMISSION SUBMITTAL** 4/2/2025

Sheet Title: **SITE LAYOUT PLAN - AREA B**

Sheet Number: **C1.22B**

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E VETERANS WAY (CTH NN)
WIDTH VARIES

MATCHLINE

CONCRETE SIDEWALK

P/L

25' PAVEMENT SETBACK

50' BUILDING SETBACK

ASPHALT PARKING LOT

MUKWONAGO AREA SCHOOL DISTRICT
385 E. VETERANS WAY,
MUKWONAGO, WI 53149

BIO-RETENTION BASIN-1
TOP OF BERM 830.25
BOTTOM OF BASIN 826.25

CLARENDON AVENUE ELEMENTARY SCHOOL
915 CLARENDON AVE.,
MUKWONAGO, WI 53149

GAGA BALL PIT

PLAY AREA

ASPHALT PLAY AREA

ONYX

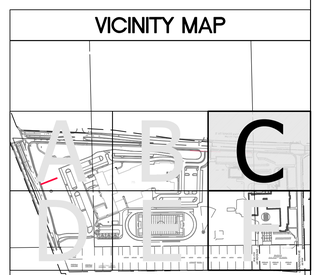
SCHOOL

OHB

UGMH

Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP



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- 22 — NEW ORNAMENTAL STEEL MANUAL SECURITY GATES — 2/C2.14
- 23 — NEW BIKE RACKS — 3/C2.14
- 24 — NEW BASKETBALL COURTS — 4/C2.14, 5/C2.14, 6/C2.14
- 25 — CONCRETE SHOT PUT/DISCUS THROWING PAD — 4/C2.15
- 26 — RUNNING TRACK RADIUS POINT — 6/C2.15
- 27 — LONG JUMP/TRIPLE JUMP RUNWAYS AND SAND PIT BOXES — 1/C2.16, 2/C2.16

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St,
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: **3526**

Issued For: **PLAN COMMISSION SUBMITTAL** 4/2/2025

Sheet Title: **SITE LAYOUT PLAN - AREA C**

Sheet Number: **C1.23C**

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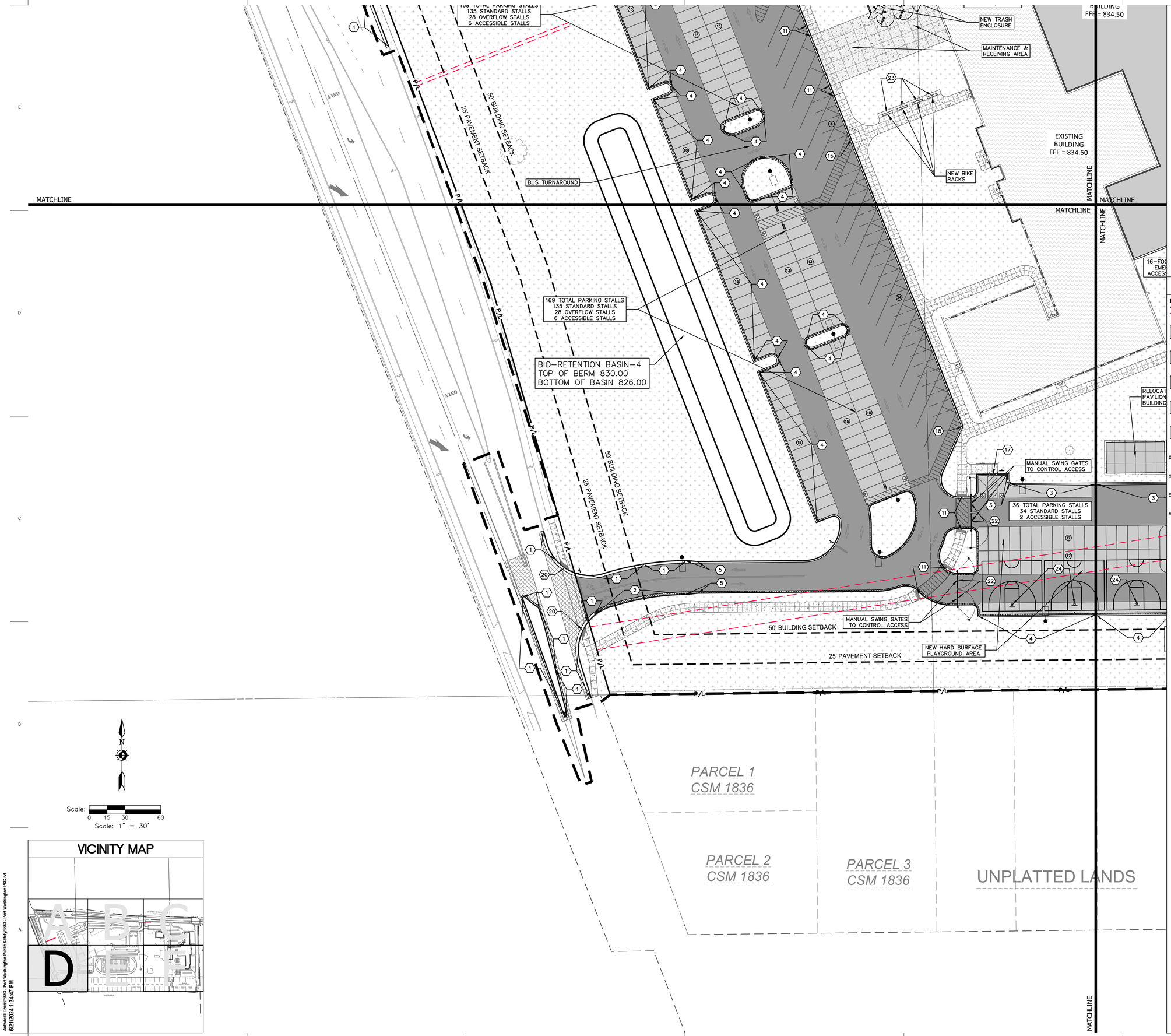

N

Scale: 0 15 30 60

Scale: 1" = 30'

VICINITY MAP

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KEY INDEX

- PROJECT LIMITS
- P/L PROPERTY LINE
- EASE EASEMENT LINE
- AREAS DISTURBED BY CONSTRUCTION (NOT SPECIFICALLY CALLED OUT ON THE LANDSCAPE PLANS) TO BE RESTORED WITH MINIMUM 4" TOPSOIL, SEED, FERTILIZER, AND MULCH (TYP). USE SALVAGED TOPSOIL OR IMPORT TOPSOIL IF REQUIRED.
- NEW ASPHALTIC CONCRETE (LIGHT DUTY) — 1/C2.11
- NEW ASPHALTIC CONCRETE (HEAVY DUTY) — 1/C2.11
- NEW CONCRETE SLAB (LIGHT DUTY) — 2/C2.11, 3/C2.11
- NEW CONCRETE SLAB (HEAVY DUTY) — 2/C2.11, 3/C2.11
- 18" BARRIER LOW-SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 4/C2.11
- 18" BARRIER HIGH-SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 1/C2.11
- 18" DEPRESSED LOW-SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 5/C2.11
- 18" DEPRESSED HIGH-SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 5/C2.11

1	NEW 30" BARRIER LOW-SIDE CONCRETE CURB & GUTTER	6/C2.11
2	NEW 30" BARRIER HIGH-SIDE CONCRETE CURB & GUTTER	6/C2.11
3	NEW 24" MOUNTABLE LOW-SIDE CONCRETE CURB & GUTTER	7/C2.11
4	NEW 24" MOUNTABLE HIGH-SIDE CONCRETE CURB & GUTTER	7/C2.11
5	10' TRANSITION FROM 18" BARRIER CURB & GUTTER TO 30" BARRIER CURB & GUTTER	4/C2.11, 6/C2.11
6	10' TRANSITION FROM 24" MOUNTABLE CURB & GUTTER TO 18" BARRIER CURB & GUTTER	4/C2.11, 8/C2.11
7	3' TRANSITION FROM 18" BARRIER CURB & GUTTER TO ZERO FACE CURB & GUTTER	4/C2.11, 10/C2.11
8	3' TRANSITION FROM 30" BARRIER CURB & GUTTER TO ZERO FACE CURB & GUTTER	6/C2.11, 10/C2.11
9	3' TRANSITION FROM 24" MOUNTABLE CURB & GUTTER TO ZERO FACE CURB & GUTTER	8/C2.11, 10/C2.11
10	9' TRANSITION FROM 18" BARRIER CURB & GUTTER TO 18" DEPRESSED CURB & GUTTER.	8/C2.11
11	NEW ACCESSIBILITY RAMP WITH TRUNCATED DOME DETECTABLE WARNING FIELDS	13/C2.11, 12/C2.11
12	NEW ACCESSIBILITY RAMP	1/C2.12
13	NEW ACCESSIBILITY RAMP WITH TRUNCATED DOME DETECTABLE WARNING FIELDS	2/C2.12, 12/C2.11
14	NEW ACCESSIBILITY RAMP WITH TRUNCATED DOME DETECTABLE WARNING FIELDS	3/C2.12, 12/C2.11
15	NEW ACCESSIBILITY RAMP WITH TRUNCATED DOME DETECTABLE WARNING FIELDS	4/C2.12, 12/C2.11
16	NEW ACCESSIBILITY RAMP	
17	NEW ACCESSIBILITY RAMP	8/C2.12
18	NEW ACCESSIBILITY RAMP	6/C2.11
19	NEW ACCESSIBILITY RAMP	6/C2.11
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930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: **3526**

Issued For: **PLAN COMMISSION SUBMITTAL** 4/2/2025

Sheet Title: **SITE LAYOUT PLAN - AREA D**

Sheet Number: **C1.24D**

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BUILDING
FFE = 834.50

PROPOSED
BUILDING
FFE = 834.50

EXISTING
BUILDING
FFE = 834.50

MATCHLINE

107 TOTAL PARKING STALLS
102 STANDARD STALLS
5 ACCESSIBLE STALLS

WIDENED PAVEMENT TO
FACILITATE FIRE TRUCK
TURN MOVEMENTS

16–FOOT WIDE
EMERGENCY
ACCESS DRIVE

RELOCATED
PAVILION
BUILDING

MANUAL SWING GATES
TO CONTROL ACCESS

TOTAL PARKING STALLS
STANDARD STALLS
ACCESSIBLE STALLS

82 TOTAL PARKING STALLS
78 STANDARD STALLS
4 ACCESSIBLE STALLS

NEW NATURAL TURF FOOTBALL FIELD
AND 60 YD. X 120 YD. SOCCER FIELD

NEW SOCCER
GOAL & FIELD
GOAL POST

NEW DISCUS
THROWING SECTOR
ON NATURAL TURF

NEW CONCRETE
DISCUS THROWING
PAD WITH
THROWING CAGE

NEW SOCCER
GOAL & FIELD
GOAL POST

NEW 8–LANE
RUNNING TRACK WITH
PAVED "D" SECTION
FOR HIGH JUMP

50' BUILDING SETBACK

25' PAVEMENT SETBACK

NEW LONG JUMP/TRIPLE JUMP
RUNWAYS AND LANDING PITS

NEW CONCRETE SHOT
PUT THROWING PAD

NEW SHOT PUT
THROWING SECTOR
FILLED WITH
COARSE SAND

P/L

LOT 16 LOT 15 LOT 14 LOT 13 LOT 12 LOT 11 LOT 10 LOT 9 LOT 8 LOT 7

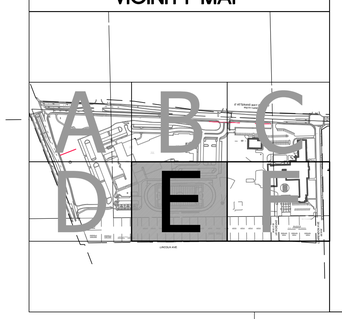
CRAIGS ADDN.

ATTED LANDS

LINCOLN AVE.

Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP



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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number:
3526

Issued For:
PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
SITE LAYOUT PLAN - AREA E

Sheet Number:
C1.25E

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BIO-RETENTION BASIN-1
TOP OF BERM 830.25
BOTTOM OF BASIN 826.25

MATCHLINE

CLARENDON AVENUE
ELEMENTARY SCHOOL
915 CLARENDON AVE.,
MUKWONAGO, WI 53149

GAGA BALL PITS

PLAY AREA

ASPHALT PLAY AREA

BASEBALL / SOFTBALL / KICKBALL FIELD

PLAY AREA

ASPHALT PARKING LOT

50' BUILDING SETBACK

25' PAVEMENT SETBACK

P/L

FND. 1" IP 1.82' WEST

LOT 6 | LOT 5 | LOT 4 | LOT 3 | LOT 2 | LOT 1

DIVISION ST.
63.2' R/W

BLOCK B
H.A. YOUMANS ADDN.

PART OF LOT 1 | PART OF LOT 1 | PART OF LOT 1

CLARENDON AVE.
66' R/W

REPLAT OF WILSO
SUBDIVISI

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KEY INDEX

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27. LONG JUMP/TRIPLE JUMP RUNWAYS AND SAND PIT BOXES — 1/C2.16, 2/C2.16

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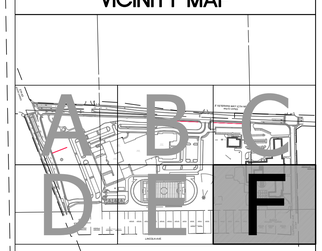
Scale: 1" = 30'

VICINITY MAP



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REVISIONS:

#	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE LAYOUT PLAN - AREA F

Sheet Number: C1.26F

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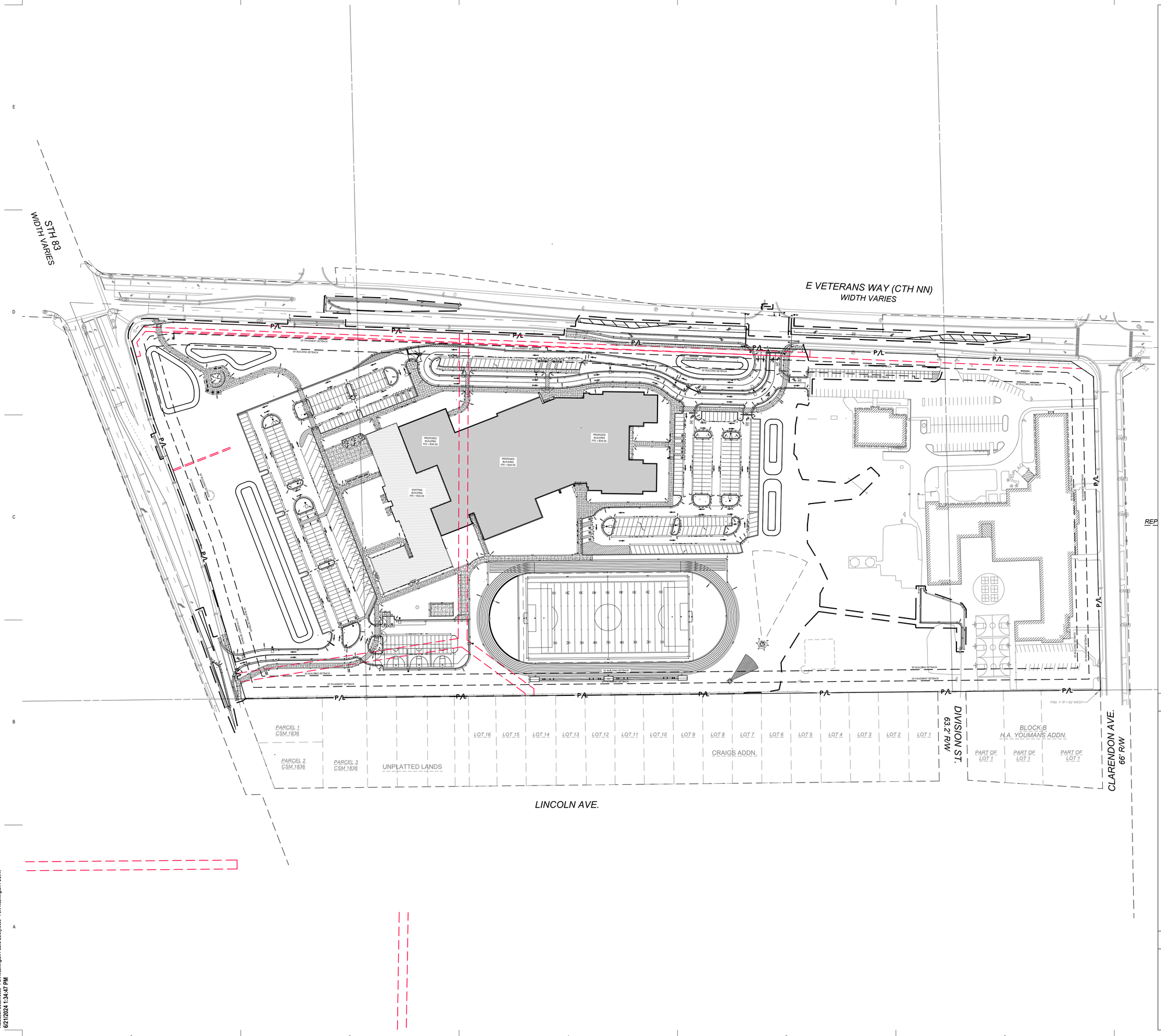

N

Scale: 0 40 80 160

Scale: 1" = 80'

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KEY INDEX

- PROJECT LIMITS
- P/L — PROPERTY LINE
- EASE — EASEMENT LINE
- (1) PAVEMENT MARKING ARROWS, LATEX PAVEMENT MARKING PAINT, WHITE (SEE WisDOT PAVEMENT MARKING S.D.D.)
- (2) PAVEMENT MARKING WORDS, LATEX PAVEMENT MARKING PAINT, WHITE (SEE WisDOT PAVEMENT MARKING S.D.D.)
- (3) PAVEMENT MARKING STOP LINE, LATEX PAVEMENT MARKING PAINT, WHITE (SEE WisDOT PAVEMENT MARKING S.D.D.)
- (4) PAVEMENT MARKING MANLINE, LATEX PAVEMENT MARKING PAINT, 4" YELLOW (DOUBLE) (SEE WisDOT PAVEMENT MARKING S.D.D.)
- (5) PAVEMENT MARKING INTERSECTION, LATEX PAVEMENT MARKING PAINT, 4" WHITE (SEE WisDOT PAVEMENT MARKING S.D.D.)
- (6) PAVEMENT MARKING CROSSWALK, LATEX PAVEMENT MARKING PAINT, WHITE, 4—INCH WIDE DIAGONAL STRIPING, 3' O.C. SPACING
- (7) PAVEMENT MARKING CROSSWALK, LATEX PAVEMENT MARKING PAINT, WHITE, 6—INCH WIDE TRANSVERSE LINES, 6—FOOT SPACING. (SEE WisDOT PAVEMENT MARKING S.D.D.)
- (8) NEW ACCESSIBLE PARKING SYMBOL (TYP.). → 8 C2.12
- (9) NEW ACCESSIBLE SIGN (TYP.). → 9 C2.12
- (10) NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS → 1 C2.13
- (11) NEW 4" WHITE PAINT → 2

SIGN INDEX

(A) STOP — R1—1, 30" X 30"

DO NOT ENTER — R5—1, 30" X 30" (B)

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Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: OVERALL SITE SIGNAGE & TRAFFIC CONTROL PLAN

Sheet Number: C1.30

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6/21/2024 1:34:47 PM

STH 83
WIDTH VARIES

MATCHLINE

P/L

25' PAVEMENT SETBACK

50' BUILDING SETBACK

PROPOSED BUILDING FFE = 834.50

EXISTING BUILDING FFE = 834.50

ONLY

MATCHLINE

Scale: 0 15 30 60
Scale: 1" = 30'

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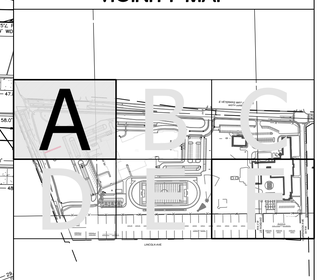
VICINITY MAP



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9	NEW ACCESSIBLE SIGN (TYP.).	9 C2.12
10	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	1 C2.13
11	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	2 C2.13
12	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	3 C2.13
13	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	4 C2.13
14	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	5 C2.13
15	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	6 C2.13
16	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	7 C2.13
17	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	

SIGN INDEX

(A) STOP — R1–1, 30" X 30"

(B) DO NOT ENTER — R5–1, 30" X 30"

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St,
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number:
3526

Issued For:
PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
SITE SIGNAGE & TRAFFIC CONTROL PLAN - AREA A

Sheet Number:
C1.31A

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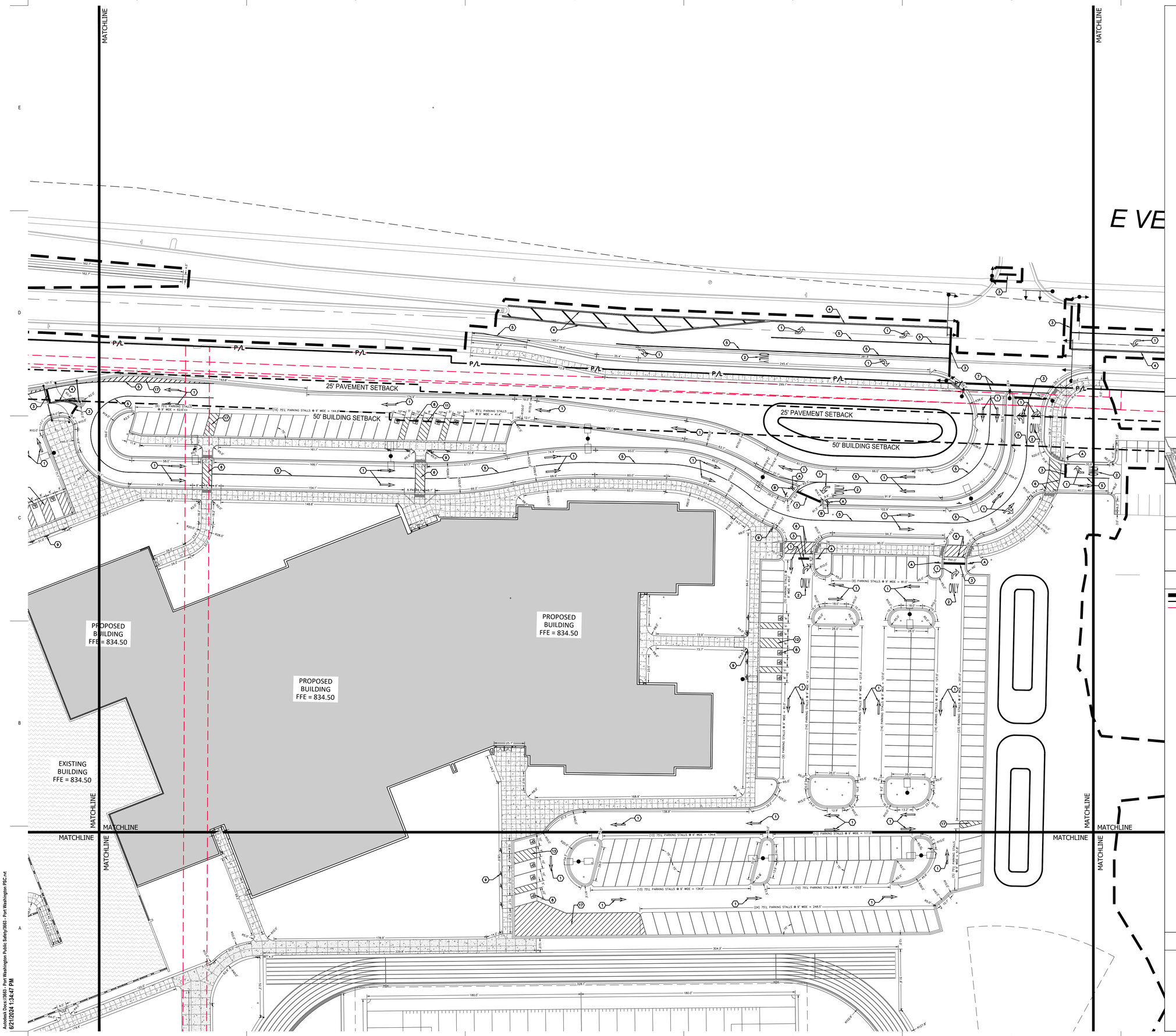

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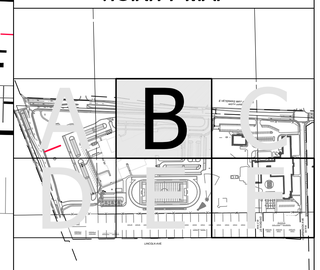

KEY INDEX

	PROJECT LIMITS	
P/L	PROPERTY LINE	
EASE	EASEMENT LINE	
1	PAVEMENT MARKING ARROWS, LATEX PAVEMENT MARKING PAINT, WHITE (SEE WisDOT PAVEMENT MARKING S.D.D.)	
2	PAVEMENT MARKING WORDS, LATEX PAVEMENT MARKING PAINT, WHITE (SEE WisDOT PAVEMENT MARKING S.D.D.)	
3	PAVEMENT MARKING STOP LINE, LATEX PAVEMENT MARKING PAINT, WHITE (SEE WisDOT PAVEMENT MARKING S.D.D.)	
4	PAVEMENT MARKING MAINLINE, LATEX PAVEMENT MARKING PAINT, 4" YELLOW (DOUBLE) (SEE WisDOT PAVEMENT MARKING S.D.D.)	
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6	PAVEMENT MARKING CROSSWALK, LATEX PAVEMENT MARKING PAINT, WHITE, 6-INCH WIDE DIAGONAL STRIPING, 3' O.C. SPACING	
7	PAVEMENT MARKING CROSSWALK, LATEX PAVEMENT MARKING PAINT, WHITE, 6-INCH WIDE TRANSVERSE LINES, 6-FOOT SPACING, (SEE WisDOT PAVEMENT MARKING S.D.D.)	
8	NEW ACCESSIBLE PARKING SYMBOL (TYP.).	8 C2.12
9	NEW ACCESSIBLE SIGN (TYP.).	9 C2.12
10	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	1 C2.13
11	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	2 C2.13
12	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	3 C2.13
13	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	4 C2.13
14	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	5 C2.13
15	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	6 C2.13
16	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	7 C2.13
17	NEW 4" WHITE PAINT 36" O.C. FOR DIAGONALS	

SIGN INDEX

A	R1-1 30" X 30"	
B	R5-1 30" X 30"	

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Sheet Title:
SITE SIGNAGE & TRAFFIC CONTROL PLAN - AREA B

Sheet Number:
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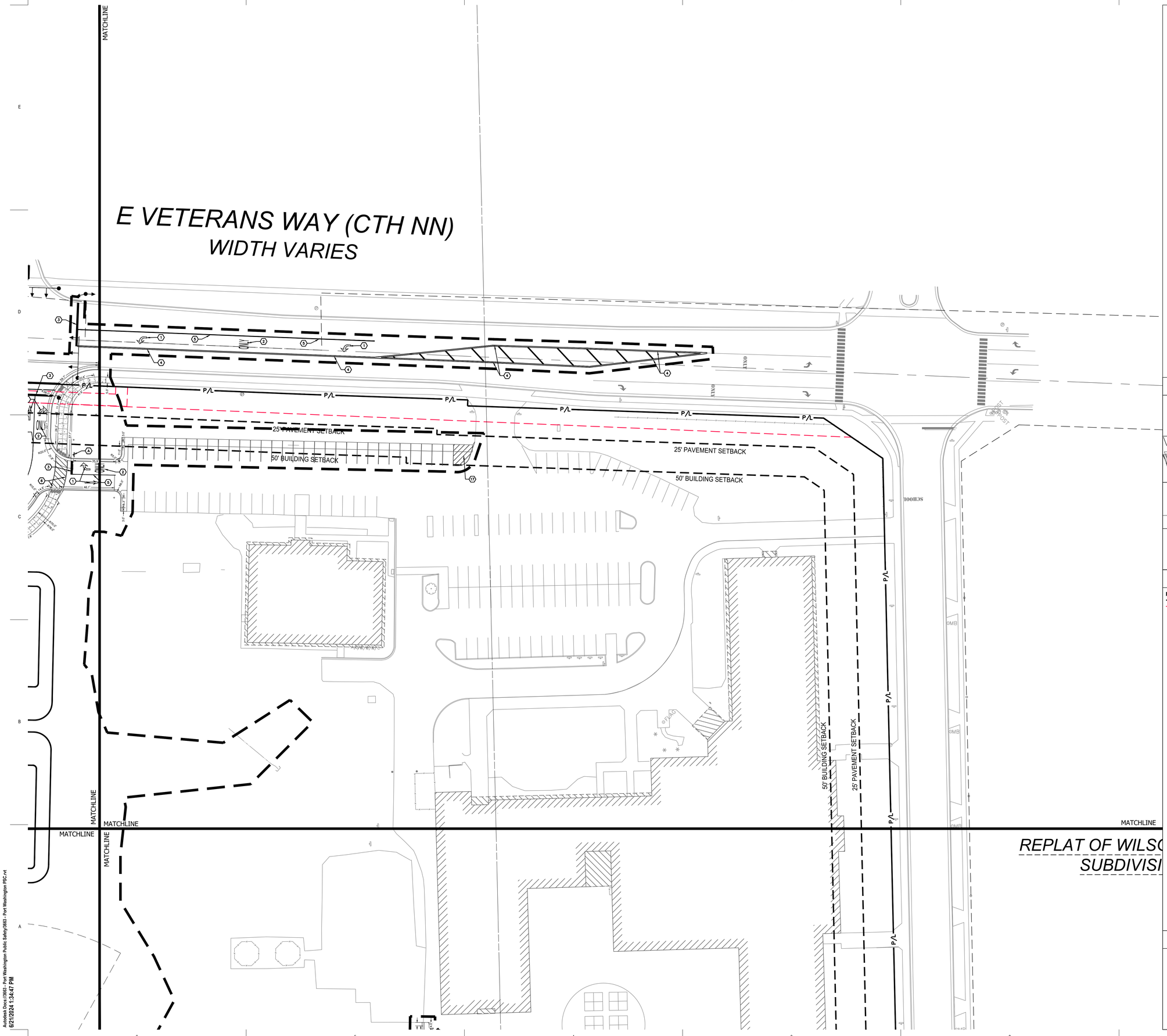

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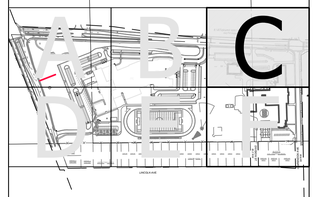

KEY INDEX

- PROJECT LIMITS
- P/L — PROPERTY LINE
- EASE — EASEMENT LINE

1	PAVEMENT MARKING ARROWS, LATEX PAVEMENT MARKING PAINT, WHITE (SEE WisDOT PAVEMENT MARKING S.D.D.)	
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SIGN INDEX

(A) STOP — R1–1, 30" X 30"

(B) DO NOT ENTER — R5–1, 30" X 30"

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Sheet Title: SITE SIGNAGE & TRAFFIC CONTROL PLAN - AREA C

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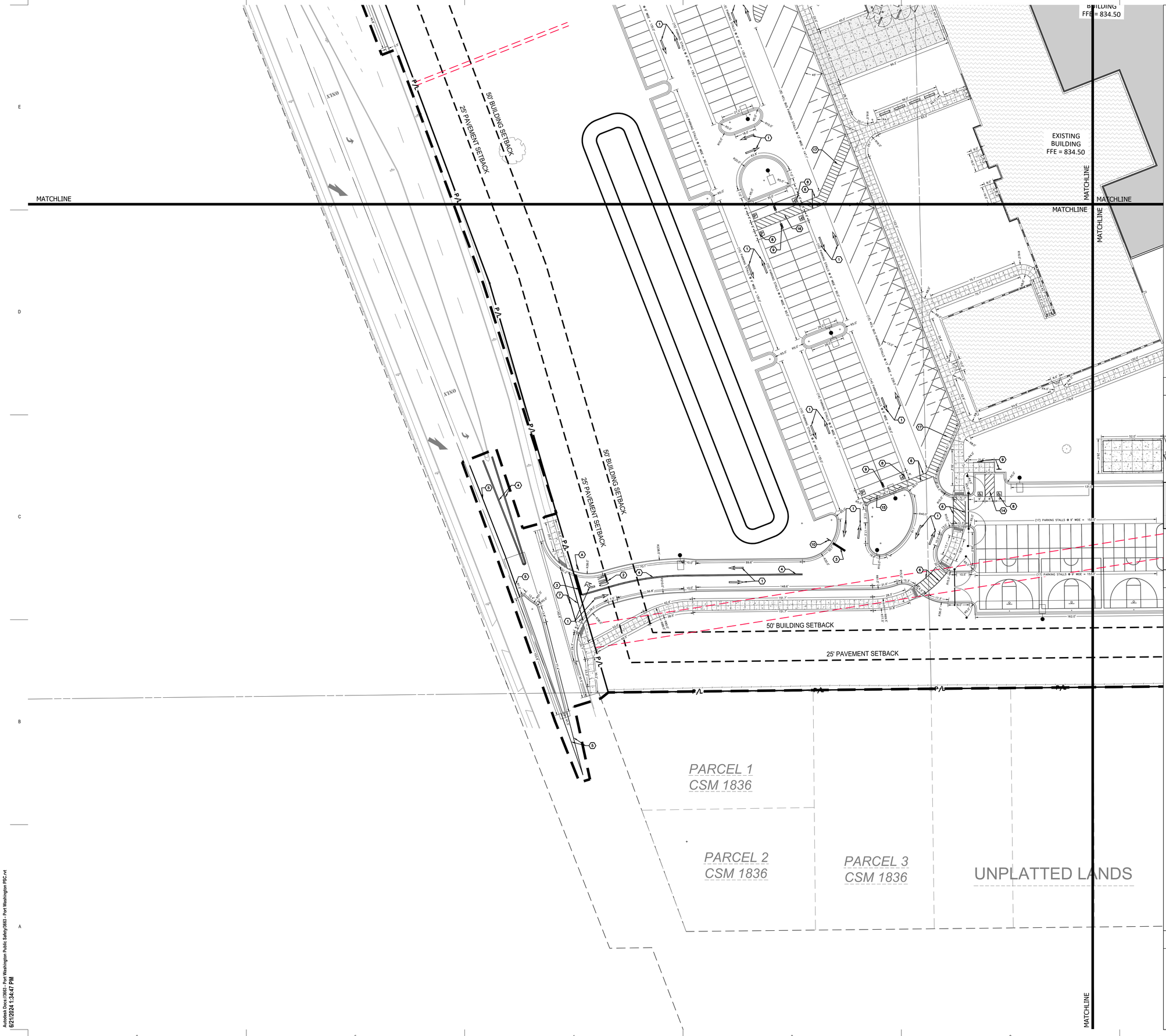

KEY INDEX

- PROJECT LIMITS
- P/L PROPERTY LINE
- EASE EASEMENT LINE

1	PAVEMENT MARKING ARROWS, LATEX PAVEMENT MARKING PAINT, WHITE (SEE WisDOT PAVEMENT MARKING S.D.D.)	
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SIGN INDEX

A — STOP — R1-1, 30" X 30"

B — DO NOT ENTER — R5-1, 30" X 30"

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Scale: 1" = 30'

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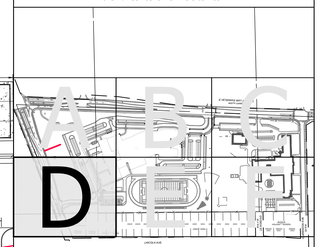

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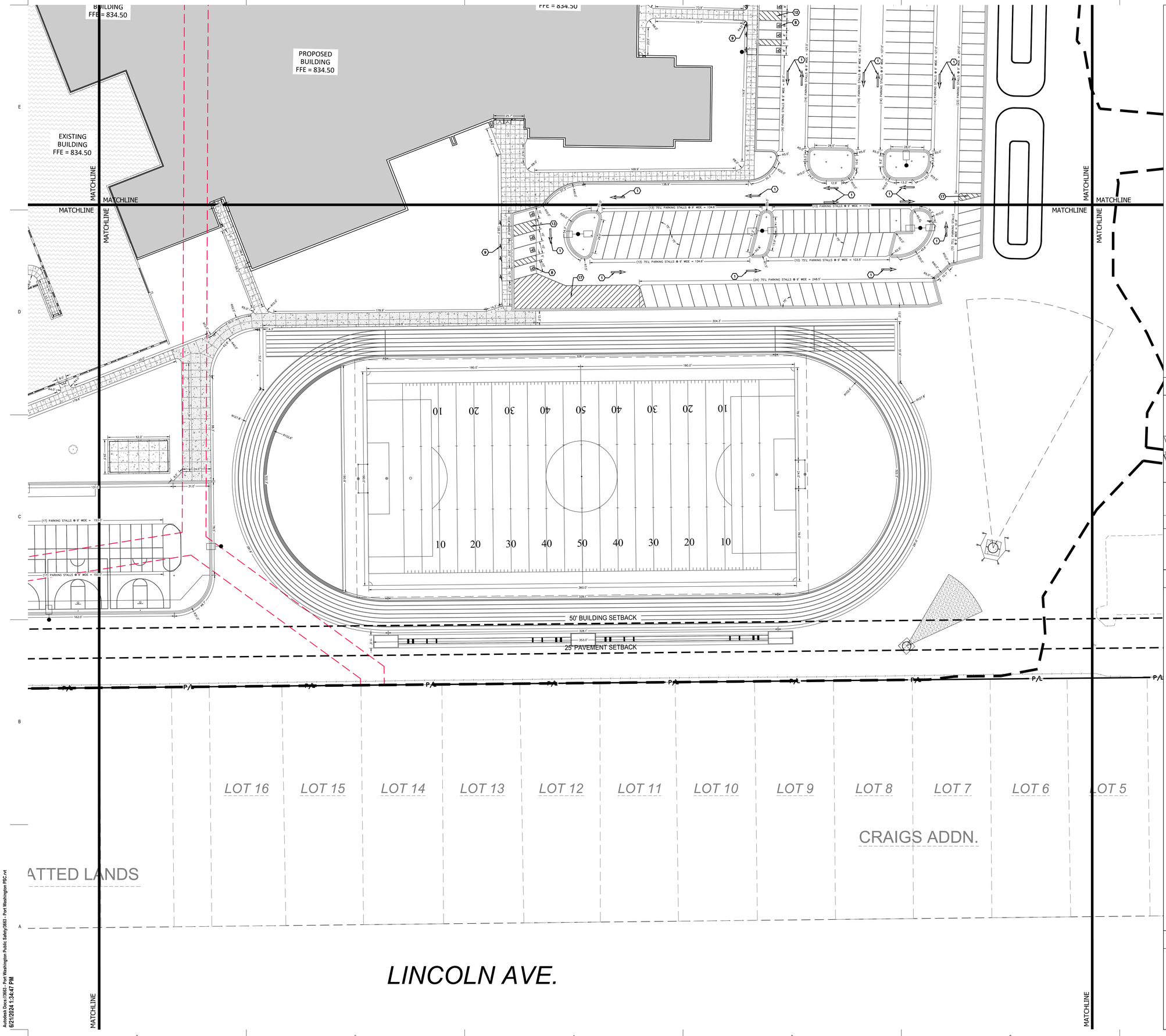

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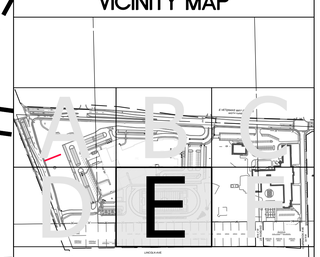

KEY INDEX

- PROJECT LIMITS
- P/L — PROPERTY LINE
- EASE — EASEMENT LINE

1	PAVEMENT MARKING ARROWS, LATEX PAVEMENT MARKING PAINT, WHITE (SEE WisDOT PAVEMENT MARKING S.D.D.)	
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SIGN INDEX

A — STOP — R1-1, 30" X 30"

B — DO NOT ENTER — R5-1, 30" X 30"

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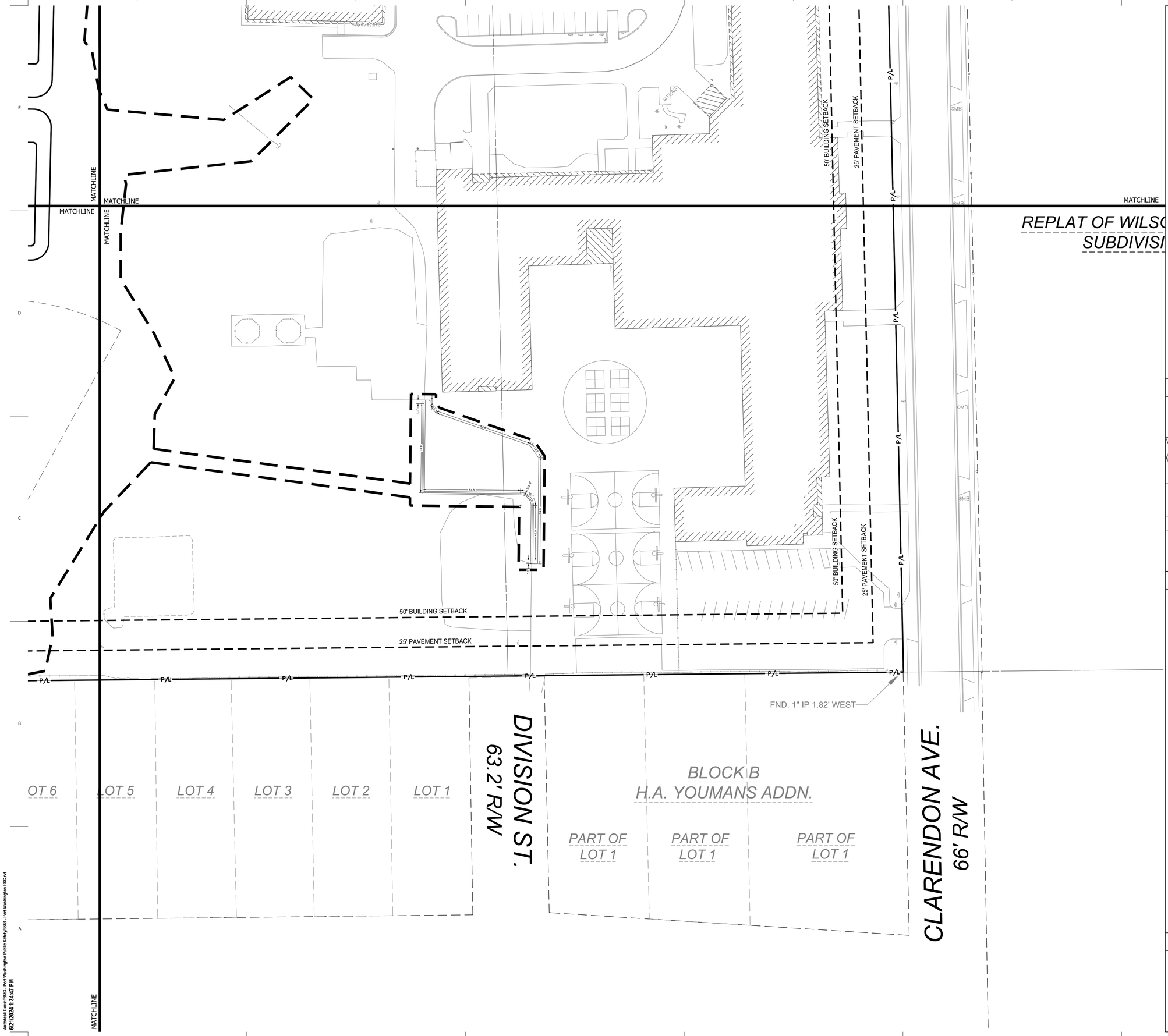

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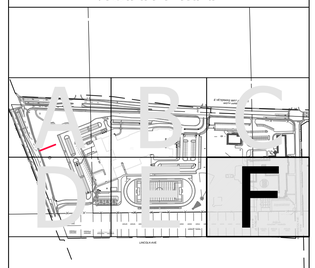

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- 1 — PAVEMENT MARKING ARROWS, LATEX PAVEMENT MARKING PAINT, WHITE (SEE WisDOT PAVEMENT MARKING S.D.D.)
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- 9 — NEW ACCESSIBLE SIGN (TYP.). (9 C2.12)
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SIGN INDEX

A — STOP — R1-1 30" X 30"

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Sheet Title: **SITE SIGNAGE & TRAFFIC CONTROL PLAN - AREA F**

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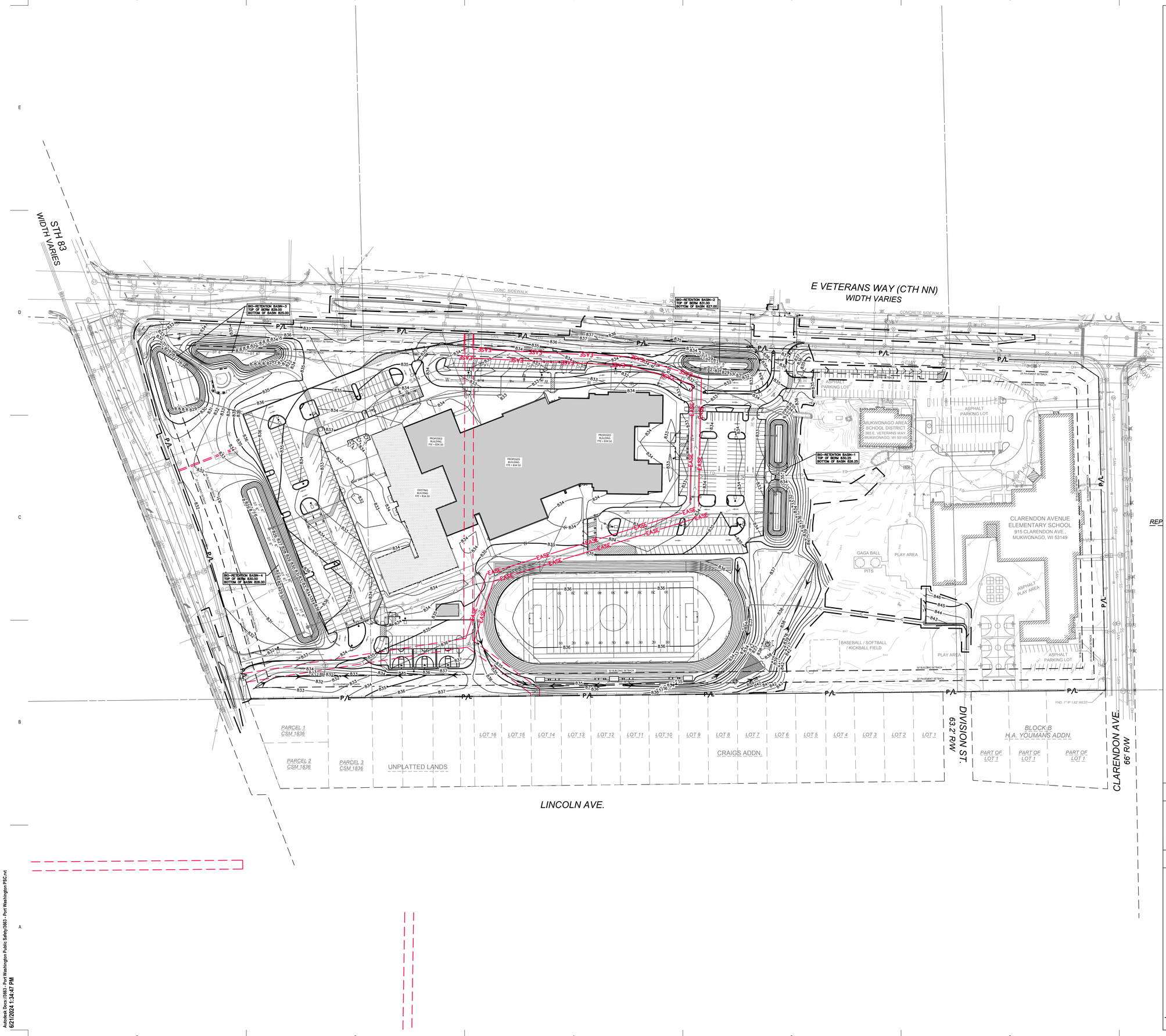

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KEY INDEX

- PROJECT LIMITS
- P/L — PROPERTY LINE
- EASE — EASEMENT LINE
- 999 — EXISTING CONTOUR MINOR
- 999 — EXISTING CONTOUR MAJOR
- 999 — PROPOSED CONTOUR MINOR
- 999 — PROPOSED CONTOUR MAJOR
- 970.00 — PROPOSED SPOT GRADE
- 970.0± — MATCH EXISTING GRADE
- T970.00 — PROPOSED TOP OF CURB GRADE, REFER TO SITE LAYOUT PLANS FOR MORE INFORMATION. GUTTER IS 6" BELOW TOP OF CURB UNLESS OTHERWISE NOTED.
- T970.0± — MATCH EXISTING TOP OF CURB GRADE
- TW970.00 / BW965.00 — PROPOSED TOP OF WALL, PROPOSED BOTTOM OF WALL
- TW970.0± / BW965.0± — MATCH EXISTING TOP OF WALL, MATCH EXISTING BOTTOM OF WALL
- DRAINAGE SWALE

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Scale: 1" = 80'

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Sheet Title: **OVERALL SITE GRADING PLAN**

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SITE GRADING PLAN - AREA A

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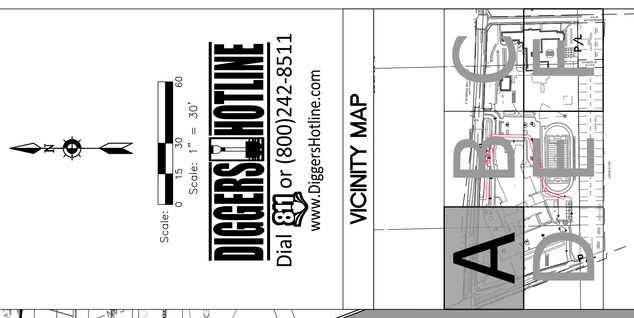

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KEY INDEX

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- PROPOSED CONTOUR MAJOR
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- MATCH EXISTING GRADE
- PROPOSED TOP OF CURB GRADE. REFER TO SITE GRADING NOTES FOR CONDITIONS WHERE GUTTER IS 6" BELOW TOP OF CURB UNLESS OTHERWISE NOTED.
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- PROPOSED TOP OF WALL / PROPOSED BOTTOM OF WALL
- MATCH EXISTING TOP OF WALL / MATCH EXISTING BOTTOM OF WALL
- DRAINAGE SWALE

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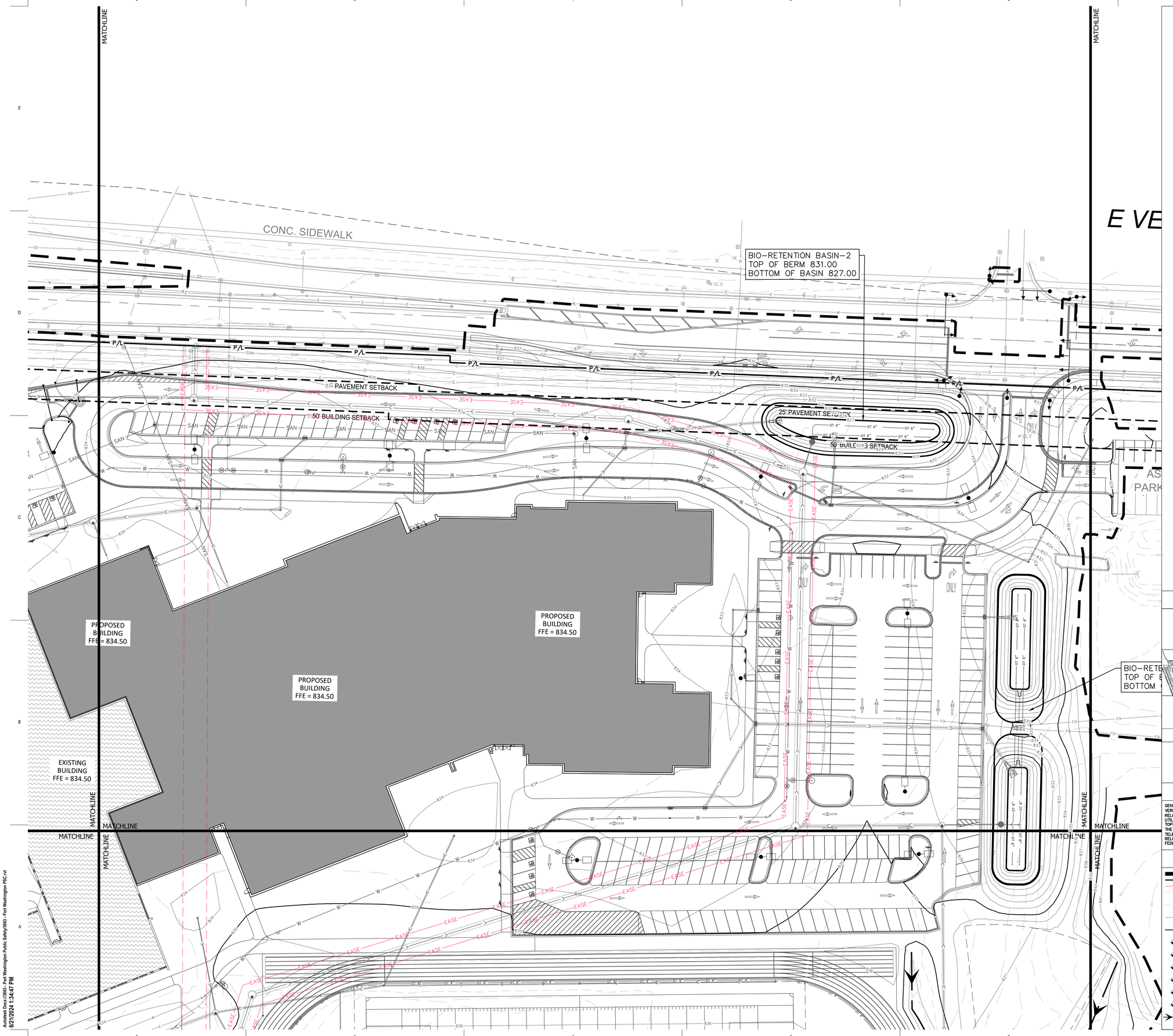

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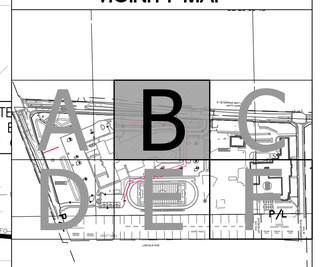
VICINITY MAP



GRADING NOTES

GENERAL CONTRACTOR OR THEIR SUB CONTRACTORS ARE RESPONSIBLE FOR VERIFYING OWNERSHIP OF AND COORDINATING THE DEMOLITION AND / OR RELOCATION / ELEVATION ADJUSTMENT OF ALL EXISTING PUBLIC OR PRIVATE UTILITIES WITHIN THE PROJECT LIMITS THAT MAY BE AFFECTED BY TOPOGRAPHICAL CHANGES, UTILITIES, OR OTHER PROPOSED CONSTRUCTION ON THE PROJECT, INCLUDING BUT NOT LIMITED TO ELECTRICAL / FIBER OPTIC / TELEPHONE / CABLE / GAS / WATER / SANITARY / STORM. DEMOLITION / RELOCATION OF THIS UTILITY WORK MUST BE IN ACCORDANCE WITH ALL STATE, FEDERAL, LOCAL, AND UTILITY OWNER REGULATIONS.

KEY INDEX

- PROJECT LIMITS
- P/L — PROPERTY LINE
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- 999 — EXISTING CONTOUR MINOR
- 999 — EXISTING CONTOUR MAJOR
- 999 — PROPOSED CONTOUR MINOR
- 999 — PROPOSED CONTOUR MAJOR
- 970.00 — PROPOSED SPOT GRADE
- 970.0± — MATCH EXISTING GRADE
- T970.00 — PROPOSED TOP OF CURB GRADE, REFER TO SITE LAYOUT PLANS FOR MORE INFORMATION. GUTTER IS 6" BELOW TOP OF CURB UNLESS OTHERWISE NOTED.
- T970.0± — MATCH EXISTING TOP OF CURB GRADE
- TW970.00 / BW965.00 — PROPOSED TOP OF WALL / PROPOSED BOTTOM OF WALL
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- DRAINAGE SWALE

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St,
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE GRADING PLAN - AREA B

Sheet Number: C1.42B

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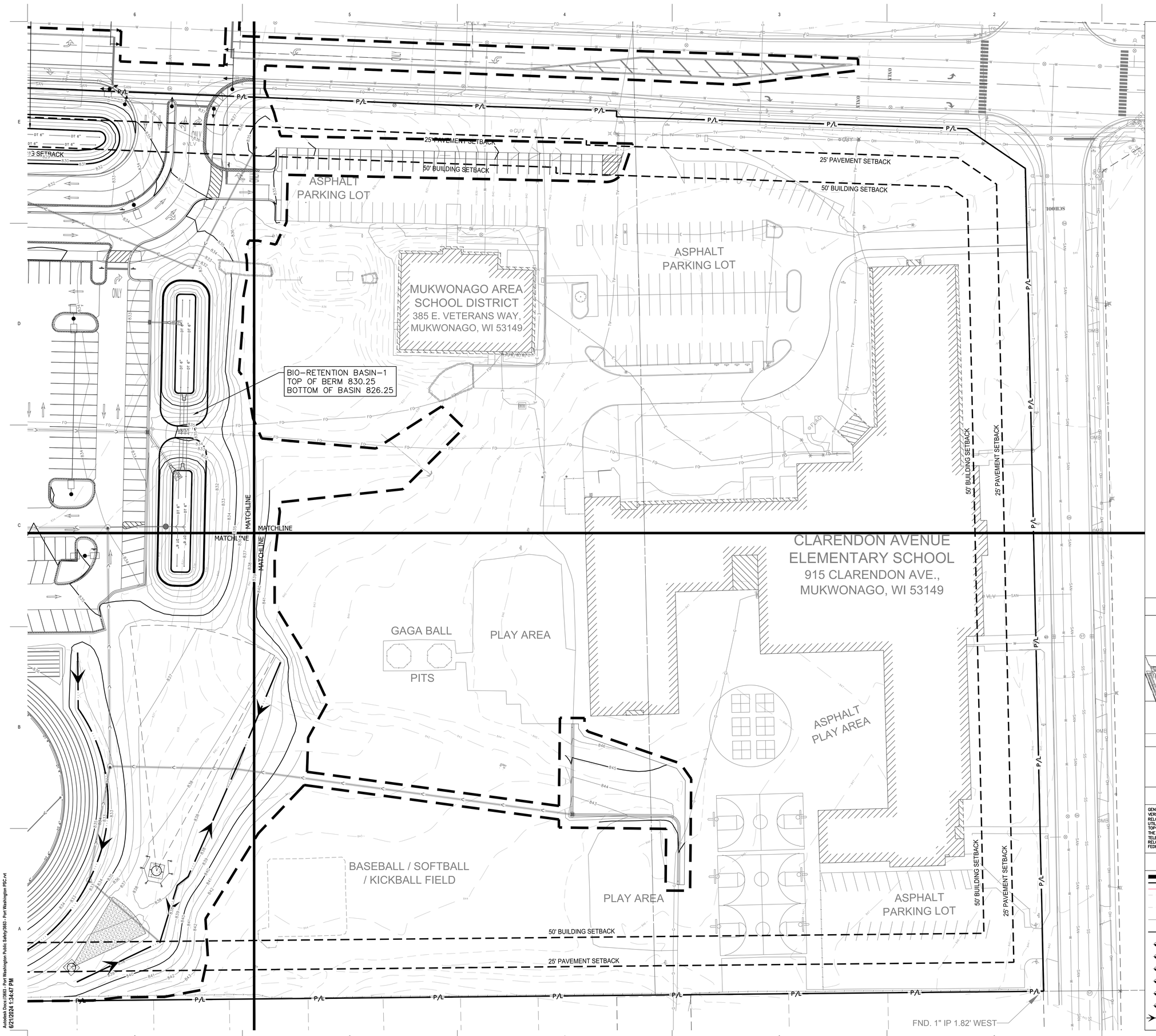

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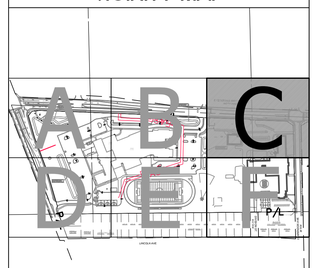
VICINITY MAP



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NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE GRADING PLAN - AREA C

Sheet Number: C1.43C

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MATCHLINE

MATCHLINE

MATCHLINE

MATCHLINE

MATCHLINE

BUILDING
FFE = 834.50

EXISTING
BUILDING
FFE = 834.50

BIO-RETENTION BASIN-4
TOP OF BERM 830.00
BOTTOM OF BASIN 826.00

50' BUILDING SETBACK

25' PAVEMENT SETBACK

50' BUILDING SETBACK

25' PAVEMENT SETBACK

50' BUILDING SETBACK

25' PAVEMENT SETBACK

P/L

PARCEL 1
CSM 1836

PARCEL 2
CSM 1836

PARCEL 3
CSM 1836

UNPLATTED LANDS

MATCHLINE

Scale:
0 15 30 60
Scale: 1" = 30'

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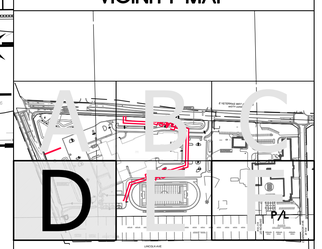
VICINITY MAP



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REVISIONS:

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4/2/2025

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SITE GRADING PLAN - AREA D

Sheet Number:
C1.44D

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PROPOSED BUILDING
FFE = 834.50

EXISTING BUILDING
FFE = 834.50

BIO-RETE
TOP OF E
BOTTOM

MATCHLINE

50' BUILDING SETBACK

25' PAVEMENT SETBACK

P/L

EASE

LOT 16 LOT 15 LOT 14 LOT 13 LOT 12 LOT 11 LOT 10 LOT 9 LOT 8 LOT 7 LOT 6 LOT 5

CRAIGS ADDN.

ATTED LANDS

LINCOLN AVE.

Scale: 0 15 30 60
Scale: 1" = 30'

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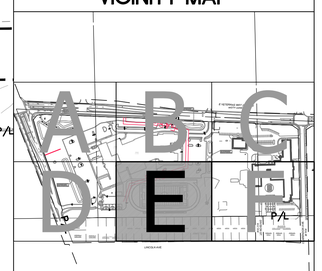
VICINITY MAP



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Mukwonago Area School District
930 N Rochester St,
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Project Number:
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Sheet Title:
SITE GRADING PLAN - AREA E

Sheet Number:
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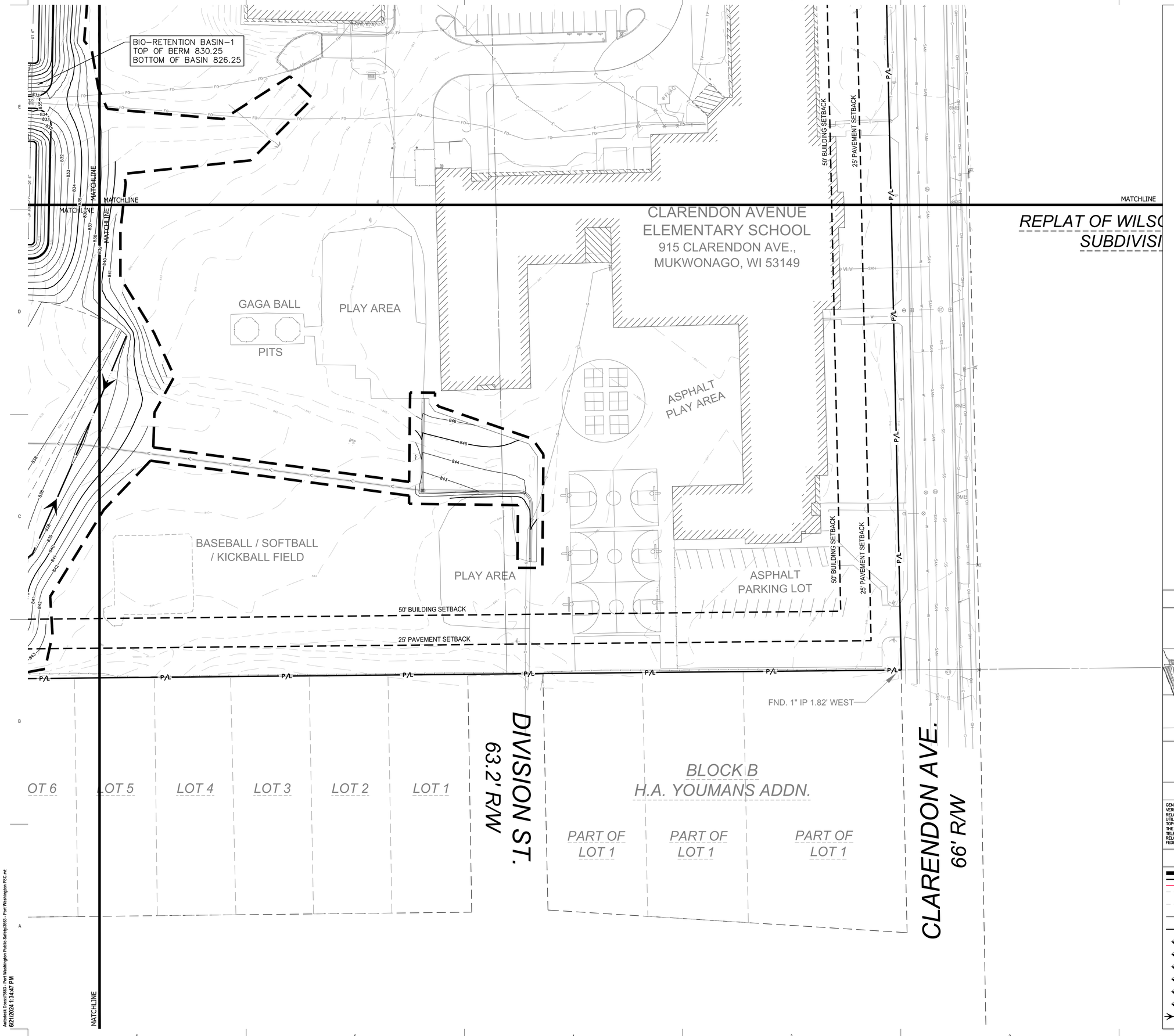

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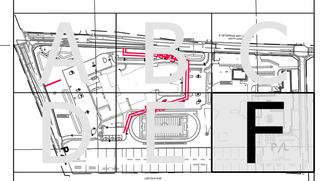

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Mukwonago, WI 53149

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Project Number: 3526

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Sheet Title: SITE GRADING PLAN - AREA F

Sheet Number: C1.46F

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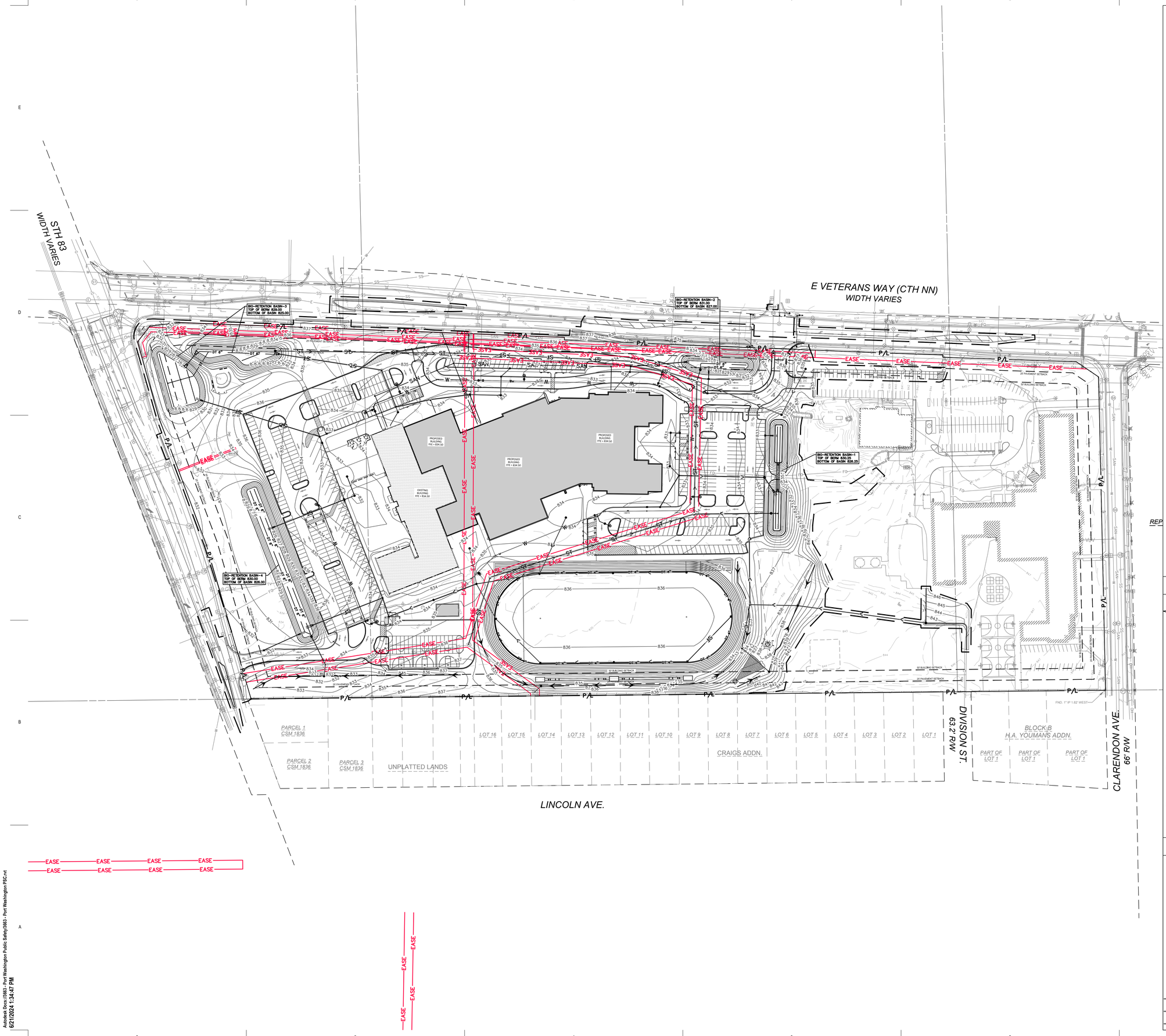

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Scale: 1" = 80'

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UTILITY NOTES

CAUTION

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1. PER PROJECT SPECIFICATIONS AND THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, THE POINT OF COMMENCEMENT FOR THE LAYING OF SEWER PIPE SHALL BE AT THE LOWEST POINT IN THE PROPOSED SEWER LINE. THE PIPE SHALL BE LAID WITH THE BELL END OF THE BELL AND SPIGOT PIPE, OR WITH THE RECEIVING GROOVE END OF THE TONGUE AND GROOVE PIPE, POINTING UPGRADE. WHEN A NEW SEWER IS TO BE CONNECTED TO AN EXISTING SEWER NOT TERMINATING IN A MANHOLE, THE CONTRACTOR SHALL UNCOVER THE EXISTING SEWER TO ALLOW ANY ADJUSTMENTS IN LINE AND GRADE TO BE MADE BEFORE PIPE IS LAID.
2. THE UNDERGROUND AND OVERHEAD UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES, LOCAL MUNICIPALITY, PROPERTY OWNER, AND DIGGERS HOTLINE. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.
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4/2/2025

Sheet Title:
OVERALL SITE UTILITY PLAN

Sheet Number:
C1.50

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STH 83
WIDTH VARIES

BIO-RETENTION BASIN-3
TOP OF BERM 829.00
BOTTOM OF BASIN 825.00

BIO-RETENTION BASIN-4
TOP OF BERM 830.00
BOTTOM OF BASIN 826.00

MATCHLINE

25' PAVEMENT SETBACK

50' BUILDING SETBACK

PROPOSED BUILDING
FFE = 834.50

EXISTING BUILDING
FFE = 834.50

Scale:
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Scale: 1" = 30'

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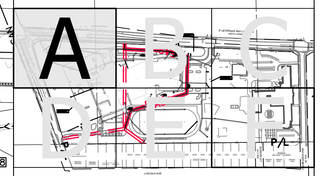

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Sheet Title:
SITE UTILITY PLAN - AREA A

Sheet Number:
C1.51A

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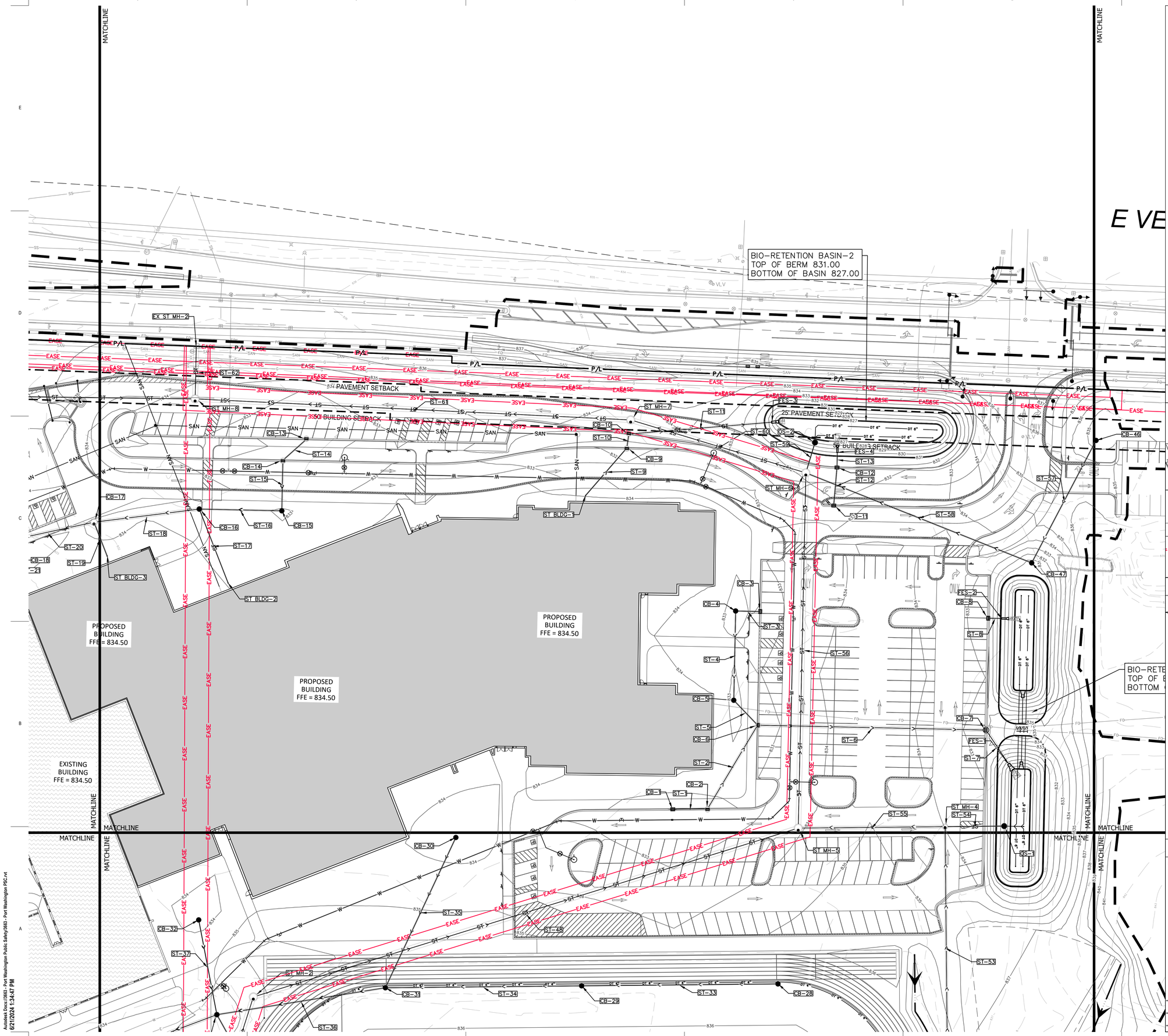

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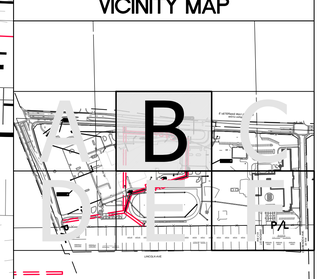

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Project Title:
RENOVATION AND ADDITION TO:
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Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE UTILITY PLAN - AREA B

Sheet Number: C1.52B

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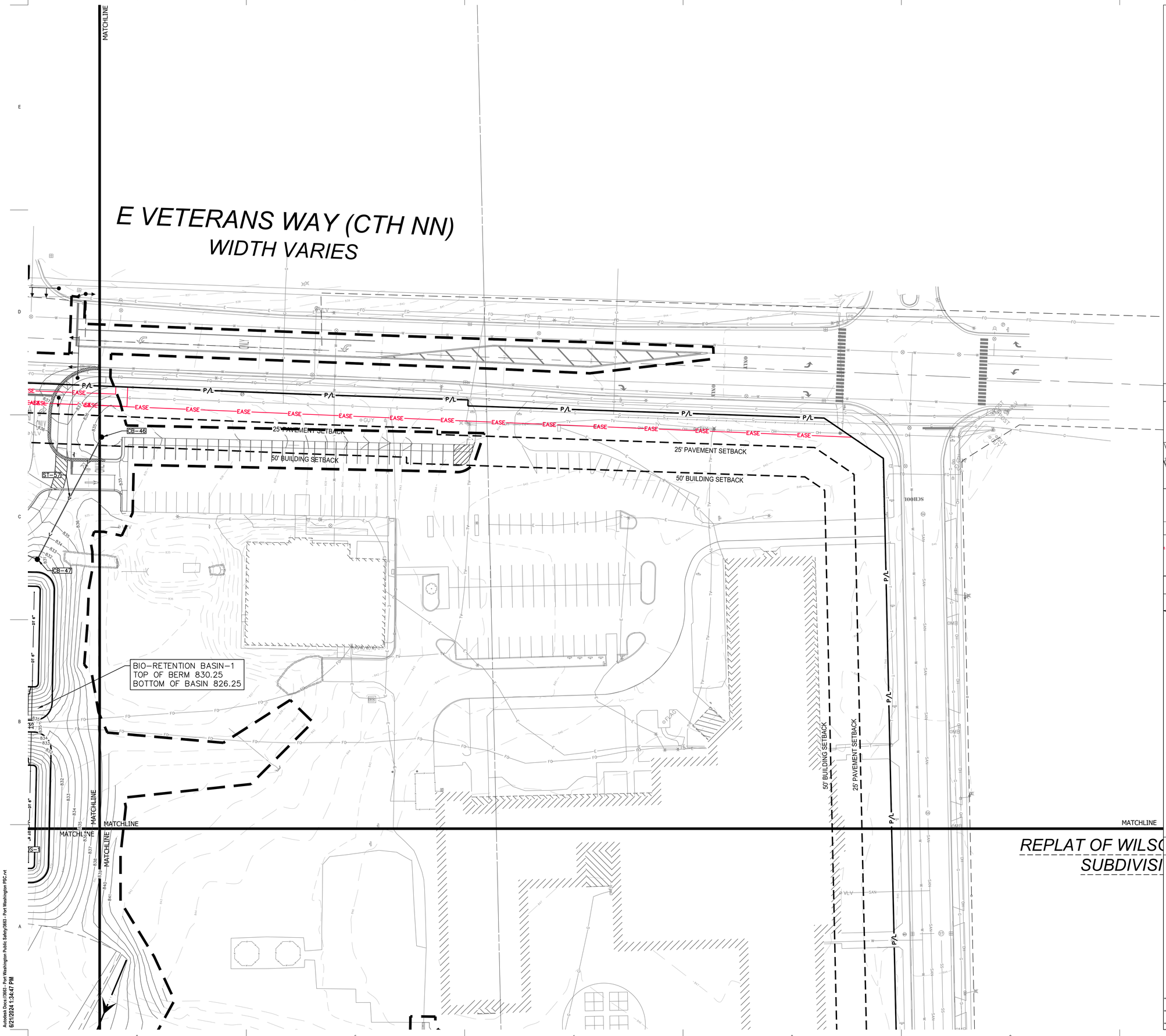

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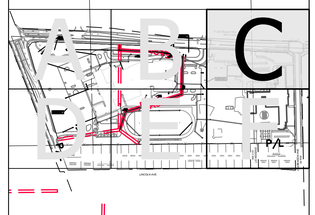

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Sheet Title:
SITE UTILITY PLAN - AREA C

Sheet Number:
C1.53C

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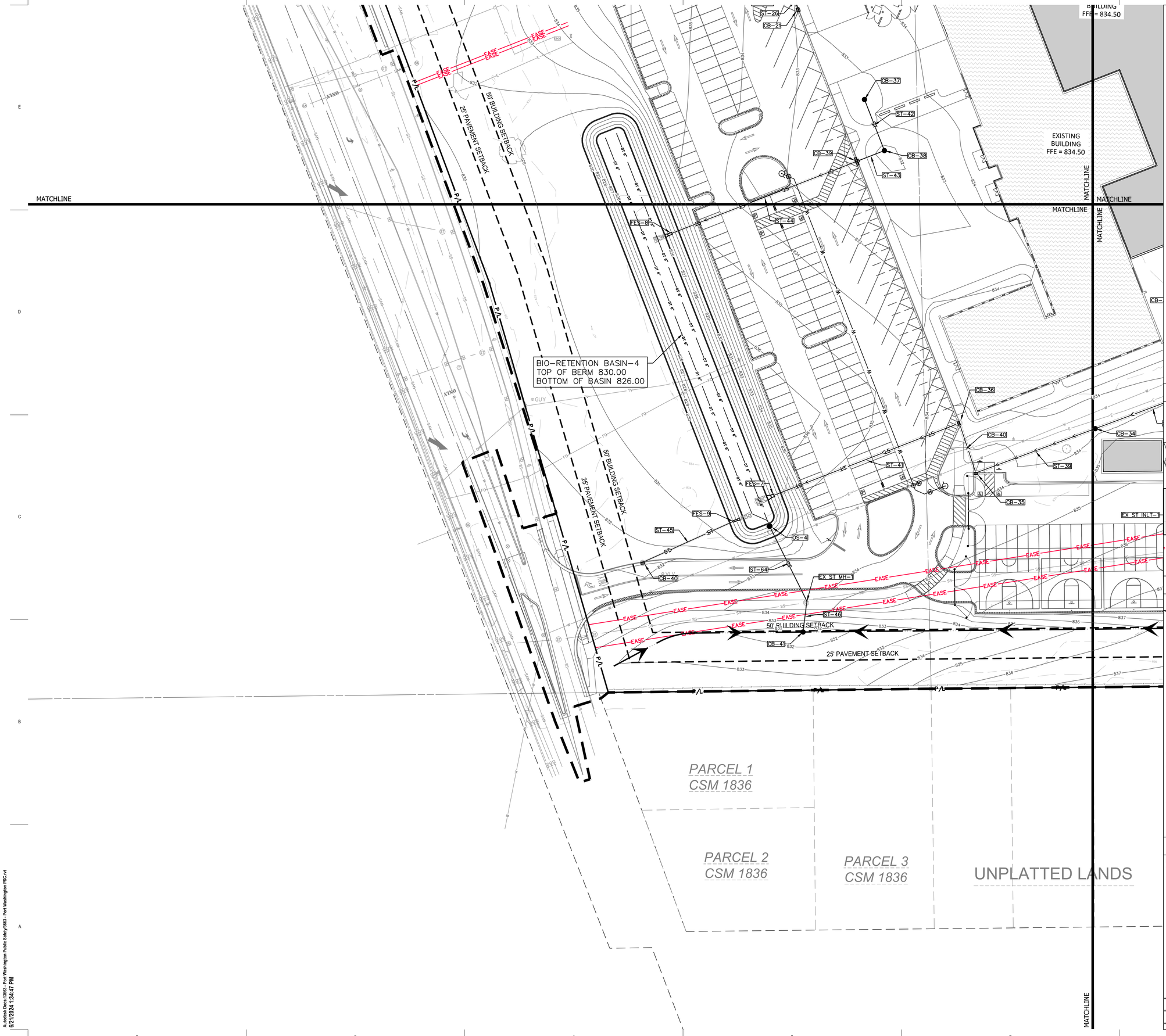

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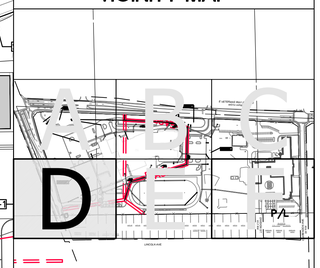

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Sheet Title:
SITE UTILITY PLAN - AREA D

Sheet Number:
C1.54D

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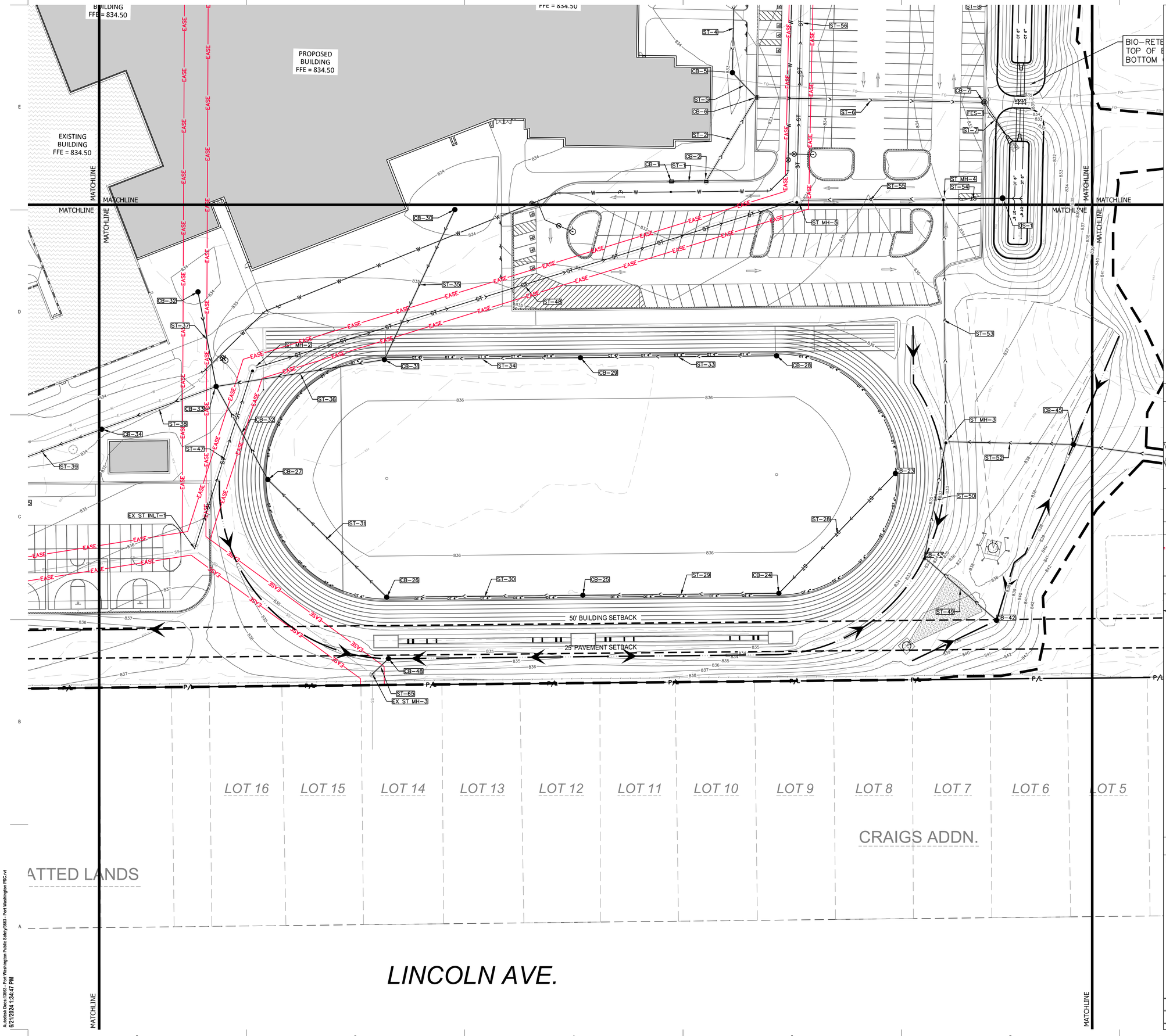

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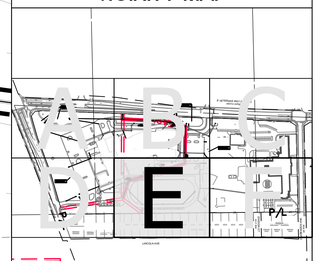

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NOT FOR CONSTRUCTION

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Issued For: **PLAN COMMISSION SUBMITTAL** 4/2/2025

Sheet Title: **SITE UTILITY PLAN - AREA E**

Sheet Number: **C1.55E**

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BIO-RETENTION BASIN-1
TOP OF BERM 830.25
BOTTOM OF BASIN 826.25

MATCHLINE

MATCHLINE

MATCHLINE

MATCHLINE

REPLAT OF WILSO
SUBDIVISI

50' BUILDING SETBACK

25' PAVEMENT SETBACK

50' BUILDING SETBACK

25' PAVEMENT SETBACK

CB-45

ST-53

CB-44

50' BUILDING SETBACK

25' PAVEMENT SETBACK

FND. 1" IP 1.82' WEST

LOT 6 | LOT 5 | LOT 4 | LOT 3 | LOT 2 | LOT 1

63.2' R/W

DIVISION ST.

BLOCK B
H.A. YOUMANS ADDN.

PART OF LOT 1 | PART OF LOT 1 | PART OF LOT 1

CLARENDON AVE.
66' R/W

MATCHLINE

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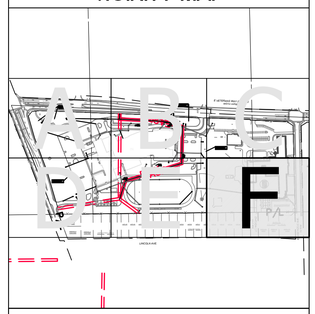

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Sheet Title:
SITE UTILITY PLAN - AREA F

Sheet Number:
C1.56F

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STORM SEWER STRUCTURE TABLE

STRUCTURE NAME:	TYPE (FRAME AND GRATE):	RIM ELEVATION:	PIPES IN:	PIPES OUT	BOTTOM:	DETAIL:
CB-1	2' X 3' RECTANGULAR (R-3067-R)	831.96		ST-1, 15" E INV = 828.71	827.21	
CB-2	48" DIAMETER (R-3067-L)	832.25	ST-1, 15" W INV = 828.42	ST-2, 18" NE INV = 828.17	826.67	
CB-3	2' X 3' RECTANGULAR (R-3067-R)	832.43		ST-3, 12" W INV = 829.43	827.93	
CB-4	18" NYLOPLAST DRAIN (1899CGS)	832.43	ST-3, 12" E INV = 829.33	ST-4, 12" S INV = 829.33	827.83	
CB-5	18" NYLOPLAST DRAIN (1899CGS)	832.65	ST-4, 12" N INV = 828.95	ST-5, 12" SE INV = 828.95	827.45	
CB-6	48" DIAMETER (R-3067-R)	832.49	ST-5, 12" NW INV = 828.73 ST-2, 18" SW INV = 827.76	ST-6, 24" E INV = 827.26	825.76	
CB-7	48" DIAMETER (R-2502-RA)	832.49	ST-6, 24" W INV = 826.68	ST-7, 24" SE INV = 826.68	825.18	
CB-8	2' X 3' RECTANGULAR (R-3067-R)	832.43		ST-8, 12" E INV = 828.16	826.66	
CB-9	48" DIAMETER (R-3067-R)	831.72	ST-9, 12" SW INV = 828.10	ST-10, 15" N INV = 827.85	826.35	
CB-10	48" DIAMETER (R-3067-R)	833.35	ST-10, 15" S INV = 827.73	ST-11, 18" E INV = 827.48	825.98	
CB-11	2' X 3' RECTANGULAR (R-3067-R)	832.39		ST-12, 12" N INV = 828.45	826.95	
CB-12	2' X 3' RECTANGULAR (R-3067-R)	831.36	ST-12, 12" S INV = 828.13	ST-13, 12" N INV = 828.13	826.63	
CB-13	48" DIAMETER (R-3067-R)	832.09		ST-14, 12" SW INV = 829.09	827.59	
CB-14	48" DIAMETER (R-3067-R)	832.02	ST-14, 12" NE INV = 828.83	ST-15, 15" S INV = 828.58	827.08	
CB-15	18" NYLOPLAST DRAIN (1899CGS)	832.91	ST-15, 15" N INV = 828.26	ST-16, 15" W INV = 828.26	826.76	
CB-16	48" DIAMETER (R-2502-D)	833.49	ST-16, 15" E INV = 827.74 ST-17, 12" S INV = 827.83	ST-18, 24" W INV = 826.83	825.33	
CB-17	60" DIAMETER (R-2502-D)	833.53	ST-18, 24" E INV = 826.50 ST-19, 12" S INV = 828.19	ST-20, 24" W INV = 826.50	825.00	
CB-18	18" NYLOPLAST DRAIN (1899CGS)	833.44	ST-21, 12" SW INV = 828.16	ST-22, 12" N INV = 828.16	826.66	
CB-19	60" DIAMETER (R-3067-R)	832.98	ST-20, 24" E INV = 826.30 ST-22, 12" S INV = 828.03	ST-23, 30" N INV = 825.80	824.30	
CB-20	48" DIAMETER (R-3067-R)	832.73		ST-25, 15" W INV = 829.48	827.98	
CB-21	2' X 3' RECTANGULAR (R-3067-R)	832.88		ST-26, 15" N INV = 829.62	828.12	
CB-21B	48" DIAMETER (R-3067-L)	833.03	ST-25, 15" E INV = 829.31 ST-26, 15" S INV = 829.47	ST-27, 18" W INV = 829.06	827.56	
CB-23	18" NYLOPLAST DRAIN (1899CGS)	835.13		ST-28, 8" SW INV = 832.26	830.76	
CB-24	18" NYLOPLAST DRAIN (1899CGS)	835.13	ST-28, 8" NE INV = 831.90	ST-29, 12" W INV = 831.57	830.07	
CB-25	18" NYLOPLAST DRAIN (1899CGS)	835.13	ST-29, 12" E INV = 831.16	ST-30, 12" W INV = 831.16	829.66	
CB-26	18" NYLOPLAST DRAIN (1899CGS)	835.13	ST-30, 12" E INV = 830.33	ST-31, 12" NW INV = 830.33	828.83	
CB-27	18" NYLOPLAST DRAIN (1899CGS)	835.13	ST-31, 12" SE INV = 829.63	CB-32, 12" NW INV = 829.63	829.63	
CB-28	18" NYLOPLAST DRAIN (1899CGS)	835.13		ST-33, 8" W INV = 831.90	830.40	
CB-29	18" NYLOPLAST DRAIN (1899CGS)	835.13	ST-33, 8" E INV = 831.07	ST-34, 12" W INV = 830.74	829.24	
CB-30	18" NYLOPLAST DRAIN (1899CGS)	833.13		ST-35, 12" SW INV = 830.13	828.63	
CB-31	18" NYLOPLAST DRAIN (1899CGS)	835.13	ST-34, 12" E INV = 830.33 ST-35, 12" NE INV = 829.77	ST-36, 15" W INV = 829.52	828.02	
CB-32	18" NYLOPLAST DRAIN (1899CGS)	833.60		ST-37, 8" S INV = 830.60	829.10	
CB-33	48" DIAMETER (R-2502-D)	833.97	ST-37, 8" N INV = 829.79 CB-32, 12" SE INV = 828.70 ST-36, 15" E INV = 828.44	ST-38, 24" W INV = 827.69	826.19	
CB-34	24" NYLOPLAST DRAIN (2499CGS)	833.09	ST-38, 24" E INV = 827.38	ST-39, 24" W INV = 827.38	825.88	
CB-35	60" DIAMETER (R-3067-R)	833.56	ST-39, 24" E INV = 827.06	CB-40, 24" N INV = 827.06	825.56	
CB-36	60" DIAMETER (R-3067-C)	833.32	CB-40, 24" S INV = 826.84	ST-41, 24" W INV = 827.01	825.34	
CB-37	18" NYLOPLAST DRAIN (1899CGS)	832.01		ST-42, 8" S INV = 829.01	827.51	
CB-38	18" NYLOPLAST DRAIN (1899CGS)	831.68	ST-42, 8" N INV = 828.55	ST-43, 8" W INV = 828.55	827.05	
CB-39	2' X 6' (R-3295-2)	831.70	ST-43, 8" E INV = 828.30	ST-44, 18" W INV = 827.20	825.70	
CB-40	48" DIAMETER (R-3067-R)	831.70		ST-45, 12" NE INV = 827.70	826.20	
CB-41	18" NYLOPLAST DRAIN (1899CGS)	831.40		ST-46, 12" N INV = 827.40	825.90	
CB-42	18" NYLOPLAST DRAIN (1899CGS)	837.41		ST-49, 12" NW INV = 831.46	829.96	
CB-43	48" DIAMETER (R-2502-D)	832.05	ST-49, 12" SE INV = 829.05	ST-50, 15" N INV = 829.05	827.55	
CB-44	48" DIAMETER (R-3501-RA)	842.05		ST-51, 15" W INV = 839.71	839.71	
CB-45	18" NYLOPLAST DRAIN (1899CGS)	836.77	ST-51, 15" E INV = 832.52	ST-52, 15" W INV = 832.52	831.02	
CB-46	18" NYLOPLAST DRAIN (1899CGS)	834.27		ST-57, 12" SW INV = 829.30	827.80	
CB-47	18" NYLOPLAST DRAIN (1899CGS)	830.04	ST-57, 12" NE INV = 827.04	ST-58, 12" W INV = 827.04	825.54	
CB-48	18" NYLOPLAST DRAIN (1899CGS)	833.46		ST-65, 12" SW INV = 828.21	826.71	
EX ST INLT-1	N/A		EX ST, 18" SE INV = 825.83 EX ST, 36" W INV = 825.53	ST-47, 42" N INV = 823.53		
EX ST MH-1	N/A		ST-46, 12" S INV = 827.14 ST-64, 10" NW INV = 823.86 EX ST, 36" W INV = 823.86	EX ST, 36" E INV = 823.86		
EX ST MH-2	N/A		ST-62, 42" S INV = 820.79	EX ST, 36" NE INV = 820.79		
EX ST MH-3	N/A		ST-65, 12" NE INV = 827.21 EX ST, 18" S INV = 826.83	EX ST, 18" NW INV = 826.83		
FES-1	24" RCP APRON ENDWALL		ST-7, 24" NW INV = 826.51			
FES-2	12" RCP APRON ENDWALL		ST-8, 12" W INV = 828.00			
FES-3	18" RCP APRON ENDWALL		ST-11, 18" W INV = 827.00			
FES-4	12" RCP APRON ENDWALL		ST-13, 12" S INV = 828.00			
FES-5	30" RCP APRON ENDWALL		ST-24, 30" E INV = 825.00			
FES-6	18" RCP APRON ENDWALL		ST-27, 18" E INV = 826.00			
FES-7	24" RCP APRON ENDWALL		ST-41, 24" E INV = 826.00			
FES-8	18" RCP APRON ENDWALL		ST-44, 18" E INV = 826.00			

STORM SEWER STRUCTURE TABLE

STRUCTURE NAME:	TYPE (FRAME AND GRATE):	RIM ELEVATION:	PIPES IN:	PIPES OUT	BOTTOM:	DETAIL:
FES-9	12" RCP APRON ENDWALL		ST-45, 12" SW INV = 826.86			
FES-10	36" RCP APRON ENDWALL			ST-66, 36" NE INV = 821.25		
FES-11	36" RCP APRON ENDWALL		ST-66, 36" SW INV = 820.97			
OS-1	48" OUTLET STRUCTURE	828.25	DT, 6" E INV = 823.75	ST-54, 10" W INV = 823.75	822.25	
OS-2	48" OUTLET STRUCTURE	829.00	DT, 6" N INV = 824.50	ST-59, 10" S INV = 824.50	825.00	
OS-3	48" OUTLET STRUCTURE	827.00	DT, 6" S INV = 822.50	ST-63, 10" E INV = 822.50	821.50	
OS-4	48" OUTLET STRUCTURE	828.00	DT, 6" NW INV = 824.00	ST-64, 10" SE INV = 824.00	822.50	
ST BLDG-1	N/A			ST-9, 12" NE INV = 828.50		
ST BLDG-2	N/A			ST-17, 12" N INV = 828.50		
ST BLDG-3	N/A			ST-19, 12" N INV = 828.50		
ST BLDG-4	N/A			ST-21, 12" NE INV = 828.50		
ST MH-1	60" DIAMETER (R-1661)	835.03	ST-23, 30" S INV = 825.58	ST-24, 30" W INV = 825.58	825.58	
ST MH-2	72" DIAMETER (R-1661)	835.61	ST-47, 42" S INV = 823.24	ST-48, 42" E INV = 823.24	823.24	
ST MH-3	48" DIAMETER (R-1661)	833.60	ST-50, 15" S INV = 828.55 ST-52, 15" E INV = 828.55	ST-53, 18" N INV = 828.30	828.30	
ST MH-4	48" DIAMETER (R-1661)	833.99	ST-53, 18" S INV = 826.77 ST-54, 10" E INV = 823.13	ST-55, 24" W INV = 823.13	823.13	
ST MH-5	72" DIAMETER (R-1661)	833.90	ST-48, 42" W INV = 822.37 ST-55, 24" E INV = 822.82	ST-56, 42" N INV = 822.37	822.37	
ST MH-6	72" DIAMETER (R-1661)	831.86	ST-56, 42" S INV = 821.85 ST-58, 12" E INV = 825.00 ST-59, 10" N INV = 824.23	ST-60, 42" W INV = 821.85	821.85	
ST MH-7	72" DIAMETER (R-1661)	833.63	ST-60, 42" E INV = 821.57	ST-61, 42" W INV = 821.57	821.57	
ST MH-8	72" DIAMETER (R-1661)	833.73	ST-61, 42" E INV = 820.88 ST-63, 10" W INV = 820.88	ST-62, 42" N INV = 820.88	820.88	

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St,
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

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Project Number:
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SITE UTILITY PLAN - TABLES

Sheet Number:
C1.57G

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STORM SEWER PIPE TABLE

PIPE NAME:	FROM:	TO:	UPSTREAM INVERT ELEVATION:	DOWNSTREAM INVERT ELEVATION:	LENGTH:	SLOPE:	SIZE AND MATERIAL:	GPM:
CB-32	CB-27	CB-33	829.63	828.70	89.63'	1.04%	12" DUAL WALL HDPE	
CB-40	CB-35	CB-36	827.06	826.84	44.13'	0.50%	24" DUAL WALL HDPE	
ST-1	CB-1	CB-2	828.71	828.42	29.23'	1.00%	15" DUAL WALL HDPE	
ST-2	CB-2	CB-6	828.17	827.76	81.90'	0.50%	18" DUAL WALL HDPE	
ST-3	CB-3	CB-4	829.43	829.33	20.50'	0.50%	12" DUAL WALL HDPE	
ST-4	CB-4	CB-5	829.33	828.95	75.03'	0.50%	12" DUAL WALL HDPE	
ST-5	CB-5	CB-6	828.95	828.73	28.99'	0.75%	12" DUAL WALL HDPE	
ST-6	CB-6	CB-7	827.26	826.68	192.00'	0.30%	24" DUAL WALL HDPE	
ST-7	CB-7	FES-1	826.68	826.51	34.44'	0.50%	24" CLASS IV RCP	
ST-8	CB-8	FES-2	828.16	828.00	11.09'	1.47%	12" CLASS IV RCP	
ST-9	ST BLDG-1	CB-9	828.50	828.10	52.90'	0.75%	12" SDR 35 PVC	
ST-10	CB-9	CB-10	827.85	827.73	11.78'	1.00%	15" DUAL WALL HDPE	
ST-11	CB-10	FES-3	827.48	827.00	120.55'	0.40%	18" CLASS IV RCP	
ST-12	CB-11	CB-12	828.45	828.13	32.07'	1.00%	12" DUAL WALL HDPE	
ST-13	CB-12	FES-4	828.13	828.00	12.59'	1.00%	12" CLASS IV RCP	
ST-14	CB-13	CB-14	829.09	828.83	26.42'	1.00%	12" DUAL WALL HDPE	
ST-15	CB-14	CB-15	828.58	828.26	42.50'	0.75%	15" DUAL WALL HDPE	
ST-16	CB-15	CB-16	828.26	827.74	69.35'	0.75%	15" DUAL WALL HDPE	
ST-17	ST BLDG-2	CB-16	828.50	827.83	66.75'	1.00%	12" SDR 35 PVC	
ST-18	CB-16	CB-17	826.83	826.50	89.22'	0.37%	24" DUAL WALL HDPE	
ST-19	ST BLDG-3	CB-17	828.50	828.19	30.62'	1.00%	12" DUAL WALL HDPE	
ST-20	CB-17	CB-19	826.50	826.30	79.28'	0.25%	24" DUAL WALL HDPE	
ST-21	ST BLDG-4	CB-18	828.50	828.16	33.74'	1.00%	12" DUAL WALL HDPE	
ST-22	CB-18	CB-19	828.16	828.03	12.50'	1.00%	12" DUAL WALL HDPE	
ST-23	CB-19	ST MH-1	825.80	825.58	89.00'	0.25%	30" DUAL WALL HDPE	
ST-24	ST MH-1	FES-5	825.58	825.00	232.99'	0.25%	30" CLASS IV RCP	
ST-25	CB-20	CB-21B	829.48	829.31	16.88'	1.00%	15" DUAL WALL HDPE	
ST-26	CB-21	CB-21B	829.62	829.47	14.97'	1.00%	15" DUAL WALL HDPE	
ST-27	CB-21B	FES-6	829.06	826.00	274.54'	1.11%	18" CLASS IV RCP	
ST-28	CB-23	CB-24	832.26	831.90	140.75'	0.25%	8" SDR 35 PVC	
ST-29	CB-24	CB-25	831.57	831.16	165.00'	0.25%	12" DUAL WALL HDPE	
ST-30	CB-25	CB-26	831.16	830.33	165.00'	0.50%	12" DUAL WALL HDPE	
ST-31	CB-26	CB-27	830.33	829.63	140.75'	0.50%	12" DUAL WALL HDPE	
ST-33	CB-28	CB-29	831.90	831.07	165.00'	0.50%	8" DUAL WALL HDPE	
ST-34	CB-29	CB-31	830.74	830.33	165.00'	0.25%	12" DUAL WALL HDPE	
ST-35	CB-30	CB-31	830.13	829.77	139.51'	0.26%	12" DUAL WALL HDPE	
ST-36	CB-31	CB-33	829.52	828.44	143.39'	0.75%	15" DUAL WALL HDPE	
ST-37	CB-32	CB-33	830.60	829.79	81.10'	1.00%	8" SDR 35 PVC	
ST-38	CB-33	CB-34	827.69	827.38	102.78'	0.30%	24" DUAL WALL HDPE	
ST-39	CB-34	CB-35	827.38	827.06	107.16'	0.30%	24" DUAL WALL HDPE	
ST-41	CB-36	FES-7	827.01	826.00	167.62'	0.60%	24" CLASS IV RCP	
ST-42	CB-37	CB-38	829.01	828.55	46.13'	1.00%	8" SDR 35 PVC	
ST-43	CB-38	CB-39	828.55	828.30	24.50'	1.00%	8" SDR 35 PVC	
ST-44	CB-39	FES-8	827.20	826.00	167.49'	0.72%	18" CLASS IV RCP	
ST-45	CB-40	FES-9	827.70	826.86	83.64'	1.00%	12" CLASS IV RCP	
ST-46	CB-41	EX ST MH-1	827.40	827.14	26.18'	1.00%	12" DUAL WALL HDPE	
ST-47	EX ST INLT-1	ST MH-2	823.53	823.24	159.03'	0.18%	42" CLASS IV RCP	
ST-48	ST MH-2	ST MH-5	823.24	822.37	479.45'	0.18%	42" CLASS IV RCP	
ST-49	CB-42	CB-43	831.46	829.05	80.48'	3.00%	12" DUAL WALL HDPE	
ST-50	CB-43	ST MH-3	829.05	828.55	99.13'	0.50%	15" DUAL WALL HDPE	
ST-51	CB-44	CB-45	839.71	832.52	290.06'	2.48%	15" DUAL WALL HDPE	
ST-52	CB-45	ST MH-3	832.52	828.55	107.48'	3.69%	15" DUAL WALL HDPE	
ST-53	ST MH-3	ST MH-4	828.30	826.77	204.50'	0.75%	18" DUAL WALL HDPE	
ST-54	OS-1	ST MH-4	823.75	823.13	49.69'	1.25%	10" SDR 35 PVC	
ST-55	ST MH-4	ST MH-5	823.13	822.82	123.40'	0.25%	24" DUAL WALL HDPE	
ST-56	ST MH-5	ST MH-6	822.37	821.85	298.62'	0.18%	42" CLASS IV RCP	
ST-57	CB-46	CB-47	829.30	827.04	116.27'	1.94%	12" DUAL WALL HDPE	
ST-58	CB-47	ST MH-6	827.04	825.00	204.34'	1.00%	12" DUAL WALL HDPE	
ST-59	OS-2	ST MH-6	824.50	824.23	26.61'	1.00%	10" SDR 35 PVC	
ST-60	ST MH-6	ST MH-7	821.85	821.57	153.77'	0.18%	42" CLASS IV RCP	
ST-61	ST MH-7	ST MH-8	821.57	820.88	366.51'	0.19%	42" CLASS IV RCP	
ST-62	ST MH-8	EX ST MH-2	820.88	820.79	44.21'	0.20%	42" CLASS IV RCP	
ST-63	OS-3	ST MH-8	822.50	820.88	433.62'	0.37%	10" SDR 35 PVC	
ST-64	OS-4	EX ST MH-1	824.00	823.86	70.59'	0.20%	10" SDR 35 PVC	
ST-65	CB-48	EX ST MH-3	828.21	827.21	18.76'	5.33%	12" DUAL WALL HDPE	
ST-66	FES-10	FES-11	821.25	820.97	28.65'	1.00%	36" CLASS IV RCP	

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

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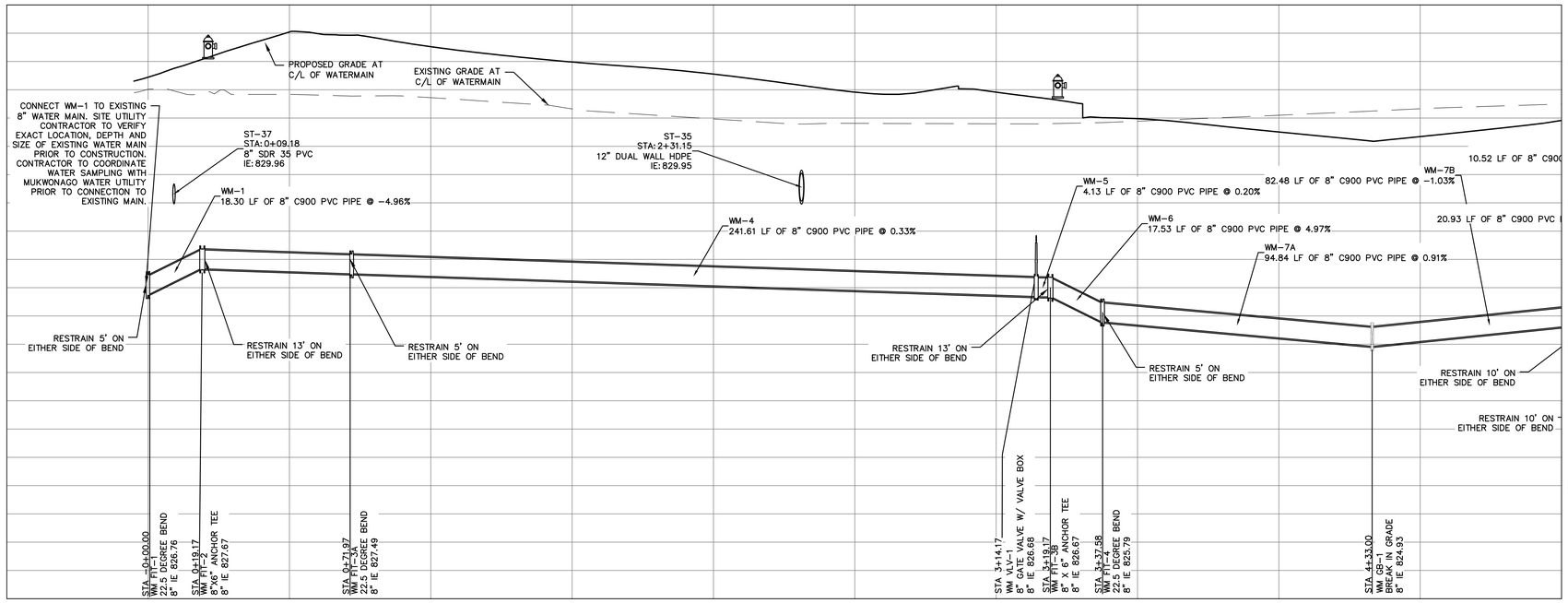

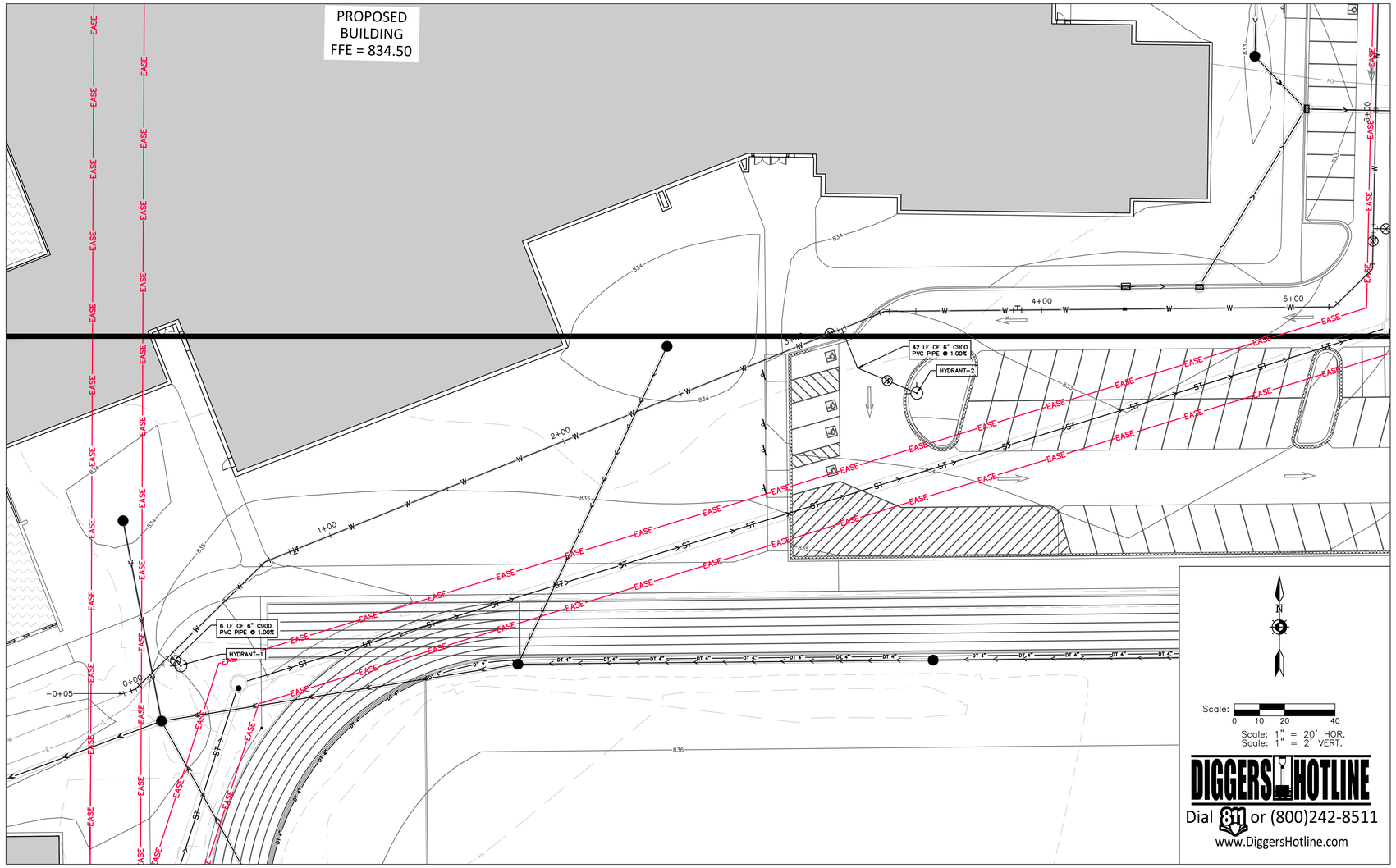

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GENERAL NOTES

1. ALL WATER MAIN MATERIALS, INSTALLATION, CONSTRUCTION, AND TESTING SHALL BE DONE PER APPLICABLE SECTIONS OF THE LATEST EDITIONS OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, WISCONSIN ADMINISTRATION PLUMBING CODE AND THE VILLAGE OF MUKWONAGO STANDARDS.
2. CONTRACTOR SHALL COORDINATE WITH PEWAUKEE WATER UTILITY FOR ALL CONSTRUCTION INSPECTION 72 HOURS PRIOR TO COMMENCING WORK.
3. PROPOSED WATER MAIN SHALL REMAIN ISOLATED FROM EXISTING WATER MAIN UNTIL PROPOSED WATER MAIN HAS PASSED ALL REQUIRED TESTS.
4. ALL WATER MAIN AND SERVICES ARE TO BE BEDDED AND COVERED WITH STONE CHIPS PER SWS 8.43.2(A), AND BACKFILLED WITH MECHANICALLY COMPACTED GRANULAR BACKFILL PER SWS 8.43.4 IN PAVED AREAS/SHOULDERS AND WITHIN 5 FEET OF THE PAVED/SHOULDER AREAS. SPOIL BACKFILL WILL BE ALLOWED IN NON-PAVEMENT AND NON-SHOULDERED AREAS. SLURRY BACKFILL REQUIRED IN EXISTING PAVED AREAS.
6. PIPE MATERIAL SHALL BE PVC MEETING THE FOLLOWING: FOR 4"-12" DIAMETER MAIN, AWWA C900, CLASS 150 WITH DR 18 OR LESS. FOR 6" DIAMETER HYDRANT LATERALS, AWWA C900, CLASS 200 WITH DR 18 OR LESS.
7. CONTRACTOR SHALL PROVIDE DOUBLE POLYWRAPPING AROUND ALL VALVE, TEES, AND FITTINGS.
8. RESTRAIN ALL VALVES, FITTINGS, BENDS, REDUCERS, AND DEAD ENDS AT THE PIPE CONNECTION.
9. HYDRANTS SHALL BE FULLY RESTRAINED. ALL HYDRANT LEADS SHALL BE RESTRAINED WITH CONCRETE BUTTRESS AT TEE AND HYDRANT SHOE.
10. ALL STATIONING ALONG CENTERLINE OF WATER MAIN.
11. CONTRACTOR SHALL TEST WATER MAIN MAINLINE AND LATERAL TRACER WIRE TRACEABILITY OF THE ENTIRE WATER MAIN SYSTEM INSTALLED DURING THE PROJECT.

UTILITY NOTES

PROJECT LIMITS

EASE — 20' PROPOSED UTILITY EASEMENT

CAUTION — KNOWN UTILITY AND POTENTIAL CONFLICT EXIST WITH EXISTING UNDERGROUND UTILITIES. PRIOR TO UTILITY INSTALLATION, CONTRACTOR TO EXCAVATE AND EXPOSE EXISTING UTILITIES, VERIFY LOCATIONS AND ELEVATIONS, AND CONTACT ENGINEER IF CONFLICTS EXIST WITH PROPOSED CONSTRUCTION AND EXISTING UNDERGROUND UTILITIES..

1. PER PROJECT SPECIFICATIONS AND THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, THE POINT OF COMMENCEMENT FOR THE LAYING OF SEWER PIPE SHALL BE AT THE LOWEST POINT IN THE PROPOSED SEWER LINE. THE PIPE SHALL BE LAID WITH THE BELL END OF THE BELL AND SPIGOT PIPE, OR WITH THE RECEIVING GROOVE END OF THE TONGUE AND GROOVE PIPE, POINTING UPGRADE. WHEN A NEW SEWER IS TO BE CONNECTED TO AN EXISTING SEWER NOT TERMINATING IN A MANHOLE, THE CONTRACTOR SHALL UNCOVER THE EXISTING SEWER TO ALLOW ANY ADJUSTMENTS IN LINE AND GRADE TO BE MADE BEFORE PIPE IS LAID.
2. THE UNDERGROUND AND OVERHEAD UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES, LOCAL MUNICIPALITY, PROPERTY OWNER, AND DIGGERS HOTLINE. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.
3. GENERAL CONTRACTOR OR THEIR SUB CONTRACTORS SHALL APPLY FOR AND OBTAIN ALL THEIR REQUIRED PERMITS AND APPROVALS PRIOR TO THE START OF THEIR WORK. CONSULT WITH AND OBTAIN FROM ENGINEER COPIES OF ENGINEERING DESIGN APPROVAL PERMITS, INCLUDING BUT NOT LIMITED TO WDNR, STATE OR LOCAL PLUMBING, WDOT, COUNTY, AND STORM WATER MANAGEMENT.
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5. GENERAL CONTRACTOR OR THEIR SUB CONTRACTORS ARE RESPONSIBLE FOR COORDINATING THEIR WORK WITH ALL OTHER CONTRACTORS.
6. GENERAL CONTRACTOR OR THEIR SUB CONTRACTORS ARE RESPONSIBLE FOR VERIFYING OWNERSHIP OF AND COORDINATING THE DEMOLITION AND / OR RELOCATION / ELEVATION ADJUSTMENT OF ALL EXISTING PUBLIC OR PRIVATE UTILITIES WITHIN THE PROJECT LIMITS THAT MAY BE AFFECTED BY TOPOGRAPHICAL CHANGES, UTILITIES, OR OTHER PROPOSED CONSTRUCTION ON THE PROJECT, INCLUDING BUT NOT LIMITED TO ELECTRICAL / FIBER OPTIC / TELEPHONE / CABLE / GAS / WATER / SANITARY / STORM. DEMOLITION / RELOCATION OF THIS UTILITY WORK MUST BE IN ACCORDANCE WITH ALL STATE, FEDERAL, LOCAL, AND UTILITY OWNER REGULATIONS.
7. FOR ALL WORK, GENERAL CONTRACTOR OR THEIR SUB CONTRACTORS ARE RESPONSIBLE FOR REVIEWING BID DOCUMENTS, VERIFYING THE VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES WITHIN THE PROJECT LIMITS, AND INCLUDE IN THEIR CONTRACT THE RELOCATION OF SAID UTILITIES (NOTED OR NOT ON THE BID DOCUMENTS) AS NECESSARY TO PROVIDE PROPER DEPTH/CLEARANCE PER UTILITY OWNER'S REQUIREMENTS.

KEY INDEX

- STORM SEWER — REFER TO STORM SEWER PLANS FOR MORE INFORMATION
- SANITARY SEWER — REFER TO SANITARY SEWER PLANS FOR MORE INFORMATION
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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: WATER MAIN - PLAN & PROFILE - STA. 0+00 TO 5+00

Sheet Number: C1.59I

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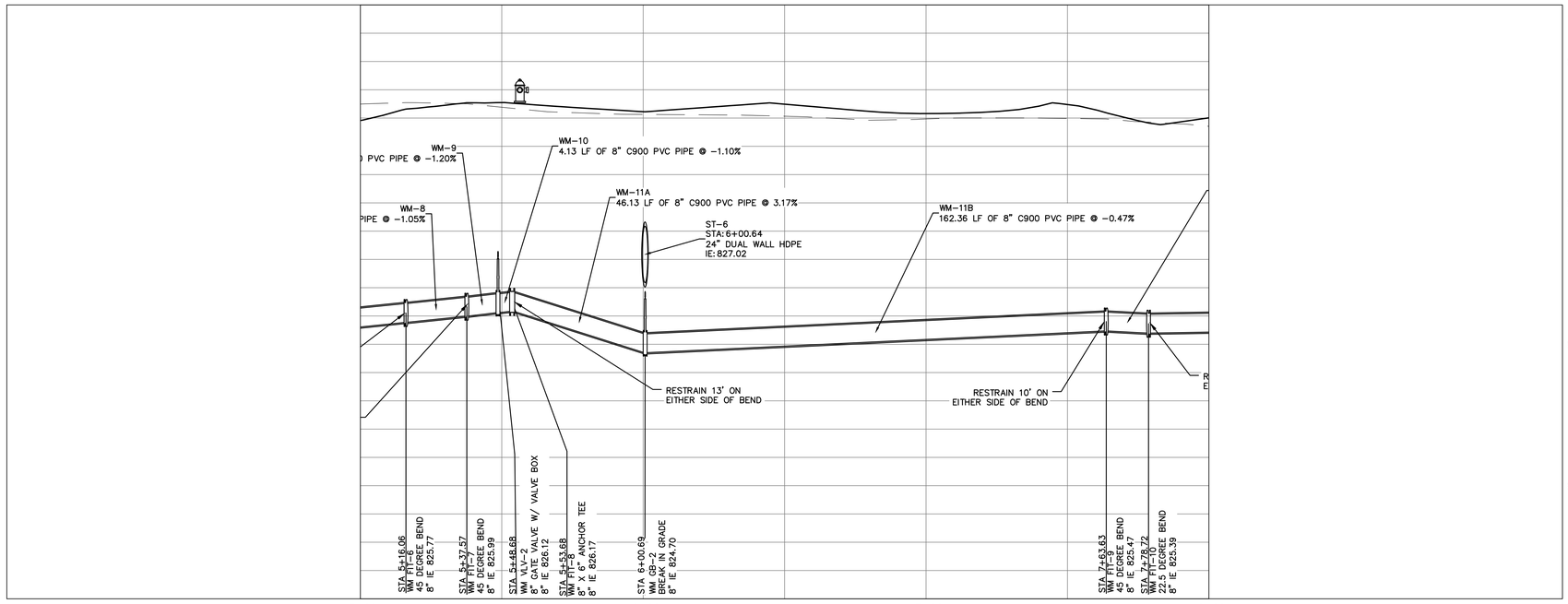

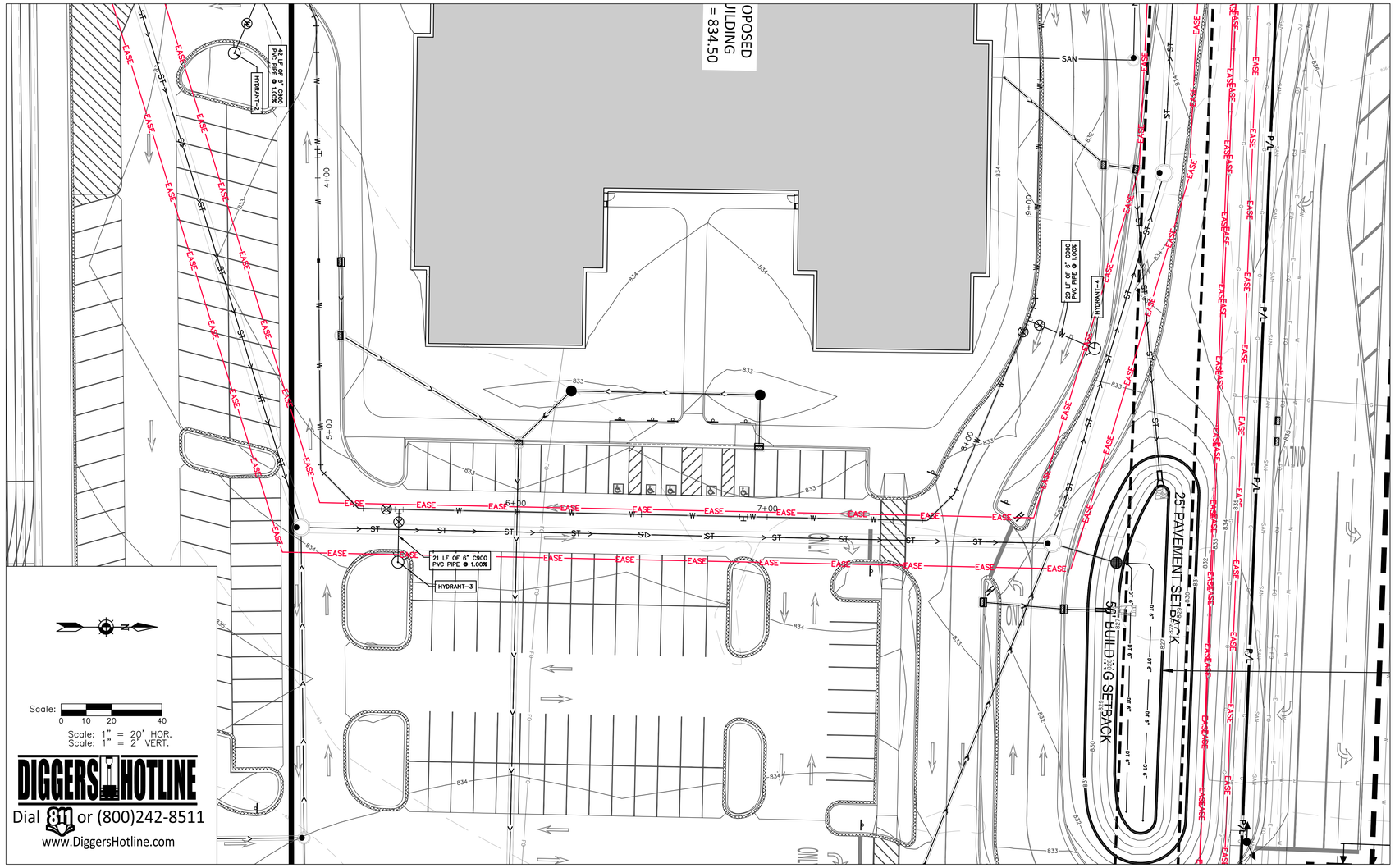

GENERAL NOTES

1. ALL WATER MAIN MATERIALS, INSTALLATION, CONSTRUCTION, AND TESTING SHALL BE DONE PER APPLICABLE SECTIONS OF THE LATEST EDITIONS OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, WISCONSIN ADMINISTRATION PLUMBING CODE AND THE VILLAGE OF MUKWONAGO STANDARDS.
2. CONTRACTOR SHALL COORDINATE WITH PEWAUKEE WATER UTILITY FOR ALL CONSTRUCTION INSPECTION 72 HOURS PRIOR TO COMMENCING WORK.
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UTILITY NOTES

PROJECT LIMITS

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Mukwonago Area School District
930 N Rochester St,
Mukwonago, WI 53149

REVISIONS:

⚠	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: **3526**

Issued For: **PLAN COMMISSION SUBMITTAL** 4/2/2025

Sheet Title: **WATER MAIN - PLAN & PROFILE STA. - 5+00 TO 8+00**

Sheet Number: **C1.60J**

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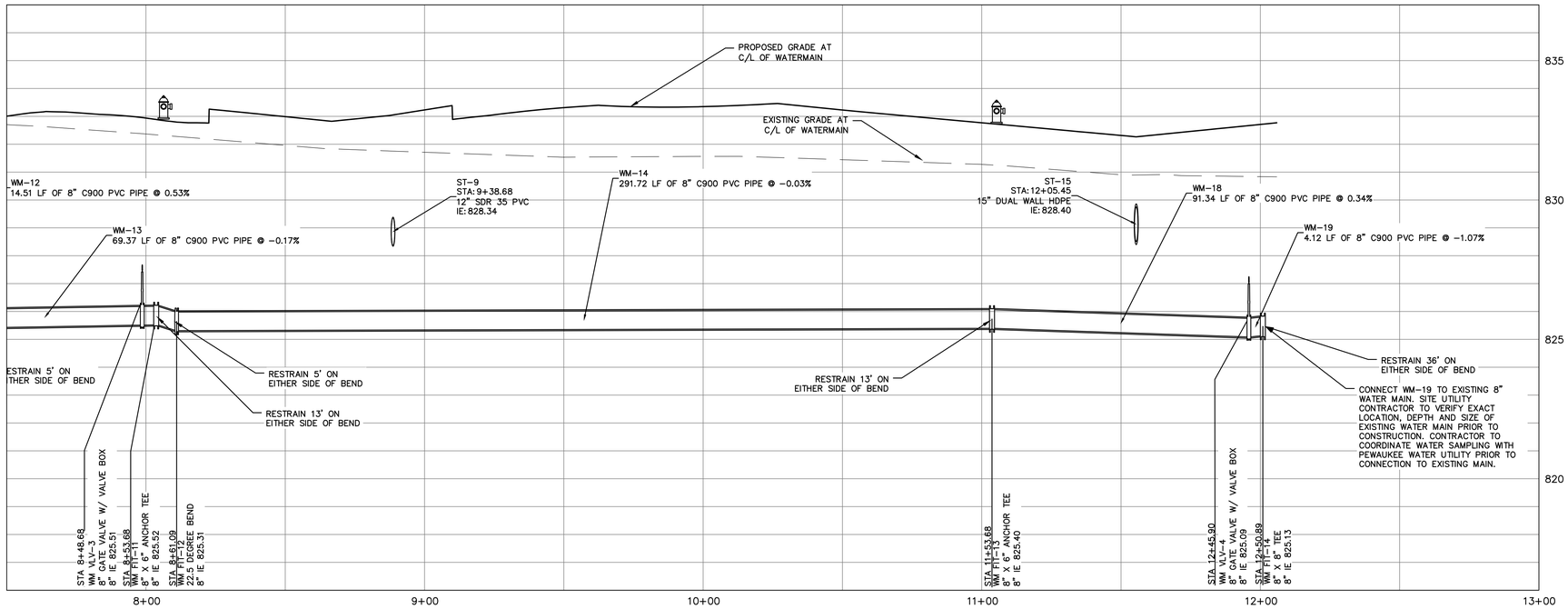

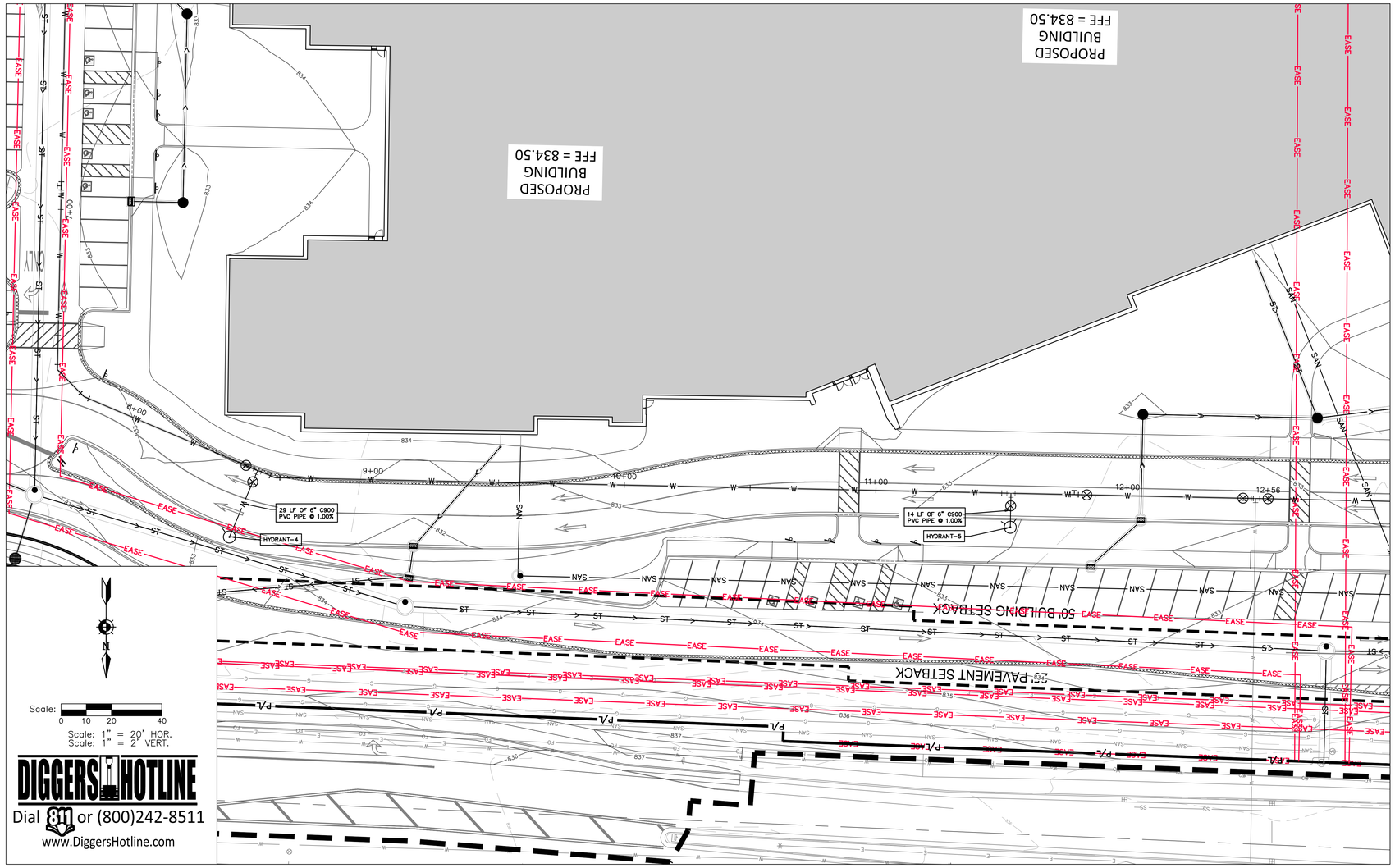

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UTILITY NOTES

PROJECT LIMITS

20' PROPOSED UTILITY EASEMENT

CAUTION

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Project Title:
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Mukwonago Area School District
930 N Rochester St.
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REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: WATER MAIN - PLAN & PROFILE - STA. 8+00 TO 12+50.89

Sheet Number: C1.61K

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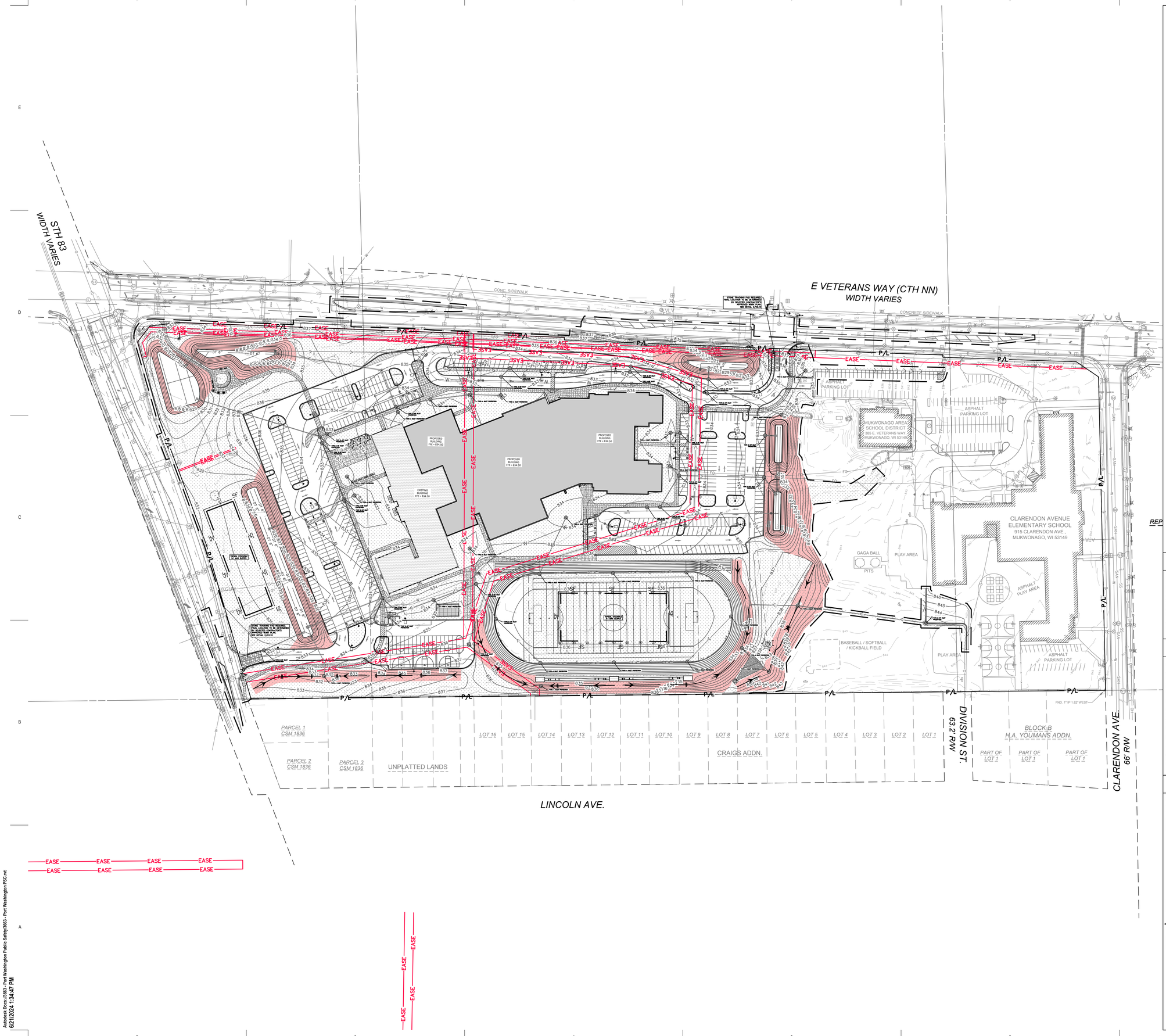

Scale: 0 40 80 160
Scale: 1" = 80'

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EROSION NOTES

INSPECT ALL EROSION CONTROL MEASURES PRIOR TO COMMENCING GRADING, GRUBBING OR OTHER LAND DISTURBING ACTIVITIES. EROSION CONTROL MEASURES MUST BE INSPECTED WEEKLY AND WITHIN 24 HOURS OF EVERY PRECIPITATION EVENT OF 0.50 INCH OR GREATER. IN ADDITION THE CONTRACTOR SHALL CONDUCT DAILY INSPECTIONS AND DOCUMENT CONDITIONS AND REPAIRS MADE ALONG WITH DATE, TIME OF INSPECTION AND WEATHER CONDITIONS IN A DAILY LOG BOOK. THE DAILY LOG BOOK, WEEKLY / 0.50 INCH PRECIPITATION REPORTS, APPROVED PLANS AND WPDES PERMIT SHALL BE KEPT IN AN ACCESSIBLE LOCATION, LIKE A MAILBOX, WITHIN THE STAGING AREA.

AT ABSOLUTELY NO TIME MAY CONSTRUCTION EQUIPMENT, DEBRIS, FILL, ETC. BE PLACED WITHIN WETLANDS, WATERWAYS OR FLOOD PLAINS UNLESS IDENTIFIED IN THE PLANS.

POINTS OF CONTACT

LAND OWNER:

ANDY WENGER – OPERATIONS MANAGER
MUKWONAGO AREA SCHOOL DISTRICT
385 E VETERANS WAY
MUKWONAGO, WI 53149
PHONE: (262) 363-6300

PROJECT ENGINEER:

MICHAEL J. FROEHLICH, P.E.
KAPUR & ASSOCIATES, INC
788 N JEFFERSON STREET, STE 900
MILWAUKEE, WI 53202
PHONE: (414) 751-7200

CONSTRUCTION MANAGER:

JASUN BERKA – SUPERINTENDENT
JP CULLEN
104 E PLEASANT STREET
MILWAUKEE, WI 53212
PHONE: (414) 988-0088

KEY INDEX

- PROJECT LIMITS
- P/L — PROPERTY LINE
- EASE — EASEMENT LINE
- INSTALL EROSION MAT ON ALL SLOPES GREATER THAN 4:1 AND ALL DRAINAGE SWALES
  USE CLASS I, TYPE A FROM WSDOT PRODUCT APPROVED LIST FOR ALL SIDE SLOPES
  USE CLASS II, TYPE B FOR ALL DRAINAGE SWALES. INSTALL EROSION MAT ON THE BOTTOM OF AND A MINIMUM OF 2 FEET VERTICALLY UP THE SIDE SLOPES OF ALL DRAINAGE SWALES. CLASS I, TYPE A MAY BE USED FOR THE REMAINDER OF THE SIDE SLOPES IN DRAINAGE SWALES EXCEEDING 2 FEET VERTICALLY.
- INSTALL CLASS III TRM, TYPE B FROM WSDOT PRODUCT APPROVED LIST. CLASS I, TYPE A MUST ALSO BE INSTALLED IN THIS AREA PER WDNR TECHNICAL BULLETIN 1053
- SF — FILTER FABRIC FENCE
- STONE TRACKING PAD REQUIRED; LOCATION TO BE DETERMINED BY SELECTED CONTRACTOR'S APPROVED WORK PLAN.
- TRIANGULAR SILT DIKES
- DESIGNATES PROPOSED INLETS THAT MUST BE PROTECTED AFTER THEY HAVE BEEN CONSTRUCTED.
- DESIGNATES EXISTING INLETS THAT MUST BE PROTECTED

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Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: OVERALL SITE EROSION CONTROL PLAN

Sheet Number: C1.70

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STH 83
WIDTH VARIES

MATCHLINE

TOPSOIL STOCKPILE
3:1 MAX SLOPES

PROPOSED
BUILDING
FFE = 834.50

EXISTING
BUILDING
FFE = 834.50

TYPE D-RF INLET PROTECTION

TYPE-A INLET PROTECTION

Scale: 1" = 30'

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VICINITY MAP

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- DESIGNATES EXISTING INLETS THAT MUST BE PROTECTED

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St,
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number:
3526

Issued For:
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4/2/2025

Sheet Title:
SITE EROSION CONTROL PLAN - AREA A

Sheet Number:
C1.71A

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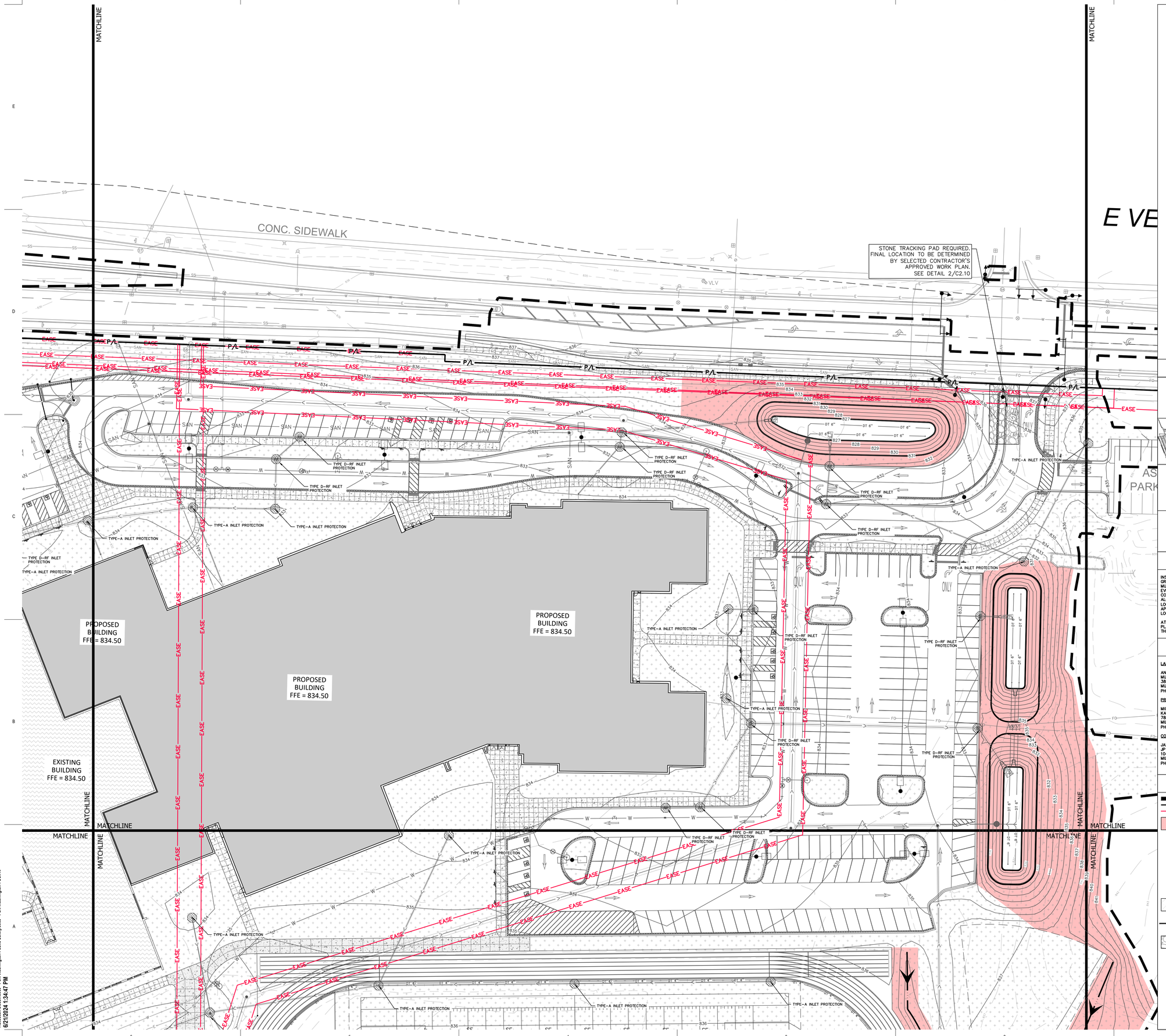

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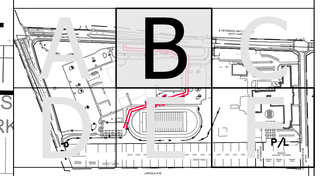

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Sheet Title: SITE EROSION CONTROL PLAN - AREA B

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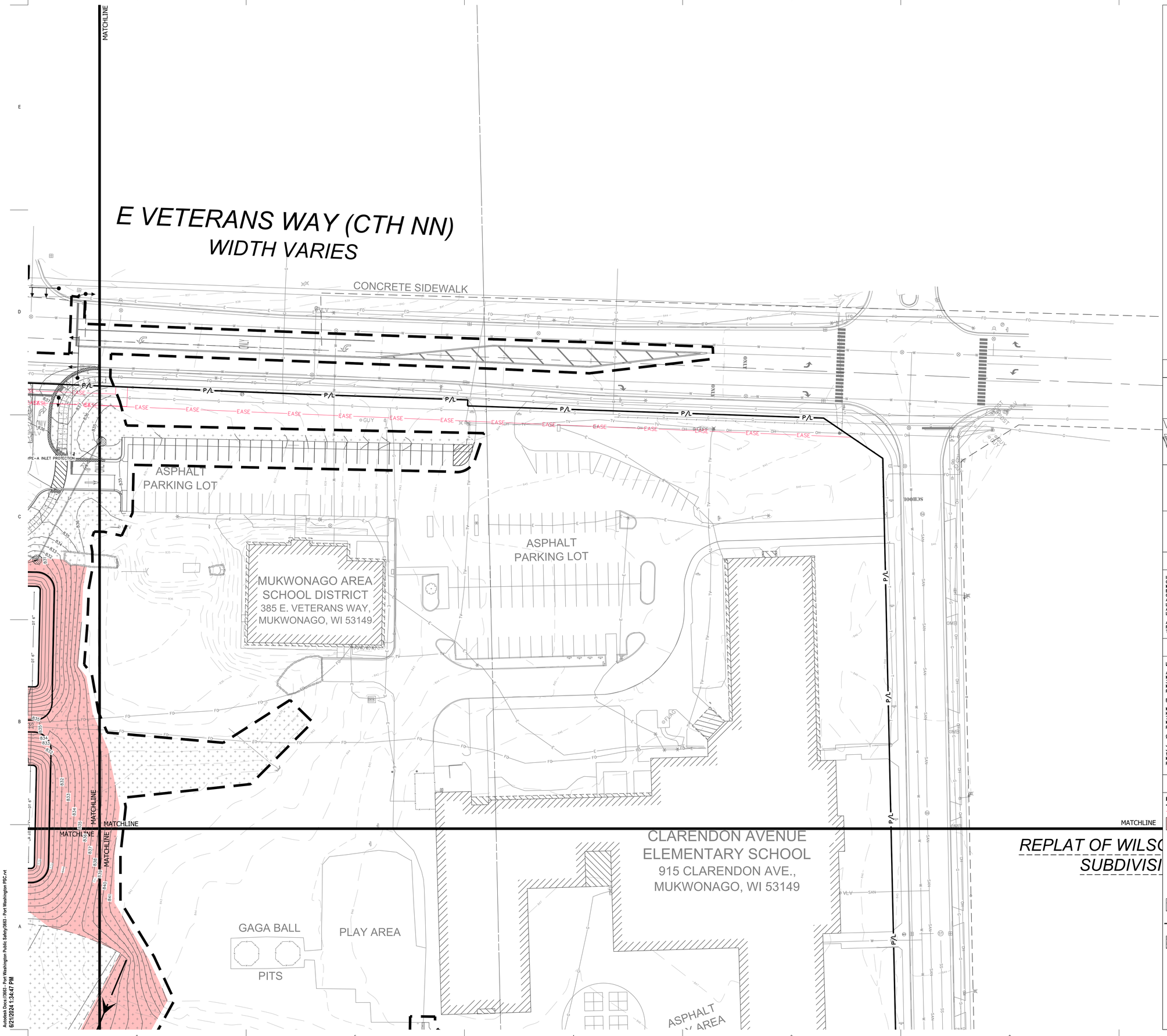

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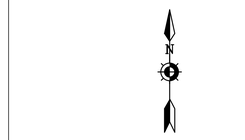

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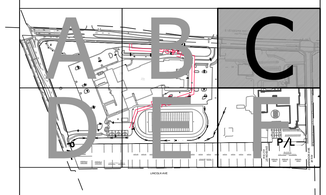

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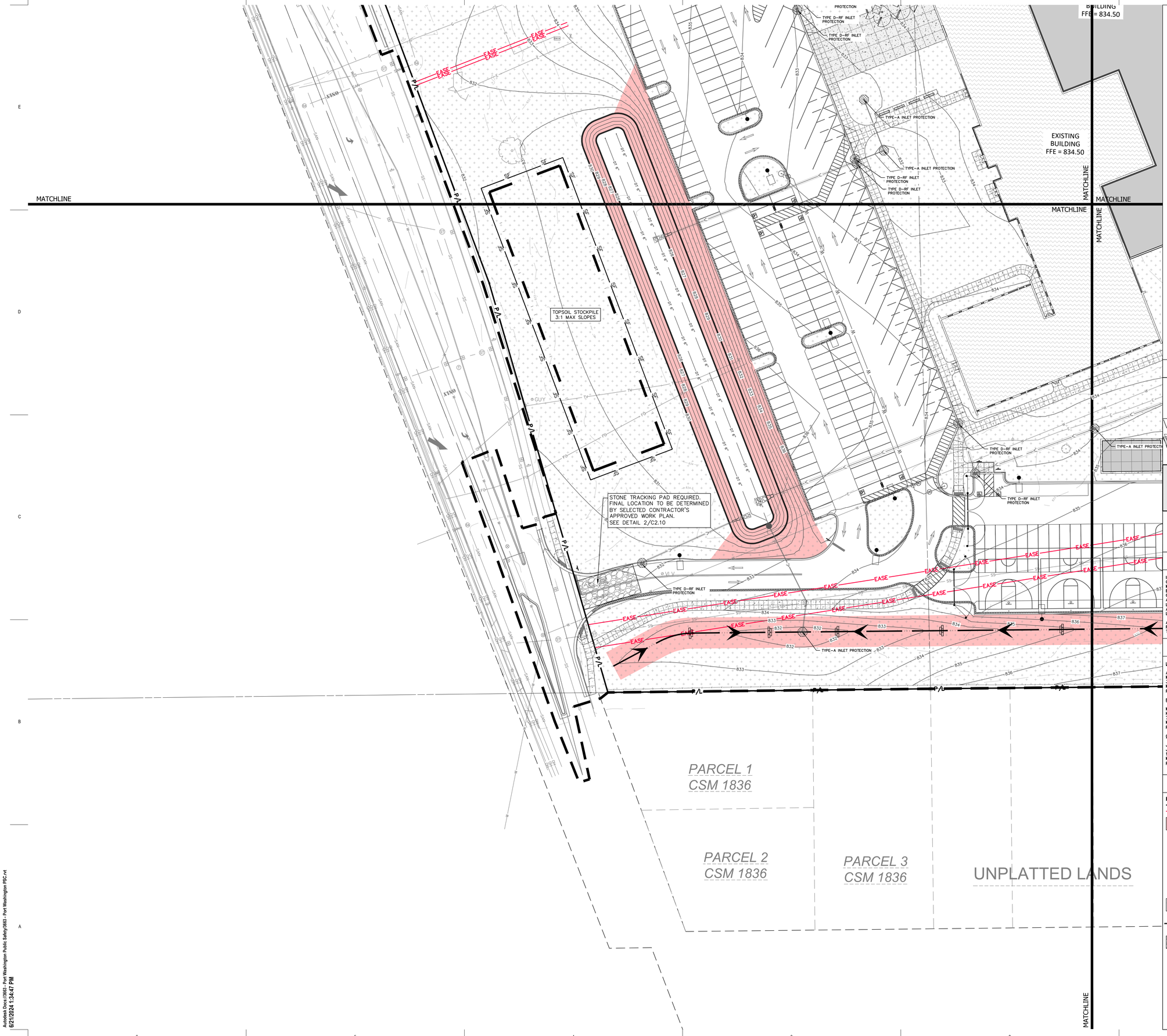

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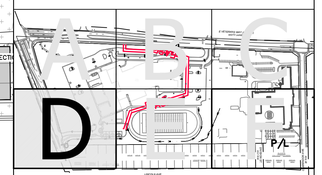

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Sheet Title: SITE EROSION CONTROL PLAN - AREA D

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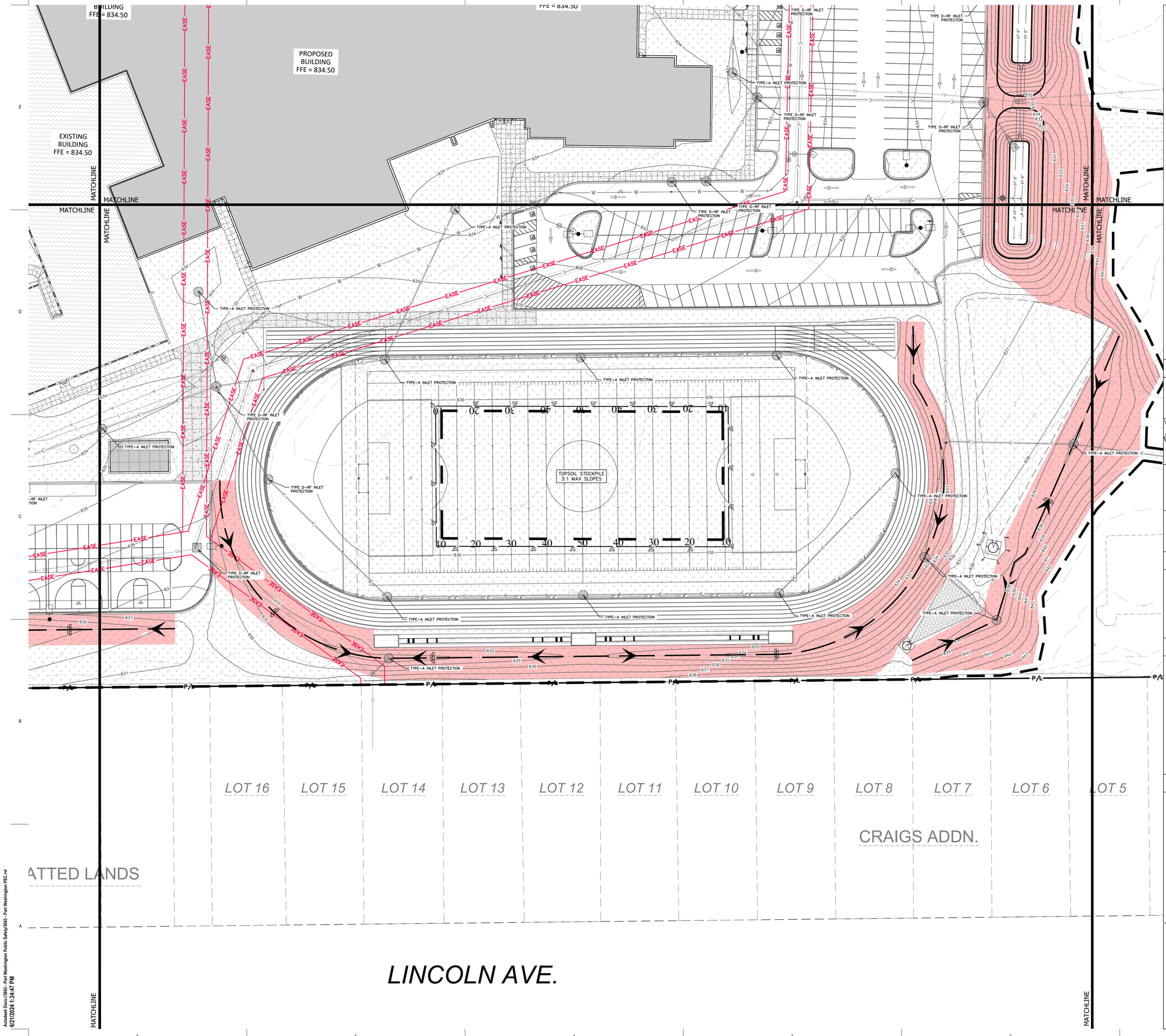

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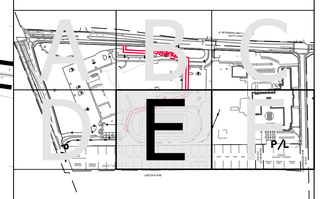

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Sheet Title:
SITE EROSION CONTROL PLAN - AREA E

Sheet Number:
C1.75E

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CLARENDON AVENUE
ELEMENTARY SCHOOL
915 CLARENDON AVE.,
MUKWONAGO, WI 53149

GAGA BALL
PLAY AREA
PITS
ASPHALT
PLAY AREA
BASEBALL / SOFTBALL
/ KICKBALL FIELD
PLAY AREA
ASPHALT
PARKING LOT

MATCHLINE
MATCHLINE
MATCHLINE
MATCHLINE
MATCHLINE

TYPE-A INLET PROTECTION
TYPE D-RF INLET PROTECTION

P/L
EASE
SAN
SS
OHP
OHD
FO
TV
W
G
E
GAS
FES
TH
CATV
VLV
HYD
CO
SMH

FND. 1" IP 1.82' WEST

REPLAT OF WILSO
SUBDIVISI

LOT 6 | LOT 5 | LOT 4 | LOT 3 | LOT 2 | LOT 1

DIVISION ST.
63.2' R/W

BLOCK B
H.A. YOUMANS ADDN.

PART OF LOT 1 | PART OF LOT 1 | PART OF LOT 1

CLARENDON AVE.
66' R/W

Scale: 0 15 30 60
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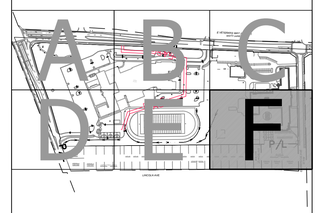

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SITE EROSION CONTROL PLAN - AREA F

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EROSION CONTROL MEASURES

1. CONTRACTOR TO INSTALL AND MAINTAIN EROSION CONTROL MEASURES AS INDICATED ON THIS PLAN AND PER THE LATEST WDNR TECHNICAL STANDARDS. TECHNICAL STANDARDS MAY BE VIEWED ONLINE AT:
   http://dnr.wi.gov/topic/stormwater/standards/const_standards.htm

2. INLETS AND CATCH BASINS SHALL BE PROTECTED WITH INLET FILTERS THAT ARE PHASED IN WITH CONSTRUCTION TO REDUCE SEDIMENT FROM ENTERING THESE AREAS PER WDNR TECHNICAL STANDARD 1060 AS FOLLOWS:

   ALL FABRIC BARRIERS SELECTED FOR INLET/CATCH BASIN PROTECTION DEVICES SHALL BE SELECTED FROM THE LIST OF APPROVED FABRICS CERTIFIED FOR INLET PROTECTION, GEOTEXTILE FABRIC, TYPE FF IN THE CURRENT EDITION OF THE WisDOT PRODUCT ACCEPTABILITY LIST. TO OBTAIN THE PAL, PLEASE REFER TO THIS WEBSITE:
   http://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/tools/pal/pal-7-14.pdf

   A. INLET PROTECTION SHALL BE AT A MINIMUM INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT OF ¾ INCH OR GREATER DURING A 24-HOUR PERIOD.

   B. PLACEMENT OF SPOIL MATERIAL, DEBRIS, SOILS, ETC. ON TOP OF INLETS/CATCH BASINS, EVEN IF TEMPORARY, IS STRICTLY DISCOURAGED AND PROHIBITED.

   C. SEDIMENT DEPOSITS SHALL BE REMOVED AND THE INLET PROTECTION DEVICE RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED BETWEEN 1/3 TO ½ THE DESIGN DEPTH OF THE DEVICE FOR TYPES A-C. WHEN SEDIMENT IS WITHIN 6" OF THE BOTTOM OF THE OVERFLOW HOLE FOR TYPE D, OR WHEN THE DEVICE IS NO LONGER FUNCTIONING PER MANUFACTURER'S SPECIFICATIONS. ALL SEDIMENT COLLECTED SHALL BE PROPERLY DISPOSED OF TO PREVENT DISCHARGE INTO AREA WATERWAYS AND WETLANDS.

   D. DUE CARE SHALL BE TAKEN TO ENSURE SEDIMENT DOES NOT FALL INTO THE INLETS/CATCH BASINS AND IMPEDE THE INTENDED FUNCTION OF THE DEVICE. ANY MATERIAL FALLING INTO THE INLET/CATCH BASIN SHALL BE REMOVED AND PROPERLY DISPOSED OF PER NOTE C ABOVE.

   E. INLET FILTERS MAY BE REMOVED AND PROPERLY DISPOSED OF UPON COMPLETION OF CONSTRUCTION, HAULING OR MOVEMENT OF CONSTRUCTION EQUIPMENT THROUGHOUT THE SITE, AND ONCE THE SITE IS ADEQUATELY STABILIZED, UNLESS AS OTHERWISE NOTIFIED BY THE WDNR.

3. A TRACKING PAD SHALL BE INSTALLED AS SHOWN ON THE PLAN SHEET PRIOR TO THE START OF CONSTRUCTION TO REDUCE OFF-SITE SEDIMENTATION BY ELIMINATING THE TRACKING OF SEDIMENT FROM THE SITE PER WDNR TECHNICAL STANDARD 1057 AS FOLLOWS:

   A. AGGREGATE USED FOR TRACKING PADS SHALL BE 3 TO 6 INCH CLEAR OR WASHED STONE. ALL MATERIAL TO BE RETAINED BY 3 INCH SIEVE.

   B. THE AGGREGATE SHALL BE PLACED IN A LAYER OF AT LEAST 12 INCHES THICK, ON SITES WITH A HIGH WATER TABLE, OR WHERE SATURATED CONDITIONS ARE EXPECTED, TRACKING PADS WILL BE UNDERLAIN WITH WisDOT TYPE R GEOTEXTILE FABRIC.

   C. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT (MIN. IS FEET WIDE) AND BE AT LEAST 50 FEET LONG.

   D. VEHICLES TRAVELING ACROSS THE TRACKING PAD SHALL MAINTAIN A SLOW CONSTANT SPEED.

   E. ANY SEDIMENT OR ROCK ACCUMULATION ONTO LOCAL ROADWAYS SHALL BE REMOVED BY STREET CLEANING, NOT FLUSHING BEFORE THE END OF EACH WORKING DAY.

   F. THE TRACKING PAD SHALL, AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT OF ½ INCH OF RAIN OR MORE DURING A 24-HOUR PERIOD.

   G. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED AT A MINIMUM OF 12" BY SCRAPING OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.

4. THE CONSTRUCTION SITE PERIMETER AND TOPSOIL STOCKPILE AREA SHALL BE PROTECTED WITH SILT FENCE AS SHOWN ON THE PLAN SHEET PRIOR TO THE START OF CONSTRUCTION TO INTERCEPT AND REDUCE THE FLOW OF SEDIMENT-LADEN SHEET FLOW RUNOFF FROM THE CONSTRUCTION SITE PER WDNR TECHNICAL STANDARD 1056 AS FOLLOWS:

   A. SILT FENCE ENDS SHALL BE EXTENDED UPSLOPE TO PREVENT WATER FROM FLOWING AROUND THE ENDS OF THE FENCE AS SHOWN ON THE PLAN SHEET.

   B. INSTALLED SILT FENCE SHALL BE A MINIMUM 14 INCHES HIGH AND SHALL NOT EXCEED 28 INCHES IN HEIGHT MEASURED FROM THE INSTALLED GROUND ELEVATION.

   C. SILT FENCE SHALL BE SUPPORTED BY EITHER STEEL OR WOOD SUPPORT POSTS.

   D. THE MAXIMUM SPACING OF POSTS FOR NONWOVEN SILT FENCE SHALL BE 3 FEET OR FOR WOVEN FABRIC 8 FEET.

   E. SILT FENCE SHALL HAVE A SUPPORT CORD AT THE TOP OF THE FENCE.

   F. WHERE JOINTS ARE NEEDED, EACH END OF THE FABRIC SHALL BE SECURELY FASTENED TO A POST. THE POSTS SHALL BE WRAPPED AROUND EACH OTHER TO PRODUCE A STABLE AND SECURE JOINT OR SHALL BE OVERLAPPED THE DISTANCE BETWEEN TWO POSTS.

   G. A MINIMUM OF 20 INCHES OF THE POSTS SHALL EXTEND INTO THE GROUND AFTER INSTALLATION.

   H. SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8 INCHES OF THE FABRIC IN A 4 INCH WIDE BY 6 INCH DEEP TRENCH, OR 6 INCH DEEP V-TRENCH ON THE UPSLOPE SIDE OF THE FENCE. THE TRENCH SHALL BE BACKFILLED AND COMPACTED. TRENCHES SHALL NOT BE EXCAVATED ANY WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.

   I. ON THE TERMINAL ENDS OF THE SILT FENCE THE FABRIC SHALL BE WRAPPED AROUND THE POST SUCH THAT THE STAPLES ARE NOT VISIBLE.

   J. GEOTEXTILE FABRIC SPECIFICATIONS SHALL MEET VALUES ESTABLISHED IN TECHNICAL STANDARD 1056.

   K. SILT FENCE SHALL BE REMOVED ONCE THE SITE IS ADEQUATELY STABILIZED.

   L. WHEN PLACING SILT FENCE NEAR TREES, CARE SHALL BE TAKEN TO MINIMIZE DAMAGE TO THE ROOT SYSTEM BY AVOIDING COMPACTION AND ROOT CUTTING WITHIN A RADIUS OF 1.5 FEET MULTIPLIED BY THE INCH DIAMETER OF THE TREE.

   M. THE CONTRACTOR MAY FURTHER STRENGTHEN THE SILT FENCE BY USING HAY BALES ON THE DOWN SLOPE SIDE AS NEEDED.

   N. SILT FENCE SHALL AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES ½ INCH OF RAIN OR MORE DURING A 24 HOUR PERIOD.

   O. DAMAGED OR DECOMPOSED SILT FENCE, UNDERCUTTING, OR FLOW CHANNELS AROUND THE END OF BARRIERS SHALL BE REPAIRED OR CORRECTED.

   P. SEDIMENT SHALL BE PROPERLY DISPOSED OF ONCE THE DEPOSITS REACH ½ THE HEIGHT OF THE FENCE TO PREVENT DISCHARGE INTO AREA WATERWAYS AND WETLANDS.

5. SEEDING AND MULCHING TECHNIQUES SHALL BE USED ON AREAS OF EXPOSED SOIL WHERE THE ESTABLISHMENT OF VEGETATION IS DESIRED. TEMPORARY SEEDING APPLIES TO DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND-DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 14 CALENDAR DAYS, REQUIRING VEGETATIVE COVER FOR LESS THAN ONE YEAR. SEED AND MULCH SHALL BE UTILIZED THROUGHOUT THE DURATION OF CONSTRUCTION TO ESTABLISH TEMPORARY VEGETATION TO HELP REDUCE EROSION PER WDNR TECHNICAL STANDARDS 1059 AND 1058 RESPECTIVELY AS FOLLOWS:

   A. TEMPORARY SEEDING REQUIRES A SEEDBED OF LOOSE SOIL TO A MINIMUM DEPTH OF 2 INCHES.

   B. FERTILIZER APPLICATION IS NOT GENERALLY REQUIRED FOR TEMPORARY SEEDING. HOWEVER, ANY APPLICATION OF FERTILIZER OR LIME SHALL BE BASED ON SOIL TESTING.

   C. THE SOIL SHALL HAVE A PH RANGE OF 5.5 TO 8.0.

   D. ALL SEED SHALL CONFORM TO THE REQUIREMENTS OF THE WISCONSIN STATE STATUTES AND OF THE ADMINISTRATIVE CODE CHAPTER ATCP 20.01 REGARDING NOXIOUS WEED SEED CONTENT AND LABELING.

   E. SEED SHALL NOT BE USED LATER THAN ONE YEAR AFTER THE TEST DATE ON THE LABEL.

   F. IN THE SUMMER-SPRING, CONTRACTOR SHALL USE OATS APPLIED AT 131 LBS/ACRE FOR TEMPORARY SEEDING PURPOSES. IN THE FALL THE CONTRACTOR SHALL USE ANNUAL RYEGRASS APPLIED AT 80 LBS/ACRE OR WINTER WHEAT OR CEREAL RYE APPLIED AT 131 LBS/ACRE. THE CONTRACTOR SHALL USE STRAW MULCH APPLIED AT 1.5 TONS/ACRE. DORMANT SEED SHALL BE USED WHEN SOIL TEMPERATURE IS CONSISTENTLY BELOW 53 DEGREES FAHRENHEIT (TYPICALLY NOV. 1 UNTIL SNOW COVER ANNUALLY). NEVER PLACE SEED ON TOP OF SNOW. IF COVER IS NEEDED AFTER SNOW FALL, CONTRACTOR MAY CHOOSE TO USE A DRY, NONTOXIC TYPE B SOIL STABILIZER PER MANUFACTURER'S SPECIFICATIONS AS REQUIRED BY THE WDNR.

   G. SEEDING SHALL NOT TAKE PLACE WHEN THE SOIL IS TOO WET.

   H. CONTRACTOR MAY CONSIDER WATERING TO HELP ESTABLISH THE SEED. WATER APPLICATION RATES SHALL BE CONTROLLED TO HELP PREVENT RUNOFF AND EROSION.

   I. DURING CONSTRUCTION, AREAS THAT HAVE BEEN SEEDED AND MULCHED SHALL AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES ½ INCH OF RAIN OR MORE DURING A 24 HOUR PERIOD. INSPECT WEEKLY DURING THE GROWING SEASON UNTIL VEGETATION IS DENSELY ESTABLISHED AND THE SOIL IS LAID. REPAIR AND RESEED AREAS THAT HAVE EROSION DAMAGE AS NECESSARY.

   J. CONTRACTOR IS TO LIMIT VEHICLE TRAFFIC AND OTHER FORMS OF COMPACTION IN AREAS THAT ARE SEEDED AS MUCH AS POSSIBLE. RE-SEED DRIVEN OVER AREAS AS NEEDED.

   K. MULCH SHOULD BE PLACED WITHIN 24 HOURS OF SEEDING.

   L. MULCHING OPERATIONS SHALL NOT TAKE PLACE DURING PERIODS OF EXCESSIVELY HIGH WINDS THAT WOULD PRECLUDE THE PROPER PLACEMENT OF MULCH.

   M. MULCH THAT IS DISPLACED SHALL BE REAPPLIED AND PROPERLY ANCHORED. MAINTENANCE SHALL BE COMPLETED AS SOON AS POSSIBLE WITH CONSIDERATION TO SITE CONDITIONS.

   N. WHEN CHANNEL EROSION MAT IS USED WITHIN CONSTRUCTION SITE DIVERSION AREAS, TECHNICAL STANDARDS 1053 AND 1066 SHALL BE FOLLOWED.

   O. WHEN NON-CHANNEL EROSION MAT IS USED TECHNICAL STANDARD 1052 SHALL BE FOLLOWED.

   P. DEPENDING ON DURATION OF CONSTRUCTION, THE CONTRACTOR MAY NEED TO RE-SEED AND RE-STABILIZE THE TOPSOIL STOCKPILE AS NECESSARY TO DISCOURAGE SEDIMENT AND EROSION.

6. A COPY OF EROSION CONTROL INSPECTION REPORTS AND THE APPROVED EROSION CONTROL PLANS SHALL BE KEPT ON SITE.

7. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL PRACTICES BY THE END OF EACH WORKDAY.

8. LOCAL ROADS SHALL BE CLEAN BY THE END OF EACH WORKDAY. CONTRACTOR SHALL HAVE LOCAL ROADS SWEPT WHERE SEDIMENT ACCUMULATES.

EROSION CONTROL OPERATION SEQUENCE + SCHEDULE

AFTER BIDS ARE RECEIVED AND A MASS GRADING CONTRACTOR IS SELECTED, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE WITH ALL RELEVANT PARTIES IN ATTENDANCE.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL SILT FENCES, SEEDING, EROSION MATTING, AND OTHER EROSION CONTROL MEASURES. GENERAL CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PRIOR TO COMMENCING GRADING, GRUBBING, OR OTHER LAND DISTURBING ACTIVITIES. EROSION CONTROL MEASURES MUST BE INSPECTED WEEKLY AND WITHIN 24 HOURS OF EVERY PRECIPITATION EVENT OF ½ INCH OR GREATER. IN ADDITION, THE ACTIVE CONTRACTOR SHALL CONDUCT DAILY INSPECTIONS AND DOCUMENT CONDITIONS AND REPAIRS MADE, ALONG WITH DATE, TIME OF INSPECTION, AND WEATHER CONDITIONS IN A DAILY LOG BOOK.

ALL REGULATORY PERMITS, PROJECT PLANS, AND INSPECTION LOGS SHALL BE KEPT ON SITE IN AN ACCESSIBLE LOCATION, SUCH AS A MAILBOX, AVAILABLE TO REGULATORY AGENCIES UPON REQUEST.

CONTRACTORS ARE TO MAINTAIN THE CONSTRUCTION SITE IN A NEAT AND TIDY MANNER FOR THE DURATION OF THE PROJECT.

THE TIMING AND SEQUENCE OF CONSTRUCTION IS SCHEDULED AS FOLLOWS:

1. OBTAIN PLAN APPROVAL FROM THE VILLAGE OF MUKWONAGO, AND ALL APPLICABLE PERMITS, INCLUDING EROSION CONTROL PERMIT.
2. CONSTRUCTION IS SCHEDULED TO BEGIN IN SEPTEMBER 2025, DEPENDING ON WEATHER & GROUND CONDITIONS.
3. A GRAVEL TRACKING PAD UNDERLAIN WITH WISDOT TYPE R GEOTEXTILE FABRIC SHALL BE INSTALLED AS SHOWN ON THE PLANS. IF INDICATED ON PLANS, INSTALL CONSTRUCTION FENCE AND ANY TEMPORARY TRAFFIC CONTROLS.
4. SILT FENCE, INLET FILTER PROTECTION, AND TRIANGULAR SILT DIKES SHALL BE INSTALLED AS SHOWN ON THE PLANS, AND INSPECTED PRIOR TO COMMENCING OF ANY LAND DISTURBING ACTIVITIES PER PROJECT PLANS AND DETAILS. SEDIMENT DEPOSITS WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN THEY REACH A DEPTH OF 1/2 FENCE HEIGHT.
5. FOLLOWING INSTALLATION OF THE EROSION CONTROL MEASURES LISTED IT ITEM #4, THE BIO-RETENTION BASINS SHALL BE CONSTRUCTED TO THE BOOM OF BASIN ELEVATIONS TO SERVE AS TEMPORARY SEDIMENT BASIN DURING CONSTRUCTION. THE CONTRACT SHALL IMMEDIATELY INSTALL THE OUTLET STRUCTURES AT THE LOCATIONS SHOWN ON THE PLANS. IN ADDITION, THE CONTRACTOR SHALL INSTALL DIVERSION SWALES AND DIVERSION BERMS TO DIRECT WATER TO THE TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY STABILIZE THE BIO-RETENTION BASIN BANKS, INLETS AND OUTLET STRUCTURES.
6. THE BIO-RETENTION BASINS SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES ½ INCH OF RAIN OR MORE DURING A 24-HOUR PERIOD. SEDIMENT SHALL BE REMOVED TO MAINTAIN THE 3 FOOT DEPTH OF THE TREATMENT SURFACE AREA AS MEASURED FROM THE INVERT OF THE PRINCIPAL OUTLET. IF THE OUTLET BECOMES CLOGGED IT SHALL BE CLEANED TO RESTORE FLOW CAPACITY. SEDIMENT TO BE REMOVED AFTER CONSTRUCTION & SITE STABILIZATION IS COMPLETE.
7. SITE DEMOLITION OF PAVEMENT, ETC. WILL OCCUR AFTER ALL EROSION CONTROL MEASURES ARE IN PLACE.
8. CONSTRUCTION OF THE BUILDING, STARTING WITH THE FOUNDATION, WILL BEGIN IMMEDIATELY AFTER THE SITE DEMOLITION IS COMPLETE IN THE BUILDING PAD AREA.
9. TOPSOIL STRIPPING AND ROUGH GRADING WILL FOLLOW. TOPSOIL STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS OF LAY UP. STOCKPILES WILL BE USED FOR FINAL LANDSCAPING. REMAINING STOCKPILES WILL BE REMOVED FROM THE SITE.
10. UTILITY INSTALLATION WILL OCCUR NEXT AND CONTINUE UNTIL ALL THE UTILITIES ARE INSTALLED.
11. AFTER ROUGH GRADING IS COMPLETE IN HARD SURFACE AREAS SUCH AS ROADWAYS, PARKING LOTS, AND BUILDINGS, THE REQUIRED THICKNESS OF DENSE GRADED BASE COURSE, PER THE PROJECT PLANS AND DETAILS WILL BE APPLIED FOR STABILIZATION. AFTER ROUGH GRADING IS COMPLETE OUTSIDE OF HARD SURFACE AREAS, THE TOPSOIL WILL BE REAPPLIED AND THE LANDSCAPE CONTRACTOR WILL COMPLETE SEEDING/SODDING/FERTILIZING/MULCHING AND INSTALL EROSION MATTING AS PER APPROVED PLANS AND SPECIFICATIONS.
12. FINAL SITE STABILIZATION IS ANTICIPATED FOLLOWING THE COMPLETION OF GRADING ACTIVITIES PER WDNR TECHNICAL STANDARD 1059. IF SITE STABILIZATION CANNOT BE COMPLETED BY OCTOBER 15, THEN THE USE OF ANIONIC POLYACRYLAMIDE CONFORMING TO WDNR TECHNICAL STANDARD 1050 SHALL BE USED. IN ADDITION, ALL SLOPES OF GREATER THAN 20% MUST ADHERE TO THE SCHEDULE IN TABLE 1 BELOW.
13. AFTER ALL TOPSOIL HAS BEEN REAPPLIED AND STABILIZATION IS UNDERWAY, ROADWAY, PARKING LOT, AND SIDEWALK SURFACE MATERIAL (I.E. ASPHALT & CONCRETE) WILL BE INSTALLED PER THE PROJECT PLANS AND SPECIFICATIONS.
14. THE GENERAL CONTRACTOR WILL REQUEST A FINAL INSPECTION BY THE CITY. UPON APPROVAL, ALL SILT FENCES, INLET FILTER PROTECTION, AND TRIANGULAR SILT DIKES SHALL BE REMOVED, AND ACCUMULATED SEDIMENT IN THE SEDIMENT BASIN/STORM WATER POND SHALL BE DREDGED AND PROPERLY DISPOSED OF. IN ADDITION, THE CONTRACTOR MUST ENSURE THAT THE STORM WATER POND IS RETURNED TO THE SLOPES AND GRADES SHOWN ON THE PROJECT PLANS AND DETAILS.
15. IF REQUIRED, FINAL "AS-BUILT" SURVEYS ARE TO BE CONDUCTED BY THE OWNER AND FINAL DOCUMENTS FORWARDED TO THE CITY.
16. BARE SOIL LEFT UNDISTURBED FOR 14 CALENDAR DAYS MUST BE TEMPORARILY STABILIZED PER WDNR TECHNICAL STANDARD 1059. BY OCTOBER 15, THE SITE SHALL BE STABILIZED PER NOTE 12 ABOVE.
17. WE DO NOT ANTICIPATE THE NEED FOR WATERING WITH THIS CONSTRUCTION SCHEDULE, HOWEVER, IF ADEQUATE RAIN IS NOT EXPERIENCED WITHIN ONE WEEK AFTER INITIAL SEED GERMINATION AT ANY POINT DURING THE CONSTRUCTION PROCESS, WATER SHALL BE TRUCKED IN AND APPLIED ONCE PER WEEK.

IF CONSTRUCTION SCHEDULES SHOULD CHANGE SIGNIFICANTLY, THIS PLAN NARRATIVE WILL BE UPDATED AND RESUBMITTED BY THE GENERAL CONTRACTOR TO THE CITY AND WDNR.

TABLE 1 – MAXIMUM PERIOD OF BARE SOIL FOR SLOPES GREATER THAN 20%		
SLOPE AREA DRAINS TO SEDIMENT BASIN?	LAND DISTURBANCE BETWEEN SEPT. 16 AND MAY 1	LAND DISTURBANCE BETWEEN MAY 2 AND SEPT. 15
YES	90 DAYS	90 DAYS
NO	60 DAYS	30 DAYS
TABLE FROM WI DNR GUIDANCE DOC # 3800-2015-06		

DEWATERING PLAN

TO FACILITATE CONSTRUCTION AT THE PROJECT SITE, DEWATERING MAY TAKE PLACE BY THE SELECTED CONTRACTOR. CONTRACTOR TO FOLLOW THESE INSTRUCTIONS WHILE PERFORMING DEWATERING ACTIVITIES ON-SITE. IF DEWATERING IS TO TAKE PLACE AT THE SITE, IT WILL OCCUR BETWEEN STEPS 3 AND 14 OF THE EROSION CONTROL OPERATION SEQUENCE.

NOTE: THESE INSTRUCTIONS DO NOT APPLY TO WATER BEING DISCHARGED DIRECTLY TO GROUNDWATER OR KARST FEATURES OR WELL DEWATERING SYSTEMS. CONTRACTOR SHALL COORDINATE ACCORDINGLY FOR OTHER DEWATERING ACTIVITIES AS DEEMED NECESSARY WITH THE WDNR.

1. THE CONTRACTOR SHALL ENSURE THAT THE DEWATERING PRACTICES CARRIED OUT MEET OR EXCEED WNDR TECHNICAL STANDARD NUMBER 1061.
2. A PAN OR OTHER CONTAINMENT DEVICE SHALL BE PLACED UNDERNEATH THE PUMP TO CAPTURE ANY SPILLS. OILS, GASOLINE, ETC. SHALL NOT BE STORED WITHIN WETLANDS, NEAR THE STORMWATER POND, OR OTHER ON-SITE WATER AREAS.
3. A TYPE 2 GEOTEXTILE BAG THAT IS NO SMALLER THAN 100 SQUARE FEET; HAS A MAXIMUM APPARENT OPENING SIZE OF 0.212 mm; HAS A GRAB TENSILE STRENGTH OF 300 LBS; MULLEN BURST OF 580 PSI; PERMEABILITY OF 0.2 CM/SEC; FABRIC WEIGHT OF 12 OZ SHALL BE USED. THE GEOTEXTILE BAG AREA AND DOWNGRADE FLOW AREA SHALL CONSIST OF VEGETATED AND UNDISTURBED SOILS.
4. POLYMER APPROVED BY THE WDNR MEETING WDNR TECHNICAL STANDARD 1051 MAY BE USED IN COMBINATION WITH THE DEWATERING BAG IF THE DEWATERING BAG IS NOT DONE AN ADEQUATE JOB ALONE OF FILTERING SEDIMENTS. THE CONTRACTOR SHALL SUPPLY TOXICITY TESTING DATA TO THE WDNR BEFORE USE ON-SITE FOR WDNR APPROVAL. POLYMER SHALL NOT BE DIRECTLY APPLIED TO SURFACE WATER. CONTRACTOR SHALL OBTAIN THE MATERIAL SAFETY DATA SHEETS (MSDS) FOR THE SELECTED POLYMER, MANUFACTURER'S INFORMATION AND WDNR USE RESTRICTIONS (SEE TECHNICAL STANDARD 1051) AND KEEP ALL THIS INFORMATION ON-SITE. CONTRACTOR SHALL ADHERE TO MANUFACTURER AND WDNR'S APPLICATION RATES FOR THE POLYMER, WITH THE WDNR'S RATE TAKING PRECEDENCE. THE CONTRACTOR SHALL TAKE STEPS TO ENSURE THAT THE POLYMER IS NOT SPILLED. SPILL KITS SHALL BE KEPT ON SITE; THE MANUFACTURER'S RECOMMENDED CLEANUP PROCEDURES SHALL BE FOLLOWED IN THE EVENT OF A SPILL.
5. A TARP MAY BE UTILIZED UNDERNEATH THE TYPE 2 GEOTEXTILE BAG AND JUST DOWN SLOPE OF THE BAG TO DISCOURAGE EROSION AND SCOUR.
6. A FLOATING SUCTION HOSE OR OTHER FLOTATION METHOD SHALL BE UTILIZED WHEN PUMPING FROM AN AREA WITH STANDING WATER TO AVOID SUCKING SEDIMENT FROM GRADE.
7. IF TURBID WATER IS LEAVING THE GEOTEXTILE BAG, THE CONTRACTOR SHALL SHUT OFF THE PUMP TO ALLOW SEDIMENTS TO SETTLE INTO THE BAG. CONTRACTOR SHALL FOLLOW THE MANUFACTURER'S SPECIFICATIONS FOR DETERMINING THE SEDIMENT CAPACITY OF THE GEOTEXTILE BAG USING GOOD COMMON SENSE. SEDIMENT LEVELS CONTAINED IN THE BAG SHALL BE MONITORED TO MEASURE THE LOSS OF STORAGE CAPACITY OVER TIME. THE CONTRACTOR SHALL PROPERLY DISPOSE OF THE GEOTEXTILE BAG IN A WASTE RECEPTACLE ONCE IT IS NO LONGER USED.
8. DURING DEWATERING ACTIVITIES THE CONTRACTOR SHALL MONITOR DEWATERING PRACTICES AND KEEP A LOG OF THE FOLLOWING:
   A. DISCHARGE DURATION AND SPECIFIED PUMPING RATE.
   B. OBSERVED WATER TABLE AT TIME OF DEWATERING.
   C. MAINTENANCE ACTIVITIES
   D. NAME AND QUANTITY OF POLYMER USED. PRODUCT TYPE. APPLICATION RATE OF POLYMER IN POUNDS/ACRE FEET OF WATER. DATE AND TIME APPLIED. WEATHER CONDITIONS DURING APPLICATION. METHOD OF APPLICATION.

THIS LOG NEEDS TO BE KEPT ON SITE FOR WDNR REGULATORY REVIEW. COPIES OF THIS DOCUMENTATION SHOULD BE KEPT IN THE CONTRACTOR'S MONITORING LOG AND MADE AVAILABLE UPON REQUEST.

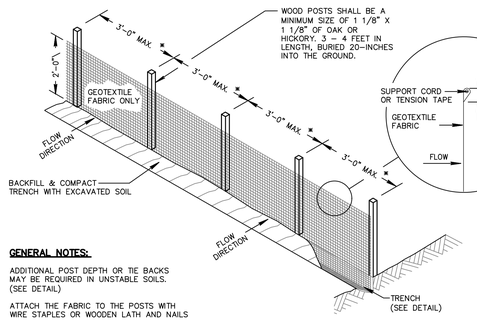
REVIEW THE FOLLOWING FOR MORE INFORMATION:

WDNR TECHNICAL STANDARD 1061 FOR DEWATERING –
http://dnr.wi.gov/topic/stormWater/documents/Dewatering_1061.pdf

WDNR TECHNICAL STANDARD 1051 FOR POLYMER –
http://dnr.wi.gov/topic/stormWater/documents/dnr1051.pdf

INSPECT ALL EROSION CONTROL MEASURES PRIOR TO COMMENCING GRADING, GRUBBING OR OTHER LAND DISTURBING ACTIVITIES. EROSION CONTROL MEASURES MUST BE INSPECTED WEEKLY AND WITHIN 24 HOURS OF EVERY PRECIPITATION EVENT OF 0.50 INCH OR GREATER. IN ADDITION THE CONTRACTOR SHALL CONDUCT DAILY INSPECTIONS AND DOCUMENT CONDITIONS AND REPAIRS MADE, ALONG WITH DATE, TIME OF INSPECTION AND WEATHER CONDITIONS IN A DAILY LOG BOOK. THE DAILY LOG BOOK, WEEKLY / 0.50 INCH PRECIPITATION REPORTS, APPROVED PLANS WPDES PERMIT & CHAPTER 30 PERMIT SHALL BE KEPT IN AN ACCESSIBLE LOCATION, LIKE A MAILBOX, WITHIN THE STAGING AREA.

AT ABSOLUTELY NO TIME MAY CONSTRUCTION EQUIPMENT, DEBRIS, FILL, ETC. BE PLACED WITHIN WETLANDS, WATERWAYS OR FLOODPLAINS UNLESS IDENTIFIED IN THE PLANS & APPROVED BY DNR/USACOE.



GENERAL NOTES:

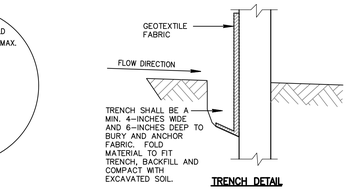
ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS. (SEE DETAIL)

ATTACH THE FABRIC TO THE POSTS WITH WIRE STAPLES OR WOODEN LATH AND NAILS

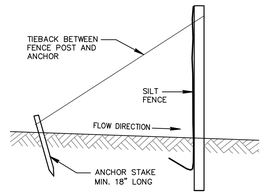
*8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

IF POSSIBLE, CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL TO AVOID JOINTS. IF A JOINT IS NECESSARY, USE ONE OF THE FOLLOWING METHODS: (1)TWIST METHOD: OVERLAP END POSTS & TWIST AT LEAST 180 DEGREES. (2)HOOK METHOD: HOOK THE END OF EACH SILT FENCE LENGTH.

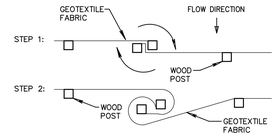
AXONIMETRIC VIEW



TRENCH DETAIL

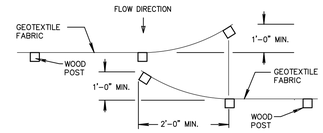


SILT FENCE TIE BACK (WHEN ADDITIONAL SUPPORT REQUIRED)



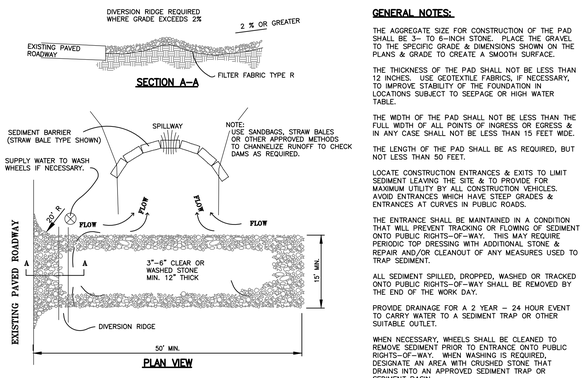
TWIST METHOD

JOINING TWO LENGTHS OF SILT FENCE



HOOK METHOD

1 / C2.10 FILTER FABRIC SILT FENCE DETAIL
N.T.S.



2 / C2.10 STONE TRACKING CONSTRUCTION ENTRANCE
N.T.S.

GENERAL NOTES:

THE AGGREGATE SIZE FOR CONSTRUCTION OF THE PAD SHALL BE 3– TO 6–INCH STONE. PLACE THE GRAVEL TO THE SPECIFIC GRADE & DIMENSIONS SHOWN ON THE PLANS & GRADE TO CREATE A SMOOTH SURFACE.

THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 12 INCHES. USE GEOTEXTILE FABRICS, IF NECESSARY, TO IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE.

THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS & IN ANY CASE SHALL NOT BE LESS THAN 15 FEET WIDE.

THE LENGTH OF THE PAD SHALL BE AS REQUIRED, BUT NOT LESS THAN 50 FEET.

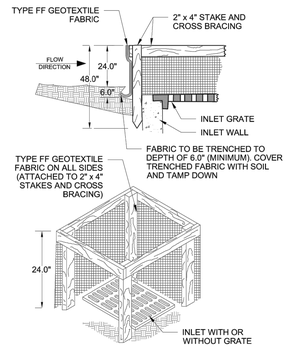
LOCATE CONSTRUCTION ENTRANCES & EXITS TO LIMIT SEDIMENT LEAVING THE SITE & TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES. AVOID ENTRANCES WHICH HAVE STEEP GRADES & ENTRANCES AT CURVES IN PUBLIC ROADS.

THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE & REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

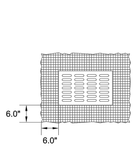
ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY SHALL BE REMOVED BY THE END OF THE WORK DAY.

PROVIDE DRAINAGE FOR A 2 YEAR – 24 HOUR EVENT TO CARRY WATER TO A SEDIMENT TRAP OR

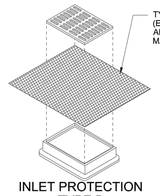
FIGURE 1. INLET PROTECTION TYPES A, B AND C



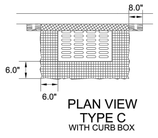
INLET PROTECTION TYPE A



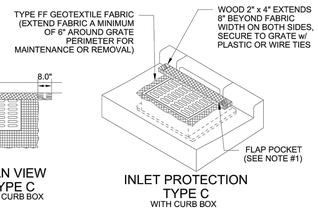
PLAN VIEW TYPE B
WITHOUT CURB BOX



INLET PROTECTION TYPE B
WITHOUT CURB BOX



PLAN VIEW TYPE C
WITH CURB BOX



INLET PROTECTION TYPE C
WITH CURB BOX

NOTES:

1. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2" x 4". THE REBAR, STEEL PIPE, OR WOOD SHALL BE INSTALLED IN THE REAR FLAP AND SHALL NOT BLOCK THE TOP HALF OF THE CURB FACE OPENING.

MAINTENANCE NOTES:

1. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED IN THE FABRIC DOES NOT FALL INTO THE STRUCTURE. MATERIAL THAT HAS FALLEN INTO THE INLET SHALL BE IMMEDIATELY REMOVED.

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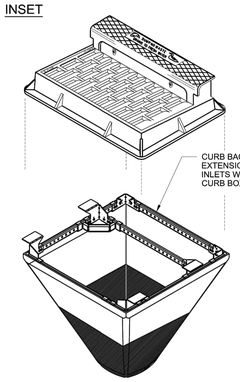
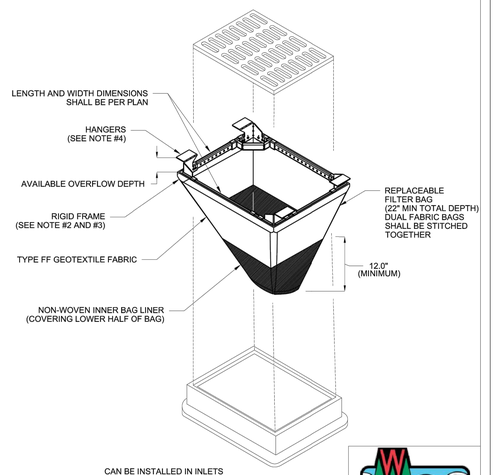
FIGURE 5. INLET PROTECTION TYPE D-RF

INSET





CAN BE INSTALLED IN INLETS
WITH OR WITHOUT CURB BOXES

NOTES:

1. TAPER BOTTOM OF BAG TO MAINTAIN 3" OF CLEARANCE BETWEEN THE BAG AND THE STRUCTURE, MEASURED FROM THE BOTTOM OF THE OVERFLOW OPENINGS TO THE STRUCTURE WALL.
2. THE RIGID FRAME SHALL BE CONSTRUCTED OF GALVANIZED STEEL AND HAVE ADEQUATE STRENGTH TO SUPPORT THE WEIGHT OF THE SEDIMENT BAG WHEN COMPLETELY FULL.
3. THE RIGID FRAME SHALL NOT INTERFERE WITH OR ELEVATE THE GRATE MORE THAN 1/8".
4. DROP THE INLET FILTER THROUGH THE CLEAR OPENING SUCH THAT THE HANGERS REST FIRMLY ON THE LIP OF THE STRUCTURE.

MAINTENANCE NOTES:

1. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED IN THE FABRIC DOES NOT FALL INTO THE STRUCTURE. MATERIAL THAT HAS FALLEN INTO THE STRUCTURE SHALL BE IMMEDIATELY REMOVED.

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TABLE 1 – INLET DEVICE SELECTION			
INLET TYPE	PROJECT PHASE	INLET PROTECTION	NOTES
YARD DRAIN OR FIELD INLET	MAJOR GRADING THROUGH FINAL STABILIZATION	TYPE A	ALLOW PONDING AROUND DRAIN IF CONDITIONS ALLOW
PAVED AREA DRAIN	PRE–PAVING	TYPE A	AFTER CASTINGS ARE IN PLACE, USE TYPE D SERIES WHEN NEEDED FOR SAFETY, OR USE TYPE B IF INSUFFICIENT DEPTH IS AVAILABLE
	POST–PAVING	TYPE D, D–M, D–HR, OR D–RF	USE TYPE B IF INLET IS NOT DEEP ENOUGH FOR TYPE D SERIES
CURB INLET	PRE–PAVING	TYPE A	AFTER CASTINGS ARE IN PLACE, USE TYPE D SERIES WHEN NEEDED FOR SAFETY, OR USE TYPE C IF INSUFFICIENT DEPTH IS AVAILABLE
	POST–PAVING/CURBING	TYPE D, D–M, D–HR, OR D–RF	USE TYPE C IF INLET IS NOT DEEP ENOUGH FOR TYPE D SERIES
TABLE FROM WI DNR TECHNICAL STANDARD STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES 1060			

1 / C2.10A INLET PROTECTION DETAIL
N.T.S.

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RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

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Project Number:
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Sheet Title:
SITE EROSION CONTROL DETAILS

Sheet Number:
C2.10A

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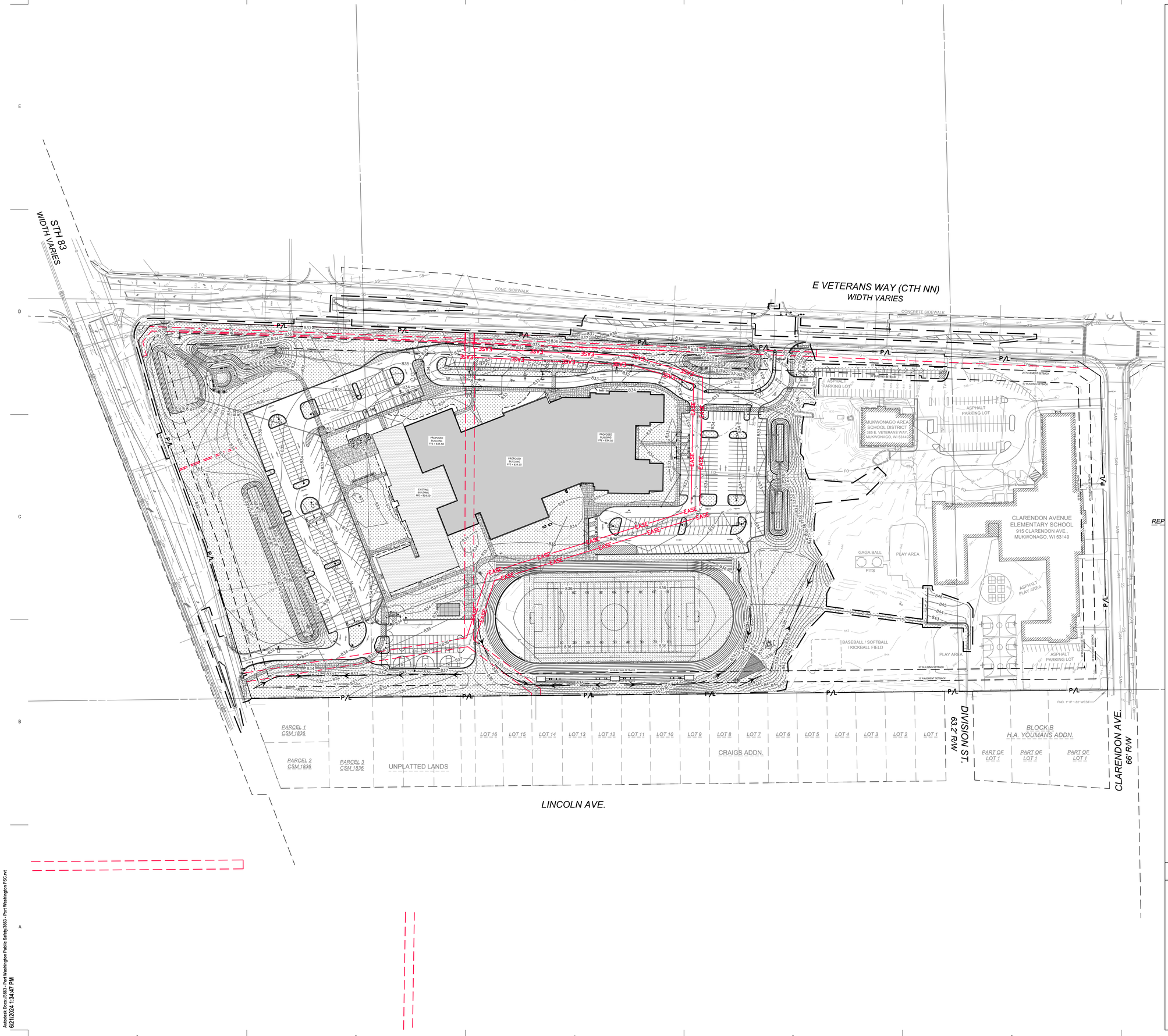

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HATCH LEGEND

- PROJECT LIMITS
- P/L — PROPERTY LINE
- EASE — EASEMENT LINE
- TEMPORARY TREE PROTECTION FENCE
- AREAS DISTURBED BY CONSTRUCTION TO BE RESTORED WITH MINIMUM 4" TOPSOIL, KENTUCKY BLUE GRASS SEED, FERTILIZER, AND MULCH (TYP). USE SALVAGED TOPSOIL OR IMPORT TOPSOIL IF REQUIRED.
- AREAS DISTURBED BY CONSTRUCTION TO BE RESTORED WITH MINIMUM 4" TOPSOIL, NO MOW FESCUE WITH ANNUAL RYE GRASS SEED, FERTILIZER, AND MULCH (TYP). USE SALVAGED TOPSOIL OR IMPORT TOPSOIL IF REQUIRED.
- MIX 1; 3" PLUG PLANTINGS IN BIORETENTION AREA. REFER TO CIVIL AND LANDSCAPE DETAILS. PLUGS TO BE PLANTED 12–INCHES O.C. (2 / L2.10)
- NEW SEEDED SPORTS FIELD WITH MINIMUM 4" TOPSOIL, BARENBRUG TURF BLUE PRO SEED (OR APPROVED EQUIVALENT), FERTILIZER, AND MULCH (TYP). USE SALVAGED TOPSOIL OR IMPORT TOPSOIL IF REQUIRED. TOPSOIL PLACEMENT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND FINE GRADING BY THE LANDSCAPE CONTRACTOR.

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Project Number: **3526**

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Sheet Title: **SITE LANDSCAPE PLAN - AREA A**

Sheet Number: **L1.11A**

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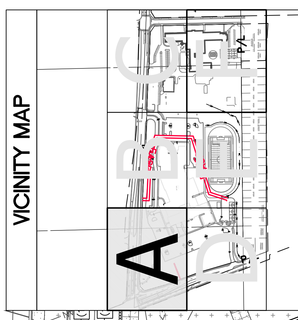


HATCH LEGEND

- PROJECT LIMITS
- PROPERTY LINE
- CASE/CONT. LINE
- TEMPORARY TREE PROTECTION FENCE.
- AREAS DISTURBED BY CONSTRUCTION TO BE RESTORED WITH MINIMUM 4" TOPSOIL, KENTUCKY BLUE PARKBRING TURF BLUE PRO SEED (OR APPROVED EQUIVALENT), FERTILIZER, AND MULCH (TYP.). USE SALVAGED TOPSOIL OR IMPORT TOPSOIL IF REQUIRED.
- AREAS DISTURBED BY CONSTRUCTION TO BE RESTORED WITH MINIMUM 4" TOPSOIL, NO NEW SEED, FERTILIZER, OR MULCH (TYP.). USE SALVAGED TOPSOIL OR IMPORT TOPSOIL IF REQUIRED.
- MIX IS 5" PLUG PLANTINGS IN BIORETENTION AREA + 2" WOOD MULCH. SEE DETAILS 2/L2.10 TO BE PLANTED 12-INCHES O.C.
- NEW SEEDED SPORTS FIELD WITH MINIMUM 4" TOPSOIL, BARENBRUG TURF BLUE PRO SEED (OR APPROVED EQUIVALENT), FERTILIZER, AND MULCH (TYP.). USE SALVAGED TOPSOIL OR IMPORT TOPSOIL IF REQUIRED. TOPSOIL PLACEMENT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR. SEED IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- PLANT "CODE" REFERENCES TO THE PLANT SCHEDULE
- QUANTITY OF PLANTS IN THE PLANT GROUPING
- LEADER LINE
- PLANT SYMBOL (SYMBOL VARIES)

KEY INDEX

1. SHREDDED HARDWOOD MULCH
2. ALUMINUM EDGING AT PLANTING BED
3. NEW TRANSPLANTED LOCATION FOR EXISTING TREES THAT WERE PLANTED BY THE GIRL SCOUTS. (SEE CIVIL PLANS) - LOCATED ADJACENT TO EXISTING BASEBALL FIELD AND THE MUKWONAGO SCHOOL DISTRICT ADMINISTRATIVE OFFICE BUILDING.
4. NEW TRANSPLANTED LOCATION FOR EXISTING MEMORIAL TREE AND PLAQUE. (CURRENTLY LOCATED AT THE EXISTING ENTRANCE TO THE MIDDLE SCHOOL - ADJACENT TO THE NEW PARKING LOT).
5. 4'x8' RAISED GARDENS – 30" TALL (FOR SPECIAL EDUCATION)
6. UTILITY TRANSFORMER (SEE CIVIL PLANS – PROTECT FROM DAMAGE DURING CONSTRUCTION)
7. PAD MOUNTED CT CABINET WITH METER (SEE CIVIL PLANS – PROTECT FROM DAMAGE DURING CONSTRUCTION)
8. FLAGPOLES (SEE CIVIL PLANS – PROTECT FROM DAMAGE DURING CONSTRUCTION)

MATCHLINE

CONC. SIDEWALK

P/L

PAVEMENT SETBACK

3501 BUILDING SETBACK

EASE

SAN

W

FO

BIORETENTION BASIN #4
(2178 SF) (SEE DETAIL 2/L2.10)

25' PAVEMENT SETBACK

50' BUILDING SETBACK

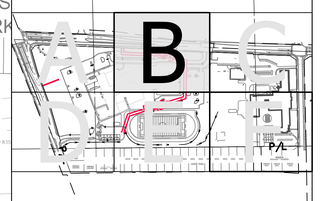
(1)TICOG
(1)ACFAF
(3)SYMEP
(1)SYRIS
(3)CABRA
(2)MALM
(21)RHARG
(13)HOFII
(21)HOAM
(5)RIALG
(17)SPFRA
(2)RIALG
(3)CABRA
(2)RIALG
(3)CABRA
(1)CECA
(2)CECA
(1)SYMEP
(1)MASS
(1)CACFK
(1)ACMSS
(1)GIBAG
(1)BENI
(1)CAOV
(2)CAOV
(7)SPFRA
(7)SYXBK
(14)RIALG

PROPOSED BUILDING
FFE = 834.50

EXISTING BUILDING
FFE = 834.50

BIORETENTION BASIN #5
(3308 SF) (SEE DETAIL 2/L2.10)

VICINITY MAP



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Sheet Title: SITE LANDSCAPE PLAN - AREA B

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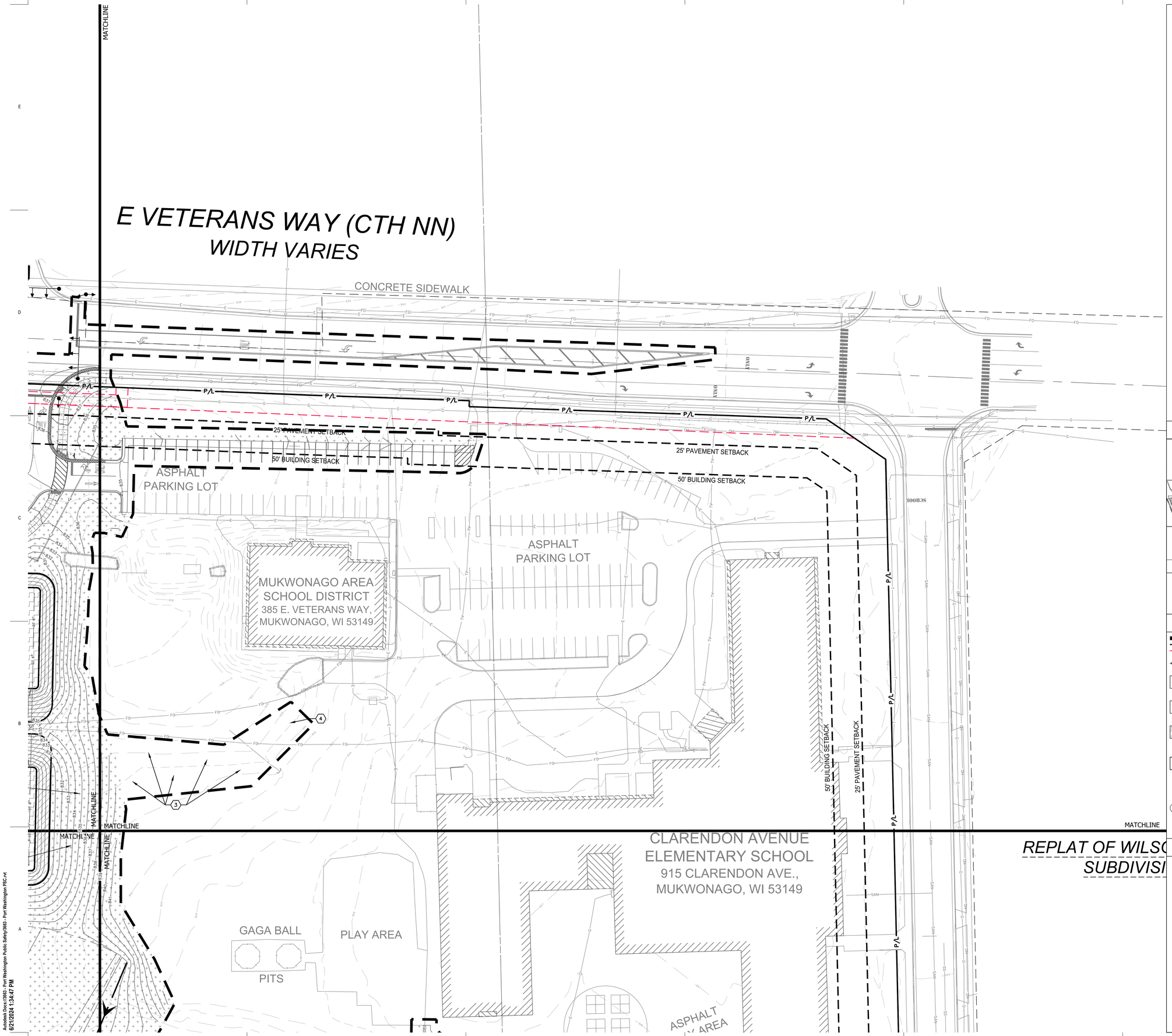

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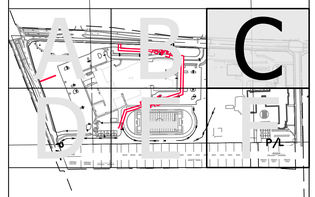

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SITE LANDSCAPE PLAN - AREA C

Sheet Number:
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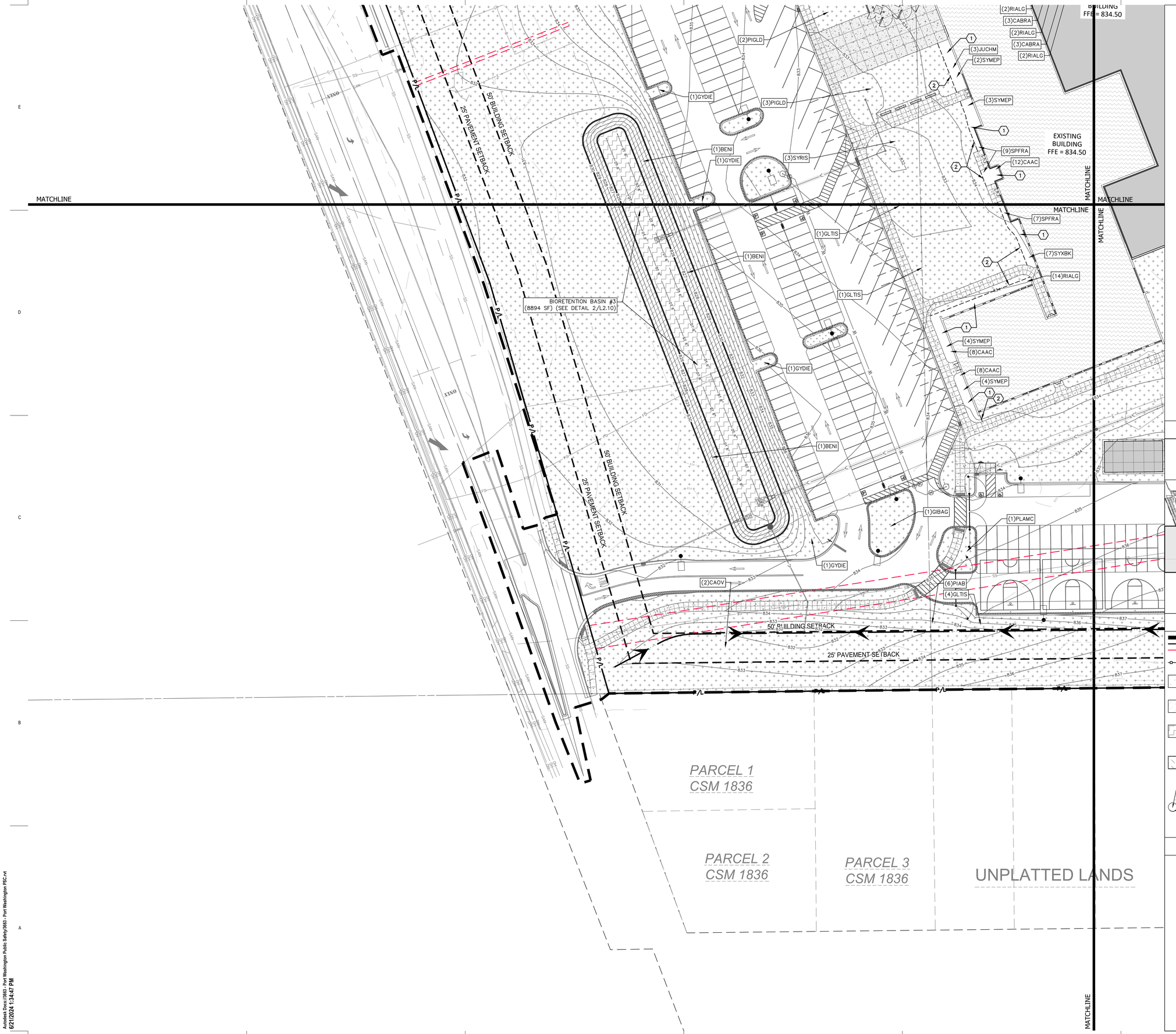

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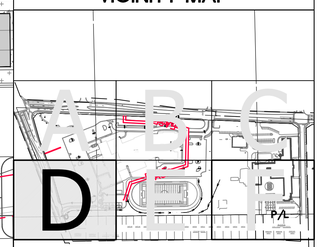

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Milwaukee
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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St,
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE LANDSCAPE PLAN - AREA D

Sheet Number: L1.14D

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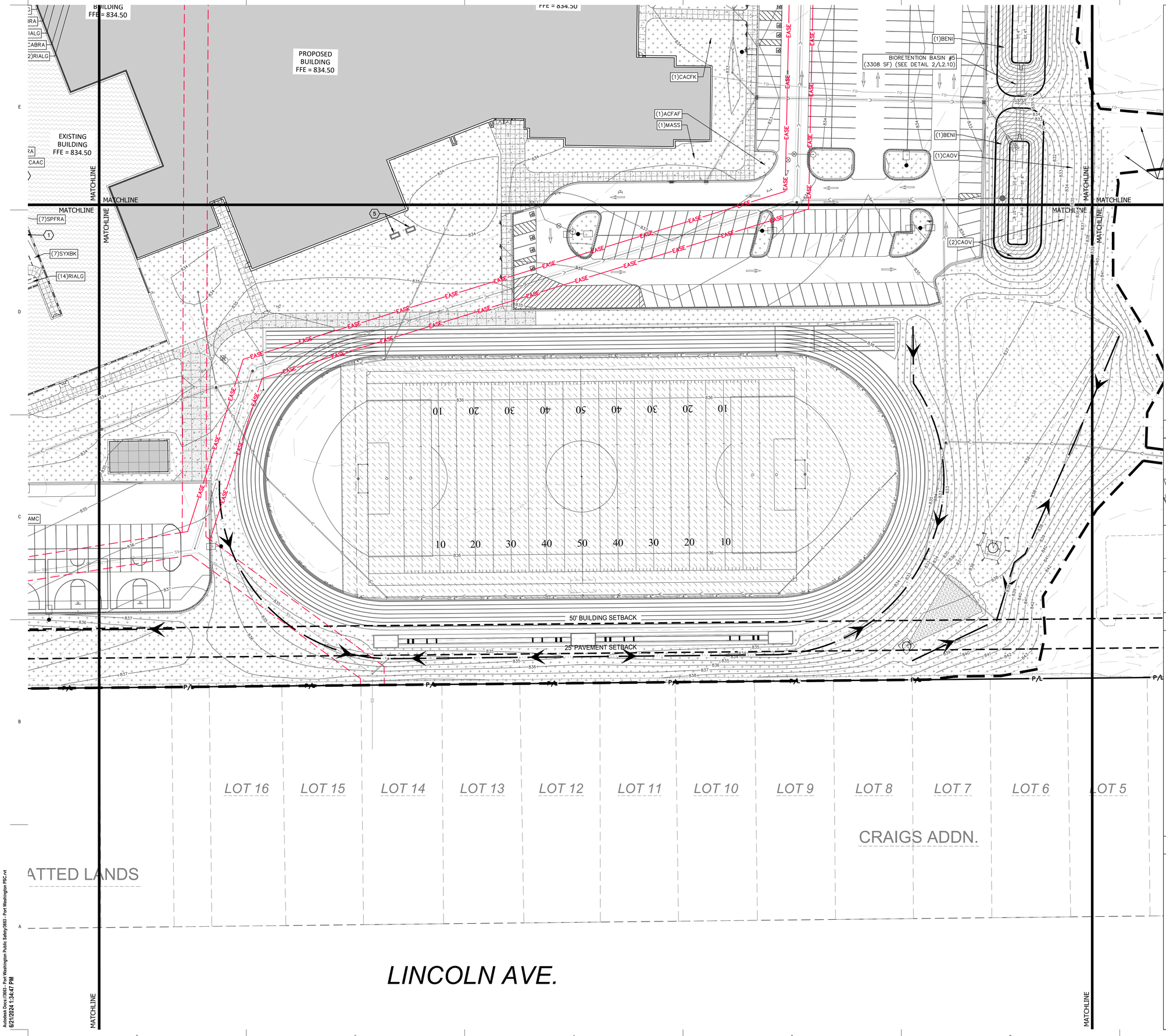

Scale: 0 15 30 60
Scale: 1" = 30'

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VICINITY MAP

HATCH LEGEND

- PROJECT LIMITS
- P/L — PROPERTY LINE
- EASE — EASEMENT LINE
- TEMPORARY TREE PROTECTION FENCE
- AREAS DISTURBED BY CONSTRUCTION TO BE RESTORED WITH MINIMUM 4" TOPSOIL, KENTUCKY BLUE GRASS SEED, FERTILIZER, AND MULCH (TYP). USE SALVAGED TOPSOIL OR IMPORT TOPSOIL IF REQUIRED.
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4/2/2025

Sheet Title:
SITE LANDSCAPE PLAN - AREA E

Sheet Number:
L1.15E

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CLARENDON AVENUE
ELEMENTARY SCHOOL
915 CLARENDON AVE.,
MUKWONAGO, WI 53149

GAGA BALL
PLAY AREA
PITS
ASPHALT
PLAY AREA
BASEBALL / SOFTBALL
/ KICKBALL FIELD
PLAY AREA
ASPHALT
PARKING LOT

MATCHLINE
MATCHLINE
MATCHLINE
MATCHLINE

50' BUILDING SETBACK
25' PAVEMENT SETBACK
50' BUILDING SETBACK
25' PAVEMENT SETBACK

P/L
EASE

FND. 1" IP 1.82' WEST

REPLAT OF WILSO
SUBDIVISI

LOT 6 | LOT 5 | LOT 4 | LOT 3 | LOT 2 | LOT 1

DIVISION ST.
63.2' R/W

BLOCK B
H.A. YOUMANS ADDN.

PART OF LOT 1 | PART OF LOT 1 | PART OF LOT 1

CLARENDON AVE.
66' R/W

Scale: 0 15 30 60
Scale: 1" = 30'

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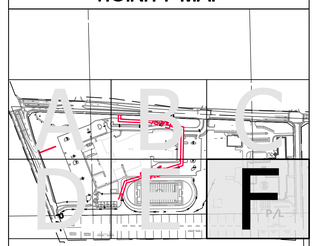
VICINITY MAP



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Sheet Title: SITE LANDSCAPE PLAN - AREA F

Sheet Number: L1.16F

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Plant Schedule

Code	Scientific Name	Common Name	Quantity	Spacing	Install Size	Mature Size
						(Height/Spread)
Canopy Trees: (Install in accordance with detail 3/L2.10)						
ACFAF	Acer x freemanii 'Autumn Fantasy'	Autumn Fantasy Maple	5	Per Plan	2.5" caliper B&B	50'/40'
ACMSS	Acer miyabei 'Morton'	State Street Miyabei Maple	5	Per Plan	2.5" caliper B&B	50'/40'
BENI	Betula nigra	River Birch	5	Per Plan	8' multi-stem B&B	40'-70'/35'-50'
CAOV	Carya ovata	Shagbark Hickory	5	Per Plan	2.5" caliper B&B	80'/40'
GIBAG	Ginko biloba 'Autumn Gold'	Autumn Gold Ginko (male)	5	Per Plan	2.5" caliper B&B	50'/30'
GLTIS	Gleditsia tricanthos 'Shademaster' PP1,515	Shademaster Honeylocust	6	Per Plan	2.5" caliper B&B	60'/35'
GYDIE	Gymnocladus dioicus 'Espresso'	Espresso Kentucky Coffee Tree	4	Per Plan	2.5" caliper B&B	50'/35'
PLAMC	Platanus x acerfolia 'Morton Circle'	Exclamation London Planetree	4	Per Plan	2.5" caliper B&B	60'/45'
TICOG	Tilia cordata 'Greenspire' PP2,086	Greenspire Linden	3	Per Plan	2.5" caliper B&B	40'-50'/30'-35'
ULAMP	Ulmus americana 'Princeton'	Princeton Elm	1	Per Plan	2.5" caliper B&B	60'-80'/40'-60'
Ornamental Trees: (Install in accordance with detail 3/L2.10)						
CACFK	Carpinus caroliniana 'JN Select A' PPAF	Fire King Musclewood	2	Per Plan	2" caliper B&B	20'-25'/20'-25'
CECA	Cercis canadensis	Eastern Redbud	3	Per Plan	8' multi-stem B&B	20'-30'/25'-35'
MALM	Magnolia x loebneri 'Leonard Messel'	Leonard Messel Magnolia	2	Per Plan	2" caliper B&B	15'-20'/20'-25'
MASS	Malus x 'Spring Snow'	Spring Snow Crabapple	2	Per Plan	2" caliper B&B	20-25'/15-20'
SYRIS	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	6	Per Plan	2" caliper B&B	25'/15'
Evergreen Trees: (Install in accordance with detail 4/L2.10)						
PIAB	Picea aibes	Norway Spruce	6	Per Plan	6' tall B&B	50'-70'/25'-30'
PIGLD	Picea glauca var. densata	Black Hills Spruce	5	Per Plan	6' tall B&B	25'-45'/15'-25'
Deciduous Shrubs: (Install in accordance with detail 5/L2.10)						
HAVE	Hamamelis vernalis	Vernal Witchhazel	3	Per Plan	30" tall pot	6'-10'/10'-15'
PHOCG	Physocarpus opulifolius 'Center Glow'	Center Glow Ninebark	6	Per Plan	36" tall pot	8'-10'/8'-10'
RHARG	Rhus aromatica 'Gro-Low'	Gro-Low Sumac	21	Per Plan	18" spread pot	2'-3'/6'-8'
RIALG	Ribes alpinum 'Green Mound'	Green Mound Alpine Currant	38	Per Plan	18" tall pot	3'-5'/3'-5'
SPFRA	Spiraea x fritschiana 'JN Select A'	Pink-a-licious Fritsch Spirea	59	Per Plan	18" tall pot	2'-3'/2'-3'
SYMEP	Syringa meyeri 'Palibin'	Meyer Lilac (Dwarf Korean Lilac)	23	Per Plan	24" tall pot	4'-5'/5'-7'
SYXBK	Syringa x 'SMNSDTP'	Baby Kim Lilac	7	Per Plan	15" tall pot	2'-3'/2.5'-3'
Evergreen Shrubs: (Install in accordance with detail 5/L2.10)						
JUCHM	Juniperus chinensis 'Mountbatten'	Mountbatten Chinese Juniper	12	Per Plan	4' tall B&B	15'/6'-8'
Perennials: (Install in accordance with detail 6/L2.10)						
CAAC	Calamagrostis x acutiflora Karl Foerster	Karl Foerster Reed Grass	44	Per Plan	#1 cont.	4'-5'/18"-24"
CABRA	Calamagrostis brachytricha	Fall Blooming Feather Reed Grass	21	Per Plan	#1 cont.	36"-60"/24"
HOAM	Hosta 'August Moon'	August Moon Hosta	21	Per Plan	#1 cont.	20"/24"-30"
HOFII	Hosta x 'Fire and Ice'	Fire and Ice Hosta	24	Per Plan	#1 cont.	12"-18"/24"
PANO	Panicum virgatum 'Northwinds'	Northwinds Switch Grass	28	Per Plan	#1 cont.	4'-5'/24"-30"

NOTE: Plant quantities indicated in the plant schedule are for convenience only. Installation contractor is responsible for verifying plant count on the landscape plan. When discrepancies between the plant schedule, labels and the landscape plan occur, the quantity drawn on the landscape plan shall be the official quantity.

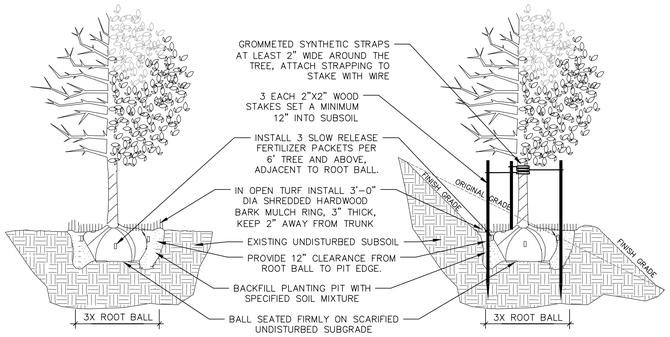
1 / L2.10 PLANT SCHEDULE
REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION

Bio-Retention Basin Plant Plug Schedule

Code	Scientific Name	Common Name	Bio #1 Quantity	Bio #2 Quantity	Bio #3 Quantity	Bio #4 Quantity	Bio #5 Quantity	Soldier Spacing	Install Size	Mature Size
										(Height/Spread)
Bio-mix: (Space according to detail 9/L2.10)										
BIOMIX 1	Aster ericoides	Heath Aster	440	180	550	130	200	12" o.c.	3" plug	18"-24"/12"-18"
BIOMIX 1	Aster novae-angliae	New England Aster	440	180	550	130	200	12" o.c.	3" plug	48"-60"/18"-24"
BIOMIX 1	Physostegia virginiana	Obedient Plant	440	180	550	130	200	12" o.c.	3" plug	24"-48"/18"-24"
BIOMIX 1	Verbena hastata	Blue Vervain	440	180	550	130	200	12" o.c.	3" plug	36"-48"/18"-24"
BIOMIX 1	Liatris spicata	Marsh Blazing Star	440	180	550	130	200	12" o.c.	3" plug	36"-48"/12"-24"
BIOMIX 1	Monarda fistulosa	Wild Bergamot	440	180	550	130	200	12" o.c.	3" plug	36"-48"/24"-36"
BIOMIX 1	Rudbeckia hirta	Black-eyed Susan	440	180	550	130	200	12" o.c.	3" plug	36"-48"/12"-18"
BIOMIX 1	Solidago rugosa 'Fireworks'	Fireworks Goldenrod	440	180	550	130	200	12" o.c.	3" plug	42"-48"/18"-24"
BIOMIX 1	Tradescanta ohiensis	Spiderwort	440	180	550	130	200	12" o.c.	3" plug	24"-36"/12"-18"
BIOMIX 1	Ratibida pinnata	Yellow Coneflower	440	180	550	130	200	12" o.c.	3" plug	36"-48"/12"-18"
BIOMIX 1	Carex bebbi	Bebb's Sedge	468	268	597	179	254	12" o.c.	3" plug	12"-24"/8"-12"
BIOMIX 1	Bromus ciliatus	Fringed Brome Grass	440	180	550	130	200	12" o.c.	3" plug	20"-40"/12"-18"
BIOMIX 1	Panicum virgatum	Switch Grass	440	180	550	130	200	12" o.c.	3" plug	60"-108"/24"-36"
BIOMIX 1	Elymus canadensis	Canada Wild Rye	440	180	550	130	200	12" o.c.	3" plug	24"-48"/10"-12"
BIOMIX 1	Elymus virginius	Virginia Wild Rye	440	180	550	130	200	12" o.c.	3" plug	24"-48"/18"-24"
BIOMIX 1	Carex vulpinoidea	Fox Sedge	468	268	597	179	254	12" o.c.	3" plug	12"-36"/24"-36"

NOTE: Plant quantities indicated in the plant schedule are for convenience only. Installation contractor is responsible for verifying plant count on the landscape plan. When discrepancies between the plant schedule, labels and the landscape plan occur, the quantity drawn on the landscape plan shall be the official quantity. Native plugs of same species shall be planted in groupings of a minimum 40 plugs.

2 / L2.10 BIORETENTION BASIN PLANT SCHEDULE
REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION



3 / L2.10 DECIDUOUS TREE PLANTING, STAKING, & PLANTING ON A SLOPE
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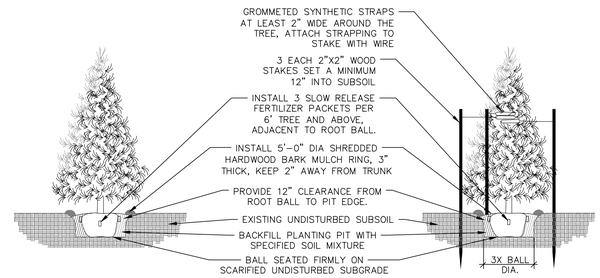

4 / L2.10 EVERGREEN TREE PLANTING & STAKING
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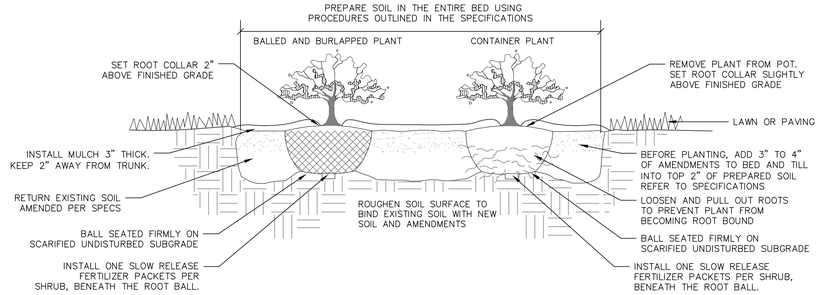

5 / L2.10 DECIDUOUS & EVERGREEN SHRUB PLANTING
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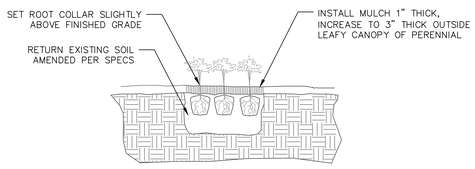
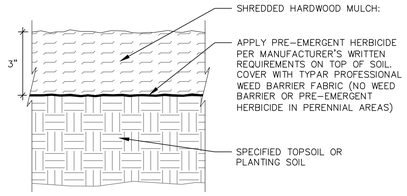


6 / L2.10 PERENNIAL PLANTING
N.T.S.



7 / L2.10 SHREDDED HARDWOOD MULCH SECTION
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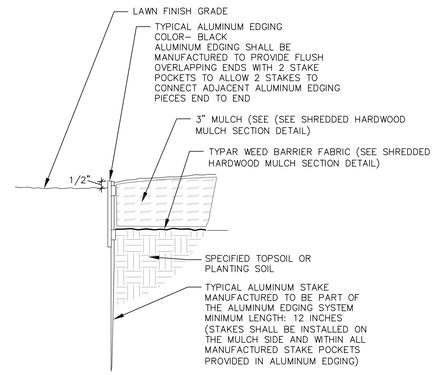

8 / L2.10 ALUMINUM EDGING AT PLANTING BED SECTION
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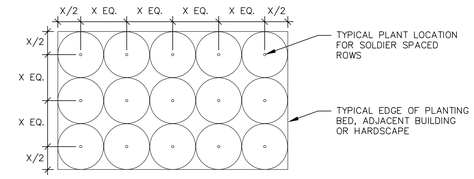

NOTE:
1. X IS EQUAL TO ON CENTER SPACING. SEE LANDSCAPE SCHEDULE FOR SPACING PER PLANT.

9 / L2.10 PERENNIALS AND GROUNDCOVERS SPACING: SOLDIER
N.T.S.

1. ALL PLANT MATERIAL SHALL BE OBTAINED FROM A NURSERY LOCATED IN ZONE 5, CONFORM TO APPLICABLE REQUIREMENTS OF THE CURRENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AND BOTANICAL NAMES SHALL BE ACCORDING TO THE CURRENT EDITION OF "STANDARDIZED PLANT NAMES" PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURE NOMENCLATURE.
2. CONTRACTOR TO PROVIDE TO THE LANDSCAPE ARCHITECT SAMPLES OF ALL BARK AND MINERAL/STONE MULCHES, DECORATIVE GRAVELS, MAINTENANCE STRIP STONE, OR OTHER GROUND COVER MATERIALS FOR APPROVAL PRIOR TO INSTALLATION.
3. BARK MULCH TO BE FRESHLY ACQUIRED HARDWOOD SHREDDED BARK MULCH WHICH IS DARK BROWN IN COLOR. DOUBLE MILLED, EXCESSIVE DIRT AND DUST LIKE MATERIAL OR OLD MATERIAL IS NOT ACCEPTABLE.
4. LANDSCAPE EDGING TO BE ALUMINUM EDGING. REFER TO SPECIFICATION 32 93 00 PLANTS FOR ADDITIONAL INFORMATION.
5. ALL PLANTING AREAS TO RECEIVE A 3-INCH THICK LAYER OF HARDWOOD SHREDDED BARK MULCH OVER TYPAR PROFESSIONAL WEED FABRIC WITH EDGING. EDGING TO BE INSTALLED BETWEEN DIFFERENT TYPES OF MULCHES, BETWEEN MULCHES AND TURF, AND/OR WHERE SPECIFICALLY NOTED ON THE PLAN. REFER TO SPECIFICATION 32 93 00 PLANTS FOR ADDITIONAL INFORMATION.
6. INSTALL SHOVEL CUT EDGE AROUND ALL INDIVIDUAL TREES AND SHRUBS IN LAWN AREAS AND ALONG PAVEMENT WHERE PLANTING AREAS ABUT TO PREVENT HARDWOOD SHREDDED BARK MULCH FROM SPILLING OUT OF PLANTING AREA.
7. CONTRACTOR RESPONSIBLE FOR MAINTENANCE OF PLANT MATERIAL FOR 90 DAYS FROM INSTALLATION, INCLUDING WATERING, WEEDING, ETC. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF SEEDED AREAS FOR 60 DAYS FROM INSTALLATION, INCLUDING WATERING, WEEDING, ETC. CONTRACTOR TO PROVIDE AND REVIEW MAINTENANCE INSTRUCTIONS WITH THE OWNER PRIOR TO THE COMPLETION OF THESE MAINTENANCE PERIODS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8. CLEANLY PRUNE AND REMOVE DAMAGED BRANCHES, DEAD WOOD, AND ROOTS IMMEDIATELY PRIOR TO PLANTING. DO NOT CUT LEADERS OR LEAVE "V" CROTCHES OR DOUBLE LEADERS UNLESS A MULTI-STEM TREE IS SPECIFIED.
9. REMOVE BURLAP, WIRE BASKET, ROPE, TWINE, AND ALL SYNTHETIC MATERIAL FROM THE ROOTS, TRUNK, OR CROWN OF PLANT.
10. REMOVE EXCESS SOIL ABOVE ROOT COLLAR.
11. PLANT TREES AND SHRUBS SO THAT THE ROOT COLLAR IS 2" ABOVE FINISHED GRADE OR SEVERAL INCHES ABOVE GRADE IF PLANT IS INSTALLED IN POOR SOILS.
12. PLANT TREES AND SHRUBS WITH SAME ORIENTATION AS WHEN HARVESTED FROM THE NURSERY OR TO SHOWCASE THE MOST AESTHETIC VIEW.
13. PLANT ALL TREES WITH THREE SLOW RELEASE FERTILIZER PACKETS, SPACED EQUIDISTANT AROUND THE EDGE OF THE ROOT BALL.
14. PLANT ALL SHRUBS WITH ONE SLOW RELEASE FERTILIZER PACKET, PLACED BELOW THE ROOTING SYSTEM.
15. WATER AND TAMP BACKFILL AND ROOTS OF ALL NEWLY SET PLANT MATERIAL SO THE SOIL AND ROOTS ARE THOROUGHLY SOAKED AND AIR POCKETS ARE REMOVED.
16. FOR INDIVIDUAL TREES & SHRUBS PLANTED IN TURF AREAS, PROVIDE CONTINUOUS 3" SOIL SAUCER TO CONTAIN WATER & MULCH (TREES ON SLOPES SHALL BE SAUCERED ON THE DOWNHILL SIDE)
17. INSTALL 3" THICK SHREDDED HARDWOOD BARK MULCH RING 3'-0" DIA. FOR DECIDUOUS TREES AND ALL INDIVIDUAL SHRUBS IN LAWN AREAS, 5'-0" DIA. FOR EVERGREEN TREES. KEEP MULCH 2" AWAY FROM TRUNKS.
18. STAKING - ONLY STAKE EVERGREEN TREES 5'-0" OR GREATER IN HEIGHT OR TREES THAT ARE UNABLE TO REMAIN UPRIGHT AFTER PLANTING. TREES WILL BECOME STRONGER FASTER WHEN THE TOP 2/3 OF THE TREE IS FREE TO SWAY. DO NOT ATTACH WIRE DIRECTLY TO TREES OR THROUGH HOSES - UTILIZE GROMMETED, SYNTHETIC STRAPS AT LEAST 2" WIDE AROUND THE TREE, ATTACH STRAPPING TO STAKE WITH WIRE. STAKE ONLY WHEN NECESSARY. STAKES SHOULD BE DRIVEN DEEPLY INTO THE GROUND TO PREVENT DISLODGING. CHECK AT LEAST EVERY THREE MONTHS FOR BINDING OR OTHER PROBLEMS. STAKES AND TIES SHOULD BE REMOVED SIX MONTHS TO ONE YEAR AFTER PLANTING.
19. NO MOW TO BE NO MOW FESCUE SEED MIX WITH ANNUAL RYE NURSE CROP FROM PRAIRIE NURSERY, INC. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. PRAIRIE NURSERY ADDRESS: PO BOX 306 WESTFIELD, WI 53964. TELEPHONE: 1-800-476-9453 FAX: 608-296-2741.
20. REFER TO SPECIFICATIONS 32 93 00 PLANTS AND 32 92 00 TURF AND GRASSES FOR ADDITIONAL INFORMATION.

10 / L2.10 LANDSCAPE NOTES
REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION

BRAY ARCHITECTS
Milwaukee
829 South 1st Street
Milwaukee, Wisconsin 53204
T: 414.226.0200
Sheboygan • Davenport • Moline
www.brayarch.com

kapur

Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

⚠	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE LANDSCAPE DETAILS

Sheet Number: L2.10

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LANDSCAPE CALCULATIONS

Village of Mukwonago Landscaping Requirements

Site Zoning = P-1 Zoning (Public and Semipublic District)
Total car parking spaces = 453 car parking spaces
Total bus parking spaces = 21 bus parking spaces
Total parking spaces = 453 car + 21 bus = 474 parking spaces
Total parking lot interior landscape island area from landscape islands that are at least 720 sf in size = 14,406 square feet

Landscape requirements

	Required	Provided
Off-street Parking Area Landscape Requirements		
A minimum of 15 square feet of interior landscape islands that are at least 720 square feet in size each shall be provided per parking stall.	474 parking spaces x 15 sf = 7110 sf of interior landscape space is required	14,406 sf of parking lot interior landscape that are 720 sf or larger is provided
The interior landscaping shall be placed so as to delineate driving lanes, define rows, protect parking lot light poles and generally mitigate the visual impact of the parking lot.	Interior landscaping shall be placed to delineate driving lanes, define rows, protect parking lot light poles and generally mitigate the visual impact of the parking lot.	The interior landscaping is placed so as to delineate driving lanes, define rows, protect parking lot light poles and generally mitigate the visual impact of the parking lot.
The interior landscaping shall be composed of a combination of hardy trees, shrubs, perennials, and groundcover that are able to tolerate winter salt and snow, and are underlain by a layer of decorative mulch and weed barrier where applicable.	Interior landscape islands shall be planted with a combination of hardy trees, shrubs, perennials, and groundcover that are able to tolerate salt and snow.	Interior landscape islands are planted with trees in some islands and lawn groundcover in all islands.
Interior landscaping shall not exceed 30 inches in height at maturity when located within an identified vision triangle.	Interior landscaping shall not exceed 30 inches in height at maturity when located within vision triangles.	Interior landscaping does not exceed 30 inches in height at maturity when located within vision triangles.
Trees shall be planted in such a way that they are protected from vehicle damage.	Trees shall be planted in such a way that they are protected from vehicle damage.	Trees are planted in such a way that they are protected from vehicle damage with curb and gutter.
Sufficient diversity of tree species shall be provided so as to help prevent the spread of detrimental insect infestation and disease.	Diversity of tree species is required.	Diversity of tree species is provided.
Parking lot screening. Parking lots shall be screeded fram adjacent residential properties by a perimeter landscape screen to be located within 15 feet of the edge of pavement. The plants selected for use in the landscape screen shall be suited for such palntings and be arranged in such manner as to provide an effectie visual barrier.	Parking lot screening from residential properties required.	Parking lot screening of evergreen and deciduous trees is provided south of the parking lots in the southwest corner of the site. Some plantings are greater than 15 feet from the edge of parking lot pavement since there is ample greenspace between the parking lot and residential lots for the trees.
P-1 Public and Semipublic District Landscaping Standards		
No minimum landscape requirements within P-1 zoning district	N/A	N/A

1 / L2.11 LANDSCAPE CALCULATIONS
REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION

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www.brayarch.com

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Project Title:
RENOVATION AND ADDITION TO:
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Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE LANDSCAPE DETAILS

Sheet Number: L2.11

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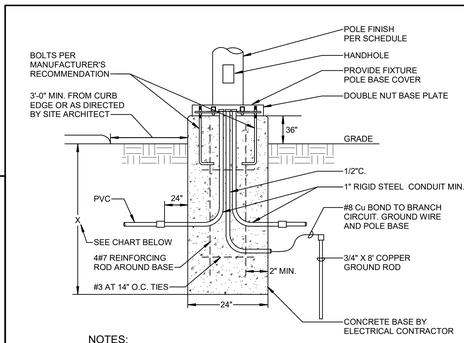
GENERAL NOTES

1. UNLESS SHOWN OTHERWISE, ALL WIRING SHOWN IS (2)#10 AND #10 GROUND IN 1" PVC.
2. INSTALL PULL CORD IN ALL EMPTY CONDUITS.
3. PROVIDE CONCRETE BASE ROUGH-IN FIXTURES PER DETAIL 2/E1.0.
4. UNLESS SHOWN OTHERWISE, ALL CONDUITS BURIED 2'-6" BELOW FINISHED GRADE.
5. PROVIDE SITE LIGHTING CONTROL PANEL PER DETAIL 4/E6.0.
6. BRING SITE EXCAVATION AND TOPPING BACK TO ORIGINAL CONDITION IF TRENCHING IS DONE ON COMPACTED SURFACES.
7. ALL CONDUITS STUBBED OUT OF BUILDINGS SHALL BE DONE PER DETAIL 3/E6.0.

PLAN NOTES

103	CONTROL THROUGH BAS SYSTEM. ROUTE THROUGH RELAY PER DETAIL 1/E6.3
153	PROVIDE CONCRETE BOLLARD BASE FOR LIGHTING BOLLARD PER DETAIL 3/E1.0
154	PRIVODE 36" CONCRETE POLE BASE PER DETAIL 2/E1.0
156	PROVIDE ELECTRICAL CONNECTION TO DIGITAL SIGN. CONFIRM LOCATION AND REQUIREMENTS WITH OWNER.
158	TYPICAL LIGHT DISTRIBUTION OF 0.5 FOOT CANDLES. TYPICAL FOR ALL LIGHT FIXTURES OF THIS TYPE.
187	PROVIDE QUAZITE BOX FOR FLAG POLE LIGHTING CONNECTION. PROVIDE CONNECTION TO 120V INTERNALLY LIT FLAG POLE BEACON (FBO). PROVIDE ALL NECESSARY FIELD CONNECTION FROM FLAG POLE WHIP TO J-BOX.
271	WIRE HAS BEEN UPSIZED FOR VOLTAGE DROP.

3 E1.0 BOLLARD MOUNTED FIXTURE BASE DETAIL
SCALE: NTS

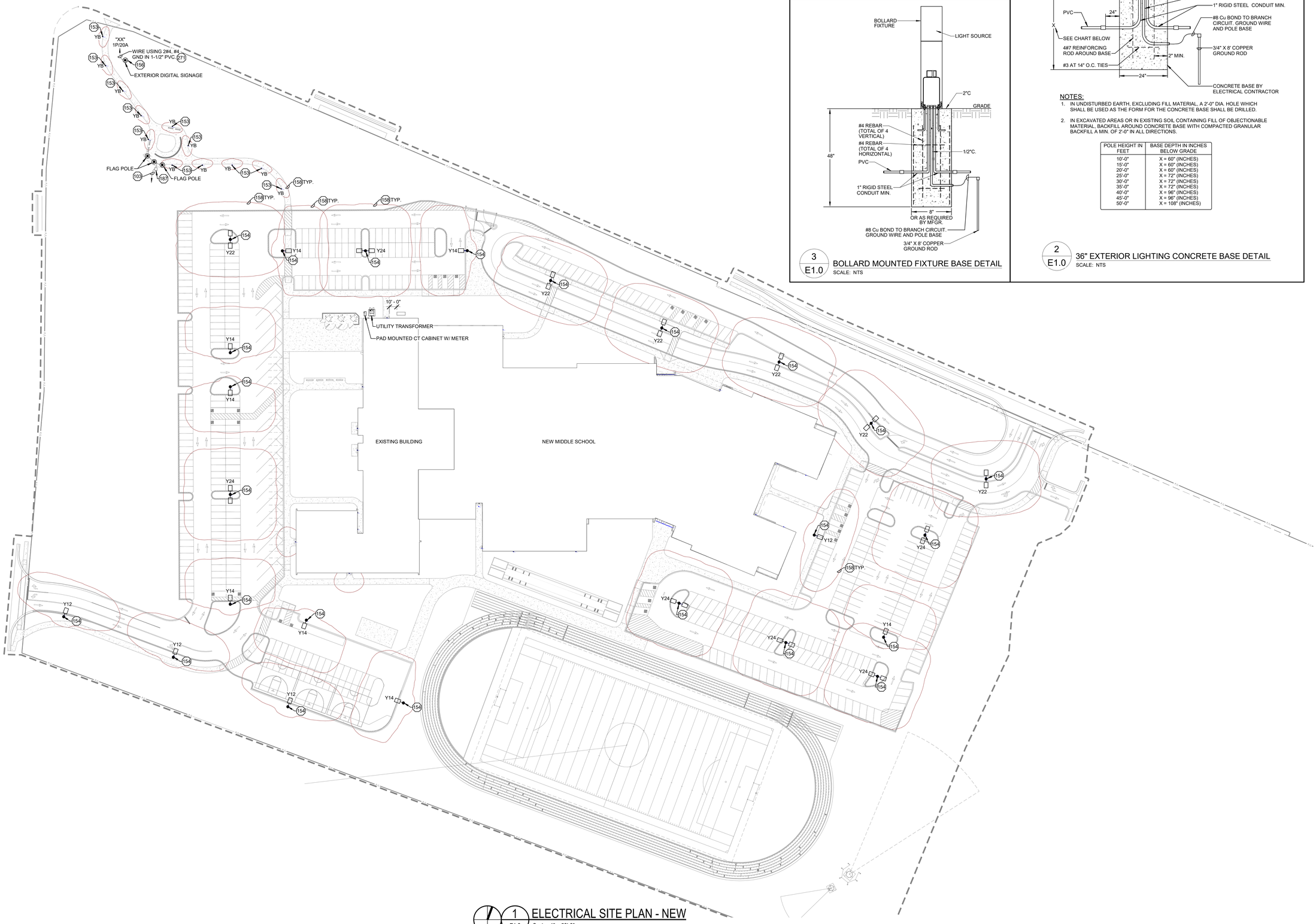


NOTES:

1. IN UNDISTURBED EARTH, EXCLUDING FILL MATERIAL, A 2'-0" DIA. HOLE WHICH SHALL BE USED AS THE FORM FOR THE CONCRETE BASE SHALL BE DRILLED.
2. IN EXCAVATED AREAS OR IN EXISTING SOIL CONTAINING FILL OF OBJECTIONABLE MATERIAL, BACKFILL AROUND CONCRETE BASE WITH COMPACTED GRANULAR BACKFILL A MIN. OF 2'-0" IN ALL DIRECTIONS.

POLE HEIGHT IN FEET	BASE DEPTH IN INCHES BELOW GRADE
10'-0"	X = 60" (INCHES)
15'-0"	X = 60" (INCHES)
20'-0"	X = 60" (INCHES)
25'-0"	X = 72" (INCHES)
30'-0"	X = 72" (INCHES)
35'-0"	X = 72" (INCHES)
40'-0"	X = 96" (INCHES)
45'-0"	X = 96" (INCHES)
50'-0"	X = 108" (INCHES)

2 E1.0 36" EXTERIOR LIGHTING CONCRETE BASE DETAIL
SCALE: NTS



1 E1.0 ELECTRICAL SITE PLAN - NEW
Scale: 1" = 50'-0"

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ENGINEERING DESIGN BY
MSA
(800) 362-4505 • www.msa-ps.com

Project Title:
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930 N Rochester St,
Mukwonago, WI 53149

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Project Number:
3526

Issued For:

Sheet Title:
SITE PLAN

Sheet Number:
E1.0

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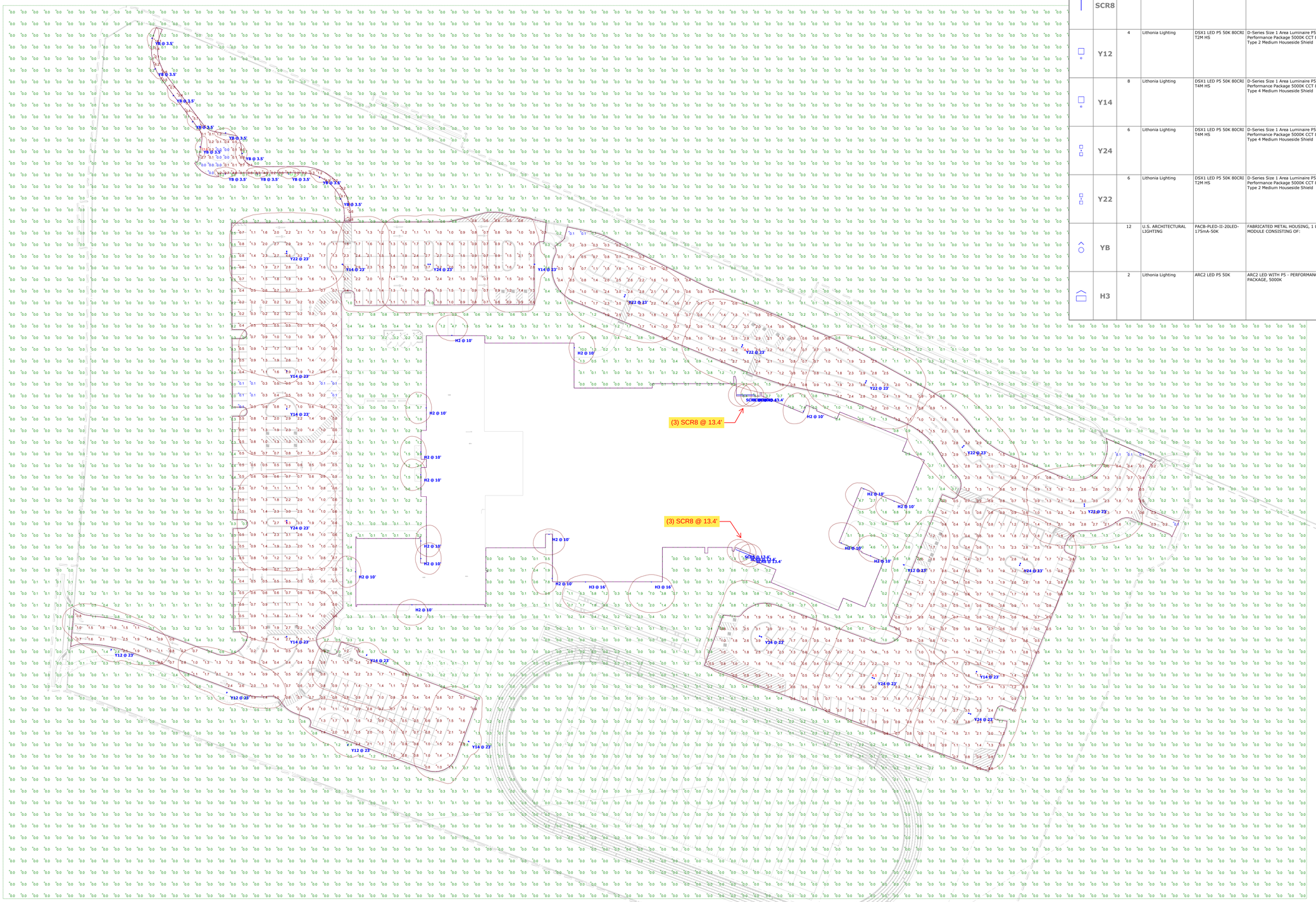
Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
SITE EXTENTS	+	0.1 fc	17.2 fc	0.0 fc	N/A	N/A
EAST PARKING LOT	+	1.4 fc	4.5 fc	0.1 fc	45.0:1	14.0:1
NORTH SIDEWALK	+	2.3 fc	17.0 fc	0.0 fc	N/A	N/A
WEST PARKING LOT	+	1.2 fc	5.3 fc	0.1 fc	53.0:1	12.0:1

Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage	Plot
	H2	16	Lithonia Lighting	ARC2 LED P3 50K	ARC2 LED WITH P3 - PERFORMANCE PACKAGE, 5000K	1	3410	0.9	23.7345	Max: 2794cd
	SCR8	6	Focal Point LLC	FSM11x-FL-375LF-35K-1C-UNV-Lxx(0xxx/-xxxx1-Cxx-WH-4FT	White formed aluminum housing, frosted plastic lens	1	1516	0.9	14.62	Max: 591cd
	Y12	4	Lithonia Lighting	DSX1 LED P5 50K 80CRI T2M HS	D-Series Size 1 Area Luminaire P5 Performance Package 5000K CCT 80 CRI Type 2 Medium Houseside Shield	1	13943	0.9	138.1649	Max: 12277cd
	Y14	8	Lithonia Lighting	DSX1 LED P5 50K 80CRI T4M HS	D-Series Size 1 Area Luminaire P5 Performance Package 5000K CCT 80 CRI Type 4 Medium Houseside Shield	1	14192	0.9	138.1649	Max: 12043cd
	Y24	6	Lithonia Lighting	DSX1 LED P5 50K 80CRI T4M HS	D-Series Size 1 Area Luminaire P5 Performance Package 5000K CCT 80 CRI Type 4 Medium Houseside Shield	1	14192	0.9	276.3298	Max: 12043cd
	Y22	6	Lithonia Lighting	DSX1 LED P5 50K 80CRI T2M HS	D-Series Size 1 Area Luminaire P5 Performance Package 5000K CCT 80 CRI Type 2 Medium Houseside Shield	1	13943	0.9	276.3298	Max: 12277cd
	YB	12	U.S. ARCHITECTURAL LIGHTING	PACB-PLED-II-20LED-175mA-50K	FABRICATED METAL HOUSING, 1 LED MODULE CONSISTING OF:	20	92	0.9	11.7	Max: 1716cd
	H3	2	Lithonia Lighting	ARC2 LED P5 50K	ARC2 LED WITH P5 - PERFORMANCE PACKAGE, 5000K	1	6660	0.9	51.2609	Max: 5457cd



Plan View - ELECTRICAL SITE PLAN - PHOTOMETRICS
Scale: 1" = 50'

ENGINEERING DESIGN BY MSA
(800) 362-4505 • www.msa-ps.com

MUKWONAGO PARK VIEW MS
930 N ROCHESTER ST, MUKWONAGO, WI 53149
OVERALL SITE PLAN - PHOTOMETRICS

Designer: ABG
Date: 03/28/2025
Scale: 1" = 50'-0"
Drawing No.: ELP001
Summary

1 of 1

ARC2 LED

Architectural Wall Luminaire

Catalog Number

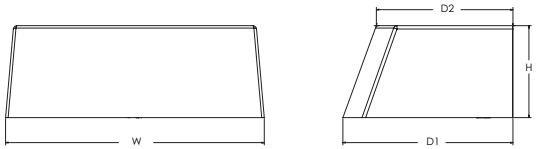
Notes

Type H2, H3

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

Specifications

Depth (D1): 9.25"
Depth (D2): 7.5"
Height: 5"
Width: 14"
Weight: (without options) 11 lbs



Introduction

The Lithonia Lighting ARC LED wall-mounted luminaires provide both architectural styling and visually comfortable illumination while providing the high energy savings and low initial costs for quick financial payback.

ARC2 delivers up to 6,500 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. It offers integrated emergency battery backup options, including an 8W cold temperature option, making it suitable for pedestrian scale applications in any environment.

ARC LED Family Overview

Luminaire	Standard EM, 0°C	Cold EM, -20°C	Approximate Lumens (4000K)				
			P1	P2	P3	P4	P5
ARC1 LED	4W	--	1,500	2,000	3,000	--	--
ARC2 LED	4W	8W	1,500	2,000	3,000	4,000	6,500

Ordering Information

EXAMPLE: ARC2 LED P2 40K MVOLT PE DDBXD

Series	Package	Color Temperature	Voltage	Options	Finish
ARC2 LED	P1 1,500 Lumens P2 2,000 Lumens P3 3,000 Lumens P4 4,000 Lumens P5 6,500 Lumens	30K 3000K 40K 4000K 50K 5000K	MVOLT 347[1]	E4WH Emergency battery backup, CEC compliant (4W, 0°C min)[1] E8WC Emergency battery backup, CEC compliant (8W, -20°C min)[1] PE Button type photocell for dusk-to-dawn operation DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)[2] SPD6KV 6kV surge protection[1] FAO Field adjustable light output device. Allows for easy adjustment to the desired light levels, from 20% to 100%[2]	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone

H2

H3

Accessories

Ordered and shipped separately.

WSBBW DDBXD U Surface - mounted back box (specify finish)

NOTES

1 347V not available with E4WH, E8WC and SPD6KV.
2 FAO not available with DMG.

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Performance Data

Lumen Output

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

Performance Package	System Watts	30K (3000K, 80 CRI)					40K (4000K, 80 CRI)					50K (5000K, 80 CRI)				
		Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P1	11W	1,502	142	0	0	1	1,587	150	0	0	1	1,598	151	0	0	1
P2	16W	2,250	140	0	0	1	2,377	147	0	0	1	2,393	148	0	0	1
P3	24W	3,206	135	0	0	1	3,387	143	0	0	1	3,410	144	0	0	1
P4	30W	3,903	128	1	0	1	4,124	136	1	0	1	4,152	136	1	0	1
P5	51W	6,260	122	1	0	1	6,615	129	1	0	1	6,659	130	1	0	1

Electrical Load

Performance Package	System Watts	Current (A)				
		120V	208V	240V	277V	347V
P1	11W	0.090	0.055	0.049	0.046	0.045
P2	16W	0.141	0.081	0.072	0.064	0.059
P3	24W	0.202	0.117	0.103	0.091	0.079
P4	30W	0.280	0.162	0.144	0.128	0.095
P5	51W	0.471	0.272	0.239	0.212	0.158

Lumen Output in Emergency Mode (4000K, 80 CRI)

Option	Lumens
E4WH	693
E8WC	1,413

Lumen Ambient Temperature (LAT) Multipliers

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

Ambient		Lumen Multiplier
0°C	32°F	1.04
10°C	50°F	1.03
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.97

Projected LED Lumen Maintenance

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

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

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.96	>0.93	>0.88

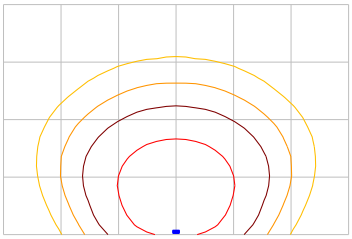
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting ARC LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND

- 0.25 fc
- 0.5 fc
- 1.0 fc
- 3.0 fc

MH = 15ft
Grid = 15ft x 15ft



ARC2 LED P3 40K

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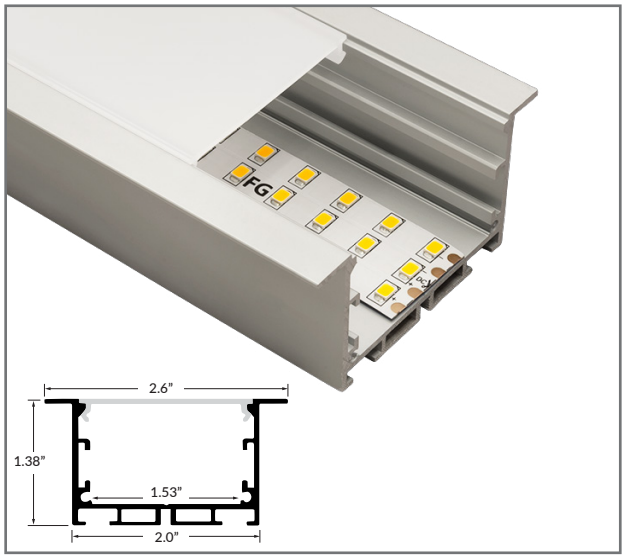
PROJECT
SKU
QUANTITY DATE

Type: SCR8

ICON 2 FLANGED EXTRUSION + LED TAPELIGHT



5 YEAR LIMITED WARRANTY

DIMMABLE

ASSEMBLED IN THE USA

SPECIFICATIONS

FINISH	Silver Anodized
LENS	Frosted
WATTAGE	7.9W/ft to 15.2W/ft
IP RATING	IP20 dry, IP65 wet, IP68 wet
CCT / COLOR	2200K - 5200K; RGB; RGBW;
BEAM SPREAD	104° typical with Frosted lens
INPUT VOLTAGE	24VDC
LENGTH	Made to order. Actual lengths vary by LED tapelight cutpoints.
OUTPUT	326 to 520 lm/ft
LEDS	Single binned LEDs +/- 30-70 CCT, MacAdam 3 SDCM
MATERIAL	Extrusion - Anodized aluminum; Lens - Polycarbonate
MOUNTING	Mounting clips recommended
POWER SUPPLY	Requires a 24V power supply – see page 5
WARRANTY	IP20 - 5 year limited, IP65/68 - 3 year limited

FEATURES & RECOMMENDED APPLICATIONS

Modular, recessable extrusion with a frosted lens that provides a wide, dot-free line of light. Corners available for making turns in a variety of applications, such as general lighting, accents, displays, shelving, and signage.

PRODUCT: LLI-IC2F-SF-DH8.8W-30K-24V-96IN

ICON 2 FLANGED EXTRUSION + LED TAPELIGHT

ORDERING GUIDE

← PRODUCT CODE

PROFILE	1a. FINISH	1b. LENS	2. LED	3. IP RATING	4. CCT / COLOR	INPUT	5. LENGTH
LLI-IC2F	S	F	D8.8W	65	30K	24V	48IN
	FINISH Silver	LENS Frosted	WATTS/FT 7.9-15.2 W/ft	IP RATING [blank] - IP20 65 - IP65 68 - IP68	WHITE 22K-52K COLOR RGB RGBW		Enter desired length in inches. Nominal length only. Actual lengths vary by LED cutpoint.

OPTIONAL →

6. MOUNTING	POWER FEED 7. LEAD LENGTH	8. LEAD TYPE	9. FEED TYPE
[blank]	[blank]		
[blank] - Ships standard with standard clips. Refer to section 6 on the next page if you require alternate mounting.	[blank] - Ships standard with 48" soldered end power feed. Refer to section 7 on the next page for an alternate power feed configuration.		

Example part number: **LLI-IC2F-SF-D8.8W-65-35K-24V-48IN**

More LED tapelight and color options available upon request. Visit www.llialighting.com or contact us for details.

1. FINISH & LENS

1a. FINISH	
S	Silver Anodized finish

1b. LENS	
F	Frosted lens

2-4. LED TAPELIGHT OPTIONS

2. LED CODE	3. IP RATING	4. CCT / COLOR
D8.8W	[blank]	30K
	For IP20, leave [blank].	

TECHNICAL DATA

				WATTAGE	TAPELIGHT	DELIVERED LM/FT @ 30K^	FROSTED LENS APPEARANCE**	CRI	MAX. RUN	CUT POINTS*
	D8.8W (White)	**20 / 65 / 68**	**22K / 27K / 30K / 35K / 42K / 52K**	8.8 W/ft	(2) L4.4W	**326 lm/ft**	UNIFORM	90+	32 ft	2"
	H7.9W (White)	**20 / 65**	**22K / 27K / 30K / 35K / 42K / 52K**	7.9 W/ft	(1) LHE7.9W	**470 lm/ft**	UNIFORM	90+	32 ft	3.3"
★	**DH8.8W** (White)	**20 / 65 / 68**	**22K / 27K / 30K / 35K / 42K / 52K**	8.8 W/ft	(2) LHE4.4W	**520 lm/ft**	UNIFORM	90+	32 ft	2"
	DC8.8W (Static Color)	**20 / 65 / 68**	**RED / AMB / GRN / BLU**	8.8 W/ft	(2) LC4.4W	**N/A**	UNIFORM	–	32 ft	2"
★	**DCC11.8W** (RGB)	**20 / 65**	**RGB**	11.8 W/ft	(2) LCC5.9W	**576 lm/ft**	UNIFORM	–	32 ft	2.8"
★	**DCW15.2W** (RGBW)	**20 / 65 / 68**	**R30** (RGB + 30K) **/ R60**	15.2 W/ft	(2) LCCW5.8W	**521 lm/ft**	UNIFORM	80+	32 ft	3.9"

★ *Recommended options.*
** *Diode visibility data tested at 100% output. Diodes may become more visible as tapelight dims.*
^ *Lumen data based on frosted lens, IP20 tapelight, 30K white output, or combined output for tunable white, warm fade, RGB, and RGB(W) tapelights.*

SEMI-UNIFORM (for reference)
UNIFORM

5. LENGTH

5. LENGTH
96 IN

Enter desired length in inches. Nominal length only. Actual lengths vary by LED cutpoint.

Overall Extrusion+LED tapelight length will be rounded up or down based on nearest LED tapelight cut point.

D-Series Size 1
LED Area Luminaire

Catalog Number

Notes

Type Y12, Y14, Y22, Y24

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

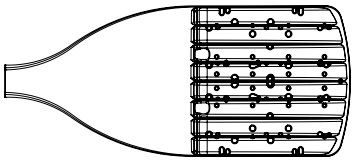
Introduction

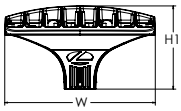
The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Specifications

EPA:	0.69 ft² (0.06 m²)
Length:	32.71" (83.1 cm)
Width:	14.26" (36.2 cm)
Height H1:	7.88" (20.0 cm)
Height H2:	2.73" (6.9 cm)
Weight:	34 lbs (15.4 kg)





Design Select options indicated by this color background.

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

Ordering Information

EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

Series	LEDs	Color temperature[2]	Color Rendering Index[2]	Distribution	Voltage	Mounting
DSX1 LED	**Forward optics**	(this section 70CRI only)		AFR Automotive front row	MVOLT (120V-277V)[4]	**Shipped included**
Y12 Y22	P1 P6	30K 3000K	70CRI	T1S Type I short	HVOLT (347V-480V)[5,6]	SPA Square pole mounting (#8 drilling)
	P2 P7	40K 4000K	70CRI	T2M Type II medium	XVOLT (277V - 480V)[7,8]	RPA Round pole mounting (#8 drilling)
	P3 P8	50K 5000K	70CRI	T3M Type III medium	120[16,26]	SPA5 Square pole mounting #5 drilling[9]
	P4 P9	(this section 80CRI only, extended lead times apply)		T3LG Type III low glare[3]	208[16,26]	RPA5 Round pole mounting #5 drilling[9]
Y14 Y24	P5	27K 2700K	80CRI	T4M Type IV medium	240[16,26]	SPA8N Square narrow pole mounting #8 drilling
	Rotated optics	30K 3000K	80CRI	T4LG Type IV low glare[3]	277[16,26]	WBA Wall bracket[10]
	P10[1] P12[1]	35K 3500K	80CRI	TFTM Forward throw medium	347[16,26]	MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)
	P11[1] P13[1]	40K 4000K	80CRI	T5M Type V medium	480[16,26]	
		50K 5000K	80CRI	T5LG Type V low glare		
				T5W Type V wide		
				BLC3 Type III backlight control[3]		
				BLC4 Type IV backlight control[3]		
				LCCO Left corner cutoff[3]		
				RCCO Right corner cutoff[3]		

Control options

Shipped installed

NLTAIR2 PIRHN	nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc.[11,12,20,21]
PIR	High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc[13,20,21]
PER	NEMA twist-lock receptacle only (controls ordered separate)[14]
PER5	Five-pin receptacle only (controls ordered separate)[14,21]
PER7	Seven-pin receptacle only (controls ordered separate)[14,21]
FAO	Field adjustable output[15,21]
BL30	Bi-level switched dimming, 30%[16,21]
BL50	Bi-level switched dimming, 50%[16,21]
DMG	0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[17]
DS	Dual switching[18,19,21]

Other options

Shipped installed

SPD20KV	20KV surge protection
HS	Houseside shield (black finish standard)[22]
L90	Left rotated optics[1]
R90	Right rotated optics[1]
CCE	Coastal Construction[23]
HA	50°C ambient operation[24]
BAA	Buy America(n) Act and/or Build America Buy America Qualified
SF	Single fuse (120, 277, 347V)[26]
DF	Double fuse (208, 240, 480V)[26]

Shipped separately

EGSR	External Glare Shield (reversible, field install required, matches housing finish)
BSDB	Bird Spikes (field install required)

Finish *(required)*

DDBXD	Dark Bronze
DBLXD	Black
DNAXD	Natural Aluminum
DWHXD	White
DDBTXD	Textured dark bronze
DBLBXD	Textured black
DNATXD	Textured natural aluminum
DWHGXD	Textured white

Finish selected by architect

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Ordering Information

Accessories

Ordered and shipped separately.

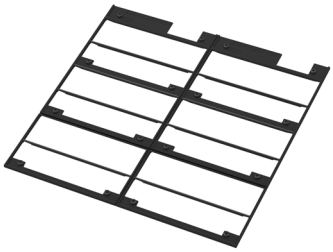
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [25]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [25]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [25]
DSHORT SBK	Shorting cap [25]
DSX1HS P#	House-side shield (enter package number 1-13 in place of #)
DSXRPA (FINISH)	Round pole adapter (#8 drilling, specify finish)
DSXSPA5 (FINISH)	Square pole adapter #5 drilling (specify finish)
DSXRPA5 (FINISH)	Round pole adapter #5 drilling (specify finish)
DSX1EGSR (FINISH)	External glare shield (specify finish)
DSX1BSDB (FINISH)	Bird spike deterrent bracket (specify finish)

NOTES

1 Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.
2 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
3 T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
4 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
5 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
6 HVOLT not available with package P1 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
7 XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
8 XVOLT not available in packages P1 or P10. XVOLT not available with fusing (SF or DF).
9 SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
10 WBA cannot be combined with Type 5 distributions plus photocell (PER).
11 NLTAIR2 and PIRHN must be ordered together. For more information on nLight AIR2 visit this link
12 NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50, DMG and DS. NLTAIR2 PIRHN not available with P1 and P10 using HVOLT. NLTAIR2 PIRHN not available with P1 and P10 using XVOLT.
13 PIR not available with NLTAIR2 PIRHN, PER, PER5, PER7, FAO BL30, BL50, DMG and DS. PIR not available with P1 and P10 using HVOLT. PIR not available with P1 and P10 using XVOLT.
14 PER/PER5/PER7 not available with NLTAIR2 PIRHN, PIR, BL30, BL50, FAO, DMG and DS. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
15 FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, DMG and DS.
16 BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO, DMG and DS. BL30 or BL50 must specify 120 or 277V.
17 DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DS.
18 DS not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DMG.
19 DS requires (2) separately switched circuits. DS provides 50/50 fixture operation via (2) different sets of leads using (2) drivers. DS only available with packages P8, P9, P10, P11, P12 and P13.
20 Reference Motion Sensor Default Settings table on page 4 to see functionality.
21 Reference Controls Options table on page 4.
22 HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
23 CCE option not available with option BS and EGSR. Contact Technical Support for availability.
24 Option HA not available with performance packages P4, P5, P7, P8, P9 and P13.
25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
26 Single fuse (SF) requires 120V, 277V, or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).

Shield Accessories

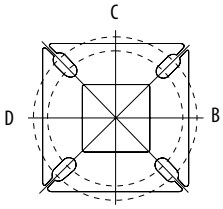
External Glare Shield (EGSR)

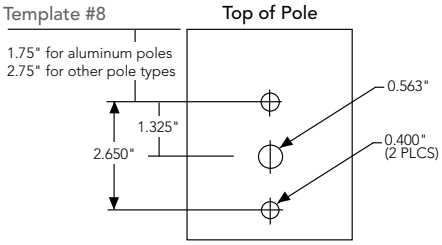


House Side Shield (HS)

Drilling

HANDHOLE ORIENTATION





Tenon Mounting Slipfitter

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

Y12 Y14 Y22 Y24

Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
			Minimum Acceptable Outside Pole Dimension				
SPA	#8	3.5"	3.5"	3.5"	3.5"		3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPA5	#5	3"	3"	3"	3"		3"
RPA5	#5	3"	3"	3"	3"	3"	3"
SPA8N	#8	3"	3"	3"	3"		3"

DSX1 Area Luminaire - EPA

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

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX1 with SPA	0.69	1.38	1.23	1.54	---	1.58
DSX1 with SPA5, SPA8N	0.70	1.40	1.30	1.66	---	1.68
DSX1 with RPA, RPA5	0.70	1.40	1.30	1.66	1.60	1.68
DSX1 with MA	0.83	1.66	1.50	2.09	2.09	2.09

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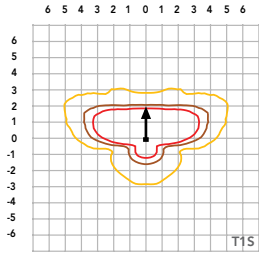
Photometric Diagrams

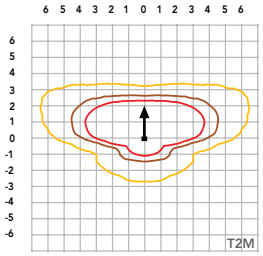
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's homepage.

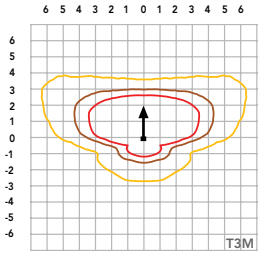
Isofootcandle plots for the DSX1 LED P9 40K 70CRI. Distances are in units of mounting height (25').

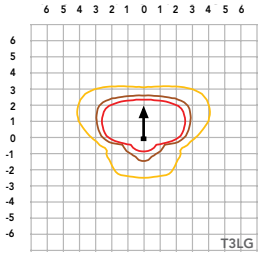
LEGEND

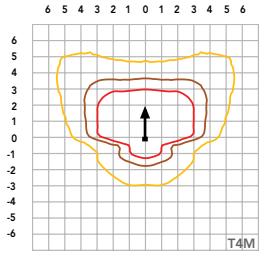
- 0.1 fc
- 0.5 fc
- 1.0 fc

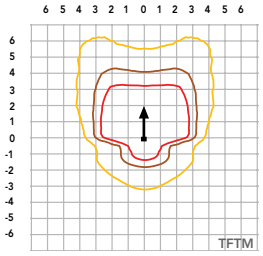


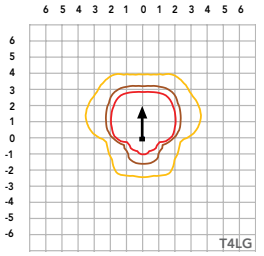


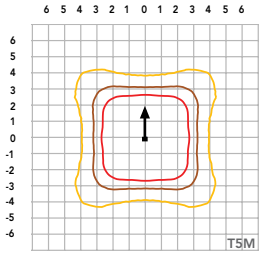


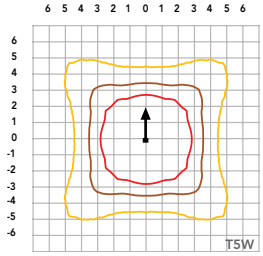


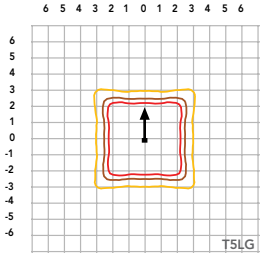


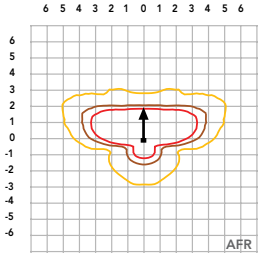


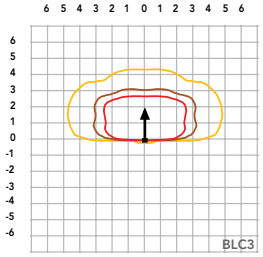


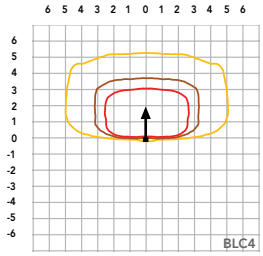


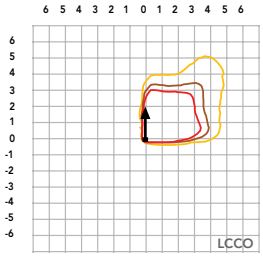


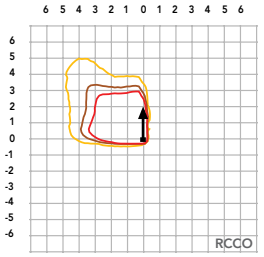












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Type: YB

SOLID STATE LIGHTING

Pacifica® - BOLLARD

CONTEMPORARY ROUND FORM BOLLARD

PROJECT NAME:

PROJECT TYPE:

PACB

Optical Housing
Contemporary, double strut post-top style bollard. All housing components are heavy wall, low copper aluminum alloy (A356 alloy, <0.2% copper). Removable internal heatsink provides direct mounting of the LED modules and thermal control for long life and efficiency. Bollard Top is removable for LED Module access. Bollard head is removable for electrical and driver access. All hardware is stainless steel.

Shaft & Base
Bollard Shaft is heavy wall extruded 6063-T6 aluminum alloy. Base is heavy cast aluminum. All hardware is stainless steel and tamper resistant. Standard shaft height provides a 42.5" overall height, consult factory for custom heights.

Anchor Bolts
Four 3/8" x 10" x 2" galvanized anchor bolts with couplings, leveling nuts, washers, template, and stainless bolts.

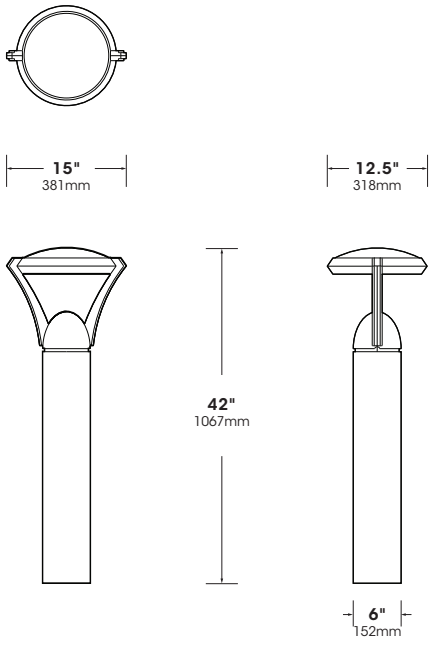
PLED™ Optics
Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side, maximizing usable light. Optional house side shields are available that cover each individual optic. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments. Quick-disconnects are provided above each panel for fast field replacement. All fixture optical options will provide a "U0" no uplight optical package and is are dark sky friendly.

LED Emitters
LED thermal management is designed to maintain LED operating temperature below 90 °C, well below the manufacturers thermal max of 150 °C for long life, high lumen maintenance and color stability. High Power White LED's are driven between 350mA and 875mA for a maximum output of 2.5 Watts nominal. LED's are available in standard Warm White (2700K & 3000K), Neutral White (4000K), or Cool White (5000K). All Standard LED's have a minimum of 70 CRI. Consult Factory for other LED options. Lumen Maintenance of L93 at 100,000 hours (TM-21 calculated at 6x Test Time).

True Amber LED's TRA-True Amber LED's emit light in the amber spectral bandwidth centered on 585-590nm. True Amber has negligible blue light and is suitable for wildlife.

LED Driver
Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50/60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with a separate 20KV surge protector for field installation.

Finish
Polyester powder coat incorporates four step iron phosphate process to pretreat metal surface for maximum adhesion. Top coat is baked at 400°F for maximum hardness and exterior durability.



Front View

Side View

U.L. Listed for Wet Location

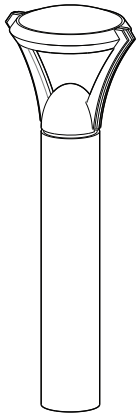
BABA COMPLIANT

2023087

PACB SERIES - PLED

PRODUCT CONFIGURATIONS

EPA & WEIGHT



PACB
Max Weight = 22 lbs
20 LED

PLED™ MODULE

20 LED Module

ORDERING INFORMATION

Spec/Order Example: PACB/PLED-IV/20LED-350mA/347/Rust/DF+V

Luminaire	Optics	LED Mode	Voltage	Finish	Options

Luminaire

☐ **PACB**

Optics

PLED™ Distribution Type

- ☐ **PLED-II**
- ☐ **PLED-II-FR**
- ☐ **PLED-III**
- ☐ **PLED-III-W**
- ☐ **PLED-IV**
- ☐ **PLED-IV-FT**
- ☐ **PLED-V-SQ-N**
- ☐ **PLED-V-SQ-M**
- ☐ **PLED-V-SQ-W**

LED

# of LEDs
- ☐ **20LED**

Drive Current
- ☐ **175mA**
- ☐ **350mA**

Color Temp - CCT
- ☐ **27K** (2700K)
- ☐ **30K** (3000K)
- ☐ **40K** (4000K)
- ☐ **50K** (5000K)
- ☐ **TRA** True Amber

NOTES:
1 - Consult factory for other CCT, CRI, & Drive Current options

Voltage

- ☐ **UNV** (120-277)
- ☐ **347**
- ☐ **480**

Finish

Standard Textured Finish

- ☐ Black **RAL-9005-T**
- ☐ White **RAL-9003-T**
- ☐ Grey **RAL-7004-T**
- ☐ Dark Bronze **RAL-8019-T**
- ☐ Green **RAL-6005-T**

Premium Finishes

- ☐ Rust
- ☐ Patina Copper **PC**

For smooth finish replace suffix "T" with suffix "S" (Example: RAL-9500-S)

Consult factor for custom colors

Options

- ☐ Clear Acrylic Lens **CA**
- ☐ Internal House Side Shield incl. LED Count (Example: HS-PLED/48) **HS-PLED**
- ☐ High-Low Dimming for Switch by Others/Select Levels 50/100 or 25/100 (Example: HLSW/25) **HLSW**
- ☐ Photo Cell + Voltage (Example: PC120V) **PC+V**
- ☐ Single Fuse (Example: SF277V) **SF+V**
- ☐ Double Fuse (Example: DF240V) **DF+V**

LITHONIA LIGHTING®

FEATURES & SPECIFICATIONS

INTENDED USE — These specifications are for USA standards only. Check with factory for Canadian specifications. Square Straight Steel is a general purpose light pole for up to 39-foot mounting heights. This pole provides a robust yet cost effective option for mounting area lights and floodlights.

CONSTRUCTION — Pole Shaft: The pole shaft is of uniform dimension and wall thickness and is made of a weldable-grade, hot-rolled, commercial-quality steel tubing with a minimum yield of 55 KSI (11-gauge, .1196"), or 50 KSI (7-gauge, .1793"). Shaft is one-piece with a full-length longitudinal high-frequency electric resistance weld. Uniformly square in cross-section with flat sides, small corner radii and excellent torsional qualities. Available shaft widths are 4", 5" and 6".

Pole Top: A flush non-metalic black top cap is provided for all poles that will receive drilling patterns for side-mount luminaire arm assemblies or when ordered with PT option.

Handhole: A reinforced handhole with grounding provision is provided at 18" from the base on side A. Positioning the handhole lower may not be possible and requires engineering review; consult Tech Support-Outdoor for further information. Every handhole includes a cover and cover attachment hardware. The handhole has a nominal dimension of 2.5" x 5".

Base Cover: A durable ABS plastic two-piece full base cover, finished to match the pole, is provided with each pole assembly. Additional base cover options are available upon request.

Anchor Base/ Bolts: Anchor base is fabricated from steel that meets ASTM A36 standards and can be altered to match existing foundations; consult factory for modifications. Anchor bolts are manufactured to ASTM F1554 Standards grade 55, (55 KSI minimum yield strength and tensile strength of 75-95 KSI). Top threaded portion (nominal 12") is hot-dipped galvanized per ASTM A-153.

HARDWARE – All structural fasteners are high-strength galvanized carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.

FINISH – Extra durable standard powder-coat finishes include Dark Bronze, White, Black, Medium Bronze and Natural Aluminum colors. Classic finishes include Sandstone, Charcoal Gray, Tennis Green, Bright Red and Steel Blue colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Hot-dipped Galvanized, Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes. Factory-applied primer paint finish is available for customer field-paint applications.

WARRANTY — 1-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

NOTE: Actual performance may differ as a result of end-user environment and application.
Specifications subject to change without notice.

Catalog Number	
Notes	See Plans for Fixture Mounting
Type	Yxx, see plans for types

Anchor Base Poles

SSS

SQUARE STRAIGHT STEEL

See footnotes next page.

SSS Square Straight Steel Poles

Finish selected by client

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative.

Example: SSS 20 5C DM19 DDB

SSS						
Series	**Nominal fixture mounting height**	**Nominal shaft base size/wall thickness[1]**	**Mounting[2]**		**Options**	**Finish[10]**
SSS	10'-39' (for 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.) See technical information table for complete ordering information.) 20ft	4C 4" 11g (.1196") 4G 4" 7g (.1793") 5C 5" 11g (.1196") 5G 5" 7g (.1793") 6G 6" 7g (.1793") See technical information table for complete ordering information.)	Tenon mounting PT Open top (includes top cap) T20 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D. (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS) T35 4" O.D. (3-1/2" NPS) KAC/KAD/KSE/KSF/KVR/KVF Drill mounting[3] DM19 1 at 90° DM28 2 at 180° DM28 PL 2 at 180° with one side plugged DM29 2 at 90° DM39 3 at 90° DM49 4 at 90° CSX/DSX/AERIS™/OMERO™/HLA/KAX Drill mounting[3] DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM39AS 3 at 90° DM49AS 4 at 90°	AERIS™ Suspend drill mounting[3,4] DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90° DM39AST_ 3 at 90° DM49AST_ 4 at 90° OMERO™ Suspend drill mounting[3,4] DM19MRT_ 1 at 90° DM28MRT_ 2 at 180° DM29MRT_ 2 at 90° DM39MRT_ 3 at 90° DM49MRT_ 4 at 90°	Shipped installed L/AB Less anchor bolts (Include when anchor bolts are not needed) VD Vibration damper TP Tamper resistant handhole cover fasteners HAxy Horizontal arm bracket (1 fixture)[5,6] FDLxy Festoon outlet less electrical[5] CPL12/xy 1/2" coupling[5] CPL34/xy 3/4" coupling[5] CPL1/xy 1" coupling[5] NPL12/xy 1/2" threaded nipple[5] NPL34/xy 3/4" threaded nipple[5] NPL1/xy 1" threaded nipple[5] EHHxy Extra handhole[5,7] MAEX Match existing[8] USPOM United States point of manufacture[9] IC Interior coating[10] UL UL listed with label (Includes NEC compliant cover) NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) Shipped separately (replacement kit available) (blank) FBC Full base cover (plastic) (blank) TC Top cap (blank) HHC Handhole cover	Standard colors DDBXD Dark bronze DWHXD White DBLXD Black DMBXD Medium bronze DNAXD Natural aluminum Classic colors DSS Sandstone DGC Charcoal gray DTG Tennis green DBR Bright red DSB Steel blue Architectural Colors and Special Finishes[11] Galvanized, Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes available.

NOTES:

1. Wall thickness will be signified with a "C" (11 Gauge) or a "G" (7-Gauge) in nomenclature. "C" - 0.1196" | "G" - 0.1793".
2. PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20. The combination includes a required extra handhole.
3. Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
4. Insert "1" or "2" to designate fixture size; e.g. DM19AST**2**.
5. Specify location and orientation when ordering option.
   For "x": Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-".
   Example: 5ft = 5 and 20ft 3in = 20-3
   For "y": Specify orientation from handhole (A,B,C,D)
   Refer to the Handhole Orientation diagram below.
   Example: 1/2" coupling at 5'8", orientation C = CPL12/5-8C
6. Horizontal arm is 18" x 2-3/8" O.D. tenon standard, with radius curve providing 12" rise and 2-3/8" O.D. If ordering two horizontal arm at the same height, specify with HAxyy. Example: HA20BD.
7. Combination of tenon-top and drill mount includes extra handhole.
8. Must add original order number of existing pole(s).
9. Use when mill certifications are required.
10. Provides enhanced corrosion resistance.
11. Additional colors available; see www.lithonia.com/archcolors or Architectural Colors brochure (Form No. 794.3). Available by formal quote only, consult factory for details.

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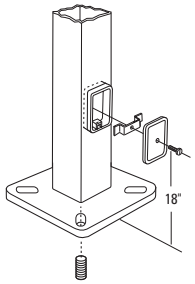
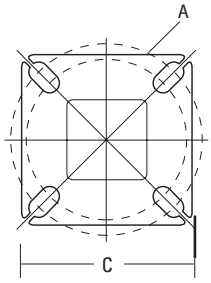
TECHNICAL INFORMATION — EPA (ft2) with 1.3 gust														
Catalog Number	Nominal Shaft Length (ft.)*	Pole Shaft Size (Base in. x Top in. x ft.)	Wall thick (in)	Gauge	EPA (ft^2) with 1.3 gust						Bolt circle (in)	Bolt size (in. x in. x in.)	Approximate ship weight (lbs.)
					80 MPH	Max. weight	90 MPH	Max. weight	100 MPH	Max. weight			
SSS 10 4C	10	4.0 x 10.0	0.1196	11	30.6	765	23.8	595	18.9	473	8--9	3/4 x 18 x 3	75
SSS 12 4C	12	4.0 x 12.0	0.1196	11	24.4	610	18.8	470	14.8	370	8--9	3/4 x 18 x 3	90
SSS 14 4C	14	4.0 x 14.0	0.1196	11	19.9	498	15.1	378	11.7	293	8--9	3/4 x 18 x 3	100
SSS 16 4C	16	4.0 x 16.0	0.1196	11	15.9	398	11.8	295	8.9	223	8--9	3/4 x 18 x 3	115
SSS 18 4C	18	4.0 x 18.0	0.1196	11	12.6	315	9.2	230	6.7	168	8--9	3/4 x 18 x 3	125
SSS 20 4C	20	4.0 x 20.0	0.1196	11	9.6	240	6.7	167	4.5	150	8--9	3/4 x 18 x 3	140
SSS 20 4G	20	4.0 x 20.0	0.1793	7	14	350	11	275	8	200	8--9	3/4 x 30 x 3	198
SSS 20 5C	20	5.0 x 20.0	0.1196	11	17.7	443	12.7	343	9.4	235	10--12	1 x 36 x 4	185
SSS 20 5G	20	5.0 x 20.0	0.1793	7	28.1	703	21.4	535	16.2	405	10--12	1 x 36 x 4	265
SSS 25 4C	25	4.0 x 25.0	0.1196	11	4.8	150	2.6	100	1	50	8--9	3/4 x 18 x 3	170
SSS 25 4G	25	4.0 x 25.0	0.1793	7	10.8	270	7.7	188	5.4	135	8--9	3/4 x 30 x 3	245
SSS 25 5C	25	5.0 x 25.0	0.1196	11	9.8	245	6.3	157	3.7	150	10--12	1 x 36 x 4	225
SSS 25 5G	25	5.0 x 25.0	0.1793	7	18.5	463	13.3	333	9.5	238	10--12	1 x 36 x 4	360
SSS 30 4G	30	4.0 x 30.0	0.1793	7	6.7	168	4.4	110	2.6	65	8--9	3/4 x 30 x 3	295
SSS 30 5C	30	5.0 x 30.0	0.1196	11	4.7	150	2	50	--	--	10--12	1 x 36 x 4	265
SSS 30 5G	30	5.0 x 30.0	0.1793	7	10.7	267	6.7	167	3.9	100	10--12	1 x 36 x 4	380
SSS 30 6G	30	6.0 x 30.0	0.1793	7	19	475	13.2	330	9	225	11--13	1 x 36 x 4	520
SSS 35 5G	35	5.0 x 35.0	0.1793	7	5.9	150	2.5	100	--	--	10--12	1 x 36 x 4	440
SSS 35 6G	35	6.0 x 35.0	0.1793	7	12.4	310	7.6	190	4.2	105	11--13	1 x 36 x 4	540
SSS 39 6G	39	6.0 x 39.0	0.1793	7	7.2	180	3	75	--	--	11--13	1 x 36 x 4	605

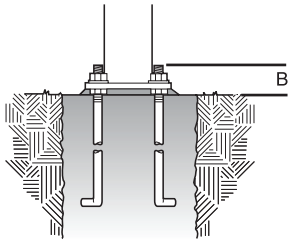
* EPA values are based ASCE 7-93 wind map. For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

BASE DETAIL

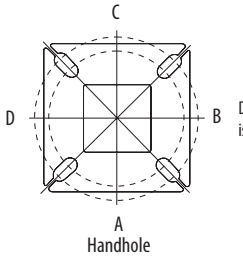


POLE DATA								
Shaft base size	Bolt circle A	Bolt projection B	Base diameter C	Base plate thickness	Template description	Anchor bolt description	Anchor bolt and template number	Anchor bolt description
4"C	8" – 9"	3.25"- 3.75"	8"- 8.25"	0.75"	ABTEMPLATE PJ50004	AB18-0	ABSSS-4C	3/4"x18"x3"
4"G	8" – 9"	3.38"- 3.75"	8"- 8.25"	0.875"	ABTEMPLATE PJ50004	AB30-0	ABSSS-4G	3/4"x30"x3"
5"	10" – 12"	3.5"- 4"	11"	1"	ABTEMPLATE PJ50010	AB36-0	ABSSS-5	1"x36"x4"
6"	11" – 13"	4"- 4.50"	12.5"	1"	ABTEMPLATE PJ50011	AB36-0	N/A	1"x36"x4"





HANDHOLE ORIENTATION



Default DM19 is on side B.

IMPORTANT INSTALLATION NOTES:

- **Do not** erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Lithonia Lighting is not responsible for the foundation design.

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PROPOSED BUILDING FFE = 834.50

PROPOSED BUILDING FFE = 834.50

PROPOSED BUILDING FFE = 834.50

EXISTING BUILDING FFE = 834.50

BIO-RETENTION BASIN-4
TOP OF BERM 830.00
BOTTOM OF BASIN 826.00

P/L

ATWO

10 20 30 40 50 40 30 20 10

10 20 30 40

N

Scale: 0 15 30 60

Scale: 1" = 30'

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Milwaukee, Wisconsin 53204
T: 414.226.0200

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kapur

Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number:
3526

Issued For:
PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
EMERGENCY ACCESS EXHIBIT 1

Sheet Number:
EXHIBIT 1

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PROPOSED BUILDING FFE = 834.50

PROPOSED BUILDING FFE = 834.50

EXISTING BUILDING FFE = 834.50

BIO-RETENTION BASIN-4
TOP OF BERM 830.00
BOTTOM OF BASIN 826.00

P/L

STATE HIGHWAY 57

Scale: 0 15 30 60
Scale: 1" = 30'

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	DATE	DESCRIPTION

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Sheet Number:
EXHIBIT 2

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TOP OF BERM 831.00
BOTTOM OF BASIN 827.00

P/L

ONLY

ASPHALT
PARKING LOT

MUKWONAG
SCHOOL DI
385 E. VETERA
MUKWONAGO

PROPOSED
BUILDING
FFE = 834.50

PROPOSED
BUILDING
FFE = 834.50

PROPOSED
BUILDING
FFE = 834.50

EXISTING
BUILDING
FFE = 834.50

BIO-RETENTION BASIN-1
TOP OF BERM 830.25
BOTTOM OF BASIN 826.25

GAGA BALL

PITS

10 20 30 40 50 40 30 20 10

10 20 30 40 50 40 30 20 10

N

Scale: 1" = 30'
0 15 30 60

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Sheet Title:
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Sheet Number:
EXHIBIT 3

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TOP OF BERM 831.00
BOTTOM OF BASIN 827.00

P/L

ASPHALT
PARKING LOT

ONLY

MUKWONAG
SCHOOL DI
385 E. VETERA
MUKWONAGO

PROPOSED
BUILDING
FFE = 834.50

PROPOSED
BUILDING
FFE = 834.50

PROPOSED
BUILDING
FFE = 834.50

EXISTING
BUILDING
FFE = 834.50

BIO-RETENTION BASIN-1
TOP OF BERM 830.25
BOTTOM OF BASIN 826.25

GAGA BALL

PITS

10 20 30 40 50 40 30 20 10

10 20 30 40 50 40 30 20 10

N

Scale: 0 15 30 60
Scale: 1" = 30'

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RENOVATION AND ADDITION TO:
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EXHIBIT 4

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PRELIMINARY STORM WATER MANAGEMENT PLAN
MUKWONAGO PARKVIEW MIDDLE SCHOOL

Prepared For:

Mukwonago Area School District

385 E. Veterans Way

Mukwonago, WI 53149

Prepared By:

Kapur & Associates, Inc.

788 N. Jefferson Street, Ste 900

Milwaukee, WI 53202

APRIL 2025

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Appendix F Civil Engineering Plan Set
Appendix G Stormwater Maintenance Agreement
Appendix H Pick ‘N Save Pond Retrofit Storm Water Management Plan

1.0 Project Contacts

Owner: Andy Wenger – Operations Manager
Mukwonago Area School District
385 E Veterans Way
Mukwonago, WI 53149
Phone: (262) 363-6300

Engineer: Kapur & Associates, Inc.
Michael J. Froehlich, PE
788 N Jefferson Street, Ste 900.
Milwaukee, WI 53202
Phone: (414) 751-7200
Email: mfroehlich@kapurinc.com

Construction Manager: Jasun Berka – Superintendent
JP Cullen
104 E Pleasant Street
Milwaukee, WI 53212
Phone: (414) 988-0088

2.0 Project Location and Description

The project site is located at 385 E. Veterans Way, Mukwonago, WI 53149. The parcel is part of the southeast 1/4 of section 23, township 5 north, range 18 east, in the Village (formerly in the Town) of Mukwonago, county of Waukesha, state of Wisconsin.

The parcel area of the site is approximately 36.88 acres (1,606,414 sq.ft.). The existing project is a developed school site consisting of buildings, drive lanes, parking lots, athletic fields, and landscaped areas. The proposed project would disturb approximately 27.55 acres (1,200,154 sq. ft.).

The proposed project improvements include the construction of a new middle school building, mass grading, asphalt parking lots, asphalt drive lanes, concrete walkways, utility improvements, and the construction of onsite stormwater management basin in the form of bioretention basins.

The Park View Middle School site drains to an existing regional pond called the "Pick 'N Save Pond" that was recently retrofitted in 2019. The proposed stormwater BMPs as part of the current project will ensure that peak flows to the regional pond are no greater than the existing conditions. Refer to Appendix G for a copy of the Pick 'N Save Pond Retrofit SWMP Report.

3.0 Soil Information

A geotechnical exploration of the site is scheduled to occur in Spring 2025. Once the inspection is done and the geotechnical report has been compiled, it will be provided with this SWMP report and attached as an Appendix.

The USDA soil types located on this site are shown on the Hydrologic Soil Group (HSG) Map in Appendix A. The HSG Map states that the soils can be described as Sandy and Gravelly Land characterized as hydrologic soil classification group "D". However, the Pick 'N Save Pond Retrofit project SWMP completed in April of 2019 modeled the existing Park View Middle School site as HSG "B". Therefore, this report also models the middle school site as HSG "B" so that peak flows may be

compared between the two reports. The results of the geotechnical investigation may warrant future adjustment to the soil groups modeled on site. Refer to Appendix G for a copy of Pick 'N Save Pond Retrofit SWMP Report.

The site is expected to be suitable for infiltration. Until the geothecncial investigation and infiltration tests are performed, a conservative infiltration rate of 0.5 in/hr was assumed in the bioretention basins.

4.0 Hydrology

Hydrologic conditions were modeled using HydroCAD, which is based on TR-55 methodology. Four storm events were analyzed based on the 1-year, 2-year, 10-year, and 100-year recurrence intervals with rainfall amounts of 2.40, 2.70, 3.81, and 6.18 inches per 24 hours, respectively. Rainfall amounts for the selected 24-hour storm events were based on the rainfall values contained the Village of Mukwonago Municipal Code Ch. 34-111(a)(2).

Existing and proposed watershed locations and characteristics are provided in Figures SWMP-2 through SWMP-5 in Appendix E. The SWMP limits include all locations of land disturbance and any offsite drainage to the proposed wet pond. The SWMP limits were then divided into sub-watersheds based on the areas of captured and uncaptured runoff. Weighted Runoff Curve Numbers (CN) for all existing and proposed watersheds were computed dependent upon the area, soil type, and ground cover. The time of concentration (T_c) for each watershed was determined by selecting the longest runoff flow path (with regards to time, not necessarily distance) within the watershed basin to the point of interest. The T_c values were calculated based on a combination of sheet flow, shallow concentrated flow, and pipe flow with a 6-minute minimum Tc set as the default.

5.0 Storm Water Performance Standards

The post-construction storm water management plan shall comply with Village of Mukwonago Municipal Code Chapter 34, Article II, Division 4, Stormwater Management and Erosion Control, and the DNR requirements of Chapter 151.21 through NR 151.128. The most stringent requirement for each performance standard is listed below.

Peak Discharge Control:
Per Village of Mukwonago Code of Ordinance Ch. 34-110(d)(1): the 100-yr, 10-yr, 2-yr, and 1-yr post-development peak discharge rates shall be equal to or less than the 10-yr, 2-yr, 2-yr, and 1-yr pre-development peak discharge rates, respectively.

Water Quality/TSS Removal:
Per Village of Mukwonago Code of Ordinance Ch. 34-110(d)(2): By design, each stormwater management plan shall meet the following post-development total suspended solids reduction targets, based on average annual rainfalls, as compared to runoff management controls. For new land development and in-fill development, 80% reduction in total suspended solids load; For redevelopment, 40% reduction of total suspended solids load from parking areas and roads.

The proposed project is a mix of new development and redevelopment areas, therefore, a weighted average shall be used to determine the percentage reduction in total suspended solids required.

Infiltration:
Per Village of Mukwonago Code of Ordinance Ch. 34-110(d)(3): BMPs shall be designed, installed, and maintained to infiltrate runoff in accordance with the performance standards in Table 1. Per Table 1, for a site with medium imperviousness, the post-development infiltration volume shall be at least 75% of the pre-development infiltration volume.

6.0 Pre-Development Site Conditions

The area enclosed by the SWMP limits totals 25.90 acres (1,128,169 sq. ft.). The pre-developed conditions within the SWMP limits consist of developed area consisting of buildings, drive lanes, parking lots, concrete sidewalk areas, and landscaped areas. Refer to Figures SWMP-2 and SWMP-4 in Appendix E for additional information. Figure SWMP-2 shows the pre-developed site conditions and Figure SWMP-4 provides information on the pre-developed drainage conditions for the storm water management area.

Refer to Table 1 for a summary of the pre-developed site conditions for the project area. Refer to Appendix B for the pre-developed HydroCAD report.

Table 1 – Pre-Developed Watershed Data Summary

Project Name: Mukwonago Parkview Middle School	**Parcel Size:** 36.88 acres	**Project Type:** Redevelopment
Number of Runoff Discharge Points: 1	**Watershed (Ultimate Discharge):** Mukwonago River	
Project Watershed Area (including off-site runoff traveling through project area): 25.90 acres		
Public Land Survey Location: Part of the SE ¼ of Section 23, Township 5 North, Range 18 East, Village (formerly in the Town) of Mukwonago, County of Waukesha, State of Wisconsin.		

Summary Data Elements	E1 Existing Site
Watershed Area *(see SWMP-2 in Appendix E)*	25.90 acres
Land Uses **(Acres of Each)**	3.61 Roof 3.60 Pavement 1.16 Sidewalk 17.53 Pervious
Weighted Runoff Curve Numbers	73
Time of Concentration (Tc) *(see SWMP-4 in Appendix E)*	37.3 minutes
1-year/24-hour Peak Flow *(See Appendix B)*	8.84 cfs
2-year/24-hour Peak Flow *(See Appendix B)*	12.26 cfs
10-year/24-hour Peak Flow *(See Appendix B)*	27.33 cfs
100-year/24-hour Peak Flow *(see Appendix B)*	65.86 cfs

7.0 Post-Development Site Conditions

As previously discussed, the area enclosed by the SWMP limits totals 25.90 acres (1,128,169 sq. ft.). The post-developed site includes the construction of buildings, parking lots, drive lanes, sidewalks, utility improvements, and various landscaping. Refer to Figures SWMP-3, and SWMP-5 in Appendix E for additional information. The proposed site development will result in an increase in impervious area of approximately 3.49-acres.

Refer to Table 2 for a summary of the post-development conditions of the watershed for the project area. Refer to Appendix C for the post-development HydroCAD report.

Table 2 – Post-Developed Watershed Data Summary

Project Name: Mukwonago Parkview Middle School		**Parcel Size:** 36.88 acres		**Project Type:** Redevelopment	
Number of Runoff Discharge Points: 1			**Watershed (Ultimate Discharge):** Mukwonago River		
Project Watershed Area (including off-site runoff traveling through project area): 25.90 acres					
Public Land Survey Location: Part of the SE ¼ of Section 23, Township 5 North, Range 18 East, Village (formerly in the Town) of Mukwonago, County of Waukesha, State of Wisconsin.					
Summary Data Elements	P1 Proposed to Bio-1	P2 Proposed to Bio-2	P3 Proposed to Bio-3	P4 Proposed to Bio-4	P5 Proposed Uncaptured
Watershed Area *(see SWMP-5 in Appendix E)*	3.68 acres	2.43 acres	7.64 acres	9.43 acres	2.72 acres
Land Uses (Acres of Each)	1.76 Pavement 0.22 Sidewalk 1.70 Pervious	1.03 Roof 0.68 Pavement 0.12 Sidewalk 0.60 Pervious	2.58 Roof 1.56 Pavement 0.36 Sidewalk 3.14 Pervious	2.12 Pavement 1.39 Sidewalk 5.92 Pervious	0.02 Pavement 0.02 Sidewalk 2.68 Pervious
Weighted Runoff Curve Numbers	81	89	83	75	62
Time of Concentration (Tc) *(see SWMP-5 in Appendix E)*	14.3 minutes	6.0 minutes	10.1 minutes	14.6 minutes	15.1 minutes
1-year/24-hour Peak Flow *(See Appendix B)*	4.11 cfs	5.91 cfs	11.30 cfs	6.62 cfs	0.29 cfs
2-year/24-hour Peak Flow *(See Appendix C)*	5.18 cfs	7.01 cfs	13.98 cfs	8.91 cfs	0.58 cfs
10-year/24-hour Peak Flow *(See Appendix C)*	9.46 cfs	11.11 cfs	24.50 cfs	18.52 cfs	2.26 cfs
100-year/24-hour Peak Flow *(see Appendix C)*	19.36 cfs	19.86 cfs	48.18 cfs	42.17 cfs	7.52 cfs

8.0 Post-Development Summary

Bioretention Basins

Four bioretention basins have been designed to accommodate the entire flow from proposed Watershed areas P1, P2, P3 and P4, as shown in the SWMP figures. Tables 3-10 illustrate the design parameters and performance of each bioretention basin. The design and specifications for the wet pond can be found in the Civil Engineering Plan Set in Appendix F.

Table 3 – Bioretention Basin-1 (B1) Summary	Design Data
Site Assessment Data: (Refer to Appendix E for Proposed Drainage Figures)	
Contributing Drainage Area to Basin	3.68 acres
% of Each Land Use Contributing to Drainage Area	46% Pervious, 54% Impervious
Floodplain, Shoreland, or Wetlands?	No
Basin Design Data: (Refer to the Civil Engineering Plan Set in Appendix F for additional Information)	
Top of Berm Elevation	830.25’
Top of Engineered Soil Elevation	826.25’
Bottom of Engineered Soil Elevation	824.25
Bottom of Basin Elevation	823.25’
Surface Area of Engineered Soil	3,309 Sq. Ft.

Table 4 – Bioretention Basin-1 - Inflow, Outflow, & Storage Data (B1)

(See Hydrographs & Modeling Output in Appendix C and the Detail Drawings in the Civil Engineering Plan Set in Appendix F)

Design Storm	Peak Inflow Rate (cfs)	Peak Outflow Rate (cfs)	Max. Water Elevation (ft)	Storage Volume at Max. Elev. (cu ft)	Time to Drain Ponding Area (hrs)	Outflow Control Structures
1-yr/24-hour	4.11	1.47	826.42	3,481	0.30	#1, #2
2-yr/24-hour	5.18	1.57	826.76	4,744	0.75	#1, #2
10-yr/24-hour	9.46	1.88	827.94	10,524	2.00	#1, #2
100-yr/24-hour	19.36	3.88	829.71	22,929	3.50	#1, #2, #3

The controlling elements are summarized below (Refer to Appendix H and the detail drawings in the Civil Engineering Plan Set in Appendix F)

#1 = Exfiltration at 823.25’

#2 = 6” Orifice at 823.75’

#3 = 48” Standpipe at 828.25’

#4 = 8” Culvert at 823.75’

Table 5 – Bioretention Basin-2 (B2) Summary	Design Data
Site Assessment Data: (Refer to Appendix E for Proposed Drainage Figures)	
Contributing Drainage Area to Basin	2.43 acres
% of Each Land Use Contributing to Drainage Area	25% Pervious, 75% Impervious
Floodplain, Shoreland, or Wetlands?	No
Basin Design Data: (Refer to the Civil Engineering Plan Set in Appendix F for additional Information)	
Top of Berm Elevation	831.00’
Top of Engineered Soil Elevation	827.00’
Bottom of Engineered Soil Elevation	825.00’
Bottom of Basin Elevation	824.00’
Surface Area of Engineered Soil	2,178 Sq. Ft.

Table 6 – Bioretention Basin-2 - Inflow, Outflow, & Storage Data (B2)

(See Hydrographs & Modeling Output in Appendix C and the Detail Drawings in the Civil Engineering Plan Set in Appendix F)

Design Storm	Peak Inflow Rate (cfs)	Peak Outflow Rate (cfs)	Max. Water Elevation (ft)	Storage Volume at Max. Elev. (cu ft)	Time to Drain Ponding Area (hrs)	Outflow Control Structures
1-yr/24-hour	5.91	1.64	827.75	3,802	0.65	#1, #2
2-yr/24-hour	7.01	1.72	828.06	4,749	0.90	#1, #2
10-yr/24-hour	11.11	2.58	829.07	8,516	1.70	#1, #2, #3
100-yr/24-hour	19.86	6.08	830.28	14,335	2.35	#1, #2, #3, #4

The controlling elements are summarized below (Refer to Appendix H and the detail drawings in the Civil Engineering Plan Set in Appendix F)

#1 = Exfiltration at 824.00’

#2 = 6” Orifice at 824.50’

#3 = 36” Standpipe at 829.00’

#4 = 10” Culvert at 824.50’

Table 7 – Bioretention Basin-3 (B3) Summary	Design Data
Site Assessment Data: (Refer to Appendix E for Proposed Drainage Figures)	
Contributing Drainage Area to Basin	7.64 acres
% of Each Land Use Contributing to Drainage Area	41% Pervious, 59% Impervious
Floodplain, Shoreland, or Wetlands?	No
Basin Design Data: (Refer to the Civil Engineering Plan Set in Appendix F for additional Information)	
Top of Berm Elevation	829.00’
Top of Engineered Soil Elevation	825.00’
Bottom of Engineered Soil Elevation	823.00’
Bottom of Basin Elevation	822.00’
Surface Area of Engineered Soil	10,153 Sq. Ft.

Table 8 – Bioretention Basin-3 - Inflow, Outflow, & Storage Data (B3)

(See Hydrographs & Modeling Output in Appendix C and the Detail Drawings in the Civil Engineering Plan Set in Appendix F)

Design Storm	Peak Inflow Rate (cfs)	Peak Outflow Rate (cfs)	Max. Water Elevation (ft)	Storage Volume at Max. Elev. (cu ft)	Time to Drain Ponding Area (hrs)	Outflow Control Structures
1-yr/24-hour	11.30	1.50	825.28	11,829	1.15	#1, #2
2-yr/24-hour	13.98	1.60	825.60	15,433	1.95	#1, #2
10-yr/24-hour	24.50	1.90	826.80	31,100	4.60	#1, #2
100-yr/24-hour	48.18	3.42	828.89	66,645	8.45	#1, #2, #3, #4

The controlling elements are summarized below (Refer to Appendix H and the detail drawings in the Civil Engineering Plan Set in Appendix F)

- #1 = Exfiltration at 822.00’
- #2 = 6” Orifice at 822.50’
- #3 = 48” Standpipe at 827.00’
- #4 = 10” Culvert at 822.50’

Table 9 – Bioretention Basin-4 (B4) Summary	Design Data
Site Assessment Data: (Refer to Appendix E for Proposed Drainage Figures)	
Contributing Drainage Area to Basin	9.43 acres
% of Each Land Use Contributing to Drainage Area	63% Pervious, 37% Impervious
Floodplain, Shoreland, or Wetlands?	No
Basin Design Data: (Refer to the Civil Engineering Plan Set in Appendix F for additional Information)	
Top of Berm Elevation	830.00’
Top of Engineered Soil Elevation	826.00’
Bottom of Engineered Soil Elevation	824.50’
Bottom of Basin Elevation	823.50’
Surface Area of Engineered Soil	8,894 Sq. Ft.

Table 10 – Bioretention Basin-4 - Inflow, Outflow, & Storage Data (B4)

(See Hydrographs & Modeling Output in Appendix C and the Detail Drawings in the Civil Engineering Plan Set in Appendix F)

Design Storm	Peak Inflow Rate (cfs)	Peak Outflow Rate (cfs)	Max. Water Elevation (ft)	Storage Volume at Max. Elev. (cu ft)	Time to Drain Ponding Area (hrs)	Outflow Control Structures
1-yr/24-hour	6.62	1.28	826.07	7,200	0.50	#1, #2
2-yr/24-hour	8.91	1.39	826.40	10,309	1.45	#1, #2
10-yr/24-hour	18.52	1.77	827.76	25,877	4.60	#1, #2
100-yr/24-hour	42.17	5.59	829.88	58,856	8.05	#1, #2, #3, #4

The controlling elements are summarized below (Refer to Appendix H and the detail drawings in the Civil Engineering Plan Set in Appendix F)

- #1 = Exfiltration at 823.50’
- #2 = 6” Orifice at 824.00’
- #3 = 48” Standpipe at 828.00’

#4 = 10” Culvert at 824.00’

Total Storm Water Flows/Peak Discharge Requirements

Table 11 summarizes the peak discharge leaving the site.

Table 11 – Peak Storm Water Discharge Leaving Site
(See Model Output Attachments in Appendix G)

Storm Event	Pre-Development Peak Discharge (cfs)	Post-Development Peak Discharge (cfs)
10-year 24-hour Pre-Dev vs 100-year 24-hour Post Dev	27.33	**25.53**
2-year 24-hour Pre-Dev vs 10-year 24-hour Post Dev	12.26	**9.66**
2-year 24-hour Pre-Dev vs 2-year 24-hour Post Dev	12.26	**6.65**
1-year 24-hour Pre-Dev vs 1-year 24-hour Post Dev	8.84	**6.09**

As detailed in table 11, the 100-yr, 10-yr, 2-yr, and 1-yr post-development peak discharge rates are less than the 10-yr, 2-yr, 2-yr, and 1-yr pre-development peak discharges, respectively, for this site. **Therefore, this site meets the Village of Mukwonago Code of Ordinance Ch. 34-110(d)(1) peak discharge requirement.**

Total Suspended Solids/Water Quality and Infiltration Requirements

The proposed project is a mix of redevelopment and new development. The proposed new development area is 151,798 sq. ft (increased impervious area) and redevelopment impervious area is 364,626 sq. ft. The required TSS reduction would be a weighted average of the new development and redevelopment areas.

$$TSS\ reduction\ requirements = \frac{(151{,}798 * 0.8) + (364{,}626 * 0.4)}{516{,}424} * 100 = \mathbf{51.76\%}$$

Table 12 – WinSLAMM Model Output Results
(See Model Output Attachment in Appendix D)

Required TSS Reduction	Modeled TSS Reduction
51.76%	**87.78%**

Based on the WinSLAMM analysis, the post-developed site reduces TSS by 87.78% exceeding the required reduction of 51.76% TSS removal. **Therefore, the site meets the water quality requirements of the Village of Mukwonago Code of Ordinances.**

Table 13 – Infiltration Calculation (See Model Output Attachment in Appendix D)	
Pre-Development Infiltration Calculation (Based on Average Annual Rainfall)	**Post-Development Infiltration Calculation (Based on Average Annual Rainfall)**
Rainfall Volume = 2,728,289 CF Pre-Development Runoff Volume = 751,639 CF Pre-Development Infiltration Volume = 1,976,650 CF 75% of Pre-Development Infiltration Volume = **1,482,488 CF**	Rainfall Volume = 2,728,289 CF Post-Development Runoff Volume = 444,593 CF Post-Development Infiltration Volume = **2,283,696 CF**

The post-development modeled infiltration volume is greater than 75% of the pre-development infiltration volume, **Therefore, the site meets the water quality requirements of the Village of Mukwonago Code of Ordinance Ch. 34-110(d)(3).**

Appendix A

Web Soil Survey Report

Map Scale: 1:2,600 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 35 70 140 210

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: Waukesha County, Wisconsin
Survey Area Data: Version 3, Dec 10, 2024

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

Date(s) aerial images were photographed: Jul 30, 2022—Aug 18, 2022

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CeB	Casco loam, 2 to 6 percent slopes	B	0.6	2.4%
CeC2	Casco loam, 6 to 12 percent slopes, eroded	B	0.6	2.3%
FoB	Fox loam, 2 to 6 percent slopes	C	0.3	1.3%
MxD2	Miami loam, sandy loam substratum, 12 to 20 percent slopes, eroded	B	0.1	0.4%
Sf	Sandy and gravelly land	D	24.4	93.6%
Totals for Area of Interest			**26.0**	**100.0%**

Description

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

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

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

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

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

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

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

Rating Options

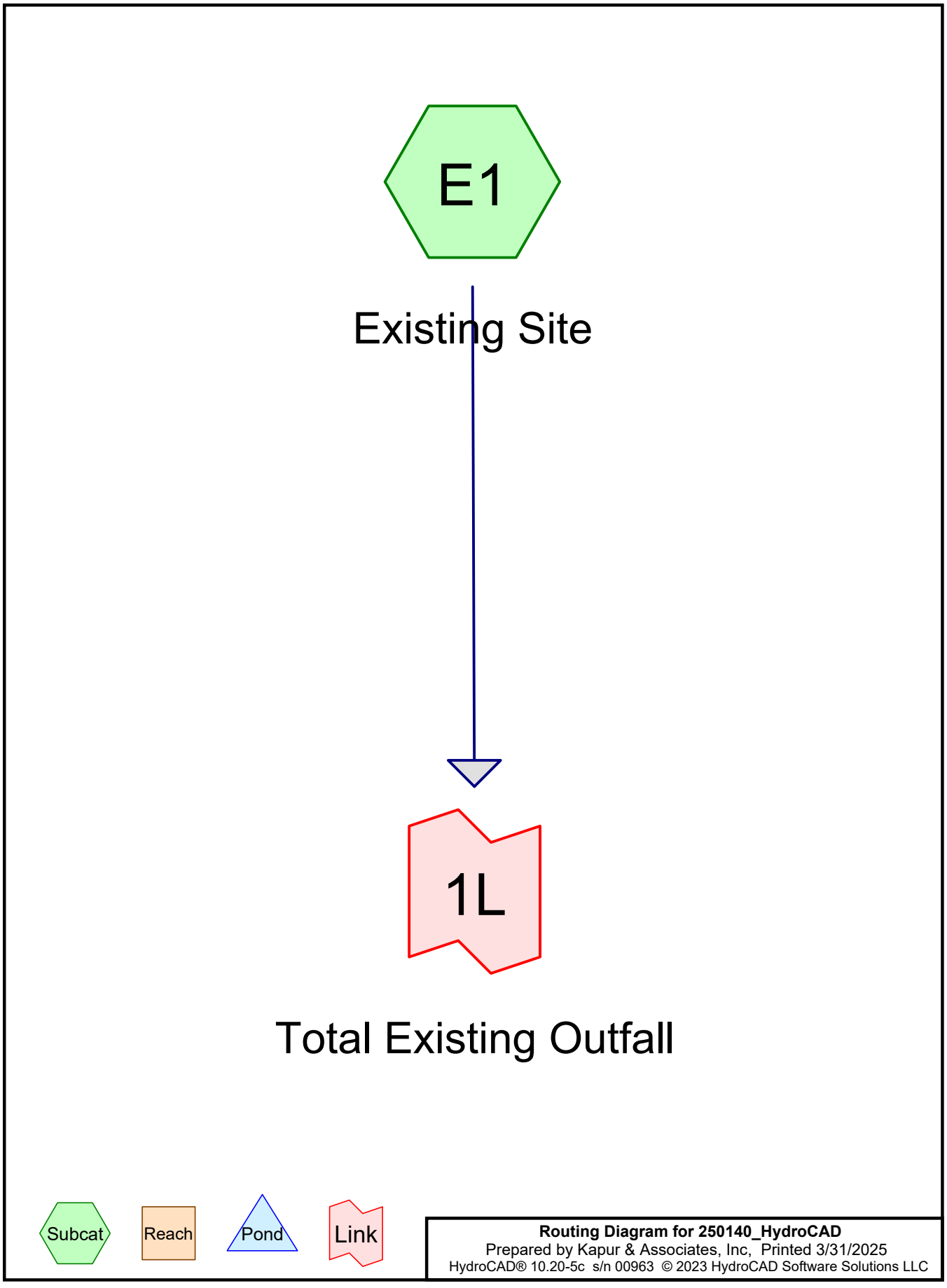
Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Appendix B

HydroCAD Analysis – Pre-Development Conditions


E1
Existing Site
1L
Total Existing Outfall
Subcat
Reach
Pond
Link
Routing Diagram for 250140_HydroCAD
Prepared by Kapur & Associates, Inc, Printed 3/31/2025
HydroCAD® 10.20-5c s/n 00963 © 2023 HydroCAD Software Solutions LLC

Project Notes

Rainfall events imported from "Atlas-14-Rain.txt" for 1254 WI Waukesha
Rainfall events imported from "Atlas-14-Rain.txt" for 1254 WI Waukesha
Rainfall events imported from "Atlas-14-Rain.txt" for 1254 WI Waukesha

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	MSE 24-hr	3	Default	24.00	1	2.40	2
2	2-Year	MSE 24-hr	3	Default	24.00	1	2.70	2
3	10-Year	MSE 24-hr	3	Default	24.00	1	3.81	2
4	100-Year	MSE 24-hr	3	Default	24.00	1	6.18	2

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
763,543	61	>75% Grass cover, Good, HSG B (E1)
156,956	98	Paved parking, HSG B (E1)
157,259	98	Roofs, HSG B (E1)
50,411	98	Sidewalks, HSG B (E1)
1,128,169	**73**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
1,128,169	HSG B	E1
0	HSG C	
0	HSG D	
0	Other	
1,128,169		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Su Nu
0	763,543	0	0	0	763,543	>75% Grass cover, Good	
0	156,956	0	0	0	156,956	Paved parking	
0	157,259	0	0	0	157,259	Roofs	
0	50,411	0	0	0	50,411	Sidewalks	
0	**1,128,169**	**0**	**0**	**0**	**1,128,169**	**TOTAL AREA**	

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	E1	0.00	0.00	36.0	0.0100	0.013	0.0	12.0	0.0	

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment E1: Existing Site Runoff Area=1,128,169 sf 32.32% Impervious Runoff Depth=0.51"
Flow Length=878' Tc=37.3 min CN=73 Runoff=8.84 cfs 48,359 cf

Link 1L: Total Existing Outfall Inflow=8.84 cfs 48,359 cf
Primary=8.84 cfs 48,359 cf

Total Runoff Area = 1,128,169 sf Runoff Volume = 48,359 cf Average Runoff Depth = 0.51"
67.68% Pervious = 763,543 sf 32.32% Impervious = 364,626 sf

Summary for Subcatchment E1: Existing Site

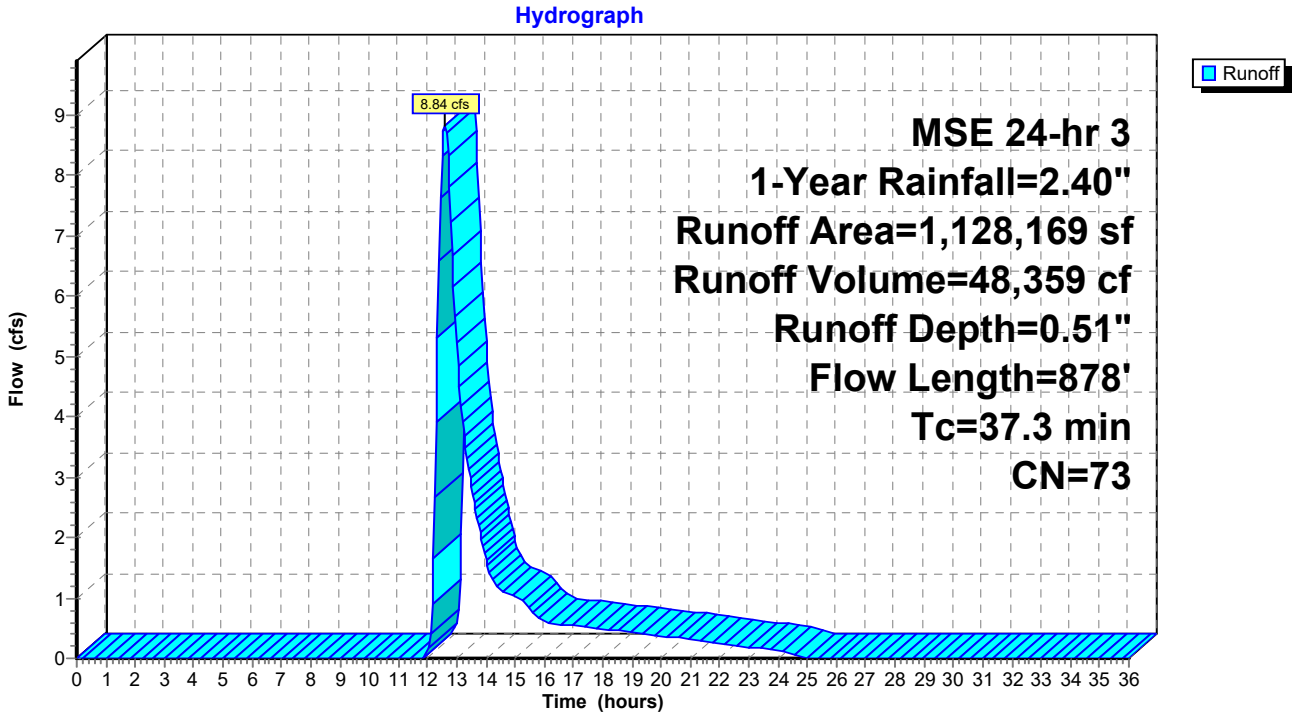
Runoff = 8.84 cfs @ 12.59 hrs, Volume= 48,359 cf, Depth= 0.51"
Routed to Link 1L : Total Existing Outfall

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
	157,259	98	Roofs, HSG B
	156,956	98	Paved parking, HSG B
*	50,411	98	Sidewalks, HSG B
	763,543	61	>75% Grass cover, Good, HSG B
	1,128,169	73	Weighted Average
	763,543		67.68% Pervious Area
	364,626		32.32% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, Pre-developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
2.7	136	0.0147	0.85		**Shallow Concentrated Flow, Pre-Developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
0.1	36	0.0100	4.54	3.56	**Pipe Channel, Pre-Developed Pipe Flow-1** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013
20.4	606	0.0050	0.49		**Shallow Concentrated Flow, Pre-Developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
37.3	878	Total			

Subcatchment E1: Existing Site

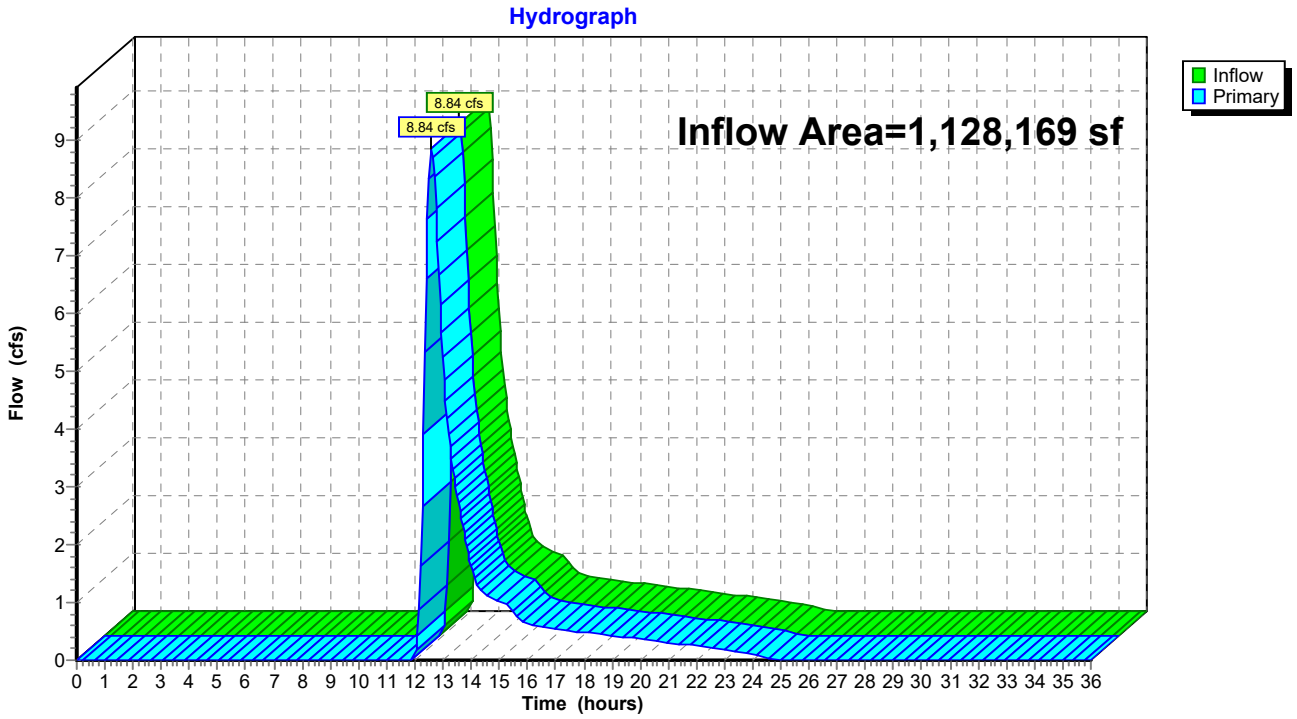


Summary for Link 1L: Total Existing Outfall

Inflow Area = 1,128,169 sf, 32.32% Impervious, Inflow Depth = 0.51" for 1-Year event
Inflow = 8.84 cfs @ 12.59 hrs, Volume= 48,359 cf
Primary = 8.84 cfs @ 12.59 hrs, Volume= 48,359 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Total Existing Outfall



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment E1: Existing Site Runoff Area=1,128,169 sf 32.32% Impervious Runoff Depth=0.68"
Flow Length=878' Tc=37.3 min CN=73 Runoff=12.26 cfs 63,840 cf

Link 1L: Total Existing Outfall Inflow=12.26 cfs 63,840 cf
Primary=12.26 cfs 63,840 cf

Total Runoff Area = 1,128,169 sf Runoff Volume = 63,840 cf Average Runoff Depth = 0.68"
67.68% Pervious = 763,543 sf 32.32% Impervious = 364,626 sf

Summary for Subcatchment E1: Existing Site

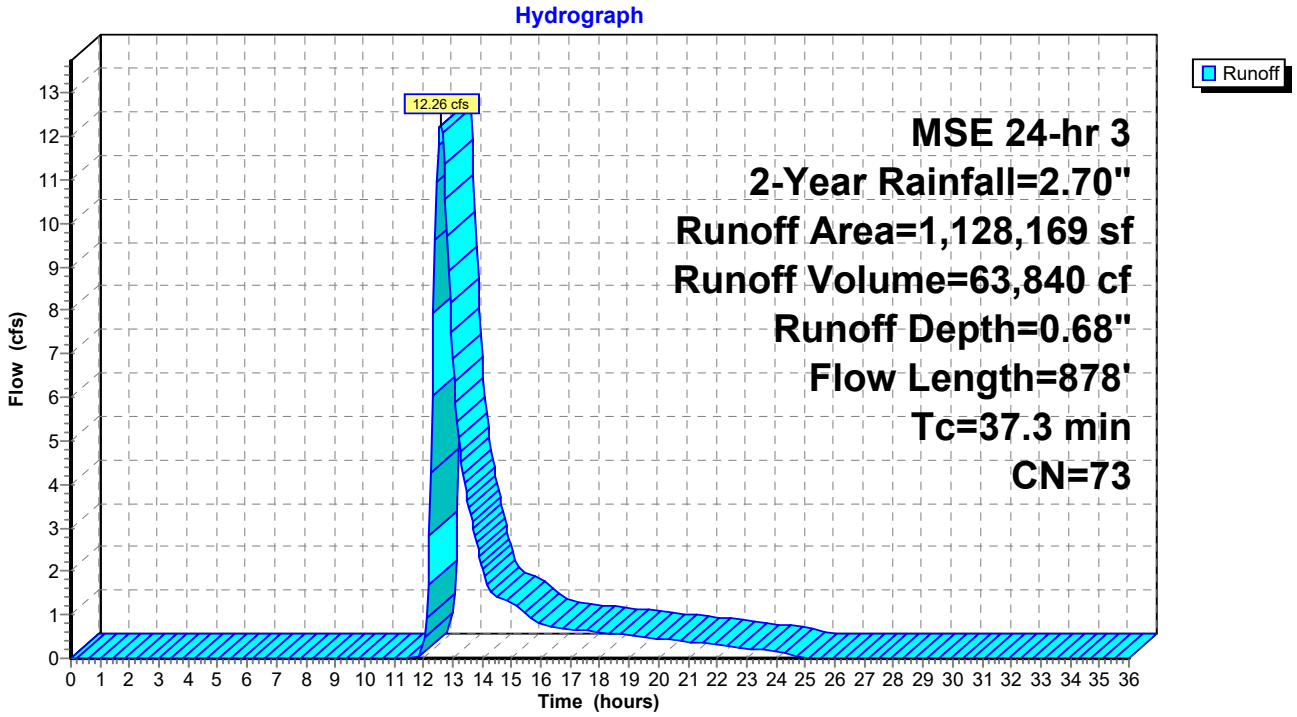
Runoff = 12.26 cfs @ 12.58 hrs, Volume= 63,840 cf, Depth= 0.68"
Routed to Link 1L : Total Existing Outfall

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
	157,259	98	Roofs, HSG B
	156,956	98	Paved parking, HSG B
*	50,411	98	Sidewalks, HSG B
	763,543	61	>75% Grass cover, Good, HSG B
	1,128,169	73	Weighted Average
	763,543		67.68% Pervious Area
	364,626		32.32% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, Pre-developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
2.7	136	0.0147	0.85		**Shallow Concentrated Flow, Pre-Developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
0.1	36	0.0100	4.54	3.56	**Pipe Channel, Pre-Developed Pipe Flow-1** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013
20.4	606	0.0050	0.49		**Shallow Concentrated Flow, Pre-Developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
37.3	878	Total			

Subcatchment E1: Existing Site

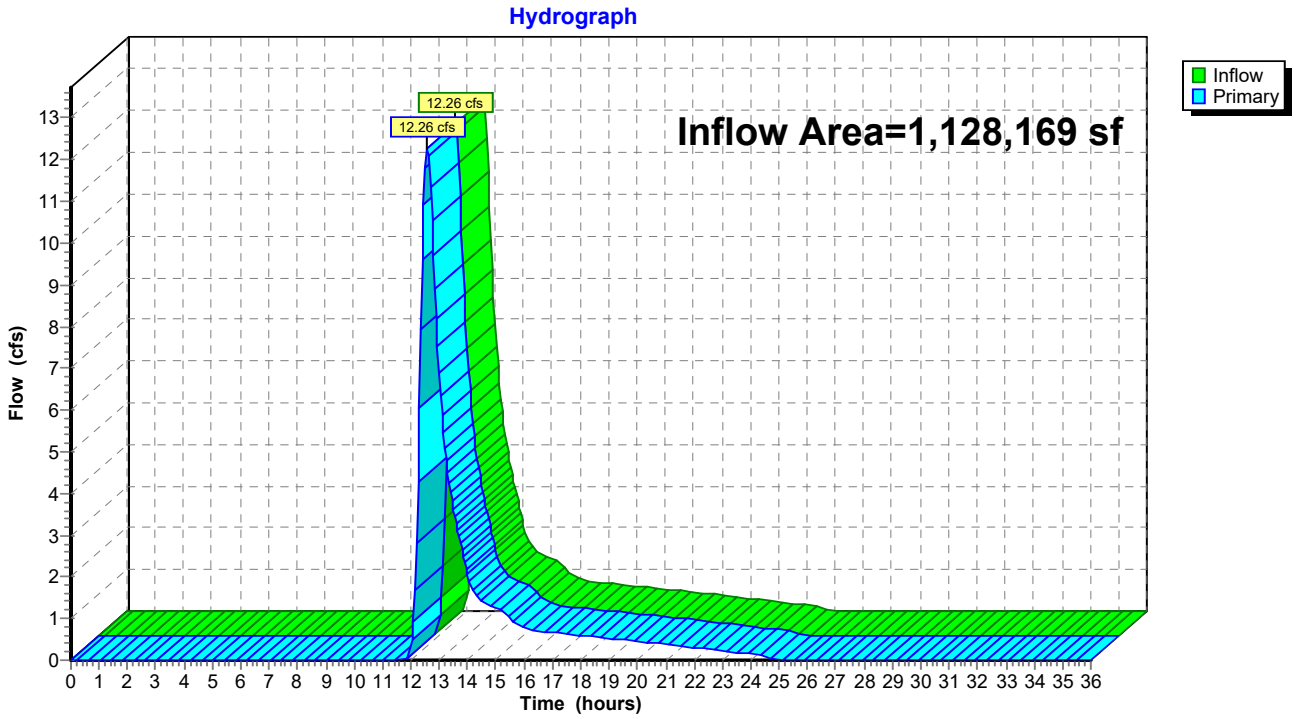


Summary for Link 1L: Total Existing Outfall

Inflow Area = 1,128,169 sf, 32.32% Impervious, Inflow Depth = 0.68" for 2-Year event
Inflow = 12.26 cfs @ 12.58 hrs, Volume= 63,840 cf
Primary = 12.26 cfs @ 12.58 hrs, Volume= 63,840 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Total Existing Outfall



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment E1: Existing Site Runoff Area=1,128,169 sf 32.32% Impervious Runoff Depth=1.39"
Flow Length=878' Tc=37.3 min CN=73 Runoff=27.33 cfs 130,927 cf

Link 1L: Total Existing Outfall Inflow=27.33 cfs 130,927 cf
Primary=27.33 cfs 130,927 cf

Total Runoff Area = 1,128,169 sf Runoff Volume = 130,927 cf Average Runoff Depth = 1.39"
67.68% Pervious = 763,543 sf 32.32% Impervious = 364,626 sf

Summary for Subcatchment E1: Existing Site

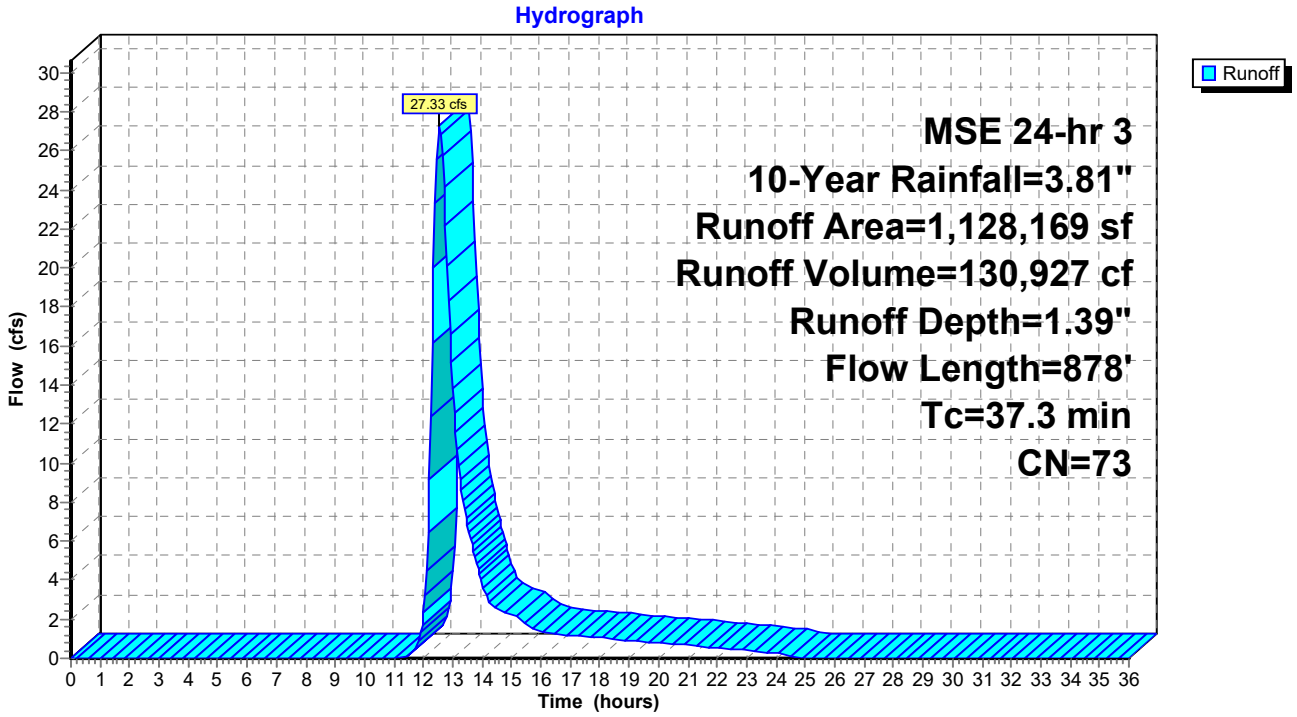
Runoff = 27.33 cfs @ 12.55 hrs, Volume= 130,927 cf, Depth= 1.39"
Routed to Link 1L : Total Existing Outfall

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
	157,259	98	Roofs, HSG B
	156,956	98	Paved parking, HSG B
*	50,411	98	Sidewalks, HSG B
	763,543	61	>75% Grass cover, Good, HSG B
	1,128,169	73	Weighted Average
	763,543		67.68% Pervious Area
	364,626		32.32% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, Pre-developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
2.7	136	0.0147	0.85		**Shallow Concentrated Flow, Pre-Developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
0.1	36	0.0100	4.54	3.56	**Pipe Channel, Pre-Developed Pipe Flow-1** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013
20.4	606	0.0050	0.49		**Shallow Concentrated Flow, Pre-Developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
37.3	878	Total			

Subcatchment E1: Existing Site

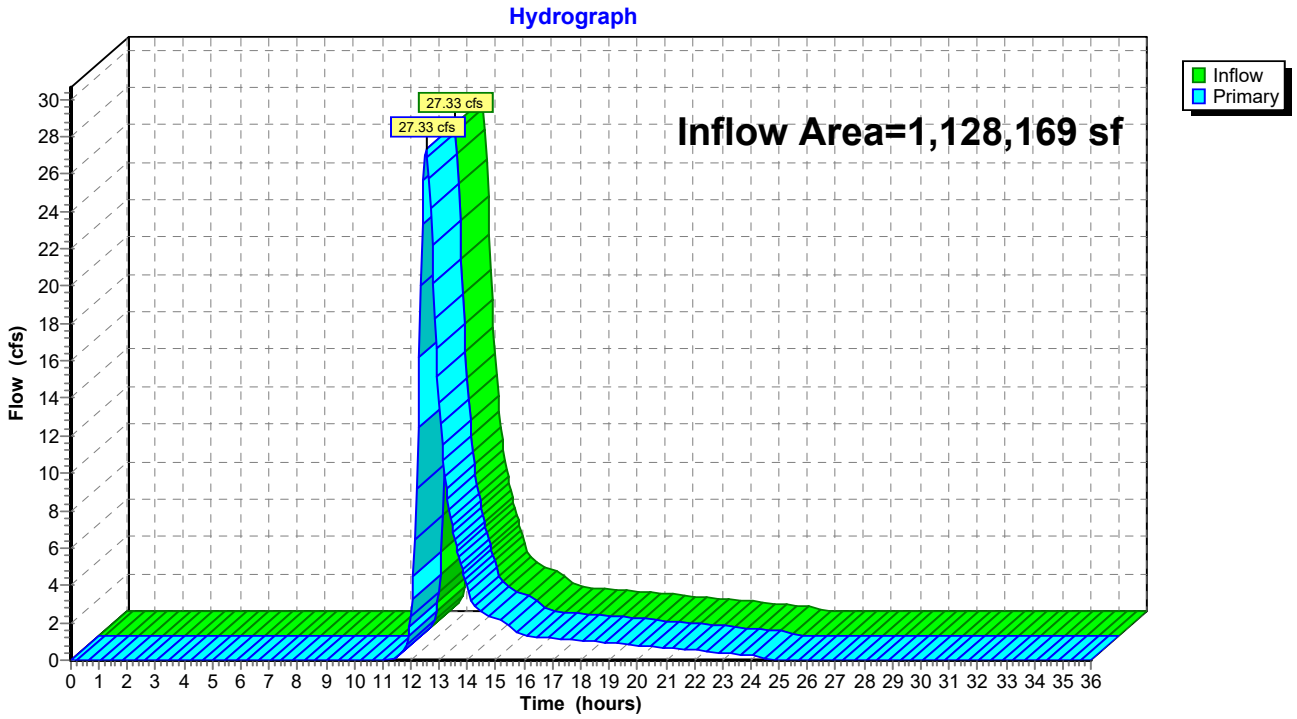


Summary for Link 1L: Total Existing Outfall

Inflow Area = 1,128,169 sf, 32.32% Impervious, Inflow Depth = 1.39" for 10-Year event
Inflow = 27.33 cfs @ 12.55 hrs, Volume= 130,927 cf
Primary = 27.33 cfs @ 12.55 hrs, Volume= 130,927 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Total Existing Outfall



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment E1: Existing Site Runoff Area=1,128,169 sf 32.32% Impervious Runoff Depth=3.24"
Flow Length=878' Tc=37.3 min CN=73 Runoff=65.86 cfs 304,467 cf

Link 1L: Total Existing Outfall Inflow=65.86 cfs 304,467 cf
Primary=65.86 cfs 304,467 cf

Total Runoff Area = 1,128,169 sf Runoff Volume = 304,467 cf Average Runoff Depth = 3.24"
67.68% Pervious = 763,543 sf 32.32% Impervious = 364,626 sf

Summary for Subcatchment E1: Existing Site

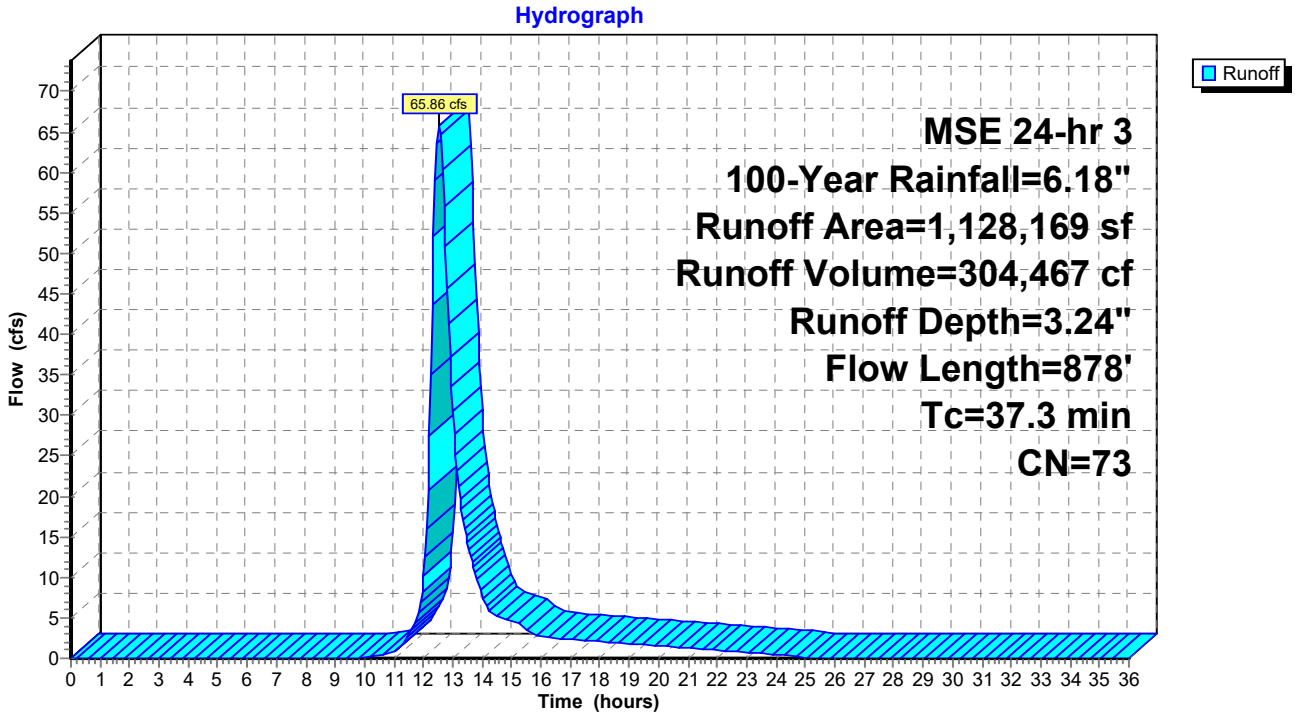
Runoff = 65.86 cfs @ 12.52 hrs, Volume= 304,467 cf, Depth= 3.24"
Routed to Link 1L : Total Existing Outfall

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
	157,259	98	Roofs, HSG B
	156,956	98	Paved parking, HSG B
*	50,411	98	Sidewalks, HSG B
	763,543	61	>75% Grass cover, Good, HSG B
	1,128,169	73	Weighted Average
	763,543		67.68% Pervious Area
	364,626		32.32% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, Pre-developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
2.7	136	0.0147	0.85		**Shallow Concentrated Flow, Pre-Developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
0.1	36	0.0100	4.54	3.56	**Pipe Channel, Pre-Developed Pipe Flow-1** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013
20.4	606	0.0050	0.49		**Shallow Concentrated Flow, Pre-Developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
37.3	878	Total			

Subcatchment E1: Existing Site

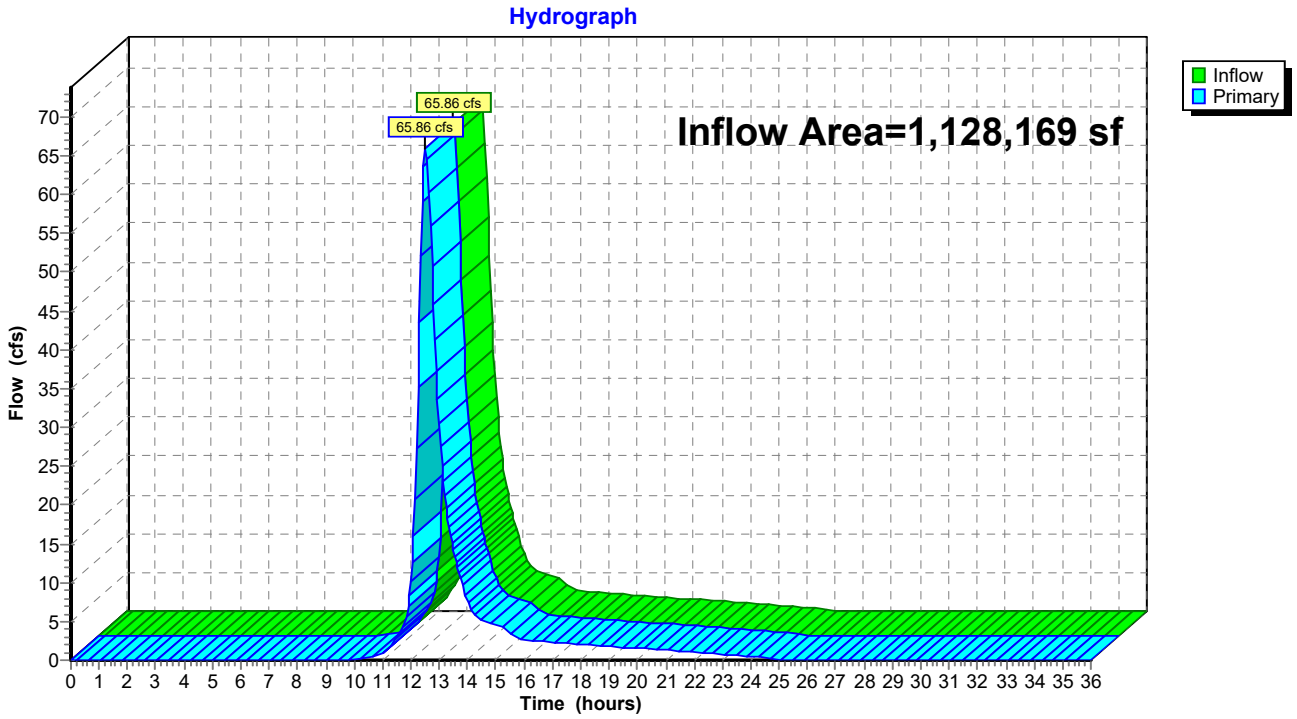


Summary for Link 1L: Total Existing Outfall

Inflow Area = 1,128,169 sf, 32.32% Impervious, Inflow Depth = 3.24" for 100-Year event
Inflow = 65.86 cfs @ 12.52 hrs, Volume= 304,467 cf
Primary = 65.86 cfs @ 12.52 hrs, Volume= 304,467 cf, Atten= 0%, Lag= 0.0 min

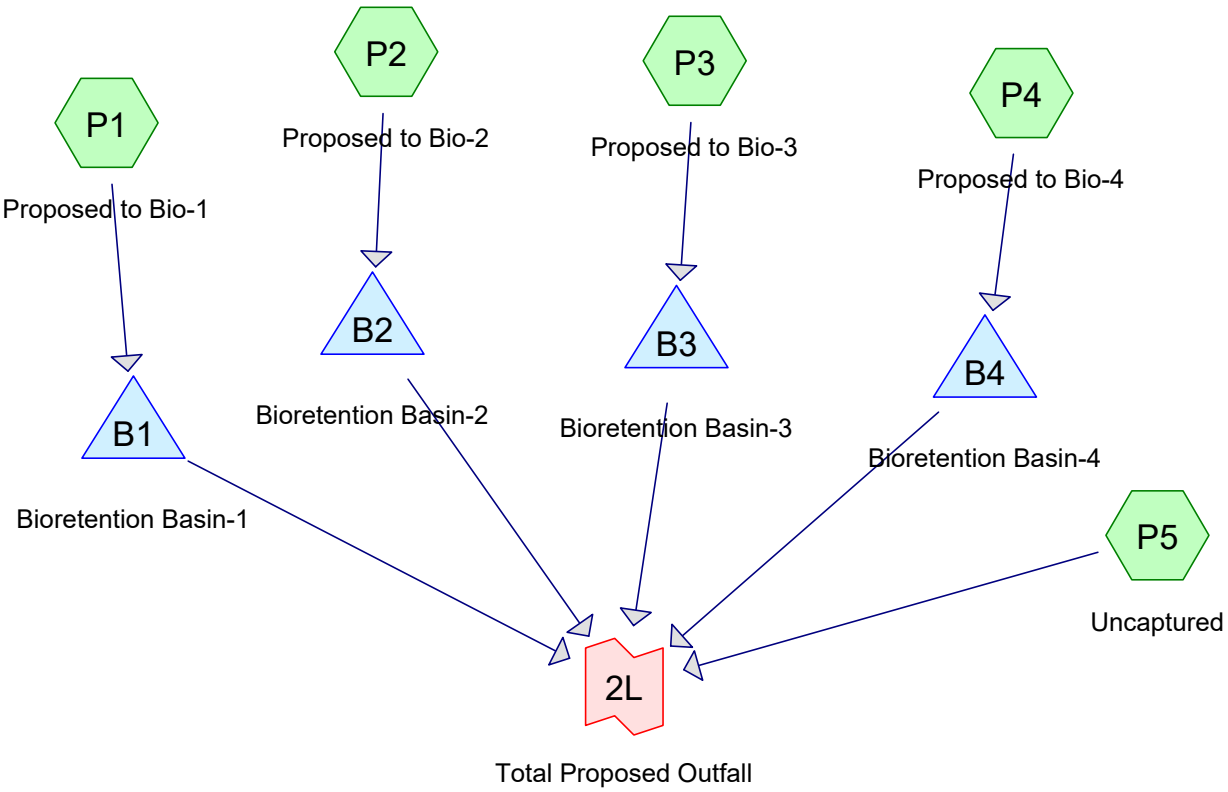
Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Total Existing Outfall



Appendix C

HydroCAD Analysis – Post-Development Conditions



Subcat Reach Pond Link

Routing Diagram for 250140_HydroCAD
Prepared by Kapur & Associates, Inc, Printed 3/31/2025
HydroCAD® 10.20-5c s/n 00963 © 2023 HydroCAD Software Solutions LLC

Project Notes

Rainfall events imported from "Atlas-14-Rain.txt" for 1254 WI Waukesha
Rainfall events imported from "Atlas-14-Rain.txt" for 1254 WI Waukesha
Rainfall events imported from "Atlas-14-Rain.txt" for 1254 WI Waukesha

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
611,745	61	>75% Grass cover, Good, HSG B (P1, P2, P3, P4, P5)
267,418	98	Paved parking, HSG B (P1, P2, P3, P4, P5)
157,510	98	Roofs, HSG B (P2, P3)
91,496	98	Sidewalks, HSG B (P1, P2, P3, P4, P5)
1,128,169	**78**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
1,128,169	HSG B	P1, P2, P3, P4, P5
0	HSG C	
0	HSG D	
0	Other	
1,128,169		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Su Nu
0	611,745	0	0	0	611,745	>75% Grass cover, Good	
0	267,418	0	0	0	267,418	Paved parking	
0	157,510	0	0	0	157,510	Roofs	
0	91,496	0	0	0	91,496	Sidewalks	
0	**1,128,169**	**0**	**0**	**0**	**1,128,169**	**TOTAL AREA**	

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	B1	824.75	824.13	49.7	0.0125	0.010	0.0	8.0	0.0	
2	B2	824.50	824.23	26.6	0.0102	0.012	0.0	10.0	0.0	
3	B3	822.50	820.88	433.6	0.0037	0.010	0.0	10.0	0.0	
4	B4	824.00	823.86	70.6	0.0020	0.010	0.0	10.0	0.0	

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment P1: Proposed to Bio-1 Runoff Area=160,309 sf 53.74% Impervious Runoff Depth=0.87"
Flow Length=347' Tc=14.3 min CN=81 Runoff=4.11 cfs 11,646 cf

Subcatchment P2: Proposed to Bio-2 Runoff Area=105,983 sf 75.37% Impervious Runoff Depth=1.37"
Tc=6.0 min CN=89 Runoff=5.91 cfs 12,079 cf

Subcatchment P3: Proposed to Bio-3 Runoff Area=332,690 sf 58.85% Impervious Runoff Depth=0.98"
Flow Length=150' Tc=10.1 min CN=83 Runoff=11.30 cfs 27,195 cf

Subcatchment P4: Proposed to Bio-4 Runoff Area=410,715 sf 37.19% Impervious Runoff Depth=0.59"
Flow Length=119' Slope=0.0100 '/' Tc=14.6 min CN=75 Runoff=6.62 cfs 20,296 cf

Subcatchment P5: Uncaptured Runoff Area=118,472 sf 1.56% Impervious Runoff Depth=0.19"
Flow Length=186' Slope=0.0100 '/' Tc=15.1 min CN=62 Runoff=0.29 cfs 1,864 cf

Pond B1: Bioretention Basin-1 Peak Elev=826.55' Storage=3,948 cf Inflow=4.11 cfs 11,646 cf
Discarded=0.12 cfs 4,566 cf Primary=1.27 cfs 7,080 cf Outflow=1.39 cfs 11,646 cf

Pond B2: Bioretention Basin-2 Peak Elev=827.75' Storage=3,802 cf Inflow=5.91 cfs 12,079 cf
Discarded=0.08 cfs 1,884 cf Primary=1.64 cfs 10,194 cf Outflow=1.72 cfs 12,079 cf

Pond B3: Bioretention Basin-3 Peak Elev=825.28' Storage=11,829 cf Inflow=11.30 cfs 27,195 cf
Discarded=0.36 cfs 9,099 cf Primary=1.50 cfs 18,097 cf Outflow=1.86 cfs 27,195 cf

Pond B4: Bioretention Basin-4 Peak Elev=826.07' Storage=7,200 cf Inflow=6.62 cfs 20,296 cf
Discarded=0.31 cfs 7,258 cf Primary=1.28 cfs 13,038 cf Outflow=1.59 cfs 20,296 cf

Link 2L: Total Proposed Outfall Inflow=5.89 cfs 50,273 cf
Primary=5.89 cfs 50,273 cf

Total Runoff Area = 1,128,169 sf Runoff Volume = 73,080 cf Average Runoff Depth = 0.78"
54.22% Pervious = 611,745 sf 45.78% Impervious = 516,424 sf

Summary for Subcatchment P1: Proposed to Bio-1

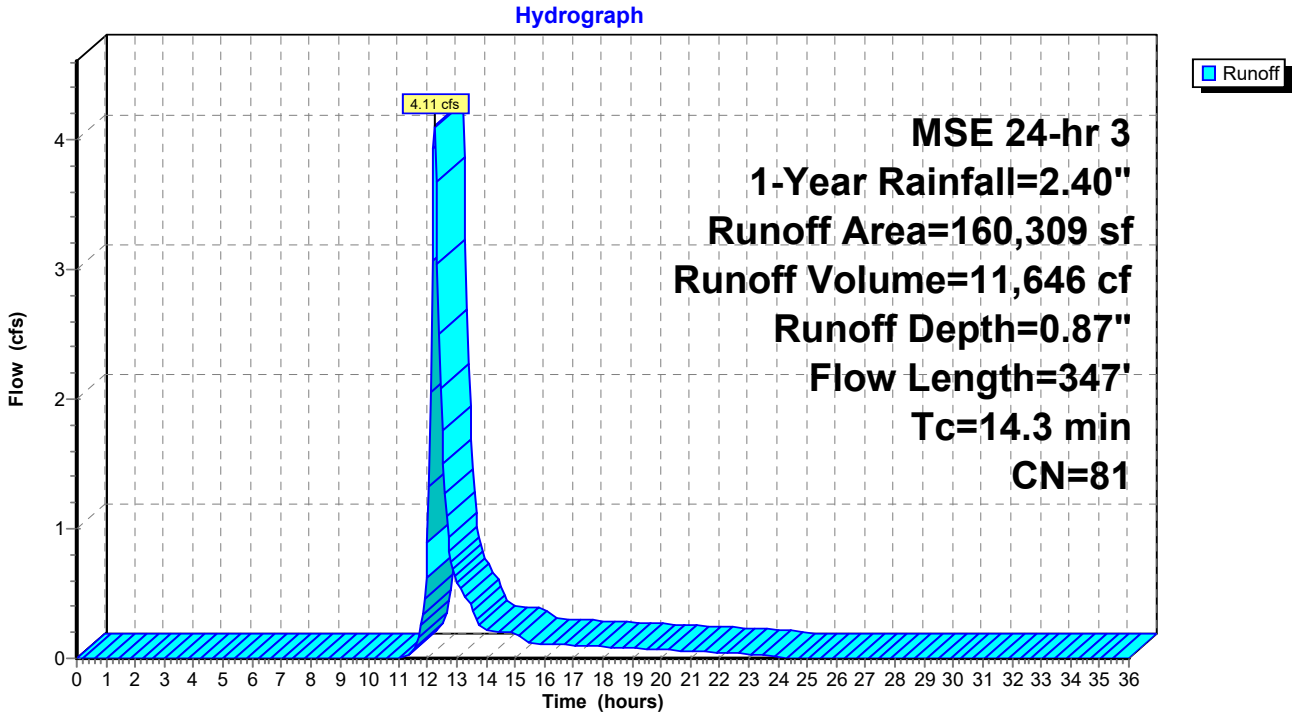
Runoff = 4.11 cfs @ 12.24 hrs, Volume= 11,646 cf, Depth= 0.87"
Routed to Pond B1 : Bioretention Basin-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
	76,705	98	Paved parking, HSG B
*	9,448	98	Sidewalks, HSG B
	74,156	61	>75% Grass cover, Good, HSG B
	160,309	81	Weighted Average
	74,156		46.26% Pervious Area
	86,153		53.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	11	0.0150	0.72		**Sheet Flow, Post-developed Sheet Flow-1** Smooth surfaces n= 0.011 P2= 2.70"
10.4	89	0.0168	0.14		**Sheet Flow, Post-developed Sheet Flow-2** Grass: Short n= 0.150 P2= 2.70"
3.2	194	0.0206	1.00		**Shallow Concentrated Flow, Post-developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
0.4	53	0.1170	2.39		**Shallow Concentrated Flow, ost-developed Shallow Conc. Flow-** Short Grass Pasture Kv= 7.0 fps
14.3	347	Total			

Subcatchment P1: Proposed to Bio-1



Summary for Subcatchment P2: Proposed to Bio-2

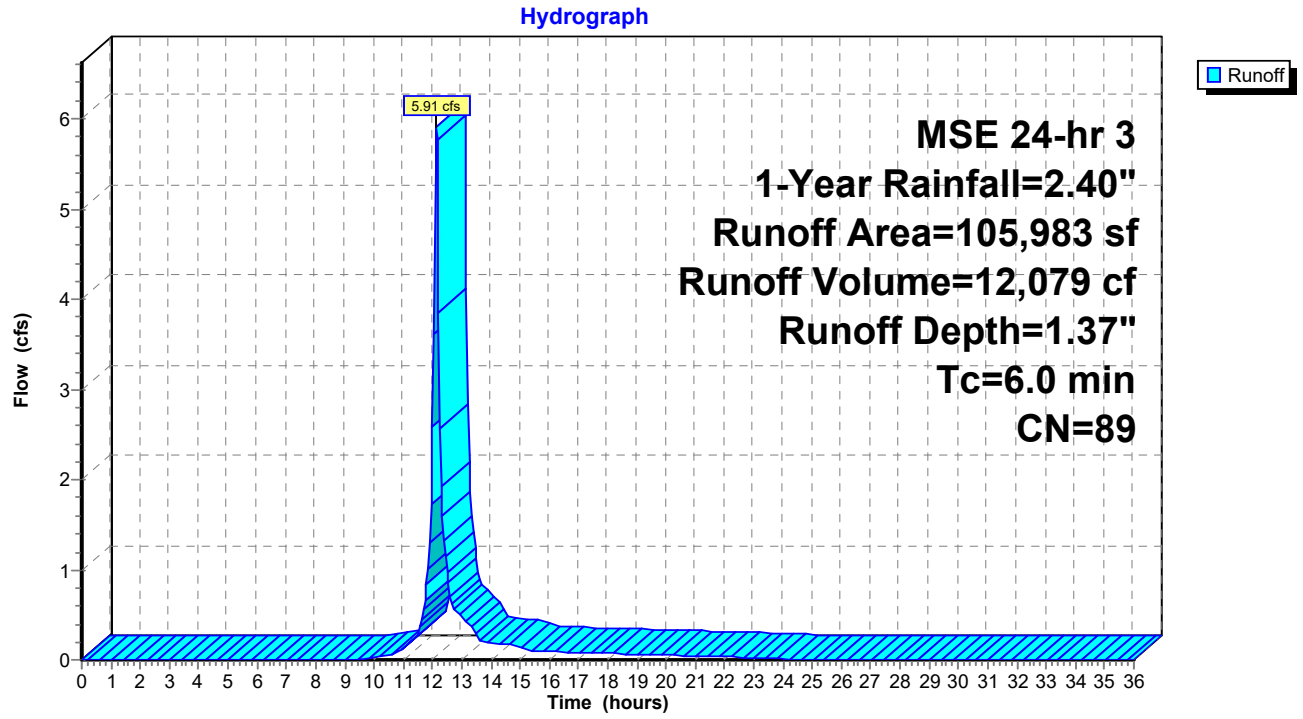
Runoff = 5.91 cfs @ 12.13 hrs, Volume= 12,079 cf, Depth= 1.37"
Routed to Pond B2 : Bioretention Basin-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
	45,039	98	Roofs, HSG B
	29,686	98	Paved parking, HSG B
*	5,153	98	Sidewalks, HSG B
	26,105	61	>75% Grass cover, Good, HSG B
	105,983	89	Weighted Average
	26,105		24.63% Pervious Area
	79,878		75.37% Impervious Area

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

Subcatchment P2: Proposed to Bio-2



Summary for Subcatchment P3: Proposed to Bio-3

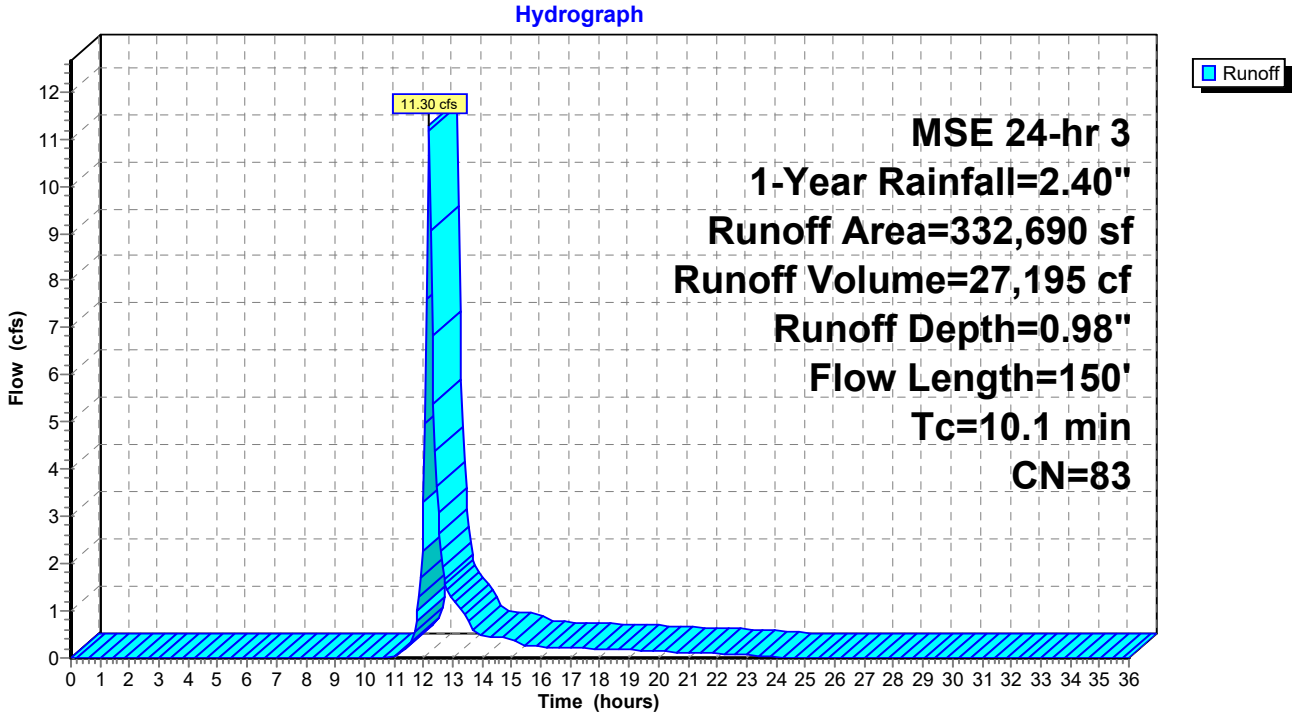
Runoff = 11.30 cfs @ 12.18 hrs, Volume= 27,195 cf, Depth= 0.98"
Routed to Pond B3 : Bioretention Basin-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
	112,471	98	Roofs, HSG B
	67,867	98	Paved parking, HSG B
*	15,465	98	Sidewalks, HSG B
	136,887	61	>75% Grass cover, Good, HSG B
	332,690	83	Weighted Average
	136,887		41.15% Pervious Area
	195,803		58.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8	100	0.0250	0.17		**Sheet Flow, Post-developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
0.3	50	0.1200	2.42		**Shallow Concentrated Flow, Post-developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
10.1	150	Total			

Subcatchment P3: Proposed to Bio-3



Summary for Subcatchment P4: Proposed to Bio-4

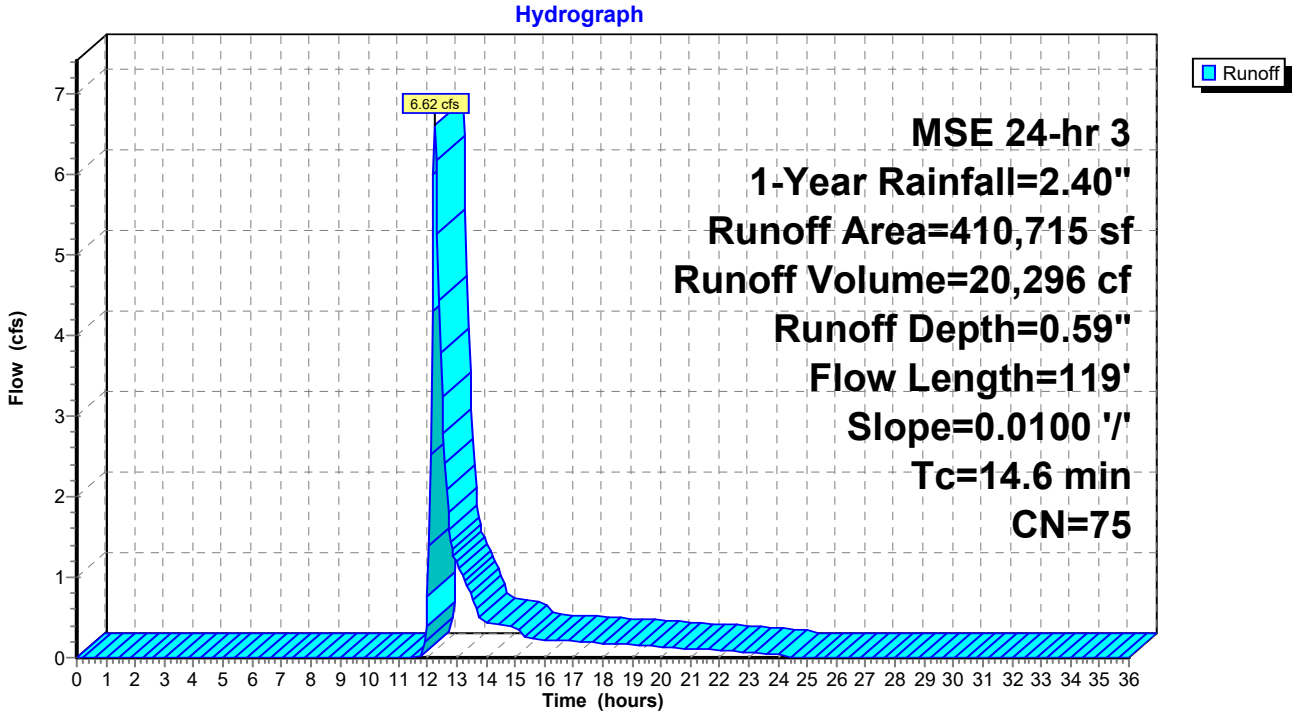
Runoff = 6.62 cfs @ 12.25 hrs, Volume= 20,296 cf, Depth= 0.59"
Routed to Pond B4 : Bioretention Basin-4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
	92,179	98	Paved parking, HSG B
*	60,560	98	Sidewalks, HSG B
	257,976	61	>75% Grass cover, Good, HSG B
	410,715	75	Weighted Average
	257,976		62.81% Pervious Area
	152,739		37.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, Post-Developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
0.5	19	0.0100	0.70		**Shallow Concentrated Flow, Post-Developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
14.6	119	Total			

Subcatchment P4: Proposed to Bio-4



Summary for Subcatchment P5: Uncaptured

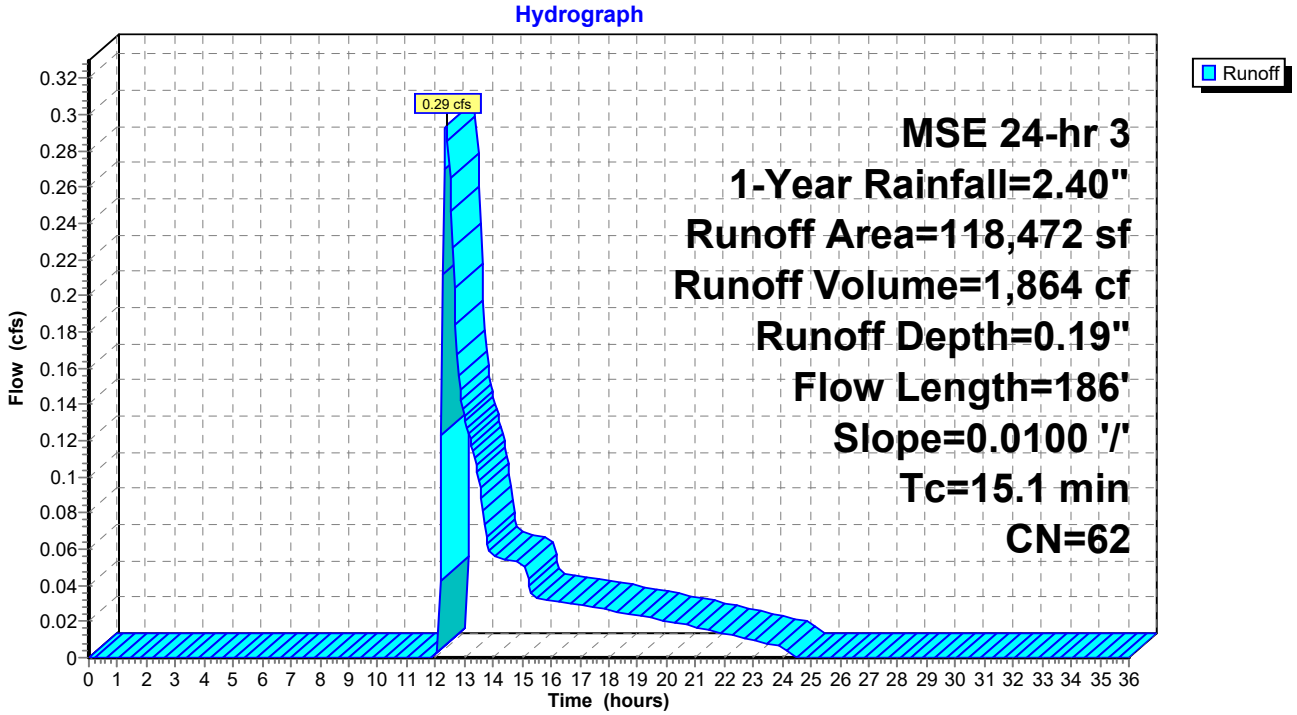
Runoff = 0.29 cfs @ 12.37 hrs, Volume= 1,864 cf, Depth= 0.19"
Routed to Link 2L : Total Proposed Outfall

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
	981	98	Paved parking, HSG B
*	870	98	Sidewalks, HSG B
	116,621	61	>75% Grass cover, Good, HSG B
	118,472	62	Weighted Average
	116,621		98.44% Pervious Area
	1,851		1.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, Post-developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
1.0	86	0.0100	1.50		**Shallow Concentrated Flow, Post-developed Shallow Conc. Flow** Grassed Waterway Kv= 15.0 fps
15.1	186	Total			

Subcatchment P5: Uncaptured



Summary for Pond B1: Bioretention Basin-1

Inflow Area = 160,309 sf, 53.74% Impervious, Inflow Depth = 0.87" for 1-Year event
Inflow = 4.11 cfs @ 12.24 hrs, Volume= 11,646 cf
Outflow = 1.39 cfs @ 12.57 hrs, Volume= 11,646 cf, Atten= 66%, Lag= 20.1 min
Discarded = 0.12 cfs @ 12.57 hrs, Volume= 4,566 cf
Primary = 1.27 cfs @ 12.57 hrs, Volume= 7,080 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 826.55' @ 12.57 hrs Surf.Area= 10,357 sf Storage= 3,948 cf

Plug-Flow detention time= 128.3 min calculated for 11,630 cf (100% of inflow)
Center-of-Mass det. time= 128.9 min (959.8 - 830.9)

Volume	Invert	Avail.Storage	Storage Description
#1	823.25'	1,102 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 3,309 cf Overall x 33.3% Voids
#2	824.25'	1,787 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 6,618 cf Overall x 27.0% Voids
#3	826.25'	24,664 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		27,553 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
823.25	3,309	0	0
824.25	3,309	3,309	3,309

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
824.25	3,309	0	0
826.25	3,309	6,618	6,618

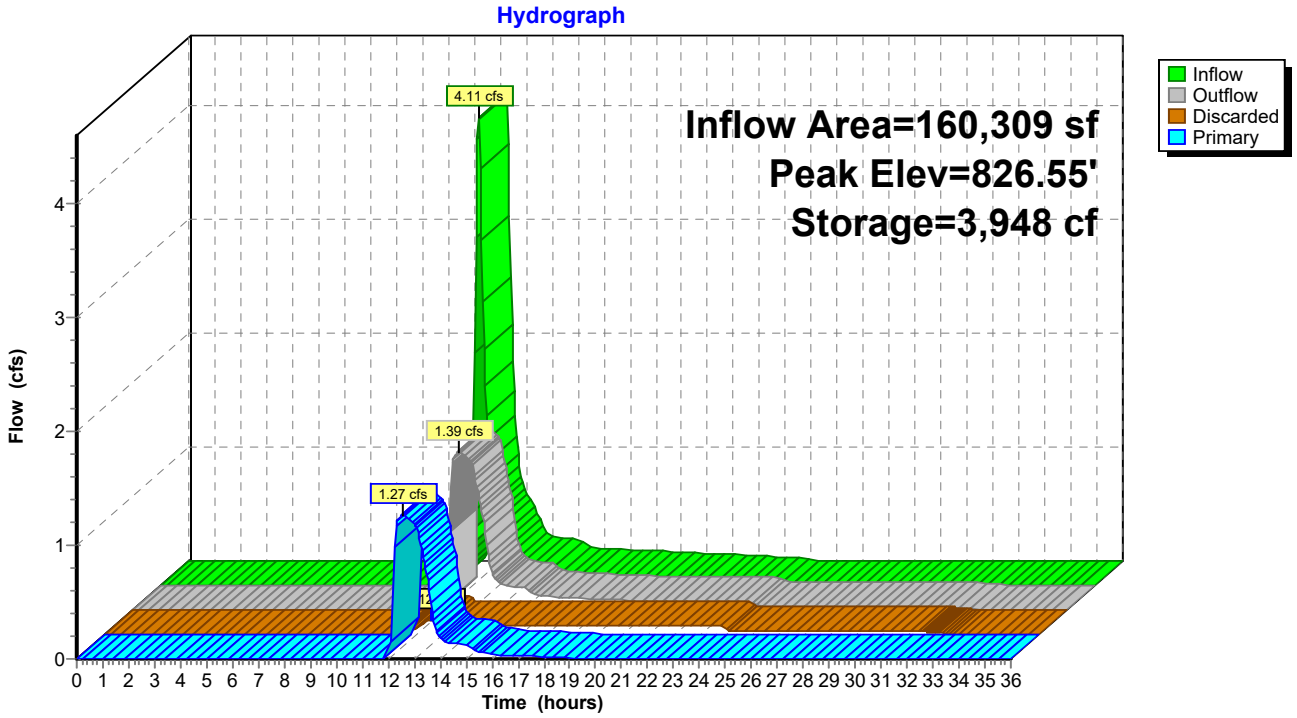
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
826.25	3,309	0	0
830.25	9,023	24,664	24,664

Device	Routing	Invert	Outlet Devices
#1	Primary	824.75'	**8.0" Round 8" Culvert** L= 49.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 824.75' / 824.13' S= 0.0125 '/' Cc= 0.900 n= 0.010, Flow Area= 0.35 sf
#2	Device 1	823.75'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	828.25'	**48.0" Horiz. 48" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	823.25'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.12 cfs @ 12.57 hrs HW=826.55' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.12 cfs)

Primary OutFlow Max=1.27 cfs @ 12.57 hrs HW=826.55' (Free Discharge)
└**1=8" Culvert** (Passes 1.27 cfs of 2.03 cfs potential flow)
└**2=6" Drain Tile** (Orifice Controls 1.27 cfs @ 6.46 fps)
└**3=48" Standpipe** (Controls 0.00 cfs)

Pond B1: Bioretention Basin-1



Summary for Pond B2: Bioretention Basin-2

Inflow Area = 105,983 sf, 75.37% Impervious, Inflow Depth = 1.37" for 1-Year event
Inflow = 5.91 cfs @ 12.13 hrs, Volume= 12,079 cf
Outflow = 1.72 cfs @ 12.33 hrs, Volume= 12,079 cf, Atten= 71%, Lag= 12.0 min
Discarded = 0.08 cfs @ 12.33 hrs, Volume= 1,884 cf
Primary = 1.64 cfs @ 12.33 hrs, Volume= 10,194 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 827.75' @ 12.33 hrs Surf.Area= 7,268 sf Storage= 3,802 cf

Plug-Flow detention time= 47.1 min calculated for 12,062 cf (100% of inflow)
Center-of-Mass det. time= 47.4 min (847.8 - 800.4)

Volume	Invert	Avail.Storage	Storage Description
#1	824.00'	725 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 2,178 cf Overall x 33.3% Voids
#2	825.00'	1,176 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 4,356 cf Overall x 27.0% Voids
#3	827.00'	16,578 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		18,479 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
824.00	2,178	0	0
825.00	2,178	2,178	2,178

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
825.00	2,178	0	0
827.00	2,178	4,356	4,356

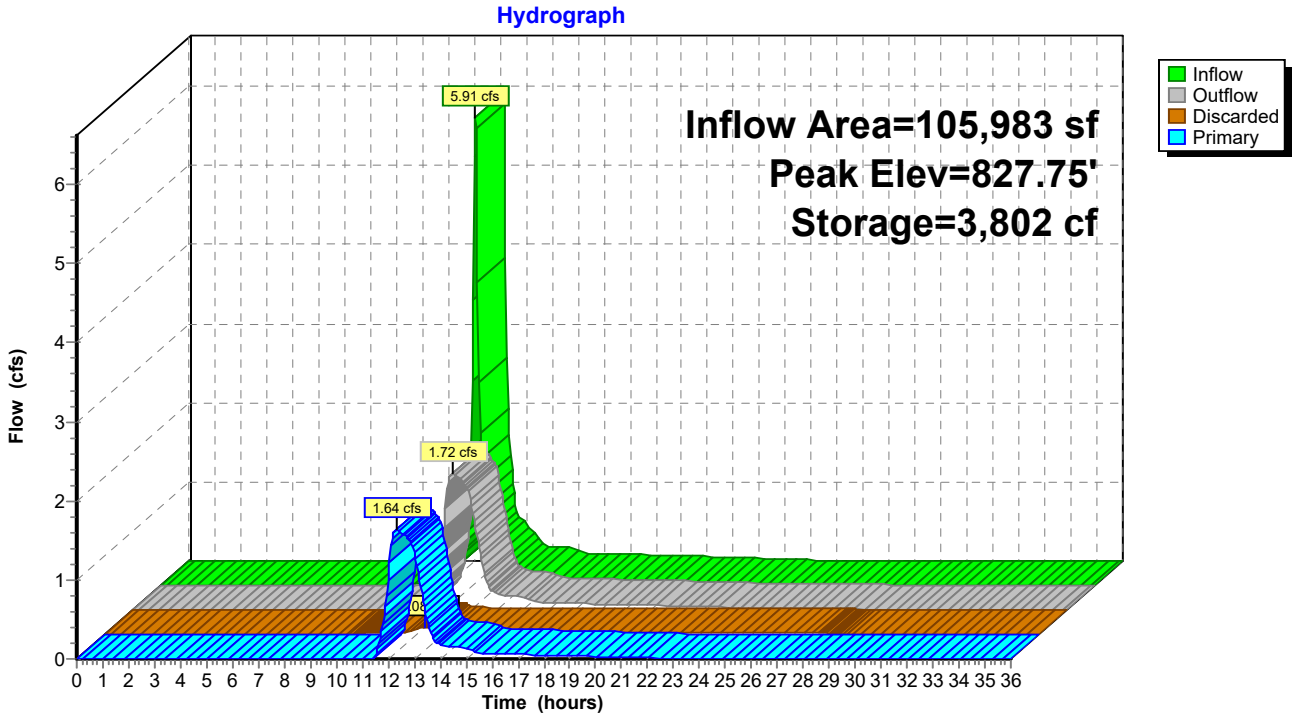
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
827.00	2,178	0	0
831.00	6,111	16,578	16,578

Device	Routing	Invert	Outlet Devices
#1	Primary	824.50'	**10.0" Round 10" Culvert** L= 26.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 824.50' / 824.23' S= 0.0102 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Device 1	824.50'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	829.00'	**36.0" Horiz. 36" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	824.00'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.08 cfs @ 12.33 hrs HW=827.74' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.08 cfs)

Primary OutFlow Max=1.64 cfs @ 12.33 hrs HW=827.74' (Free Discharge)
└**1=10" Culvert** (Passes 1.64 cfs of 4.42 cfs potential flow)
└**2=6" Drain Tile** (Orifice Controls 1.64 cfs @ 8.33 fps)
└**3=36" Standpipe** (Controls 0.00 cfs)

Pond B2: Bioretention Basin-2



Summary for Pond B3: Bioretention Basin-3

Inflow Area = 332,690 sf, 58.85% Impervious, Inflow Depth = 0.98" for 1-Year event
Inflow = 11.30 cfs @ 12.18 hrs, Volume= 27,195 cf
Outflow = 1.86 cfs @ 12.66 hrs, Volume= 27,195 cf, Atten= 83%, Lag= 28.8 min
Discarded = 0.36 cfs @ 12.66 hrs, Volume= 9,099 cf
Primary = 1.50 cfs @ 12.66 hrs, Volume= 18,097 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 825.28' @ 12.66 hrs Surf.Area= 31,145 sf Storage= 11,829 cf

Plug-Flow detention time= 110.2 min calculated for 27,158 cf (100% of inflow)
Center-of-Mass det. time= 110.5 min (931.9 - 821.4)

Volume	Invert	Avail.Storage	Storage Description
#1	822.00'	3,381 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 10,153 cf Overall x 33.3% Voids
#2	823.00'	5,483 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 20,306 cf Overall x 27.0% Voids
#3	825.00'	60,038 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		68,902 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
822.00	10,153	0	0
823.00	10,153	10,153	10,153

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
823.00	10,153	0	0
825.00	10,153	20,306	20,306

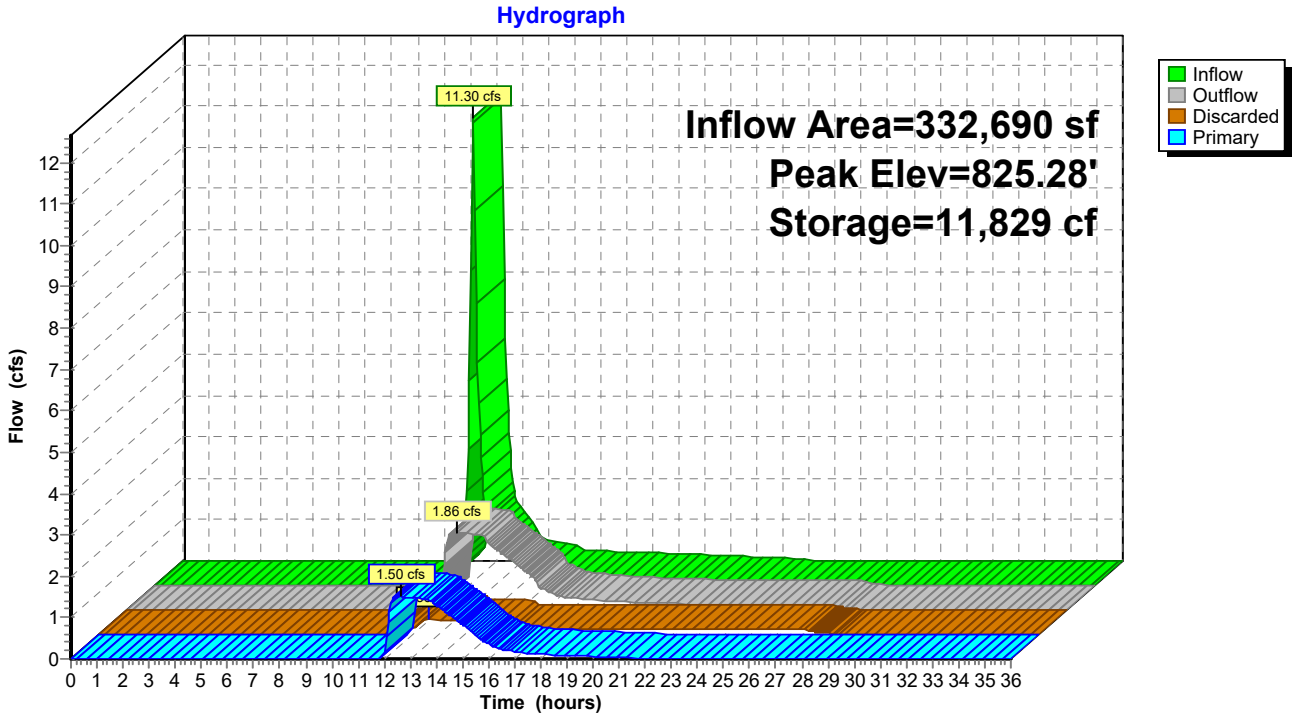
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
825.00	10,153	0	0
829.00	19,866	60,038	60,038

Device	Routing	Invert	Outlet Devices
#1	Primary	822.50'	**10.0" Round 10" Culvert** L= 433.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 822.50' / 820.88' S= 0.0037 '/' Cc= 0.900 n= 0.010, Flow Area= 0.55 sf
#2	Device 1	822.50'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	827.00'	**48.0" Horiz. 48" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	822.00'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.36 cfs @ 12.66 hrs HW=825.28' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.36 cfs)

Primary OutFlow Max=1.50 cfs @ 12.66 hrs HW=825.28' (Free Discharge)
└**1=10" Culvert** (Passes 1.50 cfs of 2.41 cfs potential flow)
└**2=6" Drain Tile** (Orifice Controls 1.50 cfs @ 7.66 fps)
└**3=48" Standpipe** (Controls 0.00 cfs)

Pond B3: Bioretention Basin-3



Summary for Pond B4: Bioretention Basin-4

Inflow Area = 410,715 sf, 37.19% Impervious, Inflow Depth = 0.59" for 1-Year event
Inflow = 6.62 cfs @ 12.25 hrs, Volume= 20,296 cf
Outflow = 1.59 cfs @ 12.76 hrs, Volume= 20,296 cf, Atten= 76%, Lag= 30.1 min
Discarded = 0.31 cfs @ 12.76 hrs, Volume= 7,258 cf
Primary = 1.28 cfs @ 12.76 hrs, Volume= 13,038 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 826.07' @ 12.76 hrs Surf.Area= 26,850 sf Storage= 7,200 cf

Plug-Flow detention time= 106.1 min calculated for 20,296 cf (100% of inflow)
Center-of-Mass det. time= 105.8 min (954.5 - 848.7)

Volume	Invert	Avail.Storage	Storage Description
#1	823.50'	2,962 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 8,894 cf Overall x 33.3% Voids
#2	824.50'	3,602 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 13,341 cf Overall x 27.0% Voids
#3	826.00'	54,570 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		61,134 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
823.50	8,894	0	0
824.50	8,894	8,894	8,894

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
824.50	8,894	0	0
826.00	8,894	13,341	13,341

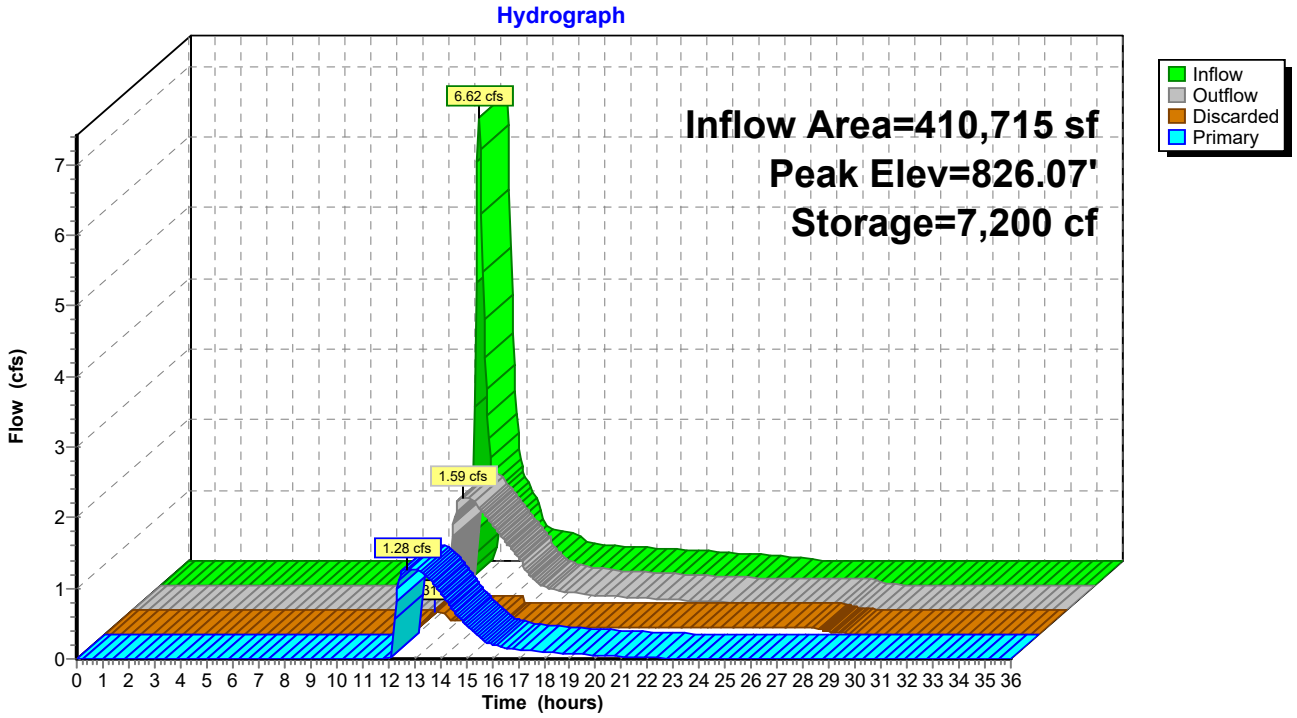
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
826.00	8,894	0	0
830.00	18,391	54,570	54,570

Device	Routing	Invert	Outlet Devices
#1	Primary	824.00'	**10.0" Round 10" Culvert** L= 70.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 824.00' / 823.86' S= 0.0020 '/' Cc= 0.900 n= 0.010, Flow Area= 0.55 sf
#2	Device 1	824.00'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	828.00'	**48.0" Horiz. 48" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	823.50'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.31 cfs @ 12.76 hrs HW=826.07' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.31 cfs)

Primary OutFlow Max=1.28 cfs @ 12.76 hrs HW=826.07' (Free Discharge)
└**1=10" Culvert** (Passes 1.28 cfs of 2.88 cfs potential flow)
└**2=6" Drain Tile** (Orifice Controls 1.28 cfs @ 6.50 fps)
└**3=48" Standpipe** (Controls 0.00 cfs)

Pond B4: Bioretention Basin-4

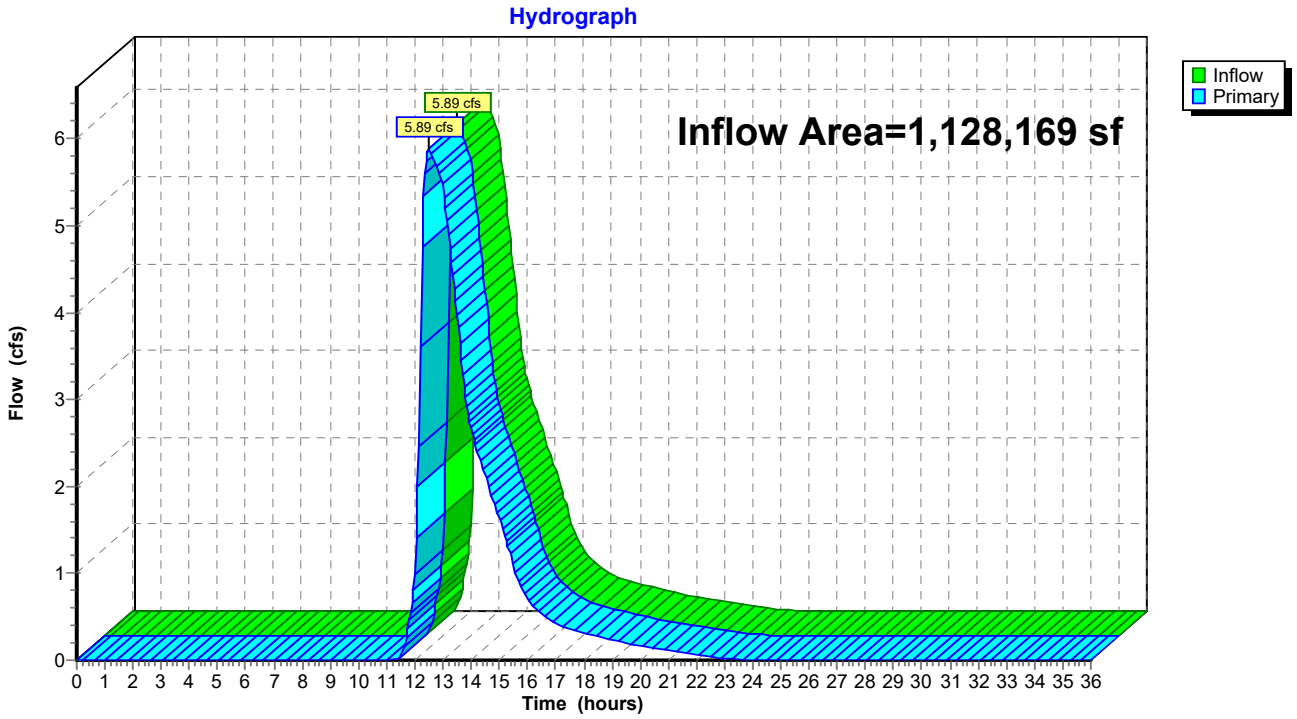


Summary for Link 2L: Total Proposed Outfall

Inflow Area = 1,128,169 sf, 45.78% Impervious, Inflow Depth = 0.53" for 1-Year event
Inflow = 5.89 cfs @ 12.52 hrs, Volume= 50,273 cf
Primary = 5.89 cfs @ 12.52 hrs, Volume= 50,273 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Total Proposed Outfall



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment P1: Proposed to Bio-1 Runoff Area=160,309 sf 53.74% Impervious Runoff Depth=1.09"
Flow Length=347' Tc=14.3 min CN=81 Runoff=5.18 cfs 14,527 cf

Subcatchment P2: Proposed to Bio-2 Runoff Area=105,983 sf 75.37% Impervious Runoff Depth=1.63"
Tc=6.0 min CN=89 Runoff=7.01 cfs 14,405 cf

Subcatchment P3: Proposed to Bio-3 Runoff Area=332,690 sf 58.85% Impervious Runoff Depth=1.21"
Flow Length=150' Tc=10.1 min CN=83 Runoff=13.98 cfs 33,521 cf

Subcatchment P4: Proposed to Bio-4 Runoff Area=410,715 sf 37.19% Impervious Runoff Depth=0.77"
Flow Length=119' Slope=0.0100 '/' Tc=14.6 min CN=75 Runoff=8.91 cfs 26,368 cf

Subcatchment P5: Uncaptured Runoff Area=118,472 sf 1.56% Impervious Runoff Depth=0.29"
Flow Length=186' Slope=0.0100 '/' Tc=15.1 min CN=62 Runoff=0.58 cfs 2,822 cf

Pond B1: Bioretention Basin-1 Peak Elev=826.89' Storage=5,297 cf Inflow=5.18 cfs 14,527 cf
Discarded=0.13 cfs 4,835 cf Primary=1.38 cfs 9,693 cf Outflow=1.51 cfs 14,527 cf

Pond B2: Bioretention Basin-2 Peak Elev=828.06' Storage=4,749 cf Inflow=7.01 cfs 14,405 cf
Discarded=0.09 cfs 2,002 cf Primary=1.72 cfs 12,403 cf Outflow=1.81 cfs 14,405 cf

Pond B3: Bioretention Basin-3 Peak Elev=825.60' Storage=15,433 cf Inflow=13.98 cfs 33,521 cf
Discarded=0.37 cfs 10,167 cf Primary=1.60 cfs 23,355 cf Outflow=1.97 cfs 33,521 cf

Pond B4: Bioretention Basin-4 Peak Elev=826.40' Storage=10,309 cf Inflow=8.91 cfs 26,368 cf
Discarded=0.32 cfs 8,240 cf Primary=1.39 cfs 18,127 cf Outflow=1.71 cfs 26,368 cf

Link 2L: Total Proposed Outfall Inflow=6.46 cfs 66,400 cf
Primary=6.46 cfs 66,400 cf

Total Runoff Area = 1,128,169 sf Runoff Volume = 91,643 cf Average Runoff Depth = 0.97"
54.22% Pervious = 611,745 sf 45.78% Impervious = 516,424 sf

Summary for Subcatchment P1: Proposed to Bio-1

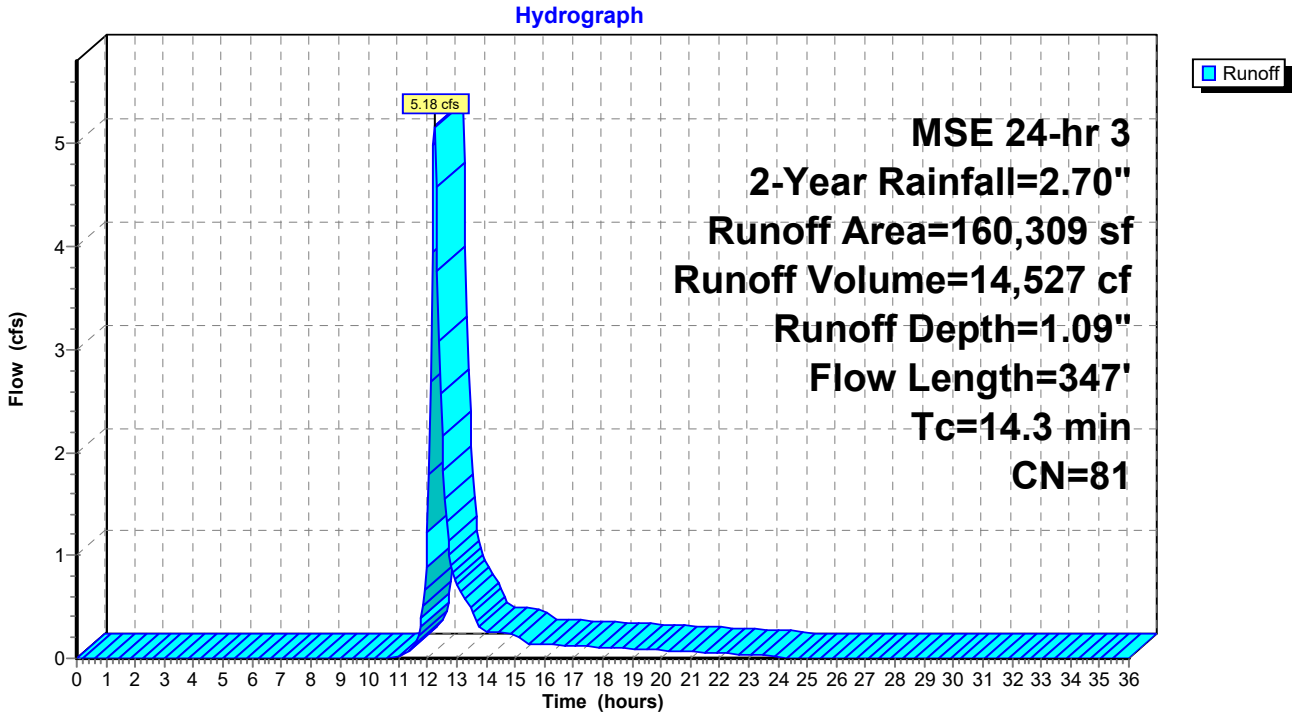
Runoff = 5.18 cfs @ 12.24 hrs, Volume= 14,527 cf, Depth= 1.09"
Routed to Pond B1 : Bioretention Basin-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
	76,705	98	Paved parking, HSG B
*	9,448	98	Sidewalks, HSG B
	74,156	61	>75% Grass cover, Good, HSG B
	160,309	81	Weighted Average
	74,156		46.26% Pervious Area
	86,153		53.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	11	0.0150	0.72		**Sheet Flow, Post-developed Sheet Flow-1** Smooth surfaces n= 0.011 P2= 2.70"
10.4	89	0.0168	0.14		**Sheet Flow, Post-developed Sheet Flow-2** Grass: Short n= 0.150 P2= 2.70"
3.2	194	0.0206	1.00		**Shallow Concentrated Flow, Post-developed Shallow Conc. Flov** Short Grass Pasture Kv= 7.0 fps
0.4	53	0.1170	2.39		**Shallow Concentrated Flow, ost-developed Shallow Conc. Flow-** Short Grass Pasture Kv= 7.0 fps
14.3	347	Total			

Subcatchment P1: Proposed to Bio-1



Summary for Subcatchment P2: Proposed to Bio-2

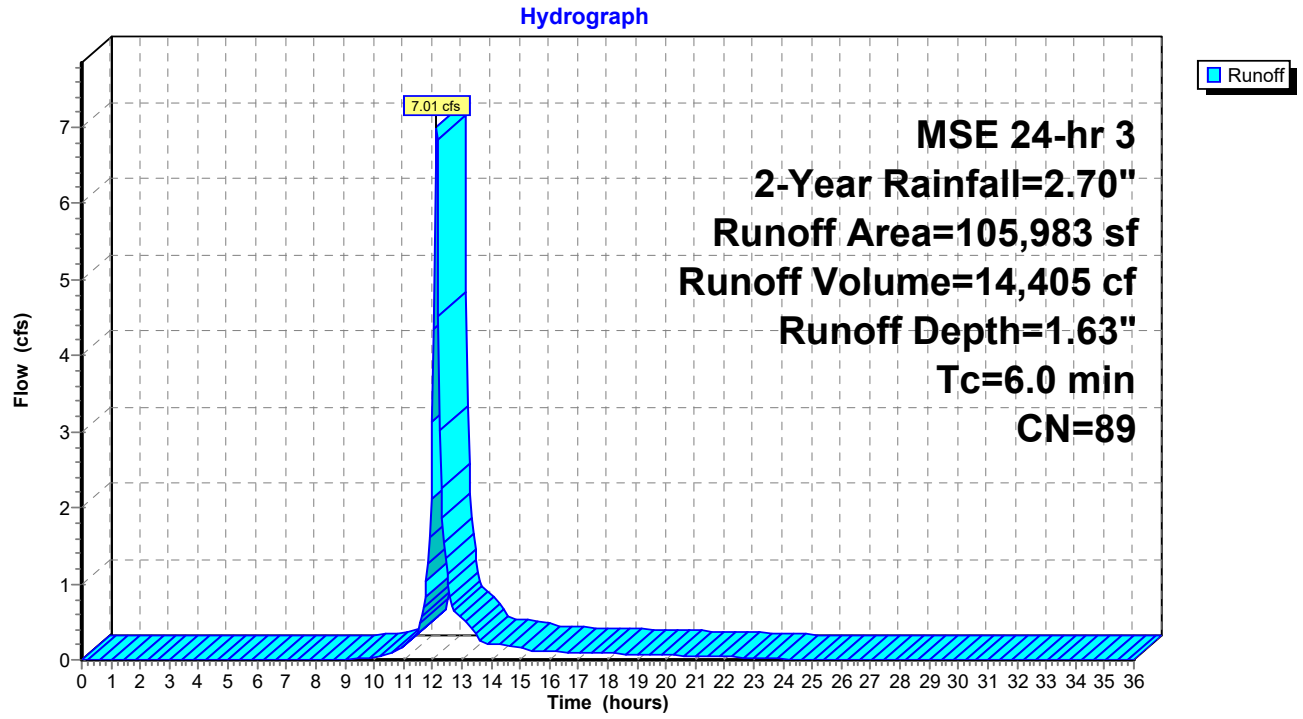
Runoff = 7.01 cfs @ 12.13 hrs, Volume= 14,405 cf, Depth= 1.63"
Routed to Pond B2 : Bioretention Basin-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
	45,039	98	Roofs, HSG B
	29,686	98	Paved parking, HSG B
*	5,153	98	Sidewalks, HSG B
	26,105	61	>75% Grass cover, Good, HSG B
	105,983	89	Weighted Average
	26,105		24.63% Pervious Area
	79,878		75.37% Impervious Area

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

Subcatchment P2: Proposed to Bio-2



Summary for Subcatchment P3: Proposed to Bio-3

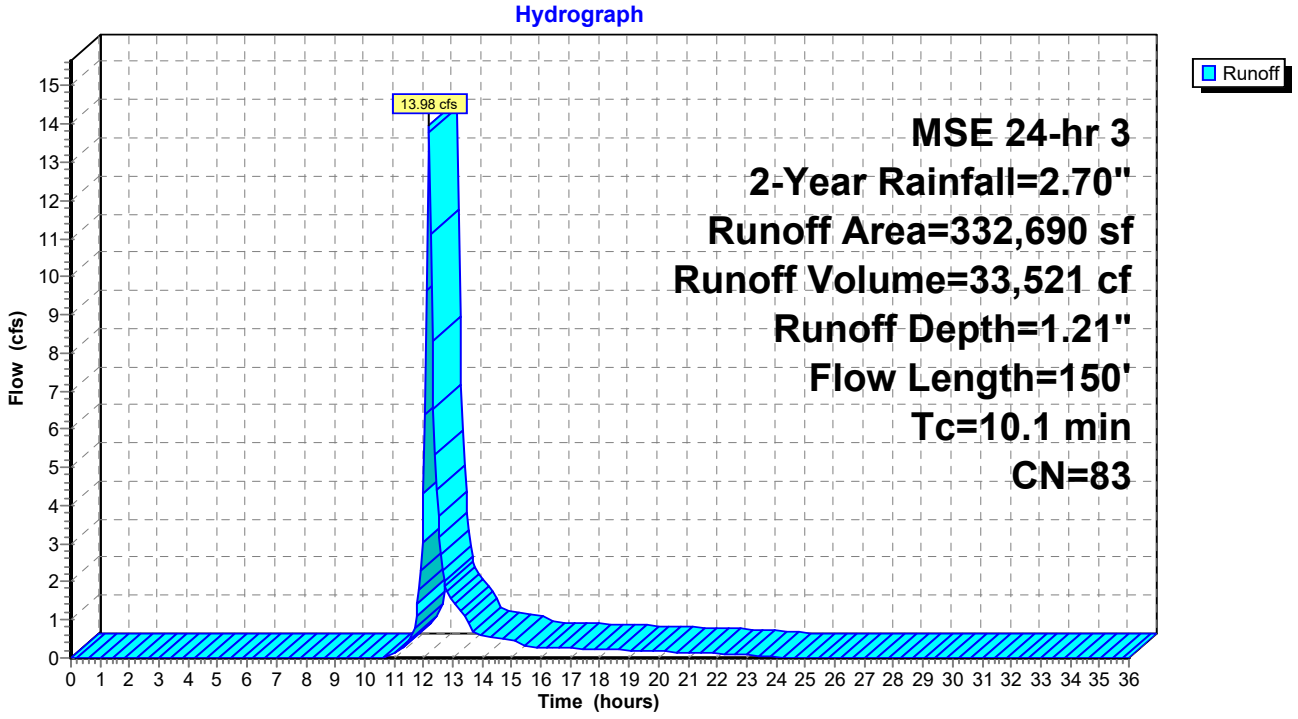
Runoff = 13.98 cfs @ 12.18 hrs, Volume= 33,521 cf, Depth= 1.21"
Routed to Pond B3 : Bioretention Basin-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
	112,471	98	Roofs, HSG B
	67,867	98	Paved parking, HSG B
*	15,465	98	Sidewalks, HSG B
	136,887	61	>75% Grass cover, Good, HSG B
	332,690	83	Weighted Average
	136,887		41.15% Pervious Area
	195,803		58.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8	100	0.0250	0.17		**Sheet Flow, Post-developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
0.3	50	0.1200	2.42		**Shallow Concentrated Flow, Post-developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
10.1	150	Total			

Subcatchment P3: Proposed to Bio-3



Summary for Subcatchment P4: Proposed to Bio-4

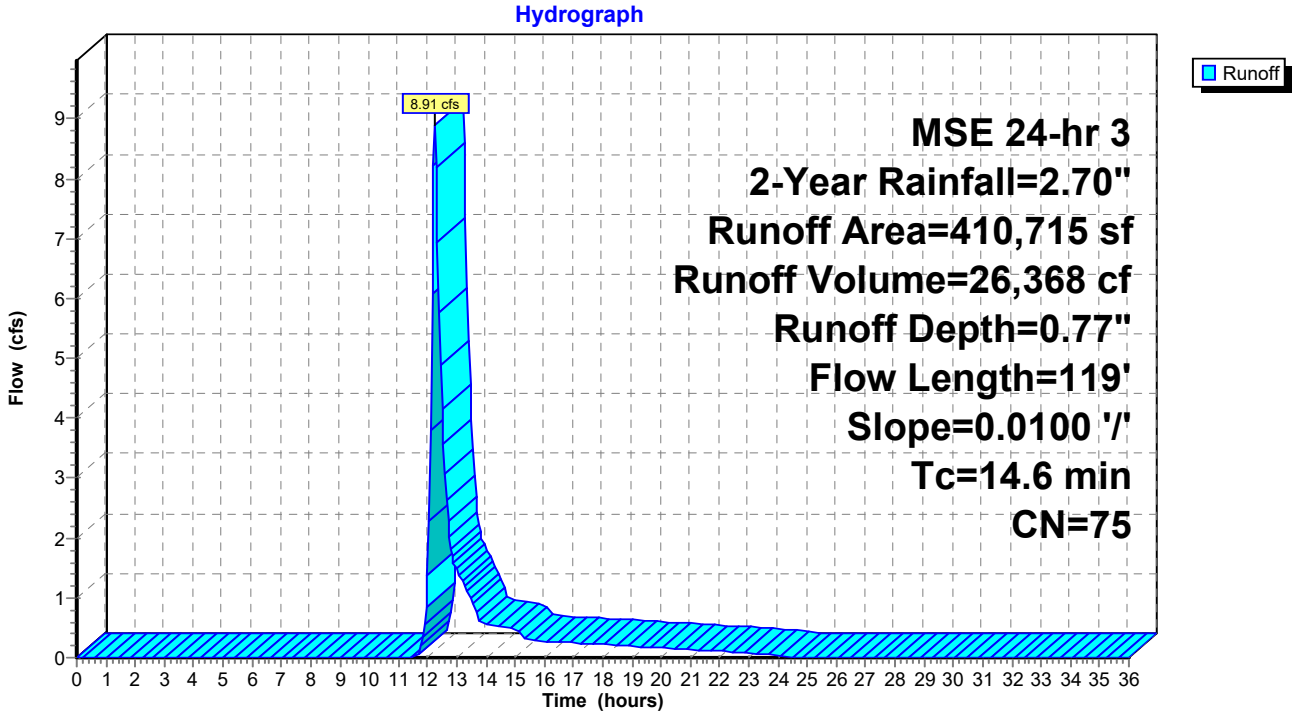
Runoff = 8.91 cfs @ 12.25 hrs, Volume= 26,368 cf, Depth= 0.77"
Routed to Pond B4 : Bioretention Basin-4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
	92,179	98	Paved parking, HSG B
*	60,560	98	Sidewalks, HSG B
	257,976	61	>75% Grass cover, Good, HSG B
	410,715	75	Weighted Average
	257,976		62.81% Pervious Area
	152,739		37.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, Post-Developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
0.5	19	0.0100	0.70		**Shallow Concentrated Flow, Post-Developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
14.6	119	Total			

Subcatchment P4: Proposed to Bio-4



Summary for Subcatchment P5: Uncaptured

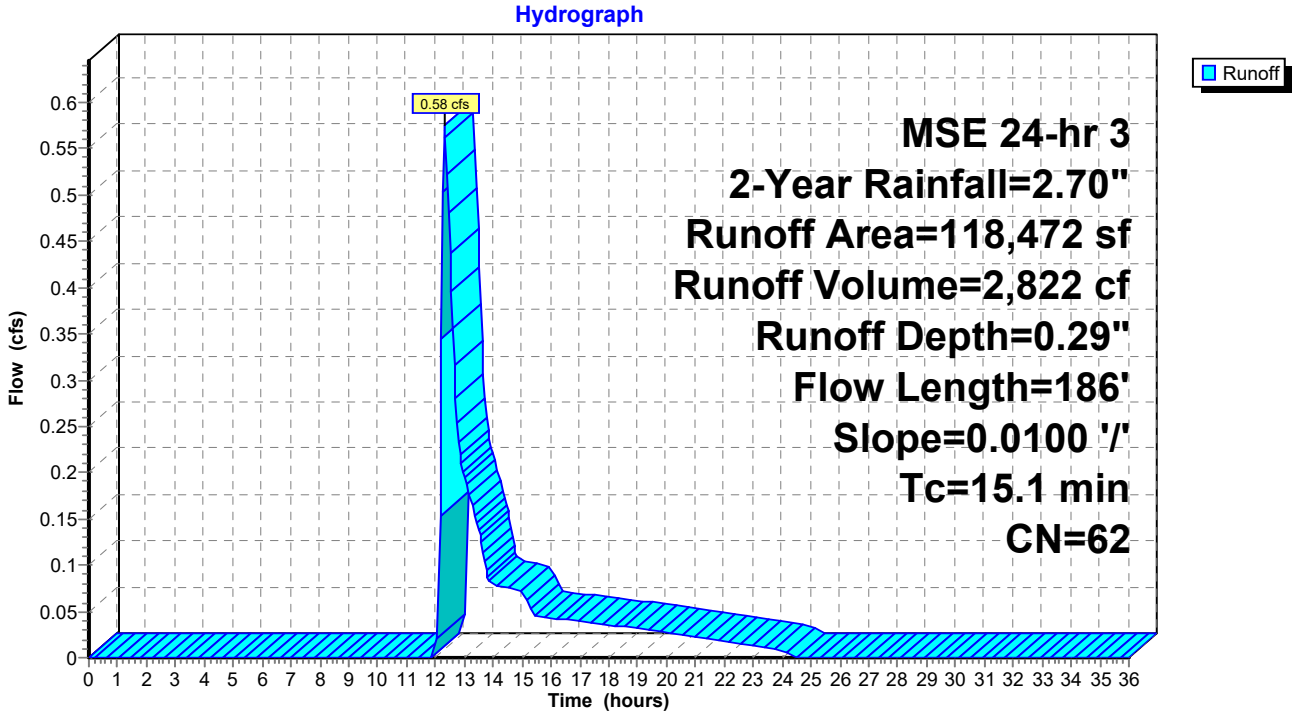
Runoff = 0.58 cfs @ 12.32 hrs, Volume= 2,822 cf, Depth= 0.29"
Routed to Link 2L : Total Proposed Outfall

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
	981	98	Paved parking, HSG B
*	870	98	Sidewalks, HSG B
	116,621	61	>75% Grass cover, Good, HSG B
	118,472	62	Weighted Average
	116,621		98.44% Pervious Area
	1,851		1.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, Post-developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
1.0	86	0.0100	1.50		**Shallow Concentrated Flow, Post-developed Shallow Conc. Flow** Grassed Waterway Kv= 15.0 fps
15.1	186	Total			

Subcatchment P5: Uncaptured



Summary for Pond B1: Bioretention Basin-1

Inflow Area = 160,309 sf, 53.74% Impervious, Inflow Depth = 1.09" for 2-Year event
Inflow = 5.18 cfs @ 12.24 hrs, Volume= 14,527 cf
Outflow = 1.51 cfs @ 12.61 hrs, Volume= 14,527 cf, Atten= 71%, Lag= 22.5 min
Discarded = 0.13 cfs @ 12.61 hrs, Volume= 4,835 cf
Primary = 1.38 cfs @ 12.61 hrs, Volume= 9,693 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 826.89' @ 12.61 hrs Surf.Area= 10,840 sf Storage= 5,297 cf

Plug-Flow detention time= 116.4 min calculated for 14,527 cf (100% of inflow)
Center-of-Mass det. time= 116.3 min (942.3 - 826.0)

Volume	Invert	Avail.Storage	Storage Description
#1	823.25'	1,102 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 3,309 cf Overall x 33.3% Voids
#2	824.25'	1,787 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 6,618 cf Overall x 27.0% Voids
#3	826.25'	24,664 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		27,553 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
823.25	3,309	0	0
824.25	3,309	3,309	3,309

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
824.25	3,309	0	0
826.25	3,309	6,618	6,618

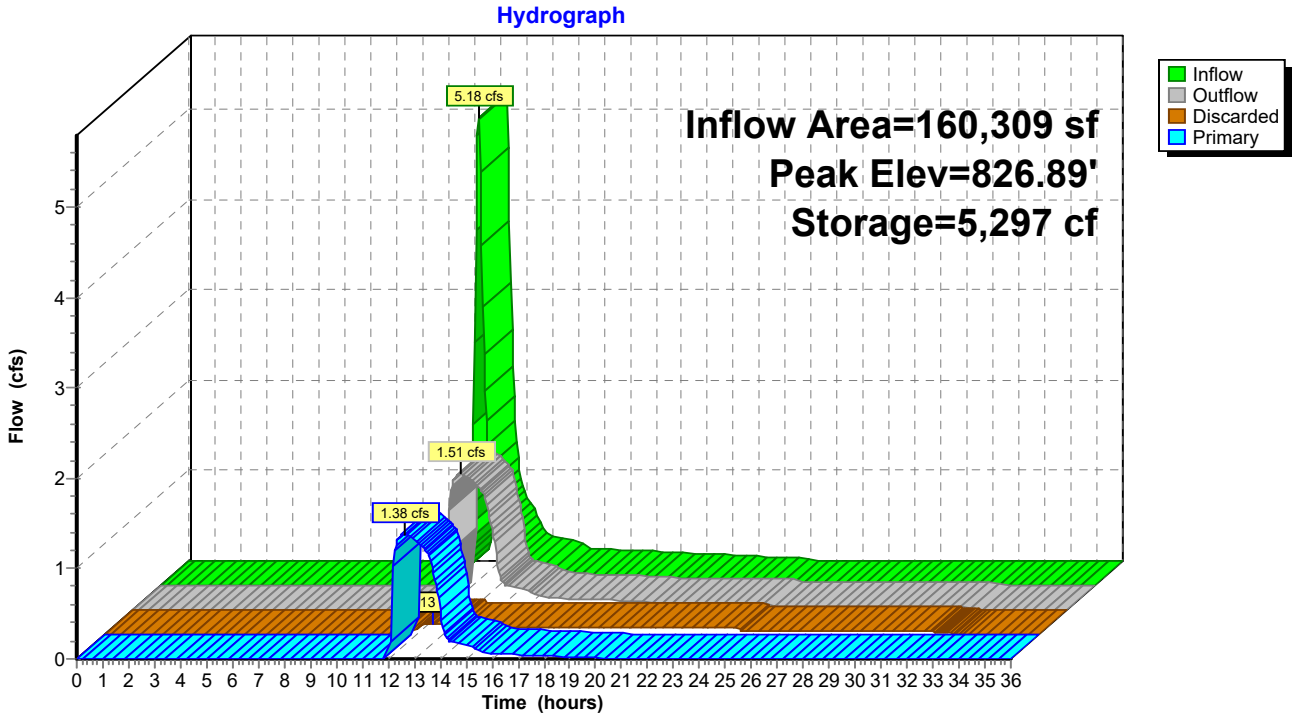
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
826.25	3,309	0	0
830.25	9,023	24,664	24,664

Device	Routing	Invert	Outlet Devices
#1	Primary	824.75'	**8.0" Round 8" Culvert** L= 49.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 824.75' / 824.13' S= 0.0125 '/' Cc= 0.900 n= 0.010, Flow Area= 0.35 sf
#2	Device 1	823.75'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	828.25'	**48.0" Horiz. 48" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	823.25'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.13 cfs @ 12.61 hrs HW=826.89' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.13 cfs)

Primary OutFlow Max=1.38 cfs @ 12.61 hrs HW=826.89' (Free Discharge)
└**1=8" Culvert** (Passes 1.38 cfs of 2.26 cfs potential flow)
└**2=6" Drain Tile** (Orifice Controls 1.38 cfs @ 7.04 fps)
└**3=48" Standpipe** (Controls 0.00 cfs)

Pond B1: Bioretention Basin-1



Summary for Pond B2: Bioretention Basin-2

Inflow Area = 105,983 sf, 75.37% Impervious, Inflow Depth = 1.63" for 2-Year event
Inflow = 7.01 cfs @ 12.13 hrs, Volume= 14,405 cf
Outflow = 1.81 cfs @ 12.36 hrs, Volume= 14,405 cf, Atten= 74%, Lag= 13.7 min
Discarded = 0.09 cfs @ 12.36 hrs, Volume= 2,002 cf
Primary = 1.72 cfs @ 12.36 hrs, Volume= 12,403 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 828.06' @ 12.36 hrs Surf.Area= 7,572 sf Storage= 4,749 cf

Plug-Flow detention time= 46.3 min calculated for 14,385 cf (100% of inflow)
Center-of-Mass det. time= 46.6 min (843.5 - 796.9)

Volume	Invert	Avail.Storage	Storage Description
#1	824.00'	725 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 2,178 cf Overall x 33.3% Voids
#2	825.00'	1,176 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 4,356 cf Overall x 27.0% Voids
#3	827.00'	16,578 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		18,479 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
824.00	2,178	0	0
825.00	2,178	2,178	2,178

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
825.00	2,178	0	0
827.00	2,178	4,356	4,356

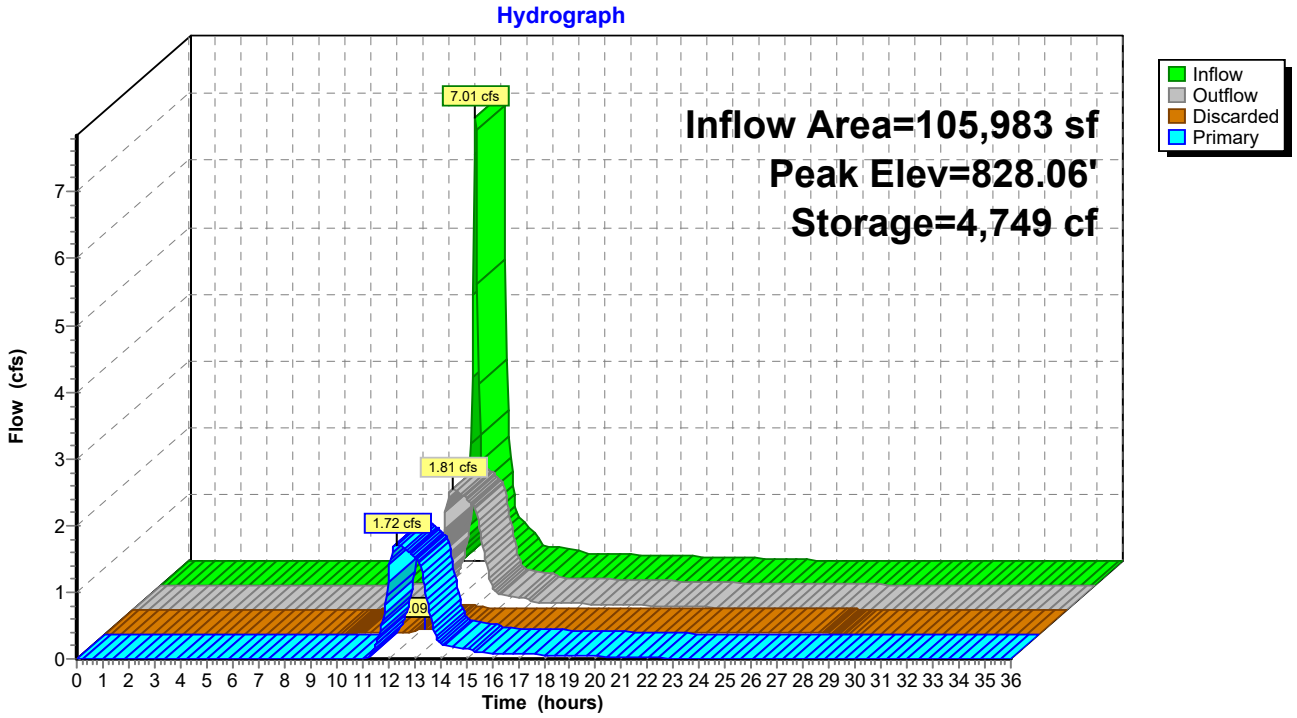
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
827.00	2,178	0	0
831.00	6,111	16,578	16,578

Device	Routing	Invert	Outlet Devices
#1	Primary	824.50'	**10.0" Round 10" Culvert** L= 26.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 824.50' / 824.23' S= 0.0102 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Device 1	824.50'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	829.00'	**36.0" Horiz. 36" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	824.00'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.09 cfs @ 12.36 hrs HW=828.05' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.09 cfs)

Primary OutFlow Max=1.72 cfs @ 12.36 hrs HW=828.05' (Free Discharge)
└**1=10" Culvert** (Passes 1.72 cfs of 4.65 cfs potential flow)
└**2=6" Drain Tile** (Orifice Controls 1.72 cfs @ 8.75 fps)
└**3=36" Standpipe** (Controls 0.00 cfs)

Pond B2: Bioretention Basin-2



Summary for Pond B3: Bioretention Basin-3

Inflow Area = 332,690 sf, 58.85% Impervious, Inflow Depth = 1.21" for 2-Year event
Inflow = 13.98 cfs @ 12.18 hrs, Volume= 33,521 cf
Outflow = 1.97 cfs @ 12.72 hrs, Volume= 33,521 cf, Atten= 86%, Lag= 32.2 min
Discarded = 0.37 cfs @ 12.72 hrs, Volume= 10,167 cf
Primary = 1.60 cfs @ 12.72 hrs, Volume= 23,355 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 825.60' @ 12.72 hrs Surf.Area= 31,925 sf Storage= 15,433 cf

Plug-Flow detention time= 115.8 min calculated for 33,521 cf (100% of inflow)
Center-of-Mass det. time= 115.6 min (932.6 - 817.0)

Volume	Invert	Avail.Storage	Storage Description
#1	822.00'	3,381 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 10,153 cf Overall x 33.3% Voids
#2	823.00'	5,483 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 20,306 cf Overall x 27.0% Voids
#3	825.00'	60,038 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		68,902 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
822.00	10,153	0	0
823.00	10,153	10,153	10,153

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
823.00	10,153	0	0
825.00	10,153	20,306	20,306

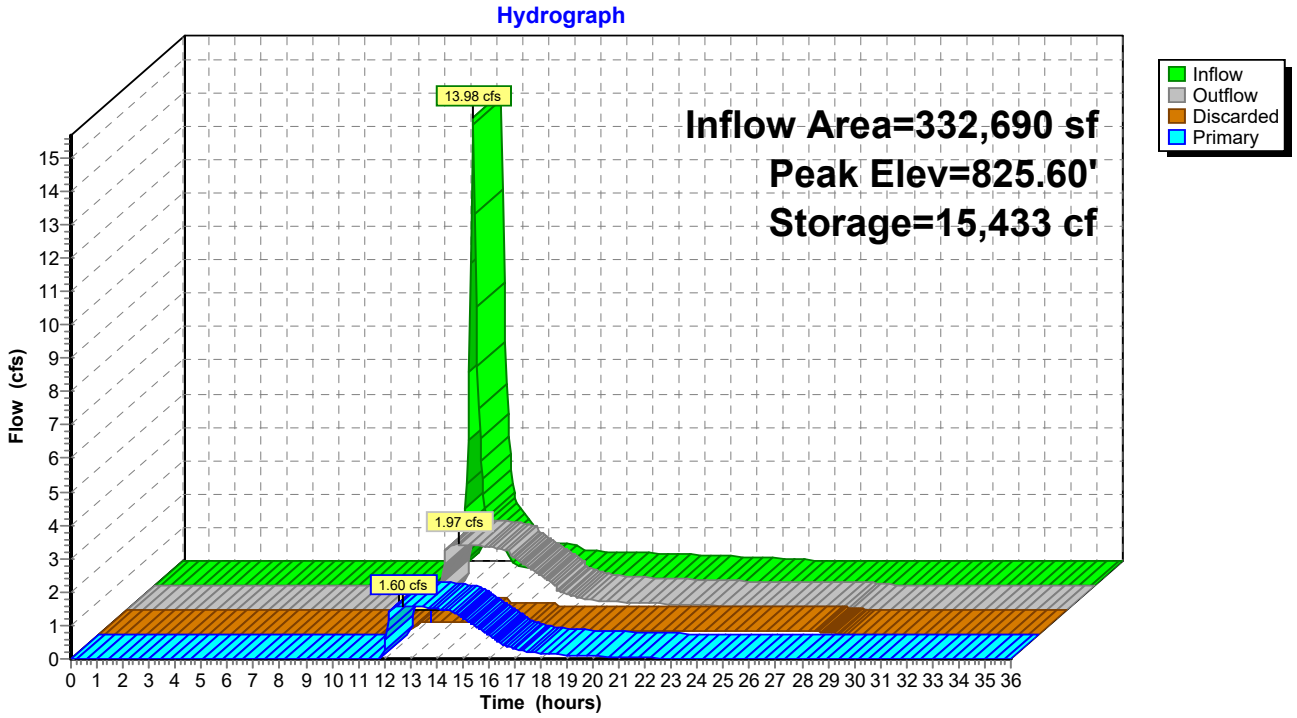
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
825.00	10,153	0	0
829.00	19,866	60,038	60,038

Device	Routing	Invert	Outlet Devices
#1	Primary	822.50'	**10.0" Round 10" Culvert** L= 433.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 822.50' / 820.88' S= 0.0037 '/' Cc= 0.900 n= 0.010, Flow Area= 0.55 sf
#2	Device 1	822.50'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	827.00'	**48.0" Horiz. 48" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	822.00'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.37 cfs @ 12.72 hrs HW=825.60' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.37 cfs)

Primary OutFlow Max=1.60 cfs @ 12.72 hrs HW=825.60' (Free Discharge)
└**1=10" Culvert** (Passes 1.60 cfs of 2.52 cfs potential flow)
└**2=6" Drain Tile** (Orifice Controls 1.60 cfs @ 8.13 fps)
└**3=48" Standpipe** (Controls 0.00 cfs)

Pond B3: Bioretention Basin-3



Summary for Pond B4: Bioretention Basin-4

Inflow Area = 410,715 sf, 37.19% Impervious, Inflow Depth = 0.77" for 2-Year event
Inflow = 8.91 cfs @ 12.25 hrs, Volume= 26,368 cf
Outflow = 1.71 cfs @ 12.84 hrs, Volume= 26,368 cf, Atten= 81%, Lag= 35.7 min
Discarded = 0.32 cfs @ 12.84 hrs, Volume= 8,240 cf
Primary = 1.39 cfs @ 12.84 hrs, Volume= 18,127 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 826.40' @ 12.84 hrs Surf.Area= 27,631 sf Storage= 10,309 cf

Plug-Flow detention time= 105.1 min calculated for 26,368 cf (100% of inflow)
Center-of-Mass det. time= 104.9 min (947.1 - 842.2)

Volume	Invert	Avail.Storage	Storage Description
#1	823.50'	2,962 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 8,894 cf Overall x 33.3% Voids
#2	824.50'	3,602 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 13,341 cf Overall x 27.0% Voids
#3	826.00'	54,570 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		61,134 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
823.50	8,894	0	0
824.50	8,894	8,894	8,894

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
824.50	8,894	0	0
826.00	8,894	13,341	13,341

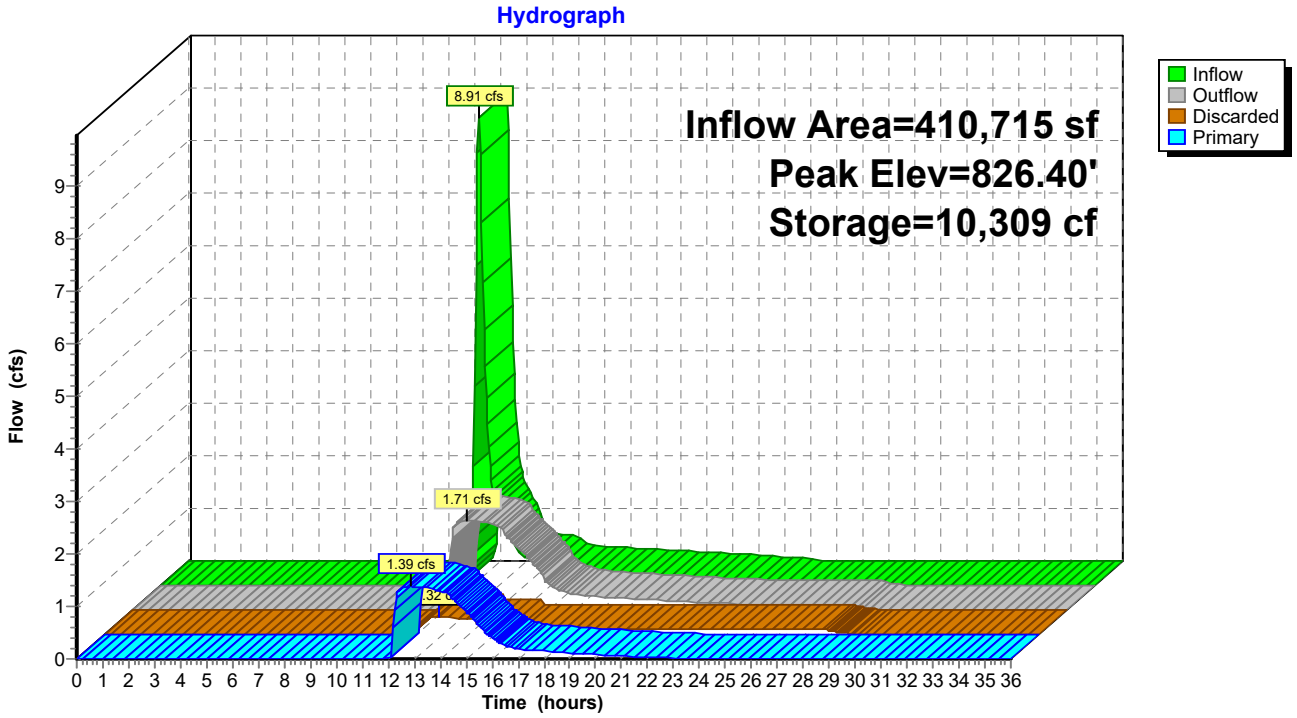
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
826.00	8,894	0	0
830.00	18,391	54,570	54,570

Device	Routing	Invert	Outlet Devices
#1	Primary	824.00'	**10.0" Round 10" Culvert** L= 70.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 824.00' / 823.86' S= 0.0020 '/' Cc= 0.900 n= 0.010, Flow Area= 0.55 sf
#2	Device 1	824.00'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	828.00'	**48.0" Horiz. 48" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	823.50'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.32 cfs @ 12.84 hrs HW=826.40' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.32 cfs)

Primary OutFlow Max=1.39 cfs @ 12.84 hrs HW=826.40' (Free Discharge)
└**1=10" Culvert** (Passes 1.39 cfs of 3.21 cfs potential flow)
└**2=6" Drain Tile** (Orifice Controls 1.39 cfs @ 7.06 fps)
└**3=48" Standpipe** (Controls 0.00 cfs)

Pond B4: Bioretention Basin-4

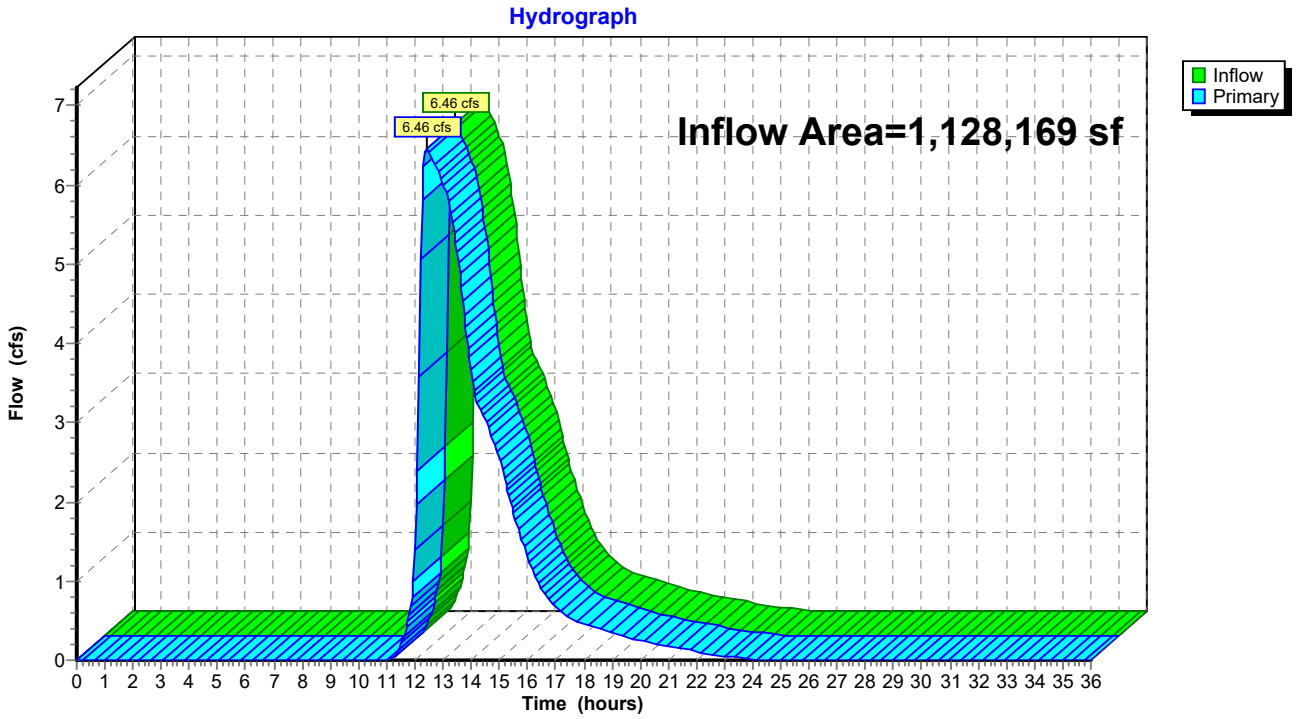


Summary for Link 2L: Total Proposed Outfall

Inflow Area = 1,128,169 sf, 45.78% Impervious, Inflow Depth = 0.71" for 2-Year event
Inflow = 6.46 cfs @ 12.45 hrs, Volume= 66,400 cf
Primary = 6.46 cfs @ 12.45 hrs, Volume= 66,400 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Total Proposed Outfall



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment P1: Proposed to Bio-1 Runoff Area=160,309 sf 53.74% Impervious Runoff Depth=1.96"
Flow Length=347' Tc=14.3 min CN=81 Runoff=9.46 cfs 26,221 cf

Subcatchment P2: Proposed to Bio-2 Runoff Area=105,983 sf 75.37% Impervious Runoff Depth=2.65"
Tc=6.0 min CN=89 Runoff=11.11 cfs 23,362 cf

Subcatchment P3: Proposed to Bio-3 Runoff Area=332,690 sf 58.85% Impervious Runoff Depth=2.12"
Flow Length=150' Tc=10.1 min CN=83 Runoff=24.50 cfs 58,834 cf

Subcatchment P4: Proposed to Bio-4 Runoff Area=410,715 sf 37.19% Impervious Runoff Depth=1.53"
Flow Length=119' Slope=0.0100 '/' Tc=14.6 min CN=75 Runoff=18.52 cfs 52,214 cf

Subcatchment P5: Uncaptured Runoff Area=118,472 sf 1.56% Impervious Runoff Depth=0.77"
Flow Length=186' Slope=0.0100 '/' Tc=15.1 min CN=62 Runoff=2.26 cfs 7,567 cf

Pond B1: Bioretention Basin-1 Peak Elev=828.09' Storage=11,371 cf Inflow=9.46 cfs 26,221 cf
Discarded=0.15 cfs 5,649 cf Primary=1.73 cfs 20,571 cf Outflow=1.87 cfs 26,221 cf

Pond B2: Bioretention Basin-2 Peak Elev=829.07' Storage=8,516 cf Inflow=11.11 cfs 23,362 cf
Discarded=0.10 cfs 2,423 cf Primary=2.58 cfs 20,939 cf Outflow=2.68 cfs 23,362 cf

Pond B3: Bioretention Basin-3 Peak Elev=826.80' Storage=31,100 cf Inflow=24.50 cfs 58,834 cf
Discarded=0.40 cfs 14,124 cf Primary=1.90 cfs 44,710 cf Outflow=2.31 cfs 58,834 cf

Pond B4: Bioretention Basin-4 Peak Elev=827.76' Storage=25,877 cf Inflow=18.52 cfs 52,214 cf
Discarded=0.36 cfs 11,992 cf Primary=1.77 cfs 40,223 cf Outflow=2.13 cfs 52,214 cf

Link 2L: Total Proposed Outfall Inflow=9.50 cfs 134,009 cf
Primary=9.50 cfs 134,009 cf

Total Runoff Area = 1,128,169 sf Runoff Volume = 168,198 cf Average Runoff Depth = 1.79"
54.22% Pervious = 611,745 sf 45.78% Impervious = 516,424 sf

Summary for Subcatchment P1: Proposed to Bio-1

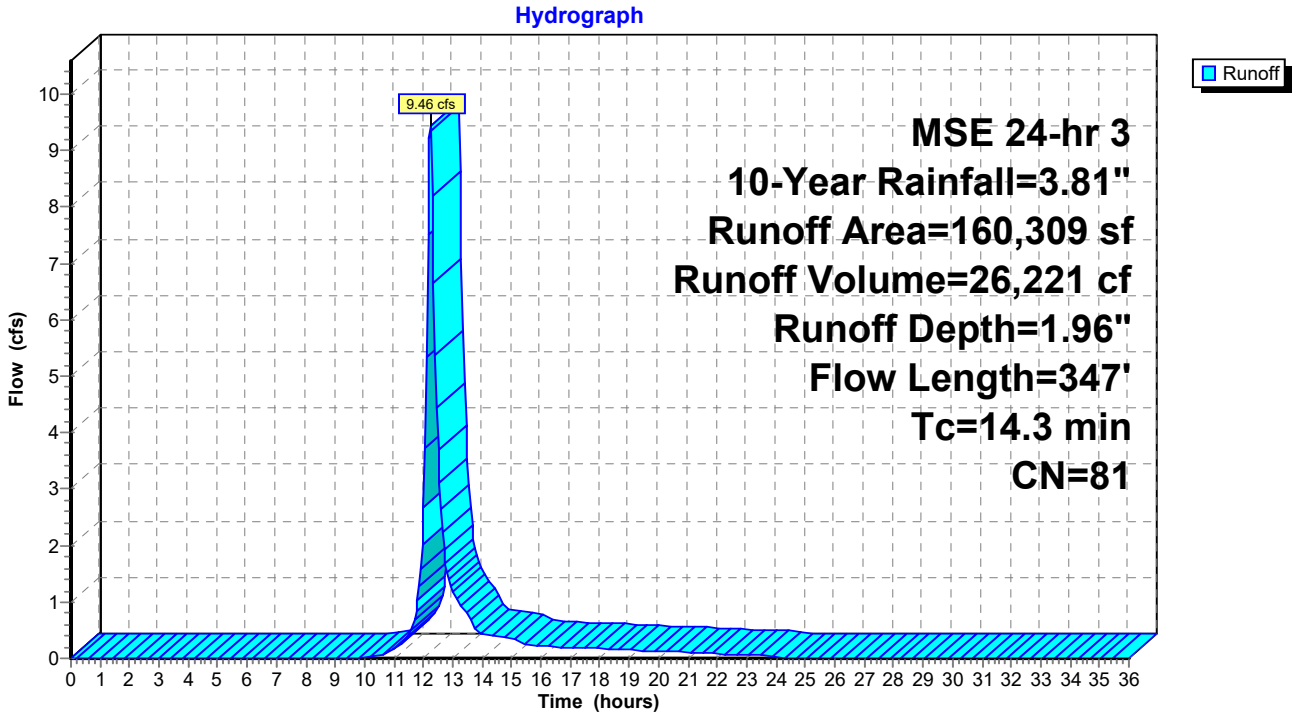
Runoff = 9.46 cfs @ 12.23 hrs, Volume= 26,221 cf, Depth= 1.96"
Routed to Pond B1 : Bioretention Basin-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
	76,705	98	Paved parking, HSG B
*	9,448	98	Sidewalks, HSG B
	74,156	61	>75% Grass cover, Good, HSG B
	160,309	81	Weighted Average
	74,156		46.26% Pervious Area
	86,153		53.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	11	0.0150	0.72		**Sheet Flow, Post-developed Sheet Flow-1** Smooth surfaces n= 0.011 P2= 2.70"
10.4	89	0.0168	0.14		**Sheet Flow, Post-developed Sheet Flow-2** Grass: Short n= 0.150 P2= 2.70"
3.2	194	0.0206	1.00		**Shallow Concentrated Flow, Post-developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
0.4	53	0.1170	2.39		**Shallow Concentrated Flow, ost-developed Shallow Conc. Flow-** Short Grass Pasture Kv= 7.0 fps
14.3	347	Total			

Subcatchment P1: Proposed to Bio-1



Summary for Subcatchment P2: Proposed to Bio-2

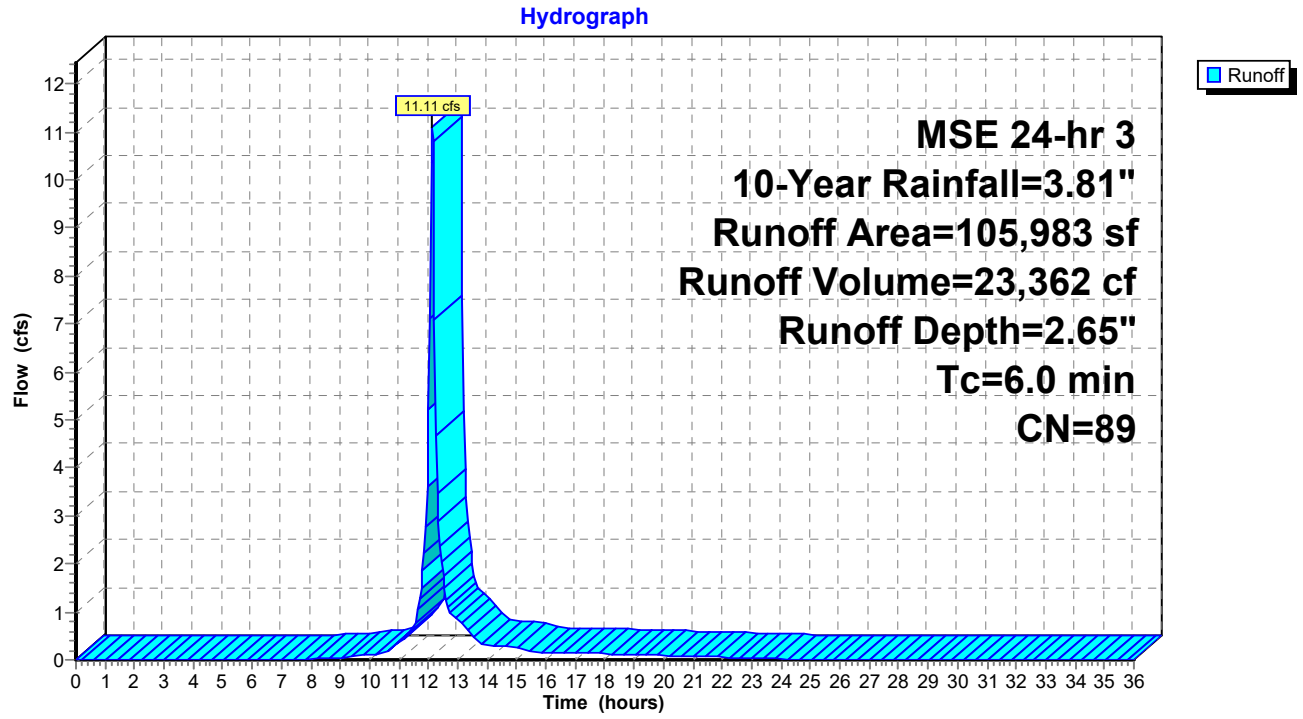
Runoff = 11.11 cfs @ 12.13 hrs, Volume= 23,362 cf, Depth= 2.65"
Routed to Pond B2 : Bioretention Basin-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
	45,039	98	Roofs, HSG B
	29,686	98	Paved parking, HSG B
*	5,153	98	Sidewalks, HSG B
	26,105	61	>75% Grass cover, Good, HSG B
	105,983	89	Weighted Average
	26,105		24.63% Pervious Area
	79,878		75.37% Impervious Area

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

Subcatchment P2: Proposed to Bio-2



Summary for Subcatchment P3: Proposed to Bio-3

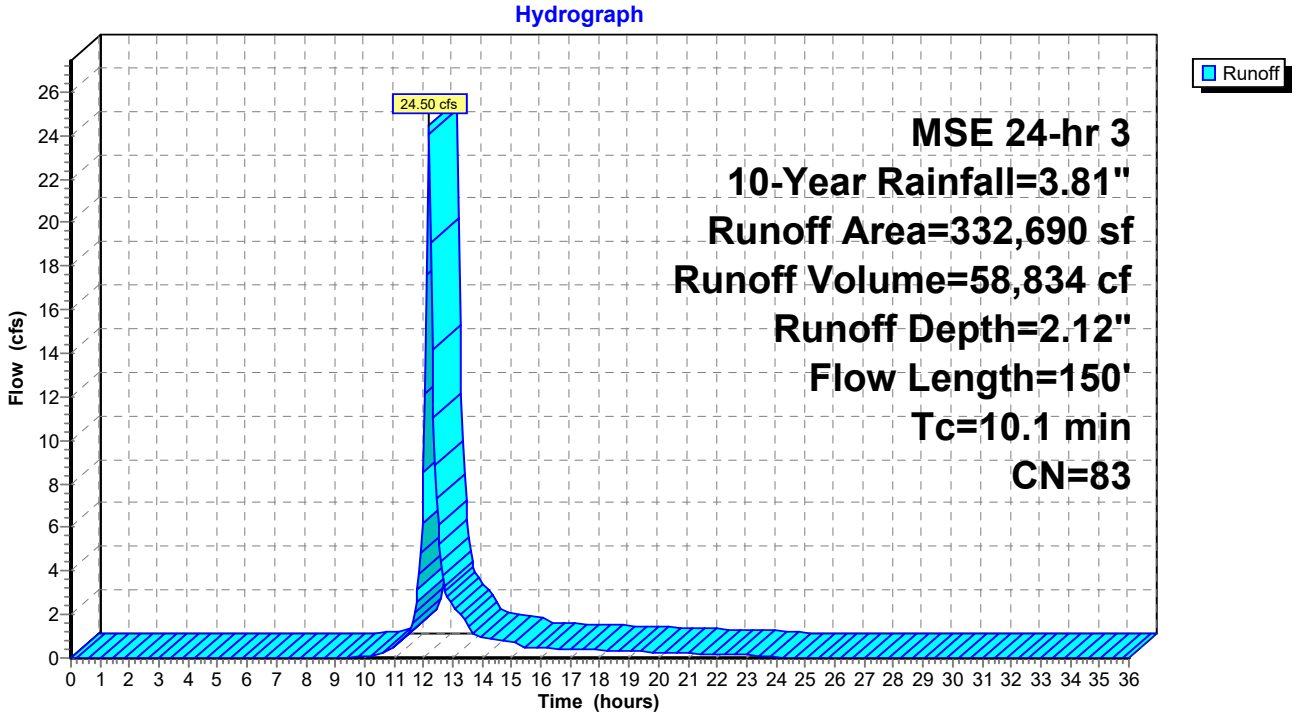
Runoff = 24.50 cfs @ 12.18 hrs, Volume= 58,834 cf, Depth= 2.12"
Routed to Pond B3 : Bioretention Basin-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
	112,471	98	Roofs, HSG B
	67,867	98	Paved parking, HSG B
*	15,465	98	Sidewalks, HSG B
	136,887	61	>75% Grass cover, Good, HSG B
	332,690	83	Weighted Average
	136,887		41.15% Pervious Area
	195,803		58.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8	100	0.0250	0.17		**Sheet Flow, Post-developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
0.3	50	0.1200	2.42		**Shallow Concentrated Flow, Post-developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
10.1	150	Total			

Subcatchment P3: Proposed to Bio-3



Summary for Subcatchment P4: Proposed to Bio-4

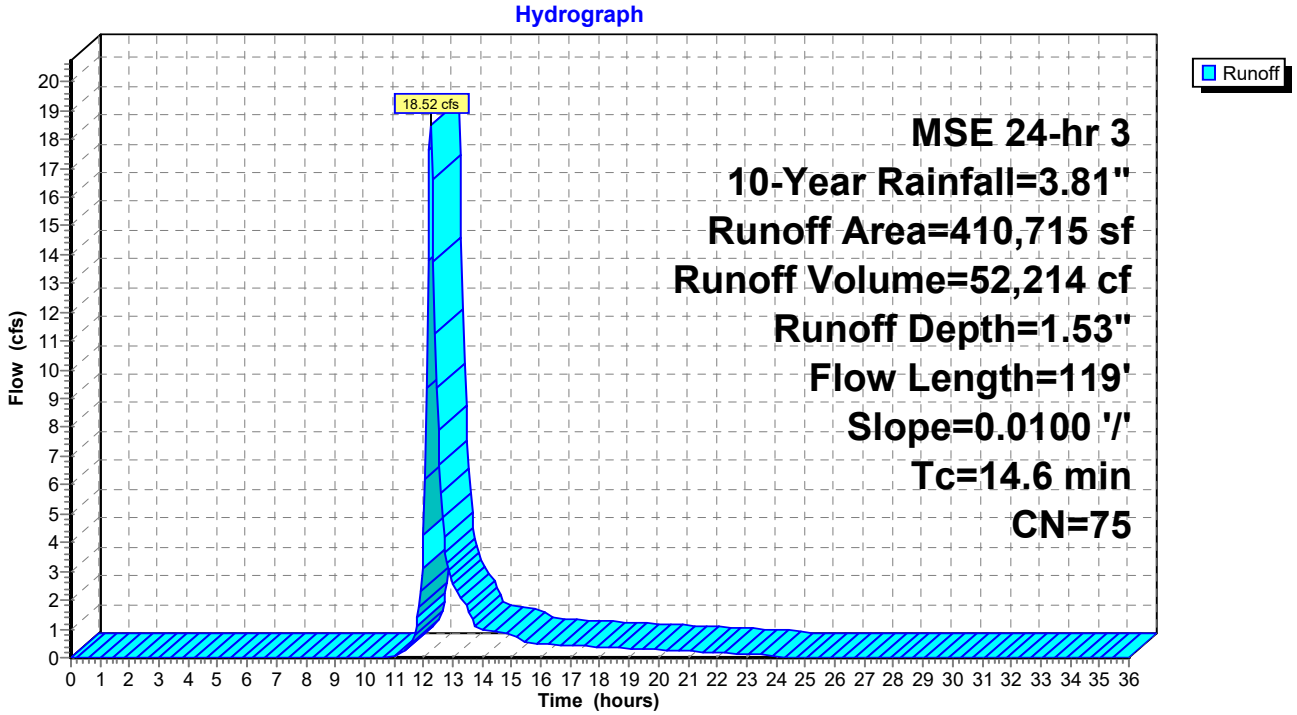
Runoff = 18.52 cfs @ 12.24 hrs, Volume= 52,214 cf, Depth= 1.53"
Routed to Pond B4 : Bioretention Basin-4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
	92,179	98	Paved parking, HSG B
*	60,560	98	Sidewalks, HSG B
	257,976	61	>75% Grass cover, Good, HSG B
	410,715	75	Weighted Average
	257,976		62.81% Pervious Area
	152,739		37.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, Post-Developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
0.5	19	0.0100	0.70		**Shallow Concentrated Flow, Post-Developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
14.6	119	Total			

Subcatchment P4: Proposed to Bio-4



Summary for Subcatchment P5: Uncaptured

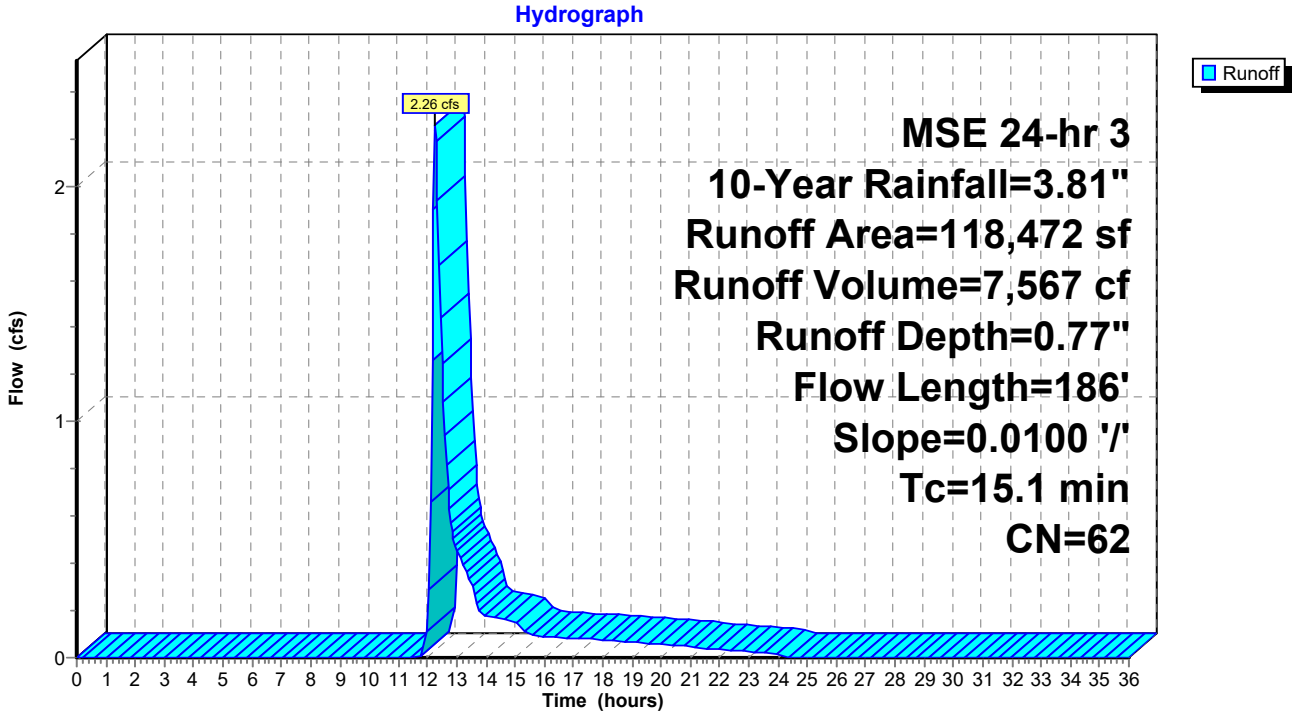
Runoff = 2.26 cfs @ 12.27 hrs, Volume= 7,567 cf, Depth= 0.77"
Routed to Link 2L : Total Proposed Outfall

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
	981	98	Paved parking, HSG B
*	870	98	Sidewalks, HSG B
	116,621	61	>75% Grass cover, Good, HSG B
	118,472	62	Weighted Average
	116,621		98.44% Pervious Area
	1,851		1.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, Post-developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
1.0	86	0.0100	1.50		**Shallow Concentrated Flow, Post-developed Shallow Conc. Flow** Grassed Waterway Kv= 15.0 fps
15.1	186	Total			

Subcatchment P5: Uncaptured



Summary for Pond B1: Bioretention Basin-1

Inflow Area = 160,309 sf, 53.74% Impervious, Inflow Depth = 1.96" for 10-Year event
Inflow = 9.46 cfs @ 12.23 hrs, Volume= 26,221 cf
Outflow = 1.87 cfs @ 12.71 hrs, Volume= 26,221 cf, Atten= 80%, Lag= 28.9 min
Discarded = 0.15 cfs @ 12.71 hrs, Volume= 5,649 cf
Primary = 1.73 cfs @ 12.71 hrs, Volume= 20,571 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 828.09' @ 12.71 hrs Surf.Area= 12,550 sf Storage= 11,371 cf

Plug-Flow detention time= 103.9 min calculated for 26,184 cf (100% of inflow)
Center-of-Mass det. time= 104.5 min (918.3 - 813.7)

Volume	Invert	Avail.Storage	Storage Description
#1	823.25'	1,102 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 3,309 cf Overall x 33.3% Voids
#2	824.25'	1,787 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 6,618 cf Overall x 27.0% Voids
#3	826.25'	24,664 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		27,553 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
823.25	3,309	0	0
824.25	3,309	3,309	3,309

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
824.25	3,309	0	0
826.25	3,309	6,618	6,618

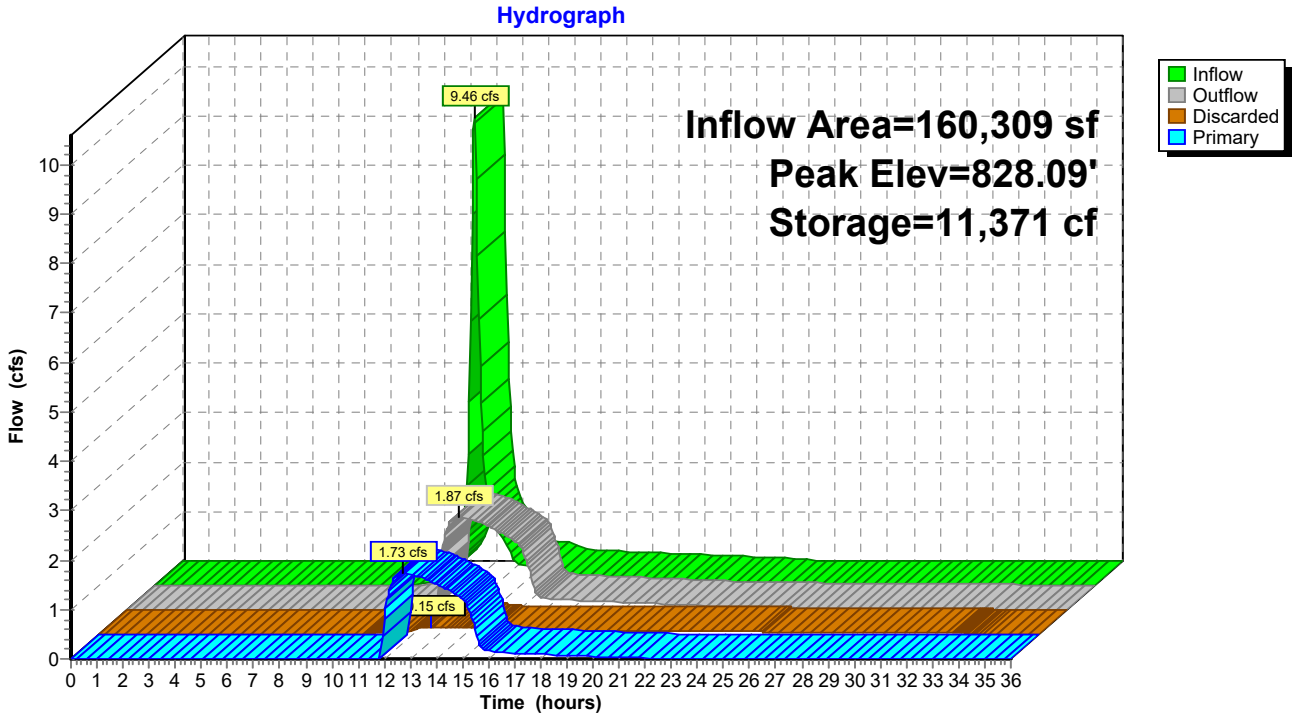
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
826.25	3,309	0	0
830.25	9,023	24,664	24,664

Device	Routing	Invert	Outlet Devices
#1	Primary	824.75'	**8.0" Round 8" Culvert** L= 49.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 824.75' / 824.13' S= 0.0125 '/' Cc= 0.900 n= 0.010, Flow Area= 0.35 sf
#2	Device 1	823.75'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	828.25'	**48.0" Horiz. 48" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	823.25'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.15 cfs @ 12.71 hrs HW=828.09' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.15 cfs)

Primary OutFlow Max=1.73 cfs @ 12.71 hrs HW=828.09' (Free Discharge)
└**1=8" Culvert** (Passes 1.73 cfs of 2.89 cfs potential flow)
└**2=6" Drain Tile** (Orifice Controls 1.73 cfs @ 8.79 fps)
└**3=48" Standpipe** (Controls 0.00 cfs)

Pond B1: Bioretention Basin-1



Summary for Pond B2: Bioretention Basin-2

Inflow Area = 105,983 sf, 75.37% Impervious, Inflow Depth = 2.65" for 10-Year event
Inflow = 11.11 cfs @ 12.13 hrs, Volume= 23,362 cf
Outflow = 2.68 cfs @ 12.37 hrs, Volume= 23,362 cf, Atten= 76%, Lag= 14.6 min
Discarded = 0.10 cfs @ 12.37 hrs, Volume= 2,423 cf
Primary = 2.58 cfs @ 12.37 hrs, Volume= 20,939 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 829.07' @ 12.37 hrs Surf.Area= 8,569 sf Storage= 8,516 cf

Plug-Flow detention time= 50.1 min calculated for 23,362 cf (100% of inflow)
Center-of-Mass det. time= 49.8 min (837.0 - 787.2)

Volume	Invert	Avail.Storage	Storage Description
#1	824.00'	725 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 2,178 cf Overall x 33.3% Voids
#2	825.00'	1,176 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 4,356 cf Overall x 27.0% Voids
#3	827.00'	16,578 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		18,479 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
824.00	2,178	0	0
825.00	2,178	2,178	2,178

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
825.00	2,178	0	0
827.00	2,178	4,356	4,356

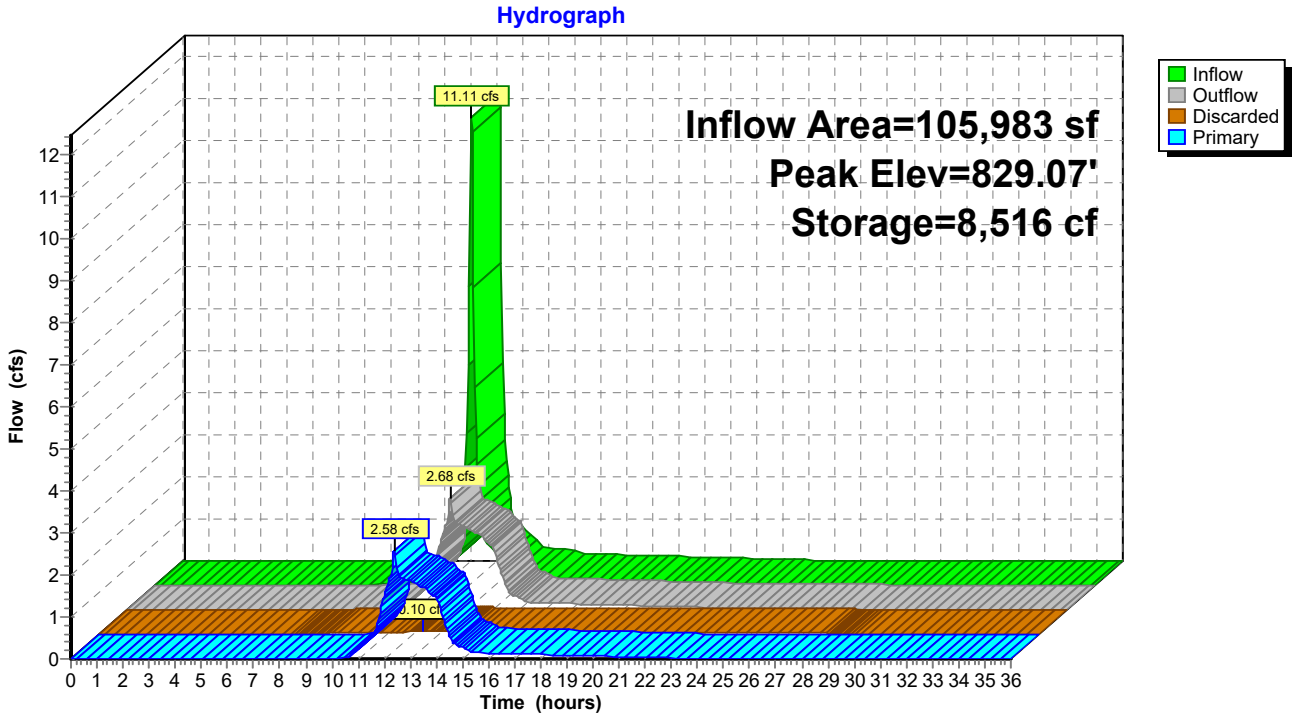
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
827.00	2,178	0	0
831.00	6,111	16,578	16,578

Device	Routing	Invert	Outlet Devices
#1	Primary	824.50'	**10.0" Round 10" Culvert** L= 26.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 824.50' / 824.23' S= 0.0102 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Device 1	824.50'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	829.00'	**36.0" Horiz. 36" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	824.00'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.10 cfs @ 12.37 hrs HW=829.07' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.10 cfs)

Primary OutFlow Max=2.49 cfs @ 12.37 hrs HW=829.07' (Free Discharge)
└**1=10" Culvert** (Passes 2.49 cfs of 5.35 cfs potential flow)
└**2=6" Drain Tile** (Orifice Controls 1.96 cfs @ 10.00 fps)
└**3=36" Standpipe** (Weir Controls 0.52 cfs @ 0.84 fps)

Pond B2: Bioretention Basin-2



Summary for Pond B3: Bioretention Basin-3

Inflow Area = 332,690 sf, 58.85% Impervious, Inflow Depth = 2.12" for 10-Year event
Inflow = 24.50 cfs @ 12.18 hrs, Volume= 58,834 cf
Outflow = 2.31 cfs @ 13.08 hrs, Volume= 58,834 cf, Atten= 91%, Lag= 54.2 min
Discarded = 0.40 cfs @ 13.08 hrs, Volume= 14,124 cf
Primary = 1.90 cfs @ 13.08 hrs, Volume= 44,710 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 826.80' @ 13.08 hrs Surf.Area= 34,834 sf Storage= 31,100 cf

Plug-Flow detention time= 156.2 min calculated for 58,834 cf (100% of inflow)
Center-of-Mass det. time= 156.0 min (961.5 - 805.5)

Volume	Invert	Avail.Storage	Storage Description
#1	822.00'	3,381 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 10,153 cf Overall x 33.3% Voids
#2	823.00'	5,483 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 20,306 cf Overall x 27.0% Voids
#3	825.00'	60,038 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		68,902 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
822.00	10,153	0	0
823.00	10,153	10,153	10,153

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
823.00	10,153	0	0
825.00	10,153	20,306	20,306

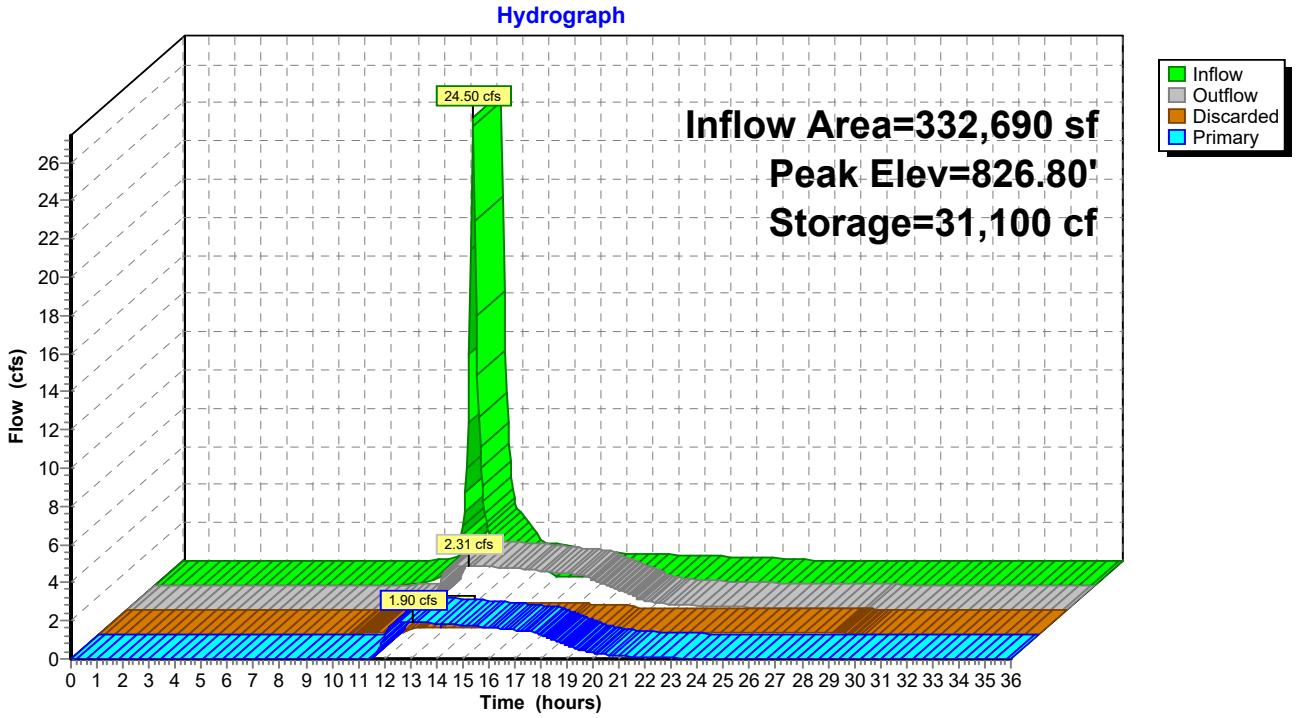
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
825.00	10,153	0	0
829.00	19,866	60,038	60,038

Device	Routing	Invert	Outlet Devices
#1	Primary	822.50'	**10.0" Round 10" Culvert** L= 433.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 822.50' / 820.88' S= 0.0037 '/' Cc= 0.900 n= 0.010, Flow Area= 0.55 sf
#2	Device 1	822.50'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	827.00'	**48.0" Horiz. 48" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	822.00'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.40 cfs @ 13.08 hrs HW=826.80' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.40 cfs)

Primary OutFlow Max=1.90 cfs @ 13.08 hrs HW=826.80' (Free Discharge)
└**1=10" Culvert** (Passes 1.90 cfs of 2.88 cfs potential flow)
└**2=6" Drain Tile** (Orifice Controls 1.90 cfs @ 9.69 fps)
└**3=48" Standpipe** (Controls 0.00 cfs)

Pond B3: Bioretention Basin-3



Summary for Pond B4: Bioretention Basin-4

Inflow Area = 410,715 sf, 37.19% Impervious, Inflow Depth = 1.53" for 10-Year event
Inflow = 18.52 cfs @ 12.24 hrs, Volume= 52,214 cf
Outflow = 2.13 cfs @ 13.27 hrs, Volume= 52,214 cf, Atten= 89%, Lag= 61.7 min
Discarded = 0.36 cfs @ 13.27 hrs, Volume= 11,992 cf
Primary = 1.77 cfs @ 13.27 hrs, Volume= 40,223 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 827.76' @ 13.27 hrs Surf.Area= 30,857 sf Storage= 25,877 cf

Plug-Flow detention time= 144.1 min calculated for 52,214 cf (100% of inflow)
Center-of-Mass det. time= 143.9 min (970.5 - 826.6)

Volume	Invert	Avail.Storage	Storage Description
#1	823.50'	2,962 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 8,894 cf Overall x 33.3% Voids
#2	824.50'	3,602 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 13,341 cf Overall x 27.0% Voids
#3	826.00'	54,570 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		61,134 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
823.50	8,894	0	0
824.50	8,894	8,894	8,894

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
824.50	8,894	0	0
826.00	8,894	13,341	13,341

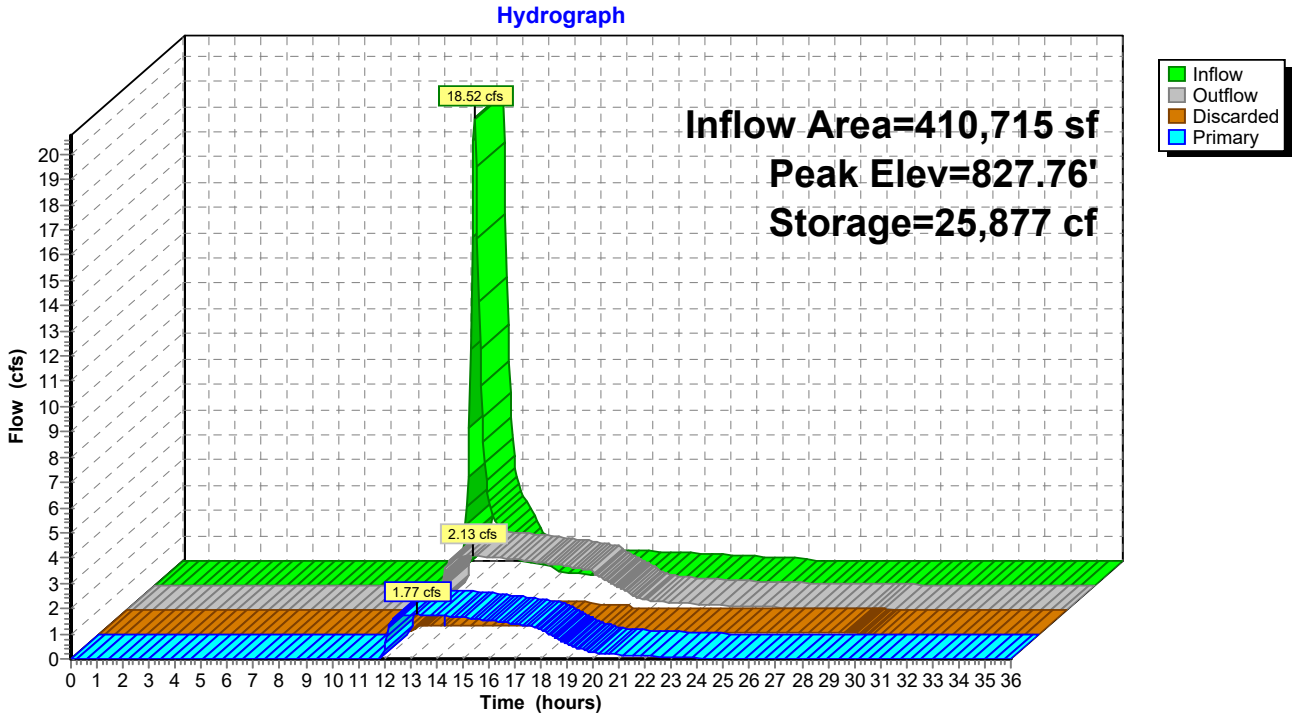
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
826.00	8,894	0	0
830.00	18,391	54,570	54,570

Device	Routing	Invert	Outlet Devices
#1	Primary	824.00'	**10.0" Round 10" Culvert** L= 70.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 824.00' / 823.86' S= 0.0020 '/' Cc= 0.900 n= 0.010, Flow Area= 0.55 sf
#2	Device 1	824.00'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	828.00'	**48.0" Horiz. 48" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	823.50'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.36 cfs @ 13.27 hrs HW=827.76' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.36 cfs)

Primary OutFlow Max=1.77 cfs @ 13.27 hrs HW=827.76' (Free Discharge)
└**1=10" Culvert** (Passes 1.77 cfs of 4.30 cfs potential flow)
└**2=6" Drain Tile** (Orifice Controls 1.77 cfs @ 9.02 fps)
└**3=48" Standpipe** (Controls 0.00 cfs)

Pond B4: Bioretention Basin-4

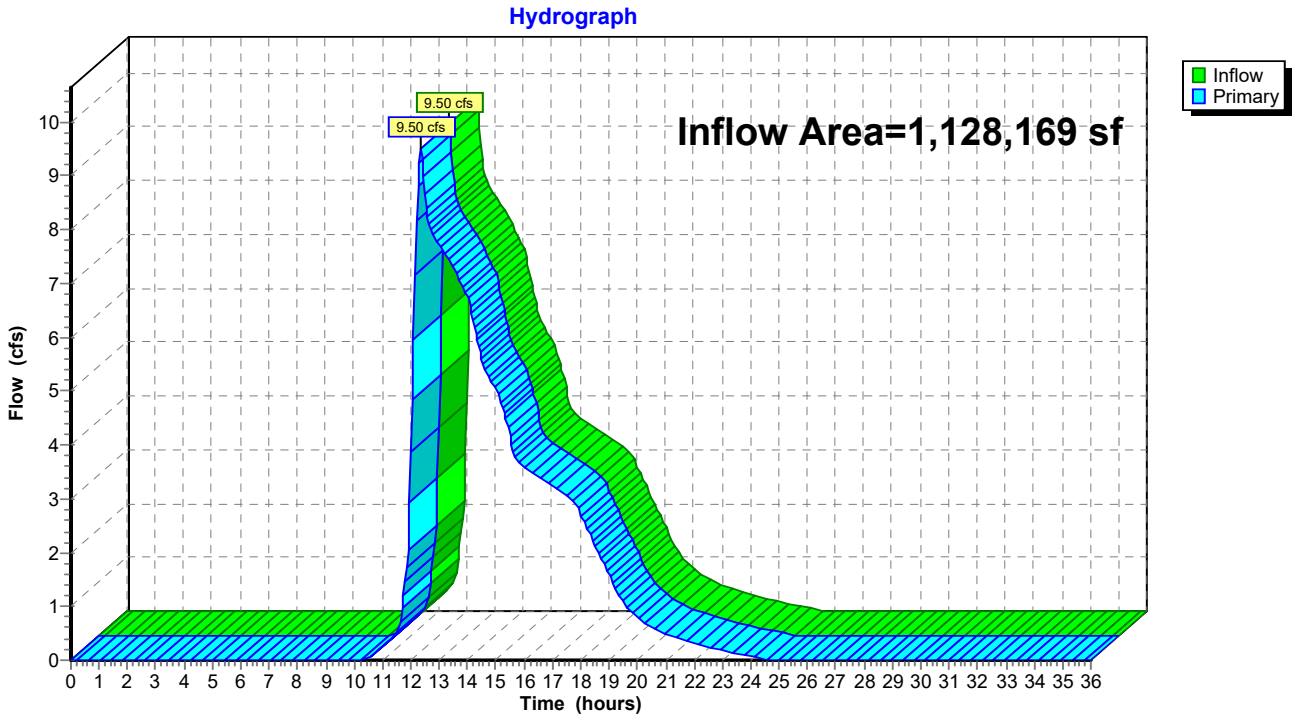


Summary for Link 2L: Total Proposed Outfall

Inflow Area = 1,128,169 sf, 45.78% Impervious, Inflow Depth = 1.43" for 10-Year event
Inflow = 9.50 cfs @ 12.35 hrs, Volume= 134,009 cf
Primary = 9.50 cfs @ 12.35 hrs, Volume= 134,009 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Total Proposed Outfall



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment P1: Proposed to Bio-1 Runoff Area=160,309 sf 53.74% Impervious Runoff Depth=4.05"
Flow Length=347' Tc=14.3 min CN=81 Runoff=19.36 cfs 54,079 cf

Subcatchment P2: Proposed to Bio-2 Runoff Area=105,983 sf 75.37% Impervious Runoff Depth=4.91"
Tc=6.0 min CN=89 Runoff=19.86 cfs 43,364 cf

Subcatchment P3: Proposed to Bio-3 Runoff Area=332,690 sf 58.85% Impervious Runoff Depth=4.26"
Flow Length=150' Tc=10.1 min CN=83 Runoff=48.18 cfs 118,070 cf

Subcatchment P4: Proposed to Bio-4 Runoff Area=410,715 sf 37.19% Impervious Runoff Depth=3.44"
Flow Length=119' Slope=0.0100 '/' Tc=14.6 min CN=75 Runoff=42.17 cfs 117,600 cf

Subcatchment P5: Uncaptured Runoff Area=118,472 sf 1.56% Impervious Runoff Depth=2.21"
Flow Length=186' Slope=0.0100 '/' Tc=15.1 min CN=62 Runoff=7.52 cfs 21,863 cf

Pond B1: Bioretention Basin-1 Peak Elev=829.88' Storage=24,281 cf Inflow=19.36 cfs 54,079 cf
Discarded=0.17 cfs 6,792 cf Primary=3.59 cfs 47,287 cf Outflow=3.77 cfs 54,079 cf

Pond B2: Bioretention Basin-2 Peak Elev=830.28' Storage=14,335 cf Inflow=19.86 cfs 43,364 cf
Discarded=0.11 cfs 2,892 cf Primary=6.08 cfs 40,472 cf Outflow=6.19 cfs 43,364 cf

Pond B3: Bioretention Basin-3 Peak Elev=828.89' Storage=66,645 cf Inflow=48.18 cfs 118,070 cf
Discarded=0.46 cfs 20,522 cf Primary=3.42 cfs 97,548 cf Outflow=3.88 cfs 118,070 cf

Pond B4: Bioretention Basin-4 Peak Elev=829.88' Storage=58,856 cf Inflow=42.17 cfs 117,600 cf
Discarded=0.42 cfs 16,326 cf Primary=5.59 cfs 101,274 cf Outflow=6.01 cfs 117,600 cf

Link 2L: Total Proposed Outfall Inflow=25.16 cfs 308,445 cf
Primary=25.16 cfs 308,445 cf

Total Runoff Area = 1,128,169 sf Runoff Volume = 354,977 cf Average Runoff Depth = 3.78"
54.22% Pervious = 611,745 sf 45.78% Impervious = 516,424 sf

Summary for Subcatchment P1: Proposed to Bio-1

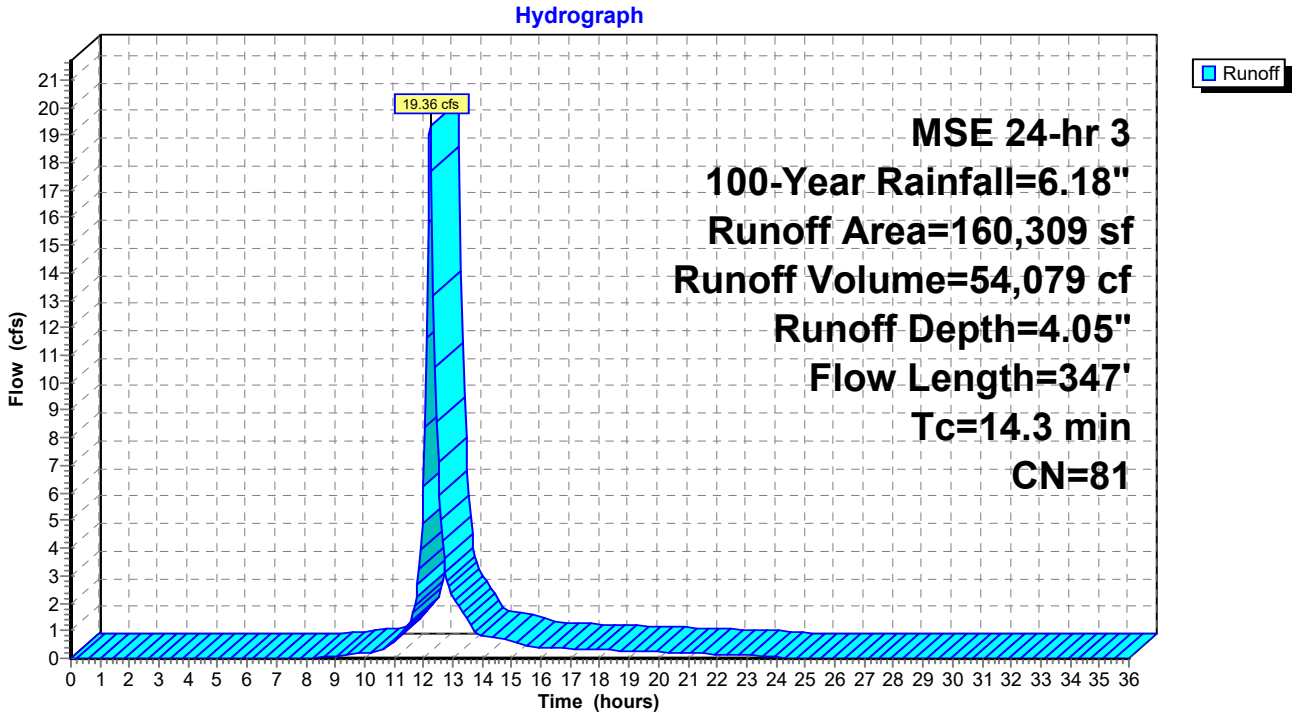
Runoff = 19.36 cfs @ 12.22 hrs, Volume= 54,079 cf, Depth= 4.05"
Routed to Pond B1 : Bioretention Basin-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
	76,705	98	Paved parking, HSG B
*	9,448	98	Sidewalks, HSG B
	74,156	61	>75% Grass cover, Good, HSG B
	160,309	81	Weighted Average
	74,156		46.26% Pervious Area
	86,153		53.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	11	0.0150	0.72		**Sheet Flow, Post-developed Sheet Flow-1** Smooth surfaces n= 0.011 P2= 2.70"
10.4	89	0.0168	0.14		**Sheet Flow, Post-developed Sheet Flow-2** Grass: Short n= 0.150 P2= 2.70"
3.2	194	0.0206	1.00		**Shallow Concentrated Flow, Post-developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
0.4	53	0.1170	2.39		**Shallow Concentrated Flow, ost-developed Shallow Conc. Flow-** Short Grass Pasture Kv= 7.0 fps
14.3	347	Total			

Subcatchment P1: Proposed to Bio-1



Summary for Subcatchment P2: Proposed to Bio-2

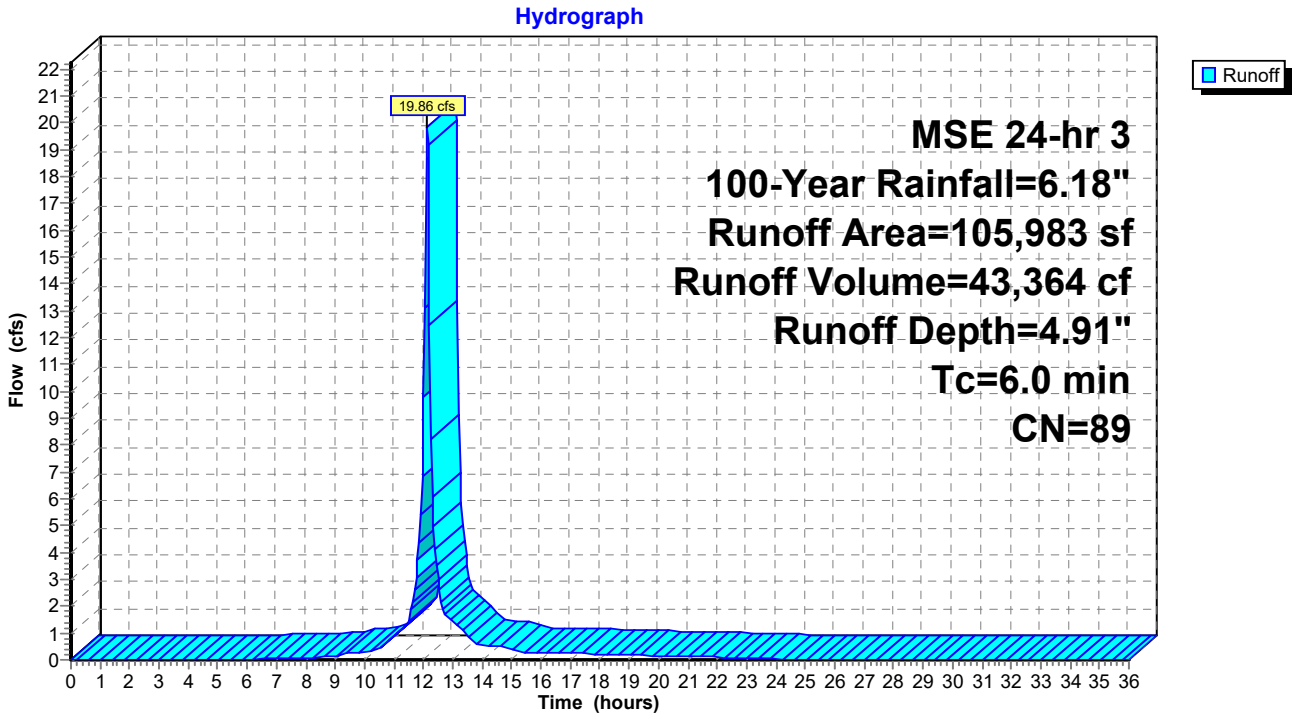
Runoff = 19.86 cfs @ 12.13 hrs, Volume= 43,364 cf, Depth= 4.91"
Routed to Pond B2 : Bioretention Basin-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
	45,039	98	Roofs, HSG B
	29,686	98	Paved parking, HSG B
*	5,153	98	Sidewalks, HSG B
	26,105	61	>75% Grass cover, Good, HSG B
	105,983	89	Weighted Average
	26,105		24.63% Pervious Area
	79,878		75.37% Impervious Area

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

Subcatchment P2: Proposed to Bio-2



Summary for Subcatchment P3: Proposed to Bio-3

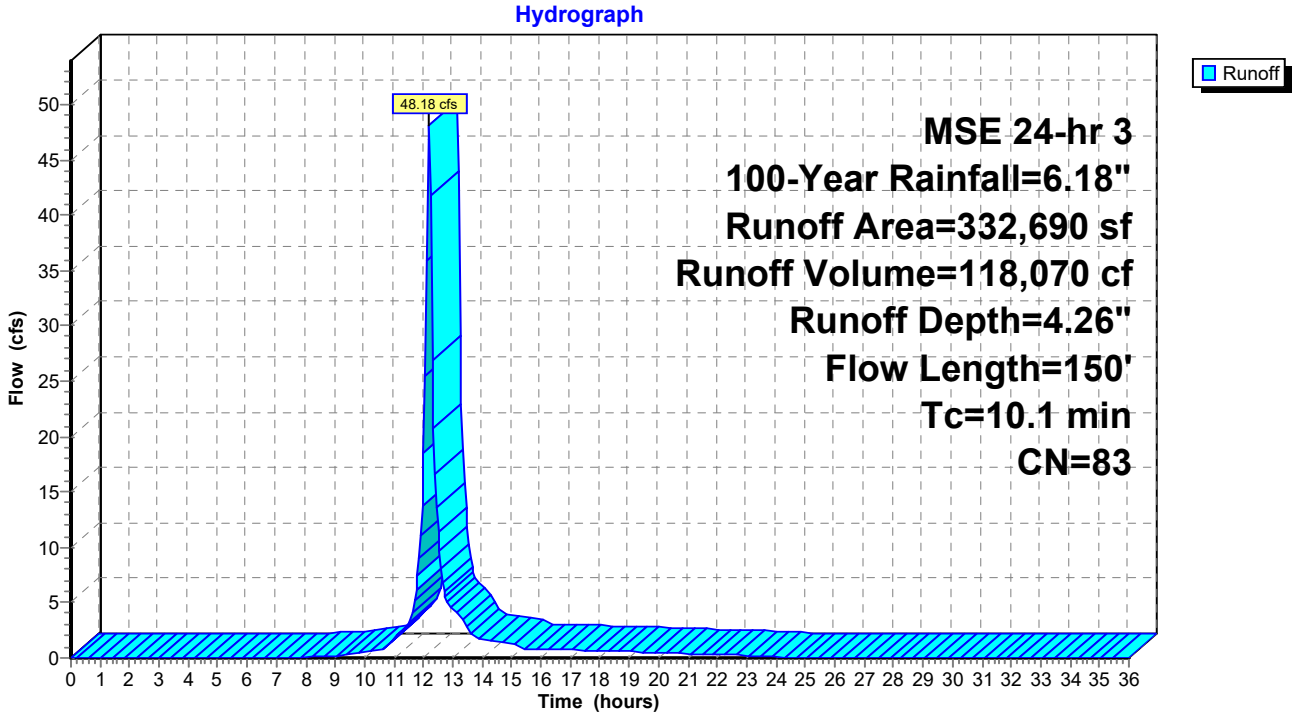
Runoff = 48.18 cfs @ 12.17 hrs, Volume= 118,070 cf, Depth= 4.26"
Routed to Pond B3 : Bioretention Basin-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
	112,471	98	Roofs, HSG B
	67,867	98	Paved parking, HSG B
*	15,465	98	Sidewalks, HSG B
	136,887	61	>75% Grass cover, Good, HSG B
	332,690	83	Weighted Average
	136,887		41.15% Pervious Area
	195,803		58.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8	100	0.0250	0.17		**Sheet Flow, Post-developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
0.3	50	0.1200	2.42		**Shallow Concentrated Flow, Post-developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
10.1	150	Total			

Subcatchment P3: Proposed to Bio-3



Summary for Subcatchment P4: Proposed to Bio-4

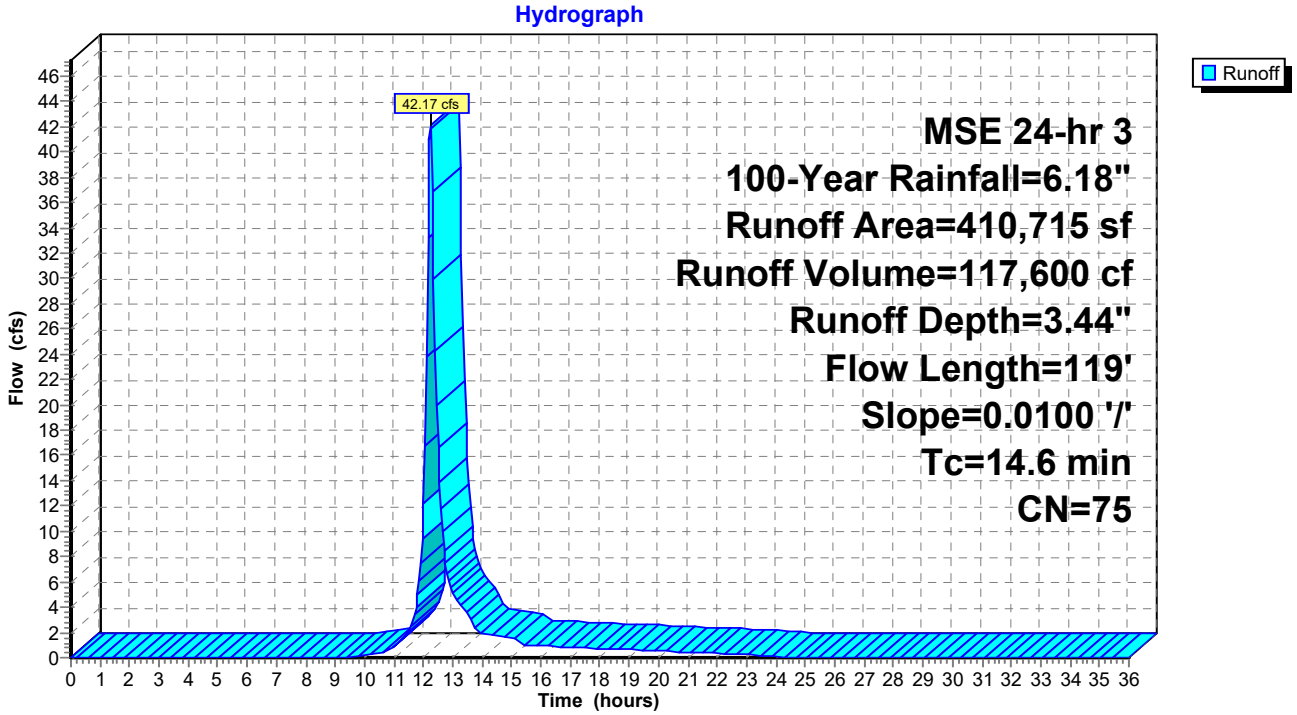
Runoff = 42.17 cfs @ 12.23 hrs, Volume= 117,600 cf, Depth= 3.44"
Routed to Pond B4 : Bioretention Basin-4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
	92,179	98	Paved parking, HSG B
*	60,560	98	Sidewalks, HSG B
	257,976	61	>75% Grass cover, Good, HSG B
	410,715	75	Weighted Average
	257,976		62.81% Pervious Area
	152,739		37.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, Post-Developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
0.5	19	0.0100	0.70		**Shallow Concentrated Flow, Post-Developed Shallow Conc. Flow** Short Grass Pasture Kv= 7.0 fps
14.6	119	Total			

Subcatchment P4: Proposed to Bio-4



Summary for Subcatchment P5: Uncaptured

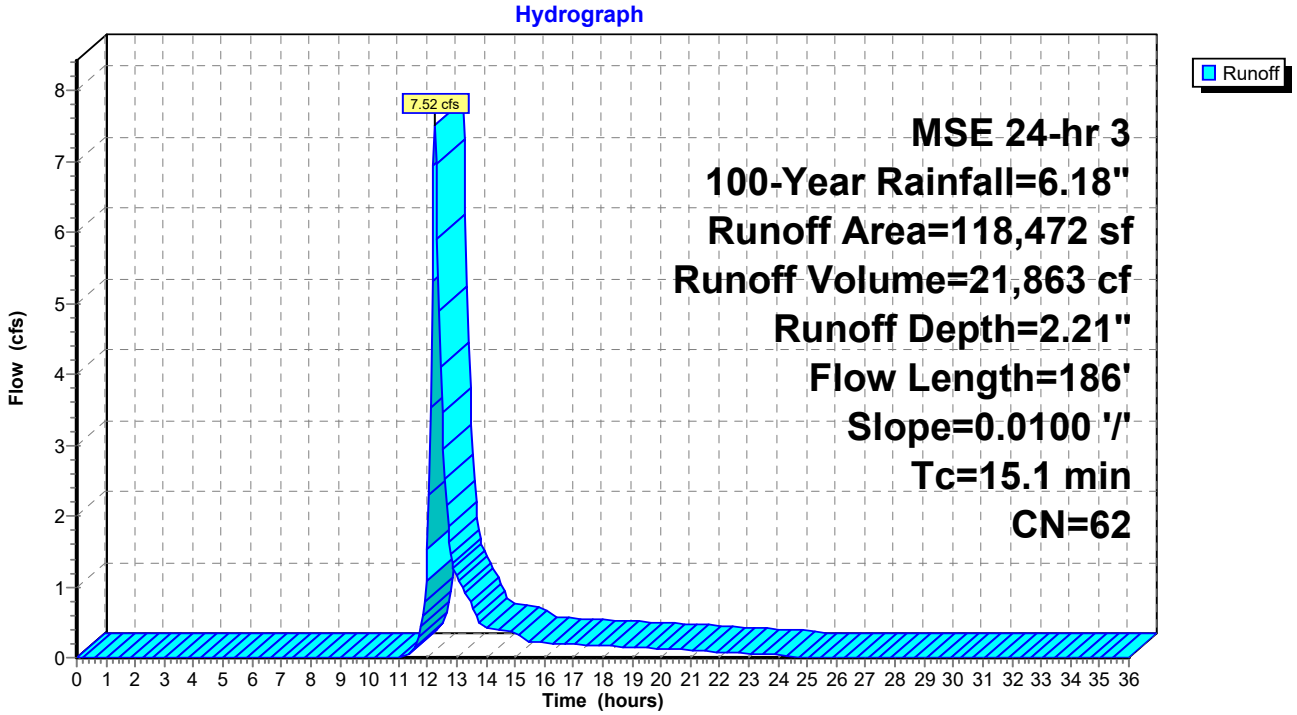
Runoff = 7.52 cfs @ 12.25 hrs, Volume= 21,863 cf, Depth= 2.21"
Routed to Link 2L : Total Proposed Outfall

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
	981	98	Paved parking, HSG B
*	870	98	Sidewalks, HSG B
	116,621	61	>75% Grass cover, Good, HSG B
	118,472	62	Weighted Average
	116,621		98.44% Pervious Area
	1,851		1.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0100	0.12		**Sheet Flow, Post-developed Sheet Flow-1** Grass: Short n= 0.150 P2= 2.70"
1.0	86	0.0100	1.50		**Shallow Concentrated Flow, Post-developed Shallow Conc. Flow** Grassed Waterway Kv= 15.0 fps
15.1	186	Total			

Subcatchment P5: Uncaptured



Summary for Pond B1: Bioretention Basin-1

Inflow Area = 160,309 sf, 53.74% Impervious, Inflow Depth = 4.05" for 100-Year event
Inflow = 19.36 cfs @ 12.22 hrs, Volume= 54,079 cf
Outflow = 3.77 cfs @ 12.69 hrs, Volume= 54,079 cf, Atten= 81%, Lag= 27.9 min
Discarded = 0.17 cfs @ 12.69 hrs, Volume= 6,792 cf
Primary = 3.59 cfs @ 12.69 hrs, Volume= 47,287 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 829.88' @ 12.69 hrs Surf.Area= 15,107 sf Storage= 24,281 cf

Plug-Flow detention time= 94.2 min calculated for 54,079 cf (100% of inflow)
Center-of-Mass det. time= 94.1 min (893.3 - 799.2)

Volume	Invert	Avail.Storage	Storage Description
#1	823.25'	1,102 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 3,309 cf Overall x 33.3% Voids
#2	824.25'	1,787 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 6,618 cf Overall x 27.0% Voids
#3	826.25'	24,664 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		27,553 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
823.25	3,309	0	0
824.25	3,309	3,309	3,309

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
824.25	3,309	0	0
826.25	3,309	6,618	6,618

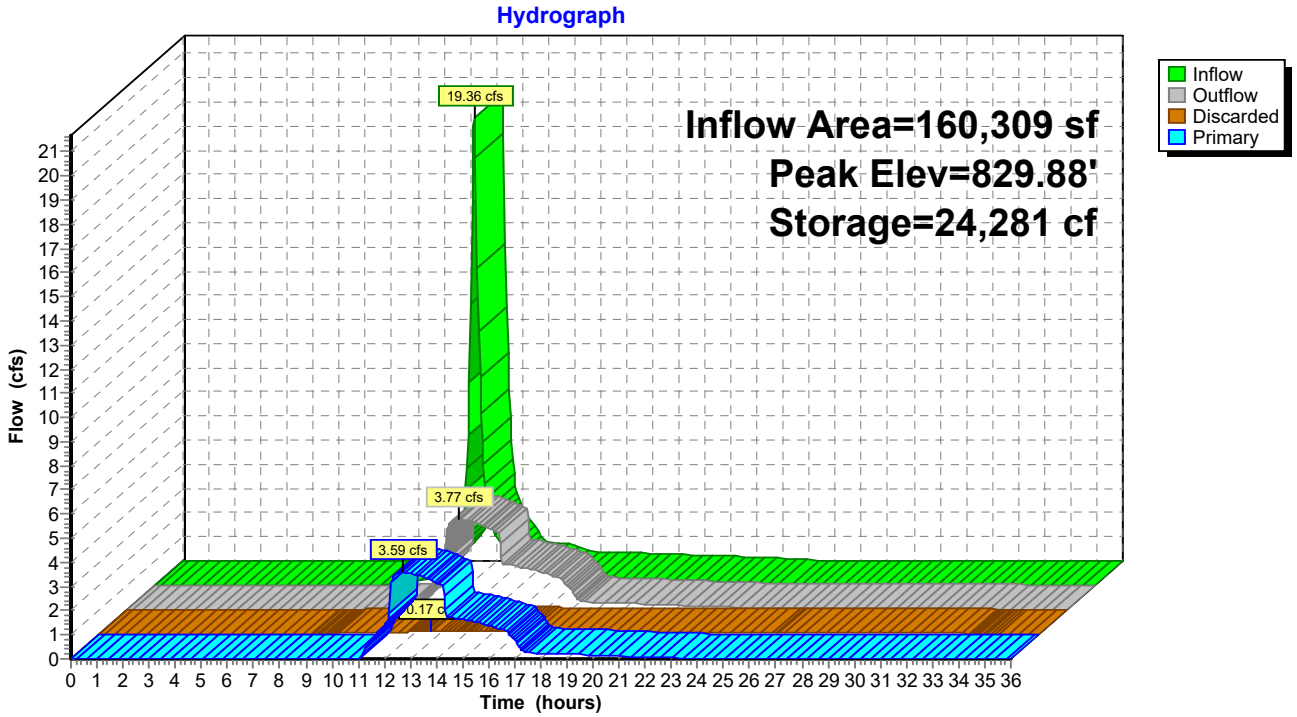
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
826.25	3,309	0	0
830.25	9,023	24,664	24,664

Device	Routing	Invert	Outlet Devices
#1	Primary	824.75'	**8.0" Round 8" Culvert** L= 49.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 824.75' / 824.13' S= 0.0125 '/' Cc= 0.900 n= 0.010, Flow Area= 0.35 sf
#2	Device 1	823.75'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	828.25'	**48.0" Horiz. 48" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	823.25'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.17 cfs @ 12.69 hrs HW=829.88' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.17 cfs)

Primary OutFlow Max=3.59 cfs @ 12.69 hrs HW=829.88' (Free Discharge)
└**1=8" Culvert** (Barrel Controls 3.59 cfs @ 10.30 fps)
└**2=6" Drain Tile** (Passes < 2.14 cfs potential flow)
└**3=48" Standpipe** (Passes < 77.14 cfs potential flow)

Pond B1: Bioretention Basin-1



Summary for Pond B2: Bioretention Basin-2

Inflow Area = 105,983 sf, 75.37% Impervious, Inflow Depth = 4.91" for 100-Year event
Inflow = 19.86 cfs @ 12.13 hrs, Volume= 43,364 cf
Outflow = 6.19 cfs @ 12.30 hrs, Volume= 43,364 cf, Atten= 69%, Lag= 10.5 min
Discarded = 0.11 cfs @ 12.30 hrs, Volume= 2,892 cf
Primary = 6.08 cfs @ 12.30 hrs, Volume= 40,472 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 830.28' @ 12.30 hrs Surf.Area= 9,759 sf Storage= 14,335 cf

Plug-Flow detention time= 40.8 min calculated for 43,364 cf (100% of inflow)
Center-of-Mass det. time= 40.5 min (815.5 - 775.0)

Volume	Invert	Avail.Storage	Storage Description
#1	824.00'	725 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 2,178 cf Overall x 33.3% Voids
#2	825.00'	1,176 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 4,356 cf Overall x 27.0% Voids
#3	827.00'	16,578 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		18,479 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
824.00	2,178	0	0
825.00	2,178	2,178	2,178

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
825.00	2,178	0	0
827.00	2,178	4,356	4,356

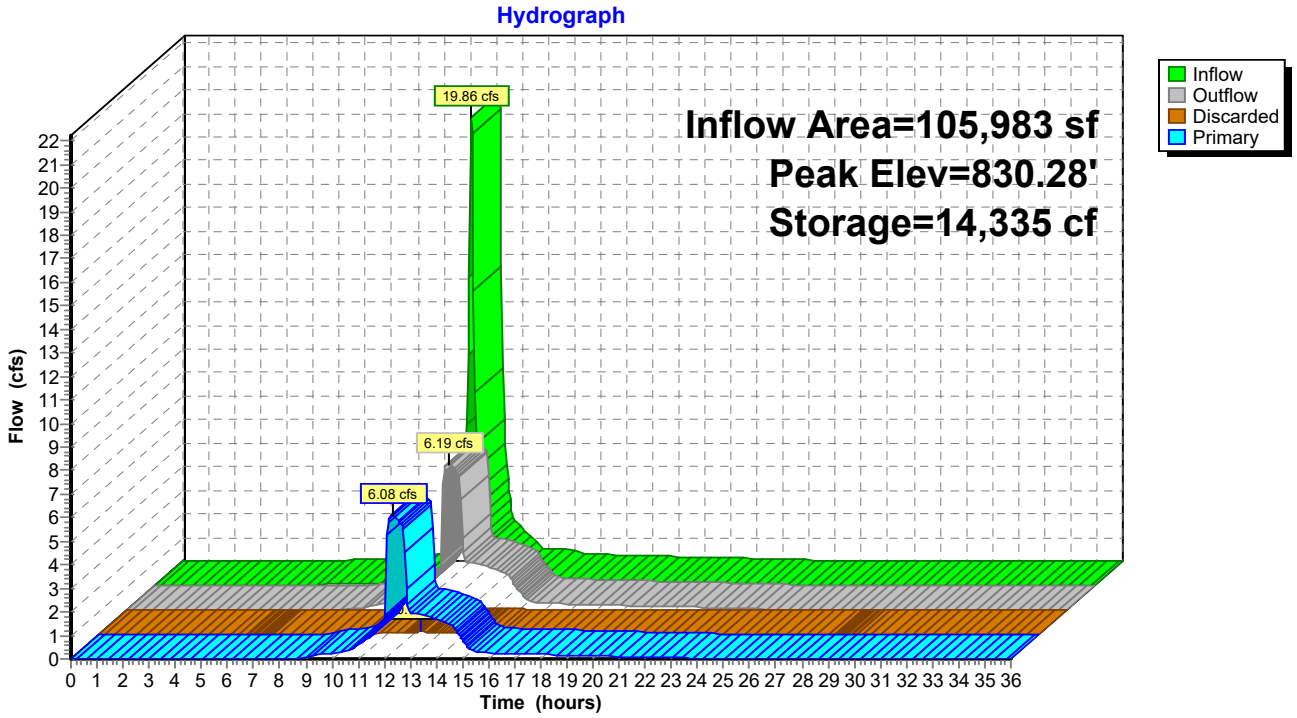
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
827.00	2,178	0	0
831.00	6,111	16,578	16,578

Device	Routing	Invert	Outlet Devices
#1	Primary	824.50'	**10.0" Round 10" Culvert** L= 26.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 824.50' / 824.23' S= 0.0102 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Device 1	824.50'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	829.00'	**36.0" Horiz. 36" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	824.00'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.11 cfs @ 12.30 hrs HW=830.28' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.11 cfs)

Primary OutFlow Max=6.08 cfs @ 12.30 hrs HW=830.28' (Free Discharge)
└**1=10" Culvert** (Inlet Controls 6.08 cfs @ 11.15 fps)
└**2=6" Drain Tile** (Passes < 2.22 cfs potential flow)
└**3=36" Standpipe** (Passes < 38.48 cfs potential flow)

Pond B2: Bioretention Basin-2



Summary for Pond B3: Bioretention Basin-3

Inflow Area = 332,690 sf, 58.85% Impervious, Inflow Depth = 4.26" for 100-Year event
Inflow = 48.18 cfs @ 12.17 hrs, Volume= 118,070 cf
Outflow = 3.88 cfs @ 13.18 hrs, Volume= 118,070 cf, Atten= 92%, Lag= 60.1 min
Discarded = 0.46 cfs @ 13.18 hrs, Volume= 20,522 cf
Primary = 3.42 cfs @ 13.18 hrs, Volume= 97,548 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 828.89' @ 13.18 hrs Surf.Area= 39,894 sf Storage= 66,645 cf

Plug-Flow detention time= 201.6 min calculated for 117,906 cf (100% of inflow)
Center-of-Mass det. time= 201.8 min (993.4 - 791.6)

Volume	Invert	Avail.Storage	Storage Description
#1	822.00'	3,381 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 10,153 cf Overall x 33.3% Voids
#2	823.00'	5,483 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 20,306 cf Overall x 27.0% Voids
#3	825.00'	60,038 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		68,902 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
822.00	10,153	0	0
823.00	10,153	10,153	10,153

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
823.00	10,153	0	0
825.00	10,153	20,306	20,306

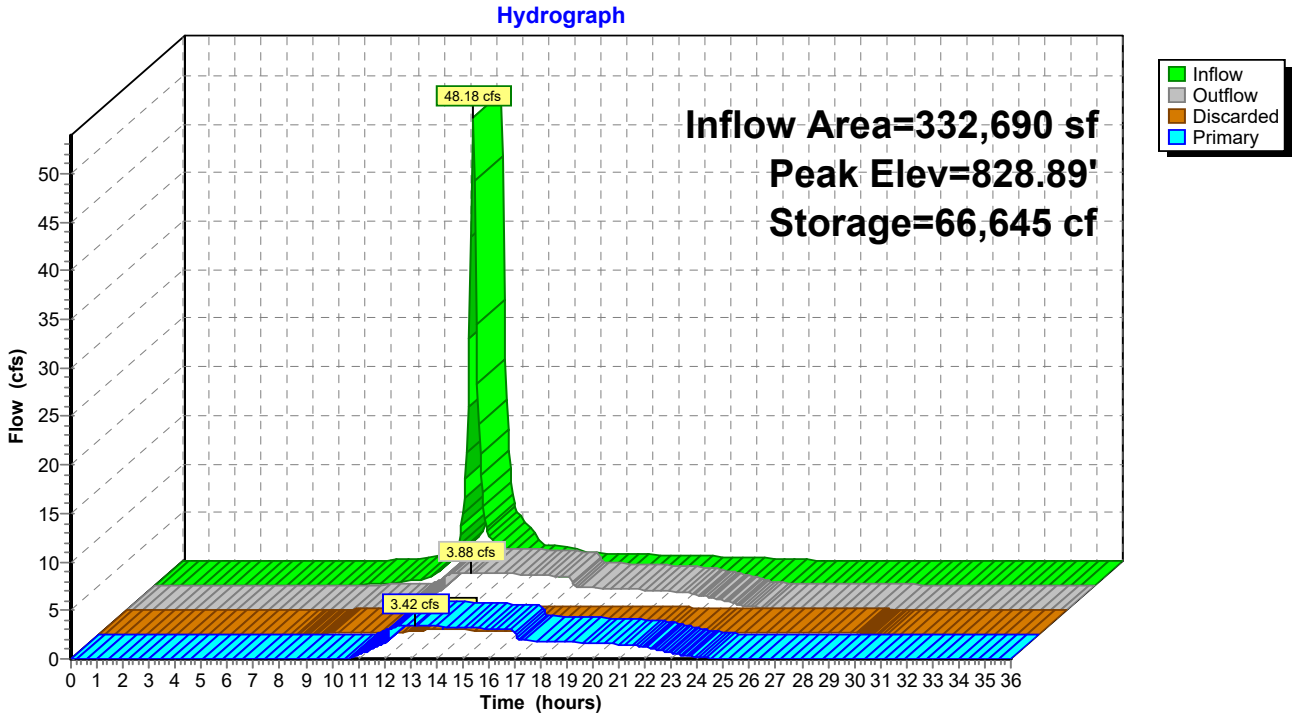
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
825.00	10,153	0	0
829.00	19,866	60,038	60,038

Device	Routing	Invert	Outlet Devices
#1	Primary	822.50'	**10.0" Round 10" Culvert** L= 433.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 822.50' / 820.88' S= 0.0037 '/' Cc= 0.900 n= 0.010, Flow Area= 0.55 sf
#2	Device 1	822.50'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	827.00'	**48.0" Horiz. 48" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	822.00'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.46 cfs @ 13.18 hrs HW=828.89' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.46 cfs)

Primary OutFlow Max=3.42 cfs @ 13.18 hrs HW=828.89' (Free Discharge)
└**1=10" Culvert** (Barrel Controls 3.42 cfs @ 6.26 fps)
└**2=6" Drain Tile** (Passes < 2.34 cfs potential flow)
└**3=48" Standpipe** (Passes < 83.08 cfs potential flow)

Pond B3: Bioretention Basin-3



Summary for Pond B4: Bioretention Basin-4

Inflow Area = 410,715 sf, 37.19% Impervious, Inflow Depth = 3.44" for 100-Year event
Inflow = 42.17 cfs @ 12.23 hrs, Volume= 117,600 cf
Outflow = 6.01 cfs @ 12.87 hrs, Volume= 117,600 cf, Atten= 86%, Lag= 38.1 min
Discarded = 0.42 cfs @ 12.87 hrs, Volume= 16,326 cf
Primary = 5.59 cfs @ 12.87 hrs, Volume= 101,274 cf
Routed to Link 2L : Total Proposed Outfall

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 829.88' @ 12.87 hrs Surf.Area= 35,883 sf Storage= 58,856 cf

Plug-Flow detention time= 141.6 min calculated for 117,600 cf (100% of inflow)
Center-of-Mass det. time= 141.3 min (951.1 - 809.8)

Volume	Invert	Avail.Storage	Storage Description
#1	823.50'	2,962 cf	**Stone Storage (Prismatic)** Listed below (Recalc) 8,894 cf Overall x 33.3% Voids
#2	824.50'	3,602 cf	**Engineered Soil (Prismatic)** Listed below (Recalc) 13,341 cf Overall x 27.0% Voids
#3	826.00'	54,570 cf	**Open Storage (Prismatic)** Listed below (Recalc)
		61,134 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
823.50	8,894	0	0
824.50	8,894	8,894	8,894

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
824.50	8,894	0	0
826.00	8,894	13,341	13,341

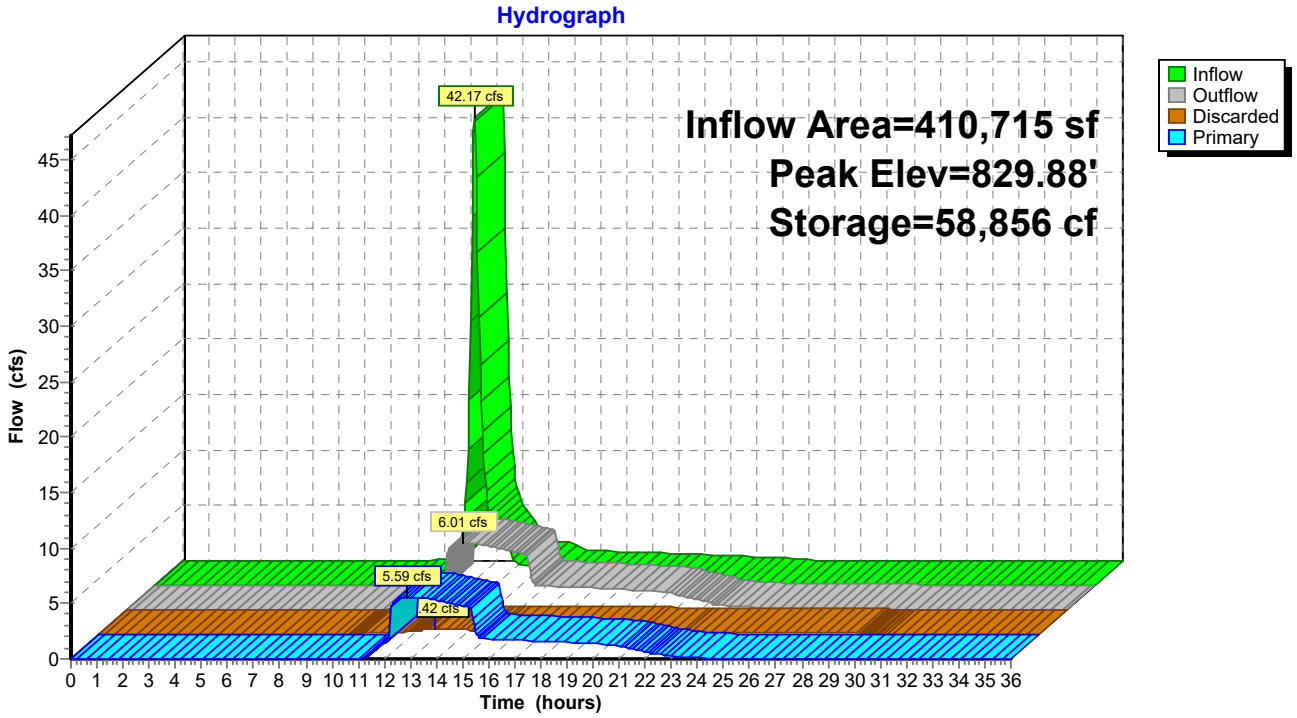
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
826.00	8,894	0	0
830.00	18,391	54,570	54,570

Device	Routing	Invert	Outlet Devices
#1	Primary	824.00'	**10.0" Round 10" Culvert** L= 70.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 824.00' / 823.86' S= 0.0020 '/' Cc= 0.900 n= 0.010, Flow Area= 0.55 sf
#2	Device 1	824.00'	**6.0" Vert. 6" Drain Tile** C= 0.600 Limited to weir flow at low heads
#3	Device 1	828.00'	**48.0" Horiz. 48" Standpipe** C= 0.600 Limited to weir flow at low heads
#4	Discarded	823.50'	**0.500 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.42 cfs @ 12.87 hrs HW=829.87' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.42 cfs)

Primary OutFlow Max=5.59 cfs @ 12.87 hrs HW=829.87' (Free Discharge)
└**1=10" Culvert** (Barrel Controls 5.59 cfs @ 10.26 fps)
└**2=6" Drain Tile** (Passes < 2.24 cfs potential flow)
└**3=48" Standpipe** (Passes < 82.84 cfs potential flow)

Pond B4: Bioretention Basin-4

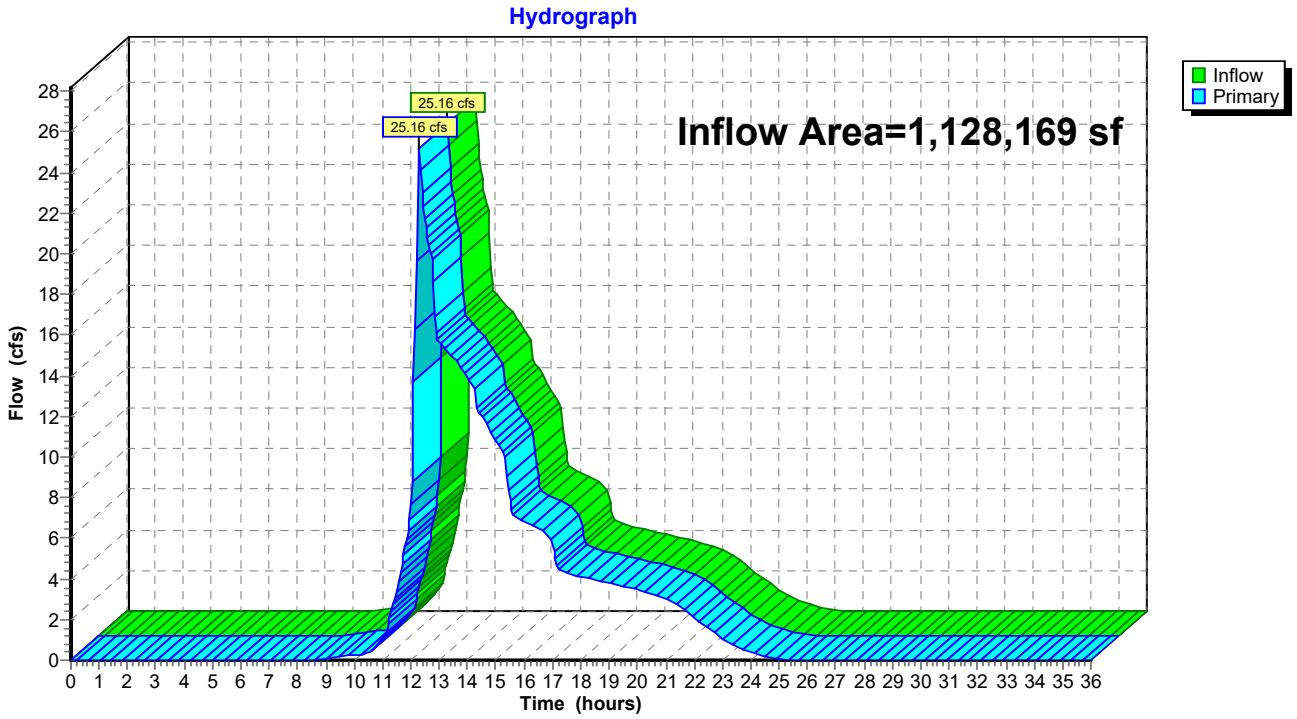


Summary for Link 2L: Total Proposed Outfall

Inflow Area = 1,128,169 sf, 45.78% Impervious, Inflow Depth = 3.28" for 100-Year event
Inflow = 25.16 cfs @ 12.27 hrs, Volume= 308,445 cf
Primary = 25.16 cfs @ 12.27 hrs, Volume= 308,445 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

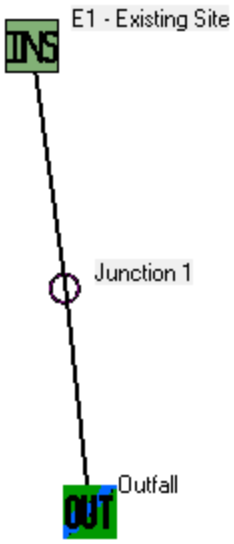
Link 2L: Total Proposed Outfall



Appendix D

SLAMM Analysis

Parkview Middle School – Mukwonago - Existing SLAMM Analysis



Data file name: S:_SiteDsgn\Bray Architects\250140 Mukwonago SD Referendum 2024\SWMP\WinSLAMM\250140_WinSLAMM - Existing.mdb
WinSLAMM Version 10.5.0
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.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: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Date: 03-31-2025 Time: 09:55:07

Site information:

LU# 1 - Institutional: Institutional 1 Total area (ac): 25.899
1 - Roofs 1: 3.610 ac. Flat Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 3.603 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 1.157 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 17.529 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

SLAMM for Windows Version 10.5.0
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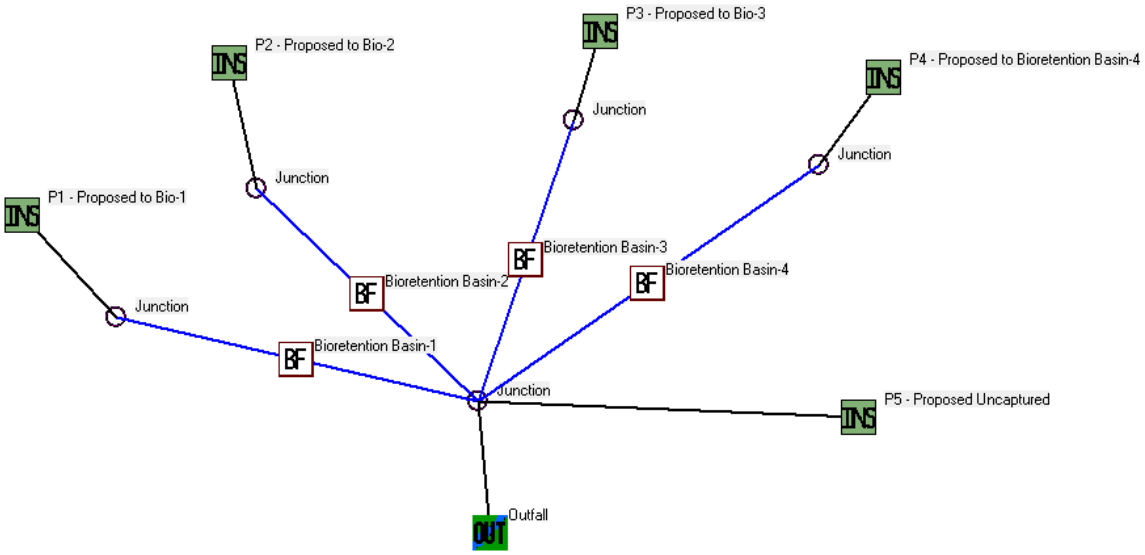
Data file name: S:_SiteDsgn\Bray Architects\250140 Mukwonago SD Referendum 2024\SWMP\WinSLAMM\250140_WinSLAMM - Existing.mdb
Data file description:
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
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
Start of Winter Season: 12/06 End of Winter Season: 03/28
Model Run Start Date: 01/05/69 Model Run End Date: 12/31/69
Date of run: 03-31-2025 Time of run: 09:54:54
Total Area Modeled (acres): 25.899
Years in Model Run: 0.99

	Runoff Volume	Percent Runoff Volume	Particulate Solids Conc	Particulate Solids Yield	Percent Particulate Solids Reduction
	(cu ft)		(mg/L)	(lbs)	
Total of all Land Uses without Controls:	751,643	-	97.42	4,571	-
Outfall Total with Controls:	751,639	0.00%	97.42	4,571	0.00%
Annualized Total After Outfall Controls:	762,079			4,635	

	Concentration – No Controls	Concentration – With Controls	Pollutant Yield - No Controls	Pollutant Yield - With Controls	Percent Reduction
	(mg/L)	(mg/L)	(lbs)	(lbs)	
Particulate Solids	97.42	97.42	4,571	4,571	0.00%
Particulate Phosphorus	0.2869	0.2869	13.46	13.46	0.00%
Filterable Phosphorus	0.1116	0.1116	5.236	5.236	0.00%
Total Phosphorus	0.3985	0.3985	18.70	18.70	0.00%

Parkview Middle School – Mukwonago - Proposed SLAMM Analysis



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WinSLAMM Version 10.5.0
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.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: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Date: 03-31-2025 Time: 10:00:23
Site information:

LU# 1 - Institutional: P1 - Proposed to Bio-1 Total area (ac): 3.680
13 - Paved Parking 1: 1.761 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.217 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 1.702 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Institutional: P2 - Proposed to Bio-2 Total area (ac): 2.432
1 - Roofs 1: 1.034 ac. Flat Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 0.681 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.118 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
51 - Small Landscaped Areas 1: 0.599 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 3 - Institutional: P3 - Proposed to Bio-3 Total area (ac): 7.637
1 - Roofs 1: 2.582 ac. Flat Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 1.558 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.355 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 3.142 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 4 - Institutional: P4 - Proposed to Bioretention Basin-4 Total area (ac): 9.428
13 - Paved Parking 1: 2.116 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 1.390 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 5.922 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 5 - Institutional: P5 - Proposed Uncaptured Total area (ac): 2.720
13 - Paved Parking 1: 0.023 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.020 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
51 - Small Landscaped Areas 1: 2.677 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Biofilter CP# 1 (DS) - Bioretention Basin-1

1. Top area (square feet) = 9023
2. Bottom aea (square feet) = 3309
3. Depth (ft): 7
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) 1
10. Porosity of rock filled volume = 0.33

11. Engineered soil infiltration rate: 3.6
12. Engineered soil depth (ft) = 2
13. Engineered soil porosity = 0.27
14. Percent solids reduction due to flow through engineered soil = 80
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil

User-Defined Media Type 1.000

Biofilter Outlet/Discharge Characteristics:

Outlet type: Broad Crested Weir

1. Weir crest length (ft): 0.01
2. Weir crest width (ft): 0.01
3. Height of datum to bottom of weir opening: 6.99

Outlet type: Vertical Stand Pipe

1. Stand pipe diameter (ft): 4
2. Stand pipe height above datum (ft): 5

Outlet type: Drain Tile/Underdrain

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

Control Practice 2: Biofilter CP# 2 (DS) - Bioretention Basin-2

1. Top area (square feet) = 6111
2. Bottom aea (square feet) = 2178
3. Depth (ft): 7
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) 1
10. Porosity of rock filled volume = 0.33
11. Engineered soil infiltration rate: 3.6
12. Engineered soil depth (ft) = 2
13. Engineered soil porosity = 0.27
14. Percent solids reduction due to flow through engineered soil = 80
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil

User-Defined Media Type 1.000

Biofilter Outlet/Discharge Characteristics:

Outlet type: Broad Crested Weir

1. Weir crest length (ft): 0.01
2. Weir crest width (ft): 0.01
3. Height of datum to bottom of weir opening: 6.99

Outlet type: Vertical Stand Pipe

1. Stand pipe diameter (ft): 3
2. Stand pipe height above datum (ft): 5

Outlet type: Drain Tile/Underdrain

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

Control Practice 3: Biofilter CP# 3 (DS) - Bioretention Basin-3

1. Top area (square feet) = 19866
2. Bottom aea (square feet) = 10153
3. Depth (ft): 7
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) 1
10. Porosity of rock filled volume = 0.33
11. Engineered soil infiltration rate: 3.6
12. Engineered soil depth (ft) = 2
13. Engineered soil porosity = 0.27
14. Percent solids reduction due to flow through engineered soil = 80
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil

User-Defined Media Type 1.000

Biofilter Outlet/Discharge Characteristics:

Outlet type: Broad Crested Weir

1. Weir crest length (ft): 0.01
2. Weir crest width (ft): 0.01
3. Height of datum to bottom of weir opening: 6.99

Outlet type: Vertical Stand Pipe

1. Stand pipe diameter (ft): 4
2. Stand pipe height above datum (ft): 5

Outlet type: Drain Tile/Underdrain

1. Underdrain outlet diameter (ft): 0.5

2. Invert elevation above datum (ft): 0.5
3. Number of underdrain outlets: 1

Control Practice 4: Biofilter CP# 4 (DS) - Bioretention Basin-4

1. Top area (square feet) = 18391
2. Bottom aea (square feet) = 8894
3. Depth (ft): 6.5
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) 1
10. Porosity of rock filled volume = 0.33
11. Engineered soil infiltration rate: 3.6
12. Engineered soil depth (ft) = 1.5
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 Media Type 1.000
Biofilter Outlet/Discharge Characteristics:
Outlet type: Broad Crested Weir

1. Weir crest length (ft): 0.01
2. Weir crest width (ft): 0.01
3. Height of datum to bottom of weir opening: 6.49

Outlet type: Vertical Stand Pipe

1. Stand pipe diameter (ft): 4
2. Stand pipe height above datum (ft): 4.5

Outlet type: Drain Tile/Underdrain

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

SLAMM for Windows Version 10.5.0
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Data file name: S:_SiteDsgn\Bray Architects\250140 Mukwonago SD Referendum 2024\SWMP\WinSLAMM\250140_WinSLAMM.mdb
Data file description:
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN

Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
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
Start of Winter Season: 12/06 End of Winter Season: 03/28
Model Run Start Date: 01/05/69 Model Run End Date: 12/31/69
Date of run: 03-31-2025 Time of run: 10:04:13
Total Area Modeled (acres): 25.897
Years in Model Run: 0.99

	Runoff Volume	**Percent Runoff Volume**	**Particulate Solids Conc**	**Particulate Solids Yield**	**Percent Particulate Solids Reduction**
	(cu ft)		(mg/L)	(lbs)	
Total of all Land Uses without Controls:	1,001,000	-	99.74	6,233	-
Outfall Total with Controls:	444,593	55.59%	27.43	761.4	87.78%
Annualized Total After Outfall Controls:	450,768			772.0	

	Concentration – No Controls	**Concentration – With Controls**	**Pollutant Yield - No Controls**	**Pollutant Yield - With Controls**	**Percent Reduction**
	(mg/L)	(mg/L)	(lbs)	(lbs)	
Particulate Solids	99.74	27.43	6,233	761.4	87.78%
Particulate Phosphorus	0.2460	0.08198	15.37	2.275	85.20%
Filterable Phosphorus	0.08717	0.1022	5.448	2.836	47.94%
Total Phosphorus	0.3332	0.1842	20.82	5.111	75.45%

Appendix E

SWMP-1	**Aerial View of Pre-Developed Site Conditions**
SWMP-2	**Pre-Developed Site Conditions**
SWMP-3	**Post-Developed Site Conditions**
SWMP-4	**Pre-Developed Drainage Conditions**
SWMP-5	**Post-Developed Drainage Conditions**

Scale: 0 40 80 160
Scale: 1" = 80'

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LEGEND

SWMP LIMITS

Sheet Number: SWMP-1

Sheet Title: AERIAL VIEW OF PRE-DEVELOPED SITE CONDITIONS

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Project Number: 3526

NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION

REVISIONS:

Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

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Milwaukee
829 South 1st Street
Milwaukee, Wisconsin 53204
T: 414.225.0500

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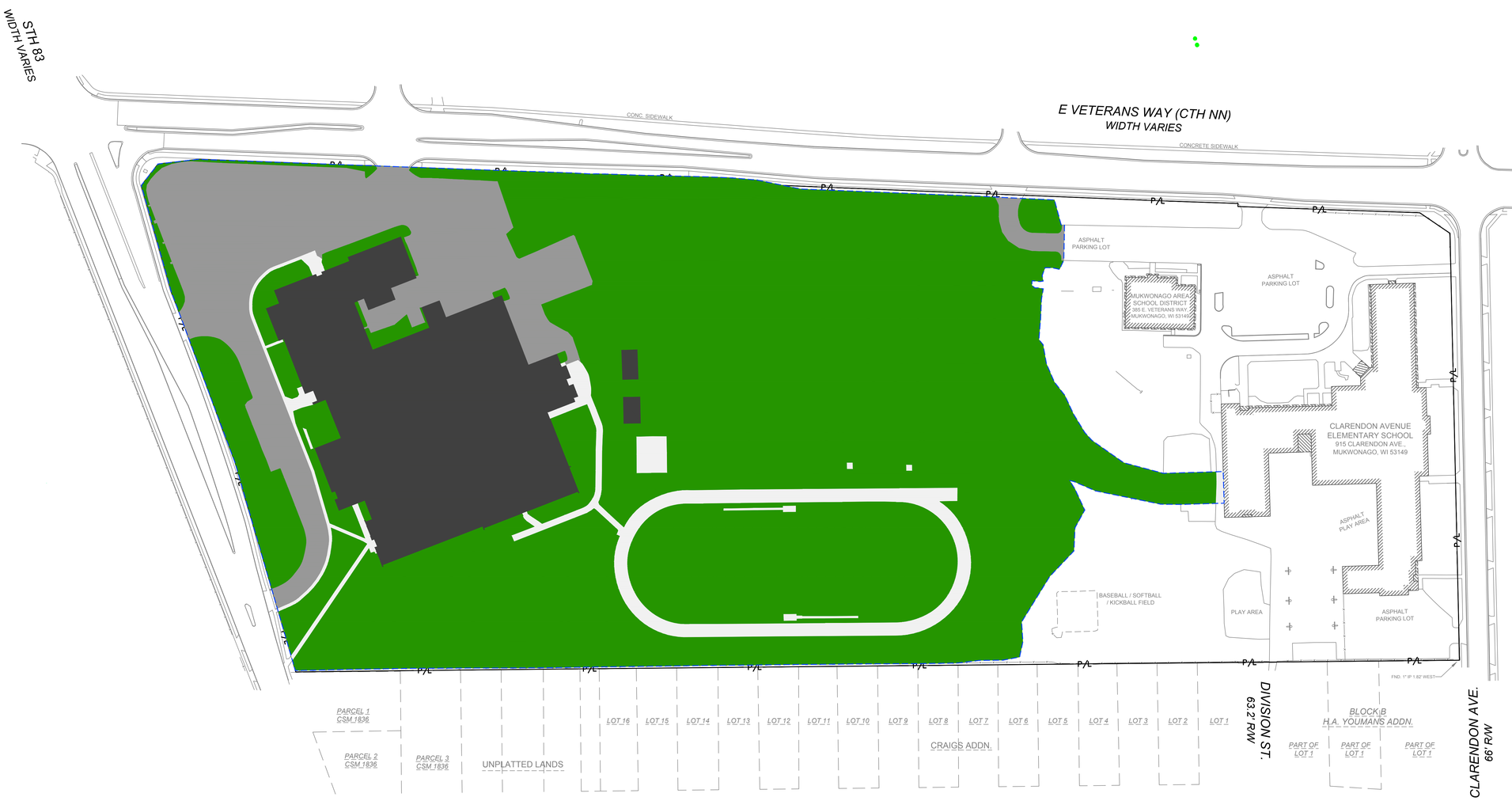

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Scale: 0 40 80 160

Scale: 1" = 80'

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LEGEND

SWMP LIMITS

EXISTING PERVIOUS VS. IMPERVIOUS AREAS

	SQUARE FEET	ACRES
AREA OF SUBJECT SITE (SWMP LIMITS)	1,128,169 SQUARE FEET	25.90 ACRES
IMPERVIOUS AREAS		
BUILDING / ALTERNATE BUILDING AREA	157,259 SQUARE FEET	3.61 ACRES
DRIVEWAY / ROADWAY AREA	156,956 SQUARE FEET	3.60 ACRES
SIDEWALK / PEDESTRIAN AREAS	50,411 SQUARE FEET	1.16 ACRES
TOTAL EXISTING IMPERVIOUS AREA	364,626 SQUARE FEET	8.37 ACRES
PERVIOUS AREAS		
TOTAL EXISTING PERVIOUS AREA	763,543 SQUARE FEET	17.53 ACRES

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Sheet Title:
PRE-DEVELOPED SITE CONDITIONS

Sheet Number:
SWMP-2

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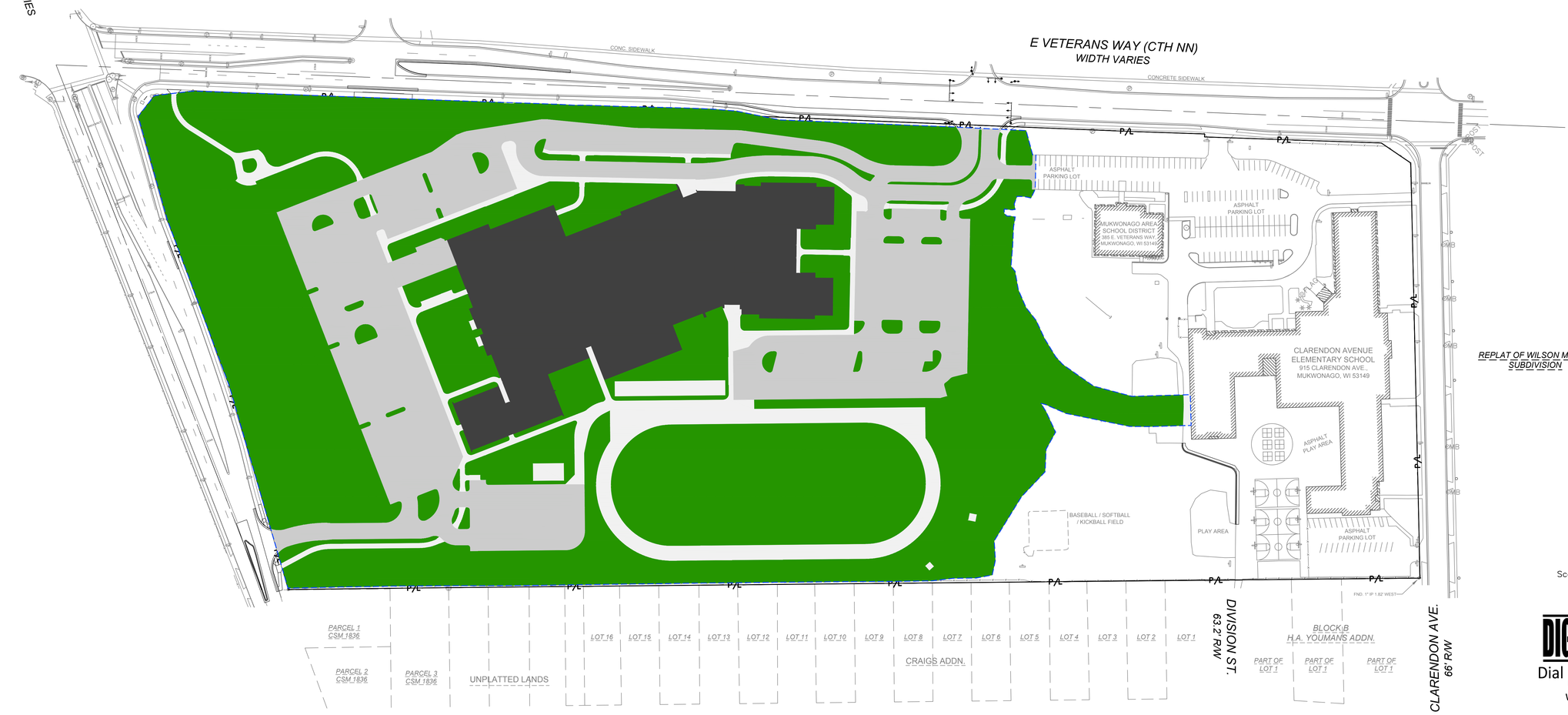

Scale: 0 40 80 160
Scale: 1" = 80'

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LEGEND

SWMP LIMITS

PROPOSED PERVIOUS VS. IMPERVIOUS AREAS

	SQUARE FEET	ACRES
AREA OF SUBJECT SITE (SWMP LIMITS)	1,128,169 SQUARE FEET	25.90 ACRES
IMPERVIOUS AREAS		
BUILDING / ALTERNATE BUILDING AREA	157,510 SQUARE FEET	3.62 ACRES
DRIVEWAY / ROADWAY AREA	267,418 SQUARE FEET	6.14 ACRES
SIDEWALK / PEDESTRIAN AREAS	91,496 SQUARE FEET	2.10 ACRES
TOTAL PROPOSED IMPERVIOUS AREA	516,424 SQUARE FEET	11.86 ACRES
PERVIOUS AREAS		
TOTAL PROPOSED PERVIOUS AREA	611,745 SQUARE FEET	14.04 ACRES

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Sheet Title:
POST DEVELOPED SITE CONDITIONS

Sheet Number:
SWMP-3

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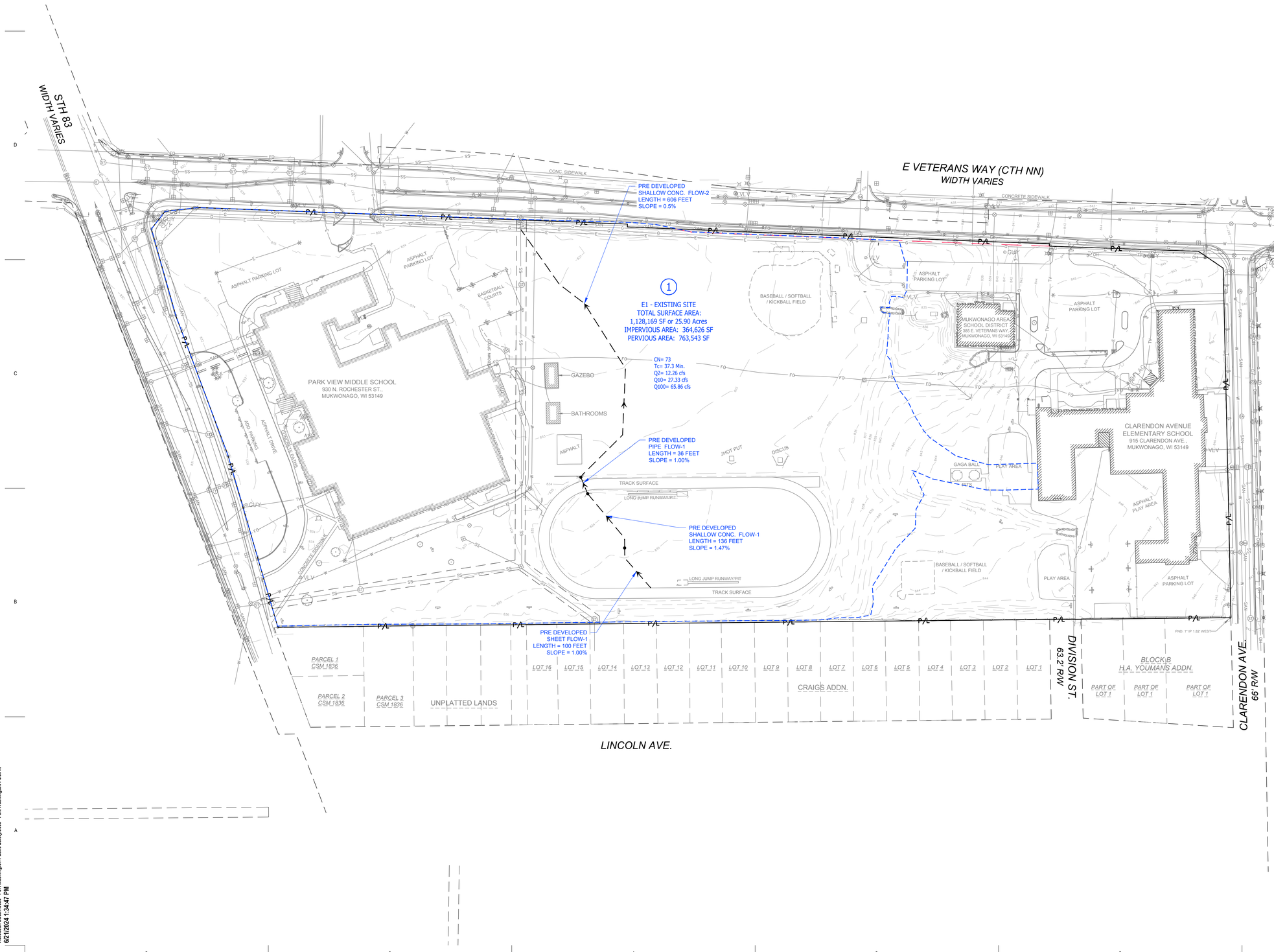

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Sheet Title:
PRE-DEVELOPED SITE DRAINAGE CONDITIONS

Sheet Number:
SWMP-4

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STH 83
WIDTH VARIES

E VETERANS WAY (CTH NN)
WIDTH VARIES

CONC. SIDEWALK

CONCRETE SIDEWALK

POST DEVELOPED
SHALLOW CONC. FLOW-1
LENGTH = 50 FEET
SLOPE = 1.20%

POST DEVELOPED
SHEET FLOW-1
LENGTH = 100 FEET
SLOPE = 2.50%

P/L

3
P3 - PROPOSED TO BIO-3
TOTAL SURFACE AREA:
332,690 SF or 7.64 Acres
IMPERVIOUS AREA: 195,803 SF
PERVIOUS AREA: 136,887 SF

CN= 95
Tc= 6.0 Min.
Q2= 13.98 cfs
Q10= 24.50 cfs
Q100= 48.18 cfs

4
P4 - PROPOSED TO BIO-4
TOTAL SURFACE AREA:
410,715 SF or 9.43 Acres
IMPERVIOUS AREA: 152,739 SF
PERVIOUS AREA: 257,976 SF

CN= 75
Tc= 14.6 Min.
Q2= 8.91 cfs
Q10= 18.52 cfs
Q100= 42.17 cfs

POST DEVELOPED
SHEET FLOW-1
LENGTH = 100 FEET
SLOPE = 1.00%

POST DEVELOPED
SHALLOW CONC. FLOW-1
LENGTH = 19 FEET
SLOPE = 1.00%

2
P2 - PROPOSED TO BIO-2
TOTAL SURFACE AREA:
105,983 SF or 2.43 Acres
IMPERVIOUS AREA: 79,878 SF
PERVIOUS AREA: 26,105 SF

CN= 89
Tc= 6.0 Min.
Q2= 7.01 cfs
Q10= 11.11 cfs
Q100= 19.86 cfs

1
P1 - PROPOSED TO BIO-1
TOTAL SURFACE AREA:
160,309 SF or 3.68 Acres
IMPERVIOUS AREA: 86,153 SF
PERVIOUS AREA: 74,156 SF

CN= 81
Tc= 14.3 Min.
Q2= 5.18 cfs
Q10= 9.46 cfs
Q100= 19.36 cfs

POST DEVELOPED
SHALLOW CONC. FLOW-2
LENGTH = 53 FEET
SLOPE = 11.70%

POST DEVELOPED
SHEET FLOW-2
LENGTH = 89 FEET
SLOPE = 1.68%

POST DEVELOPED
SHEET FLOW-1
LENGTH = 11 FEET
SLOPE = 1.50%

POST DEVELOPED
SHALLOW CONC. FLOW-1
LENGTH = 194 FEET
SLOPE = 2.06%

CLARENDON AVENUE
ELEMENTARY SCHOOL
915 CLARENDON AVE.,
MUKWONAGO, WI 53149

ASPHALT PLAY AREA

PLAY AREA

BASEBALL / SOFTBALL
/ KICKBALL FIELD

ASPHALT
PARKING LOT

POST DEVELOPED
SHEET FLOW-1
LENGTH = 100 FEET
SLOPE = 1.00%

POST DEVELOPED
SHALLOW CONC. FLOW-1
LENGTH = 86 FEET
SLOPE = 1.00%

5
P5 - PROPOSED UNCAPTURED
TOTAL SURFACE AREA:
118,472 SF or 2.72 Acres
IMPERVIOUS AREA: 1,851 SF
PERVIOUS AREA: 116,621 SF

CN= 62
Tc= 15.1 Min.
Q2= 0.58 cfs
Q10= 2.26 cfs
Q100= 7.52 cfs

PARCEL 1
CSM 1836

PARCEL 2
CSM 1836

PARCEL 3
CSM 1836

UNPLATTED LANDS

LOT 16 LOT 15 LOT 14 LOT 13 LOT 12 LOT 11 LOT 10 LOT 9 LOT 8 LOT 7 LOT 6 LOT 5 LOT 4 LOT 3 LOT 2 LOT 1

CRAIGS ADDN.

BLOCK B
H.A. YOUMANS ADDN.

PART OF LOT 1 PART OF LOT 1 PART OF LOT 1

REPLAT OF WILSON MANOR
SUBDIVISION

DIVISION ST.
66' R/W

CLARENDON AVE.
66' R/W

LINCOLN AVE.

FND. 1" IP 1.82' WEST

N

Scale: 0 40 80 160
Scale: 1" = 80'

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Sheet Title:
POST DEVELOPED SITE DRAINAGE CONDITIONS

Sheet Number:
SWMP-5

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Appendix F

Civil Engineering Plan Set

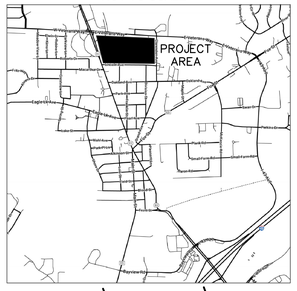
PLAT OF SURVEY WITH TOPOGRAPHY

PART OF THE SOUTHEAST 1/4 OF SECTION 23, TOWNSHIP 5 NORTH, RANGE 18 EAST, IN THE VILLAGE (FORMERLY IN THE TOWN) OF MUKWONAGO, COUNT OF WAUKESHA, STATE OF WISCONSIN.

BEARINGS ARE REFERENCED TO NAD83 WISCONSIN STATE PLANE – SOUTH ZONE VERTICAL DATUM IS NAVD 88

VICINITY MAP

NOT TO SCALE



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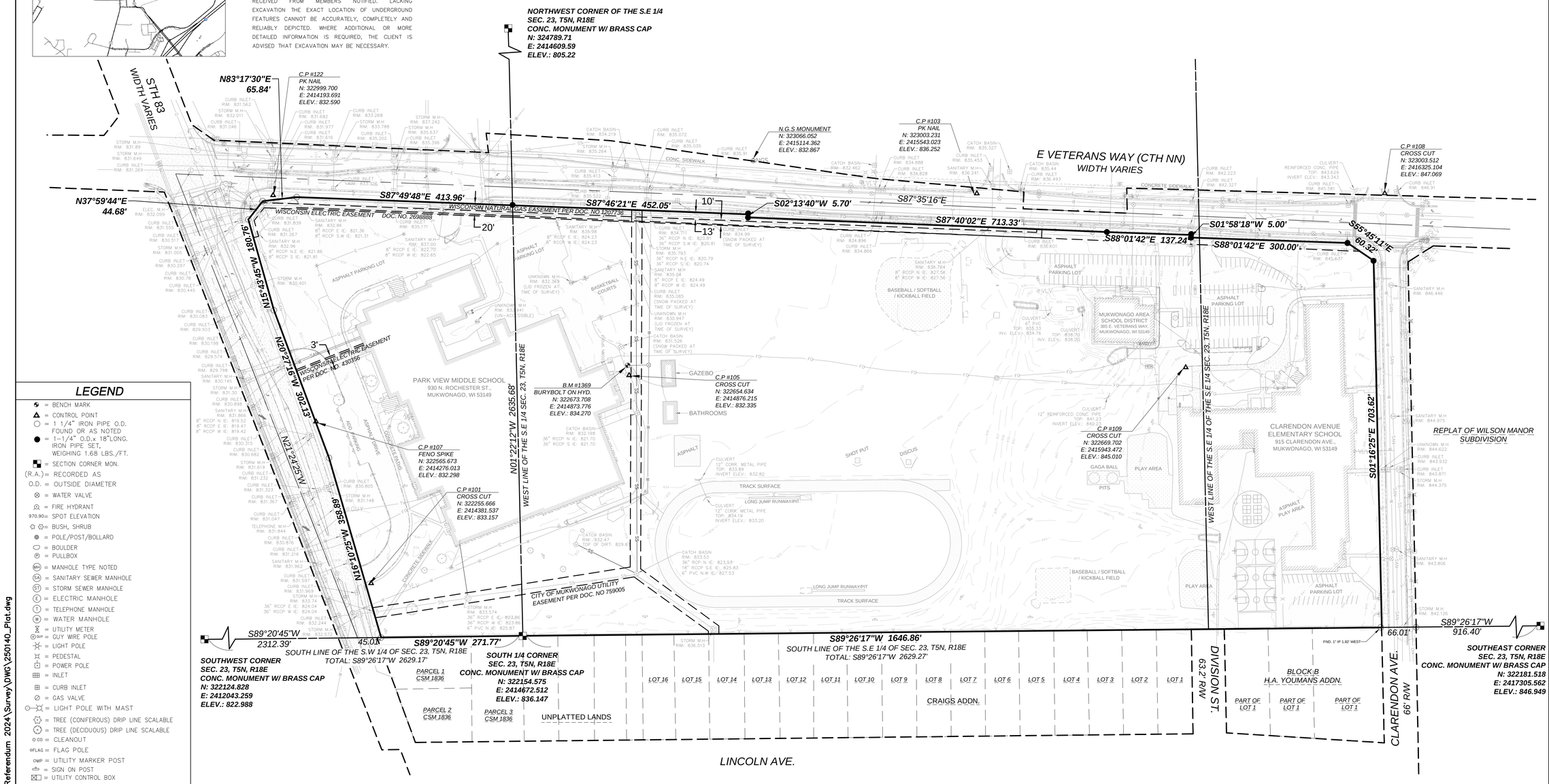
20244908553, 20244908556, 20244908564, 20244908567, 20244908581, 20244908582, 20245002221, 20245002224, 20245002227, 20245002231, 20245002238, 20245002239.

ALTHOUGH DIGGERS' HOTLINE WAS NOTIFIED THIS SURVEY DOES NOT GUARANTEE THAT ALL UTILITIES HAVE BEEN LOCATED ON SITE. SOME OF THE UTILITIES MAY HAVE BEEN DRAWN IN PER PLAN BASED ON MAPS RECEIVED FROM MEMBERS NOTIFIED. LACKING EXCAVATION THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION MAY BE NECESSARY.



LEGEND

- = BENCH MARK
- = CONTROL POINT
- = 1 1/4" IRON PIPE O.D. FOUND OR AS NOTED
- = 1-1/4" O.D.x 18"LONG. IRON PIPE SET, WEIGHING 1.68 LBS./FT.
- = SECTION CORNER MON.
- (R.A.)= RECORDED AS
- O.D. = OUTSIDE DIAMETER
- = WATER VALVE
- = FIRE HYDRANT
- 970.90= SPOT ELEVATION
- = BUSH, SHRUB
- = POLE/POST/BOLLARD
- = BOULDER
- = PULLBOX
- (MH) = MANHOLE TYPE NOTED
- (SA) = SANITARY SEWER MANHOLE
- (ST) = STORM SEWER MANHOLE
- (E) = ELECTRIC MANHOLE
- (T) = TELEPHONE MANHOLE
- (W) = WATER MANHOLE
- = UTILITY METER
- (GUY) = GUY WIRE POLE
- = LIGHT POLE
- = PEDESTAL
- = POWER POLE
- = INLET
- = CURB INLET
- = GAS VALVE
- = LIGHT POLE WITH MAST
- = TREE (CONIFEROUS) DRIP LINE SCALABLE
- = TREE (DECIDUOUS) DRIP LINE SCALABLE
- (CO) = CLEANOUT
- (FLAG) = FLAG POLE
- (UMP) = UTILITY MARKER POST
- = SIGN ON POST
- = UTILITY CONTROL BOX
- (VLV) = UNKNOWN UTILITY VALVE
- FL. EL.= FIRST FLOOR ELEVATION
- = BUILDING OUTLINE
- 3 = MINOR CONTOUR
- 5 = MAJOR CONTOUR
- = FENCE
- = BEAM GUARD
- = CHAINLINK FENCE
- = WOODED AREA/SHRUB EDGE
- W = WATER MAIN
- ST = STORM SEWER
- SAN = SANITARY SEWER
- G = NATURAL GAS MAIN
- T = UNDERGROUND TELEPHONE
- E = UNDERGROUND ELECTRIC
- OH = OVERHEAD UTILITY LINES
- FO = UNDERGROUND FIBER OPTIC
- TV = UNDERGROUND CABLE TV
- C = COMMUNICATION CONDUIT
- (P) = UTILITIES PER PLAN
- = ASPHALT SURFACE
- = CONCRETE SURFACE
- = GRAVEL / CRUSHED AGG. SURFACE

PROVIDED BY: KNIGHT BARRY TITLE GROUP
FILE #: 2310623. EFFECTIVE DATE: DECEMBER 20, 2024.

LEGAL DESCRIPTION:

All that part of the Southeast 1/4 of Section 23, Township 5 North, Range 18 East, in the Village (formerly in the Town) of Mukwonago, County of Waukesha, State of Wisconsin, described as follows: Beginning at a point on the South line of said Section 23 located 985 feet West of the Southeast corner of said Section 23; thence North 751.5 feet; thence North 86°30' West parallel to County Trunk Highway "EE" a distance of 678.3 feet; thence South 792.9 feet; thence East 677 feet to the place of beginning. The place of beginning can be further described as being 35 feet West of the intersection of the center line of Clarendon Street with the South line of said Section 23.

ALSO

All that part of the Southwest 1/4 and Southeast 1/4 of Section 23, Township 5 North, Range 18 East, in the Village (formerly in the Town) of Mukwonago, County of Waukesha, State of Wisconsin, described as follows: Beginning at the South quarter corner of said Section 23; thence 319.4 feet West on the South line of said Section 23 to the center line of State Trunk Highway 83; thence North 20° West on the center line of said State Trunk Highway 83, 954.4 feet to the intersection with the center line of County Trunk Highway "EE"; thence South 87° East along the centerline of said County Trunk Highway "EE" 1615.7 feet; thence South 809.4 feet to the South line of said Section 23; thence West on said South section line 968.8 feet to the point of beginning.

ALSO

All of Division Street adjoining the East line of Lot 1, Block 1, of Craigs Addition to the Village of Mukwonago, in the North 1/2 of Section 26, Town 5 North, Range 18 East, in the Village of Mukwonago, County of Waukesha, State of Wisconsin, EXCEPTING THEREFROM the West 16 feet thereof.

EXCEPTING THEREFROM those lands conveyed to State of Wisconsin, Department of Transportation as described in Document No. 1347347. FURTHER EXCEPTING THEREFROM those lands conveyed to the State of Wisconsin, Department of Transportation as described in Warranty Deed recorded as Document No. 2672831, as corrected by Affidavit of Correction recorded as Document No. 3389564. AND FURTHER EXCEPTING THEREFROM those lands conveyed to Waukesha County as described in Warranty Deed recorded as Document No. 4226126.

For informational purposes only:
Property Address: 385 East Veterans Way, Mukwonago, WI 53149
Tax Key Number: MUKV 1964.992

SURVEYOR'S CERTIFICATE:

I, Brian Sandberg do hereby certify that that under My direction and control the above described property was surveyed on 12/31/2024 in accordance with AE–7 of the Wisconsin Administrative Code and is correct to the best of my knowledge and belief.

Brian E. Sandberg S–2500
February 19th, 2025.

kapur
7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
MUKWONAGO AREA SCHOOL DISTRICT

LOCATION:
385 E. VETERANS WAY, MUKWONAGO, WI 53149

CLIENT:
BRAY ARCHITECTS

RELEASE:
FINAL

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1" = 80'
0 40' 80' 160'

SEAL:
WISCONSIN
BRIAN SANDBERG
S-2500
PORT WASHINGTON
WISCONSIN
LAND SURVEYOR

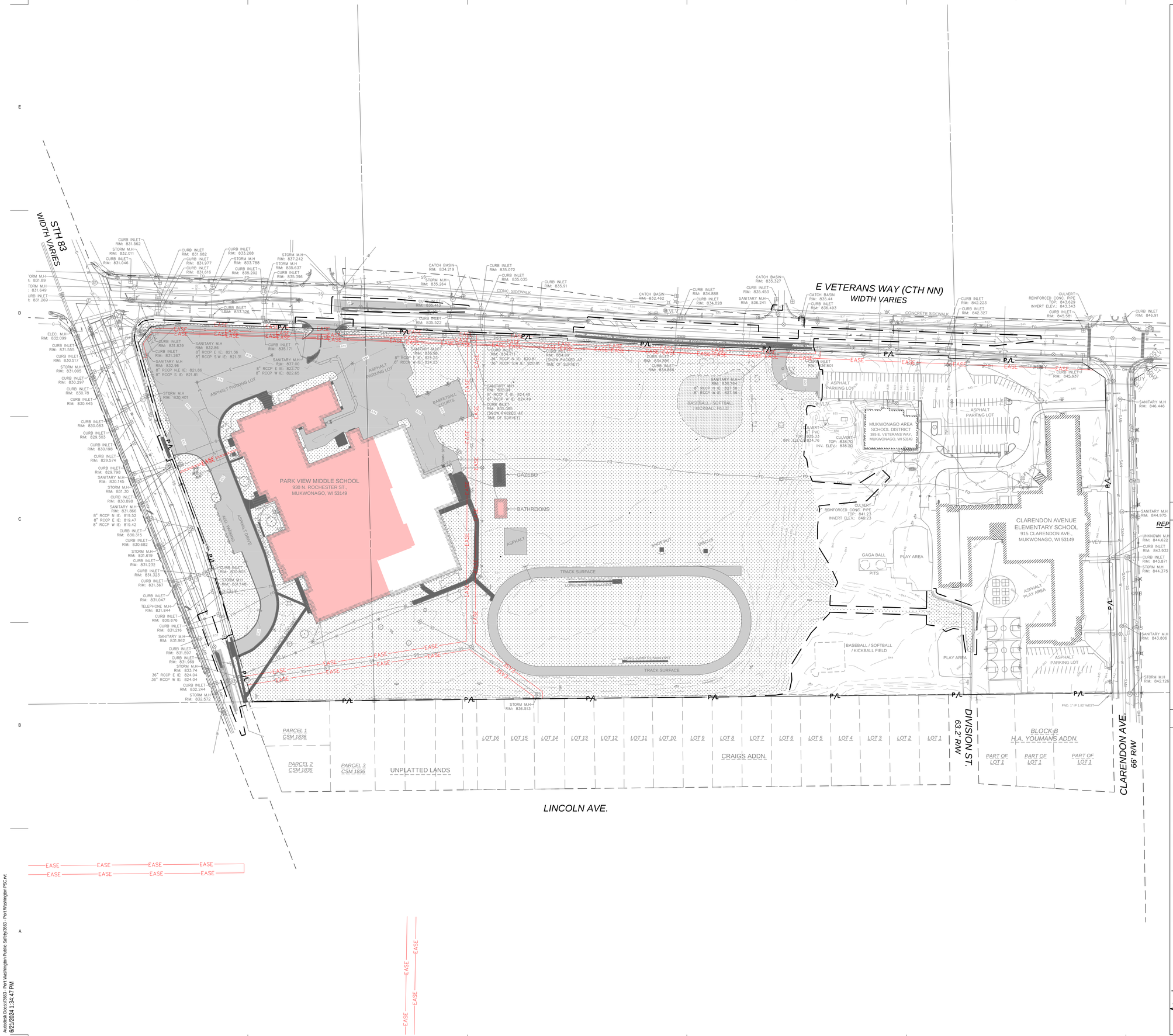
all in

SHEET:
PLAT OF SURVEY WITH TOPOGRAPHY

PROJECT MANAGER:	M.F
PROJECT NUMBER:	25.0140
DATE:	02/19/2025

SHEET NUMBER:
SU1.10

FILENAME: S:_SiteDsgn\Bray Architects\250140 Mukwonago SD Referendum 2024\Survey\DWG\250140_Plat.dwg



Scale: 0 40 80 160
Scale: 1" = 80'

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NOT FOR CONSTRUCTION

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Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: OVERALL SITE DEMOLITION PLAN

Sheet Number: C1.10

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STH 83
WIDTH VARIES

MATCHLINE

CURB INLET
RIM: 831.562

STORM M.H
RIM: 832.011

CURB INLET
RIM: 831.046

CURB INLET
RIM: 831.682

CURB INLET
RIM: 831.977

CURB INLET
RIM: 831.616

CURB INLET
RIM: 833.268

STORM M.H
RIM: 833.788

CURB INLET
RIM: 835.202

STORM M.H
RIM: 837.242

STORM M.H
RIM: 835.637

CURB INLET
RIM: 835.396

CATCH BASIN
RIM: 834.219

STORM M.H
RIM: 835.264

M M.H
331.89

RM M.H
31.649

3 INLET
331.269

CURB INLET
RIM: 833.326

CURB INLET
RIM: 835.622

ELEC. M.H
RIM: 832.099

CURB INLET
RIM: 831.555

CURB INLET
RIM: 830.517

STORM M.H
RIM: 831.005

CURB INLET
RIM: 830.297

CURB INLET
RIM: 830.78

CURB INLET
RIM: 830.445

CURB INLET
RIM: 831.839

CURB INLET
RIM: 831.267

SANITARY M.H
RIM: 832.96
8" RCCP N.E IE: 821.86
8" RCCP S IE: 821.81

SANITARY M.H
RIM: 832.86
8" RCCP E IE: 821.36
8" RCCP S.W IE: 821.31

CURB INLET
RIM: 835.171

SANITARY M.H
RIM: 837.00
8" RCCP E IE: 822.70
8" RCCP W IE: 822.65

SANITARY M.H
RIM: 835.98
8" RCCP E IE: 824.23
6" RCCP W IE: 824.23

STORM M.H
RIM: 830.401

ASPHALT PARKING LOT

ASPHALT PARKING LOT

BASKETBALL COURTS

CURB INLET
RIM: 830.083

CURB INLET
RIM: 829.503

CURB INLET
RIM: 830.198

CURB INLET
RIM: 829.574

CURB INLET
RIM: 829.798

SANITARY M.H
RIM: 830.145

STORM M.H
RIM: 831.30

CURB INLET
RIM: 830.898

SANITARY M.H
RIM: 831.866
RCCP N IE: 819.52
RCCP E IE: 819.47
RCCP W IE: 819.42

CURB INLET
RIM: 830.315

CURB INLET
RIM: 830.682

STORM M.H
RIM: 831.619

CURB INLET
RIM: 831.232

CURB INLET
RIM: 831.323

CURB INLET
RIM: 831.367

CURB INLET
RIM: 830.805

STORM M.H
RIM: 831.148

ADD. PARKING

ASPHALT DRIVE

CONCRETE PATHS

PARK VIEW MIDDLE SCHOOL
930 N. ROCHESTER ST.,
MUKWONAGO, WI 53149

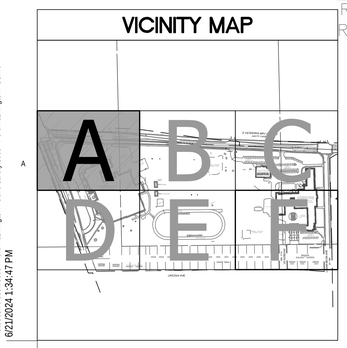
MATCHLINE

MATCHLINE

MATCHLINE

Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP



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Project Title:
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NOT FOR CONSTRUCTION

Project Number:
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Issued For:
PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
SITE DEMOLITION PLAN - AREA A

Sheet Number:
C1.11A

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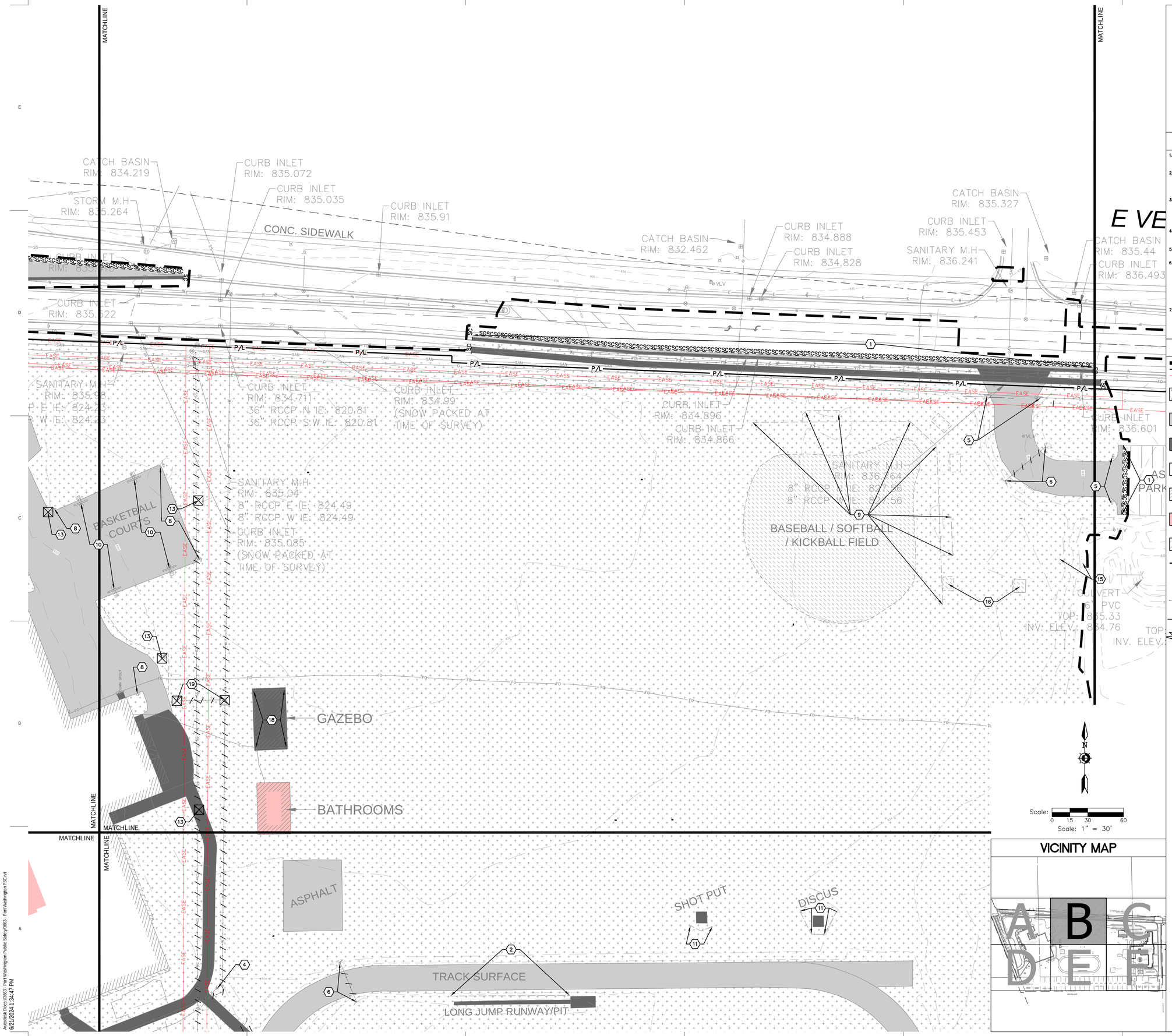

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N

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VICINITY MAP

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Sheet Title: SITE DEMOLITION PLAN - AREA B

Sheet Number: C1.12B

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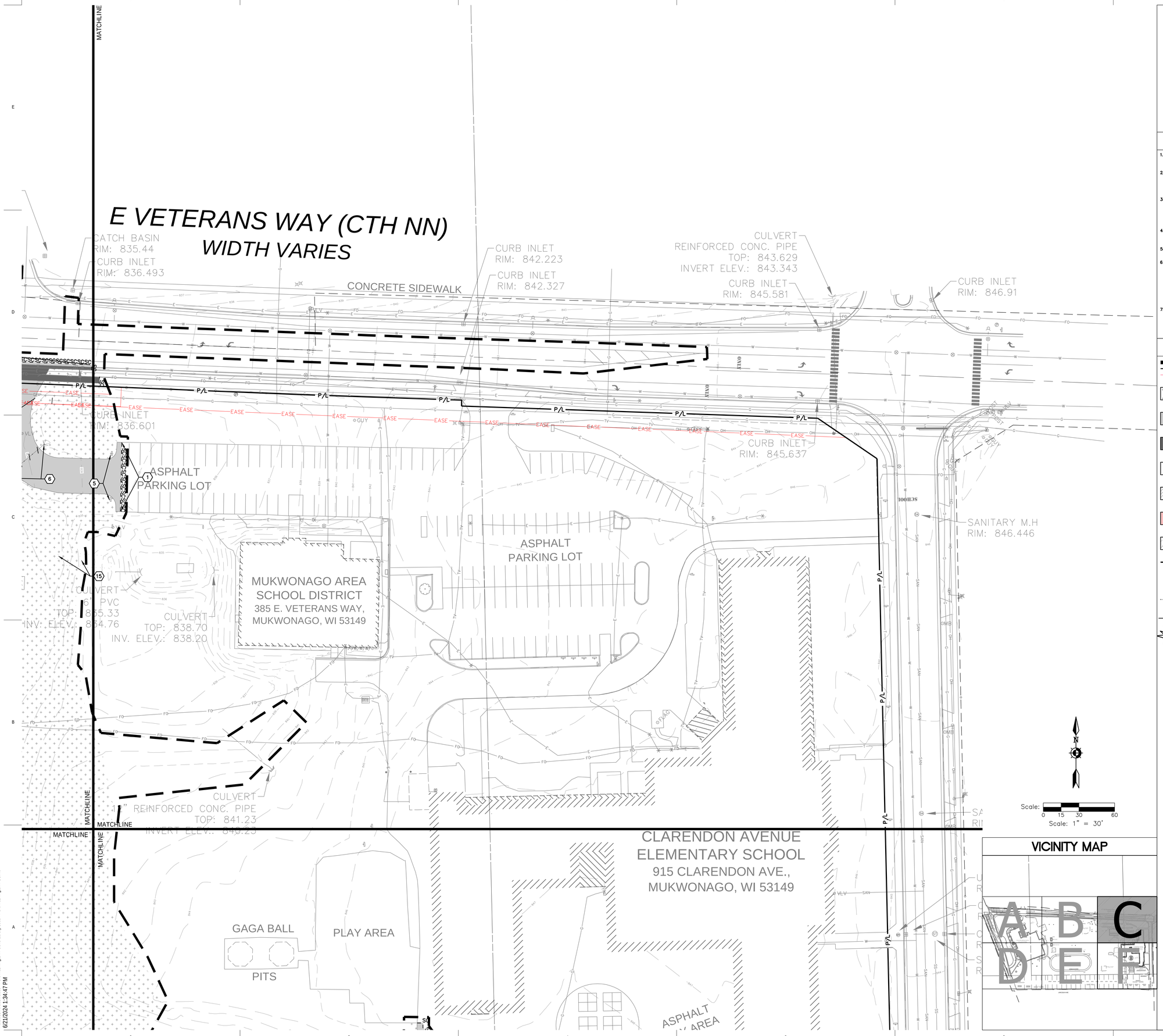

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- 7 — REMOVE & DISPOSE OF EXISTING FLAG POLE INCLUDING POST & FOOTING
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- 12 — REMOVE EXISTING TRANSFORMER. REFER TO ELECTRICAL PLANS FOR MORE INFORMATION.
- 13 — REMOVE & DISPOSE OF EXISTING STORM/SANITARY SEWER STRUCTURE AND ANY CONNECTED PIPES.
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Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP

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Mukwonago Area School District
930 N Rochester St,
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE DEMOLITION PLAN - AREA C

Sheet Number: C1.13C

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PARK VIEW MIDDLE SCHOOL
930 N. ROCHESTER ST.,
MUKWONAGO, WI 53149

CURB INLET
RIM: 830.198

CURB INLET
RIM: 829.574

CURB INLET
RIM: 829.798

SANITARY M.H
RIM: 830.145

STORM M.H
RIM: 831.30

CURB INLET
RIM: 830.898

SANITARY M.H
RIM: 831.866
8" RCCP N IE: 819.52
8" RCCP E IE: 819.47
8" RCCP W IE: 819.42

CURB INLET
RIM: 830.315

CURB INLET
RIM: 830.682

STORM M.H
RIM: 831.619

CURB INLET
RIM: 831.232

CURB INLET
RIM: 831.323

CURB INLET
RIM: 831.367

CURB INLET
RIM: 831.047

TELEPHONE M.H
RIM: 831.844

CURB INLET
RIM: 830.876

CURB INLET
RIM: 831.216

SANITARY M.H
RIM: 831.962

CURB INLET
RIM: 831.597

CURB INLET
RIM: 831.969

STORM M.H
RIM: 833.74
36" RCCP E IE: 824.04
36" RCCP W IE: 824.04

CURB INLET
RIM: 832.244

STORM M.H
RIM: 832.572

CURB INLET
RIM: 830.805

STORM M.H
RIM: 831.148

ADD. PARKING

ASPHALT DRIVE

CONCRETE PATHS

CONCRETE SIDEWALK

MATCHLINE

PARCEL 1
CSM 1836

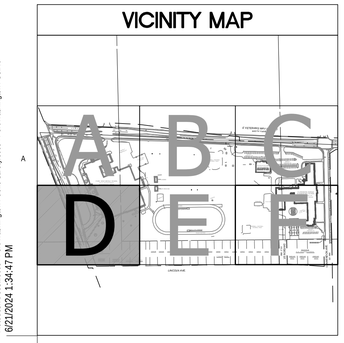
PARCEL 2
CSM 1836

PARCEL 3
CSM 1836

UNPLATTED LANDS

Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP



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3526

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PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
SITE DEMOLITION PLAN - AREA D

Sheet Number:
C1.14D

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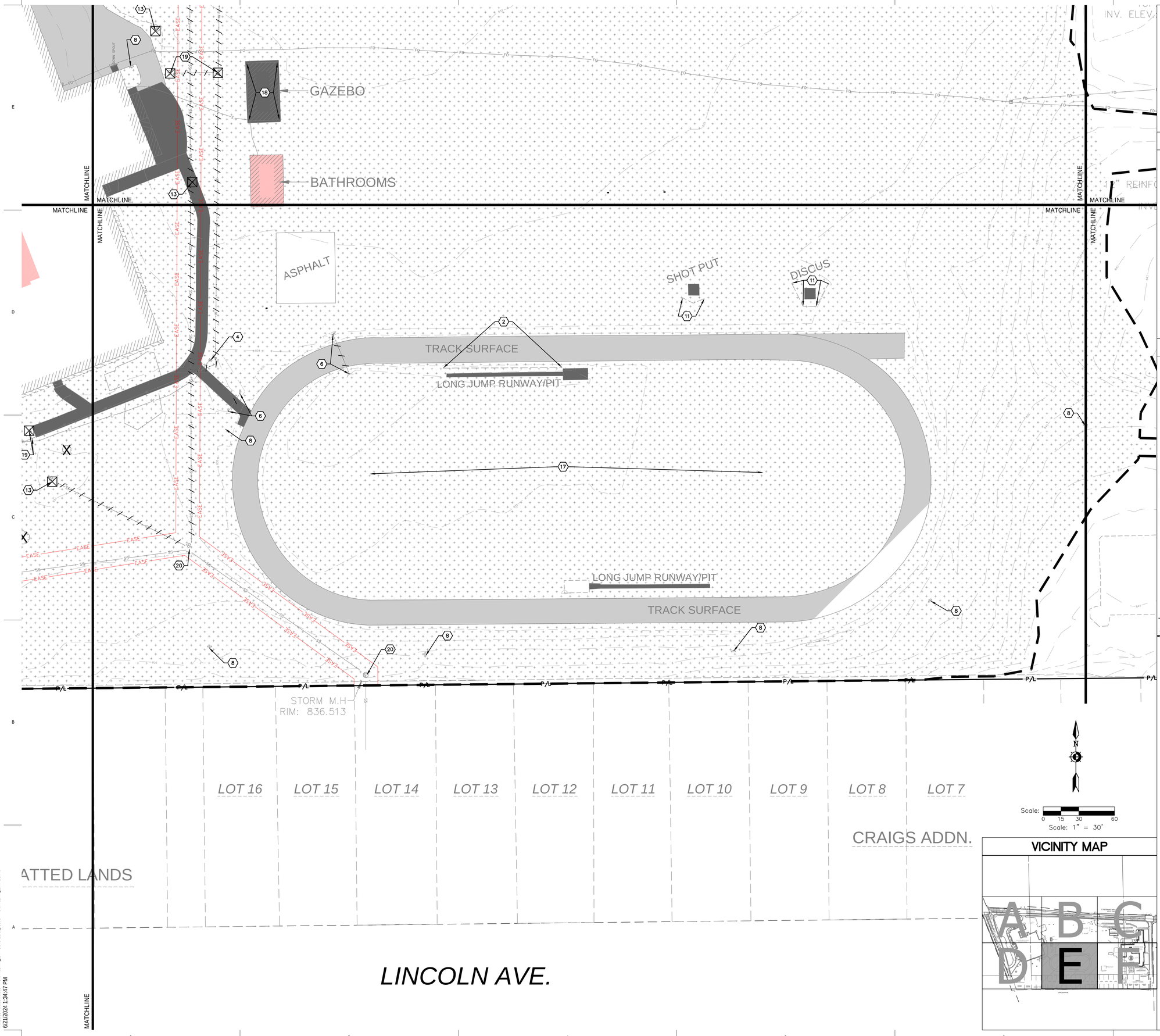

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Sheet Title: SITE DEMOLITION PLAN - AREA E

Sheet Number: C1.15E

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INV. ELEV.: 838.20

CULVERT
18" REINFORCED CONC. PIPE
TOP: 841.23
INVERT ELEV.: 840.23

MATCHLINE

CLARENDON AVENUE
ELEMENTARY SCHOOL
915 CLARENDON AVE.,
MUKWONAGO, WI 53149

GAGA BALL
PLAY AREA
PITS

ASPHALT
PLAY AREA

BASEBALL / SOFTBALL
/ KICKBALL FIELD

PLAY AREA

ASPHALT
PARKING LOT

P/L

SANITARY M.H
RIM: 844.975

REPLAT OF WILSO
SUBDIVISI

UNKNOWN M.H
RIM: 844.622

CURB INLET
RIM: 843.932

CURB INLET
RIM: 843.871

STORM M.H
RIM: 844.375

SANITARY M.H
RIM: 843.806

STORM M.H
RIM: 842.126

FND. 1" IP 1.82' WEST

OT 6 | LOT 5 | LOT 4 | LOT 3 | LOT 2 | LOT 1

DIVISION ST.
63.2' R/W

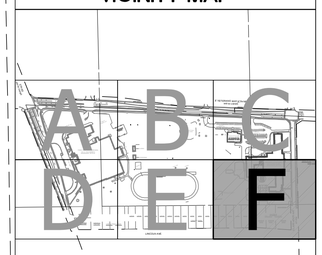
BLOCK B
H.A. YOUMANS ADDN.

PART OF LOT 1 | PART OF LOT 1 | PART OF LOT 1

CLARENDON AVE.
66' R/W

Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP



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- EASE — EASEMENT LINE
- VEGETATION TO BE REMOVED & DISPOSED OF OFFSITE. IF SUITABLE FOR REUSE, TOPSOIL TO BE STOCKPILED. UNUSED & UNSUITABLE TOPSOIL TO BE REMOVED OFFSITE. TOPSOIL THICKNESS MAY VARY. REFER TO GEOTECHNICAL REPORT.
- ASPHALT PAVEMENT & BASE MATERIAL TO BE REMOVED TO SUB-BASE & DISPOSED OF OFFSITE. PAVEMENT & BASE THICKNESS MAY VARY. REFER TO GEOTECHNICAL REPORT.
- CONCRETE & BASE MATERIAL TO BE REMOVED TO SUB-BASE & DISPOSED OF OFFSITE. CONCRETE & BASE THICKNESS MAY VARY. REFER TO GEOTECHNICAL REPORT.
- GRAVEL MATERIAL TO BE REMOVED & DISPOSED OF OFFSITE. IF SUITABLE FOR REUSE, GRAVEL TO BE STOCKPILED. UNUSED GRAVEL MATERIAL TO BE REMOVED OFFSITE. GRAVEL THICKNESS MAY VARY. REFER TO GEOTECHNICAL REPORT.
- CLEAR & GRUB VEGETATION. REMOVE ROOTS & STUMPS. REMOVE & DISPOSE OF OFFSITE.
- EXISTING BUILDING & FOUNDATION TO BE RAZED. REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- ASPHALT PAVEMENT & BASE MATERIAL TO BE PULVERIZED & REUSED AS PAVEMENT BASE MATERIAL. REFER TO SPECIFICATION SECTION 321216–ASPHALT PAVING.
- SAWCUT FULL DEPTH
- X — TREES & STUMPS TO BE REMOVED
- DENOTES UTILITIES TO BE ABANDONED & REMOVED.
- AB — DENOTES UTILITIES TO BE ABANDONED IN PLACE.
- CAUTION — KNOWN UTILITY AND POTENTIAL CONFLICT EXIST
- –UTILITY STRUCTURE REMOVAL/ABANDONMENT
- 1 — SAWCUT APPROXIMATELY 2' OF ASPHALT PAVEMENT OFF THE EDGE OF THE ROADWAY TO PROVIDE A SMOOTH EDGE FOR INSTALLATION OF NEW PAVEMENT.
- 2 — REMOVE & DISPOSE OF EXISTING CHAIN-LINK FENCE INCLUDING POSTS & FOOTINGS
- 3 — REMOVE & DISPOSE OF EXISTING BOLLARD
- 4 — REMOVE & DISPOSE OF EXISTING LIGHT POLES. REFER TO SITE ELECTRICAL PLANS.
- 5 — REMOVE & DISPOSE OF EXISTING SIGN INCLUDING POST & FOOTING
- 6 — REMOVE & DISPOSE OF EXISTING CULVERT
- 7 — REMOVE & DISPOSE OF EXISTING FLAG POLE INCLUDING POST & FOOTING
- 8 — SALVAGE EXISTING SIGN FOR RELOCATION. REFER TO CIVIL SITE PLANS FOR NEW SIGN LOCATIONS OR COORDINATE RELOCATION WITH OWNER.
- 9 — NEW REMOVE & DISPOSE OF EXISTING BACKSTOP FENCING INCLUDING POSTS & FOOTINGS
- 10 — REMOVE & DISPOSE OF EXISTING BASKETBALL HOOP, POST, & FOOTING.
- 11 — SALVAGE EXISTING SHOT PUT AND DISCUS THROWING RINGS AND BACKSTOP FENCING FOR RELOCATION. REFER TO SITE LAYOUT PLAN FOR MORE INFORMATION.
- 12 — REMOVE EXISTING TRANSFORMER. REFER TO ELECTRICAL PLANS FOR MORE INFORMATION.
- 13 — REMOVE & DISPOSE OF EXISTING STORM/SANITARY SEWER STRUCTURE AND ANY CONNECTED PIPES.
- 14 — SALVAGE EXISTING BLEACHERS AND RETURN TO OWNER
- 15 — EXISTING RIP RAP TO REMAIN..
- 16 — SALVAGE EXISTING WARM-UP MOUND STRUCTURE AND RUBBER PLATES AND RETURN TO OWNER
- 17 — SALVAGE EXISTING GOAL POSTS & RETURN TO OWNER.
- 18 — SALVAGE EXISTING PAVILION STRUCTURE, TABLES, AND TRASH RECEPTACLES FOR RELOCATION. REFER TO SITE LAYOUT PLAN FOR MORE INFORMATION.
- 19 — SALVAGE AND RELOCATE EXISTING FIRE HYDRANT AND HYDRANT VALVE. REFER TO UTILITY PLAN FOR MORE INFORMATION.
- 20 — EXISTING STORM/SANITARY SEWER STRUCTURE TO REMAIN.

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number:
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4/2/2025

Sheet Title:
SITE DEMOLITION PLAN - AREA F

Sheet Number:
C1.16F

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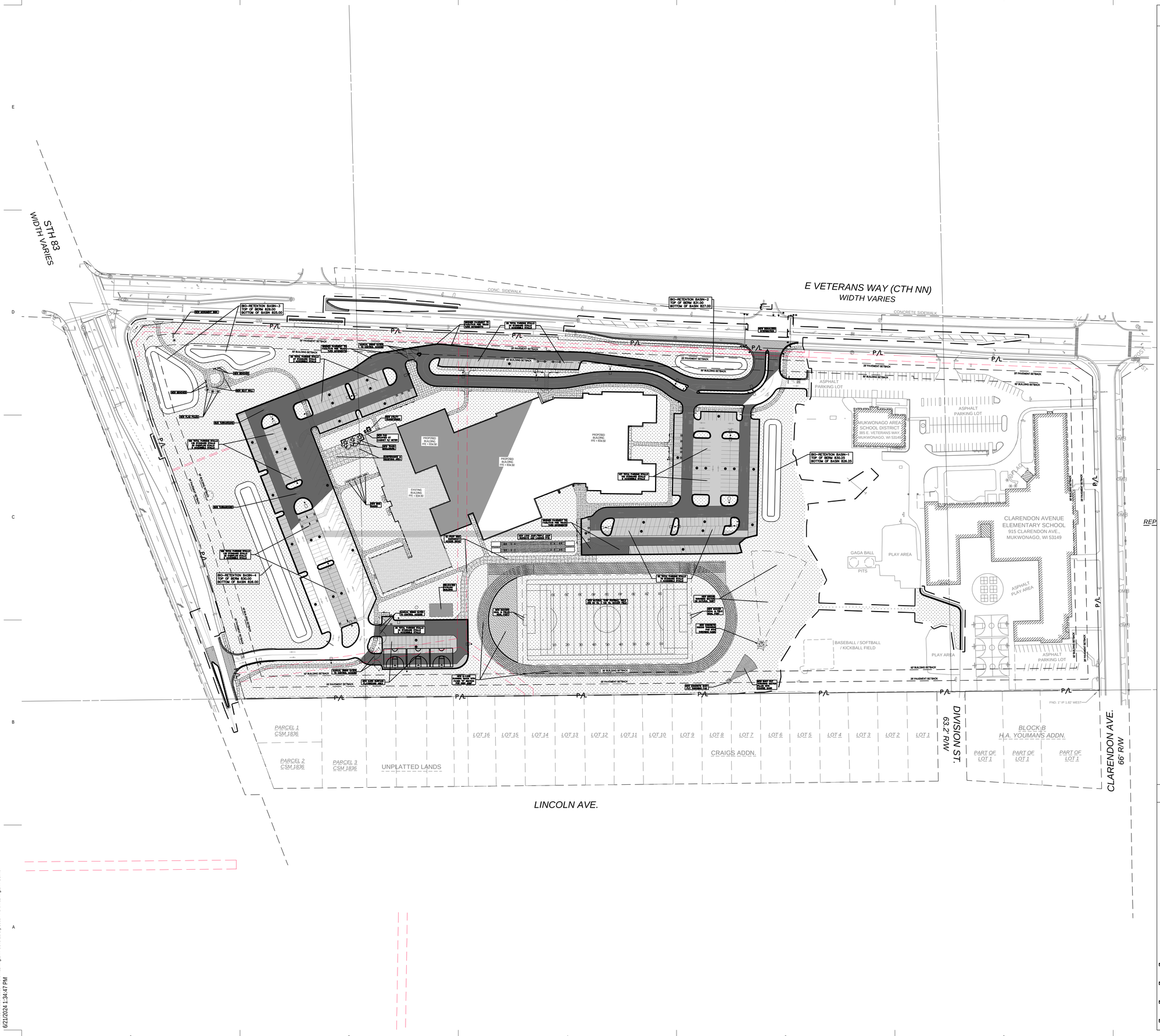

SITE STATISTICS
PARK VIEW MIDDLE SCHOOL

PARCEL ADDRESS: 930 NORTH ROCHESTER STREET
MUKWONAGO, WI 53149

PARCEL LEGAL DESCRIPTION: PART OF THE SOUTHEAST ¼ OF SECTION 23, TOWNSHIP 5 NORTH, RANGE 18 EAST, IN THE VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN.

PARCEL AREA: 1,612,646 SQ. FT. OR 37.021 ACRES

ZONING DESIGNATION – P-1 PUBLIC AND SEMIPUBLIC DISTRICT

PARCEL PERVIOUS AREA BEFORE IMPROVEMENTS: 28.650 AC. (77.39%)
PARCEL IMPERVIOUS AREA BEFORE IMPROVEMENTS: 8.371 AC. (22.61%)
PARCEL PERVIOUS AREA AFTER IMPROVEMENTS: 25.166 AC. (67.98%)
PARCEL IMPERVIOUS AREA AFTER IMPROVEMENTS: 11.855 AC. (32.02%)

NET INCREASE IN IMPERVIOUS AREA: 3.484 ACRES

PROPOSED AREA OF LAND DISTURBANCE ON PARCEL: 25.658 ACRES

PARKING SUMMARY

MINIMUM REQUIRED PARKING SPACES: 1 SPACE FOR EVERY 2 STUDENTS AT MAXIMUM ENROLLMENT AND 1 SPACE PER PERSON EMPLOYED AT THE SCHOOL. A PORTION OF THE PARKING MAY BE PROVIDED ON A SOLID SURFACE PLAY AREA, AS DETERMINED BY THE PLAN COMMISSION. (SECTION 100-402(A)(2) OF THE MUNICIPAL CODE)

EXISTING ENROLLMENT: 722 STUDENTS
EXISTING EMPLOYMENT: 100 PERSONS
MINIMUM REQUIRED PARKING SPACES PER CODE: 461 STALLS

EXISTING PARKING STALLS IN WEST PARKING AREA: 12
STANDARD PARKING STALLS: 8
ADA PARKING STALLS: 4

EXISTING PARKING STALLS IN NORTHWEST PARKING AREA: 157
STANDARD PARKING STALLS: 151
ADA PARKING STALLS: 6

EXISTING PARKING STALLS IN NORTHEAST PARKING AREA: 67
STANDARD PARKING STALLS: 67
ADA PARKING STALLS: 0

TOTAL EXISTING PARKING STALLS ON SITE: 236
STANDARD PARKING STALLS: 226
ADA PARKING STALLS: 10

PROPOSED MAXIMUM FUTURE ENROLLMENT: 1,200 STUDENTS
PROPOSED EMPLOYMENT: 150 PERSONS
MINIMUM REQUIRED PARKING SPACES PER CODE: 750 STALLS

PROPOSED PARKING STALLS IN SOUTHWEST PARKING AREA: 36
STANDARD PARKING STALLS: 34
ADA PARKING STALLS: 2

PROPOSED PARKING STALLS IN WEST PARKING AREA: 169
STANDARD PARKING STALLS: 135
OVERFLOW PARKING STALLS: 28
ADA PARKING STALLS: 6

PROPOSED PARKING STALLS IN NORTHWEST PARKING AREA: 60
STANDARD PARKING STALLS: 57
ADA PARKING STALLS: 3

PROPOSED PARKING STALLS IN NORTH PARKING AREA: 28
STANDARD PARKING STALLS: 24
ADA PARKING STALLS: 4

PROPOSED PARKING STALLS IN EAST PARKING AREA: 107
STANDARD PARKING STALLS: 102
ADA PARKING STALLS: 5

PROPOSED PARKING STALLS IN SOUTHEAST PARKING AREA: 82
STANDARD PARKING STALLS: 78
ADA PARKING STALLS: 4

TOTAL PROPOSED PARKING STALLS ON SITE: 482
STANDARD PARKING STALLS: 458
ADA PARKING STALLS: 24

PROPOSED PARKING STALL COUNT IS MORE THAN DOUBLE THE EXISTING STALL COUNT, WHEREAS THE MAXIMUM FUTURE ENROLLMENT WILL BE LESS THAN DOUBLE THE EXISTING ENROLLMENT.

Scale: 1" = 80'

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KEY INDEX

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- NEW ASPHALTIC CONCRETE (LIGHT DUTY) — 1/C2.11
- NEW ASPHALTIC CONCRETE (HEAVY DUTY) — 1/C2.11
- NEW CONCRETE SLAB (LIGHT DUTY) — 2/C2.11, 3/C2.11
- NEW CONCRETE SLAB (HEAVY DUTY) — 2/C2.11, 3/C2.11
- 18" BARRIER LOW-SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 4/C2.11
- 18" BARRIER HIGH-SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 4/C2.11
- 18" DEPRESSED LOW-SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 3/C2.11
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RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: OVERALL SITE LAYOUT PLAN

Sheet Number: C1.20

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STH 83
WIDTH VARIES

MATCHLINE

NEW MONUMENT SIGN

BIO-RETENTION BASIN-3
TOP OF BERM 829.00
BOTTOM OF BASIN 825.00

P/L

25' PAVEMENT SETBACK

50' BUILDING SETBACK

WIDENED PAVEMENT TO FACILITATE FIRE TRUCK TURN MOVEMENTS

MANUAL SWING GATES TO CONTROL ACCESS

60 TOTAL PARKING STALLS
57 STANDARD STALLS
3 ACCESSIBLE STALLS

NEW BENCHES

NEW SEAT WALL

NEW FLAG POLES

BUS TURNAROUND

NEW UTILITY TRANSFORMER

NEW PAD MOUNTED CT CABINET W/ METER

NEW TRASH ENCLOSURE

MAINTENANCE & RECEIVING AREA

PROPOSED BUILDING
FFE = 834.50

169 TOTAL PARKING STALLS
135 STANDARD STALLS
28 OVERFLOW STALLS
6 ACCESSIBLE STALLS

EXISTING BUILDING
FFE = 834.50

NEW BIKE RACKS

169 TOTAL PARKING STALLS
135 STANDARD STALLS
28 OVERFLOW STALLS
6 ACCESSIBLE STALLS

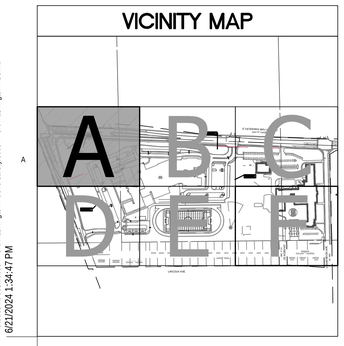
BIO-RETENTION BASIN-4
TOP OF BERM 830.00
BOTTOM OF BASIN 826.00

16-FOO
EME
ACCESS

RELOCAT
PAVILION
BUILDING

Scale:
0 15 30 60
Scale: 1" = 30'

VICINITY MAP



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Sheet Title:
SITE LAYOUT PLAN - AREA A

Sheet Number:
C1.21A

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MATCHLINE

MATCHLINE

CONC. SIDEWALK

BIO-RETENTION BASIN-2
TOP OF BERM 831.00
BOTTOM OF BASIN 827.00

NEW SIGNALIZED INTERSECTION

WIDENED PAVEMENT TO FACILITATE FIRE TRUCK TURN MOVEMENTS

28 TOTAL PARKING STALLS
24 STANDARD STALLS
4 ACCESSIBLE STALLS

P/L

25' PAVEMENT SETBACK

50' BUILDING SETBACK

25' PAVEMENT SETBACK

50' BUILDING SETBACK

ONLY

PROPOSED BUILDING
FFE = 834.50

PROPOSED BUILDING
FFE = 834.50

PROPOSED BUILDING
FFE = 834.50

107 TOTAL PARKING STALLS
102 STANDARD STALLS
5 ACCESSIBLE STALLS

EXISTING BUILDING
FFE = 834.50

MATCHLINE

MATCHLINE

MATCHLINE

WIDENED PAVEMENT TO FACILITATE FIRE TRUCK TURN MOVEMENTS

16-FOOT WIDE EMERGENCY ACCESS DRIVE

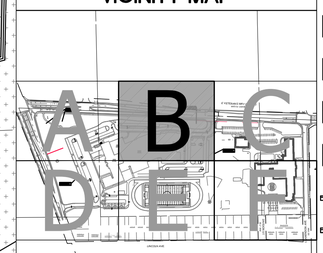
NEW LONG JUMP/TRIPLE JUMP RUNWAYS AND LANDING PITS

82 TOTAL PARKING STALLS
78 STANDARD STALLS
4 ACCESSIBLE STALLS

RELOCATED PAVILION BUILDING

Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP



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KEY INDEX

- PROJECT LIMITS
- PROPERTY LINE
- EASEMENT LINE
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Mukwonago, WI 53149

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Sheet Title:
SITE LAYOUT PLAN - AREA B

Sheet Number:
C1.22B

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E VETERANS WAY (CTH NN)
WIDTH VARIES

MATCHLINE

CONCRETE SIDEWALK

P/L

25' PAVEMENT SETBACK

50' BUILDING SETBACK

ASPHALT PARKING LOT

MUKWONAGO AREA SCHOOL DISTRICT
385 E. VETERANS WAY,
MUKWONAGO, WI 53149

BIO-RETENTION BASIN-1
TOP OF BERM 830.25
BOTTOM OF BASIN 826.25

CLARENDON AVENUE ELEMENTARY SCHOOL
915 CLARENDON AVE.,
MUKWONAGO, WI 53149

GAGA BALL PITS

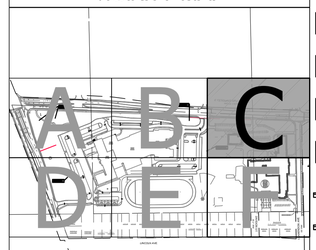
PLAY AREA

ASPHALT PARKING LOT

OMB

Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP



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Sheet Title: SITE LAYOUT PLAN - AREA C

Sheet Number: C1.23C

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169 TOTAL PARKING STALLS
135 STANDARD STALLS
28 OVERFLOW STALLS
6 ACCESSIBLE STALLS

NEW TRASH ENCLOSURE

MAINTENANCE & RECEIVING AREA

EXISTING BUILDING FFE = 834.50

NEW BIKE RACKS

BUS TURNAROUND

MATCHLINE

169 TOTAL PARKING STALLS
135 STANDARD STALLS
28 OVERFLOW STALLS
6 ACCESSIBLE STALLS

BIO-RETENTION BASIN-4
TOP OF BERM 830.00
BOTTOM OF BASIN 826.00

50' BUILDING SETBACK

25' PAVEMENT SETBACK

P/L

EASE

MANUAL SWING GATES TO CONTROL ACCESS

36 TOTAL PARKING STALLS
34 STANDARD STALLS
2 ACCESSIBLE STALLS

NEW HARD SURFACE PLAYGROUND AREA

PARCEL 1
CSM 1836

PARCEL 2
CSM 1836

PARCEL 3
CSM 1836

UNPLATTED LANDS

Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP

A B C
D E F

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Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE LAYOUT PLAN - AREA D

Sheet Number: C1.24D

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BUILDING
FFE = 834.50

PROPOSED
BUILDING
FFE = 834.50

EXISTING
BUILDING
FFE = 834.50

107 TOTAL PARKING STALLS
102 STANDARD STALLS
5 ACCESSIBLE STALLS

BIO-RETE
TOP OF E
BOTTOM

MATCHLINE

WIDENED PAVEMENT TO FACILITATE FIRE TRUCK TURN MOVEMENTS

NEW LONG JUMP/TRIPLE JUMP RUNWAYS AND LANDING PITS

16-FOOT WIDE EMERGENCY ACCESS DRIVE

82 TOTAL PARKING STALLS
78 STANDARD STALLS
4 ACCESSIBLE STALLS

RELOCATED PAVILION BUILDING

MANUAL SWING GATES TO CONTROL ACCESS

NEW NATURAL TURF FOOTBALL FIELD AND 60 YD. X 120 YD. SOCCER FIELD

NEW SOCCER GOAL & FIELD GOAL POST

NEW DISCUS THROWING SECTOR ON NATURAL TURF

NEW CONCRETE DISCUS THROWING PAD WITH THROWING CAGE

NEW SHOT PUT THROWING SECTOR FILLED WITH COARSE SAND

NEW CONCRETE SHOT PUT THROWING PAD

50' BUILDING SETBACK

25' PAVEMENT SETBACK

NEW 8-LANE RUNNING TRACK WITH PAVED "D" SECTION FOR HIGH JUMP

P/L

LOT 16 LOT 15 LOT 14 LOT 13 LOT 12 LOT 11 LOT 10 LOT 9 LOT 8 LOT 7

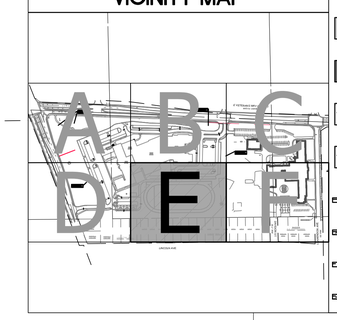
CRAIGS ADDN.

ATTED LANDS

LINCOLN AVE.

Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP



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KEY INDEX

- PROJECT LIMITS
- P/L — PROPERTY LINE
- EASE — EASEMENT LINE
- AREAS DISTURBED BY CONSTRUCTION (NOT SPECIFICALLY CALLED OUT ON THE LANDSCAPE PLANS) TO BE RESTORED WITH MINIMUM 4" TOPSOIL, SEED, FERTILIZER, AND MULCH (TYP). USE SALVAGED TOPSOIL OR IMPORT TOPSOIL IF REQUIRED.
- NEW ASPHALTIC CONCRETE (LIGHT DUTY) — 1/C2.11
- NEW ASPHALTIC CONCRETE (HEAVY DUTY) — 1/C2.11
- NEW CONCRETE SLAB (LIGHT DUTY) — 2/C2.11, 3/C2.11
- NEW CONCRETE SLAB (HEAVY DUTY) — 2/C2.11, 3/C2.11
- 18" BARRIER LOW-SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 4/C2.11
- 18" BARRIER HIGH-SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 4/C2.11
- 18" DEPRESSED LOW-SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 5/C2.11
- 18" DEPRESSED HIGH-SIDE CONCRETE CURB & GUTTER UNLESS OTHERWISE NOTED — 5/C2.11

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE LAYOUT PLAN - AREA E

Sheet Number: C1.25E

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BIO-RETENTION BASIN-1
TOP OF BERM 830.25
BOTTOM OF BASIN 826.25

MATCHLINE

CLARENDON AVENUE
ELEMENTARY SCHOOL
915 CLARENDON AVE.,
MUKWONAGO, WI 53149

GAGA BALL PIT

PLAY AREA

ASPHALT PLAY AREA

BASEBALL / SOFTBALL / KICKBALL FIELD

PLAY AREA

ASPHALT PARKING LOT

50' BUILDING SETBACK

25' PAVEMENT SETBACK

P/L

FND. 1" IP 1.82' WEST

REPLAT OF WILSO
SUBDIVISI

LOT 6 *LOT 5* *LOT 4* *LOT 3* *LOT 2* *LOT 1*

DIVISION ST.
63.2' R/W

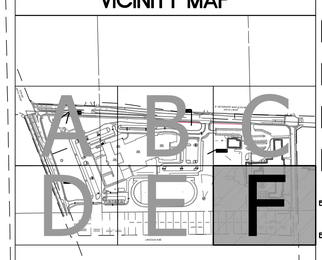
BLOCK B
H.A. YOUMANS ADDN.

PART OF LOT 1 *PART OF LOT 1* *PART OF LOT 1*

CLARENDON AVE.
66' R/W

Scale: 0 15 30 60
Scale: 1" = 30'

VICINITY MAP



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Sheet Title: SITE LAYOUT PLAN - AREA F

Sheet Number: C1.26F

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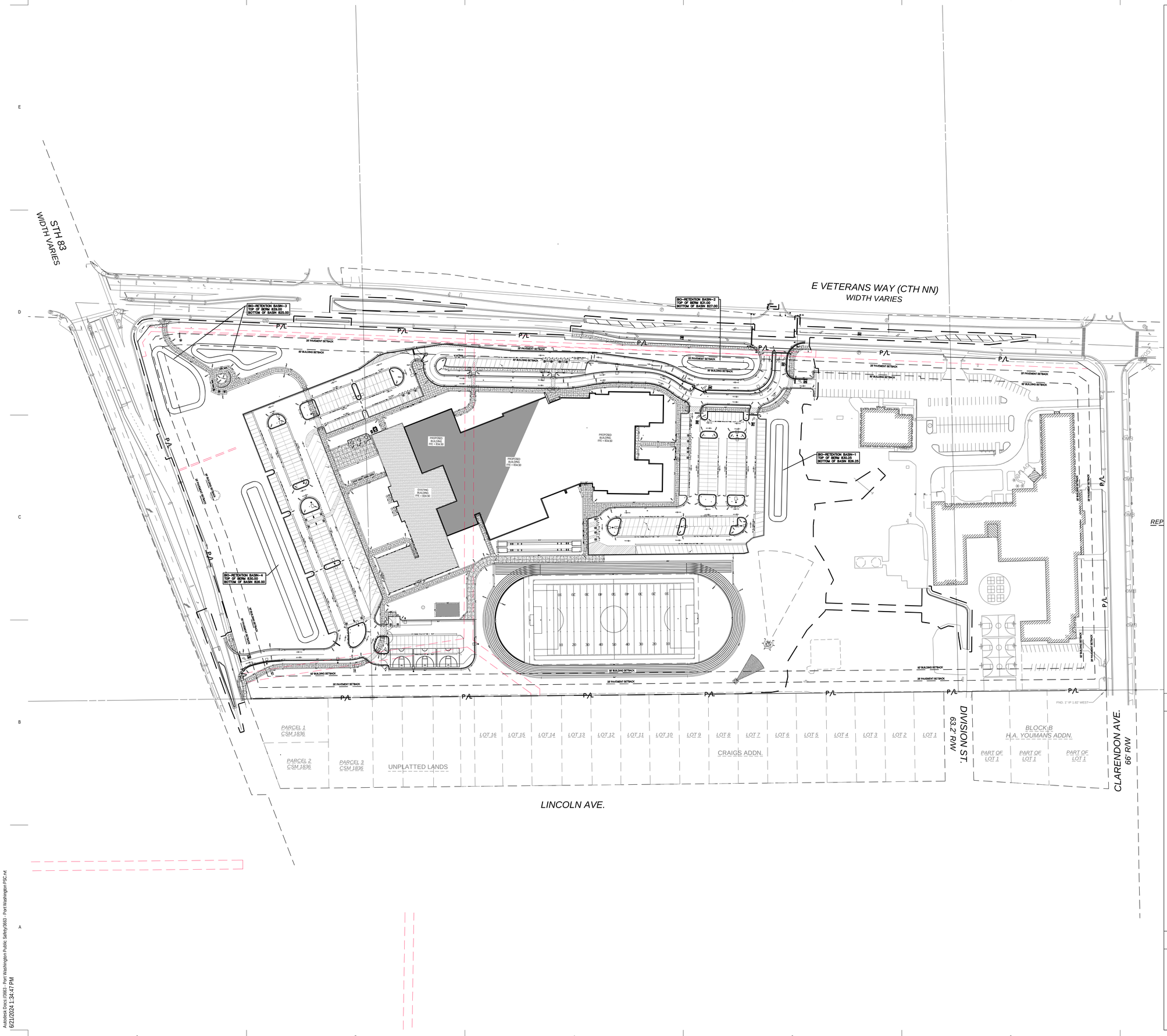

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- (8) NEW ACCESSIBLE PARKING SYMBOL — 6 / C2.11
- (9) NEW ACCESSIBLE SIGNS — 6 / C2.11

SIGN INDEX

(10) STOP — R1-1, 30" X 30"

(11) DO NOT ENTER — R5-1, 30" X 30"

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Sheet Title: OVERALL SITE SIGNAGE & TRAFFIC CONTROL PLAN

Sheet Number: C1.30

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STH 83
WIDTH VARIES

BIO-RETENTION BASIN-3
TOP OF BERM 829.00
BOTTOM OF BASIN 825.00

P/L

25' PAVEMENT SETBACK

50' BUILDING SETBACK

50' BUILDING SETBACK

25' PAVEMENT SETBACK

BIO-RETENTION BASIN-4
TOP OF BERM 830.00
BOTTOM OF BASIN 826.00

MATCHLINE

PROPOSED BUILDING
FFE = 834.50

EXISTING BUILDING
FFE = 834.50

ONLY

SCHOOL

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Scale:
0 15 30 60
Scale: 1" = 30'

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VICINITY MAP

A B C
D E F

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SIGN INDEX

(10) STOP — R1-1, 30" X 30"

(11) DO NOT ENTER — R5-1, 30" X 30"

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SITE SIGNAGE & TRAFFIC CONTROL PLAN - AREA A

Sheet Number:
C1.31A

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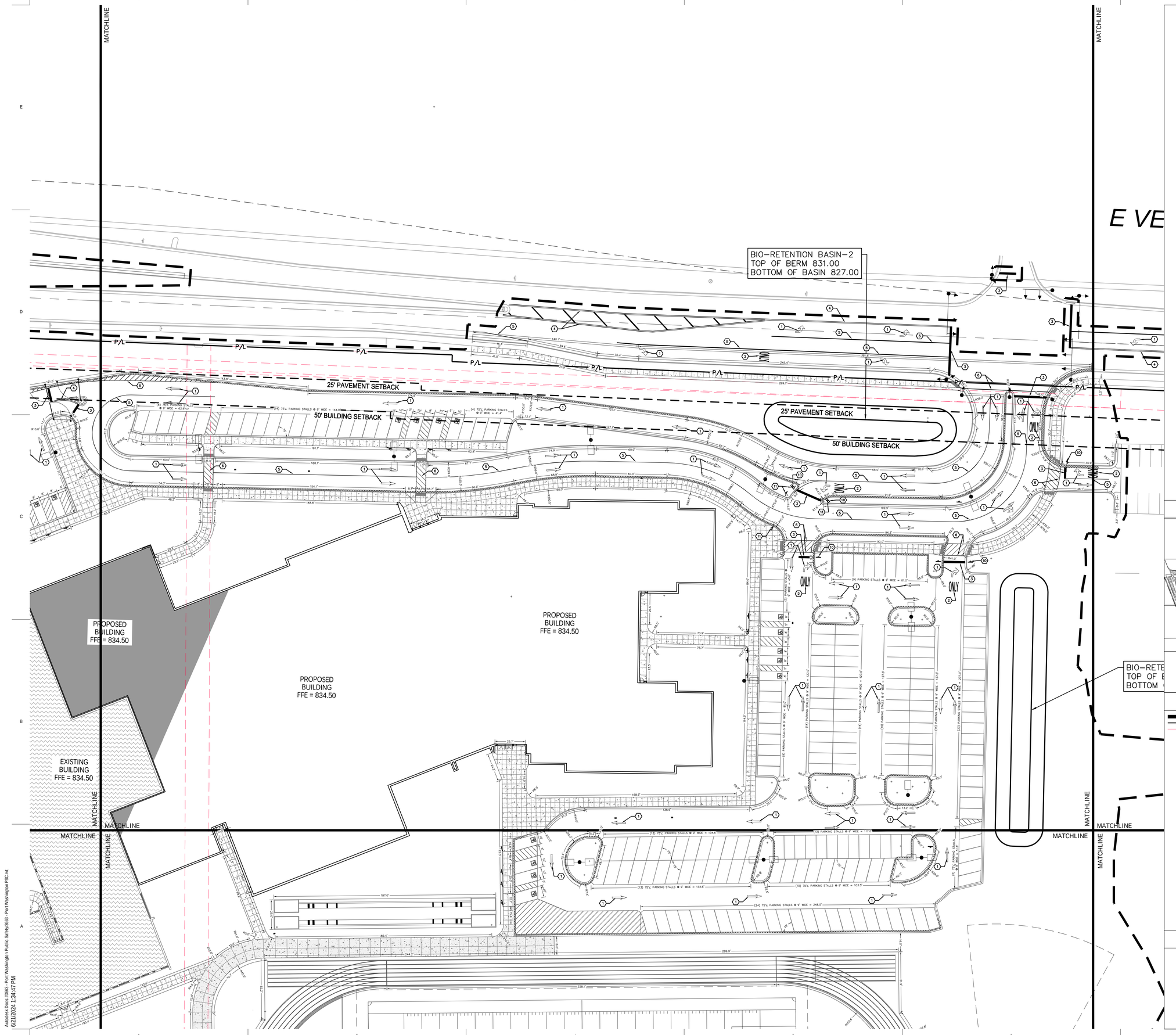

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Scale: 1" = 30'

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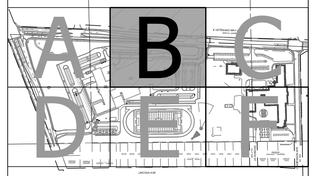

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- 8 — NEW ACCESSIBLE PARKING SYMBOL — 6 C2.11
- 9 — NEW ACCESSIBLE SIGNS — 6 C2.11

SIGN INDEX

10 — STOP — R1-1 30" X 30"

11 — DO NOT ENTER — R5-1 30" X 30"

Project Title:
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Park View Middle School
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SITE SIGNAGE & TRAFFIC CONTROL PLAN - AREA B

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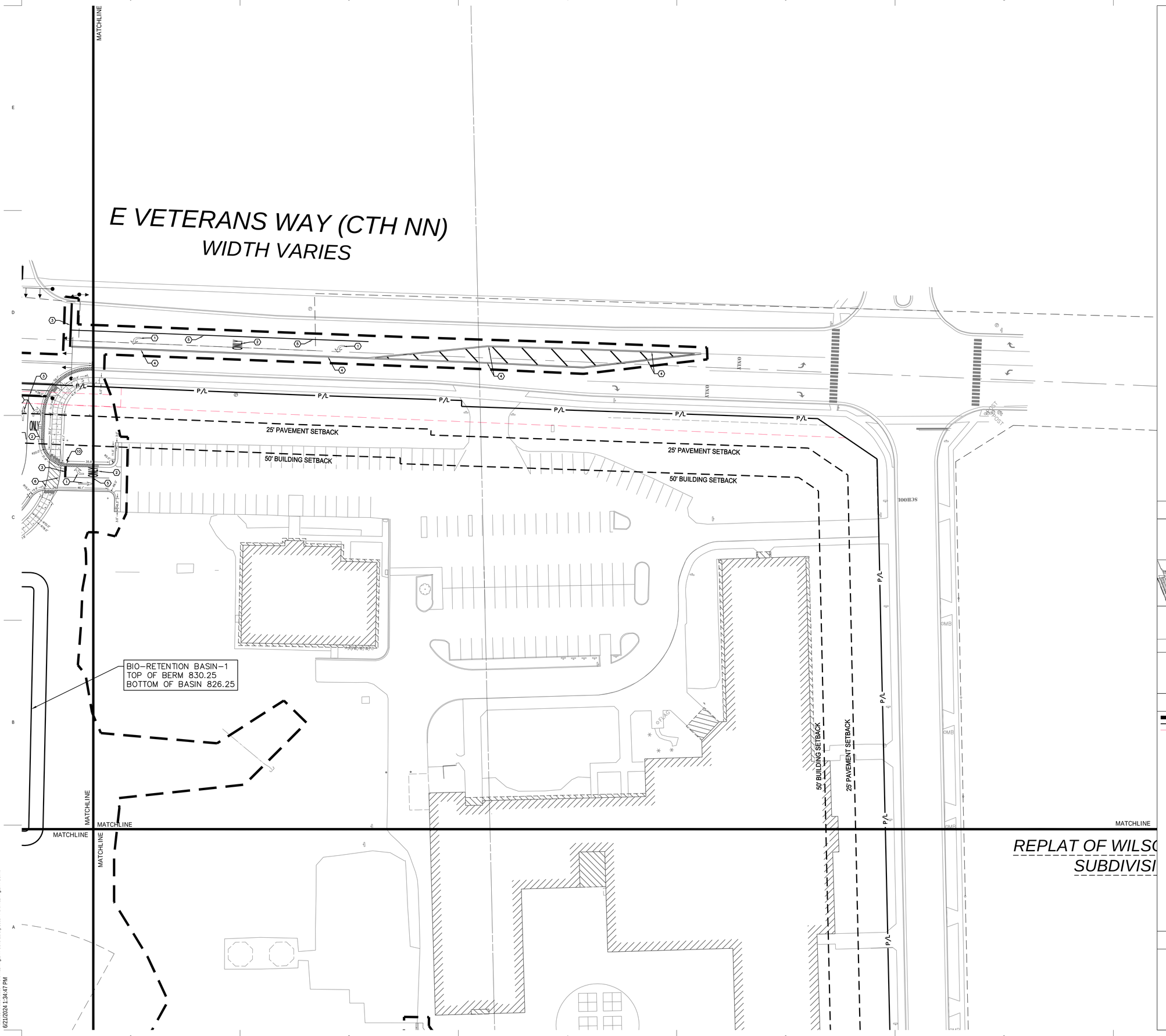
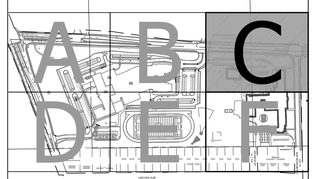


VICINITY MAP



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SIGN INDEX

(10) STOP — R1-1, 30" X 30"

(11) DO NOT ENTER — R5-1, 30" X 30"

Scale: 0 15 30 60

Scale: 1" = 30'

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Sheet Title: SITE SIGNAGE & TRAFFIC CONTROL PLAN - AREA C

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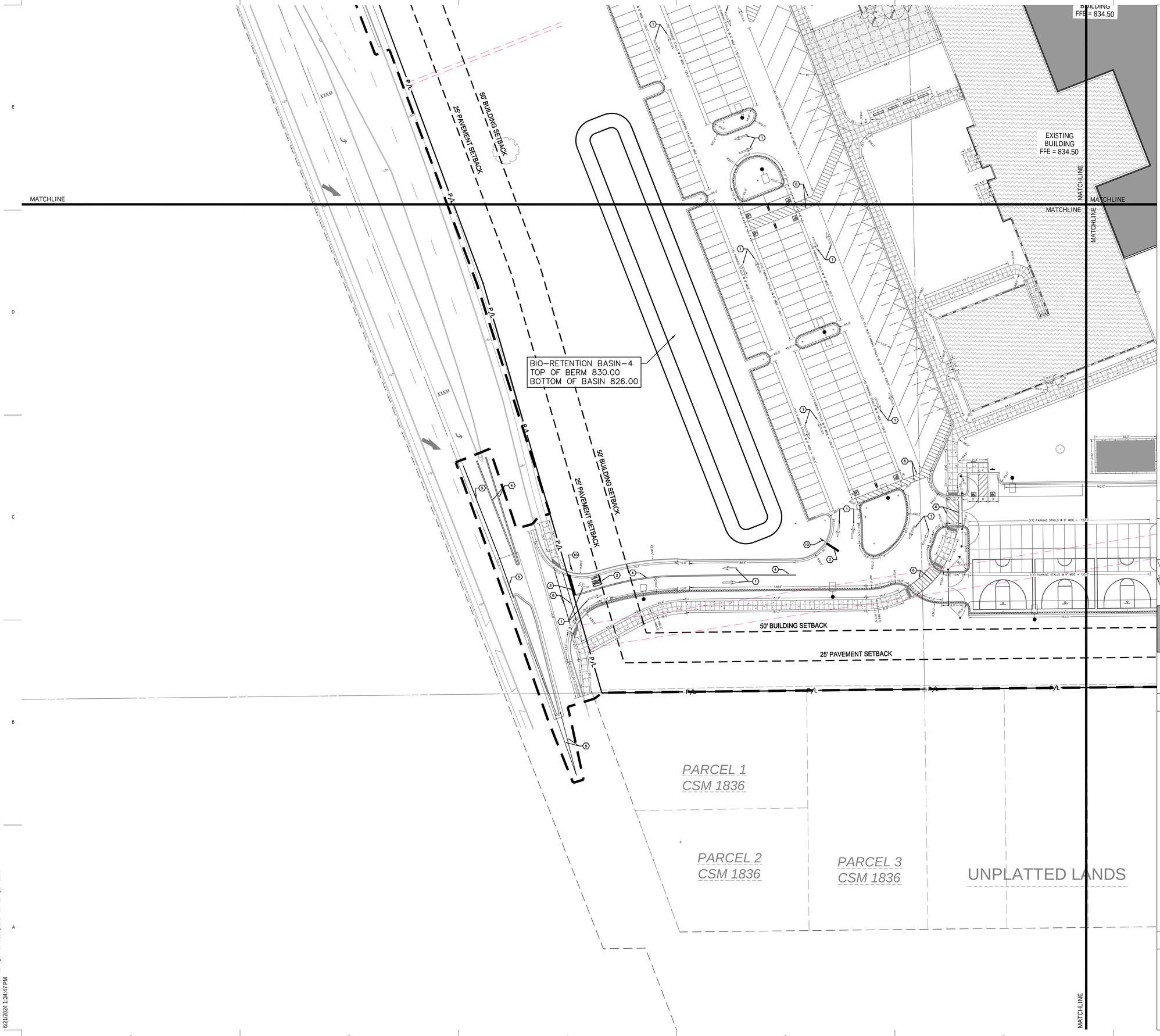
BUILDING
FFE = 834.50
EXISTING
BUILDING
FFE = 834.50
MATCHLINE
MATCHLINE
MATCHLINE
MATCHLINE
MATCHLINE
MATCHLINE
BIO-RETENTION BASIN-4
TOP OF BERM 830.00
BOTTOM OF BASIN 826.00
50' BUILDING SETBACK
25' PAVEMENT SETBACK
50' BUILDING SETBACK
25' PAVEMENT SETBACK
50' BUILDING SETBACK
25' PAVEMENT SETBACK
P/L
P/L
P/L

BUILDING
FFE = 834.50

PROPOSED
BUILDING
FFE = 834.50

EXISTING
BUILDING
FFE = 834.50

MATCHLINE

BIO–RETE
TOP OF E
BOTTOM

(13) 75'± PARKING STALLS @ 9' WIDE = 134.6'

(13) PARKING STALLS @ 9' WIDE = 117.0'

(14) PARKING STALLS @ 9' WIDE = 127.0'

(10) 75'± PARKING STALLS @ 9' WIDE = 103.5'

(24) 75'± PARKING STALLS @ 9' WIDE = 248.5'

(17) PARKING STALLS @ 9' WIDE = 153.0'

50' BUILDING SETBACK

25' PAVEMENT SETBACK

P/L

LOT 16 LOT 15 LOT 14 LOT 13 LOT 12 LOT 11 LOT 10 LOT 9 LOT 8 LOT 7 LOT 6 LOT 5

CRAIGS ADDN.

ATTED LANDS

LINCOLN AVE.

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Scale: 0 15 30 60
Scale: 1" = 30'

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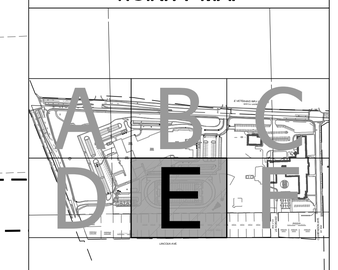

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SIGN INDEX

10 — STOP
R1–1
30" X 30"

DO NOT ENTER
R5–1
30" X 30" — 11

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Project Number:
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Sheet Title:
SITE SIGNAGE & TRAFFIC CONTROL PLAN - AREA E

Sheet Number:
C1.35E

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BIO-RETENTION BASIN-1
TOP OF BERM 830.25
BOTTOM OF BASIN 826.25

MATCHLINE

50' BUILDING SETBACK

25' PAVEMENT SETBACK

P/L

OMB

DRAG

REPLAT OF WILSO
SUBDIVISI

50' BUILDING SETBACK

25' PAVEMENT SETBACK

FND. 1" IP 1.82' WEST

OT 6 | LOT 5 | LOT 4 | LOT 3 | LOT 2 | LOT 1

DIVISION ST.
63.2' R/W

BLOCK B
H.A. YOUMANS ADDN.

PART OF LOT 1 | PART OF LOT 1 | PART OF LOT 1

CLARENDON AVE.
66' R/W

N

Scale: 0 15 30 60
Scale: 1" = 30'

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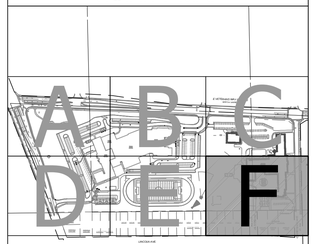

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SIGN INDEX

10 — STOP — R1-1 30" X 30"

DO NOT ENTER — R5-1 30" X 30" — 11

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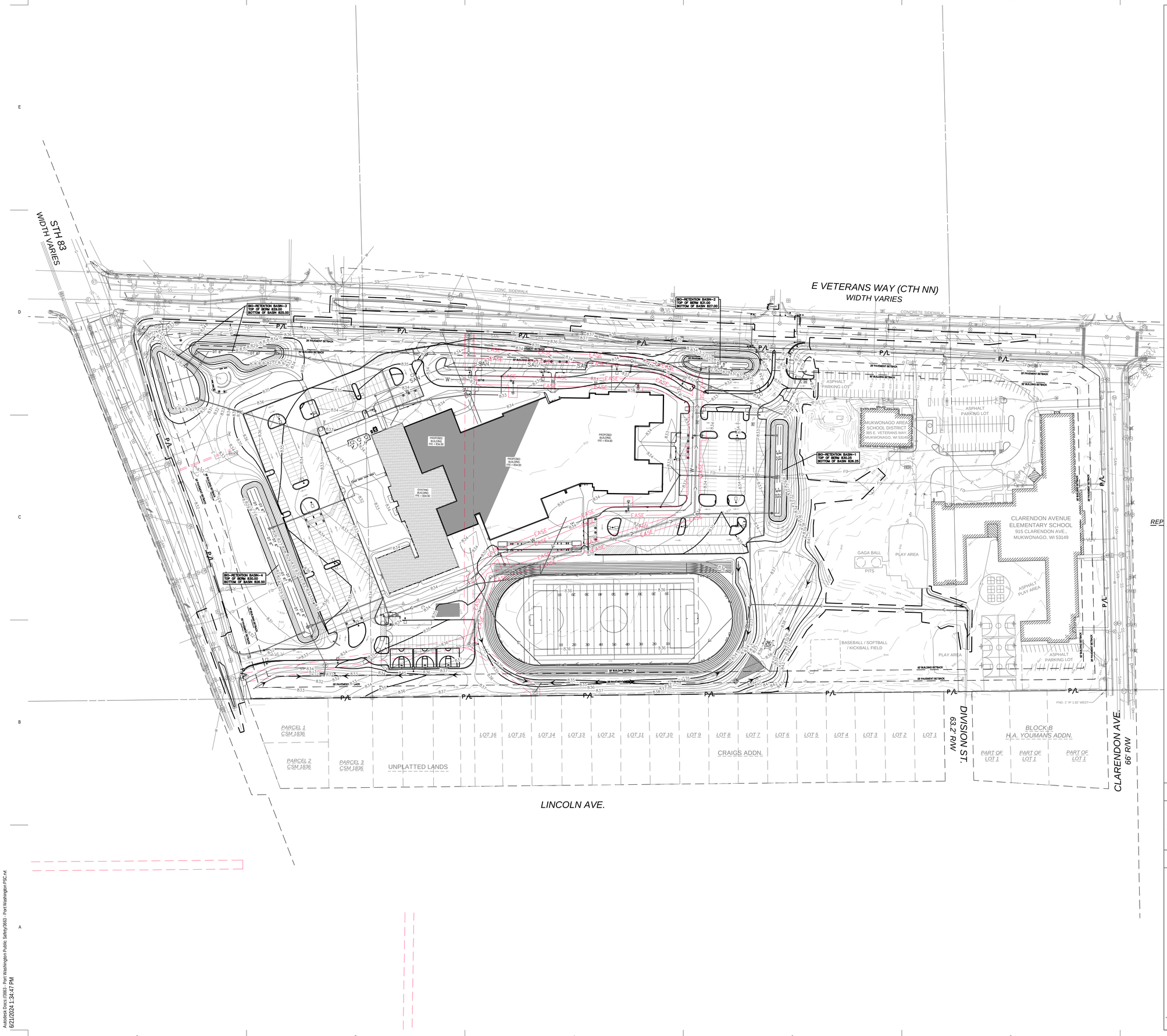

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Milwaukee, Wisconsin 53204
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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number:
3526

Issued For:
PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
OVERALL SITE GRADING PLAN

Sheet Number:
C1.40

Scale: 0 40 80 160
Scale: 1" = 80'

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GRADING NOTES

GENERAL CONTRACTOR OR THEIR SUB CONTRACTORS ARE RESPONSIBLE FOR VERIFYING OWNERSHIP OF AND COORDINATING THE DEMOLITION AND / OR RELOCATION / ELEVATION ADJUSTMENT OF ALL EXISTING PUBLIC OR PRIVATE UTILITIES WITHIN THE PROJECT LIMITS THAT MAY BE AFFECTED BY TOPOGRAPHICAL CHANGES, UTILITIES, OR OTHER PROPOSED CONSTRUCTION ON THE PROJECT, INCLUDING BUT NOT LIMITED TO ELECTRICAL / FIBER OPTIC / TELEPHONE / CABLE / GAS / WATER / SANITARY / STORM. DEMOLITION / RELOCATION OF THIS UTILITY WORK MUST BE IN ACCORDANCE WITH ALL STATE, FEDERAL, LOCAL, AND UTILITY OWNER REGULATIONS.

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- DRAINAGE SWALE

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STH 83
WIDTH VARIES

BIO-RETENTION BASIN-3
TOP OF BERM 829.00
BOTTOM OF BASIN 825.00

BIO-RETENTION BASIN-4
TOP OF BERM 830.00
BOTTOM OF BASIN 826.00

25' PAVEMENT SETBACK
50' BUILDING SETBACK

PROPOSED BUILDING
FFE = 834.50

EXISTING BUILDING
FFE = 834.50

MATCHLINE

Scale: 1" = 30'

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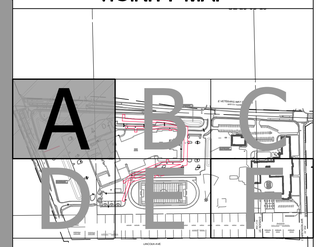
VICINITY MAP



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4/2/2025

Sheet Title:
SITE GRADING PLAN - AREA A

Sheet Number:
C1.41A

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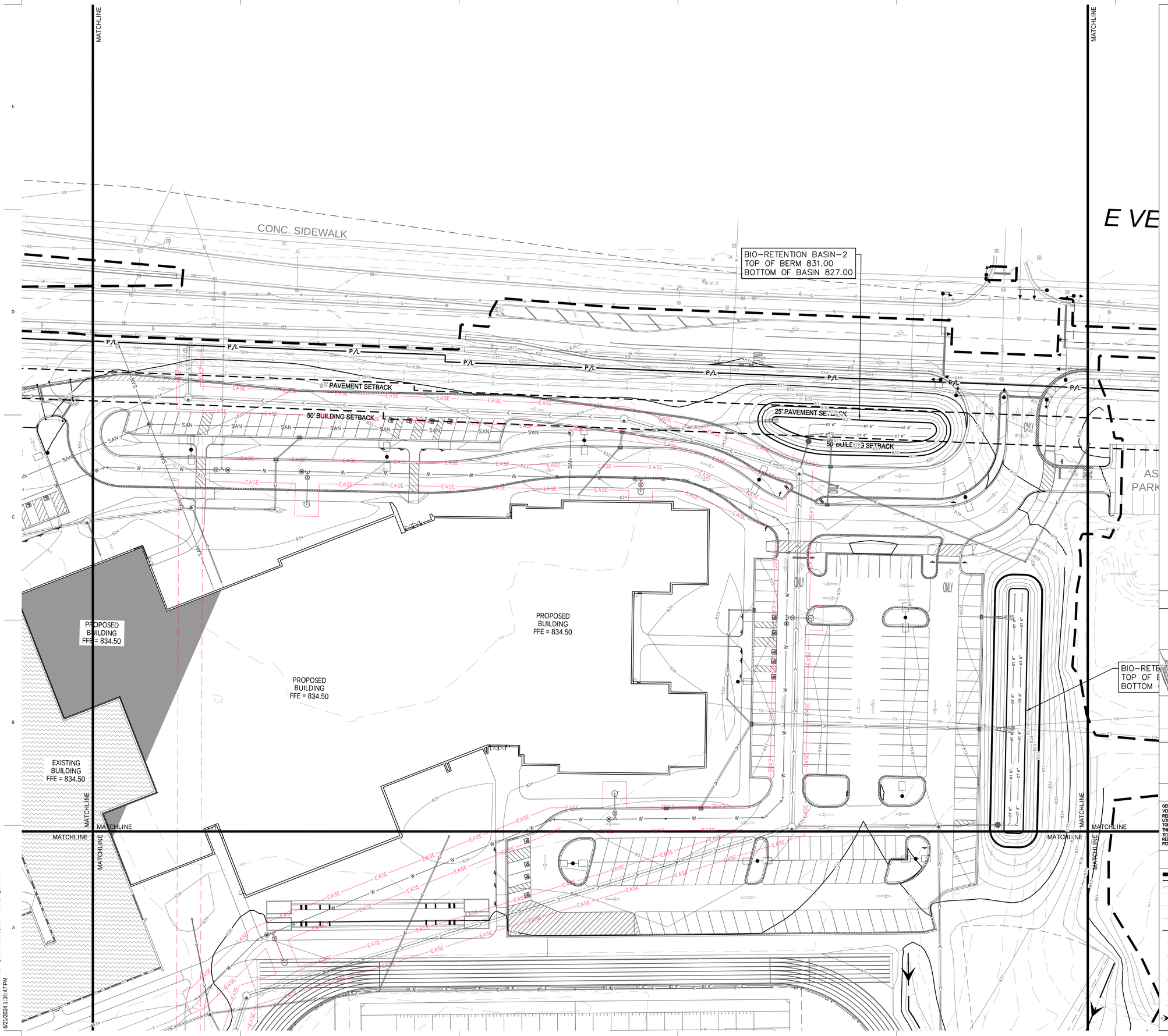

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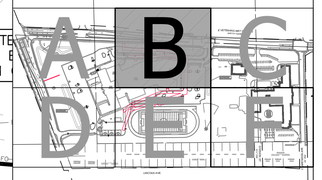

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Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE GRADING PLAN - AREA B

Sheet Number: C1.42B

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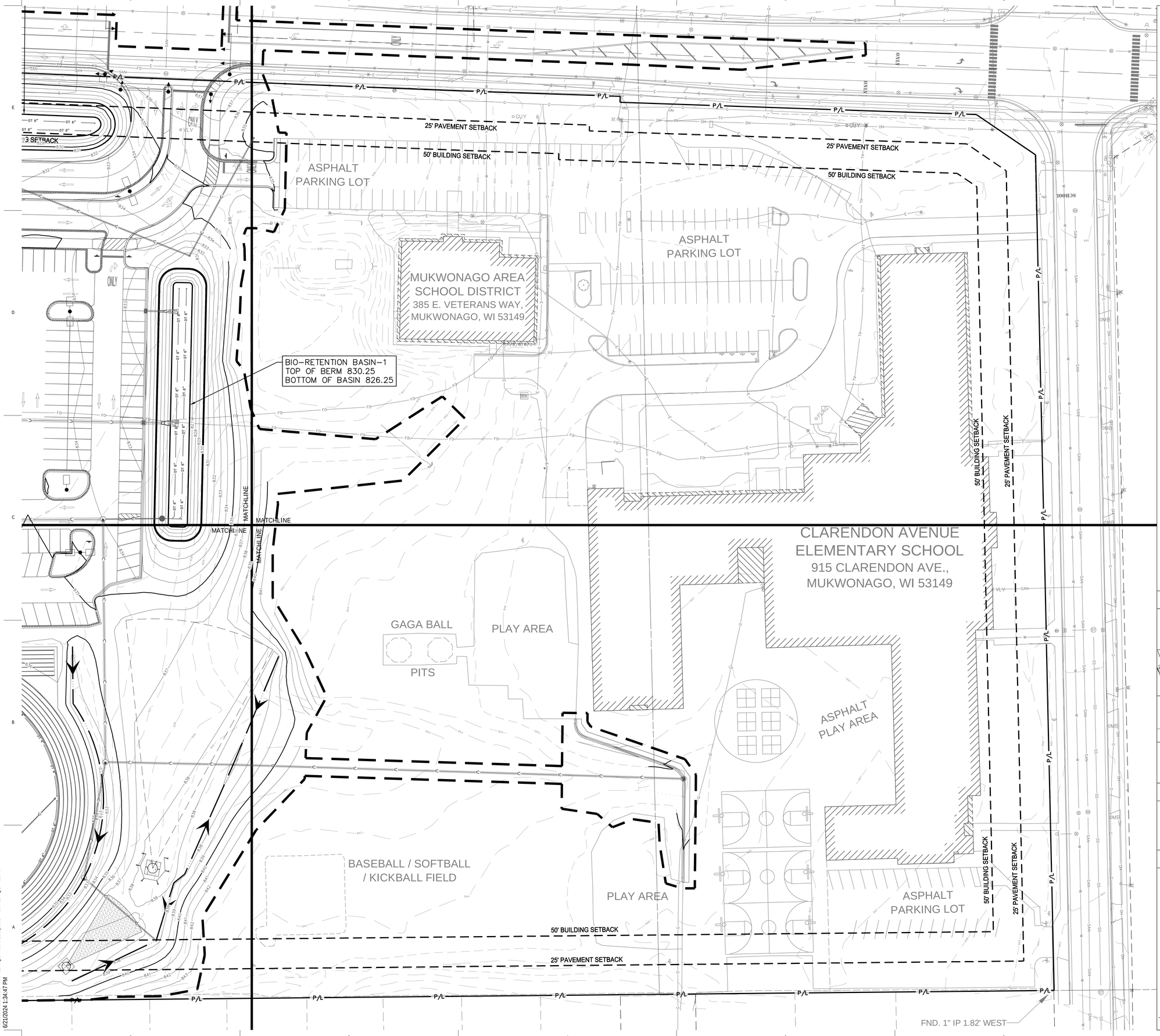

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Scale: 1" = 30'

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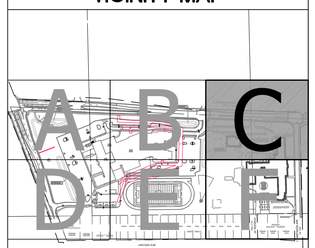
VICINITY MAP



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Project Title:
RENOVATION AND ADDITION TO:
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Mukwonago Area School District
930 N Rochester St.
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REVISIONS:

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Project Number:
3526

Issued For:
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4/2/2025

Sheet Title:
SITE GRADING PLAN - AREA C

Sheet Number:
C1.43C

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MATCHLINE

BIO-RETENTION BASIN-4
TOP OF BERM 830.00
BOTTOM OF BASIN 826.00

50' BUILDING SETBACK

25' PAVEMENT SETBACK

EXISTING BUILDING
FFE = 834.50

MATCHLINE

PARCEL 1
CSM 1836

PARCEL 2
CSM 1836

PARCEL 3
CSM 1836

UNPLATTED LANDS

Scale: 0 15 30 60
Scale: 1" = 30'

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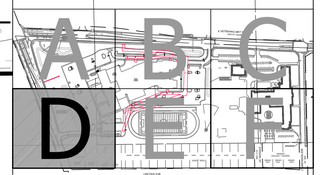
VICINITY MAP



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Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE GRADING PLAN - AREA D

Sheet Number: C1.44D

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PROPOSED BUILDING FFE = 834.50

EXISTING BUILDING FFE = 834.50

BIO-RETE
TOP OF B
BOTTOM

MATCHLINE

50' BUILDING SETBACK

25' PAVEMENT SETBACK

P/L

LOT 16 LOT 15 LOT 14 LOT 13 LOT 12 LOT 11 LOT 10 LOT 9 LOT 8 LOT 7 LOT 6 LOT 5

CRAIGS ADDN.

ATTED LANDS

LINCOLN AVE.

Scale: 0 15 30 60
Scale: 1" = 30'

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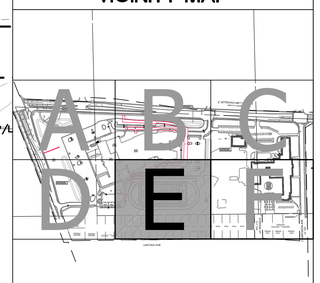
VICINITY MAP



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Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE GRADING PLAN - AREA E

Sheet Number: C1.45E

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BIO-RETENTION BASIN-1
TOP OF BERM 830.25
BOTTOM OF BASIN 826.25

MATCHLINE

MATCHLINE

MATCHLINE

MATCHLINE

CLARENDON AVENUE
ELEMENTARY SCHOOL
915 CLARENDON AVE.,
MUKWONAGO, WI 53149

GAGA BALL

PLAY AREA

PITS

ASPHALT
PLAY AREA

BASEBALL / SOFTBALL
/ KICKBALL FIELD

PLAY AREA

ASPHALT
PARKING LOT

50' BUILDING SETBACK

25' PAVEMENT SETBACK

50' BUILDING SETBACK

25' PAVEMENT SETBACK

P/L

FND. 1" IP 1.82' WEST

REPLAT OF WILSO
SUBDIVISI

LOT 6 *LOT 5* *LOT 4* *LOT 3* *LOT 2* *LOT 1*

DIVISION ST.
63.2' R/W

BLOCK B
H.A. YOUMANS ADDN.

PART OF LOT 1 *PART OF LOT 1* *PART OF LOT 1*

CLARENDON AVE.
66' R/W

MATCHLINE

Scale: 0 15 30 60
Scale: 1" = 30'

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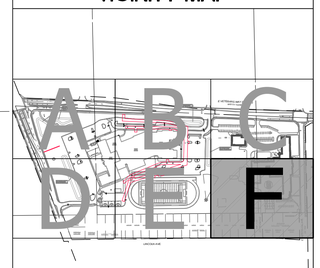
VICINITY MAP



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Sheet Title:
SITE GRADING PLAN - AREA F

Sheet Number:
C1.46F

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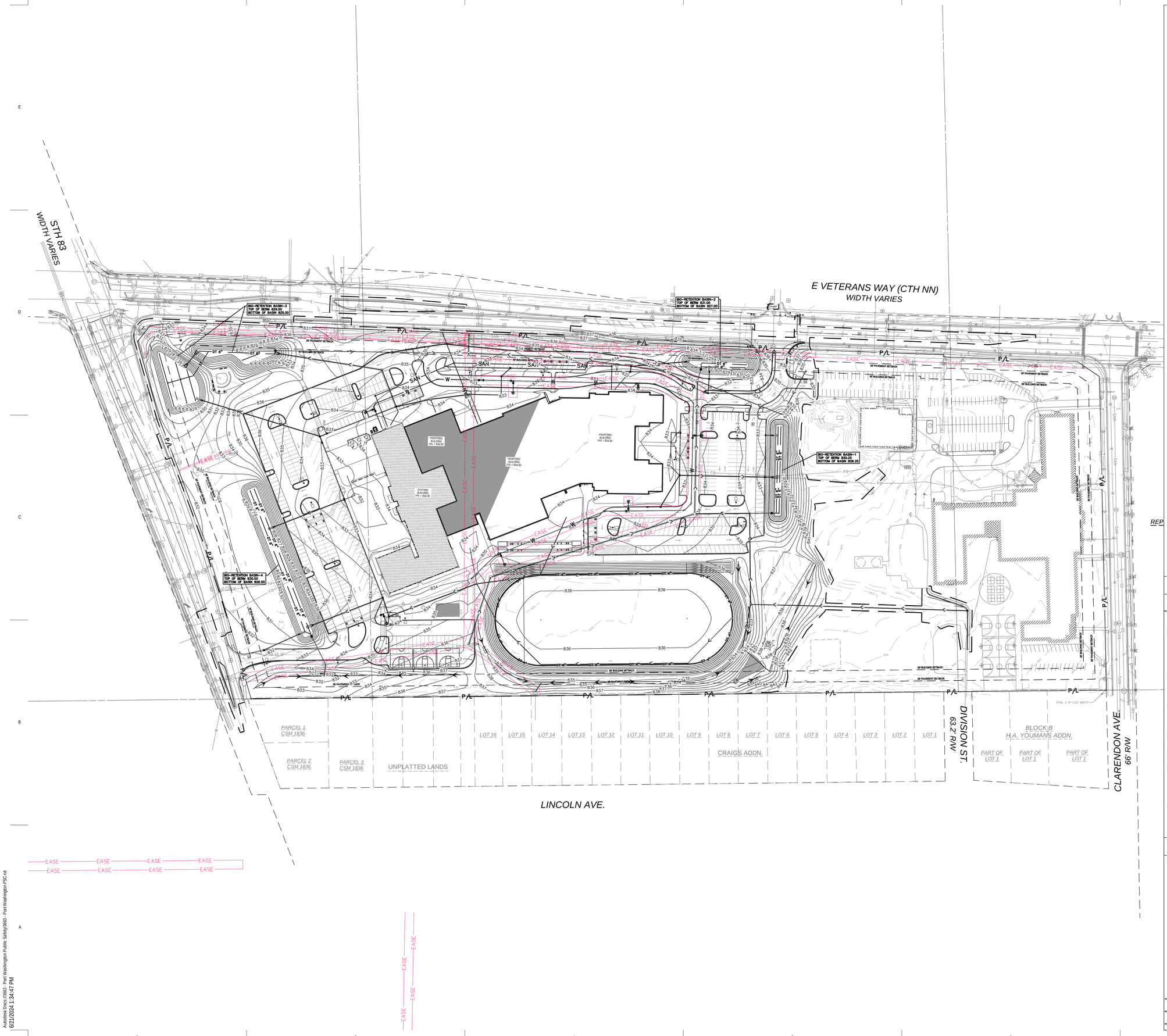

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Scale: 0 40 80 160
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UTILITY NOTES

CAUTION

KNOWN UTILITY AND POTENTIAL CONFLICT EXIST WITH EXISTING UNDERGROUND UTILITIES. PRIOR TO UTILITY INSTALLATION, CONTRACTOR TO EXCAVATE AND EXPOSE EXISTING UTILITIES, VERIFY LOCATIONS AND ELEVATIONS, AND CONTACT ENGINEER IF CONFLICTS EXIST WITH PROPOSED CONSTRUCTION AND EXISTING UNDERGROUND UTILITIES..

1. PER PROJECT SPECIFICATIONS AND THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, THE POINT OF COMMENCEMENT FOR THE LAYING OF SEWER PIPE SHALL BE AT THE LOWEST POINT IN THE PROPOSED SEWER LINE. THE PIPE SHALL BE LAID WITH THE BELL END OF THE BELL AND SPIGOT PIPE, OR WITH THE RECEIVING GROOVE END OF THE TONGUE AND GROOVE PIPE, POINTING UPGRADE. WHEN A NEW SEWER IS TO BE CONNECTED TO AN EXISTING SEWER NOT TERMINATING IN A MANHOLE, THE CONTRACTOR SHALL UNCOVER THE EXISTING SEWER TO ALLOW ANY ADJUSTMENTS IN LINE AND GRADE TO BE MADE BEFORE PIPE IS LAID.
2. THE UNDERGROUND AND OVERHEAD UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES, LOCAL MUNICIPALITY, PROPERTY OWNER, AND DIGGERS HOTLINE. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.
3. GENERAL CONTRACTOR OR THEIR SUB CONTRACTORS SHALL APPLY FOR AND OBTAIN ALL THEIR REQUIRED PERMITS AND APPROVALS PRIOR TO THE START OF THEIR WORK. CONSULT WITH AND OBTAIN FROM ENGINEER COPIES OF ENGINEERING DESIGN APPROVAL PERMITS, INCLUDING BUT NOT LIMITED TO MDNR, STATE OR LOCAL PLUMBING, WDOT, COUNTY, AND STORM WATER MANAGEMENT.
4. GENERAL CONTRACTOR OR THEIR SUB CONTRACTORS SHALL CONTACT DIGGER'S HOTLINE TO ALLOW THEM SUFFICIENT TIME TO LOCATE EXISTING UTILITIES PRIOR TO COMMENCEMENT OF WORK.
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- W — WATER MAIN

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number:
3526

Issued For:
PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
OVERALL SITE UTILITY PLAN

Sheet Number:
C1.50

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STH 83
WIDTH VARIES

BIO-RETENTION BASIN-3
TOP OF BERM 829.00
BOTTOM OF BASIN 825.00

25' PAVEMENT SETBACK

50' BUILDING SETBACK

PROPOSED BUILDING
FFE = 834.50

EXISTING BUILDING
FFE = 834.50

25' PAVEMENT SETBACK

50' BUILDING SETBACK

BIO-RETENTION BASIN-4
TOP OF BERM 830.00
BOTTOM OF BASIN 826.00

MATCHLINE

MATCHLINE

MATCHLINE

MATCHLINE

Scale:
0 15 30 60
Scale: 1" = 30'

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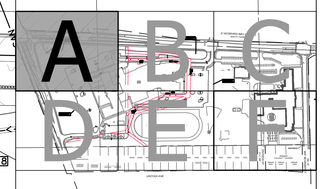
VICINITY MAP



UTILITY NOTES

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Project Number:
3526

Issued For:
PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
SITE UTILITY PLAN - AREA A

Sheet Number:
C1.51A

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BIO-RETENTION BASIN-2
TOP OF BERM 831.00
BOTTOM OF BASIN 827.00

PROPOSED BUILDING
FFE = 834.50

PROPOSED BUILDING
FFE = 834.50

PROPOSED BUILDING
FFE = 834.50

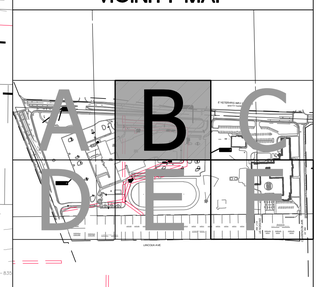
EXISTING BUILDING
FFE = 834.50

MATCHLINE

50' BUILDING SETBACK

25' PAVEMENT SETBACK

VICINITY MAP



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Scale: 0 15 30 60
Scale: 1" = 30'

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Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE UTILITY PLAN - AREA B

Sheet Number: C1.52B

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E VETERANS WAY (CTH NN)
WIDTH VARIES

MATCHLINE

25' PAVEMENT SETBACK
50' BUILDING SETBACK
25' PAVEMENT SETBACK
50' BUILDING SETBACK
50' BUILDING SETBACK
25' PAVEMENT SETBACK

BIO-RETENTION BASIN-1
TOP OF BERM 830.25
BOTTOM OF BASIN 826.25

MATCHLINE
MATCHLINE
MATCHLINE
MATCHLINE
MATCHLINE

REPLAT OF WILSO
SUBDIVISI

Scale: 0 15 30 60
Scale: 1" = 30'

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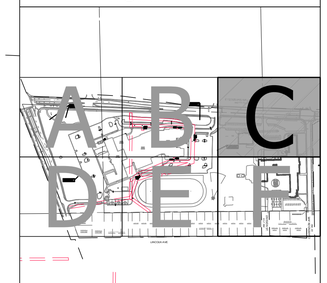
VICINITY MAP



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Sheet Title: SITE UTILITY PLAN - AREA C

Sheet Number: C1.53C

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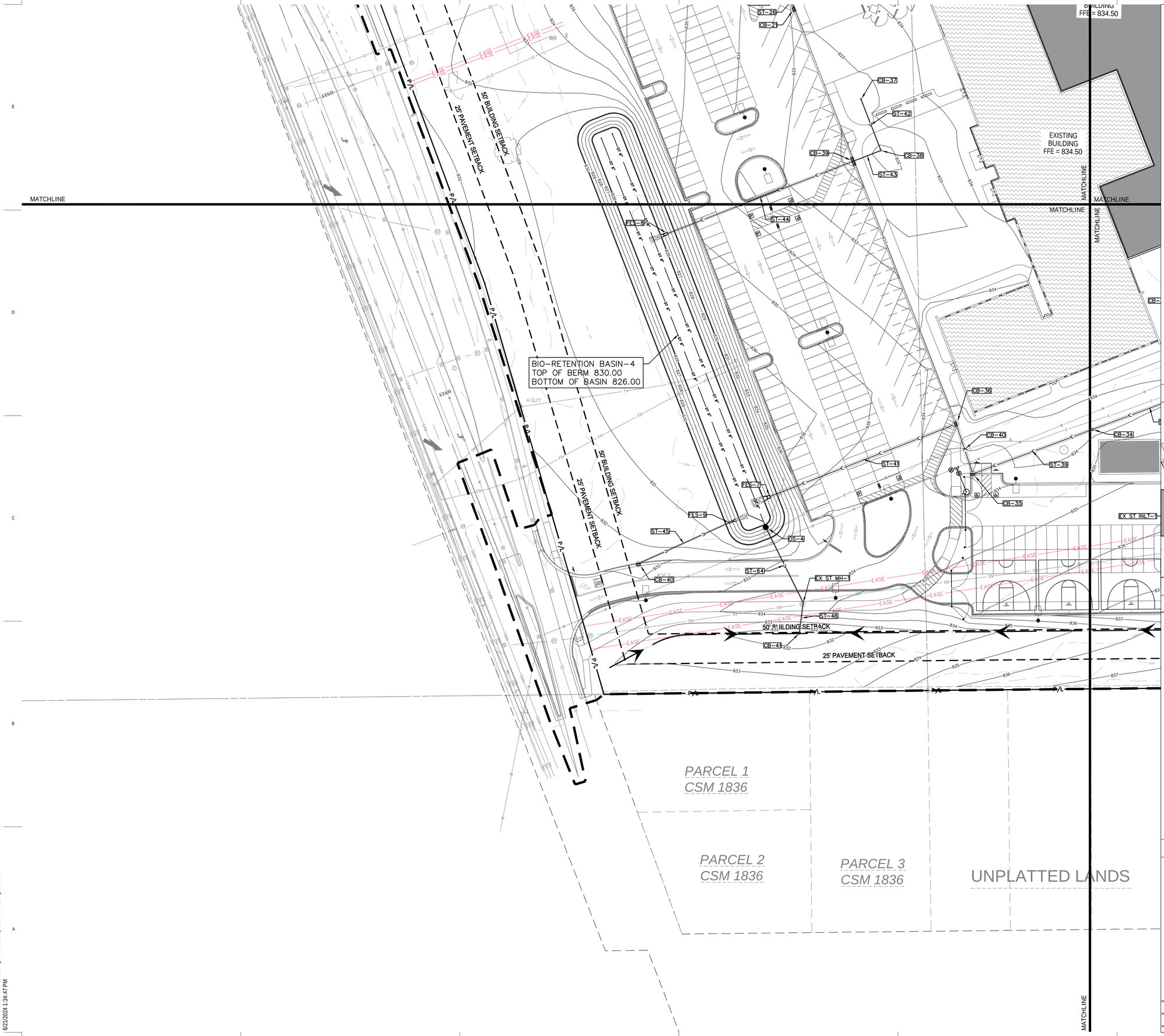

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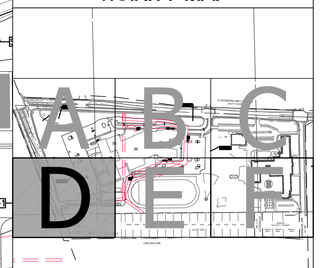

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Sheet Title: SITE UTILITY PLAN - AREA D

Sheet Number: C1.54D

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BUILDING
FFE = 834.50

PROPOSED
BUILDING
FFE = 834.50

EXISTING
BUILDING
FFE = 834.50

MATCHLINE

50' BUILDING SETBACK

25' PAVEMENT SETBACK

P/L

EASE

LOT 16 LOT 15 LOT 14 LOT 13 LOT 12 LOT 11 LOT 10 LOT 9 LOT 8 LOT 7 LOT 6 LOT 5

CRAIGS ADDN.

ATTED LANDS

LINCOLN AVE.

BIO-RETE
TOP OF B
BOTTOM

N

Scale: 0 15 30 60
Scale: 1" = 30'

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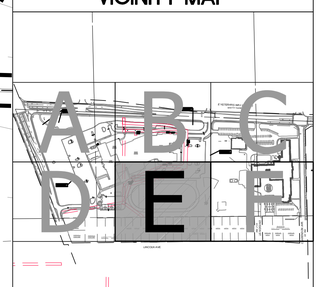

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number:
3526

Issued For:
PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
SITE UTILITY PLAN - AREA E

Sheet Number:
C1.55E

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6/21/2024 1:34:47 PM

BIO-RETENTION BASIN-1
TOP OF BERM 830.25
BOTTOM OF BASIN 826.25

MATCHLINE

MATCHLINE

MATCHLINE

MATCHLINE

MATCHLINE

CB-45

CB-44

ST-51

50' BUILDING SETBACK

25' PAVEMENT SETBACK

50' BUILDING SETBACK

25' PAVEMENT SETBACK

P/L

FND. 1" IP 1.82' WEST

REPLAT OF WILSO
SUBDIVISI

LOT 6 | LOT 5 | LOT 4 | LOT 3 | LOT 2 | LOT 1

BLOCK B
H.A. YOUMANS ADDN.

PART OF LOT 1 | PART OF LOT 1 | PART OF LOT 1

DIVISION ST.
63.2' R/W

CLARENDON AVE.
66' R/W

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6/21/2024 1:34:47 PM

Scale: 0 15 30 60
Scale: 1" = 30'

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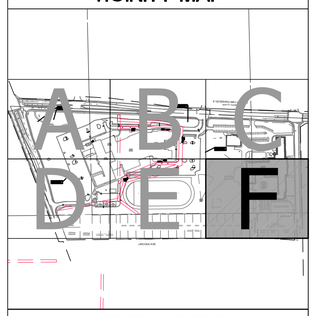
VICINITY MAP



UTILITY NOTES

CAUTION

KNOWN UTILITY AND POTENTIAL CONFLICT EXIST WITH EXISTING UNDERGROUND UTILITIES. PRIOR TO UTILITY INSTALLATION, CONTRACTOR TO EXCAVATE AND EXPOSE EXISTING UTILITIES, VERIFY LOCATIONS AND ELEVATIONS, AND CONTACT ENGINEER IF CONFLICTS EXIST WITH PROPOSED CONSTRUCTION AND EXISTING UNDERGROUND UTILITIES..

1. PER PROJECT SPECIFICATIONS AND THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, THE POINT OF COMMENCEMENT FOR THE LAYING OF SEWER PIPE SHALL BE AT THE LOWEST POINT IN THE PROPOSED SEWER LINE. THE PIPE SHALL BE LAID WITH THE BELL END OF THE BELL AND SPIGOT PIPE, OR WITH THE RECEIVING GROOVE END OF THE TONGUE AND GROOVE PIPE, POINTING UPGRADE. WHEN A NEW SEWER IS TO BE CONNECTED TO AN EXISTING SEWER NOT TERMINATING IN A MANHOLE, THE CONTRACTOR SHALL UNCOVER THE EXISTING SEWER TO ALLOW ANY ADJUSTMENTS IN LINE AND GRADE TO BE MADE BEFORE PIPE IS LAID.
2. THE UNDERGROUND AND OVERHEAD UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES, LOCAL MUNICIPALITY, PROPERTY OWNER, AND DIGGERS HOTLINE. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.
3. GENERAL CONTRACTOR OR THEIR SUB CONTRACTORS SHALL APPLY FOR AND OBTAIN ALL THEIR REQUIRED PERMITS AND APPROVALS PRIOR TO THE START OF THEIR WORK. CONSULT WITH AND OBTAIN FROM ENGINEER COPIES OF ENGINEERING DESIGN APPROVAL PERMITS, INCLUDING BUT NOT LIMITED TO WDNR, STATE OR LOCAL PLUMBING, WDOT, COUNTY, AND STORM WATER MANAGEMENT.
4. GENERAL CONTRACTOR OR THEIR SUB CONTRACTORS SHALL CONTACT DIGGER'S HOTLINE TO ALLOW THEM SUFFICIENT TIME TO LOCATE EXISTING UTILITIES PRIOR TO COMMENCEMENT OF WORK.
5. GENERAL CONTRACTOR OR THEIR SUB CONTRACTORS ARE RESPONSIBLE FOR COORDINATING THEIR WORK WITH ALL OTHER CONTRACTORS.
6. GENERAL CONTRACTOR OR THEIR SUB CONTRACTORS ARE RESPONSIBLE FOR VERIFYING OWNERSHIP OF AND COORDINATING THE DEMOLITION AND/OR RELOCATION OF ALL EXISTING UTILITIES FROM EXISTING BUILDINGS AND WITHIN THE PROJECT LIMITS, INCLUDING BUT NOT LIMITED TO ELECTRICAL/FIBER OPTIC/TELEPHONE/CABLE/GAS/WATER/SANITARY/STORM. DEMOLITION OF THIS UTILITY WORK MUST BE IN ACCORDANCE WITH ALL STATE, FEDERAL, & LOCAL REGULATIONS.
7. FOR ALL WORK, GENERAL CONTRACTOR OR THEIR SUB CONTRACTORS ARE RESPONSIBLE FOR REVIEWING BID DOCUMENTS, VERIFYING THE VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES WITHIN THE PROJECT LIMITS, AND INCLUDE IN THEIR CONTRACT THE RELOCATION OF SAID UTILITIES (NOTED OR NOT ON THE BID DOCUMENTS) AS NECESSARY TO PROVIDE PROPER DEPTH/CLEARANCE PER UTILITY OWNER'S REQUIREMENTS.

KEY INDEX

- PROJECT LIMITS
- P/L — PROPERTY LINE
- EASE — EASEMENT LINE
- STORM MANHOLE
- STORM CATCH BASIN WITH CURB BOX FRAME & GRATE
- RCP APRON ENDWALL
- RIP RAP
- WATER MAIN TEE
- WATER MAIN VALVE
- STORM SEWER
- SAN — SANITARY SEWER
- W — WATER MAIN

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SITE UTILITY PLAN - AREA F

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STORM SEWER STRUCTURE TABLE

STRUCTURE NAME:	TYPE (FRAME AND GRATE):	RIM ELEVATION:	PIPES IN:	PIPES OUT	BOTTOM:	DETAIL:
CB-1	2' X 3' RECTANGULAR (R-3067-R)	831.96		ST-1, 15" E INV = 828.71	827.21	
CB-2	48" DIAMETER (R-3067-L)	832.25	ST-1, 15" W INV = 828.42	ST-2, 18" NE INV = 828.17	826.67	
CB-3	2' X 3' RECTANGULAR (R-3067-R)	832.43		ST-3, 12" W INV = 829.43	827.93	
CB-4	18" NYLOPLAST DRAIN (1899CGS)	832.43	ST-3, 12" E INV = 829.33	ST-4, 12" S INV = 829.33	827.83	
CB-5	18" NYLOPLAST DRAIN (1899CGS)	832.65	ST-4, 12" N INV = 828.95	ST-5, 12" SE INV = 828.95	827.45	
CB-6	48" DIAMETER (R-3067-R)	832.49	ST-5, 12" NW INV = 828.73 ST-2, 18" SW INV = 827.76	ST-6, 24" E INV = 827.26	825.76	
CB-7	48" DIAMETER (R-2502-RA)	832.49	ST-6, 24" W INV = 826.68	ST-7, 24" E INV = 826.68	825.18	
CB-8	2' X 3' RECTANGULAR (R-3067-R)	832.43		ST-8, 12" E INV = 828.16	826.66	
CB-9	48" DIAMETER (R-3067-R)	831.72	ST-9, 12" SW INV = 828.10	ST-10, 15" N INV = 827.85	826.35	
CB-10	48" DIAMETER (R-3067-R)	833.35	ST-10, 15" S INV = 827.73	ST-11, 18" E INV = 827.48	825.98	
CB-11	2' X 3' RECTANGULAR (R-3067-R)	832.39		ST-12, 12" N INV = 828.45	826.95	
CB-12	2' X 3' RECTANGULAR (R-3067-R)	831.36	ST-12, 12" S INV = 828.13	ST-13, 12" N INV = 828.13	826.63	
CB-13	48" DIAMETER (R-3067-R)	832.09		ST-14, 12" SW INV = 829.09	827.59	
CB-14	48" DIAMETER (R-3067-R)	832.02	ST-14, 12" NE INV = 828.83	ST-15, 15" S INV = 828.58	827.08	
CB-15	18" NYLOPLAST DRAIN (1899CGS)	832.91	ST-15, 15" N INV = 828.26	ST-16, 15" W INV = 828.26	826.76	
CB-16	48" DIAMETER (R-2502-D)	833.49	ST-16, 15" E INV = 827.74 ST-17, 12" S INV = 827.83	ST-18, 24" W INV = 826.83	825.33	
CB-17	60" DIAMETER (R-2502-D)	833.53	ST-18, 24" E INV = 826.50 ST-19, 12" S INV = 828.19	ST-20, 24" W INV = 826.50	825.00	
CB-18	18" NYLOPLAST DRAIN (1899CGS)	833.44	ST-21, 12" SW INV = 828.16	ST-22, 12" N INV = 828.16	826.66	
CB-19	60" DIAMETER (R-3067-R)	832.98	ST-20, 24" E INV = 826.30 ST-22, 12" S INV = 828.03	ST-23, 30" N INV = 825.80	824.30	
CB-20	48" DIAMETER (R-3067-R)	832.73		ST-25, 15" W INV = 829.48	827.98	
CB-21	2' X 3' RECTANGULAR (R-3067-R)	832.88		ST-26, 15" N INV = 829.62	828.12	
CB-21B	48" DIAMETER (R-3067-L)	833.03	ST-25, 15" E INV = 829.31 ST-26, 15" S INV = 829.47	ST-27, 18" W INV = 829.06	827.56	
CB-23	18" NYLOPLAST DRAIN (1899CGS)	835.13		ST-28, 8" SW INV = 832.26	830.76	
CB-24	18" NYLOPLAST DRAIN (1899CGS)	835.13	ST-28, 8" NE INV = 831.90	ST-29, 12" W INV = 831.57	830.07	
CB-25	18" NYLOPLAST DRAIN (1899CGS)	835.13	ST-29, 12" E INV = 831.16	ST-30, 12" W INV = 831.16	829.66	
CB-26	18" NYLOPLAST DRAIN (1899CGS)	835.13	ST-30, 12" E INV = 830.33	ST-31, 12" NW INV = 830.33	828.83	
CB-27	18" NYLOPLAST DRAIN (1899CGS)	835.14	ST-31, 12" SE INV = 829.63	CB-32, 12" NW INV = 829.63	829.63	
CB-28	18" NYLOPLAST DRAIN (1899CGS)	835.13		ST-33, 8" W INV = 831.90	830.40	
CB-29	18" NYLOPLAST DRAIN (1899CGS)	835.13	ST-33, 8" E INV = 831.07	ST-34, 12" W INV = 830.74	829.24	
CB-30	18" NYLOPLAST DRAIN (1899CGS)	833.13		ST-35, 12" SW INV = 830.13	828.63	
CB-31	18" NYLOPLAST DRAIN (1899CGS)	835.13	ST-34, 12" E INV = 830.33 ST-35, 12" NE INV = 829.77	ST-36, 15" W INV = 829.52	828.02	
CB-32	18" NYLOPLAST DRAIN (1899CGS)	833.60		ST-37, 8" S INV = 830.60	829.10	
CB-33	48" DIAMETER (R-2502-D)	833.97	ST-37, 8" N INV = 829.79 CB-32, 12" SE INV = 828.70 ST-36, 15" E INV = 828.44	ST-38, 24" W INV = 827.69	826.19	
CB-34	24" NYLOPLAST DRAIN (2499CGS)	833.09	ST-38, 24" E INV = 827.38	ST-39, 24" W INV = 827.38	825.88	
CB-35	60" DIAMETER (R-3067-R)	833.56	ST-39, 24" E INV = 827.06	CB-40, 24" N INV = 827.06	825.56	
CB-36	60" DIAMETER (R-3067-C)	833.32	CB-40, 24" S INV = 826.84	ST-41, 24" W INV = 827.01	825.34	
CB-37	18" NYLOPLAST DRAIN (1899CGS)	832.01		ST-42, 8" S INV = 829.01	827.51	
CB-38	18" NYLOPLAST DRAIN (1899CGS)	831.68	ST-42, 8" N INV = 828.55	ST-43, 8" W INV = 828.55	827.05	
CB-39	2' X 6' (R-3295-2)	831.70	ST-43, 8" E INV = 828.30	ST-44, 18" W INV = 827.20	825.70	
CB-40	48" DIAMETER (R-3067-R)	831.70		ST-45, 12" NE INV = 827.70	826.20	
CB-41	18" NYLOPLAST DRAIN (1899CGS)	831.40		ST-46, 12" N INV = 827.40	825.90	
CB-42	18" NYLOPLAST DRAIN (1899CGS)	837.41		ST-49, 12" NW INV = 831.46	829.96	
CB-43	48" DIAMETER (R-2502-D)	832.05	ST-49, 12" SE INV = 829.05	ST-50, 15" N INV = 829.05	827.55	
CB-44	48" DIAMETER (R-3501-RA)	843.96		ST-51, 15" W INV = 839.71	839.71	
CB-45	18" NYLOPLAST DRAIN (1899CGS)	836.77	ST-51, 15" E INV = 832.52	ST-52, 15" W INV = 832.52	831.02	
CB-46	18" NYLOPLAST DRAIN (1899CGS)	834.07		ST-57, 12" SW INV = 829.30	827.80	
CB-47	18" NYLOPLAST DRAIN (1899CGS)	830.04	ST-57, 12" NE INV = 827.04	ST-58, 12" W INV = 827.04	825.54	
CB-48	18" NYLOPLAST DRAIN (1899CGS)	833.46		ST-65, 12" SW INV = 828.21	826.71	
EX ST INLT-1	N/A		EX ST, 18" SE INV = 825.83 EX ST, 36" W INV = 825.53	ST-47, 42" N INV = 823.53		
EX ST MH-1	N/A		ST-46, 12" S INV = 827.14 ST-64, 10" NW INV = 823.86 EX ST, 36" W INV = 823.86	EX ST, 36" E INV = 823.86		
EX ST MH-2	N/A		ST-62, 42" S INV = 820.79	EX ST, 36" NE INV = 820.79		
EX ST MH-3	N/A		ST-65, 12" NE INV = 827.21 EX ST, 18" S INV = 826.83	EX ST, 18" NW INV = 826.83		
FES-1	24" RCP APRON ENDWALL		ST-7, 24" W INV = 826.51			
FES-2	12" RCP APRON ENDWALL		ST-8, 12" W INV = 828.00			
FES-3	18" RCP APRON ENDWALL		ST-11, 18" W INV = 827.00			
FES-4	12" RCP APRON ENDWALL		ST-13, 12" S INV = 828.00			
FES-5	30" RCP APRON ENDWALL		ST-24, 30" E INV = 825.00			
FES-6	18" RCP APRON ENDWALL		ST-27, 18" E INV = 826.00			
FES-7	24" RCP APRON ENDWALL		ST-41, 24" E INV = 826.00			
FES-8	18" RCP APRON ENDWALL		ST-44, 18" E INV = 826.00			

STORM SEWER STRUCTURE TABLE

STRUCTURE NAME:	TYPE (FRAME AND GRATE):	RIM ELEVATION:	PIPES IN:	PIPES OUT	BOTTOM:	DETAIL:
FES-9	12" RCP APRON ENDWALL		ST-45, 12" SW INV = 826.86			
FES-10	36" RCP APRON ENDWALL			ST-66, 36" NE INV = 821.25		
FES-11	36" RCP APRON ENDWALL		ST-66, 36" SW INV = 820.97			
OS-1	48" OUTLET STRUCTURE	828.25	DT, 6" E INV = 823.75	ST-54, 10" W INV = 823.75	822.25	
OS-2	48" OUTLET STRUCTURE	829.00	DT, 6" N INV = 824.50	ST-59, 10" S INV = 824.50	825.00	
OS-3	48" OUTLET STRUCTURE	827.00	DT, 6" S INV = 822.50	ST-63, 10" E INV = 822.50	821.50	
OS-4	48" OUTLET STRUCTURE	828.00	DT, 6" NW INV = 824.00	ST-64, 10" SE INV = 824.00	822.50	
ST BLDG-1	N/A			ST-9, 12" NE INV = 828.50		
ST BLDG-2	N/A			ST-17, 12" N INV = 828.50		
ST BLDG-3	N/A			ST-19, 12" N INV = 828.50		
ST BLDG-4	N/A			ST-21, 12" NE INV = 828.50		
ST MH-1	60" DIAMETER (R-1661)	835.03	ST-23, 30" S INV = 825.58	ST-24, 30" W INV = 825.58	825.58	
ST MH-2	72" DIAMETER (R-1661)	835.68	ST-47, 42" S INV = 823.24	ST-48, 42" E INV = 823.24	823.24	
ST MH-3	48" DIAMETER (R-1661)	833.60	ST-50, 15" S INV = 828.55 ST-52, 15" E INV = 828.55	ST-53, 18" N INV = 828.30	828.30	
ST MH-4	48" DIAMETER (R-1661)	834.00	ST-53, 18" S INV = 826.77 ST-54, 10" E INV = 823.13	ST-55, 24" W INV = 823.13	823.13	
ST MH-5	72" DIAMETER (R-1661)	833.90	ST-48, 42" W INV = 822.37 ST-55, 24" E INV = 822.82	ST-56, 42" N INV = 822.37	822.37	
ST MH-6	72" DIAMETER (R-1661)	831.86	ST-56, 42" S INV = 821.85 ST-58, 12" E INV = 825.00 ST-59, 10" N INV = 824.23	ST-60, 42" W INV = 821.85	821.85	
ST MH-7	72" DIAMETER (R-1661)	833.63	ST-60, 42" E INV = 821.57	ST-61, 42" W INV = 821.57	821.57	
ST MH-8	72" DIAMETER (R-1661)	833.73	ST-61, 42" E INV = 820.88 ST-63, 10" W INV = 820.88	ST-62, 42" N INV = 820.88	820.88	

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STORM SEWER PIPE TABLE

PIPE NAME:	FROM:	TO:	UPSTREAM INVERT ELEVATION:	DOWNSTREAM INVERT ELEVATION:	LENGTH:	SLOPE:	SIZE AND MATERIAL:	GPM:
CB-32	CB-27	CB-33	829.63	828.70	93.14'	1.00%	12" DUAL WALL HDPE	
CB-40	CB-35	CB-36	827.06	826.84	44.13'	0.50%	24" DUAL WALL HDPE	
ST-1	CB-1	CB-2	828.71	828.42	29.23'	1.00%	15" DUAL WALL HDPE	
ST-2	CB-2	CB-6	828.17	827.76	81.90'	0.50%	18" DUAL WALL HDPE	
ST-3	CB-3	CB-4	829.43	829.33	20.50'	0.50%	12" DUAL WALL HDPE	
ST-4	CB-4	CB-5	829.33	828.95	75.03'	0.50%	12" DUAL WALL HDPE	
ST-5	CB-5	CB-6	828.95	828.73	28.99'	0.75%	12" DUAL WALL HDPE	
ST-6	CB-6	CB-7	827.26	826.68	192.00'	0.30%	24" DUAL WALL HDPE	
ST-7	CB-7	FES-1	826.68	826.51	15.00'	1.14%	24" CLASS IV RCP	
ST-8	CB-8	FES-2	828.16	828.00	11.09'	1.47%	12" CLASS IV RCP	
ST-9	ST BLDG-1	CB-9	828.50	828.10	52.90'	0.75%	12" SDR 35 PVC	
ST-10	CB-9	CB-10	827.85	827.73	11.78'	1.00%	15" DUAL WALL HDPE	
ST-11	CB-10	FES-3	827.48	827.00	120.55'	0.40%	18" CLASS IV RCP	
ST-12	CB-11	CB-12	828.45	828.13	32.07'	1.00%	12" DUAL WALL HDPE	
ST-13	CB-12	FES-4	828.13	828.00	12.59'	1.00%	12" CLASS IV RCP	
ST-14	CB-13	CB-14	829.09	828.83	26.42'	1.00%	12" DUAL WALL HDPE	
ST-15	CB-14	CB-15	828.58	828.26	42.50'	0.75%	15" DUAL WALL HDPE	
ST-16	CB-15	CB-16	828.26	827.74	69.35'	0.75%	15" DUAL WALL HDPE	
ST-17	ST BLDG-2	CB-16	828.50	827.83	66.75'	1.00%	12" SDR 35 PVC	
ST-18	CB-16	CB-17	826.83	826.50	89.22'	0.37%	24" DUAL WALL HDPE	
ST-19	ST BLDG-3	CB-17	828.50	828.19	30.62'	1.00%	12" DUAL WALL HDPE	
ST-20	CB-17	CB-19	826.50	826.30	79.28'	0.25%	24" DUAL WALL HDPE	
ST-21	ST BLDG-4	CB-18	828.50	828.16	33.74'	1.00%	12" DUAL WALL HDPE	
ST-22	CB-18	CB-19	828.16	828.03	12.50'	1.00%	12" DUAL WALL HDPE	
ST-23	CB-19	ST MH-1	825.80	825.58	89.00'	0.25%	30" DUAL WALL HDPE	
ST-24	ST MH-1	FES-5	825.58	825.00	232.99'	0.25%	30" CLASS IV RCP	
ST-25	CB-20	CB-21B	829.48	829.31	16.88'	1.00%	15" DUAL WALL HDPE	
ST-26	CB-21	CB-21B	829.62	829.47	14.97'	1.00%	15" DUAL WALL HDPE	
ST-27	CB-21B	FES-6	829.06	826.00	274.54'	1.11%	18" CLASS IV RCP	
ST-28	CB-23	CB-24	832.26	831.90	140.75'	0.25%	8" SDR 35 PVC	
ST-29	CB-24	CB-25	831.57	831.16	164.99'	0.25%	12" DUAL WALL HDPE	
ST-30	CB-25	CB-26	831.16	830.33	165.01'	0.50%	12" DUAL WALL HDPE	
ST-31	CB-26	CB-27	830.33	829.63	140.79'	0.50%	12" DUAL WALL HDPE	
ST-33	CB-28	CB-29	831.90	831.07	165.00'	0.50%	8" DUAL WALL HDPE	
ST-34	CB-29	CB-31	830.74	830.33	165.00'	0.25%	12" DUAL WALL HDPE	
ST-35	CB-30	CB-31	830.13	829.77	143.13'	0.25%	12" DUAL WALL HDPE	
ST-36	CB-31	CB-33	829.52	828.44	142.85'	0.76%	15" DUAL WALL HDPE	
ST-37	CB-32	CB-33	830.60	829.79	81.10'	1.00%	8" SDR 35 PVC	
ST-38	CB-33	CB-34	827.69	827.38	102.78'	0.30%	24" DUAL WALL HDPE	
ST-39	CB-34	CB-35	827.38	827.06	107.16'	0.30%	24" DUAL WALL HDPE	
ST-41	CB-36	FES-7	827.01	826.00	167.62'	0.60%	24" CLASS IV RCP	
ST-42	CB-37	CB-38	829.01	828.55	46.13'	1.00%	8" SDR 35 PVC	
ST-43	CB-38	CB-39	828.55	828.30	24.50'	1.00%	8" SDR 35 PVC	
ST-44	CB-39	FES-8	827.20	826.00	167.49'	0.72%	18" CLASS IV RCP	
ST-45	CB-40	FES-9	827.70	826.86	83.64'	1.00%	12" CLASS IV RCP	
ST-46	CB-41	EX ST MH-1	827.40	827.14	26.18'	1.00%	12" DUAL WALL HDPE	
ST-47	EX ST INLT-1	ST MH-2	823.53	823.24	159.03'	0.18%	42" CLASS IV RCP	
ST-48	ST MH-2	ST MH-5	823.24	822.37	479.45'	0.18%	42" CLASS IV RCP	
ST-49	CB-42	CB-43	831.46	829.05	80.48'	3.00%	12" DUAL WALL HDPE	
ST-50	CB-43	ST MH-3	829.05	828.55	99.14'	0.50%	15" DUAL WALL HDPE	
ST-51	CB-44	CB-45	839.71	832.52	378.94'	1.90%	15" DUAL WALL HDPE	
ST-52	CB-45	ST MH-3	832.52	828.55	107.48'	3.69%	15" DUAL WALL HDPE	
ST-53	ST MH-3	ST MH-4	828.30	826.77	204.50'	0.75%	18" DUAL WALL HDPE	
ST-54	OS-1	ST MH-4	823.75	823.13	49.69'	1.25%	10" SDR 35 PVC	
ST-55	ST MH-4	ST MH-5	823.13	822.82	123.40'	0.25%	24" DUAL WALL HDPE	
ST-56	ST MH-5	ST MH-6	822.37	821.85	298.62'	0.18%	42" CLASS IV RCP	
ST-57	CB-46	CB-47	829.30	827.04	112.90'	2.00%	12" DUAL WALL HDPE	
ST-58	CB-47	ST MH-6	827.04	825.00	204.34'	1.00%	12" DUAL WALL HDPE	
ST-59	OS-2	ST MH-6	824.50	824.23	26.61'	1.00%	10" SDR 35 PVC	
ST-60	ST MH-6	ST MH-7	821.85	821.57	153.77'	0.18%	42" CLASS IV RCP	
ST-61	ST MH-7	ST MH-8	821.57	820.88	366.51'	0.19%	42" CLASS IV RCP	
ST-62	ST MH-8	EX ST MH-2	820.88	820.79	44.21'	0.20%	42" CLASS IV RCP	
ST-63	OS-3	ST MH-8	822.50	820.88	433.62'	0.37%	10" SDR 35 PVC	
ST-64	OS-4	EX ST MH-1	824.00	823.86	70.59'	0.20%	10" SDR 35 PVC	
ST-65	CB-48	EX ST MH-3	828.21	827.21	24.07'	4.16%	12" DUAL WALL HDPE	
ST-66	FES-10	FES-11	821.25	820.97	28.65'	1.00%	36" CLASS IV RCP	

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

⚠	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number:
3526

Issued For:
PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
SITE UTILITY PLAN - TABLES

Sheet Number:
C1.58H

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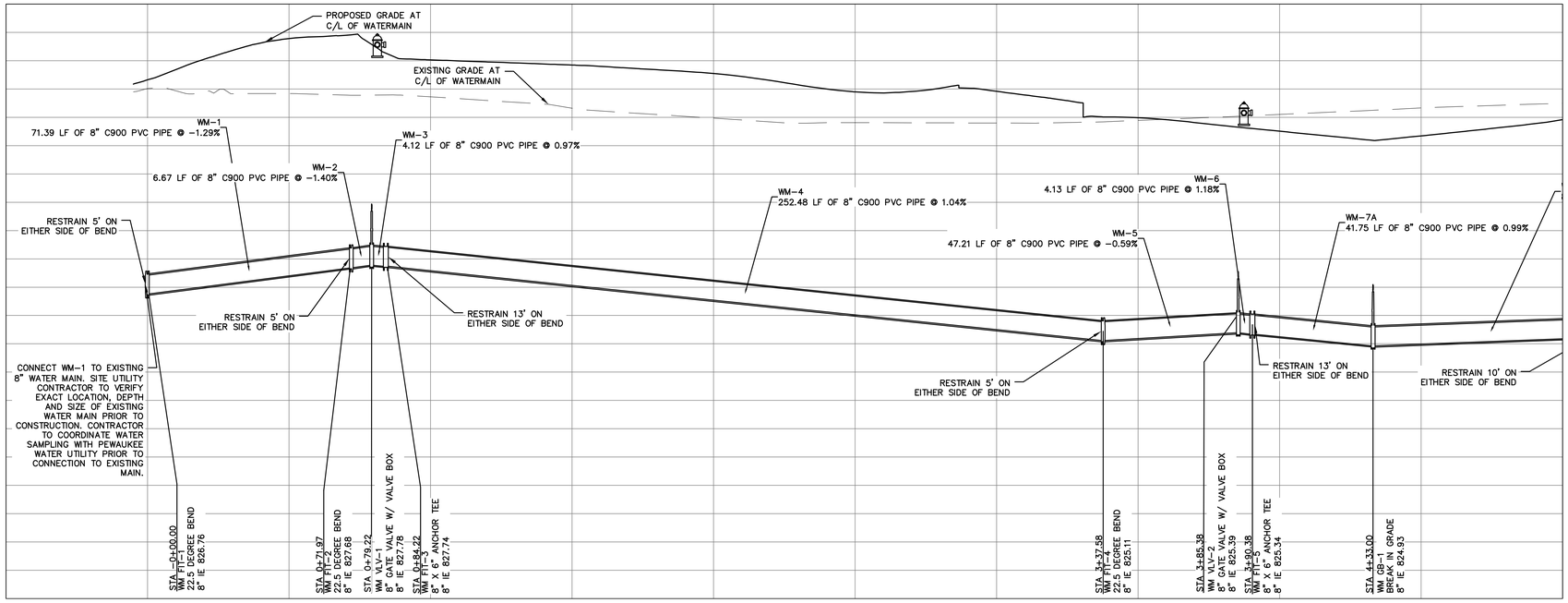

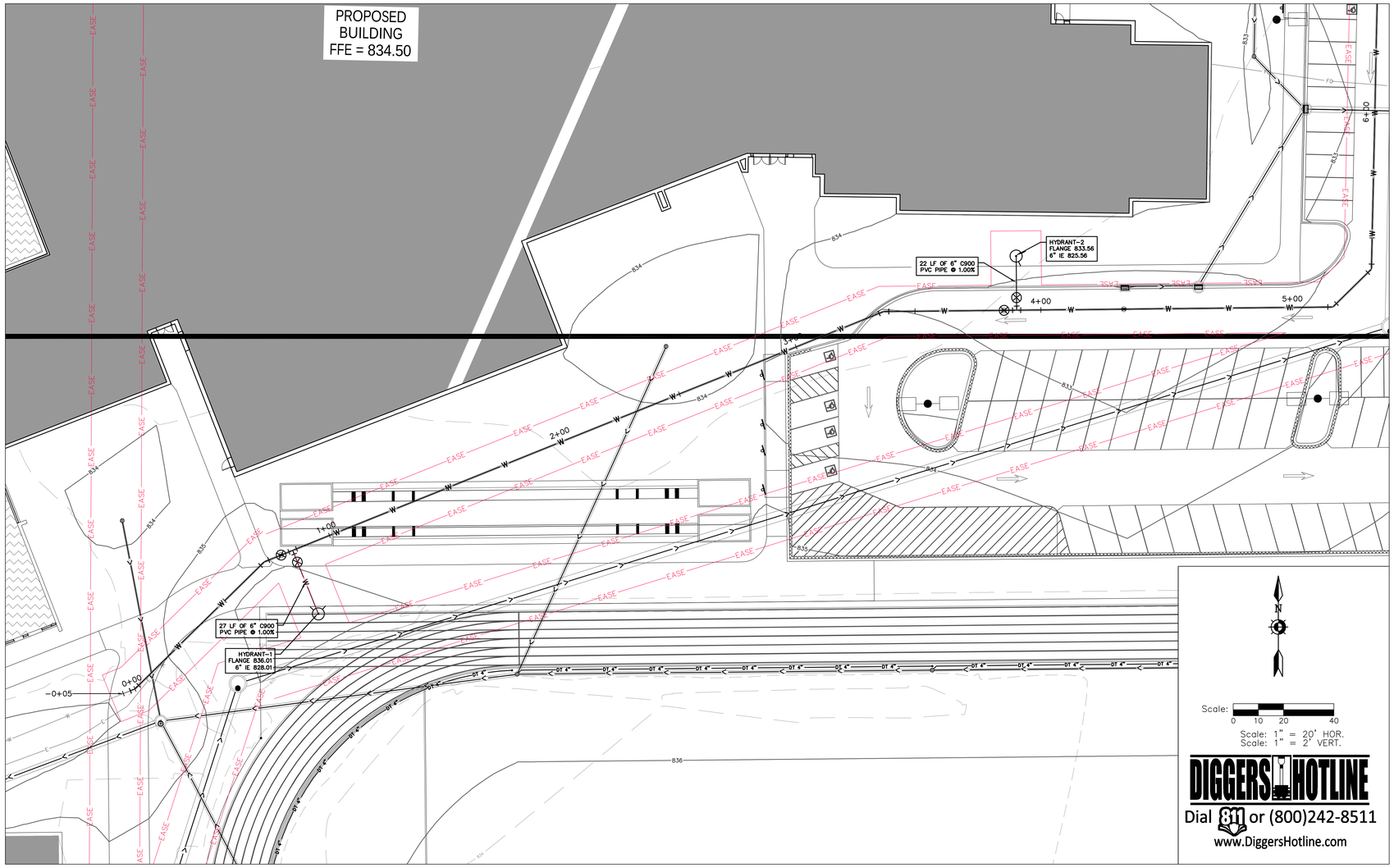

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REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: PUBLIC WATER MAIN - PLAN & PROFILE - STA. 0+00 TO 5+00

Sheet Number: C1.59I

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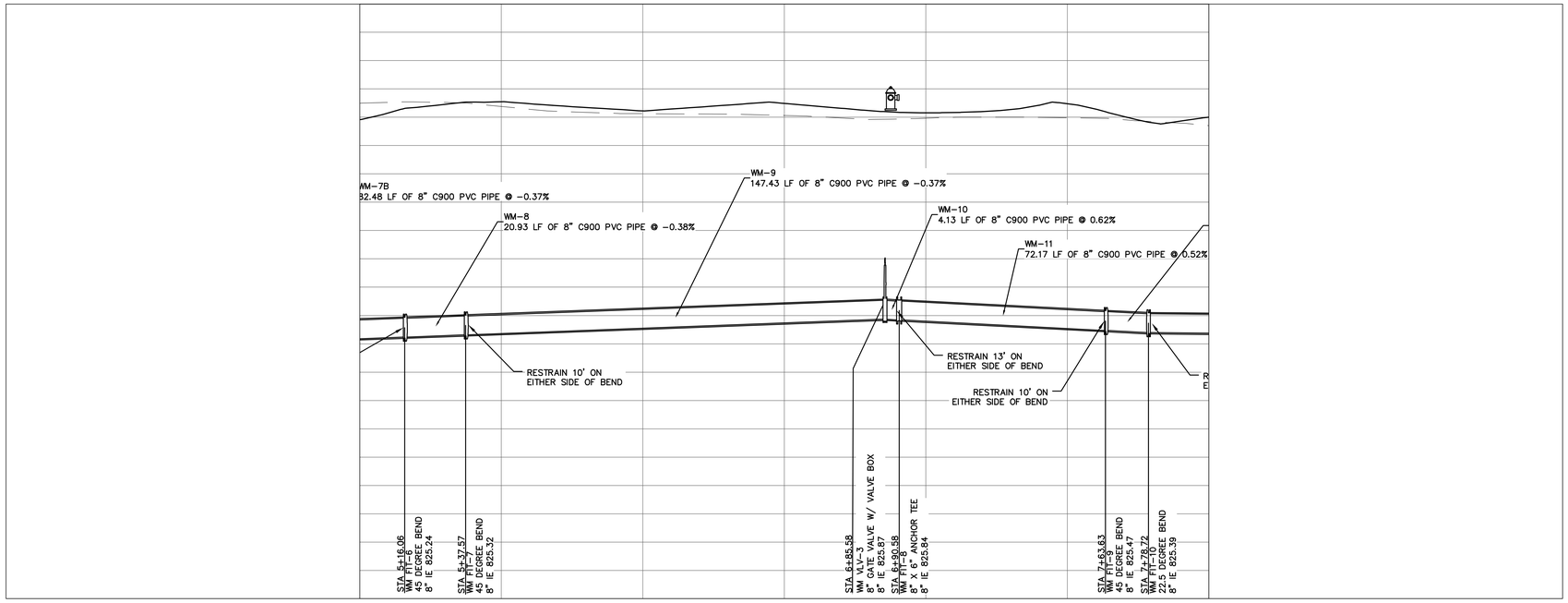

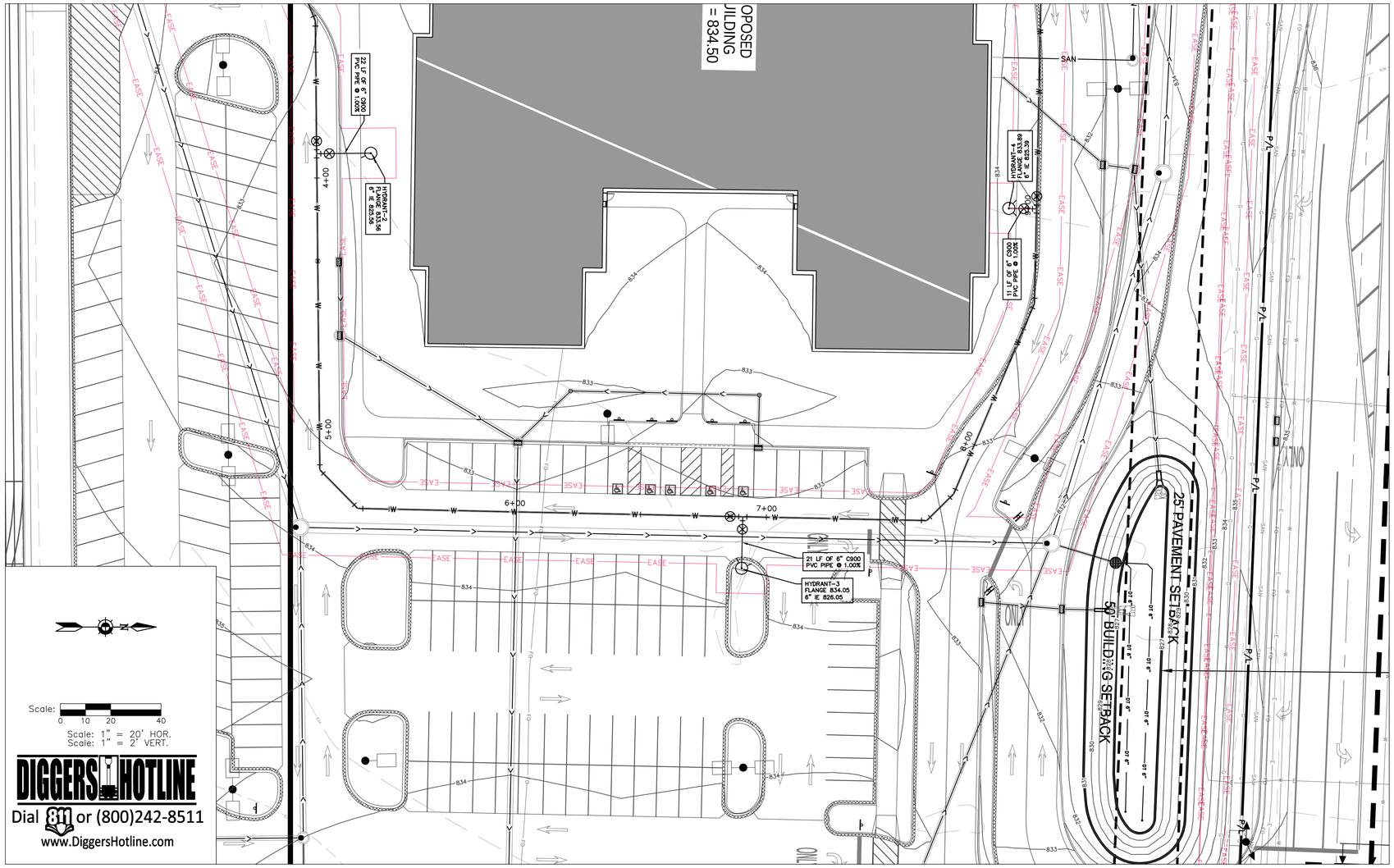

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930 N Rochester St,
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REVISIONS:

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NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: PUBLIC WATER MAIN - PLAN & PROFILE STA. - 5+00 TO 8+00

Sheet Number: C1.60J

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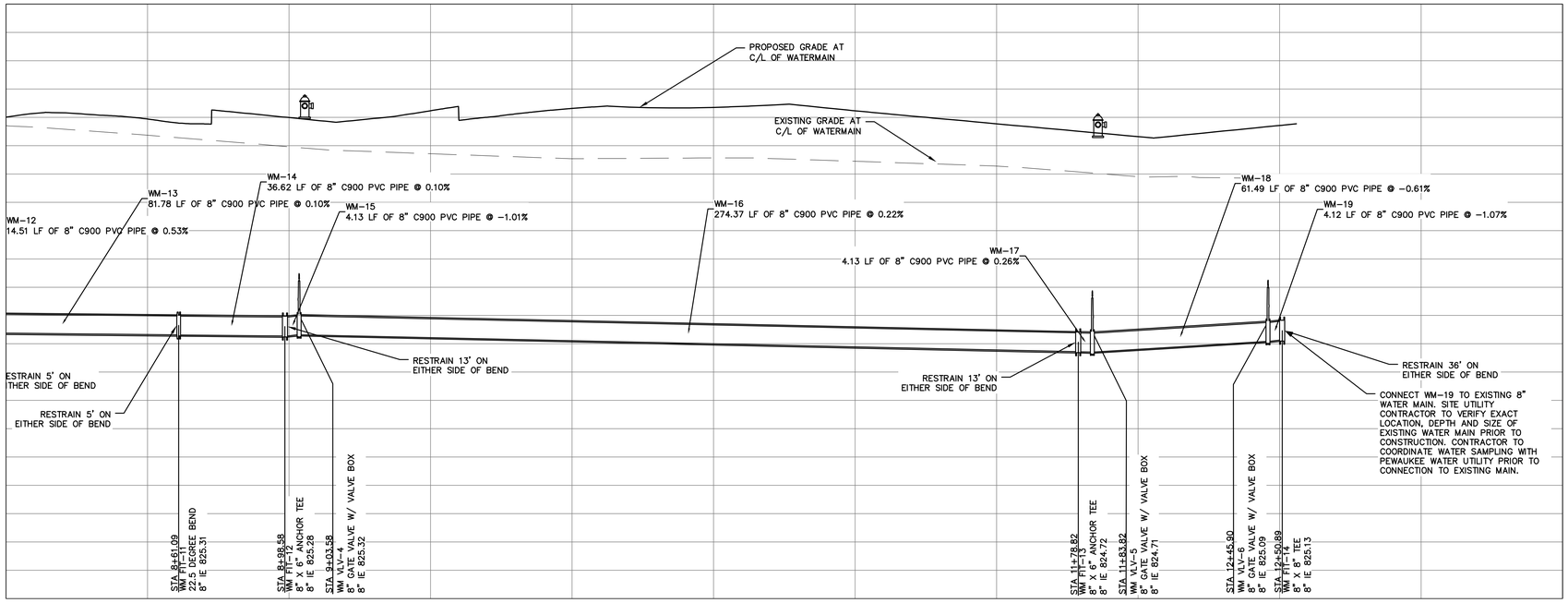

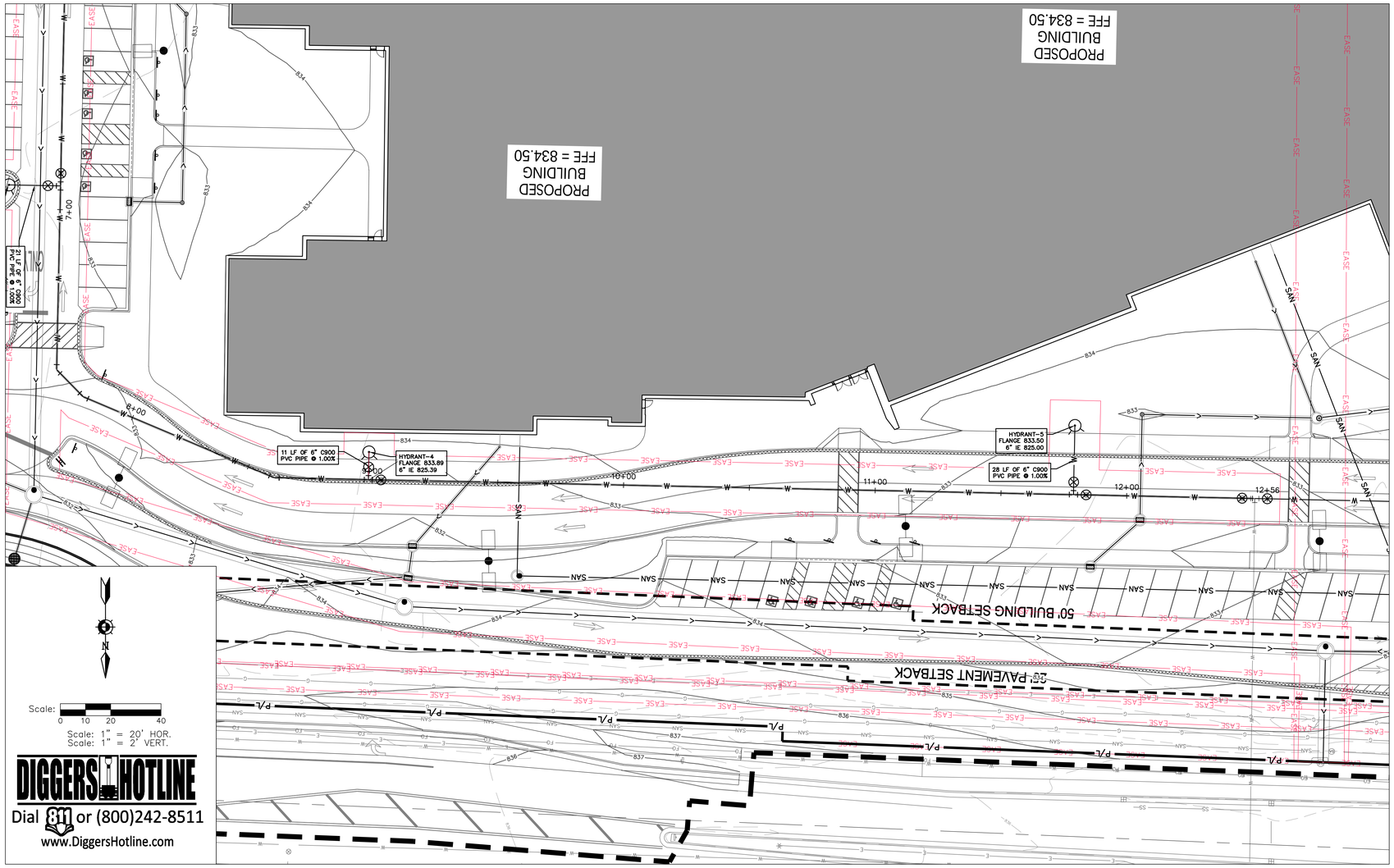

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930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: PUBLIC WATER MAIN - PLAN & PROFILE - STA. 8+00 TO 12+50.89

Sheet Number: C1.61K

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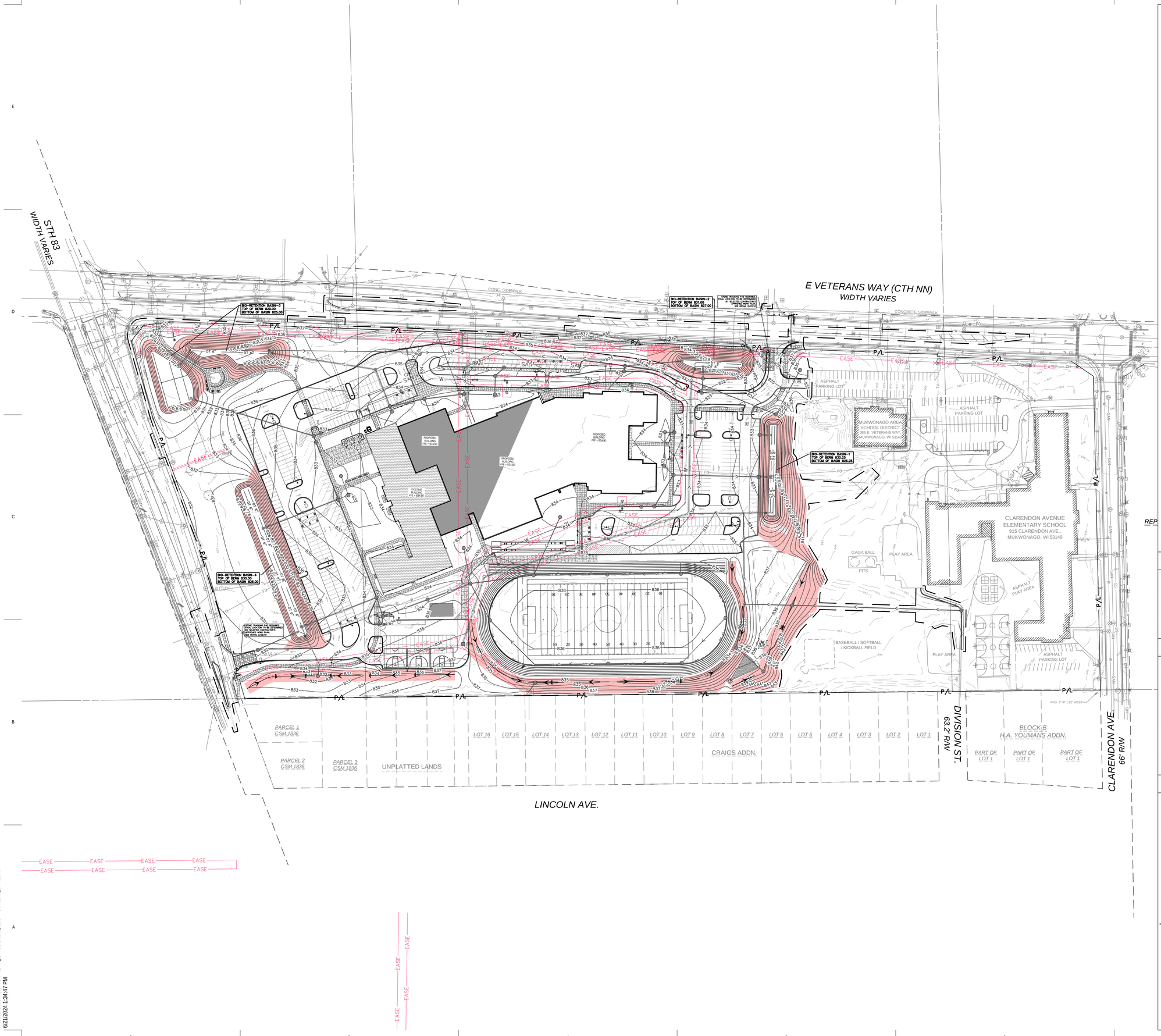

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Scale: 1" = 80'

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EROSION NOTES

INSPECT ALL EROSION CONTROL MEASURES PRIOR TO COMMENCING GRADING, GRUBBING OR OTHER LAND DISTURBING ACTIVITIES. EROSION CONTROL MEASURES MUST BE INSPECTED WEEKLY AND WITHIN 24 HOURS OF EVERY PRECIPITATION EVENT OF 0.50 INCH OR GREATER. IN ADDITION THE CONTRACTOR SHALL CONDUCT DAILY INSPECTIONS AND DOCUMENT CONDITIONS AND REPAIRS MADE ALONG WITH DATE, TIME OF INSPECTION AND WEATHER CONDITIONS IN A DAILY LOG BOOK. THE DAILY LOG BOOK, WEEKLY / 0.50 INCH PRECIPITATION REPORTS, APPROVED PLANS AND WPDES PERMIT SHALL BE KEPT IN AN ACCESSIBLE LOCATION, LIKE A MAILBOX, WITHIN THE STAGING AREA.

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POINTS OF CONTACT

LAND OWNER:

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PHONE: (262) 363-6300

PROJECT ENGINEER:

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PHONE: (414) 751-7200

CONSTRUCTION MANAGER:

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Sheet Title: OVERALL SITE EROSION CONTROL PLAN

Sheet Number: C1.70

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STH 83
WIDTH VARIES

BIO-RETENTION BASIN-3
TOP OF BERM 829.00
BOTTOM OF BASIN 825.00

BIO-RETENTION BASIN-4
TOP OF BERM 830.00
BOTTOM OF BASIN 826.00

PROPOSED BUILDING
FFE = 834.50

EXISTING BUILDING
FFE = 834.50

MATCHLINE

MATCHLINE

MATCHLINE

MATCHLINE

Scale:
0 15 30 60
Scale: 1" = 30'

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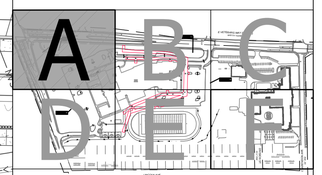

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4/2/2025

Sheet Title:
SITE EROSION CONTROL PLAN - AREA A

Sheet Number:
C1.71A

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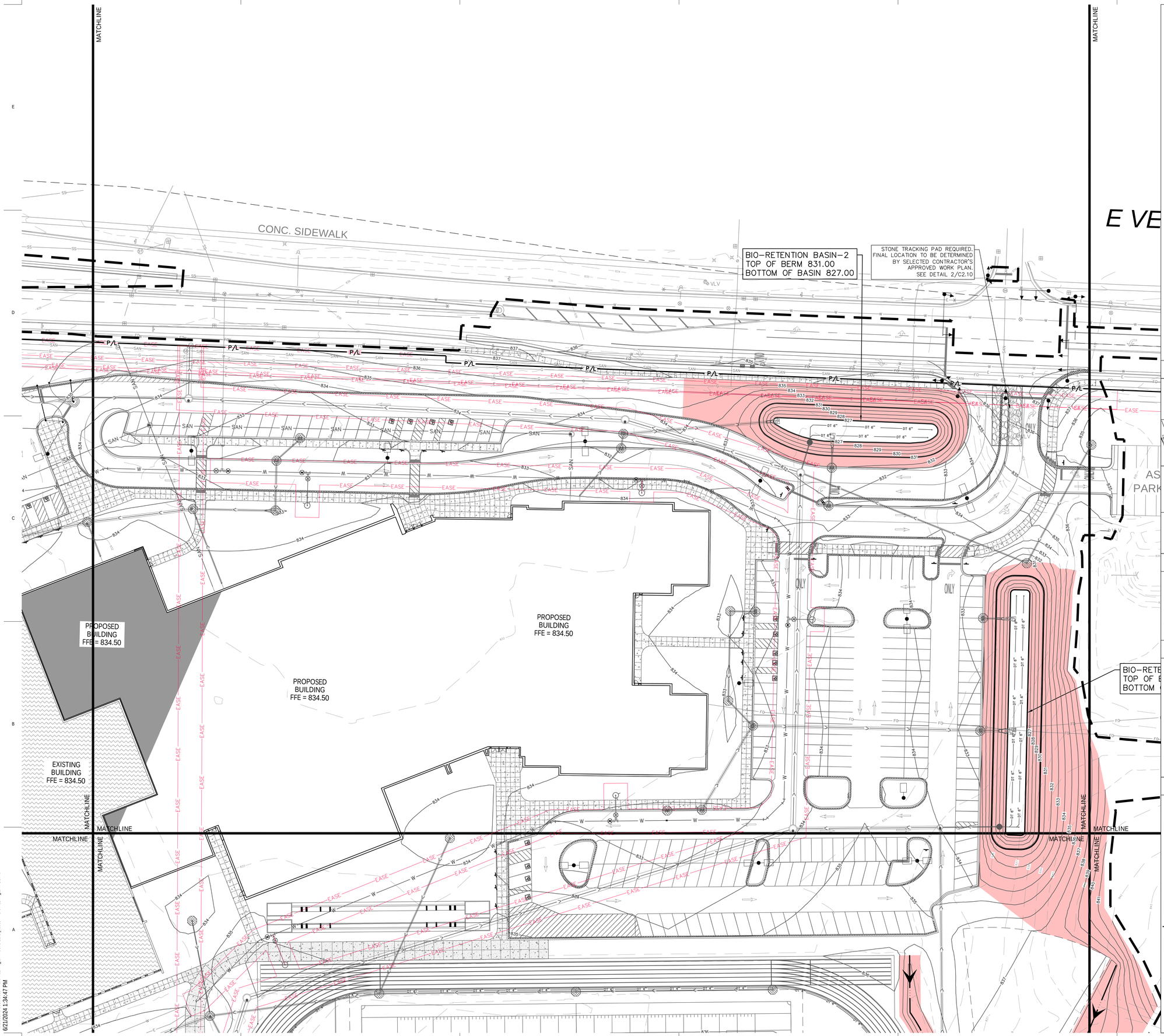

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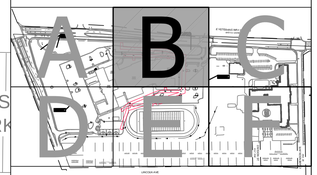

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Sheet Title: SITE EROSION CONTROL PLAN - AREA B

Sheet Number: C1.72B

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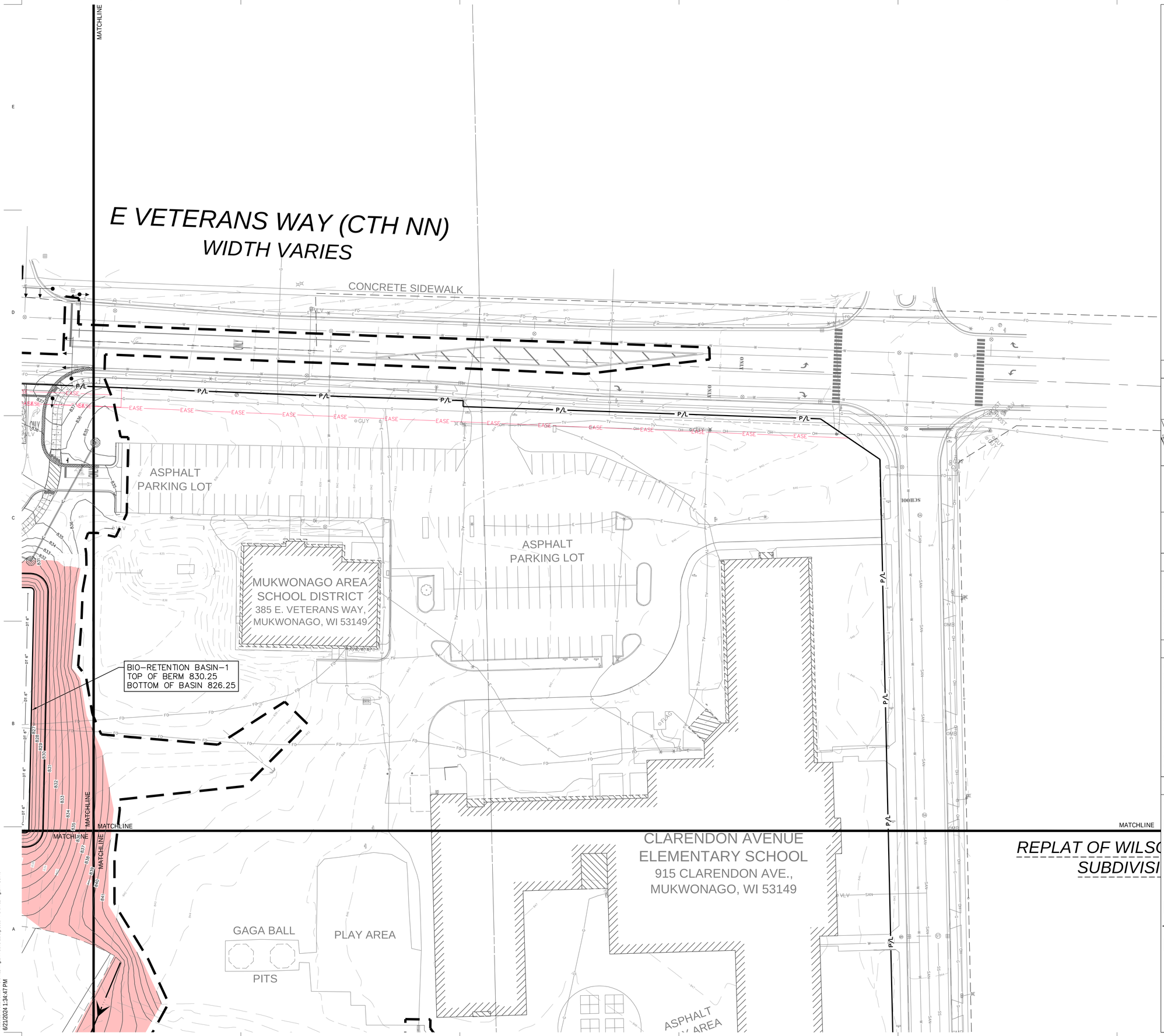

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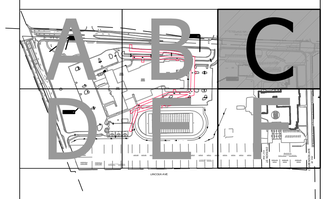

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Sheet Title:
SITE EROSION CONTROL PLAN - AREA C

Sheet Number:
C1.73C

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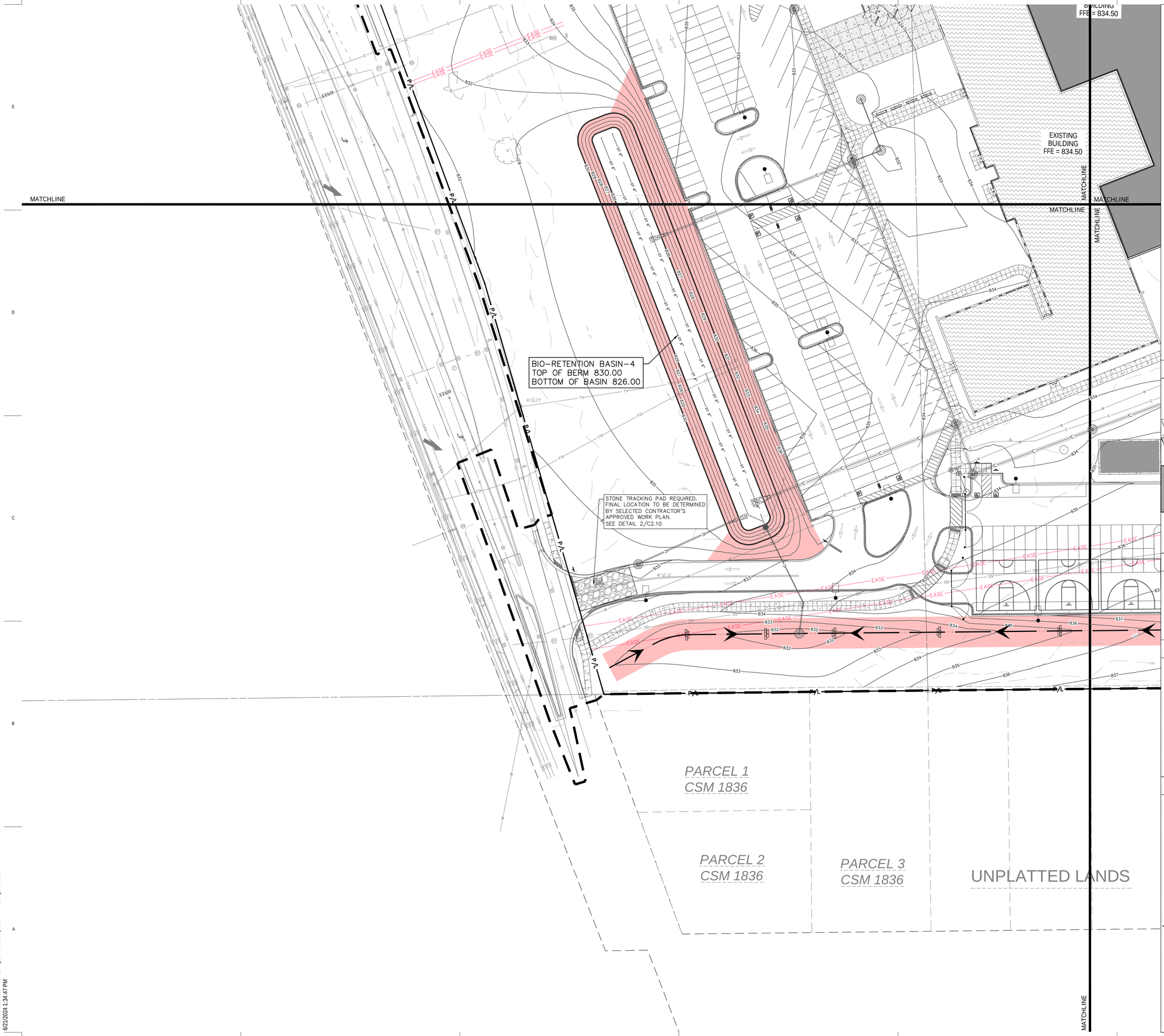

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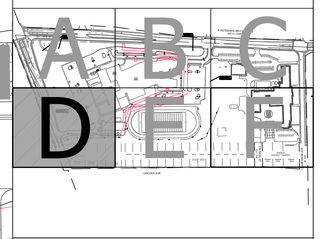

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Sheet Title: SITE EROSION CONTROL PLAN - AREA D

Sheet Number: C1.74D

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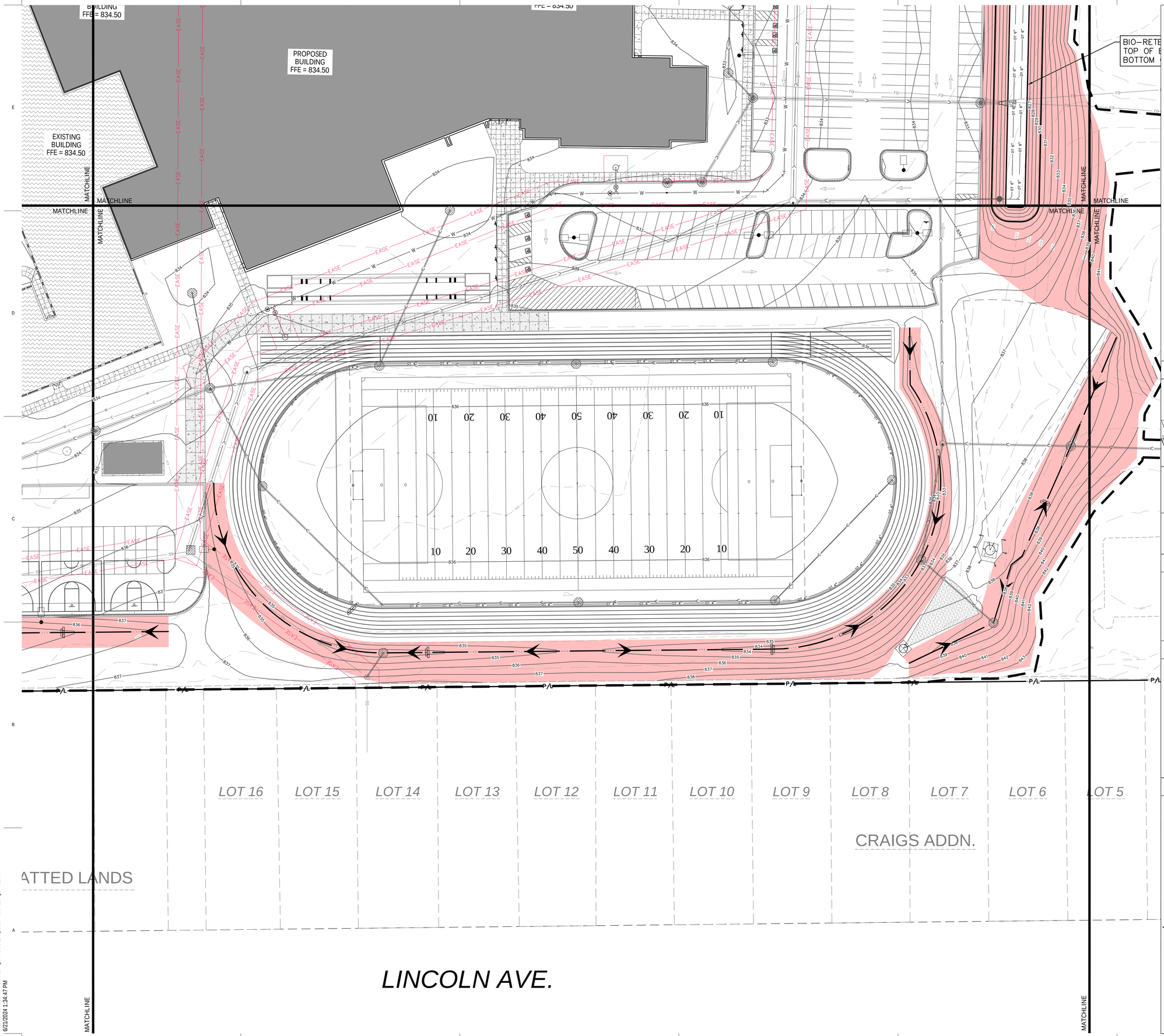

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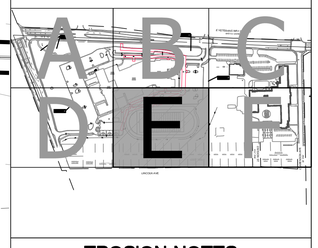

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- TRIANGULAR SILT DIKES
- DESIGNATES PROPOSED INLETS THAT MUST BE PROTECTED AFTER THEY HAVE BEEN CONSTRUCTED.
- DESIGNATES EXISTING INLETS THAT MUST BE PROTECTED

Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number:
3526

Issued For:
PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
SITE EROSION CONTROL PLAN - AREA E

Sheet Number:
C1.75E

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BIO-RETENTION BASIN-1
TOP OF BERM 830.25
BOTTOM OF BASIN 826.25

MATCHLINE

CLARENDON AVENUE
ELEMENTARY SCHOOL
915 CLARENDON AVE.,
MUKWONAGO, WI 53149

GAGA BALL
PITS
PLAY AREA
ASPHALT
PLAY AREA
BASEBALL / SOFTBALL
/ KICKBALL FIELD
PLAY AREA
ASPHALT
PARKING LOT

P/L

FND. 1" IP 1.82' WEST

DIVISION ST.
63.2' R/W

CLARENDON AVE.
66' R/W

LOT 6 | LOT 5 | LOT 4 | LOT 3 | LOT 2 | LOT 1

BLOCK B
H.A. YOUMANS ADDN.

PART OF LOT 1 | PART OF LOT 1 | PART OF LOT 1

REPLAT OF WILSO
SUBDIVISI

Scale: 0 15 30 60
Scale: 1" = 30'

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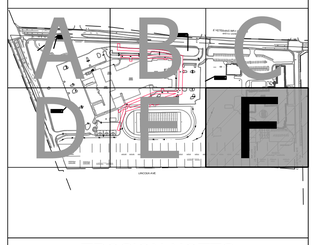
VICINITY MAP



EROSION NOTES

INSPECT ALL EROSION CONTROL MEASURES PRIOR TO COMMENCING GRADING, GRUBBING OR OTHER LAND DISTURBING ACTIVITIES. EROSION CONTROL MEASURES MUST BE INSPECTED WEEKLY AND WITHIN 24 HOURS OF EVERY PRECIPITATION EVENT OF 0.50 INCH OR GREATER. IN ADDITION THE CONTRACTOR SHALL CONDUCT DAILY INSPECTIONS AND DOCUMENT CONDITIONS AND REPAIRS MADE ALONG WITH DATE, TIME OF INSPECTION AND WEATHER CONDITIONS IN A DAILY LOG BOOK. THE DAILY LOG BOOK, WEEKLY / 0.50 INCH PRECIPITATION REPORTS, APPROVED PLANS AND WPDES PERMIT SHALL BE KEPT IN AN ACCESSIBLE LOCATION, LIKE A MAILBOX, WITHIN THE STAGING AREA.

AT ABSOLUTELY NO TIME MAY CONSTRUCTION EQUIPMENT, DEBRIS, FILL, ETC. BE PLACED WITHIN WETLANDS, WATERWAYS OR FLOOD PLAINS UNLESS IDENTIFIED IN THE PLANS.

POINTS OF CONTACT

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KEY INDEX

- PROJECT LIMITS
- P/L — PROPERTY LINE
- EASE — EASEMENT LINE
- INSTALL EROSION MAT ON ALL SLOPES GREATER THAN 4:1 AND ALL DRAINAGE SWALES
- USE CLASS I, TYPE A FROM WSDOT PRODUCT APPROVED LIST FOR ALL SIDE SLOPES
- USE CLASS II, TYPE B FOR ALL DRAINAGE SWALES. INSTALL EROSION MAT ON THE BOTTOM OF AND A MINIMUM OF 2 FEET VERTICALLY UP THE SIDE SLOPES OF ALL DRAINAGE SWALES. CLASS I, TYPE A MAY BE USED FOR THE REMAINDER OF THE SIDE SLOPES IN DRAINAGE SWALES EXCEEDING 2 FEET VERTICALLY.
- INSTALL CLASS III TRM, TYPE B FROM WSDOT PRODUCT APPROVED LIST. CLASS I, TYPE A MUST ALSO BE INSTALLED IN THIS AREA PER WDNR TECHNICAL BULLETIN 1053
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SITE EROSION CONTROL PLAN - AREA F

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EROSION CONTROL MEASURES

1. CONTRACTOR TO INSTALL AND MAINTAIN EROSION CONTROL MEASURES AS INDICATED ON THIS PLAN AND PER THE LATEST WDNR TECHNICAL STANDARDS. TECHNICAL STANDARDS MAY BE VIEWED ONLINE AT:
http://dnr.wi.gov/topic/stormwater/standards/const_standards.html

2. INLETS AND CATCH BASINS SHALL BE PROTECTED WITH INLET FILTERS THAT ARE PHASED IN WITH CONSTRUCTION TO REDUCE SEDIMENT FROM ENTERING THESE AREAS PER WDNR TECHNICAL STANDARD 1060 AS FOLLOWS:

   ALL FABRIC BARRIERS SELECTED FOR INLET/CATCH BASIN PROTECTION DEVICES SHALL BE SELECTED FROM THE LIST OF APPROVED FABRICS CERTIFIED FOR INLET PROTECTION, GEOTEXTILE FABRIC, TYPE FF IN THE CURRENT EDITION OF THE WisDOT PRODUCT ACCEPTABILITY LIST, TO OBTAIN THE PAL, PLEASE REFER TO THIS WEBSITE:
   http://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/tools/pal/pal-7-14.pdf

   A. INLET PROTECTION SHALL BE AT A MINIMUM INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT OF ½ INCH OR GREATER DURING A 24-HOUR PERIOD.

   B. PLACEMENT OF SPOIL MATERIAL, DEBRIS, SOILS, ETC. ON TOP OF INLETS/CATCH BASINS, EVEN IF TEMPORARY, IS STRICTLY DISCOURAGED AND PROHIBITED.

   C. SEDIMENT DEPOSITS SHALL BE REMOVED AND THE INLET PROTECTION DEVICE RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED BETWEEN 1/3 TO ½ THE DESIGN DEPTH OF THE DEVICE FOR TYPES A–C, WHEN SEDIMENT IS WITHIN 6" OF THE BOTTOM OF THE OVERFLOW HOLE FOR TYPE D, OR WHEN THE DEVICE IS NO LONGER FUNCTIONING PER MANUFACTURER'S SPECIFICATIONS. ALL SEDIMENT COLLECTED SHALL BE PROPERLY DISPOSED OF TO PREVENT DISCHARGE INTO AREA WATERWAYS AND WETLANDS.

   D. DUE CARE SHALL BE TAKEN TO ENSURE SEDIMENT DOES NOT FALL INTO THE INLETS/CATCH BASINS AND IMPEDE THE INTENDED FUNCTION OF THE DEVICE. ANY MATERIAL FALLING INTO THE INLET/CATCH BASIN SHALL BE REMOVED AND PROPERLY DISPOSED OF PER NOTE C ABOVE.

   E. INLET FILTERS MAY BE REMOVED AND PROPERLY DISPOSED OF UPON COMPLETION OF CONSTRUCTION, HAULING OR MOVEMENT OF CONSTRUCTION EQUIPMENT THROUGHOUT THE SITE, AND ONCE THE SITE IS ADEQUATELY STABILIZED, UNLESS AS OTHERWISE NOTIFIED BY THE WDNR.

3. A TRACKING PAD SHALL BE INSTALLED AS SHOWN ON THE PLAN SHEET PRIOR TO THE START OF CONSTRUCTION TO REDUCE OFF-SITE SEDIMENTATION BY ELIMINATING THE TRACKING OF SEDIMENT FROM THE SITE PER WDNR TECHNICAL STANDARD 1057 AS FOLLOWS:

   A. AGGREGATE USED FOR TRACKING PADS SHALL BE 3 TO 6 INCH CLEAR OR WASHED STONE. ALL MATERIAL TO BE RETAINED BY 3 INCH SIEVE.

   B. THE AGGREGATE SHALL BE PLACED IN A LAYER OF AT LEAST 12 INCHES THICK, ON SITES WITH A HIGH WATER TABLE, OR WHERE SATURATED CONDITIONS ARE EXPECTED, TRACKING PADS WILL BE UNDERLAIN WITH WisDOT TYPE R GEOTEXTILE FABRIC.

   C. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT (MIN. 15 FEET WIDE) AND BE AT LEAST 50 FEET LONG.

   D. VEHICLES TRAVELING ACROSS THE TRACKING PAD SHALL MAINTAIN A SLOW CONSTANT SPEED.

   E. ANY SEDIMENT OR ROCK ACCUMULATION ONTO LOCAL ROADWAYS SHALL BE REMOVED BY STREET CLEANING, NOT FLUSHING BEFORE THE END OF EACH WORKING DAY.

   F. THE TRACKING PAD SHALL; AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT OF ½ INCH OF RAIN OR MORE DURING A 24-HOUR PERIOD.

   G. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED AT A MINIMUM OF 12" BY SCRAPING OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.

4. THE CONSTRUCTION SITE PERIMETER AND TOPSOIL STOCKPILE AREA SHALL BE PROTECTED WITH SILT FENCE AS SHOWN ON THE PLAN SHEET PRIOR TO THE START OF CONSTRUCTION TO INTERCEPT AND REDUCE THE FLOW OF SEDIMENT-LADEN SHEET FLOW RUNOFF FROM THE CONSTRUCTION SITE PER WDNR TECHNICAL STANDARD 1056 AS FOLLOWS:

   A. SILT FENCE ENDS SHALL BE EXTENDED UPSLOPE TO PREVENT WATER FROM FLOWING AROUND THE ENDS OF THE FENCE AS SHOWN ON THE PLAN SHEET.

   B. INSTALLED SILT FENCE SHALL BE A MINIMUM 14 INCHES HIGH AND SHALL NOT EXCEED 28 INCHES IN HEIGHT MEASURED FROM THE INSTALLED GROUND ELEVATION.

   C. SILT FENCE SHALL BE SUPPORTED BY EITHER STEEL OR WOOD SUPPORT POSTS.

   D. THE MAXIMUM SPACING OF POSTS FOR NONWOVEN SILT FENCE SHALL BE 3 FEET OR FOR WOVEN FABRIC 8 FEET.

   E. SILT FENCE SHALL HAVE A SUPPORT CORD AT THE TOP OF THE FENCE.

   F. WHERE JOINTS ARE NEEDED, EACH END OF THE FABRIC SHALL BE SECURELY FASTENED TO A POST. THE POSTS SHALL BE WRAPPED AROUND EACH OTHER TO PRODUCE A STABLE AND SECURE JOINT OR SHALL BE OVERLAPPED THE DISTANCE BETWEEN TWO POSTS.

   G. A MINIMUM OF 20 INCHES OF THE POSTS SHALL EXTEND INTO THE GROUND AFTER INSTALLATION.

   H. SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8 INCHES OF THE FABRIC IN A 4 INCH WIDE BY 6 INCH DEEP TRENCH, OR 6 INCH DEEP V-TRENCH ON THE UPSLOPE SIDE OF THE FENCE. THE TRENCH SHALL BE BACKFILLED AND COMPACTED. TRENCHES SHALL NOT BE EXCAVATED ANY WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.

   I. ON THE TERMINAL ENDS OF THE SILT FENCE THE FABRIC SHALL BE WRAPPED AROUND THE POST SUCH THAT THE STAPLES ARE NOT VISIBLE.

   J. GEOTEXTILE FABRIC SPECIFICATIONS SHALL MEET VALUES ESTABLISHED IN TECHNICAL STANDARD 1056.

   K. SILT FENCE SHALL BE REMOVED ONCE THE SITE IS ADEQUATELY STABILIZED.

   L. WHEN PLACING SILT FENCE NEAR TREES, CARE SHALL BE TAKEN TO MINIMIZE DAMAGE TO THE ROOT SYSTEM BY AVOIDING COMPACTION AND ROOT CUTTING WITHIN A RADIUS OF 1.5 FEET MULTIPLIED BY THE INCH DIAMETER OF THE TREE.

   M. THE CONTRACTOR MAY FURTHER STRENGTHEN THE SILT FENCE BY USING HAY BALES ON THE DOWN SLOPE SIDE AS NEEDED.

   N. SILT FENCE SHALL AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES ½ INCH OF RAIN OR MORE DURING A 24 HOUR PERIOD.

   O. DAMAGED OR DECOMPOSED SILT FENCE, UNDERCUTTING, OR FLOW CHANNELS AROUND THE END OF BARRIERS SHALL BE REPAIRED OR CORRECTED.

   P. SEDIMENT SHALL BE PROPERLY DISPOSED OF ONCE THE DEPOSITS REACH ½ THE HEIGHT OF THE FENCE TO PREVENT DISCHARGE INTO AREA WATERWAYS AND WETLANDS.

5. SEEDING AND MULCHING TECHNIQUES SHALL BE USED ON AREAS OF EXPOSED SOIL WHERE THE ESTABLISHMENT OF VEGETATION IS DESIRED. TEMPORARY SEEDING APPLIES TO DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND-DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 14 CALENDAR DAYS, REQUIRING VEGETATIVE COVER FOR LESS THAN ONE YEAR. SEED AND MULCH SHALL BE UTILIZED THROUGHOUT THE DURATION OF CONSTRUCTION TO ESTABLISH TEMPORARY VEGETATION TO HELP REDUCE EROSION PER WDNR TECHNICAL STANDARDS 1059 AND 1058 RESPECTIVELY AS FOLLOWS:

   A. TEMPORARY SEEDING REQUIRES A SEEDBED OF LOOSE SOIL TO A MINIMUM DEPTH OF 2 INCHES.

   B. FERTILIZER APPLICATION IS NOT GENERALLY REQUIRED FOR TEMPORARY SEEDING. HOWEVER, ANY APPLICATION OF FERTILIZER OR LIME SHALL BE BASED ON SOIL TESTING.

   C. THE SOIL SHALL HAVE A PH RANGE OF 5.5 TO 8.0.

   D. ALL SEED SHALL CONFORM TO THE REQUIREMENTS OF THE WISCONSIN STATE STATUTES AND OF THE ADMINISTRATIVE CODE CHAPTER ATCP 20.01 REGARDING NOXIOUS WEED SEED CONTENT AND LABELING.

   E. SEED SHALL NOT BE USED LATER THAN ONE YEAR AFTER THE TEST DATE ON THE LABEL.

   F. IN THE SUMMER-SPRING, CONTRACTOR SHALL USE OATS APPLIED AT 131 LBS/ACRE FOR TEMPORARY SEEDING PURPOSES. IN THE FALL THE CONTRACTOR SHALL USE ANNUAL RYEGRASS APPLIED AT 80 LBS/ACRE OR WINTER WHEAT OR CEREAL RYE APPLIED AT 131 LBS/ACRE. THE CONTRACTOR SHALL USE STRAW MULCH APPLIED AT 1.5 TONS/ACRE. DORMANT SEED SHALL BE USED WHEN SOIL TEMPERATURE IS CONSISTENTLY BELOW 53 DEGREES FAHRENHEIT (TYPICALLY NOV. 1 UNTIL SNOW COVER ANNUALLY). NEVER PLACE SEED ON TOP OF SNOW. IF COVER IS NEEDED AFTER SNOW FALL, CONTRACTOR MAY CHOOSE TO USE A DRY, NONTOXIC TYPE B SOIL STABILIZER PER MANUFACTURER'S SPECIFICATIONS AS REQUIRED BY THE WDNR.

   G. SEEDING SHALL NOT TAKE PLACE WHEN THE SOIL IS TOO WET.

   H. CONTRACTOR MAY CONSIDER WATERING TO HELP ESTABLISH THE SEED. WATER APPLICATION RATES SHALL BE CONTROLLED TO HELP PREVENT RUNOFF AND EROSION.

   I. DURING CONSTRUCTION, AREAS THAT HAVE BEEN SEEDED AND MULCHED SHALL AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES ½ INCH OF RAIN OR MORE DURING A 24 HOUR PERIOD. INSPECT REGULARLY DURING THE GROWING SEASON UNTIL VEGETATION IS DENSELY ESTABLISHED OR THE SOD IS LAID. REPAIR AND RESEED AREAS THAT HAVE EROSION DAMAGE AS NECESSARY.

   J. CONTRACTOR IS TO LIMIT VEHICLE TRAFFIC AND OTHER FORMS OF COMPACTION IN AREAS THAT ARE SEEDED AS MUCH AS POSSIBLE. RE-SEED DRIVEN OVER AREAS AS NEEDED.

   K. MULCH SHOULD BE PLACED WITHIN 24 HOURS OF SEEDING.

   L. MULCHING OPERATIONS SHALL NOT TAKE PLACE DURING PERIODS OF EXCESSIVELY HIGH WINDS THAT WOULD PRECLUDE THE PROPER PLACEMENT OF MULCH.

   M. MULCH THAT IS DISPLACED SHALL BE REAPPLIED AND PROPERLY ANCHORED. MAINTENANCE SHALL BE COMPLETED AS SOON AS POSSIBLE WITH CONSIDERATION TO SITE CONDITIONS.

   N. WHEN CHANNEL EROSION MAT IS USED WITHIN CONSTRUCTION SITE DIVERSION AREAS, TECHNICAL STANDARDS 1053 AND 1066 SHALL BE FOLLOWED.

   O. WHEN NON-CHANNEL EROSION MAT IS USED TECHNICAL STANDARD 1052 SHALL BE FOLLOWED.

   P. DEPENDING ON DURATION OF CONSTRUCTION, THE CONTRACTOR MAY NEED TO RE-SEED AND RE-STABILIZE THE TOPSOIL STOCKPILE AS NECESSARY TO DISCOURAGE SEDIMENT AND EROSION.

6. A COPY OF EROSION CONTROL INSPECTION REPORTS AND THE APPROVED EROSION CONTROL PLANS SHALL BE KEPT ON SITE.

7. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL PRACTICES BY THE END OF EACH WORKDAY.

8. LOCAL ROADS SHALL BE CLEAN BY THE END OF EACH WORKDAY. CONTRACTOR SHALL HAVE LOCAL ROADS SWEPT WHERE SEDIMENT ACCUMULATES.

EROSION CONTROL OPERATION SEQUENCE + SCHEDULE

AFTER BIDS ARE RECEIVED AND A MASS GRADING CONTRACTOR IS SELECTED, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE WITH ALL RELEVANT PARTIES IN ATTENDANCE.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL SILT FENCES, SEEDING, EROSION MATTING, AND OTHER EROSION CONTROL MEASURES. GENERAL CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PRIOR TO COMMENCING GRADING, GRUBBING, OR OTHER LAND DISTURBING ACTIVITIES. EROSION CONTROL MEASURES MUST BE INSPECTED WEEKLY AND WITHIN 24 HOURS OF EVERY PRECIPITATION EVENT OF ½ INCH OR GREATER. IN ADDITION, THE ACTIVE CONTRACTOR SHALL CONDUCT DAILY INSPECTIONS AND DOCUMENT CONDITIONS AND REPAIRS MADE, ALONG WITH DATE, TIME OF INSPECTION, AND WEATHER CONDITIONS IN A DAILY LOG BOOK.

ALL REGULATORY PERMITS, PROJECT PLANS, AND INSPECTION LOGS SHALL BE KEPT ON SITE IN AN ACCESSIBLE LOCATION, SUCH AS A MAILBOX, AVAILABLE TO REGULATORY AGENCIES UPON REQUEST.

CONTRACTORS ARE TO MAINTAIN THE CONSTRUCTION SITE IN A NEAT AND TIDY MANNER FOR THE DURATION OF THE PROJECT.

THE TIMING AND SEQUENCE OF CONSTRUCTION IS SCHEDULED AS FOLLOWS:

1. OBTAIN PLAN APPROVAL FROM THE VILLAGE OF MUKWONAGO, AND ALL APPLICABLE PERMITS, INCLUDING EROSION CONTROL PERMIT.
2. CONSTRUCTION IS SCHEDULED TO BEGIN IN SEPTEMBER 2025, DEPENDING ON WEATHER & GROUND CONDITIONS.
3. A GRAVEL TRACKING PAD UNDERLAIN WITH WSDOT TYPE R GEOTEXTILE FABRIC SHALL BE INSTALLED AS SHOWN ON THE PLANS. IF INDICATED ON PLANS, INSTALL CONSTRUCTION FENCE AND ANY TEMPORARY TRAFFIC CONTROLS.
4. SILT FENCE, INLET FILTER PROTECTION, AND TRIANGULAR SILT DIKES SHALL BE INSTALLED AS SHOWN ON THE PLANS, AND INSPECTED PRIOR TO COMMENCING OF ANY LAND DISTURBING ACTIVITIES PER PROJECT PLANS AND DETAILS. SEDIMENT DEPOSITS WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN THEY REACH A DEPTH OF 1/2 FENCE HEIGHT.
5. FOLLOWING INSTALLATION OF THE EROSION CONTROL MEASURES LISTED IT ITEM #4, THE BIO-RETENTION BASINS SHALL BE CONSTRUCTED TO THE BOOM OF BASIN ELEVATIONS TO SERVE AS TEMPORARY SEDIMENT BASIN DURING CONSTRUCTION. THE CONTRACT SHALL IMMEDIATELY INSTALL THE OUTLET STRUCTURES AT THE LOCATIONS SHOWN ON THE PLANS. IN ADDITION, THE CONTRACTOR SHALL INSTALL DIVERSION SWALES AND DIVERSION BERMS TO DIRECT WATER TO THE TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY STABILIZE THE BIO-RETENTION BASIN BANKS, INLETS AND OUTLET STRUCTURES.
6. THE BIO-RETENTION BASINS SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES ½ INCH OF RAIN OR MORE DURING A 24-HOUR PERIOD. SEDIMENT SHALL BE REMOVED TO MAINTAIN THE 3 FOOT DEPTH OF THE TREATMENT SURFACE AREA AS MEASURED FROM THE INVERT OF THE PRINCIPAL OUTLET. IF THE OUTLET BECOMES CLOGGED IT SHALL BE CLEANED TO RESTORE FLOW CAPACITY. SEDIMENT TO BE REMOVED AFTER CONSTRUCTION & SITE STABILIZATION IS COMPLETE.
7. SITE DEMOLITION OF PAVEMENT, ETC. WILL OCCUR AFTER ALL EROSION CONTROL MEASURES ARE IN PLACE.
8. CONSTRUCTION OF THE BUILDING, STARTING WITH THE FOUNDATION, WILL BEGIN IMMEDIATELY AFTER THE SITE DEMOLITION IS COMPLETE IN THE BUILDING PAD AREA.
9. TOPSOIL STRIPPING AND ROUGH GRADING WILL FOLLOW. TOPSOIL STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS OF LAY UP. STOCKPILES WILL BE USED FOR FINAL LANDSCAPING. REMAINING STOCKPILES WILL BE REMOVED FROM THE SITE.
10. UTILITY INSTALLATION WILL OCCUR NEXT AND CONTINUE UNTIL ALL THE UTILITIES ARE INSTALLED.
11. AFTER ROUGH GRADING IS COMPLETE IN HARD SURFACE AREAS SUCH AS ROADWAYS, PARKING LOTS, AND BUILDINGS, THE REQUIRED THICKNESS OF DENSE GRADED BASE COURSE, PER THE PROJECT PLANS AND DETAILS WILL BE APPLIED FOR STABILIZATION. AFTER ROUGH GRADING IS COMPLETE OUTSIDE OF HARD SURFACE AREAS, THE TOPSOIL WILL BE REAPPLIED AND THE LANDSCAPE CONTRACTOR WILL COMPLETE SEEDING/SODDING/FERTILIZING/MULCHING AND INSTALL EROSION MATTING AS PER APPROVED PLANS AND SPECIFICATIONS.
12. FINAL SITE STABILIZATION IS ANTICIPATED FOLLOWING THE COMPLETION OF GRADING ACTIVITIES PER WDNR TECHNICAL STANDARD 1059. IF SITE STABILIZATION CANNOT BE COMPLETED BY OCTOBER 15, THEN THE USE OF ANIONIC POLYACRYLAMIDE CONFORMING TO WDNR TECHNICAL STANDARD 1050 SHALL BE USED. IN ADDITION, ALL SLOPES OF GREATER THAN 20% MUST ADHERE TO THE SCHEDULE IN TABLE 1 BELOW.
13. AFTER ALL TOPSOIL HAS BEEN REAPPLIED AND STABILIZATION IS UNDERWAY, ROADWAY, PARKING LOT, AND SIDEWALK SURFACE MATERIAL (I.E. ASPHALT & CONCRETE) WILL BE INSTALLED PER THE PROJECT PLANS AND SPECIFICATIONS.
14. THE GENERAL CONTRACTOR WILL REQUEST A FINAL INSPECTION BY THE CITY. UPON APPROVAL, ALL SILT FENCES, INLET FILTER PROTECTION, AND TRIANGULAR SILT DIKES SHALL BE REMOVED, AND ACCUMULATED SEDIMENT IN THE SEDIMENT BASIN/STORM WATER POND SHALL BE DREDGED AND PROPERLY DISPOSED OF. IN ADDITION, THE CONTRACTOR MUST ENSURE THAT THE STORM WATER POND IS RETURNED TO THE SLOPES AND GRADES SHOWN ON THE PROJECT PLANS AND DETAILS.
15. IF REQUIRED, FINAL "AS-BUILT" SURVEYS ARE TO BE CONDUCTED BY THE OWNER AND FINAL DOCUMENTS FORWARDED TO THE CITY.
16. BARE SOIL LEFT UNDISTURBED FOR 14 CALENDAR DAYS MUST BE TEMPORARILY STABILIZED PER WDNR TECHNICAL STANDARD 1059. BY OCTOBER 15, THE SITE SHALL BE STABILIZED PER NOTE 12 ABOVE.
17. WE DO NOT ANTICIPATE THE NEED FOR WATERING WITH THIS CONSTRUCTION SCHEDULE, HOWEVER, IF ADEQUATE RAIN IS NOT EXPERIENCED WITHIN ONE WEEK AFTER INITIAL SEED GERMINATION AT ANY POINT DURING THE CONSTRUCTION PROCESS, WATER SHALL BE TRUCKED IN AND APPLIED ONCE PER WEEK.

IF CONSTRUCTION SCHEDULES SHOULD CHANGE SIGNIFICANTLY, THIS PLAN NARRATIVE WILL BE UPDATED AND RESUBMITTED BY THE GENERAL CONTRACTOR TO THE CITY AND WDNR.

TABLE 1 – MAXIMUM PERIOD OF BARE SOIL FOR SLOPES GREATER THAN 20%		
SLOPE AREA DRAINS TO SEDIMENT BASIN?	LAND DISTURBANCE BETWEEN SEPT. 16 AND MAY 1	LAND DISTURBANCE BETWEEN MAY 2 AND SEPT. 15
YES	90 DAYS	90 DAYS
NO	60 DAYS	30 DAYS
TABLE FROM WI DNR GUIDANCE DOC # 3800-2015-06		

DEWATERING PLAN

TO FACILITATE CONSTRUCTION AT THE PROJECT SITE, DEWATERING MAY TAKE PLACE BY THE SELECTED CONTRACTOR. CONTRACTOR TO FOLLOW THESE INSTRUCTIONS WHILE PERFORMING DEWATERING ACTIVITIES ON-SITE. IF DEWATERING IS TO TAKE PLACE AT THE SITE, IT WILL OCCUR BETWEEN STEPS 3 AND 14 OF THE EROSION CONTROL OPERATION SEQUENCE.

NOTE: THESE INSTRUCTIONS DO NOT APPLY TO WATER BEING DISCHARGED DIRECTLY TO GROUNDWATER OR KARST FEATURES OR WELL DEWATERING SYSTEMS. CONTRACTOR SHALL COORDINATE ACCORDINGLY FOR OTHER DEWATERING ACTIVITIES AS DEEMED NECESSARY WITH THE WDNR.

1. THE CONTRACTOR SHALL ENSURE THAT THE DEWATERING PRACTICES CARRIED OUT MEET OR EXCEED WDNR TECHNICAL STANDARD NUMBER 1061.
2. A PAN OR OTHER CONTAINMENT DEVICE SHALL BE PLACED UNDERNEATH THE PUMP TO CAPTURE ANY SPILLS. OILS, GASOLINE, ETC. SHALL NOT BE STORED WITHIN WETLANDS, NEAR THE STORMWATER POND, OR OTHER ON-SITE WATER AREAS.
3. A TYPE 2 GEOTEXTILE BAG THAT IS NO SMALLER THAN 100 SQUARE FEET; HAS A MAXIMUM APPARENT OPENING SIZE OF 0.212 mm; HAS A GRAB TENSILE STRENGTH OF 300 LBS; MULLEN BURST OF 580 PSI; PERMEABILITY OF 0.2 CM/SEC; FABRIC WEIGHT OF 12 OZ SHALL BE USED. THE GEOTEXTILE BAG AREA AND DOWNGRADE FLOW AREA SHALL CONSIST OF VEGETATED AND UNDISTURBED SOILS.
4. POLYMER APPROVED BY THE WDNR MEETING WDNR TECHNICAL STANDARD 1051 MAY BE USED IN COMBINATION WITH THE DEWATERING BAG IF THE DEWATERING BAG IS NOT DOING AN ADEQUATE JOB ALONE OF FILTERING SEDIMENTS. THE CONTRACTOR SHALL SUPPLY TOXICITY TESTING DATA TO THE WDNR BEFORE USE ON-SITE FOR WDNR APPROVAL. POLYMER SHALL NOT BE DIRECTLY APPLIED TO SURFACE WATER. CONTRACTOR SHALL OBTAIN THE MATERIAL SAFETY DATA SHEETS (MSDS) FOR THE SELECTED POLYMER, MANUFACTURER'S INFORMATION AND WDNR USE RESTRICTIONS (SEE TECHNICAL STANDARD 1051) AND KEEP ALL THIS INFORMATION ON-SITE. CONTRACTOR SHALL ADHERE TO MANUFACTURER AND WDNR'S APPLICATION RATES FOR THE POLYMER, WITH THE WDNR'S RATE TAKING PRECEDENCE. THE CONTRACTOR SHALL TAKE STEPS TO ENSURE THAT THE POLYMER IS NOT SPILLED. SPILL KITS SHALL BE KEPT ON SITE; THE MANUFACTURER'S RECOMMENDED CLEANUP PROCEDURES SHALL BE FOLLOWED IN THE EVENT OF A SPILL.
5. A TARP MAY BE UTILIZED UNDERNEATH THE TYPE 2 GEOTEXTILE BAG AND JUST DOWN SLOPE OF THE BAG TO DISCOURAGE EROSION AND SCOUR.
6. A FLOATING SUCTION HOSE OR OTHER FLOTATION METHOD SHALL BE UTILIZED WHEN PUMPING FROM AN AREA WITH STANDING WATER TO AVOID SUCKING SEDIMENT FROM GRADE.
7. IF TURBID WATER IS LEAVING THE GEOTEXTILE BAG, THE CONTRACTOR SHALL SHUT OFF THE PUMP TO ALLOW SEDIMENT TO SETTLE INTO THE BAG. CONTRACTOR SHALL FOLLOW THE MANUFACTURER'S SPECIFICATIONS FOR DETERMINING THE SEDIMENT CAPACITY OF THE GEOTEXTILE BAG USING GOOD COMMON SENSE. SEDIMENT LEVELS CONTAINED IN THE BAG SHALL BE MONITORED TO MEASURE THE LOSS OF STORAGE CAPACITY OVER TIME. THE CONTRACTOR SHALL PROPERLY DISPOSE OF THE GEOTEXTILE BAG IN A WASTE RECEPTACLE ONCE IT IS NO LONGER USED.
8. DURING DEWATERING ACTIVITIES THE CONTRACTOR SHALL MONITOR DEWATERING PRACTICES AND KEEP A LOG OF THE FOLLOWING:
   A. DISCHARGE DURATION AND SPECIFIED PUMPING RATE.
   B. OBSERVED WATER TABLE AT TIME OF DEWATERING.
   C. MAINTENANCE ACTIVITIES
   D. NAME AND QUANTITY OF POLYMER USED. PRODUCT TYPE. APPLICATION RATE OF POLYMER IN POUNDS/ACRE FEET OF WATER. DATE AND TIME APPLIED. WEATHER CONDITIONS DURING APPLICATION. METHOD OF APPLICATION.

THIS LOG NEEDS TO BE KEPT ON SITE FOR WDNR REGULATORY REVIEW. COPIES OF THIS DOCUMENTATION SHOULD BE KEPT IN THE CONTRACTOR'S MONITORING LOG AND MADE AVAILABLE UPON REQUEST.

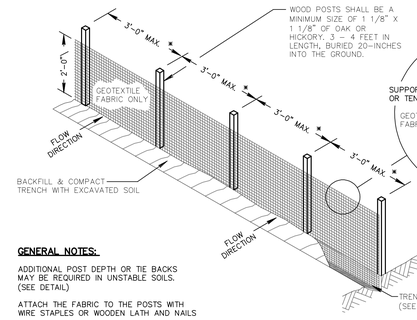
REVIEW THE FOLLOWING FOR MORE INFORMATION:

WDNR TECHNICAL STANDARD 1061 FOR DEWATERING –
http://dnr.wi.gov/topic/stormWater/documents/Dewatering_1061.pdf

WDNR TECHNICAL STANDARD 1051 FOR POLYMER –
http://dnr.wi.gov/topic/stormWater/documents/dnr1051.pdf

INSPECT ALL EROSION CONTROL MEASURES PRIOR TO COMMENCING GRADING, GRUBBING OR OTHER LAND DISTURBING ACTIVITIES. EROSION CONTROL MEASURES MUST BE INSPECTED WEEKLY AND WITHIN 24 HOURS OF EVERY PRECIPITATION EVENT OF 0.50 INCH OR GREATER. IN ADDITION THE CONTRACTOR SHALL CONDUCT DAILY INSPECTIONS AND DOCUMENT CONDITIONS AND REPAIRS MADE, ALONG WITH DATE, TIME OF INSPECTION AND WEATHER CONDITIONS IN A DAILY LOG BOOK. THE DAILY LOG BOOK, WEEKLY / 0.50 INCH PRECIPITATION REPORTS, APPROVED PLANS WPDES PERMIT & CHAPTER 30 PERMIT SHALL BE KEPT IN AN ACCESSIBLE LOCATION, LIKE A MAILBOX, WITHIN THE STAGING AREA.

AT ABSOLUTELY NO TIME MAY CONSTRUCTION EQUIPMENT, DEBRIS, FILL, ETC. BE PLACED WITHIN WETLANDS, WATERWAYS OR FLOODPLAINS UNLESS IDENTIFIED IN THE PLANS & APPROVED BY DNR/USACOE.



GENERAL NOTES:

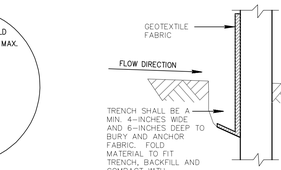
ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS. (SEE DETAIL)

ATTACH THE FABRIC TO THE POSTS WITH WIRE STAPLES OR WOODEN LATH AND NAILS

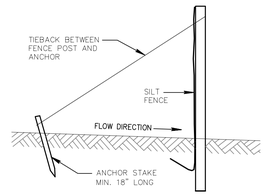
*8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

IF POSSIBLE, CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL TO AVOID JOINTS. IF A JOINT IS NECESSARY, USE ONE OF THE FOLLOWING METHODS: (1)TWIST METHOD: OVERLAP END POSTS & TWIST AT LEAST 180 DEGREES. (2)HOOK METHOD: HOOK THE END OF EACH SILT FENCE LENGTH.

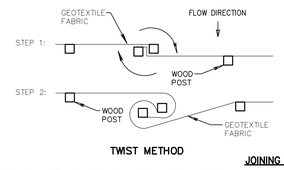
AXONIMETRIC VIEW



TRENCH DETAIL

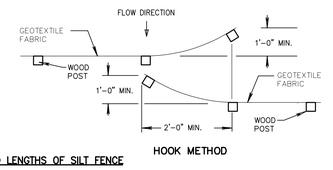


SILT FENCE TIE BACK
(WHEN ADDITIONAL SUPPORT REQUIRED)



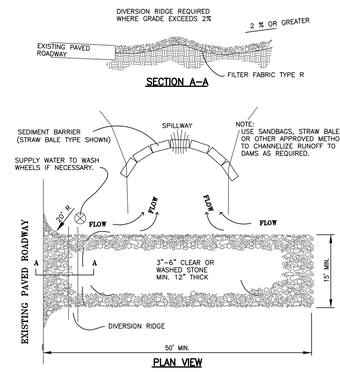
TWIST METHOD

JOINING TWO LENGTHS OF SILT FENCE



HOOK METHOD

1 C2.10 FILTER FABRIC SILT FENCE DETAIL
N.T.S.



2 C2.10 STONE TRACKING CONSTRUCTION ENTRANCE
N.T.S.

GENERAL NOTES:

THE AGGREGATE SIZE FOR CONSTRUCTION OF THE PAD SHALL BE 3– TO 6–INCH STONE. PLACE THE GRAVEL TO THE SPECIFIC GRADE & DIMENSIONS SHOWN ON THE PLANS & GRADE TO CREATE A SMOOTH SURFACE.

THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 12 INCHES. USE GEOTEXTILE FABRICS, IF NECESSARY, TO IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE.

THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS & IN ANY CASE SHALL NOT BE LESS THAN 15 FEET WIDE.

THE LENGTH OF THE PAD SHALL BE AS REQUIRED, BUT NOT LESS THAN 50 FEET.

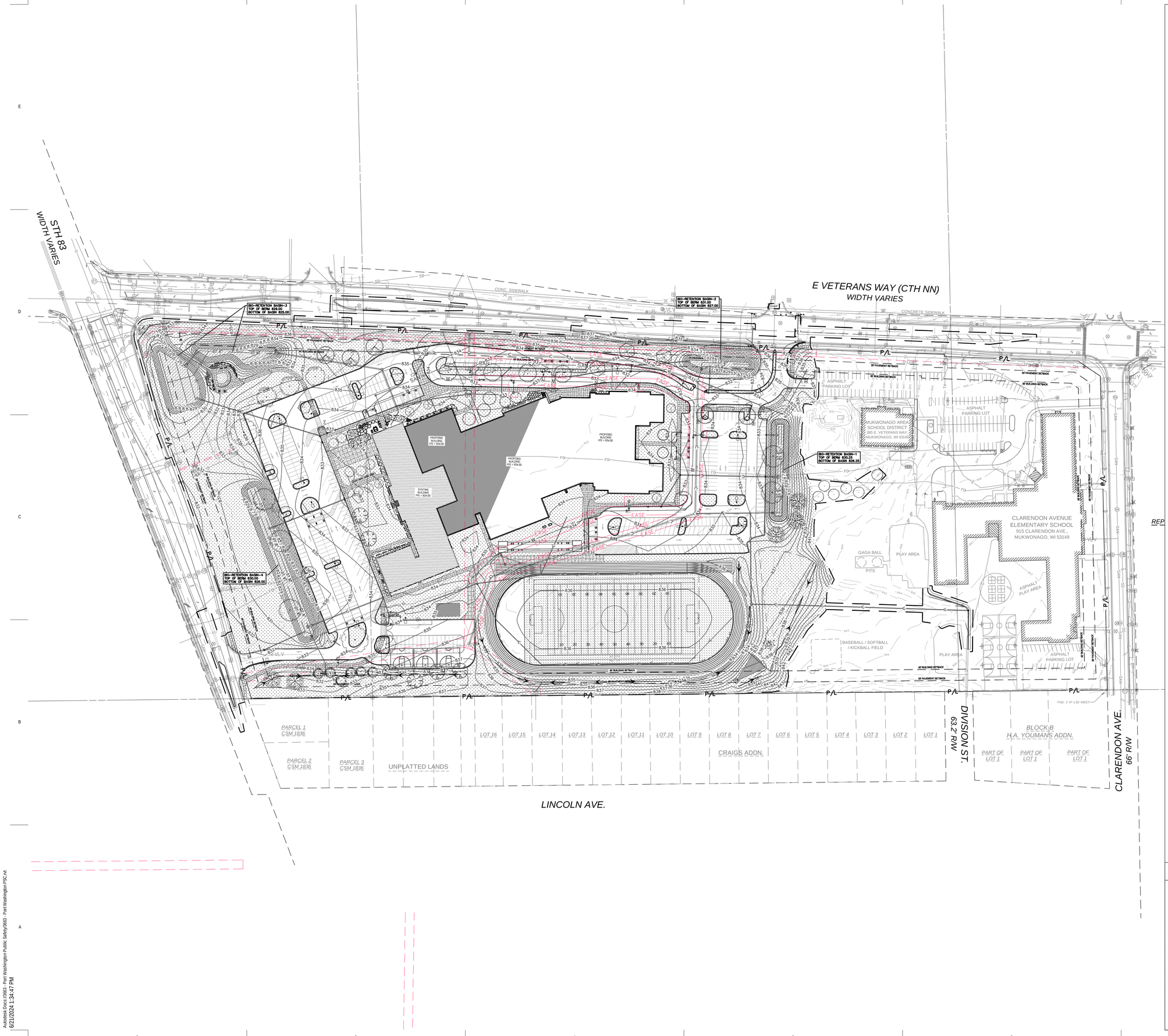
LOCATE CONSTRUCTION ENTRANCES & EXITS TO LIMIT SEDIMENT LEAVING THE SITE & TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES. AVOID ENTRANCES WHICH HAVE STEEP GRADES & ENTRANCES AT CURVES IN PUBLIC ROADS.

THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE & REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED BY THE END OF THE WORK DAY.

PROVIDE DRAINAGE FOR A 2 YEAR – 24 HOUR EVENT TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.

WHEN NECESSARY, WHE



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Scale: 1" = 80'

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HATCH LEGEND

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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: OVERALL SITE LANDSCAPE PLAN

Sheet Number: L1.10

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STH 83
WIDTH VARIES

BIO–RETENTION BASIN–3
TOP OF BERM 829.00
BOTTOM OF BASIN 825.00

BIORETENTION BASIN #2
(3,056 SF) (SEE DETAIL 2/L2.10)

BIORETENTION BASIN #1
(7,095 SF) (SEE DETAIL 2/L2.10)

BIORETENTION BASIN #3
(8894 SF) (SEE DETAIL 2/L2.10)

BIO–RETENTION BASIN–4
TOP OF BERM 830.00
BOTTOM OF BASIN 826.00

25' PAVEMENT SETBACK
50' BUILDING SETBACK

PROPOSED BUILDING
FFE = 834.50

EXISTING BUILDING
FFE = 834.50

MATCHLINE

Scale: 0 15 30 60
Scale: 1" = 30'

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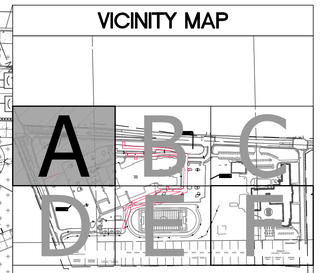
VICINITY MAP



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Sheet Title: SITE LANDSCAPE PLAN - AREA A

Sheet Number: L1.11A

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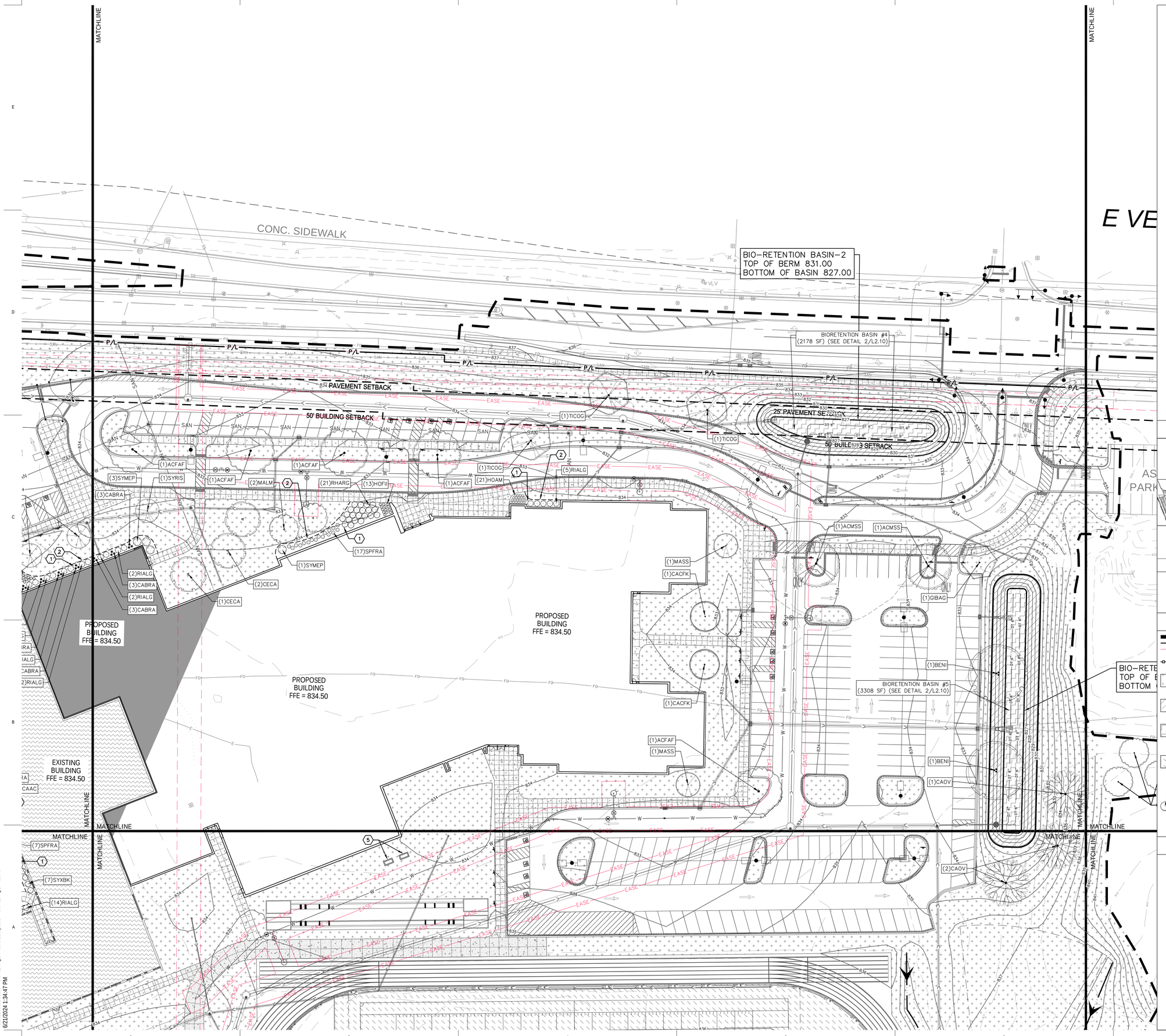

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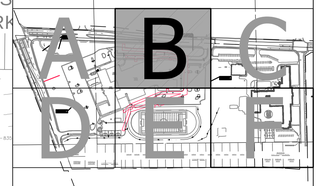

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Sheet Title: SITE LANDSCAPE PLAN - AREA B

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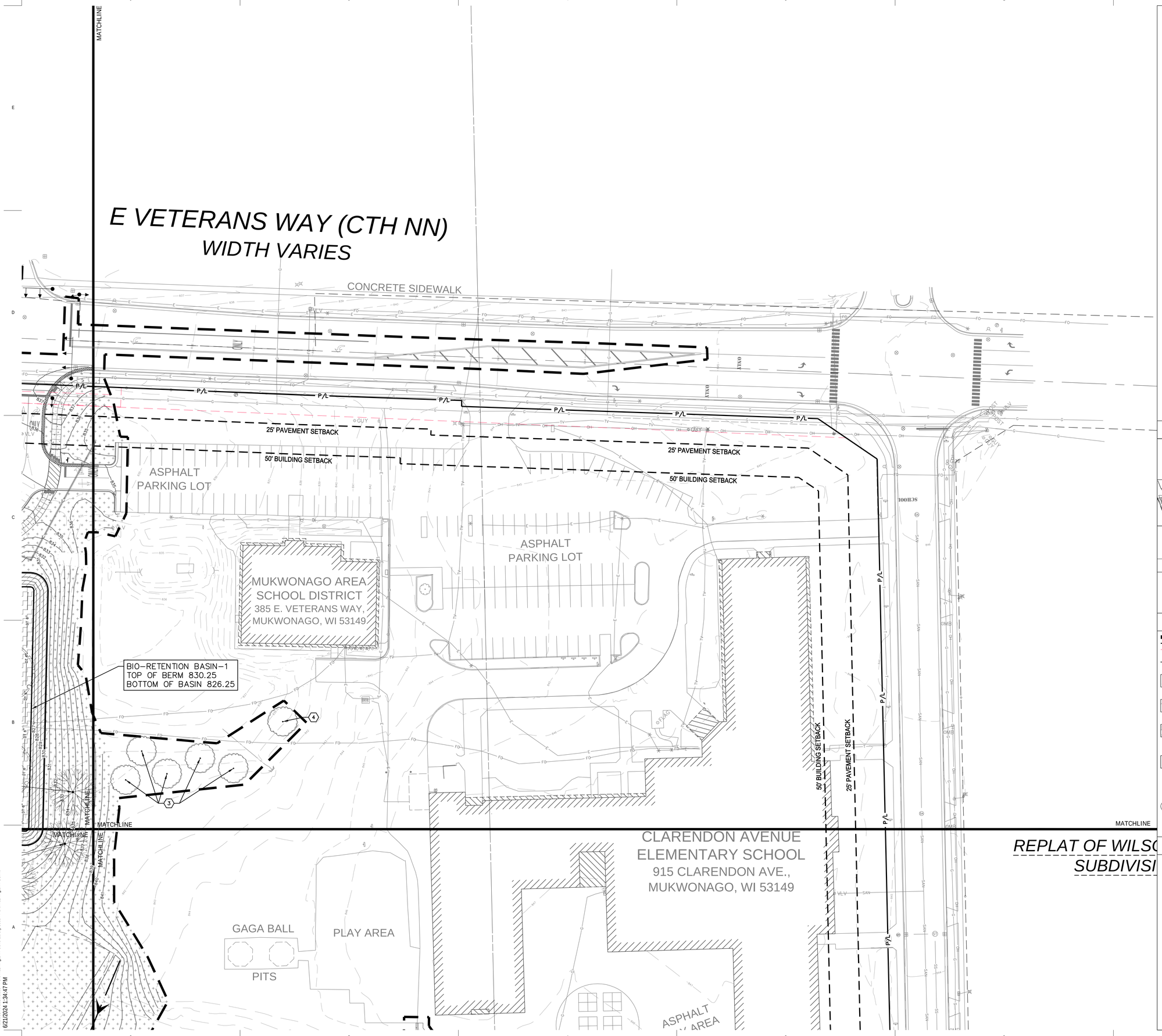

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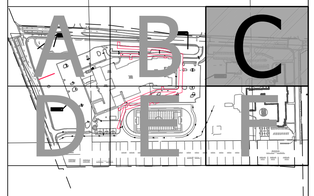

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Sheet Number: L1.13C

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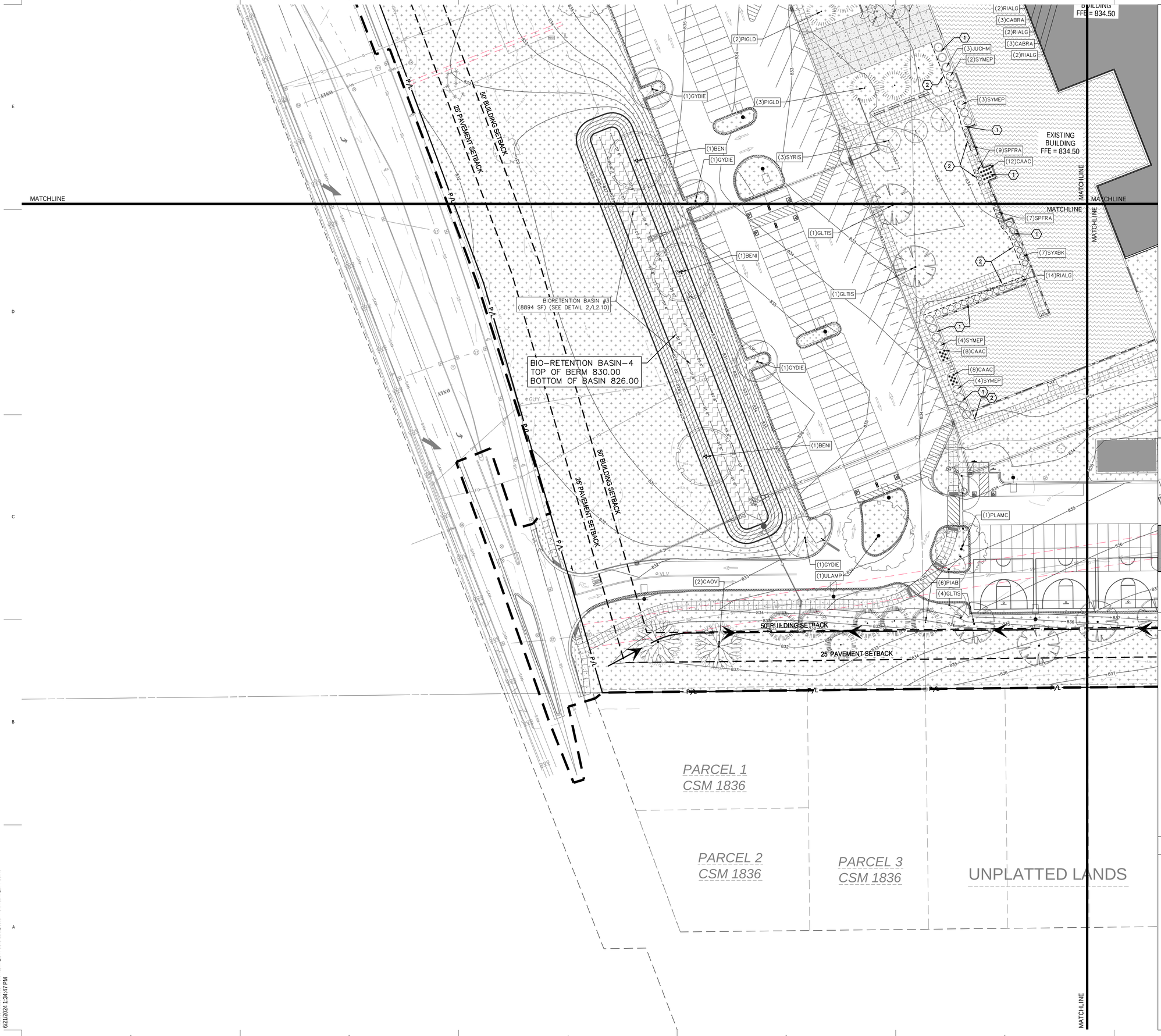

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Scale: 0 15 30 60
Scale: 1" = 30'

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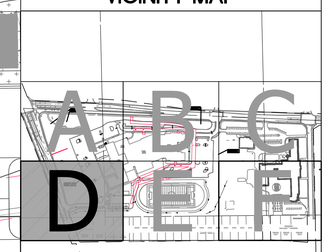
VICINITY MAP



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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE LANDSCAPE PLAN - AREA D

Sheet Number: L1.14D

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BUILDING
FFE = 834.50

PROPOSED
BUILDING
FFE = 834.50

EXISTING
BUILDING
FFE = 834.50

MATCHLINE

(7)SPFRA
(7)SYXBK
(14)RIALG
(1)ACFAF
(1)MASS
(1)CACFK
(1)BENI
(1)CAOV
(2)CAOV

BIORETENTION BASIN #5
(3308 SF) (SEE DETAIL 2/L2.10)

BIO–RETE
TOP OF E
BOTTOM

EASE

50' BUILDING SETBACK

25' PAVEMENT SETBACK

P/L

LOT 16 LOT 15 LOT 14 LOT 13 LOT 12 LOT 11 LOT 10 LOT 9 LOT 8 LOT 7 LOT 6 LOT 5

CRAIGS ADDN.

ATTED LANDS

LINCOLN AVE.

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Scale: 1" = 30'

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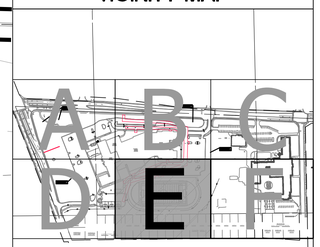

HATCH LEGEND

- PROJECT LIMITS
- P/L — PROPERTY LINE
- EASE — EASEMENT LINE
- TEMPORARY TREE PROTECTION FENCE
- AREAS DISTURBED BY CONSTRUCTION TO BE RESTORED WITH MINIMUM 4" TOPSOIL, KENTUCKY BLUE GRASS SEED, FERTILIZER, AND MULCH (TYP). USE SALVAGED TOPSOIL OR IMPORT TOPSOIL IF REQUIRED.
- AREAS DISTURBED BY CONSTRUCTION TO BE RESTORED WITH MINIMUM 4" TOPSOIL, NO MOW FESCUE WITH ANNUAL RYE GRASS SEED, FERTILIZER, AND MULCH (TYP). USE SALVAGED TOPSOIL OR IMPORT TOPSOIL IF REQUIRED.
- MIX 1: 3" PLUG PLANTINGS IN BIORETENTION AREA. REFER TO CIVIL AND LANDSCAPE DETAILS. PLUGS TO BE PLANTED 12–INCHES O.C. (2 / L2.10)
- NEW SEEDED SPORTS FIELD WITH MINIMUM 4" TOPSOIL, BARENBRUG TURF BLUE PRO SEED (OR APPROVED EQUIVALENT), FERTILIZER, AND MULCH (TYP). USE SALVAGED TOPSOIL OR IMPORT TOPSOIL IF REQUIRED. TOPSOIL PLACEMENT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND FINE GRADING BY THE LANDSCAPE CONTRACTOR.
- (10)HEPM — PLANT "CODE" REFERENCES TO THE PLANT SCHEDULE
- QUANTITY OF PLANTS IN THE PLANT GROUPING
- LEADER LINE
- PLANT SYMBOL (SYMBOL VARIES)

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Sheet Title: SITE LANDSCAPE PLAN - AREA E

Sheet Number: L1.15E

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BIO-RETENTION BASIN-1
TOP OF BERM 830.25
BOTTOM OF BASIN 826.25

MATCHLINE

CLARENDON AVENUE
ELEMENTARY SCHOOL
915 CLARENDON AVE.,
MUKWONAGO, WI 53149

GAGA BALL
PLAY AREA
PITS
ASPHALT
PLAY AREA
BASEBALL / SOFTBALL
/ KICKBALL FIELD
PLAY AREA
ASPHALT
PARKING LOT

50' BUILDING SETBACK
25' PAVEMENT SETBACK
P/L

FND. 1" IP 1.82' WEST

LOT 6 | LOT 5 | LOT 4 | LOT 3 | LOT 2 | LOT 1

DIVISION ST.
63.2' R/W

BLOCK B
H.A. YOUMANS ADDN.

PART OF LOT 1 | PART OF LOT 1 | PART OF LOT 1

CLARENDON AVE.
66' R/W

REPLAT OF WILSO
SUBDIVISI

Scale: 0 15 30 60
Scale: 1" = 30'

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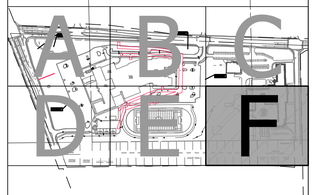
VICINITY MAP



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Sheet Title: SITE LANDSCAPE PLAN - AREA F

Sheet Number: L1.16F

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Plant Schedule

Code	Scientific Name	Common Name	Quantity	Spacing	Install Size	Mature Size (Height/Spread)
Canopy Trees: (Install in accordance with detail 3/L2.10)						
ACFAF	Acer x freemanii 'Autumn Fantasy'	Autumn Fantasy Maple	5	Per Plan	2.5" caliper B&B	50'/40'
ACMSS	Acer miyabei 'Morton'	State Street Miyabei Maple	5	Per Plan	2.5" caliper B&B	50'/40'
BENI	Betula nigra	River Birch	5	Per Plan	8' multi-stem B&B	40'-70'/35'-50'
CAOV	Carya ovata	Shagbark Hickory	5	Per Plan	2.5" caliper B&B	80'/40'
GIBAG	Ginko biloba 'Autumn Gold'	Autumn Gold Ginko (male)	4	Per Plan	2.5" caliper B&B	50'/30'
GLTIS	Gleditsia tricanthos 'Shademaster' PP1,515	Shademaster Honeylocust	6	Per Plan	2.5" caliper B&B	60'/35'
GYDIE	Gymnocladus dioicus 'Espresso'	Espresso Kentucky Coffee Tree	4	Per Plan	2.5" caliper B&B	50'/35'
PLAMC	Platanus x acerfolia 'Morton Circle'	Exclamation London Planetree	4	Per Plan	2.5" caliper B&B	60'/45'
TICOG	Tilia cordata 'Greenspire' PP2,086	Greenspire Linden	3	Per Plan	2.5" caliper B&B	40'-50'/30'-35'
ULAMP	Ulmus americana 'Princeton'	Princeton Elm	2	Per Plan	2.5" caliper B&B	60'-80'/40'-60'
Ornamental Trees: (Install in accordance with detail 3/L2.10)						
CACFK	Carpinus caroliniana 'JN Select A' PPAF	Fire King Musclewood	2	Per Plan	2" caliper B&B	20'-25'/20'-25'
CECA	Cercis canadensis	Eastern Redbud	3	Per Plan	8' multi-stem B&B	20'-30'/25'-35'
MALM	Magnolia x loebneri 'Leonard Messel'	Leonard Messel Magnolia	2	Per Plan	2" caliper B&B	15'-20'/20'-25'
MASS	Malus x 'Spring Snow'	Spring Snow Crabapple	2	Per Plan	2" caliper B&B	20-25'/15-20'
SYRIS	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	6	Per Plan	2" caliper B&B	25'/15'
Evergreen Trees: (Install in accordance with detail 4/L2.10)						
PIAB	Picea aibes	Norway Spruce	6	Per Plan	6' tall B&B	50'-70'/25'-30'
PIGLD	Picea glauca var. densata	Black Hills Spruce	5	Per Plan	6' tall B&B	25'-45'/15'-25'
Deciduous Shrubs: (Install in accordance with detail 5/L2.10)						
HAVE	Hamamelis vernalis	Vernal Witchhazel	3	Per Plan	30" tall pot	6'-10'/10'-15'
PHOCG	Physocarpus opulifolius 'Center Glow'	Center Glow Ninebark	6	Per Plan	36" tall pot	8'-10'/8'-10'
RHARG	Rhus aromatica 'Gro-Low'	Gro-Low Sumac	21	Per Plan	18" spread pot	2'-3'/6'-8'
RIALG	Ribes alpinum 'Green Mound'	Green Mound Alpine Currant	38	Per Plan	18" tall pot	3'-5'/3'-5'
SPFRA	Spiraea x fritschiana 'JN Select A'	Pink-a-licious Fritsch Spirea	59	Per Plan	18" tall pot	2'-3'/2'-3'
SYMEP	Syringa meyeri 'Palibin'	Meyer Lilac (Dwarf Korean Lilac)	23	Per Plan	24" tall pot	4'-5'/5'-7'
SYXBK	Syringa x 'SMNSDTP'	Baby Kim Lilac	7	Per Plan	15" tall pot	2'-3'/2.5'-3'
Evergreen Shrubs: (Install in accordance with detail 5/L2.10)						
JUCHM	Juniperus chinensis 'Mountbatten'	Mountbatten Chinese Juniper	12	Per Plan	4' tall B&B	15'/6'-8'
Perennials: (Install in accordance with detail 6/L2.10)						
CAAC	Calamagrostis x acutiflora Karl Foerster	Karl Foerster Reed Grass	44	Per Plan	#1 cont.	4'-5'/18"-24"
CABRA	Calamagrostis brachytricha	Fall Blooming Feather Reed Grass	21	Per Plan	#1 cont.	36"-60"/24"
HOAM	Hosta 'August Moon'	August Moon Hosta	21	Per Plan	#1 cont.	20"/24"-30"
HOFII	Hosta x 'Fire and Ice'	Fire and Ice Hosta	24	Per Plan	#1 cont.	12"-18"/24"
PANO	Panicum virgatum 'Northwinds'	Northwinds Switch Grass	28	Per Plan	#1 cont.	4'-5'/24"-30"

NOTE: Plant quantities indicated in the plant schedule are for convenience only. Installation contractor is responsible for verifying plant count on the landscape plan. When discrepancies between the plant schedule, labels and the landscape plan occur, the quantity drawn on the landscape plan shall be the official quantity.

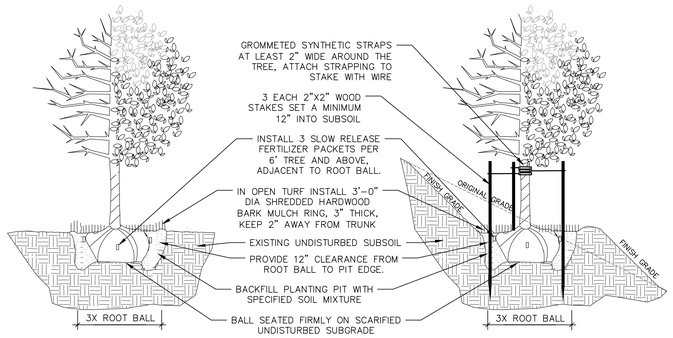
1 / L2.10 PLANT SCHEDULE
REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION

Bio-Retention Basin Plant Plug Schedule

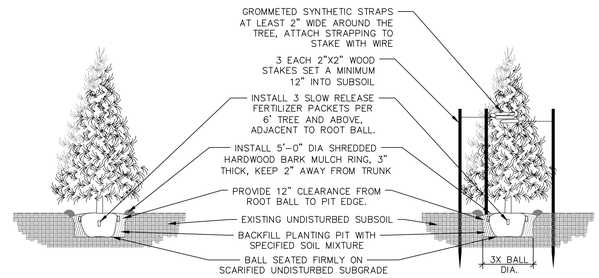
Code	Scientific Name	Common Name	Bio #1 Quantity	Bio #2 Quantity	Bio #3 Quantity	Bio #4 Quantity	Bio #5 Quantity	Soldier Spacing	Install Size	Mature Size (Height/Spread)
Bio-mix: (Space according to detail 9/L2.10)										
BIOMIX 1	Aster ericoides	Heath Aster	440	180	550	130	200	12" o.c.	3" plug	18"-24"/12"-18"
BIOMIX 1	Aster novae-angliae	New England Aster	440	180	550	130	200	12" o.c.	3" plug	48"-60"/18"-24"
BIOMIX 1	Physostegia virginiana	Obedient Plant	440	180	550	130	200	12" o.c.	3" plug	24"-48"/18"-24"
BIOMIX 1	Verbena hastata	Blue Vervain	440	180	550	130	200	12" o.c.	3" plug	36"-48"/18"-24"
BIOMIX 1	Liatris spicata	Marsh Blazing Star	440	180	550	130	200	12" o.c.	3" plug	36"-48"/12"-24"
BIOMIX 1	Monarda fistulosa	Wild Bergamot	440	180	550	130	200	12" o.c.	3" plug	36"-48"/24"-36"
BIOMIX 1	Rudbeckia hirta	Black-eyed Susan	440	180	550	130	200	12" o.c.	3" plug	36"-48"/12"-18"
BIOMIX 1	Solidago rugosa 'Fireworks'	Fireworks Goldenrod	440	180	550	130	200	12" o.c.	3" plug	42"-48"/18"-24"
BIOMIX 1	Tradescanta ohiensis	Spiderwort	440	180	550	130	200	12" o.c.	3" plug	24"-36"/12"-18"
BIOMIX 1	Ratibida pinnata	Yellow Coneflower	440	180	550	130	200	12" o.c.	3" plug	36"-48"/12"-18"
BIOMIX 1	Carex bebbi	Bebb's Sedge	468	268	597	179	254	12" o.c.	3" plug	12"-24"/8"-12"
BIOMIX 1	Bromus ciliatus	Fringed Brome Grass	440	180	550	130	200	12" o.c.	3" plug	20"-40"/12"-18"
BIOMIX 1	Panicum virgatum	Switch Grass	440	180	550	130	200	12" o.c.	3" plug	60"-108"/24"-36"
BIOMIX 1	Elymus canadensis	Canada Wild Rye	440	180	550	130	200	12" o.c.	3" plug	24"-48"/10"-12"
BIOMIX 1	Elymus virginius	Virginia Wild Rye	440	180	550	130	200	12" o.c.	3" plug	24"-48"/18"-24"
BIOMIX 1	Carex vulpinoidea	Fox Sedge	468	268	597	179	254	12" o.c.	3" plug	12"-36"/24"-36"

NOTE: Plant quantities indicated in the plant schedule are for convenience only. Installation contractor is responsible for verifying plant count on the landscape plan. When discrepancies between the plant schedule, labels and the landscape plan occur, the quantity drawn on the landscape plan shall be the official quantity. Native plugs of same species shall be planted in groupings of a minimum 40 plugs.

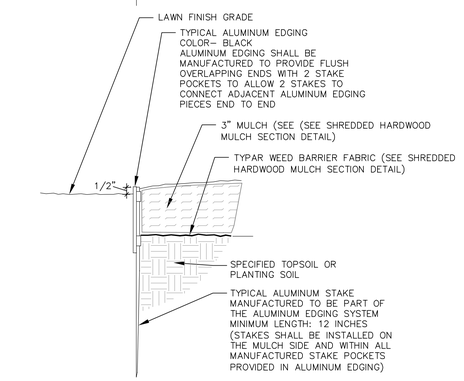
2 / L2.10 BIORETENTION BASIN PLANT SCHEDULE
REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION



3 / L2.10 DECIDUOUS TREE PLANTING, STAKING, & PLANTING ON A SLOPE
N.T.S.



4 / L2.10 EVERGREEN TREE PLANTING & STAKING
N.T.S.



8 / L2.10 ALUMINUM EDGING AT PLANTING BED SECTION
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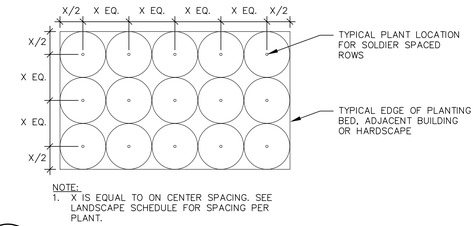
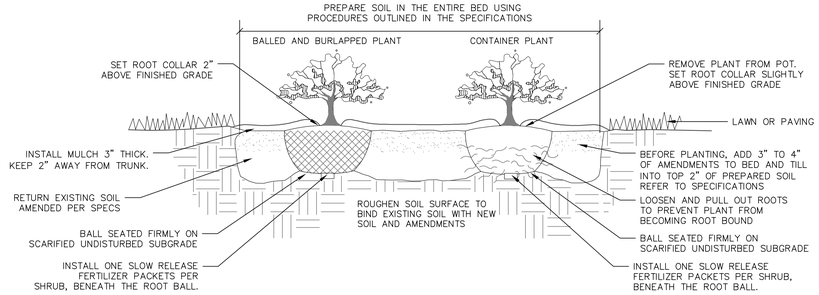
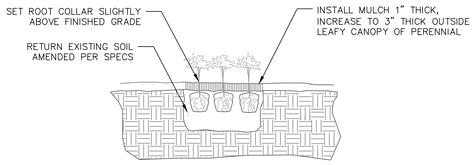


NOTE:
1. X IS EQUAL TO ON CENTER SPACING. SEE LANDSCAPE SCHEDULE FOR SPACING PER PLANT.

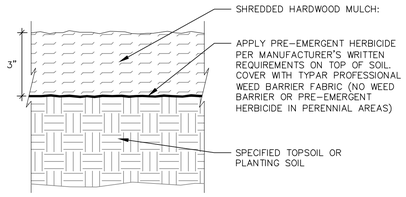
9 / L2.10 PERENNIALS AND GROUNDCOVERS SPACING: SOLDIER
N.T.S.



5 / L2.10 DECIDUOUS & EVERGREEN SHRUB PLANTING
N.T.S.



6 / L2.10 PERENNIAL PLANTING
N.T.S.



7 / L2.10 SHREDDED HARDWOOD MULCH SECTION
N.T.S.

1. ALL PLANT MATERIAL SHALL BE OBTAINED FROM A NURSERY LOCATED IN ZONE 5, CONFORM TO APPLICABLE REQUIREMENTS OF THE CURRENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AND BOTANICAL NAMES SHALL BE ACCORDING TO THE CURRENT EDITION OF "STANDARDIZED PLANT NAMES" PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURE NOMENCLATURE.
2. CONTRACTOR TO PROVIDE TO THE LANDSCAPE ARCHITECT SAMPLES OF ALL BARK AND MINERAL/STONE MULCHES, DECORATIVE GRAVELS, MAINTENANCE STRIP STONE, OR OTHER GROUND COVER MATERIALS FOR APPROVAL PRIOR TO INSTALLATION.
3. BARK MULCH TO BE FRESHLY ACQUIRED HARDWOOD SHREDDED BARK MULCH WHICH IS DARK BROWN IN COLOR. DOUBLE MILLED, EXCESSIVE DIRT AND DUST LIKE MATERIAL OR OLD MATERIAL IS NOT ACCEPTABLE.
4. LANDSCAPE EDGING TO BE ALUMINUM EDGING. REFER TO SPECIFICATION 32 93 00 PLANTS FOR ADDITIONAL INFORMATION.
5. ALL PLANTING AREAS TO RECEIVE A 3-INCH THICK LAYER OF HARDWOOD SHREDDED BARK MULCH OVER TYPAR PROFESSIONAL WEED FABRIC WITH EDGING. EDGING TO BE INSTALLED BETWEEN DIFFERENT TYPES OF MULCHES, BETWEEN MULCHES AND TURF, AND/OR WHERE SPECIFICALLY NOTED ON THE PLAN. REFER TO SPECIFICATION 32 93 00 PLANTS FOR ADDITIONAL INFORMATION.
6. INSTALL SHOVEL CUT EDGE AROUND ALL INDIVIDUAL TREES AND SHRUBS IN LAWN AREAS AND ALONG PAVEMENT WHERE PLANTING AREAS ABUT TO PREVENT HARDWOOD SHREDDED BARK MULCH FROM SPILLING OUT OF PLANTING AREA.
7. CONTRACTOR RESPONSIBLE FOR MAINTENANCE OF PLANT MATERIAL FOR 90 DAYS FROM INSTALLATION, INCLUDING WATERING, WEEDING, ETC. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF SEEDED AREAS FOR 60 DAYS FROM INSTALLATION, INCLUDING WATERING, WEEDING, ETC. CONTRACTOR TO PROVIDE AND REVIEW MAINTENANCE INSTRUCTIONS WITH THE OWNER PRIOR TO THE COMPLETION OF THESE MAINTENANCE PERIODS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8. CLEANLY PRUNE AND REMOVE DAMAGED BRANCHES, DEAD WOOD, AND ROOTS IMMEDIATELY PRIOR TO PLANTING. DO NOT CUT LEADERS OR LEAVE "V" CROTCHES OR DOUBLE LEADERS UNLESS A MULTI-STEM TREE IS SPECIFIED.
9. REMOVE BURLAP, WIRE BASKET, ROPE, TWINE, AND ALL SYNTHETIC MATERIAL FROM THE ROOTS, TRUNK, OR CROWN OF PLANT.
10. REMOVE EXCESS SOIL ABOVE ROOT COLLAR.
11. PLANT TREES AND SHRUBS SO THAT THE ROOT COLLAR IS 2" ABOVE FINISHED GRADE OR SEVERAL INCHES ABOVE GRADE IF PLANT IS INSTALLED IN POOR SOILS.
12. PLANT TREES AND SHRUBS WITH SAME ORIENTATION AS WHEN HARVESTED FROM THE NURSERY OR TO SHOWCASE THE MOST AESTHETIC VIEW.
13. PLANT ALL TREES WITH THREE SLOW RELEASE FERTILIZER PACKETS, SPACED EQUIDISTANT AROUND THE EDGE OF THE ROOT BALL.
14. PLANT ALL SHRUBS WITH ONE SLOW RELEASE FERTILIZER PACKET, PLACED BELOW THE ROOTING SYSTEM.
15. WATER AND TAMP BACKFILL AND ROOTS OF ALL NEWLY SET PLANT MATERIAL SO THE SOIL AND ROOTS ARE THOROUGHLY SOAKED AND AIR POCKETS ARE REMOVED.
16. FOR INDIVIDUAL TREES & SHRUBS PLANTED IN TURF AREAS, PROVIDE CONTINUOUS 3" SOIL SAUCER TO CONTAIN WATER & MULCH (TREES ON SLOPES SHALL BE SAUCERED ON THE DOWNHILL SIDE)
17. INSTALL 3" THICK SHREDDED HARDWOOD BARK MULCH RING 3'-0" DIA. FOR DECIDUOUS TREES AND ALL INDIVIDUAL SHRUBS IN LAWN AREAS, 5'-0" DIA. FOR EVERGREEN TREES. KEEP MULCH 2" AWAY FROM TRUNKS.
18. STAKING – ONLY STAKE EVERGREEN TREES 5'-0" OR GREATER IN HEIGHT OR TREES THAT ARE UNABLE TO REMAIN UPRIGHT AFTER PLANTING. TREES WILL BECOME STRONGER FASTER WHEN THE TOP 2/3 OF THE TREE IS FREE TO SWAY. DO NOT ATTACH WIRE DIRECTLY TO TREES OR THROUGH HOSES – UTILIZE GROMMETED, SYNTHETIC STRAPS AT LEAST 2" WIDE AROUND THE TREE, ATTACH STRAPPING TO STAKE WITH WIRE. STAKE ONLY WHEN NECESSARY. STAKES SHOULD BE DRIVEN DEEPLY INTO THE GROUND TO PREVENT DISLODGING. CHECK AT LEAST EVERY THREE MONTHS FOR BINDING OR OTHER PROBLEMS. STAKES AND TIES SHOULD BE REMOVED SIX MONTHS TO ONE YEAR AFTER PLANTING.
19. NO MOW TO BE NO MOW FESCUE SEED MIX WITH ANNUAL RYE NURSE CROP FROM PRAIRIE NURSERY, INC. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. PRAIRIE NURSERY ADDRESS: PO BOX 306 WESTFIELD, WI 53964. TELEPHONE: 1-800-476-9453 FAX: 608-296-2741.
20. REFER TO SPECIFICATIONS 32 93 00 PLANTS AND 32 92 00 TURF AND GRASSES FOR ADDITIONAL INFORMATION.

10 / L2.10 LANDSCAPE NOTES
REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION

BRAY ARCHITECTS
Milwaukee
829 South 1st Street
Milwaukee, Wisconsin 53204
T: 414.226.0200
Sheboygan • Davenport • Moline
www.brayarch.com

kapur

Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

⚠	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number: 3526

Issued For: PLAN COMMISSION SUBMITTAL 4/2/2025

Sheet Title: SITE LANDSCAPE DETAILS

Sheet Number: L2.10

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6/21/2024 1:34:47 PM

LANDSCAPE CALCULATIONS

Village of Mukwonago Landscaping Requirements

Site Zoning = P-1 Zoning (Public and Semipublic District)
Total car parking spaces = 453 car parking spaces
Total bus parking spaces = 21 bus parking spaces
Total parking spaces = 453 car + 21 bus = 474 parking spaces
Total parking lot interior landscape island area from landscape islands that are at least 720 sf in size = 14,406 square feet

Landscape requirements

	Required	Provided
Off-street Parking Area Landscape Requirements		
A minimum of 15 square feet of interior landscape islands that are at least 720 square feet in size each shall be provided per parking stall.	474 parking spaces x 15 sf = 7110 sf of interior landscape space is required	14,406 sf of parking lot interior landscape that are 720 sf or larger is provided
The interior landscaping shall be placed so as to delineate driving lanes, define rows, protect parking lot light poles and generally mitigate the visual impact of the parking lot.	Interior landscaping shall be placed to delineate driving lanes, define rows, protect parking lot light poles and generally mitigate the visual impact of the parking lot.	The interior landscaping is placed so as to delineate driving lanes, define rows, protect parking lot light poles and generally mitigate the visual impact of the parking lot.
The interior landscaping shall be composed of a combination of hardy trees, shrubs, perennials, and groundcover that are able to tolerate winter salt and snow, and are underlain by a layer of decorative mulch and weed barrier where applicable.	Interior landscape islands shall be planted with a combination of hardy trees, shrubs, perennials, and groundcover that are able to tolerate salt and snow.	Interior landscape islands are planted with trees in some islands and lawn groundcover in all islands.
Interior landscaping shall not exceed 30 inches in height at maturity when located within an identified vision triangle.	Interior landscaping shall not exceed 30 inches in height at maturity when located within vision triangles.	Interior landscaping does not exceed 30 inches in height at maturity when located within vision triangles.
Trees shall be planted in such a way that they are protected from vehicle damage.	Trees shall be planted in such a way that they are protected from vehicle damage.	Trees are planted in such a way that they are protected from vehicle damage with curb and gutter.
Sufficient diversity of tree species shall be provided so as to help prevent the spread of detrimental insect infestation and disease.	Diversity of tree species is required.	Diversity of tree species is provided.
Parking lot screening. Parking lots shall be screeded fram adjacent residential properties by a perimeter landscape screen to be located within 15 feet of the edge of pavement. The plants selected for use in the landscape screen shall be suited for such palntings and be arranged in such manner as to provide an effectie visual barrier.	Parking lot screening from residential properties required.	Parking lot screening of evergreen and deciduous trees is provided south of the parking lots in the southwest corner of the site. Some plantings are greater than 15 feet from the edge of parking lot pavement since there is ample greenspace between the parking lot and residential lots for the trees.
P-1 Public and Semipublic District Landscaping Standards		
No minimum landscape requirements within P-1 zoning district	N/A	N/A

1 / L2.11 LANDSCAPE CALCULATIONS
REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION

BRAY ARCHITECTS
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829 South 1st Street
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T: 414.226.0200
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Project Title:
RENOVATION AND ADDITION TO:
Park View Middle School
Mukwonago Area School District
930 N Rochester St.
Mukwonago, WI 53149

REVISIONS:

	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

Project Number:
3526

Issued For:
PLAN COMMISSION SUBMITTAL
4/2/2025

Sheet Title:
SITE LANDSCAPE DETAILS

Sheet Number:
L2.11

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Appendix G

Stormwater Maintenance Agreement

(Park View Middle School)
Storm Water Maintenance Agreement
Village of Mukwonago, County of Waukesha, WI

High School District 3, as "Owner" of the property described in Exhibit A, in accordance with Chapter 34 of the Village of Mukwonago Municipal Code, agrees to install and maintain storm water *management practices* on the subject property in accordance with approved plans and Storm Water Permit conditions. The Owner further agrees to the terms stated in this document to ensure that the storm water management practices continue serving the intended functions in perpetuity. This Agreement includes the following exhibits:

Exhibit A: Legal Description of the real estate for which this Agreement applies ("Property").
Exhibit B: Location Map - shows an accurate location of each storm water management practice affected by this Agreement.
Exhibit C: Maintenance Plan - prescribes those activities that must be carried out to maintain compliance with this Agreement.
Exhibit D: Design Summary - contains a summary of key Engineering calculations and other data used to design the storm water management practices.
Exhibit E: As-built survey (to be recorded as an addendum) - shows a detailed "as-built" cross section and plan view of the storm water management practices.
Exhibit F: Engineering/Construction Verification (to be recorded as an addendum) - provides verification from a Professional Engineer that the design and construction of the storm water management practices complies with all applicable technical standards and the Village's requirements.

NOTE: After construction verification has been accepted by the Village of Mukwonago, for all planned storm water management practices, an addendum(s) to this agreement shall be recorded by the Village showing construction details and construction verification. The addendum(s) may contain several additional exhibits, as described below.

Through this Agreement, the Owner hereby subjects the Property to the following covenants, conditions and restrictions:

1. Upon execution of this Agreement, the Village shall record the Agreement at the Waukesha County or Walworth County Register of Deeds, as applicable. The recording of this Agreement shall be a condition for the issuance of a Storm Water Permit. An addendum to this Agreement shall be recorded upon project completion which shall include submittal of Exhibit E and Exhibit F in an acceptable form to the Village. The recording of Amendment #1 including Exhibit E and Exhibit F shall be a condition for the issuance of an occupancy permit.

2. The Owner shall construct, maintain and if necessary reconstruct the storm water management practices so as to maintain their compliance with applicable governmental, statutes, ordinances or rules. The Owner shall be responsible for the routine and extraordinary maintenance and repair of the storm water management practices identified in Exhibit B in accordance with the maintenance plan contained in Exhibit C.

3. The Owner shall, at their own cost inspect the storm water best management practices on an annual basis and maintain records of annual inspections and maintenance performed. Records shall be made available to the Village upon request within 30 days of written notice. Annual inspections shall be performed as detailed in Exhibit C Maintenance Plan of the storm water maintenance agreement and shall be performed to determine if the facility is functioning within the design parameters. Commencing in _____- and every five years thereafter the Owner shall, at their own cost, have a certification inspection of the storm water management practices conducted by a professional engineer, who shall then file a report with the Village of Mukwonago no later than December 31st of the same year. Upon written notification by Village of Mukwonago or its designee the Owner shall, at their own cost and within a reasonable time period determined by the Village of Mukwonago, have an inspection of the storm water management practices conducted by a professional engineer, who shall then file a report with the Village of Mukwonago. The Owner shall thereafter timely complete any maintenance or repair work recommended in any of the above reports. The Owner shall be liable for the failure to undertake any maintenance or repairs.

4. In addition, and independent of the requirements under paragraph 2 above, the Village of Mukwonago, or its designee, is authorized but not required to access the property as necessary to conduct inspections of the storm water management BMP's to ascertain compliance with the terms and intent of this Agreement and the activities prescribed in Exhibit C. The Village of Mukwonago may require work to be done which differs from the report(s) described in paragraph 3 above, if the Village of Mukwonago reasonably concludes that such work is necessary and consistent with the intent of this agreement and /or with Chapter 34 of the Village Code of Ordinances. Upon notification by the Village of Mukwonago of required maintenance or repairs, the Owner shall complete the specified maintenance or repairs within a reasonable time frame, as determined by the Village of Mukwonago.

5. If the Owner does not complete an inspection under 3 above or complete the required maintenance or repairs under 2 above within the specified time period, the Village of Mukwonago is authorized, but not required, to perform the specified inspections, maintenance or repairs. In the case of an emergency situation, as determined by the Village of Mukwonago, no notice shall be required prior to the Village of Mukwonago performing emergency maintenance or repairs.

   The cost of inspections or measures undertaken by the Village pursuant to this agreement shall be first paid from the proceeds of any surety maintained to secure the performance by the Owner/Developer of its obligations under this agreement and the conditions of the use, site and architectural approval. In the event that the costs of said measures shall exceed the value of the surety or the surety has expired or been terminated, then in that event the cost of said measures shall be assessed as a special charge for current services pursuant to Wis Stat Sec. 66.0627. Any such assessment which is not paid within 60 days after billing shall be deemed a delinquent special charge and shall become a lien upon the parcel against which such charge has been assessed. Such delinquent charges shall be extended upon the current or next tax roll as a delinquent tax against the parcels for which payment has not been received by the Village and all proceedings in relation to the collection, return and sale of property for delinquent real estate taxes shall apply to such special charges. The Developer hereby consents to the levy of such charge and waives notice and the right to hearing.

6. This Agreement shall run with the property and be binding upon all heirs, successors and assigns. After the Village records this document, the Village of Mukwonago shall have the sole authority to modify this agreement contingent upon the Village of Mukwonago providing a 30 day written notice to the current Owner. Any modifications shall conform to the minimum requirements of Chapter 34

(or its successor) and be written so as to ensure the long-term maintenance of the storm water BMP's.

7. The Owner/Developer agrees to pledge a surety in a form acceptable to the Village of Mukwonago to secure performance of the obligations arising from the construction and maintenance of the storm water BMPs provided for under this Agreement in the amount of 120% of the actual cost of the storm water BMPs. Said surety shall remain in effect for a period of three (3) years from the date of the execution of this Agreement or until drawn upon in full by the Village or one year (1) from the date of the certification of the storm water improvements whichever occurs first. Release of the surety prior to the deadlines stated herein shall be governed by Mukwonago Village code section 34-108(c) as amended

8. This Agreement shall be governed and construed in accordance with the laws of the State of Wisconsin.

Dated this ____ day of _____, 202____

Owner:

_____
Authorized Representative of

_____

(Printed Name of Authorized Representative)

State of Wisconsin:

County of Waukesha

Personally came before me this ____ day of _____, 202___, the above named _____ _____, as the authorized Representative of _____ _____for the purpose of signing this document, to me known to be the person who executed the foregoing instrument and acknowledged the same.

_____

[Name]

Notary Public, Waukesha County, WI

My commission expires: _____

Accepted by the Village of Mukwonago this ____ day of _____, 202__.

_____
Fred Winchowky, Village President

_____
Diana Dykstra, Village Clerk

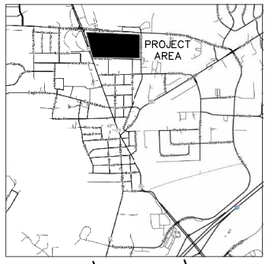
This document was drafted by:
Attorney Mark G. Blum
Hippenmeyer, Reilly, Blum,
Schmitzer, Fabian & English, S.C.
P.O. Box 766
Waukesha, WI 53187-0766
Telephone: (262) 549-8181
Facsimile: (262) 549-8191
Email: mgblum@hrblawfirm.com

PLAT OF SURVEY WITH TOPOGRAPHY

PART OF THE SOUTHEAST 1/4 OF SECTION 23, TOWNSHIP 5 NORTH, RANGE 18 EAST, IN THE VILLAGE (FORMERLY IN THE TOWN) OF MUKWONAGO, COUNT OF WAUKESHA, STATE OF WISCONSIN.

EXHIBIT A

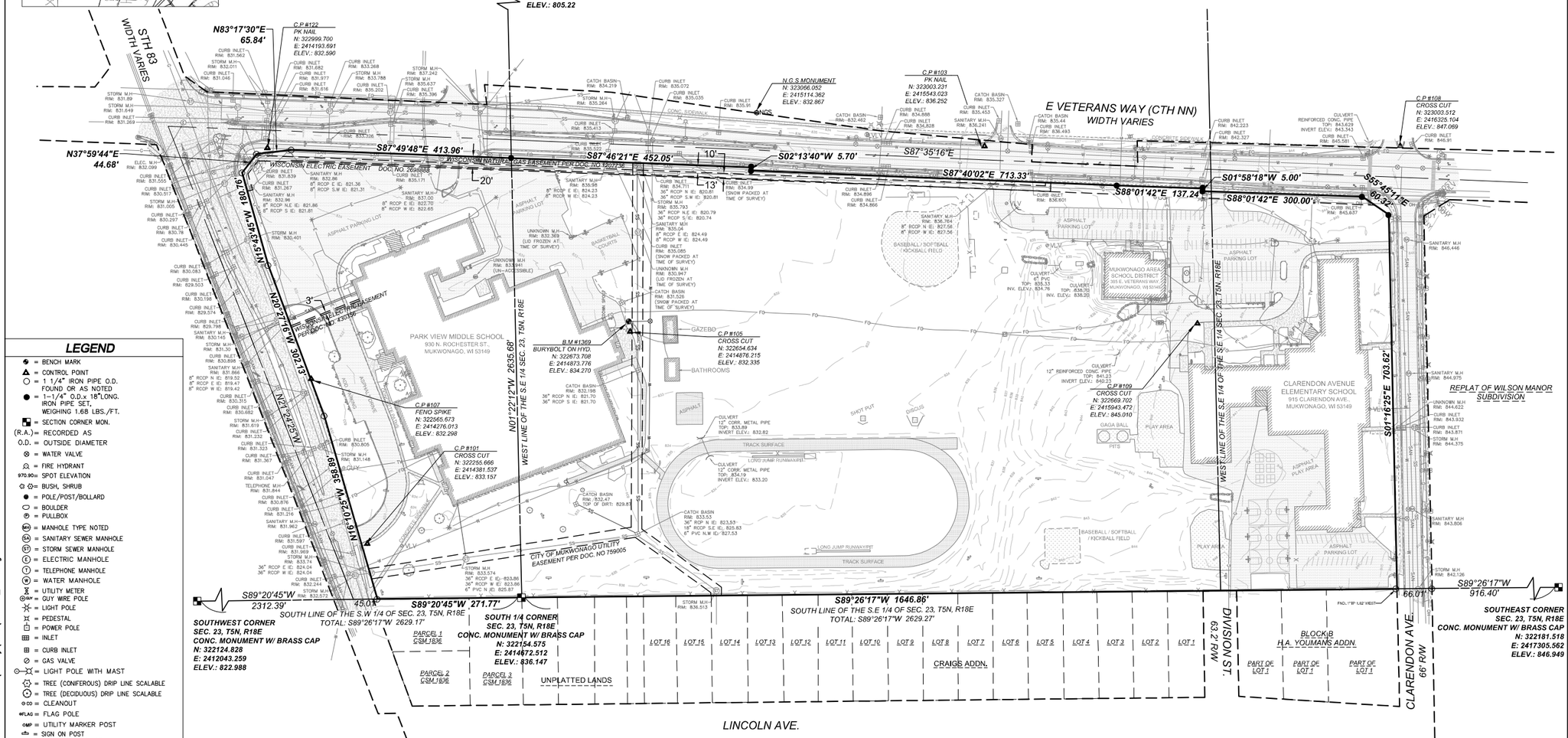
VICINITY MAP
NOT TO SCALE



DIGGERS HOTLINE
Toll Free (800)242-8511
Milwaukee Area (414)259-1181
Hearing Impaired TDD (800)542-2289
www.DiggersHotline.com
REGISTERS HOTLINE TICKETS:
20244908559, 20244908558, 20244908564, 20244908567, 20244908581, 20244908582, 20245002221, 20245002224, 20245002227, 20245002231, 20245002238, 20245002239.

ALTHOUGH DIGGERS' HOTLINE WAS NOTIFIED THIS SURVEY DOES NOT GUARANTEE THAT ALL UTILITIES HAVE BEEN LOCATED ON SITE. SOME OF THE UTILITIES MAY HAVE BEEN DRAWN IN PER PLAN BASED ON MAPS RECEIVED FROM MEMBERS NOTIFIED. LACKING EXCAVATION THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION MAY BE NECESSARY.

BEARINGS ARE REFERENCED TO NAD83 WISCONSIN STATE PLANE – SOUTH ZONE VERTICAL DATUM IS NAVD 88



LEGEND

- ⊕ = BENCH MARK
- △ = CONTROL POINT
- ○ = 1 1/4" IRON PIPE O.D. FOUND OR AS NOTED
- ● = 1-1/4" O.D.x 18"LONG. IRON PIPE SET, WEIGHING 1.68 LBS./FT.
- ■ = SECTION CORNER MON.
- (R.A.)= RECORDED AS
- O.D. = OUTSIDE DIAMETER
- ⊗ = WATER VALVE
- = FIRE HYDRANT
- 970.90= SPOT ELEVATION
- = POLE/POST/BOLLARD
- = BOULDER
- = PULLBOX
- (MH) = MANHOLE TYPE NOTED
- (SA) = SANITARY SEWER MANHOLE
- (ST) = STORM SEWER MANHOLE
- (E) = ELECTRIC MANHOLE
- (T) = TELEPHONE MANHOLE
- (W) = WATER MANHOLE
- = UTILITY METER
- GW = GUY WIRE POLE
- = LIGHT POLE
- = PEDESTAL
- = POWER POLE
- = INLET
- = CURB INLET
- = GAS VALVE
- = LIGHT POLE WITH MAST
- = TREE (CONIFEROUS) DRIP LINE SCALABLE
- = TREE (DECIDUOUS) DRIP LINE SCALABLE
- CO = CLEANOUT
- FLAG = FLAG POLE
- UMP = UTILITY MARKER POST
- = SIGN ON POST
- = UTILITY CONTROL BOX
- V,LV = UNKNOWN UTILITY VALVE
- FL. EL. = FIRST FLOOR ELEVATION
- = BUILDING OUTLINE
- 3 = MINOR CONTOUR
- 5 = MAJOR CONTOUR
- = FENCE
- = BEAM GUARD
- = CHAINLINK FENCE
- = WOODED AREA/SHRUB EDGE
- W = WATER MAIN
- ST = STORM SEWER
- SAN = SANITARY SEWER
- G = NATURAL GAS MAIN
- T = UNDERGROUND TELEPHONE
- E = UNDERGROUND ELECTRIC
- OH = OVERHEAD UTILITY LINES
- FO = UNDERGROUND FIBER OPTIC
- TV = UNDERGROUND CABLE TV
- C = COMMUNICATION CONDUIT
- (P) = UTILITIES PER PLAN
- = ASPHALT SURFACE
- = CONCRETE SURFACE
- = GRAVEL / CRUSHED AGG. SURFACE

LEGAL DESCRIPTION:

PROVIDED BY: KNIGHT BARRY TITLE GROUP
FILE #: 2310623. EFFECTIVE DATE: DECEMBER 20, 2024.

All that part of the Southeast 1/4 of Section 23, Township 5 North, Range 18 East, in the Village (formerly in the Town) of Mukwonago, County of Waukesha, State of Wisconsin, described as follows: Beginning at a point on the South line of said Section 23 located 985 feet West of the Southeast corner of said Section 23; thence North 751.5 feet; thence North 86°30' West parallel to County Trunk Highway "EE" a distance of 678.3 feet; thence South 792.9 feet; thence East 677 feet to the place of beginning. The place of beginning can be further described as being 35 feet West of the intersection of the center line of Clarendon Street with the South line of said Section 23.

ALSO

All that part of the Southwest 1/4 and Southeast 1/4 of Section 23, Township 5 North, Range 18 East, in the Village (formerly in the Town) of Mukwonago, County of Waukesha, State of Wisconsin, described as follows: Beginning at the South quarter corner of said Section 23; thence 319.4 feet West on the South line of said Section 23 to the center line of State Trunk Highway 83; thence North 20° 36' West on the center line of said State Trunk Highway 83, 954.4 feet to the intersection with the center line of County Trunk Highway "EE"; thence South 87° East along the centerline of said County Trunk Highway "EE" 1615.7 feet; thence South 809.4 feet to the South line of said Section 23; thence West on said South section line 968.8 feet to the point of beginning.

ALSO

All of Division Street adjoining the East line of Lot 1, Block 1, of Craigs Addition to the Village of Mukwonago, in the North 1/2 of Section 26, Town 5 North, Range 18 East, in the Village of Mukwonago, County of Waukesha, State of Wisconsin, EXCEPTING THEREFROM the West 16 feet thereof.

EXCEPTING THEREFROM those lands conveyed to State of Wisconsin, Department of Transportation as described in Document No. 1347347. FURTHER EXCEPTING THEREFROM those lands conveyed to the State of Wisconsin, Department of Transportation as described in Warranty Deed recorded as Document No. 2672831, as corrected by Affidavit of Correction recorded as Document No. 3389564. AND FURTHER EXCEPTING THEREFROM those lands conveyed to Waukesha County as described in Warranty Deed recorded as Document No. 4226126.

For informational purposes only:
Property Address: 385 East Veterans Way, Mukwonago, WI 53149
Tax Key Number: MUKV 1964.992

SURVEYOR'S CERTIFICATE:

I, Brian Sandberg do hereby certify that that under My direction and control the the above described property was surveyed on 12/31/2024 in accordance with AE-7 of the Wisconsin Administrative Code and is correct to the best of my knowledge and belief.

Brian E. Sandberg S-2500
February 19th, 2025.

FILENAME: S:_SiteDesgn\Bray Architects\250140 Mukwonago SD Referendum 2024\Survey\DWG\250140_Plot.dwg

kapur
7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
MUKWONAGO AREA SCHOOL DISTRICT

LOCATION:
385 E. VETERANS WAY, MUKWONAGO, WI 53149

CLIENT:
BRAY ARCHITECTS

RELEASE:
FINAL

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1" = 80'
0 40' 80' 160'

SEAL:
WISCONSIN BRIAN SANDBERG S-2500 PORT WASHINGTON WISCONSIN LAND SURVEYOR

all in

SHEET:
01
PLAT OF SURVEY WITH TOPOGRAPHY

PROJECT MANAGER:	M.F
PROJECT NUMBER:	25.0140
DATE:	02/19/2025

SHEET NUMBER:
1

EXHIBIT C-1
Catch Basin Operation, Inspection, and Maintenance Standards

I. ROUTINE MAINTENANCE

A. Inspections

1. Inspections of the catch basins shall be completed per the time intervals indicated on the attached “Catch Basin Operation, Inspection, and Maintenance Report Form” or after significant rainfall events.
2. The inspections should be completed during wet weather conditions to determine if the catch basins are functioning properly.
3. Inspection priorities shall be as follows:
   a) Inspect catch basins, manholes, endwalls, pipes for debris and sediment accumulation, blockages, obstructions, missing grates and covers, erosion at or around structures to ensure system is working properly
4. Documentation of the inspections should be completed using the attached “Catch Basin Operation, Inspection, and Maintenance Report Form” and filed. Documentation should include as a minimum:
   a) Inspectors name, affiliation and professional credentials if applicable.
   b) Date, time and weather conditions.
   c) Approximate rainfall total over a 24-hour period if applicable.
   d) Catch basin and storm sewer system condition.
   e) Sediment depth within the catch basins, manholes, endwalls, and curb and gutter.
   f) Identification of potential structural failures and repair needs.
   g) Repair recommendations.

B. Sediment, Debris and Litter Removal.

1. Sediment accumulation should be monitored at least once a month.
2. Debris and litter removal from the catch basins shall be completed at least once a month.
3. Catch basin sumps more than 50% full should be cleaned and have the sediment removed.

II. NON-ROUTINE MAINTENANCE

A. Structural Repairs and Replacement.

1. Annual inspection of the catch basins will disclose any potential structural problems. If structural problems appear, repair or replace the structures and pipes.

III. RESPONSIBLE PARTY & FINANCIAL FUNDING

A. The responsible party for the operation, inspection, and maintenance of the catch basins has been designated in the Storm Water Management Practice Maintenance Agreement.

B. The responsible party shall establish a perpetual maintenance fund to ensure that the pavement is properly inspected, maintained, and repaired.

EXHIBIT C-2
Bio-Retention Basin Operation, Inspection, and Maintenance Standards

I. ROUTINE MAINTENANCE

A. Vegetation

1. Side slopes, embankments, and emergency spillways that are not rock lined, which have been planted with native vegetation or turf grasses, should be mowed at least twice a year to prevent woody growth and control noxious weeds.
2. More frequent mowing, typically once a week during a normal growing season, is recommenced for aesthetic and allergy control purposes.
3. Native grasses should be mowed to a height of 6" in mid to late summer or after they have achieved a height of 1-1/2 feet during the first growing season. Further mowing in subsequent growing seasons will not be required.
4. If possible, the native grass area should be burned off every three to four years in the spring of the year. Check local burning regulations as permits may be required.
5. If burning of the native grass areas is not possible, a 5- to 8- inch mowing every 3 to 4 years may suffice as a substitute management technique. The mowed area should be raked and performed in the spring.

B. Inspections

1. Inspections of the bio-retention basins shall be completed with respect to the time intervals indicated on the attached "Bio-Retention Basin Operation, Inspection, and Maintenance Report Form" or after significant rainfall events.
2. The inspections should be completed during wet weather conditions to determine if the bio-retention basins are functioning properly.
3. Inspection priorities shall be as follows:
   a) Inspect the embankments for subsidence, erosion, cracking and tree growth.
   b) Inspect the condition of the overland overflow paths.
   c) Inspect the basin bottoms for accumulation of sediment and to determine plant health.
   d) Inspect the outlet control structures for clogs, debris and material failures.
   e) Inspect upstream and downstream channels from an erosion perspective.
   f) Inspect any modifications that may have been done to the bio-retention basins following their initial construction.
   g) Inspect the side slopes of the bio-retention basins for erosion, slumping, cracking or woody plant materials.
4. Documentation of the inspections should be completed using the attached "Bio-Retention Basin Operation, Inspection, and Maintenance Report Form" and filed. Documentation should include as a minimum:
   a) Inspectors name, affiliation and professional credentials if applicable.
   b) Date, time and weather conditions.
   c) Approximate rainfall total over a 24-hour period if applicable.
   d) Existing embankment, outlet and inlet conveyance systems and vegetation condition.

e) Sediment depth within the basins, outlet control structures, catch basins, manholes, endwalls, and curb and gutter.
f) Identification of potential structural failures and repair needs.
g) Other bio-retention conditions such as vegetation growth.
h) Repair recommendations.

C. Debris and Litter Removal.
1. Debris and litter removal from the bio-retention basins shall be completed at least once a month.
2. Attention should be paid to debris accumulating around the outlet structures to prevent potential clogging.

D. Erosion Control.
1. The bio-retention basin side slopes and embankments may suffer from periodic slumpage and erosion.
2. Corrective measures shall include re-grading, filling and re-vegetation of the eroded or slumping areas.
3. The ground surface around the bio-retention basin outlet structures should be inspected for displacement or undermining. Repairs shall be made upon discovery.

II. NON-ROUTINE MAINTENANCE

A. Structural Repairs and Replacement.
1. The estimated life of the outlet structure is 75 to 100 years. Annual inspection of the structures will disclose any potential structural problems. If structural problems appear, repair or replace the outlet.
2. Annual inspection of the bio-retention basin side slope and bottoms shall be conducted to disclose any potential leaks or seepage through the liners. If any appear to exist, corrective measures shall be taken.

B. Sediment Removal.
1. A sediment clean-out cycle of 10 to 15 years is recommended. Sediment removal may be necessary prior to 10 years if there is a substantial amount of land disturbance occurring within the contributory watershed. Annual inspections shall be made to ensure that the design depth and the available volume for storage is maintained, along with the infiltration capacity of the engineered soil.
2. Sediment removed from the bio-retention basin bottoms shall be hauled to an upland area, spread and stabilized with vegetative material in accordance with NR 500, Wisc. Admin. Code.
3. It is recommended that the sediment be tested to determine if land filling is necessary. Contact the local DNR prior to sediment sampling and testing to insure compliance with State standards and regulations.

C. pH Testing of Engineered Soil
1. pH tests are recommended to be conducted annually to ensure that proper treatment of the runoff is evident.
2. The engineered soil shall have a pH between 5.5 and 8.0. If the pH is observed to be out of this range, corrective measures shall be taken.

III. RESPONSIBLE PARTY & FINANCIAL FUNDING

A. The responsible party for the operation, inspection, and maintenance of the dry detention ponds has been designated in the Storm Water Management Practice Maintenance Agreement.
B. The responsible party shall establish a perpetual maintenance fund to ensure that the ponds are properly inspected, maintained, and repaired.

IV. ADDITIONAL CONSIDERATIONS TO IMPROVE POND WATER QUALITY AND REDUCE MAINTENANCE COSTS.

A. General.
    1. Improper disposal of yard wastes will affect the quality of the water exiting the bio-retention basins and may cause clogging of the outlet structures.
    2. Improper fertilizer and pesticide application will affect the quality of the water exiting the bio-retention basins.
    3. Excess lawn watering will affect the quality of the water exiting the bio-retention basins due to increased water runoff that may contain fertilizers and pesticides.
B. Yard Care.
    1. It is recommended to consider routine yard care maintenance that is practical and environmentally sound.
    2. Refer to the U.W. Extension's "Rethinking Yard Care" for additional information.
C. Leaves and Yard Trimmings.
    1. It is recommended that leaves and yard trimmings are properly disposed of.
    2. Refer to the U.W. Extension's "Managing Leaves and Yard Trimmings" for further information.
D. Lawn and Garden Fertilizers.
    1. It is recommended to control fertilizer applications on lawn and gardens so as not to be detrimental to the quality of the water exiting the bio-retention basins.
    2. Refer to the U.W. Extension's "Lawn and Garden Fertilizers" for further information.
E. Lawn and Garden Pesticides.
    1. Lawn and garden pesticides may pollute surface and ground water.
    2. Refer to the U.W. Extension's "Lawn and Garden Pesticides" for further information.
F. Lawn Watering.
    1. Excess lawn watering will wash pollutants into the bio-retention basins.
    2. Refer to the U.W. Extension's "Lawn Watering" for further information.
G. Lawn Weed Control.
    1. Proper turf management will lower the amount of the chemicals that may runoff into the bio-retention basins during rain events.
    2. Refer to the U.W. Extension's "Lawn Weed Control" for further information.

V. References

University of Wisconsin (U.W.) Extension. 1999. Lawn and Garden Fertilizers. Extension Publications GWQ002. 630 West Mifflin St., Madison WI 53703.

University of Wisconsin (U.W.) Extension. 2008. Lawn and Garden Pesticides. Extension Publications GWQ0011. 630 West Mifflin St., Madison WI 53703.

University of Wisconsin (U.W.) Extension. 2008. Lawn and Garden Pesticides. Extension Publications GWQ0011. 630 West Mifflin St., Madison WI 53703.

University of Wisconsin (U.W.) Extension. 2008. Lawn Watering. Extension Publications GWQ0012. 630 West Mifflin St., Madison WI 53703.

University of Wisconsin (U.W.) Extension. 2008. Lawn Weed Control. Extension Publications GWQ0013. 630 West Mifflin St., Madison WI 53703.

University of Wisconsin (U.W.) Extension. 2008. Managing Leaves & Yard Trimmings. Extension Publications GWQ0022. 630 West Mifflin St., Madison WI 53703.

University of Wisconsin (U.W.) Extension. 2008. Rethinking Yard Care. Extension Publications GWQ0009. 630 West Mifflin St., Madison WI 53703.

Wisconsin Administrative Code. General Solid Waste Management Requirements. Chapter NR 500. Revised July, 2015.

EXHIBIT C-3
Catch Basin Operation, Inspection, and Maintenance Report Form

Project: _____

Location: _____

Date: _____

Time: _____

Weather: _____

Inspector: _____

Maintenance Item	Satisfactory / Unsatisfactory	Comments
1. Debris and Sedimentation Accumulation (Monthly)		
1. Clean of sediment and debris (e.g. mulch, leaves, trash, etc.)		
2. No indication of excessive sediment buildup		
3. Other (specify)		
2. Catch Basin Structures and Pipes (Annual, After Major Storms)		
1. Clean of debris and obstructions		
2. Not an excessive sediment buildup in catch basins, manholes, endwalls. Sumps not more than 50% full		
3. No evidence of any blockages		
4. Good condition, no need for repair		
5. No missing grates or covers		
6. No evidence of erosion at or around structures		
7. Other (specify)		

Comments:

Actions to be Taken:

EXHIBIT C-4
Bio-retention Operation, Inspection, and Maintenance Report Form

Project: _____

Location: _____

Date: _____

Time: _____

Weather: _____

Inspector: _____

Maintenance Item	Satisfactory / Unsatisfactory	Comments
1. Debris Cleanout (Monthly)		
1. Basin and contributing areas clean of debris		
2. No dumping of yard wastes into basin		
3. Litter (branches, etc.) has been removed from basin		
4. Other (specify)		
2. Vegetation (Monthly)		
1. Vegetation fertilized per specifications		
2. Vegetation/plant composition per approved plans		
3. No placement of inappropriate plants		
4. Grass height not greater than 6 inches		
5. Plant health		
6. No evidence of erosion		
7. Other (specify)		
3. Dewatering (Monthly, After Major Storms)		
1. Basins dewater between storms		
2. No evidence of permanent standing water		
3. Other (specify)		
4. Integrity of the Bio-Retention Basin Filter Beds (Annual)		
1. Filter beds have not been blocked or filled inappropriately		
2. pH of engineered soil is in range of 5.5 to 8.0		
3. Other (specify)		

Maintenance Item	Satisfactory / Unsatisfactory	Comments
5. Bio-Retention Basin Inlet/Outlet Structures and Endwalls (Annual, After Major Storms)		
1. No excessive sediment accumulation inside structures and/or pipes		
2. No debris accumulation or clogging of structures and pipes		
3. Condition of structures and outlet pipes		
a. No major cracks or displacement		
b. No minor spalling (<1")		
c. N major spalling (exposed rebar)		
d. No joint failures		
e. Water tightness		
f. No missing grates or covers		
4. No evidence of erosion at or around structures/pipes		
5. Other (specify)		

Comments:

_____

_____

_____

_____

_____

_____

Actions to be Taken:

_____

_____

_____

_____

_____

_____

_____

Appendix H

Pick ‘N Save Pond Retrofit Storm Water Management Plan

PICK ‘N SAVE POND RETROFIT
STORM WATER MANAGEMENT PLAN

VILLAGE OF MUKWONAGO
WAUKESHA/ WALWORTH COUNTY, WISCONSIN

APRIL 2, 2019

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RUEKERT/MIELKE
W233 N2080 Ridgeview Parkway
Waukesha, Wisconsin 53188-1020

PICK 'N SAVE POND RETROFIT
STORM WATER MANAGEMENT PLAN

Project Description and Drainage Background:

Pond Basin 19, commonly referred to as the Pick 'n Save Pond, is being modified to improve water quantity and quality in the Village of Mukwonago. The Wisconsin Department of Transportation constructed the basin in 2001 and Waukesha County re-modeled the calculations in 2016 for the CTH NN Reconstruction project. Upgrades to the Pick 'n Save Pond have been planned since completion of the Village of Mukwonago Storm Water Management Plan in 2009. Ruekert & Mielke, Inc. was engaged for the planning and design of the proposed pond improvements. The pond is located north of County Highway NN and east of STH 83 and is in Section 23 SE, T5N, R18E, Waukesha County, Wisconsin.

Approximately 151.3 acres of runoff is conveyed and treated by the Pick 'n Save pond as shown on **Exhibit 1** in **Appendix 1**. To improve the function of the pond, the proposed project entails installing an outlet structure, replacing the outlet pipe and end sections, and raising the top of berm and spillway to improve particulate solids and phosphorus removal within the facility. The proposed pond improvements will capture an additional 9,578 pounds of particulate solids and 22.4 pounds if phosphorus, this would equate to an approximate 1.6% improvement throughout the Village. The complete summary and comparison between the total suspended solids, phosphorus and nitrates removal from the existing and proposed pond conditions can be found on page 5, table 4-6.

This report documents the hydrologic calculations and describes the storm water management for the proposed improvements to the Pick 'n Save Pond in the Village of Mukwonago. The proposed pond improvements will be designed to meet the Village's storm water quantity and quality requirements.

Property Owner:
Village of Mukwonago
440 River Crest Court
Mukwonago, WI 53149

Design Engineer:
Ruekert & Mielke, Inc.
W233 N2080 Ridgeview Pkwy
Waukesha, WI 53188

Planning Goals

Storm Water Quantity and Quality:

1. Meet Village of Mukwonago Storm Water Management & Erosion Control Ordinance.
2. Meet the required removal of 80% of the Total Suspended Solids (TSS) and Phosphorus generated by the average annual rainfall, per Village of Mukwonago Storm Water Management & Erosion Control Ordinance.
3. All storm water management facilities shall have the capacity to safely handle the calculated peak flow rate for a 100-year 24-hour design storm.
4. Design the post-construction facilities to minimize erosion and downstream drainage issues.

Methodology/ Hydrology:

Runoff volume and flow rates were calculated for the 1, 2, 10, and 100-year, 24-hour rainfall events using SCS (NRCS) Technical Release No. 55 methodology. Local rainfall information was based on NOAA Atlas 14, Volume 8 Precipitation Frequency data for Waukesha County. The Hydraflow Hydrographs watershed modeling program was used to complete the hydrology detention basin routing calculations. The drainage areas were delineated based on field survey and Waukesha & Walworth County topography.

Rainfall Data:

Recurrence Interval	Rainfall Depth
1 Year	2.40”
2 Year	2.70”
10 Year	3.81”
100 Year	6.18”

Soils Information:

The Natural Resources Conservation Service Soil Survey identifies the soils as having a hydrologic soil group of type B or C, with the primary soil types listed as Casco loam, Fox loam, Miami loam and sandy and gravelly land. A copy of the Web Soil Survey for the area is attached in **Appendix 3**.

Project Conditions:

While the current conditions of the Pick ‘n Save Pond have some water quality benefits, the outlet configuration does not allow for the pond to maximize its pollutant effectiveness. The current outlet for the Pick ‘n Save pond is a 27-inch pipe and an emergency spillway. With the extensive use of the emergency spillway from a 10-year storm event and greater, there has been an on-going issue of erosion on the storm water facility’s embankment that drains towards the Vernon Marsh.

The proposed improvements include removal of the existing outfall system and replacing with an 84-inch diameter outlet structure and 48-inch storm sewer pipe. Additionally, antiseep collars will be installed around the proposed outlet pipe. The top of berm and emergency spillway will be raised approximately 4-feet to significantly increase the capacity of the pond. These proposed improvements will achieve a greater pollutant reduction and minimize erosion.

Peak flows discharging from the regional storm water facility are shown below and comply with NR216 & Village of Mukwonago Storm Water Management & Erosion Control Ordinance.

	1-year	2-year	10-year	100-year
Existing Pond Condition	12.40cfs	17.90cfs	52.10cfs	195.67cfs
	1-year	2-year	10-year	100-year
Proposed Pond Condition	2.67cfs	3.25cfs	35.21cfs	144.78cfs

Peak flows from the drainage basins are depicted in the table below. The summary and comparison between the peak flows and volumes during the critical duration period for the existing and proposed pond conditions are contained in **Appendix** 2 and are depicted below.

Table 1: Watershed Data Summary Table

Basin	Area (acres)	Composite Curve Number	Time of Concentration (Min.)	1-YR, 24-HR (cfs)	2-YR, 24-HR (cfs)	10-YR, 24-HR (cfs)	100-YR, 24-HR (cfs)
Area 1 – STH 83	12.40	90	27.00	16.24	19.25	30.52	54.57
Area 2 – Res./Condo	12.80	90	40.10	13.83	16.40	26.05	46.68
Area 3 – Med. Dens. Res.	40.00	72	71.40	7.07	10.11	24.02	60.58
Area 4 – School	29.80	71	62.80	5.24	7.65	18.82	48.62
Area 5 - Industrial	5.10	91	41.90	5.51	6.49	10.15	17.95
Area 6 - Commercial	18.60	85	48.80	12.89	15.84	27.29	52.94
Area 7 – CTH NN	3.80	86	14.70	5.56	6.76	11.34	21.36
Area 8 – Condos, Pond	12.00	93	12.60	28.63	33.21	50.06	85.54
Area 9 – Field Park	16.80	61	66.30	0.59	1.14	4.66	17.28

Table 2: Existing Basin Inflow, Outflow & Storage Data Summary Table

Existing Pond (see attached hydrographs)					
Design Storm	Peak Inflow	Maximum Outflow Rate	Max. Water Elevation	Storage Volume at Max. Elev.	Outflow Control Structures*
1-yr./ 24 hr. peak	68.07 cfs	12.40 cfs	817.16 ft	216,628 cuft	#1
2-yr./ 24 hr. peak	82.14 cfs	17.90 cfs	817.61 ft	266,802 cuft	#1
10-yr./ 24 hr. peak	139.30 cfs	52.10 cfs	819.14 ft	440,145 cuft	#1 & #2
100-yr./ 24 hr. peak	276.34 cfs	195.67 cfs	820.99 ft	663,007 cuft	#1 & #2

***The controlling elements are summarized below:**

#1 = 27" culvert structure

#2 = Emergency spillway, Elevation = 818.50

Table 3: Design Basin Inflow, Outflow & Storage Data Summary Table

Proposed Pond (see attached hydrographs)					
Design Storm	Peak Inflow	Maximum Outflow Rate	Max. Water Elevation	Storage Volume at Max. Elev.	Outflow Control Structures*
1-yr./ 24 hr. peak	68.07 cfs	2.670 cfs	818.65 ft	347,139 cuft	#1 & #2
2-yr./ 24 hr. peak	82.14 cfs	3.245 cfs	819.42 ft	427,772 cuft	#1 & #2
10-yr./ 24 hr. peak	139.30 cfs	35.21 cfs	820.67 ft	564,535 cuft	#1, #2 & #3
100-yr./ 24 hr. peak	276.34 cfs	144.78 cfs	823.03 ft	837,449 cuft	#1, #2 & #3

***The controlling elements are summarized below:**

#1 = 4" orifice, Elevation = 815.00

#2 = 8" orifice, Elevation = 817.00

#3 = 84" diameter riser, Elevation = 820.00

#4 = Emergency spillway, Elevation = 823.50

Water Quality Analysis:

WinSLAMM version 10.4.1 was utilized to evaluate the performance of the existing and proposed storm water facility by calculating the average annual TSS and Phosphorus reductions. The land use used for the storm water facility modeling are delineated on **Exhibit 2** in **Appendix 4** and the input data and output summary are attached in **Appendix 5 & 6**. In developing the model, standard parameter files were used in accordance with DNR guidance. Results of the model runs are as follows:

Table 4: Water Quality Summary Table – TSS Reduction

SLAMM V10.4.1 summary results			
Area	Total TSS (LBS) No Controls	Total TSS (LBS) With Controls	TSS Reduction (%)
Pick 'n Save Pond – Existing Condition	47,742	16,074	66.33
Pick 'n Save Pond – Proposed Condition	47,742	6,496	86.39

Table 5: Water Quality Summary Table – Phosphorus Reduction

SLAMM V10.4.1 summary results			
Area	Total Phosphorus (LBS) No Controls	Total Phosphorus (LBS) With Controls	Phosphorus Reduction (%)
Pick 'n Save Pond – Existing Condition	113.6	39.24	65.46
Pick 'n Save Pond – Proposed Condition	113.6	16.81	85.20

Table 6: Water Quality Summary Table – Nitrate Reduction

SLAMM V10.4.1 summary results			
Area	Total Nitrate (LBS) No Controls	Total Nitrate (LBS) With Controls	Nitrate Reduction (%)
Pick 'n Save Pond – Existing Condition	146.9	147.0	-0.11%
Pick 'n Save Pond – Proposed Condition	146.9	144.7	1.48

The proposed improvements to the regional storm water facility provides storm water quality that exceeds the Village's ordinance.

Post-Construction Maintenance:

The maintenance plan for the storm water detention facilities is included as **Appendix 7**.

Wetlands:

The DNR website was been reviewed to determine whether any known wetlands or wetland indictors were located within the project area. In discussions with Wisconsin Department of Natural Resources' Representatives, they determined that the Pick N' Save sediment forebays are considered artificial wetlands. Therefore, no regulated wetlands will be altered or disturbed during construction.

APPENDIX 1

2019 DRAINAGE MAP

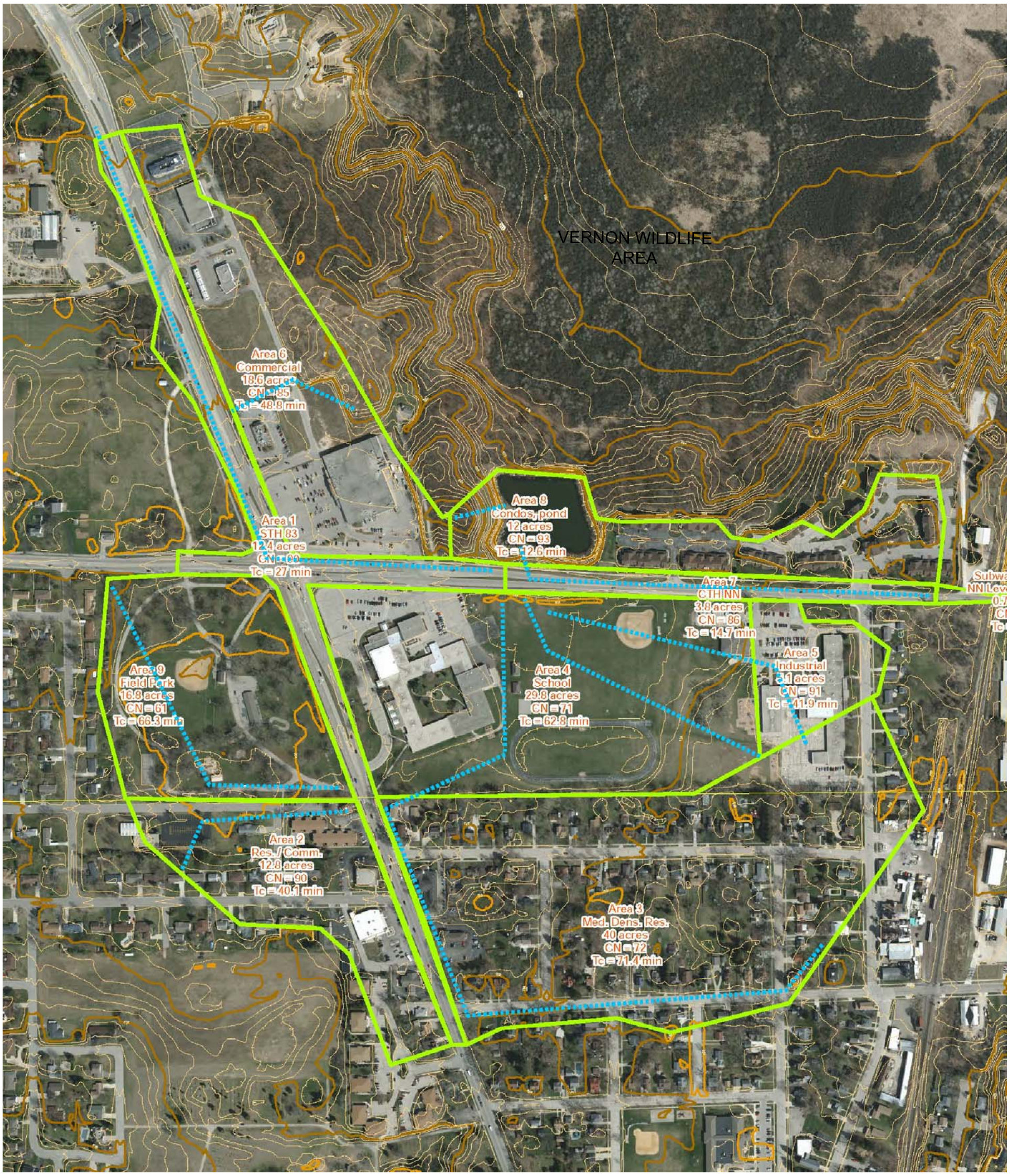
Mar 25, 2019 10:11am PLOTTED BY: MMichalski SAVED BY: MMichalski
G:\C3D_2018\12_Village of Mukwonago\10086_PICK N SAVE POND\dwg\Zcex County Drainage Map.dwg Layout1
IMAGES: G:\SYM\RM SQUARE_Full Color-Print.jpg; G:\C3D_2018\12_Village of Mukwonago\10086_PICK N SAVE POND\dwg\Waukesha County Drainage Exhibit-02.jpg;
XREFS: N:\CADASTRL\WAUK_CO\20081231_DWG\0518.dwg

RM1117LB

EXHIBIT #1

2019 DRAINAGE MAP

VILLAGE OF MUKWONAGO
WAUKESHA/ WALWORTH COUNTY, WISCONSIN



LEGEND

APPROXIMATE SUBWATERSHED BOUNDARY

Tc PATHWAY

N
W E
S

0 100 200 400 800

SCALE IN FEET

DATE: FEBRUARY, 2019

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The Village of Mukwonago
Where life, leisure and business thrive.

SOURCE: WAUKESHA COUNTY CTH NN RECONSTRUCTION STORM WATER MANAGEMENT PLAN DATED JUNE 22, 2016
BASEMAP SOURCE: WAUKESHA COUNTY

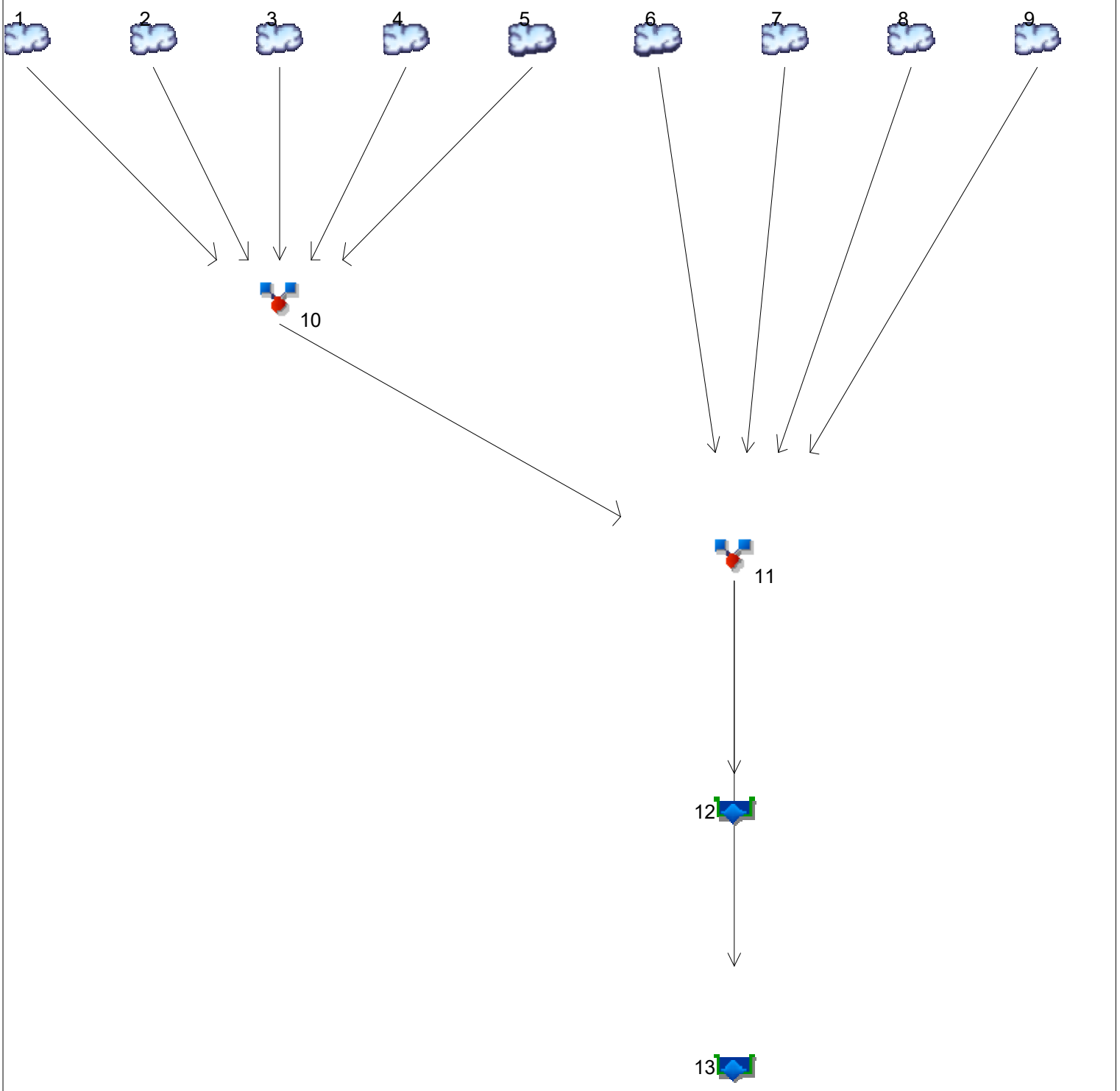
Ruekert • Mielk
www.ruekertmielke.com

APPENDIX 2

2019 DRAINAGE CONDTIONS HYDROLOGIC & HYDRAULIC DESIGN COMPUTATIONS

Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020



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IDF Report 61

Hydrograph Return Period Recap

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	------	16.24	19.25	-------	-------	30.52	-------	-------	54.57	Area 1 - STH 83
2	SCS Runoff	------	13.83	16.40	-------	-------	26.05	-------	-------	46.68	Area 2 - Res./Condo
3	SCS Runoff	------	7.066	10.11	-------	-------	24.02	-------	-------	60.58	Area 3 - Med. Dens. Res.
4	SCS Runoff	------	5.242	7.646	-------	-------	18.82	-------	-------	48.62	Area 4 - School
5	SCS Runoff	------	5.507	6.489	-------	-------	10.15	-------	-------	17.95	Area 5 - Industrial
6	SCS Runoff	------	12.89	15.84	-------	-------	27.29	-------	-------	52.94	Area 6 - Commercial
7	SCS Runoff	------	5.563	6.757	-------	-------	11.34	-------	-------	21.36	Area 7 - CTH NN
8	SCS Runoff	------	28.63	33.21	-------	-------	50.06	-------	-------	85.54	Area 8 - Condos, Pond
9	SCS Runoff	------	0.593	1.143	-------	-------	4.664	-------	-------	17.28	Area 9 - Field Park
10	Combine	1, 2, 3, 4, 5,	40.50	50.14	-------	-------	90.95	-------	-------	190.17	Combine #1
11	Combine	6, 7, 8, 9, 10	68.07	82.14	-------	-------	139.30	-------	-------	276.34	Combine #2
12	Reservoir	11	12.40	17.90	-------	-------	52.10	-------	-------	195.67	Existing Pond
13	Reservoir	11	2.670	3.245	-------	-------	35.21	-------	-------	144.78	Proposed Pond

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

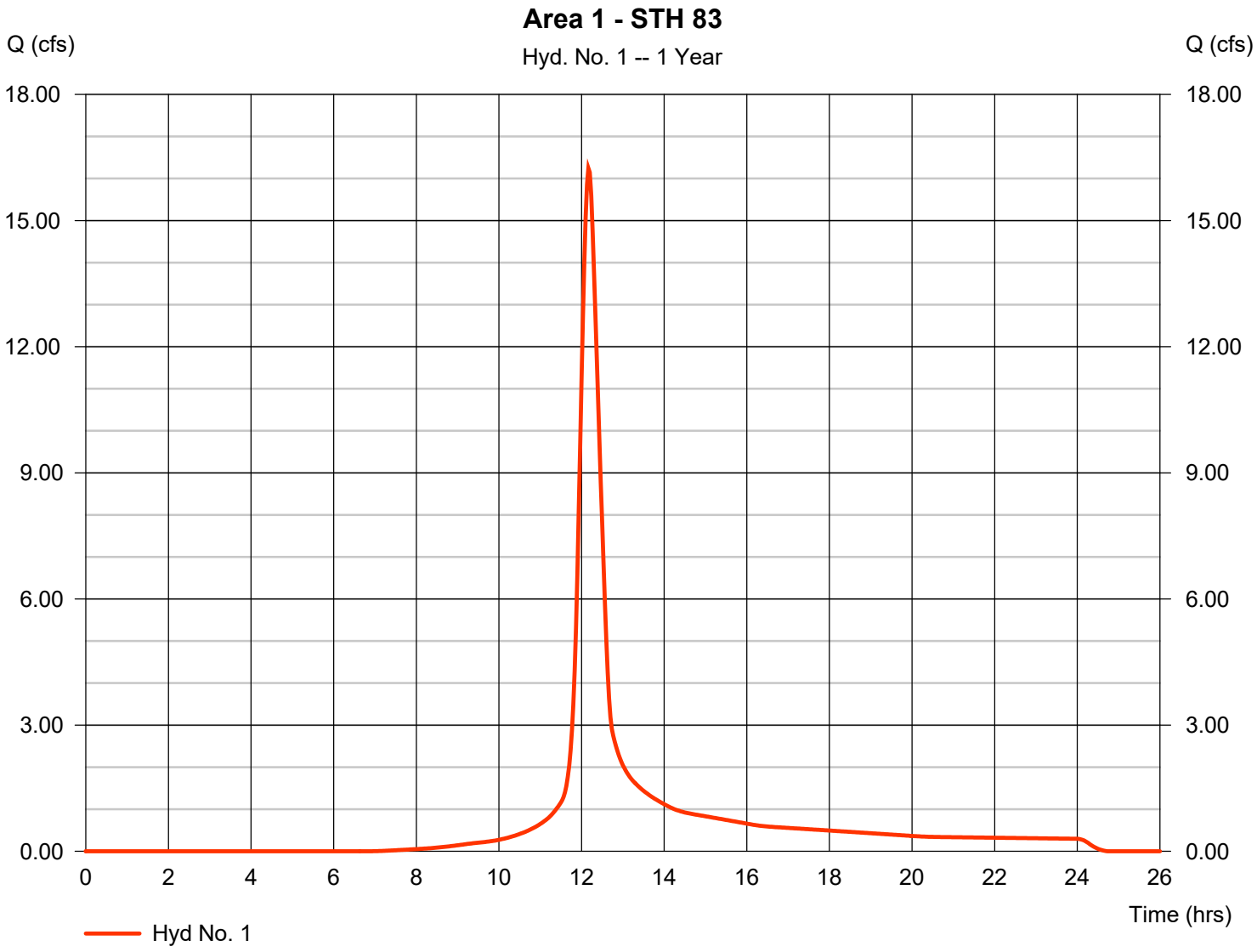
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	16.24	2	730	64,909	------	------	------	Area 1 - STH 83
2	SCS Runoff	13.83	2	736	67,003	------	------	------	Area 2 - Res./Condo
3	SCS Runoff	7.066	2	762	69,725	------	------	------	Area 3 - Med. Dens. Res.
4	SCS Runoff	5.242	2	756	48,146	------	------	------	Area 4 - School
5	SCS Runoff	5.507	2	738	28,405	------	------	------	Area 5 - Industrial
6	SCS Runoff	12.89	2	744	74,226	------	------	------	Area 6 - Commercial
7	SCS Runoff	5.563	2	722	15,632	------	------	------	Area 7 - CTH NN
8	SCS Runoff	28.63	2	720	75,714	------	------	------	Area 8 - Condos, Pond
9	SCS Runoff	0.593	2	782	10,122	------	------	------	Area 9 - Field Park
10	Combine	40.50	2	736	278,188	1, 2, 3, 4, 5,	------	------	Combine #1
11	Combine	68.07	2	724	453,881	6, 7, 8, 9, 10	------	------	Combine #2
12	Reservoir	12.40	2	822	450,234	11	817.16	216,628	Existing Pond
13	Reservoir	2.670	2	1394	340,769	11	818.65	347,139	Proposed Pond

Hydrograph Report

Hyd. No. 1

Area 1 - STH 83

Hydrograph type	=	SCS Runoff	Peak discharge	=	16.24 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.17 hrs
Time interval	=	2 min	Hyd. volume	=	64,909 cuft
Drainage area	=	12.400 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	27.00 min
Total precip.	=	2.40 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

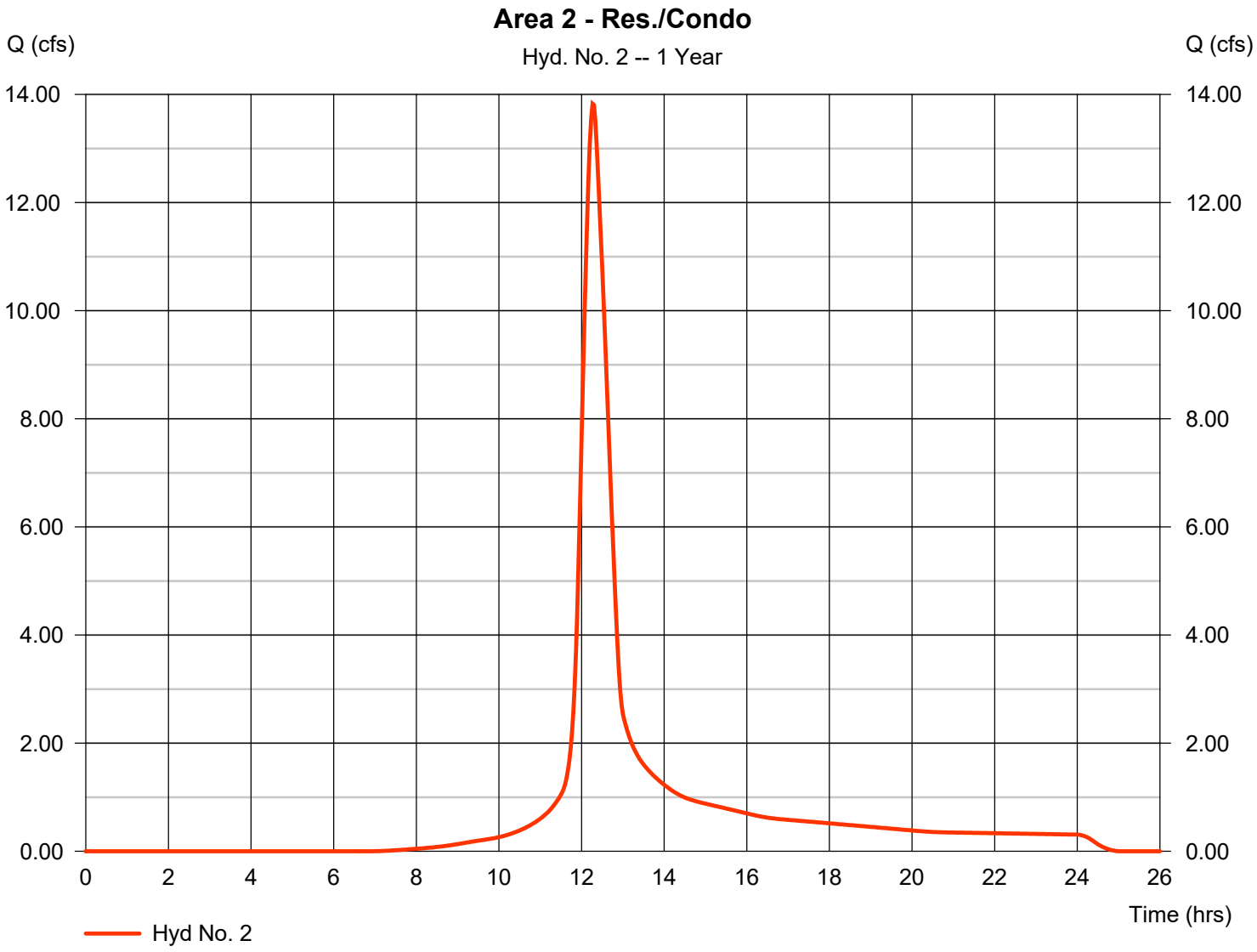


Hydrograph Report

Hyd. No. 2

Area 2 - Res./Condo

Hydrograph type	= SCS Runoff	Peak discharge	= 13.83 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.27 hrs
Time interval	= 2 min	Hyd. volume	= 67,003 cuft
Drainage area	= 12.800 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 40.10 min
Total precip.	= 2.40 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

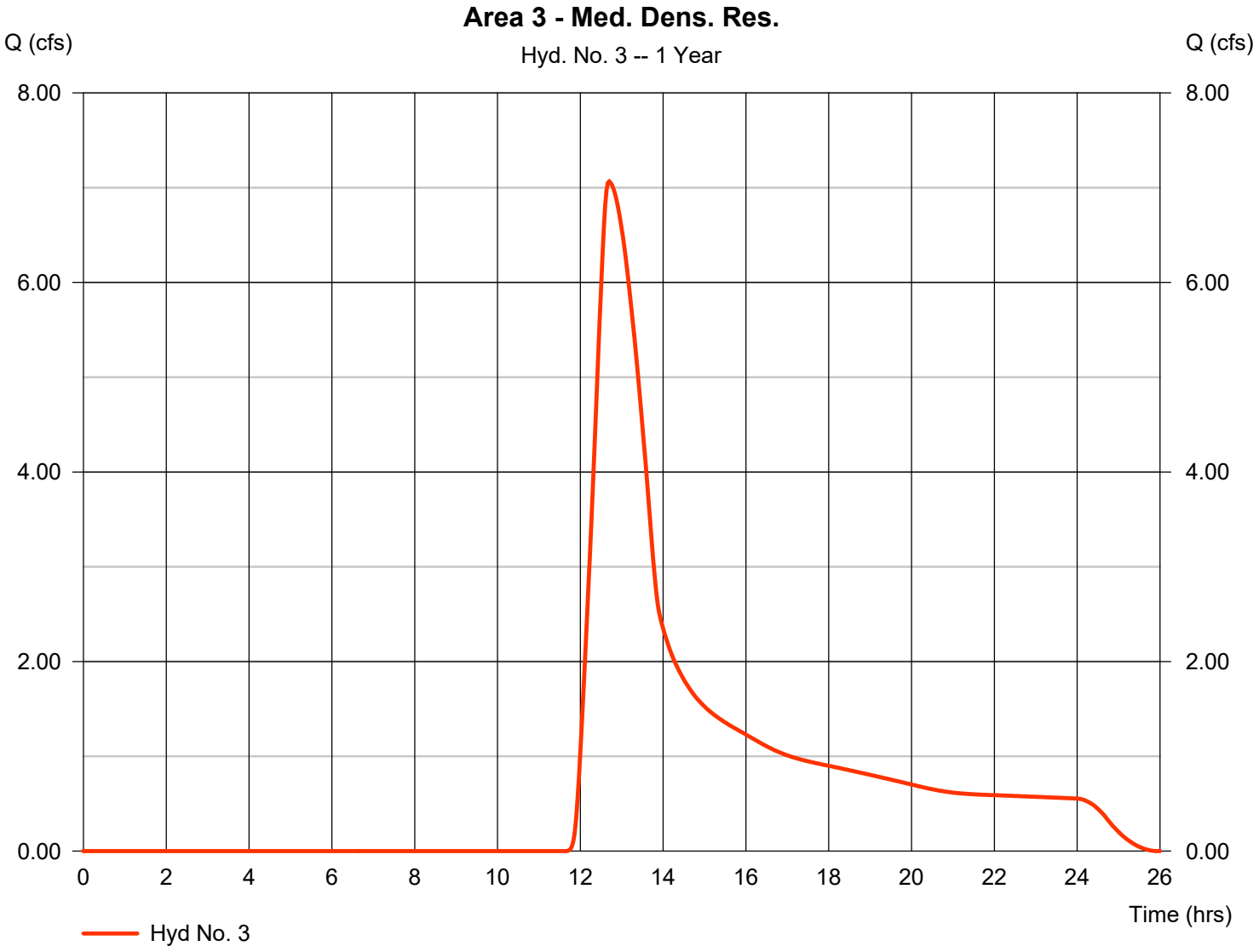


Hydrograph Report

Hyd. No. 3

Area 3 - Med. Dens. Res.

Hydrograph type	= SCS Runoff	Peak discharge	= 7.066 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.70 hrs
Time interval	= 2 min	Hyd. volume	= 69,725 cuft
Drainage area	= 40.000 ac	Curve number	= 72
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 71.40 min
Total precip.	= 2.40 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

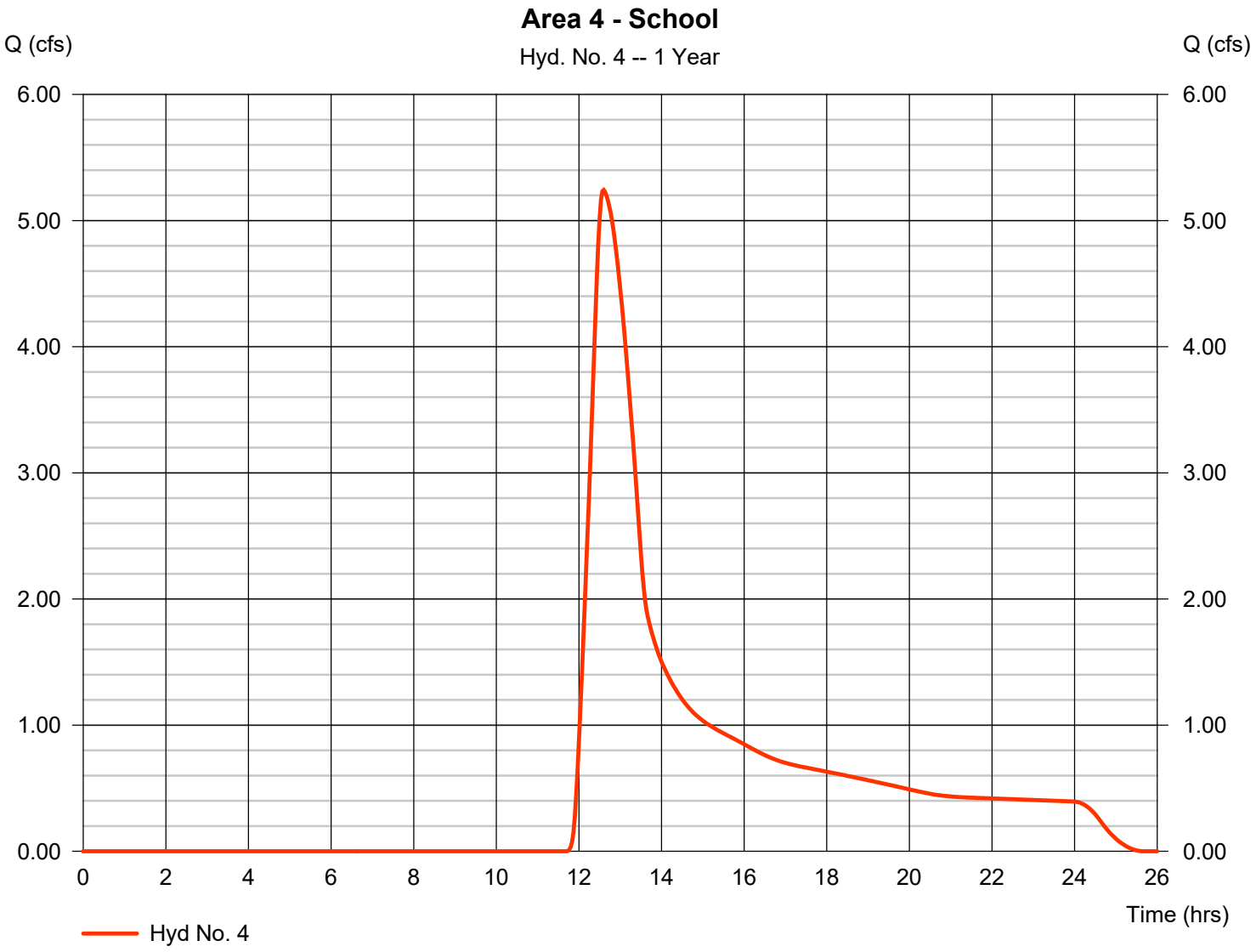


Hydrograph Report

Hyd. No. 4

Area 4 - School

Hydrograph type	=	SCS Runoff	Peak discharge	=	5.242 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.60 hrs
Time interval	=	2 min	Hyd. volume	=	48,146 cuft
Drainage area	=	29.800 ac	Curve number	=	71
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	62.80 min
Total precip.	=	2.40 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

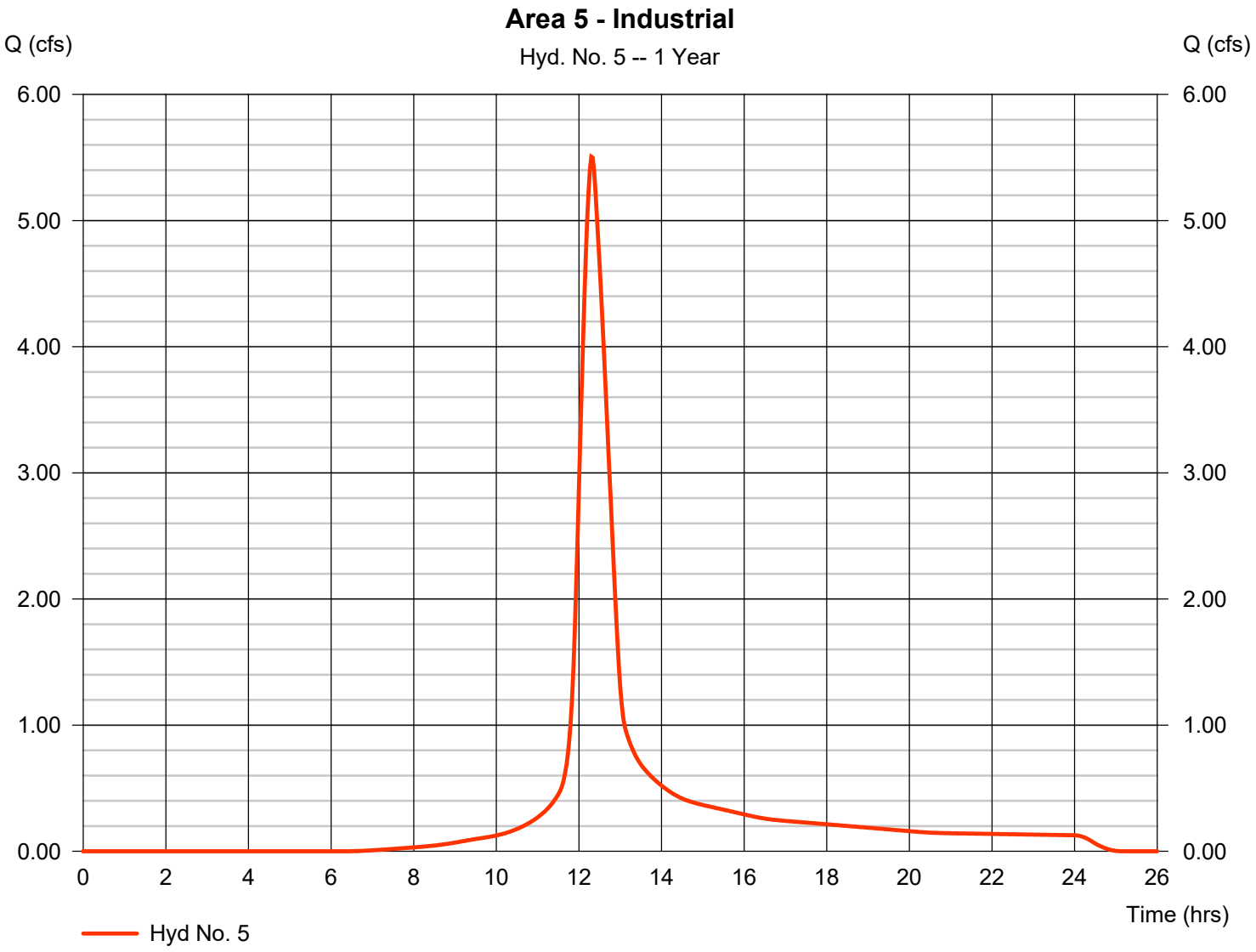


Hydrograph Report

Hyd. No. 5

Area 5 - Industrial

Hydrograph type	=	SCS Runoff	Peak discharge	=	5.507 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.30 hrs
Time interval	=	2 min	Hyd. volume	=	28,405 cuft
Drainage area	=	5.100 ac	Curve number	=	91
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	41.90 min
Total precip.	=	2.40 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

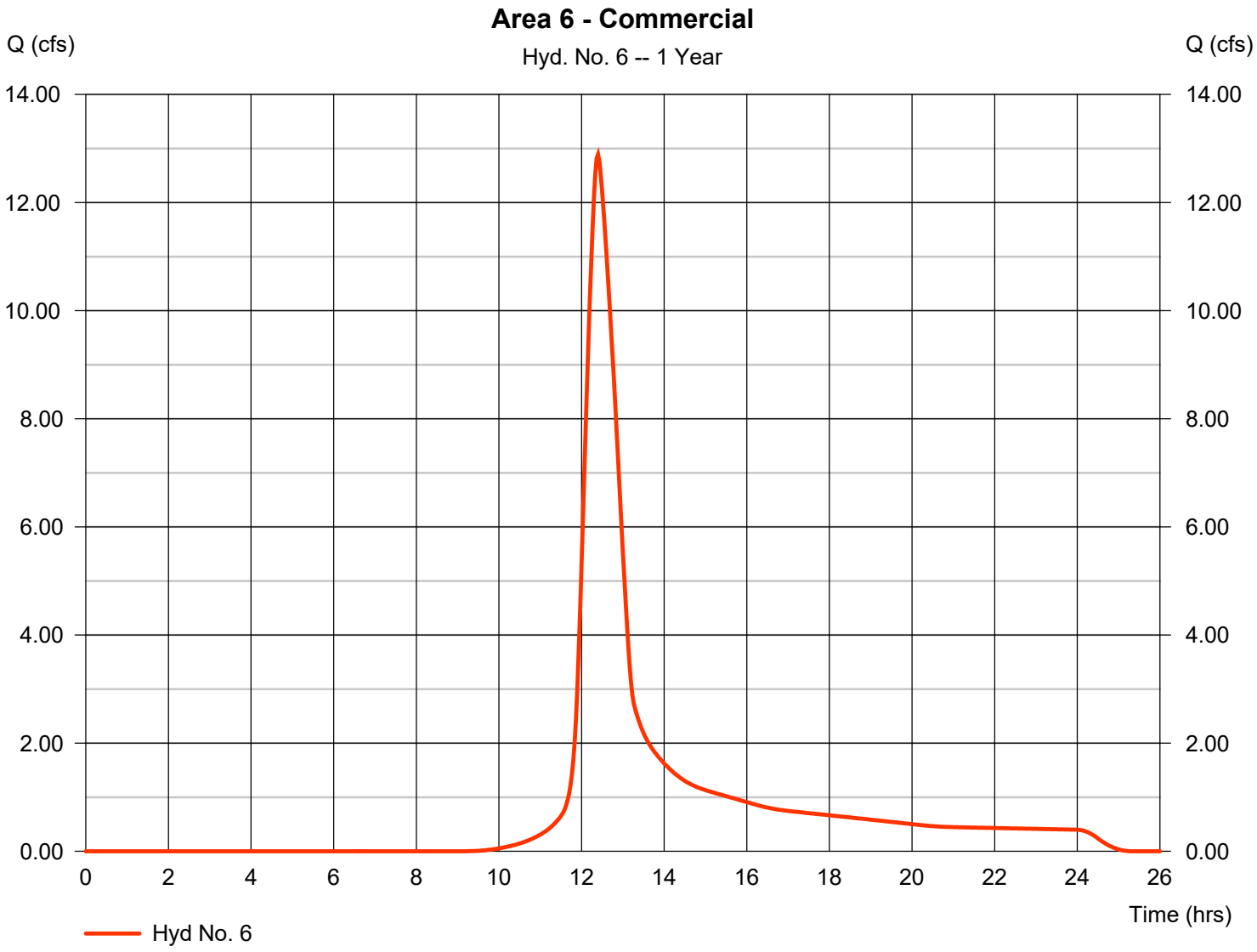


Hydrograph Report

Hyd. No. 6

Area 6 - Commercial

Hydrograph type	= SCS Runoff	Peak discharge	= 12.89 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.40 hrs
Time interval	= 2 min	Hyd. volume	= 74,226 cuft
Drainage area	= 18.600 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 48.80 min
Total precip.	= 2.40 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

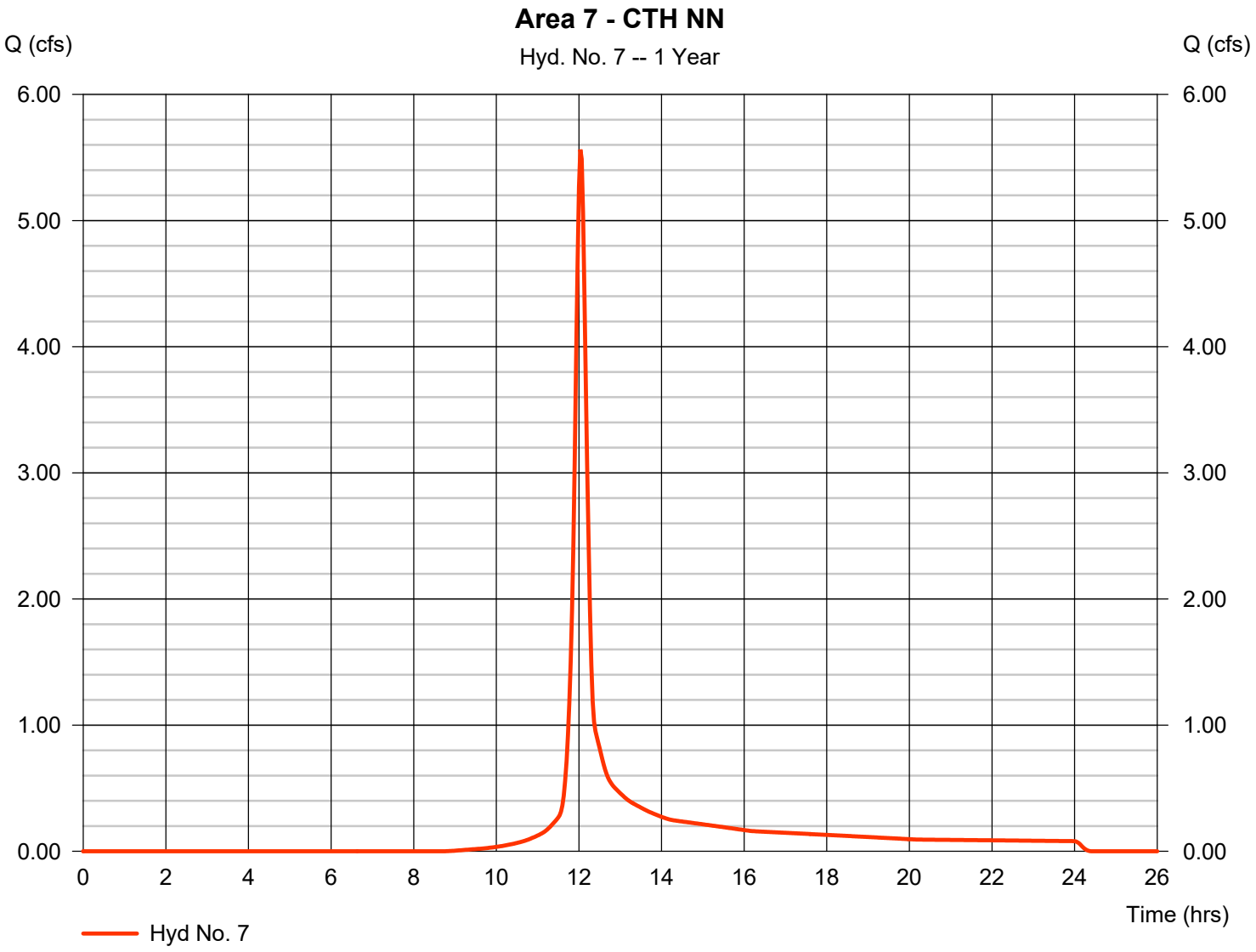


Hydrograph Report

Hyd. No. 7

Area 7 - CTH NN

Hydrograph type	=	SCS Runoff	Peak discharge	=	5.563 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	15,632 cuft
Drainage area	=	3.800 ac	Curve number	=	86
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.70 min
Total precip.	=	2.40 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

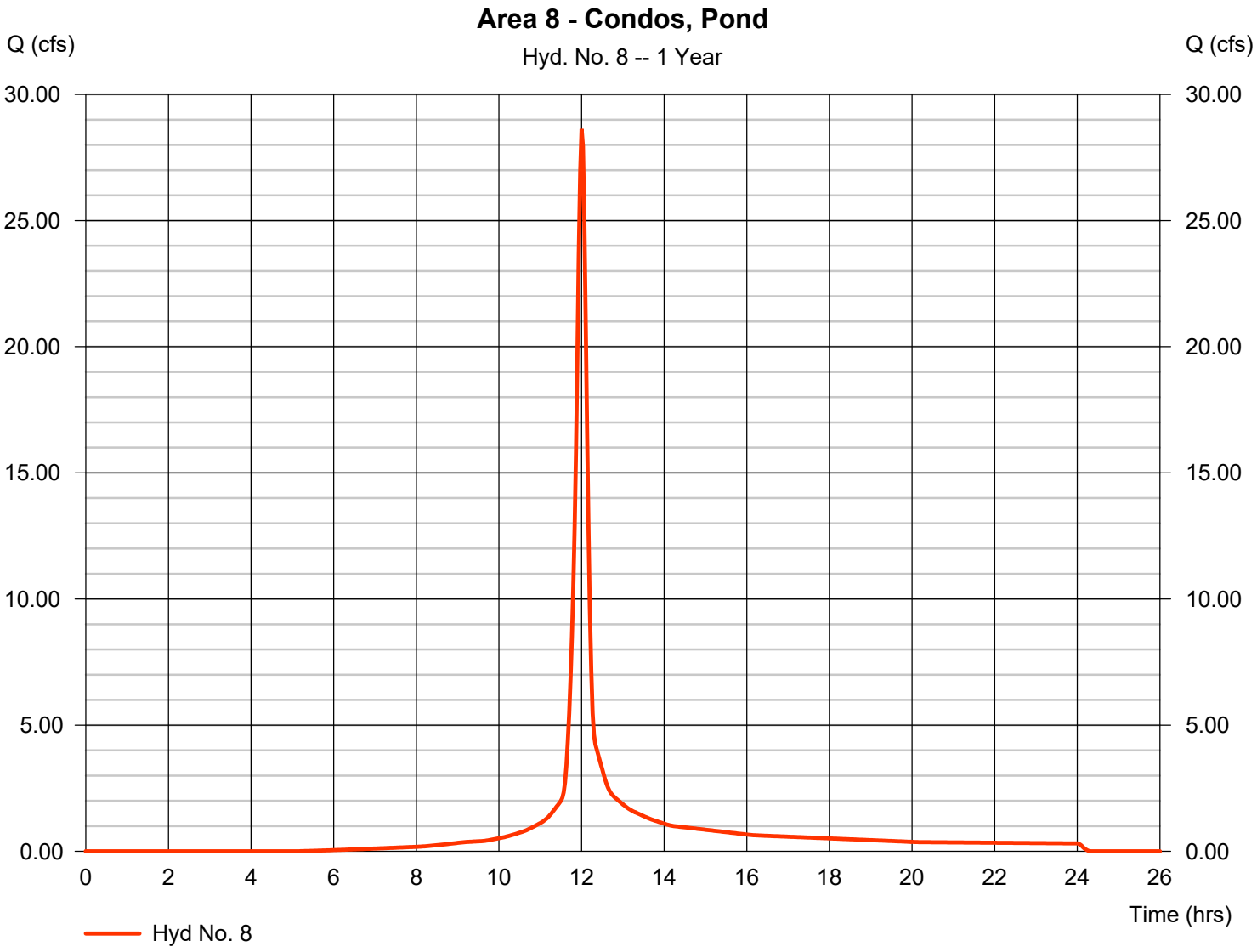


Hydrograph Report

Hyd. No. 8

Area 8 - Condos, Pond

Hydrograph type	= SCS Runoff	Peak discharge	= 28.63 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.00 hrs
Time interval	= 2 min	Hyd. volume	= 75,714 cuft
Drainage area	= 12.000 ac	Curve number	= 93
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.60 min
Total precip.	= 2.40 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

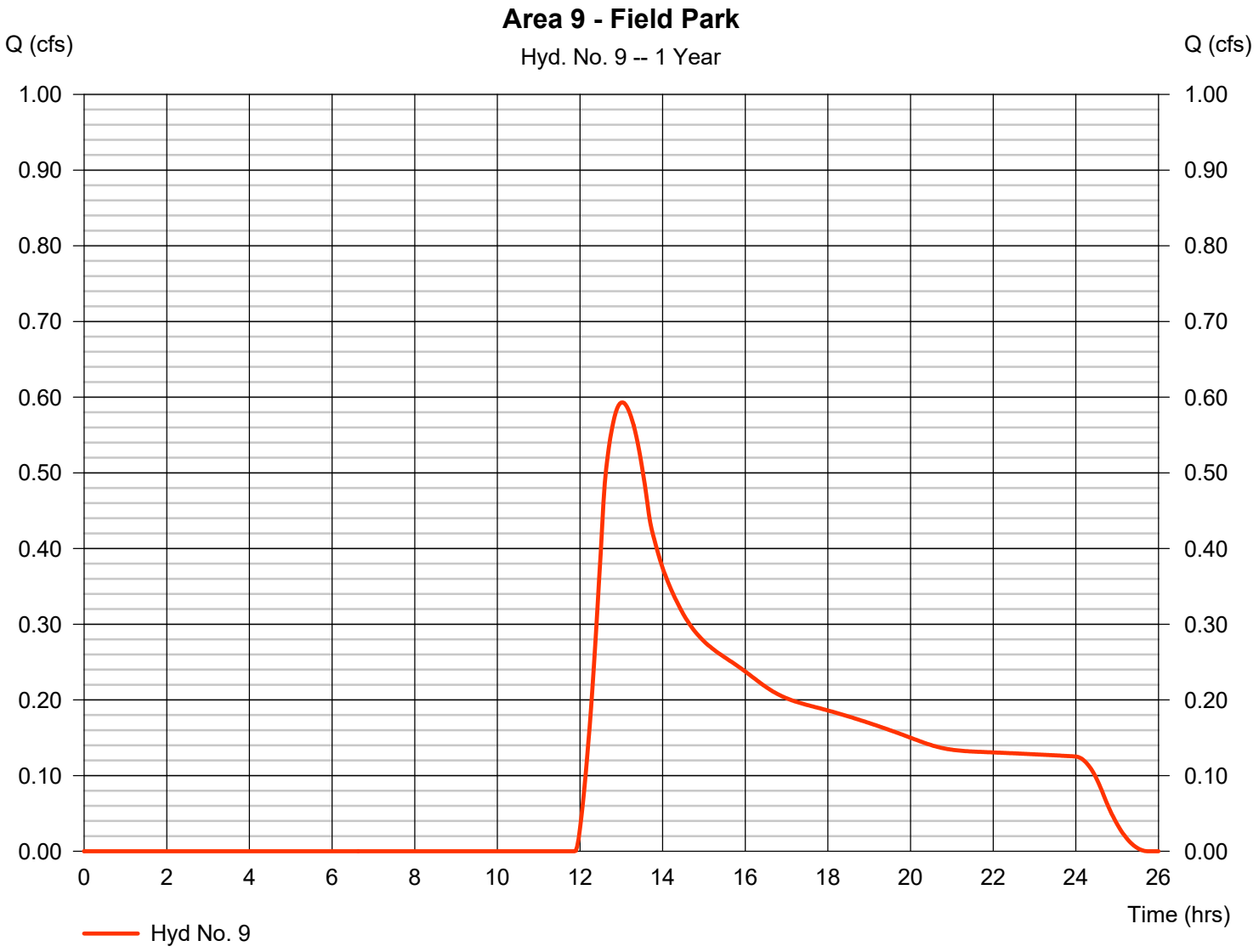


Hydrograph Report

Hyd. No. 9

Area 9 - Field Park

Hydrograph type	= SCS Runoff	Peak discharge	= 0.593 cfs
Storm frequency	= 1 yrs	Time to peak	= 13.03 hrs
Time interval	= 2 min	Hyd. volume	= 10,122 cuft
Drainage area	= 16.800 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 66.30 min
Total precip.	= 2.40 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

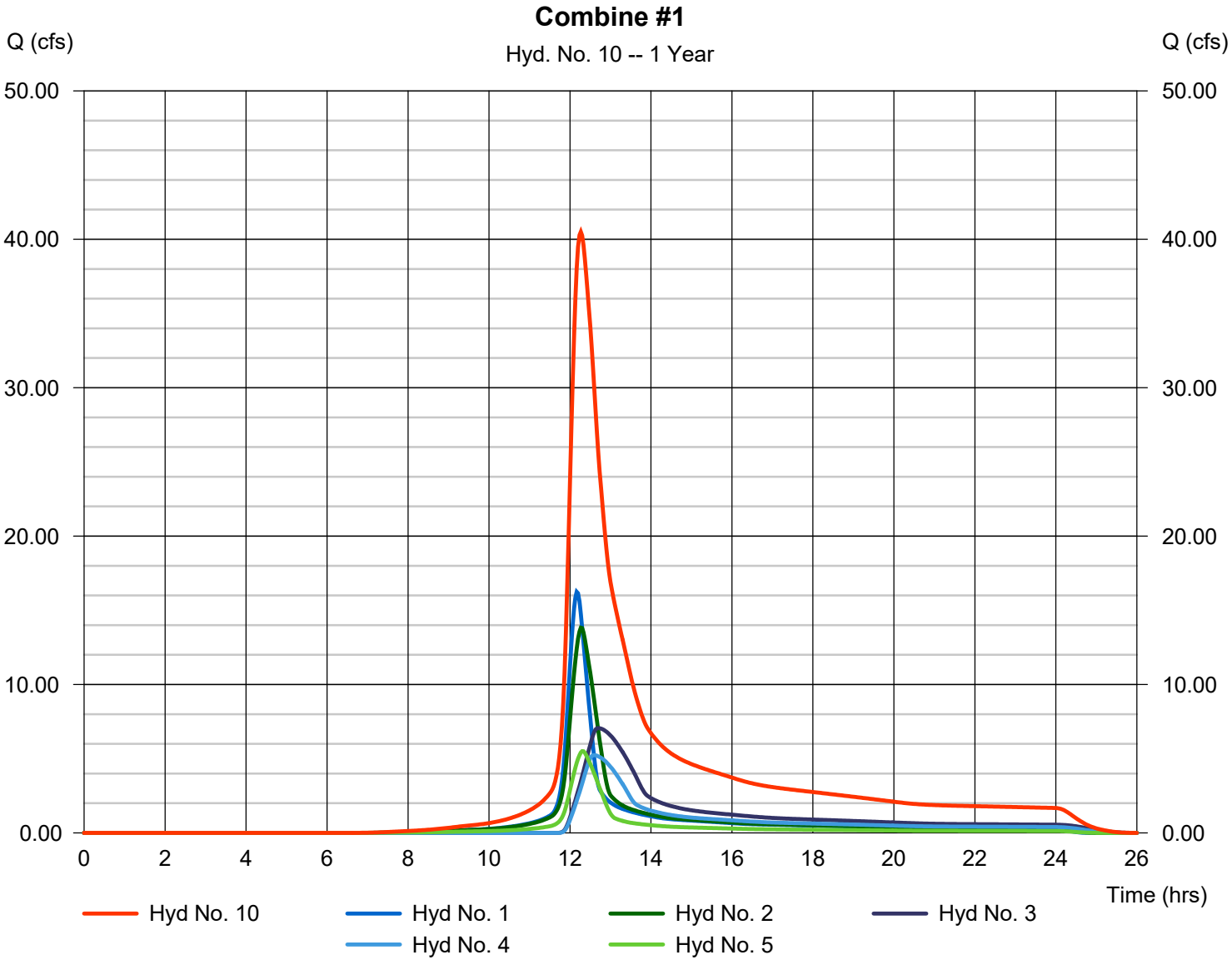


Hydrograph Report

Hyd. No. 10

Combine #1

Hydrograph type	=	Combine	Peak discharge	=	40.50 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.27 hrs
Time interval	=	2 min	Hyd. volume	=	278,188 cuft
Inflow hyds.	=	1, 2, 3, 4, 5	Contrib. drain. area	=	100.100 ac

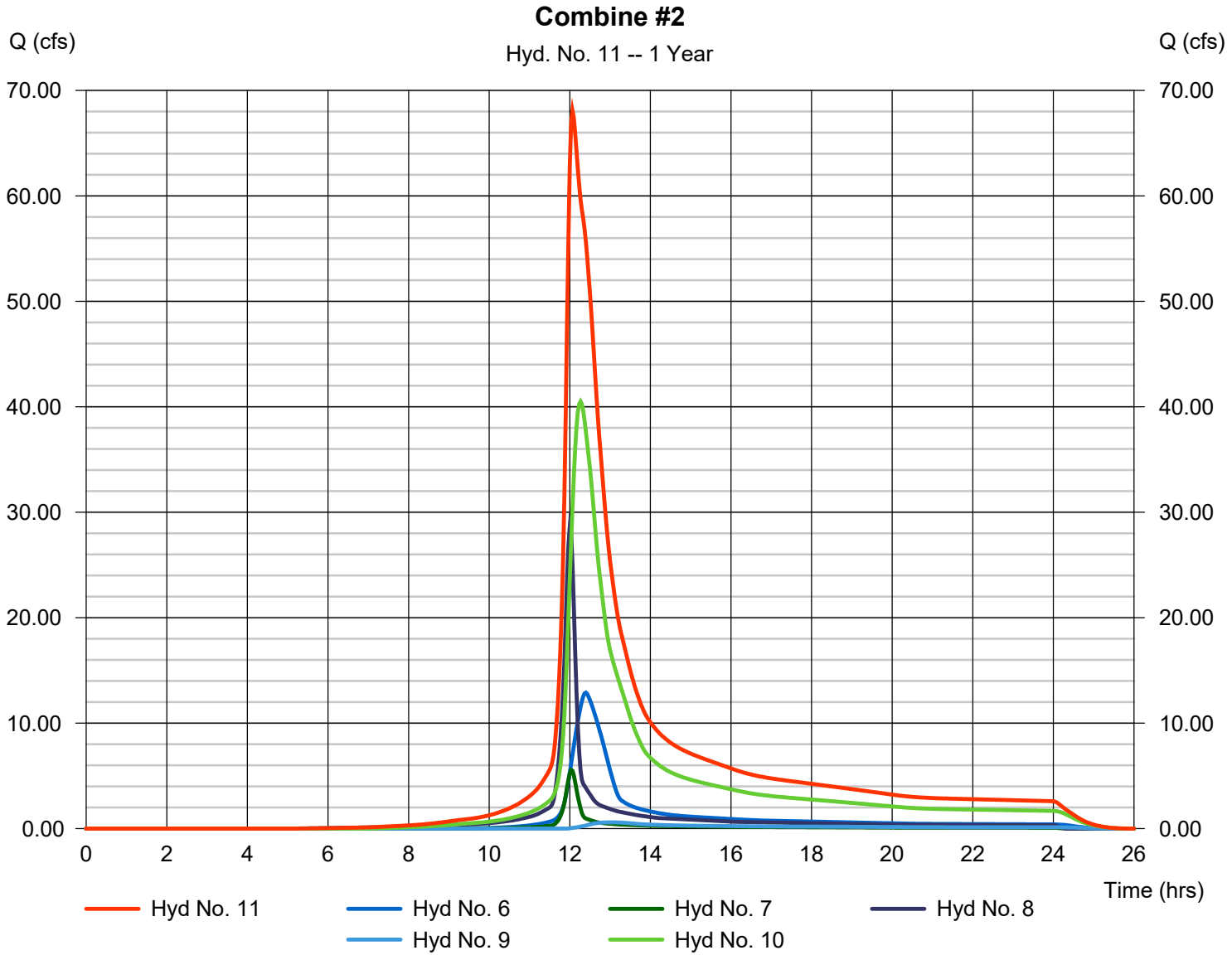


Hydrograph Report

Hyd. No. 11

Combine #2

Hydrograph type	= Combine	Peak discharge	= 68.07 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 453,881 cuft
Inflow hyds.	= 6, 7, 8, 9, 10	Contrib. drain. area	= 51.200 ac



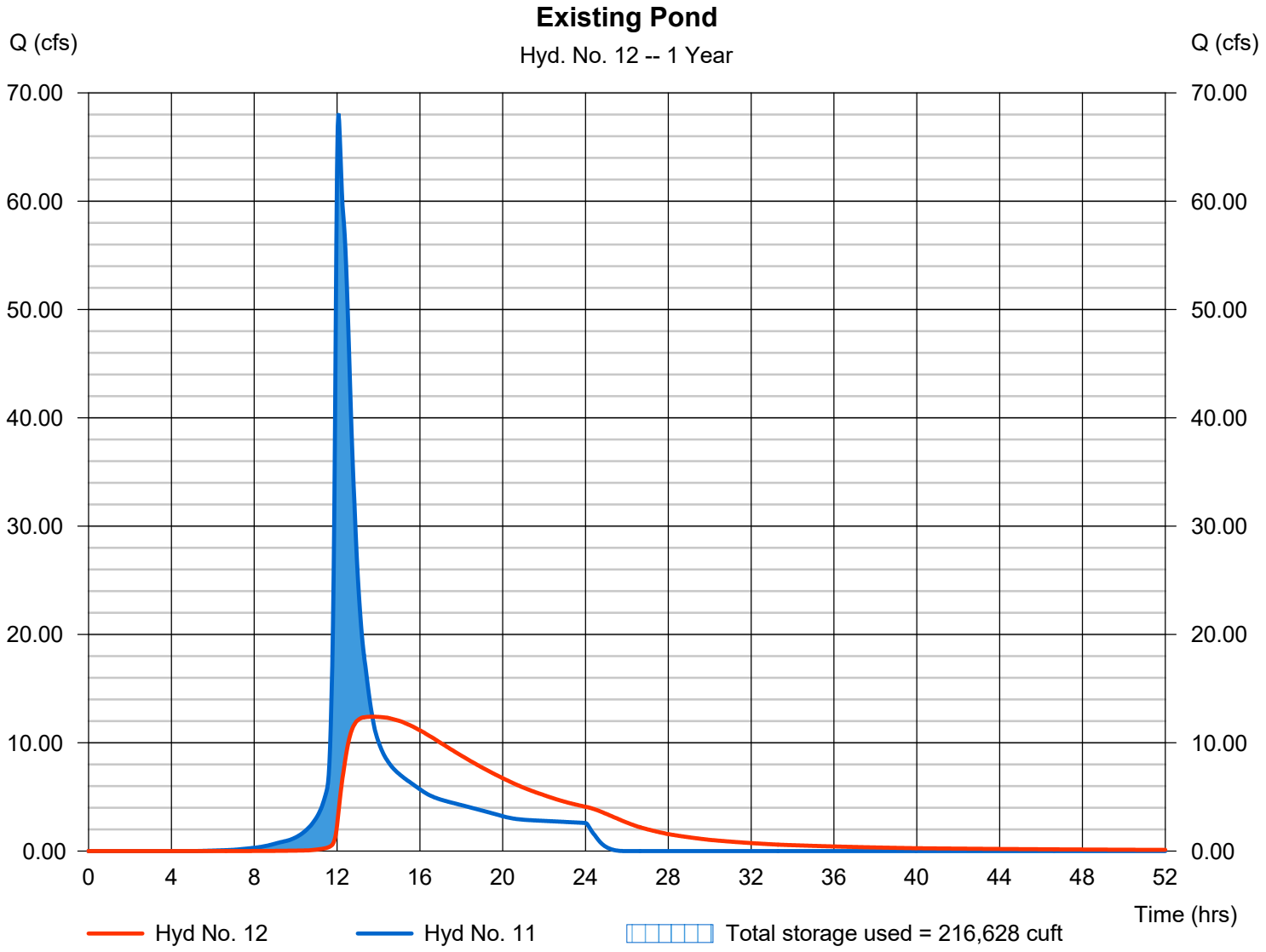
Hydrograph Report

Hyd. No. 12

Existing Pond

Hydrograph type	=	Reservoir	Peak discharge	=	12.40 cfs
Storm frequency	=	1 yrs	Time to peak	=	13.70 hrs
Time interval	=	2 min	Hyd. volume	=	450,234 cuft
Inflow hyd. No.	=	11 - Combine #2	Max. Elevation	=	817.16 ft
Reservoir name	=	Existing Pond Condition	Max. Storage	=	216,628 cuft

Storage Indication method used.



Pond Report

Pond No. 1 - Existing Pond Condition

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 815.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	815.00	91,120	0	0
1.00	816.00	99,980	95,506	95,506
2.00	817.00	107,819	103,865	199,371
3.00	818.00	112,259	110,020	309,391
4.00	819.00	116,312	114,268	423,659
5.00	820.00	120,194	118,236	541,895
6.00	821.00	123,987	122,073	663,969
7.00	822.00	127,121	125,538	789,507

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 27.00	0.00	0.00	0.00
Span (in)	= 27.00	0.00	0.00	0.00
No. Barrels	= 1	0	0	0
Invert El. (ft)	= 815.00	0.00	0.00	0.00
Length (ft)	= 65.00	0.00	0.00	0.00
Slope (%)	= 0.50	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

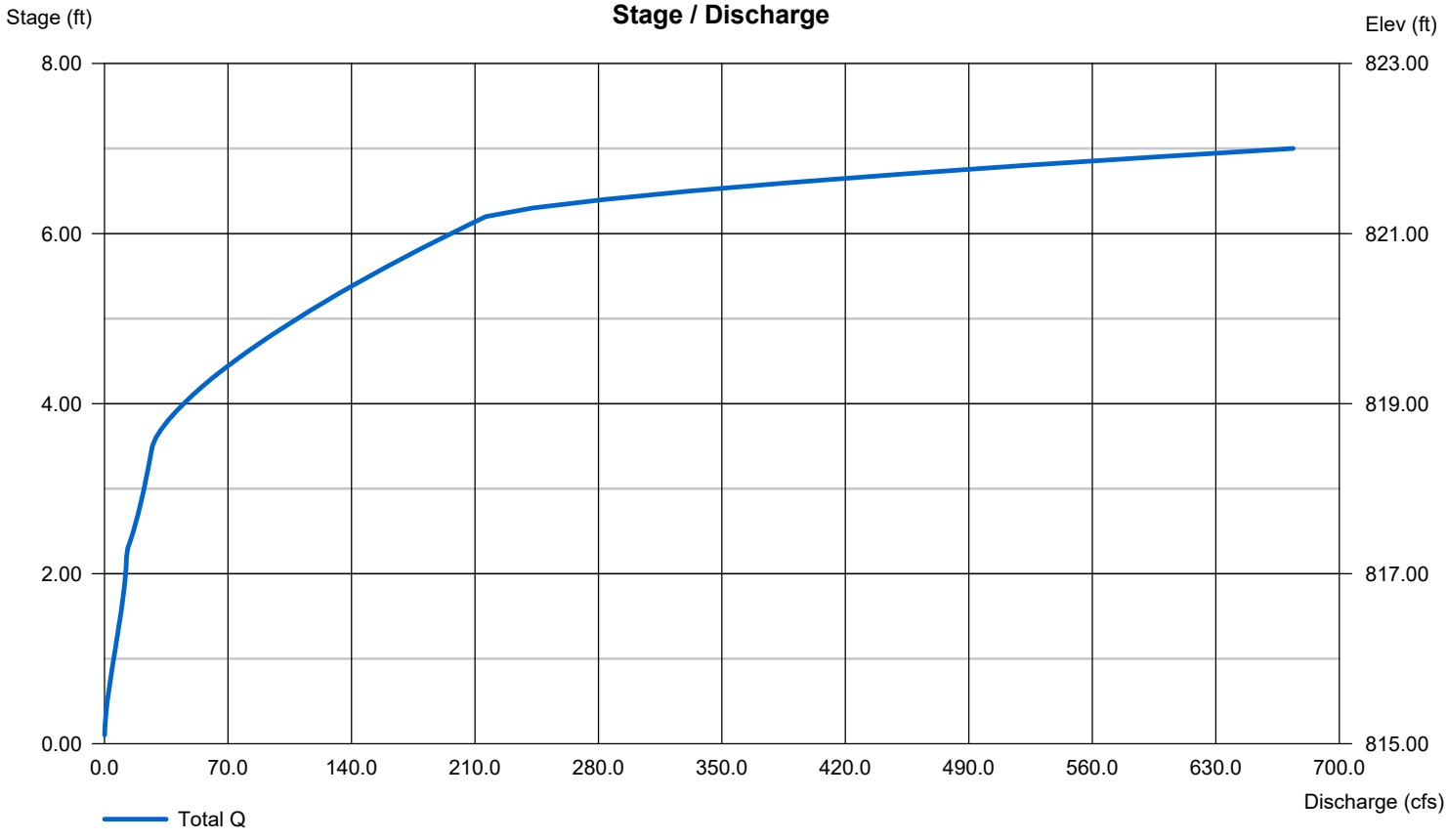
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 15.00	200.00	0.00	0.00
Crest El. (ft)	= 818.50	821.20	0.00	0.00
Weir Coeff.	= 2.60	2.60	3.33	3.33
Weir Type	= Broad	Broad	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.000 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



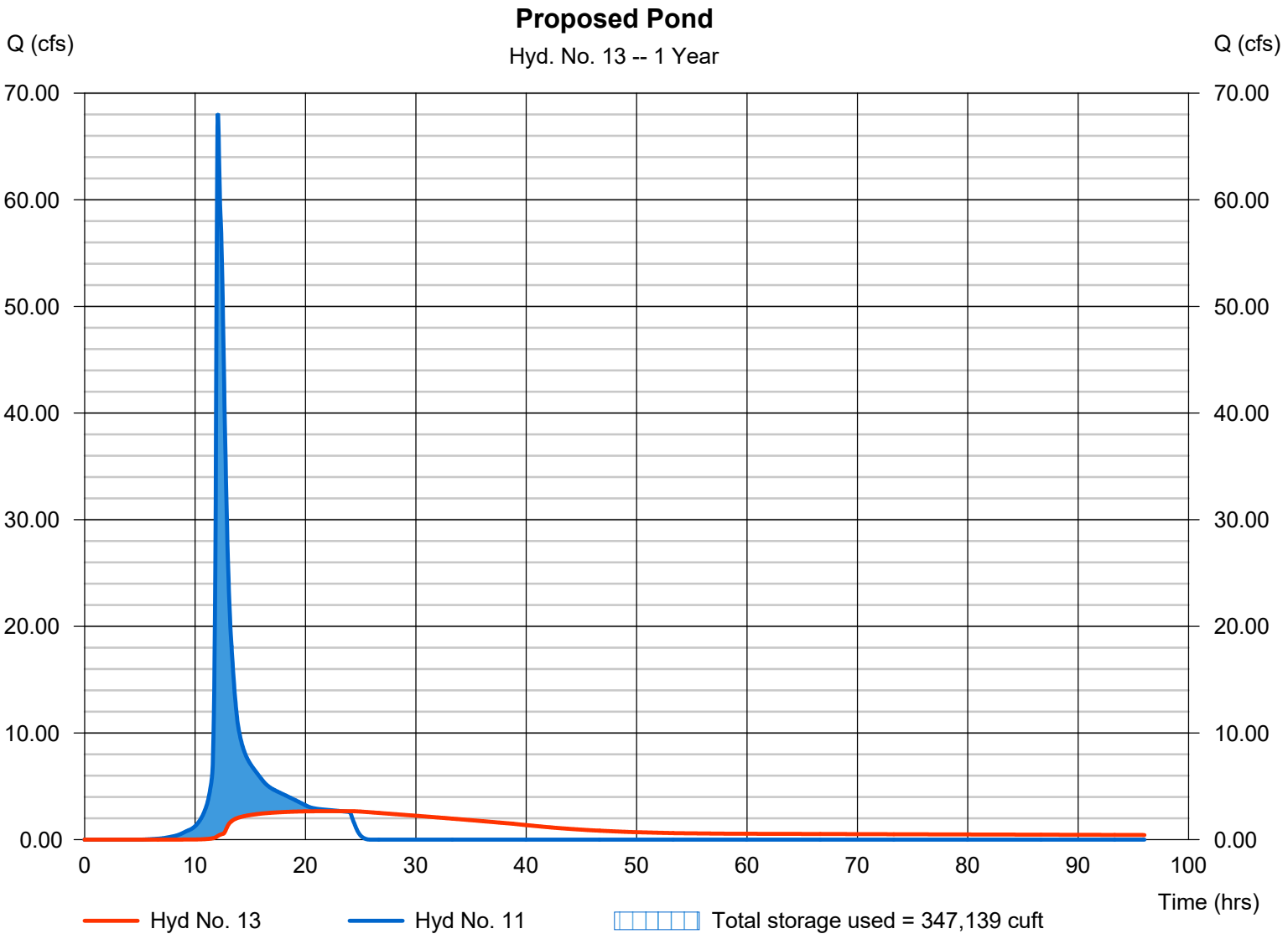
Hydrograph Report

Hyd. No. 13

Proposed Pond

Hydrograph type	=	Reservoir	Peak discharge	=	2.670 cfs
Storm frequency	=	1 yrs	Time to peak	=	23.23 hrs
Time interval	=	2 min	Hyd. volume	=	340,769 cuft
Inflow hyd. No.	=	11 - Combine #2	Max. Elevation	=	818.65 ft
Reservoir name	=	Proposed Pond Condition	Max. Storage	=	347,139 cuft

Storage Indication method used.



Pond Report

Pond No. 2 - Proposed Pond Condition

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 815.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	815.00	82,415	0	0
1.00	816.00	90,537	86,436	86,436
2.00	817.00	97,383	93,930	180,365
3.00	818.00	101,478	99,414	279,779
4.00	819.00	105,313	103,379	383,158
5.00	820.00	109,031	107,156	490,314
6.00	821.00	112,700	110,849	601,163
7.00	822.00	116,315	114,491	715,655
8.00	823.00	119,944	118,113	833,768
9.00	824.00	123,584	121,747	955,515

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 48.00	4.00	8.00	0.00
Span (in)	= 48.00	4.00	8.00	0.00
No. Barrels	= 1	1	1	0
Invert El. (ft)	= 815.00	815.00	817.00	0.00
Length (ft)	= 96.00	0.00	0.00	0.00
Slope (%)	= 0.72	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

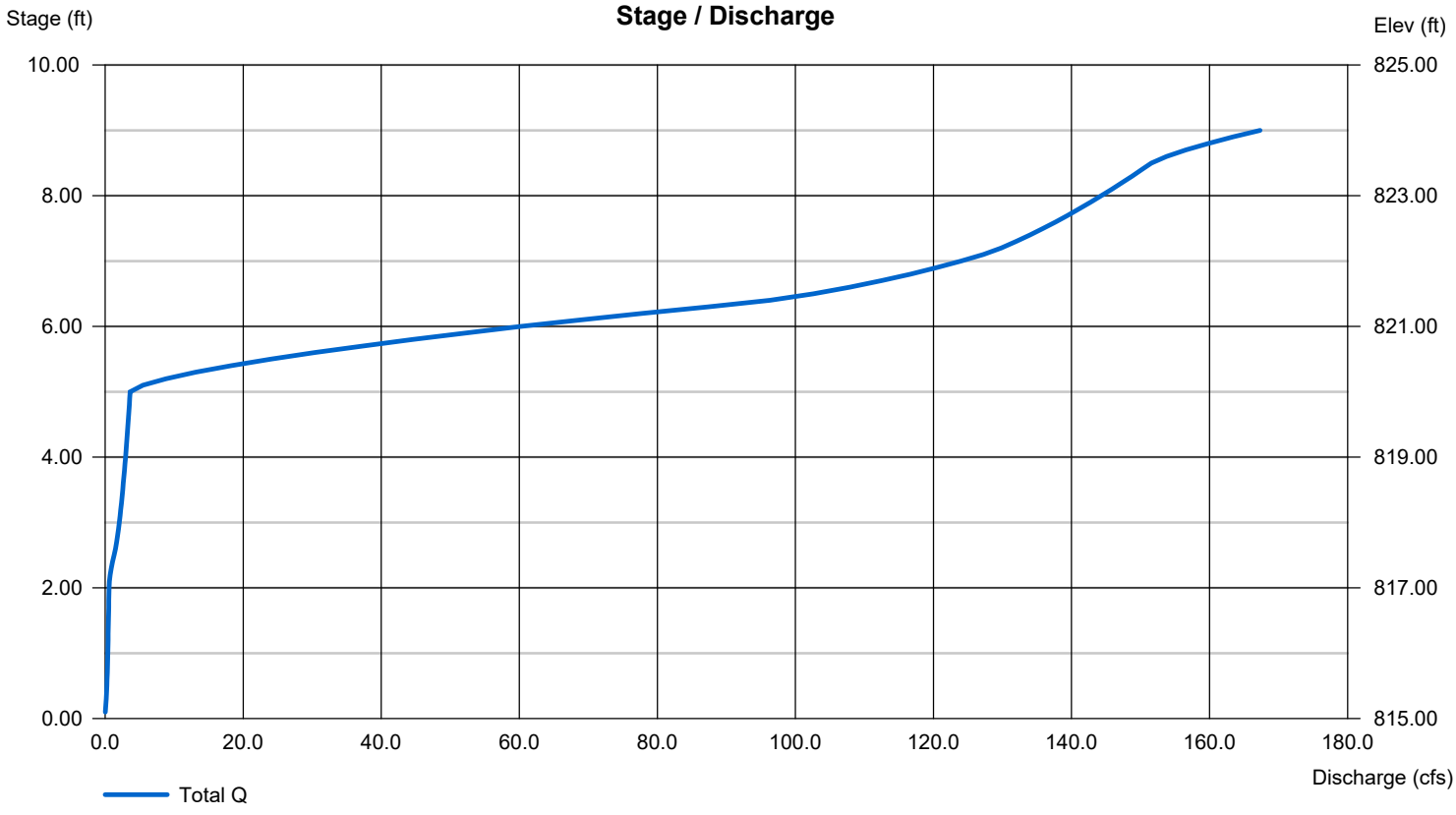
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 21.99	10.00	0.00	0.00
Crest El. (ft)	= 820.00	823.50	0.00	0.00
Weir Coeff.	= 2.60	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	No	No	No

Exfil.(in/hr) = 0.000 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

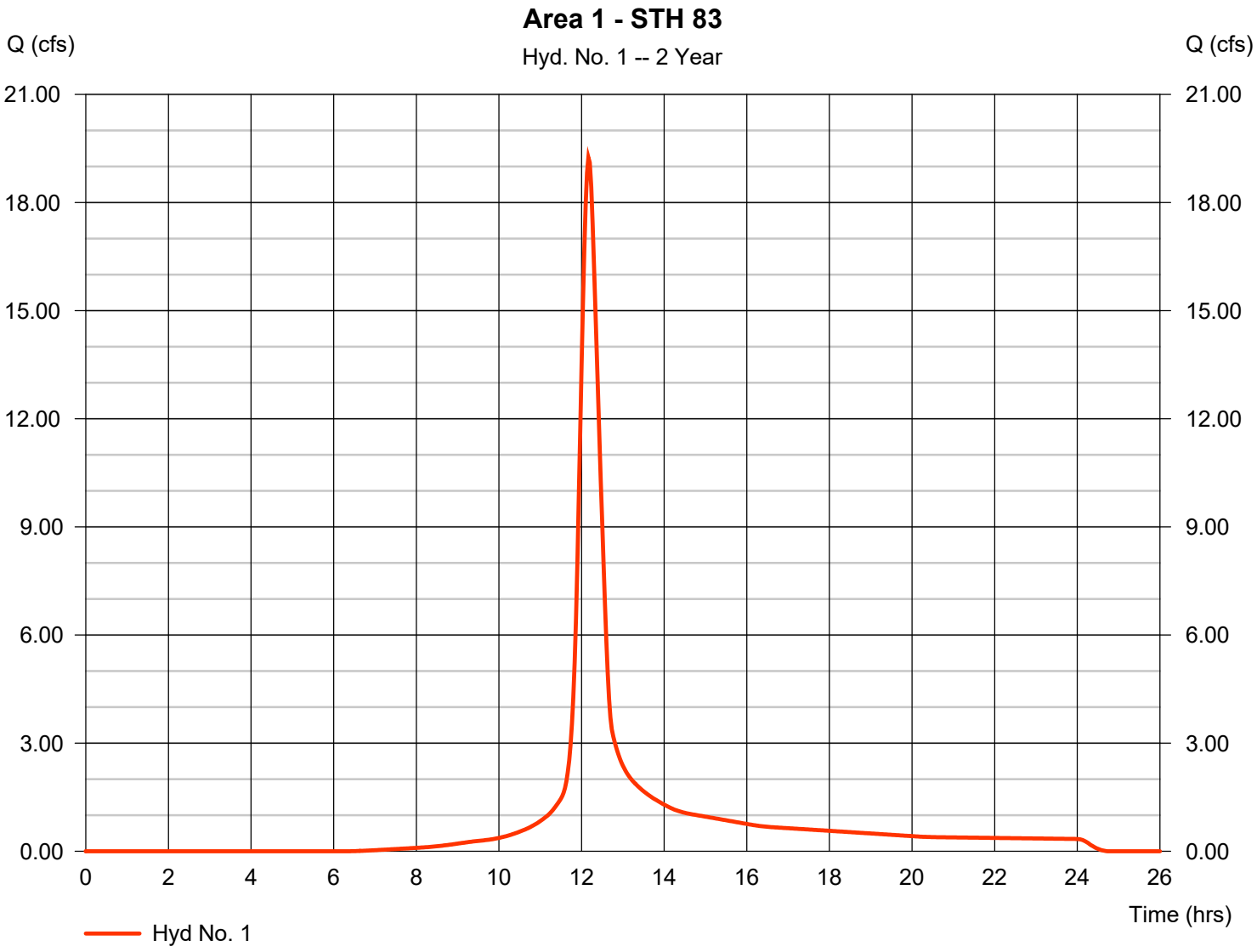
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	19.25	2	730	77,000	------	------	------	Area 1 - STH 83
2	SCS Runoff	16.40	2	736	79,484	------	------	------	Area 2 - Res./Condo
3	SCS Runoff	10.11	2	760	92,849	------	------	------	Area 3 - Med. Dens. Res.
4	SCS Runoff	7.646	2	754	64,698	------	------	------	Area 4 - School
5	SCS Runoff	6.489	2	738	33,520	------	------	------	Area 5 - Industrial
6	SCS Runoff	15.84	2	744	90,456	------	------	------	Area 6 - Commercial
7	SCS Runoff	6.757	2	722	18,945	------	------	------	Area 7 - CTH NN
8	SCS Runoff	33.21	2	720	88,420	------	------	------	Area 8 - Condos, Pond
9	SCS Runoff	1.143	2	772	15,665	------	------	------	Area 9 - Field Park
10	Combine	50.14	2	736	347,551	1, 2, 3, 4, 5,	------	------	Combine #1
11	Combine	82.14	2	724	561,038	6, 7, 8, 9, 10	------	------	Combine #2
12	Reservoir	17.90	2	812	557,318	11	817.61	266,802	Existing Pond
13	Reservoir	3.245	2	1366	435,796	11	819.42	427,772	Proposed Pond

Hydrograph Report

Hyd. No. 1

Area 1 - STH 83

Hydrograph type	= SCS Runoff	Peak discharge	= 19.25 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.17 hrs
Time interval	= 2 min	Hyd. volume	= 77,000 cuft
Drainage area	= 12.400 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 27.00 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

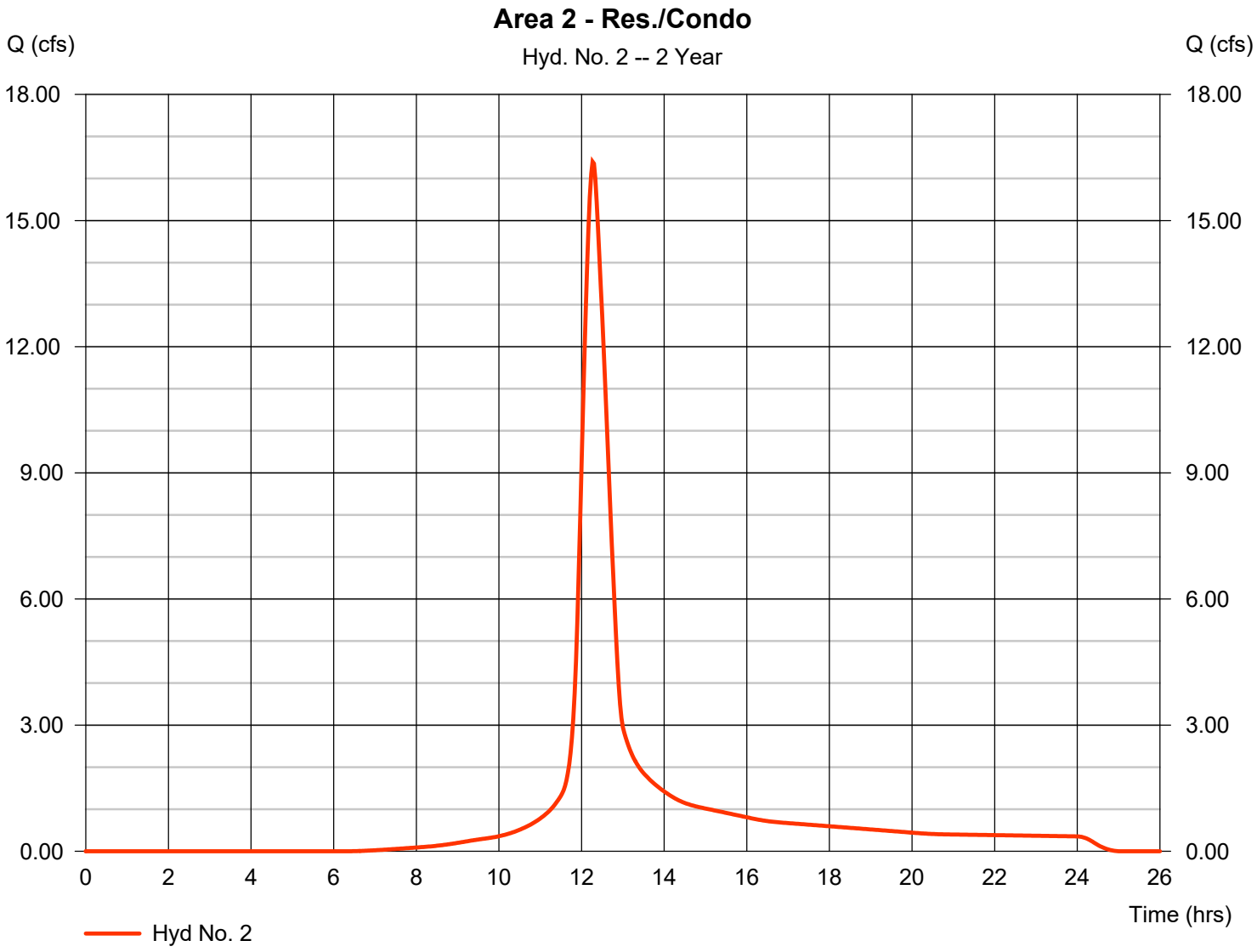


Hydrograph Report

Hyd. No. 2

Area 2 - Res./Condo

Hydrograph type	= SCS Runoff	Peak discharge	= 16.40 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.27 hrs
Time interval	= 2 min	Hyd. volume	= 79,484 cuft
Drainage area	= 12.800 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 40.10 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

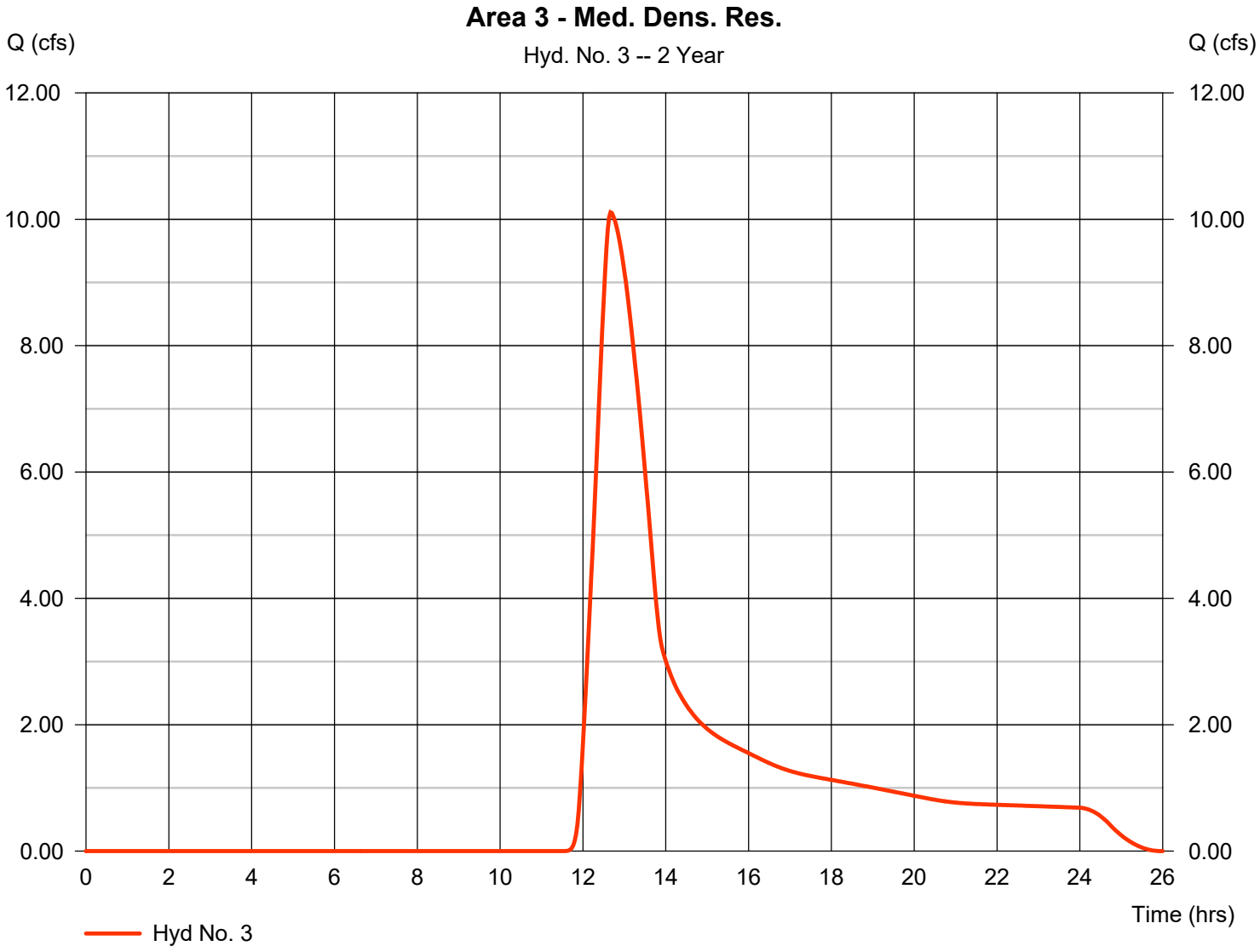


Hydrograph Report

Hyd. No. 3

Area 3 - Med. Dens. Res.

Hydrograph type	= SCS Runoff	Peak discharge	= 10.11 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.67 hrs
Time interval	= 2 min	Hyd. volume	= 92,849 cuft
Drainage area	= 40.000 ac	Curve number	= 72
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 71.40 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

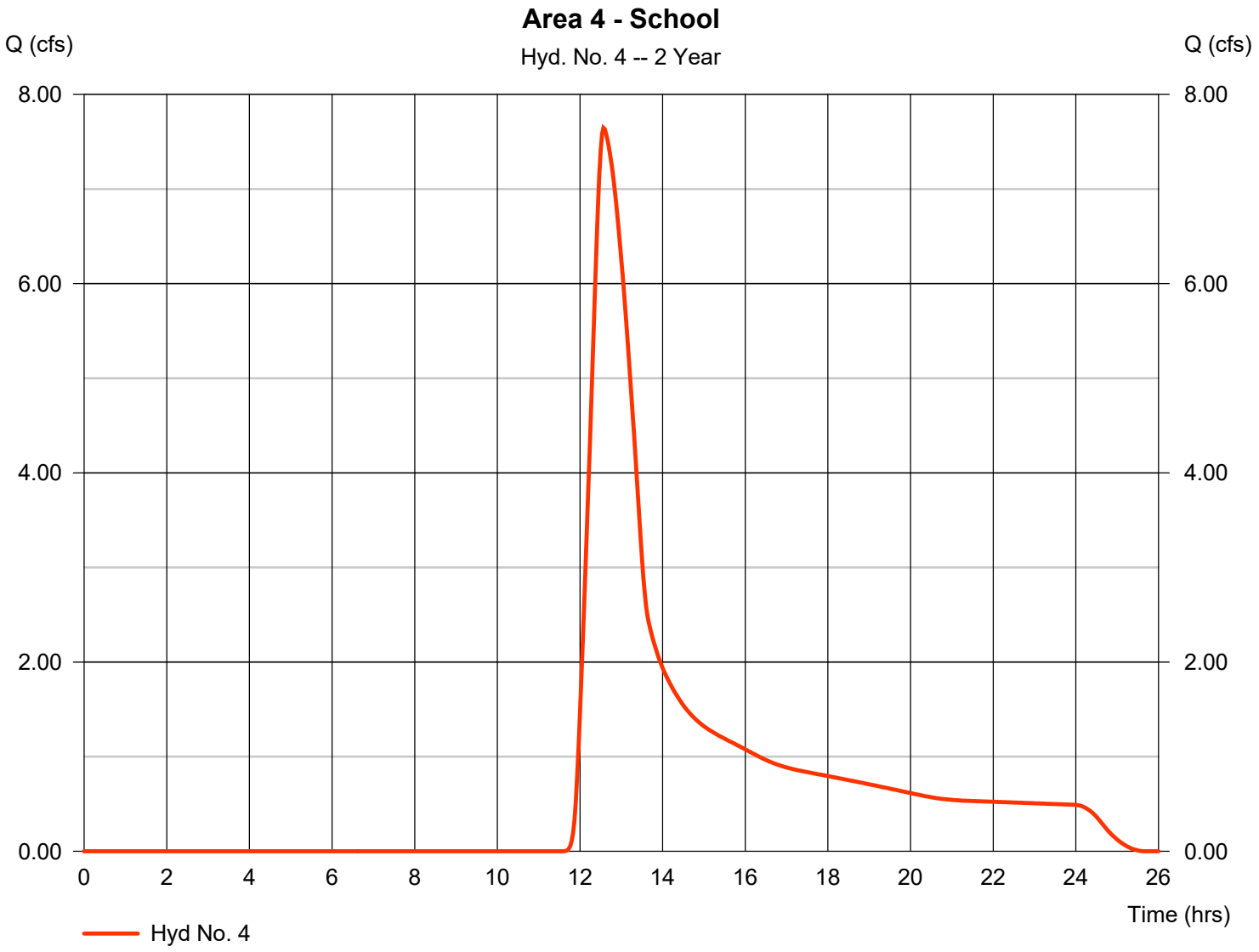


Hydrograph Report

Hyd. No. 4

Area 4 - School

Hydrograph type	=	SCS Runoff	Peak discharge	=	7.646 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.57 hrs
Time interval	=	2 min	Hyd. volume	=	64,698 cuft
Drainage area	=	29.800 ac	Curve number	=	71
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	62.80 min
Total precip.	=	2.70 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

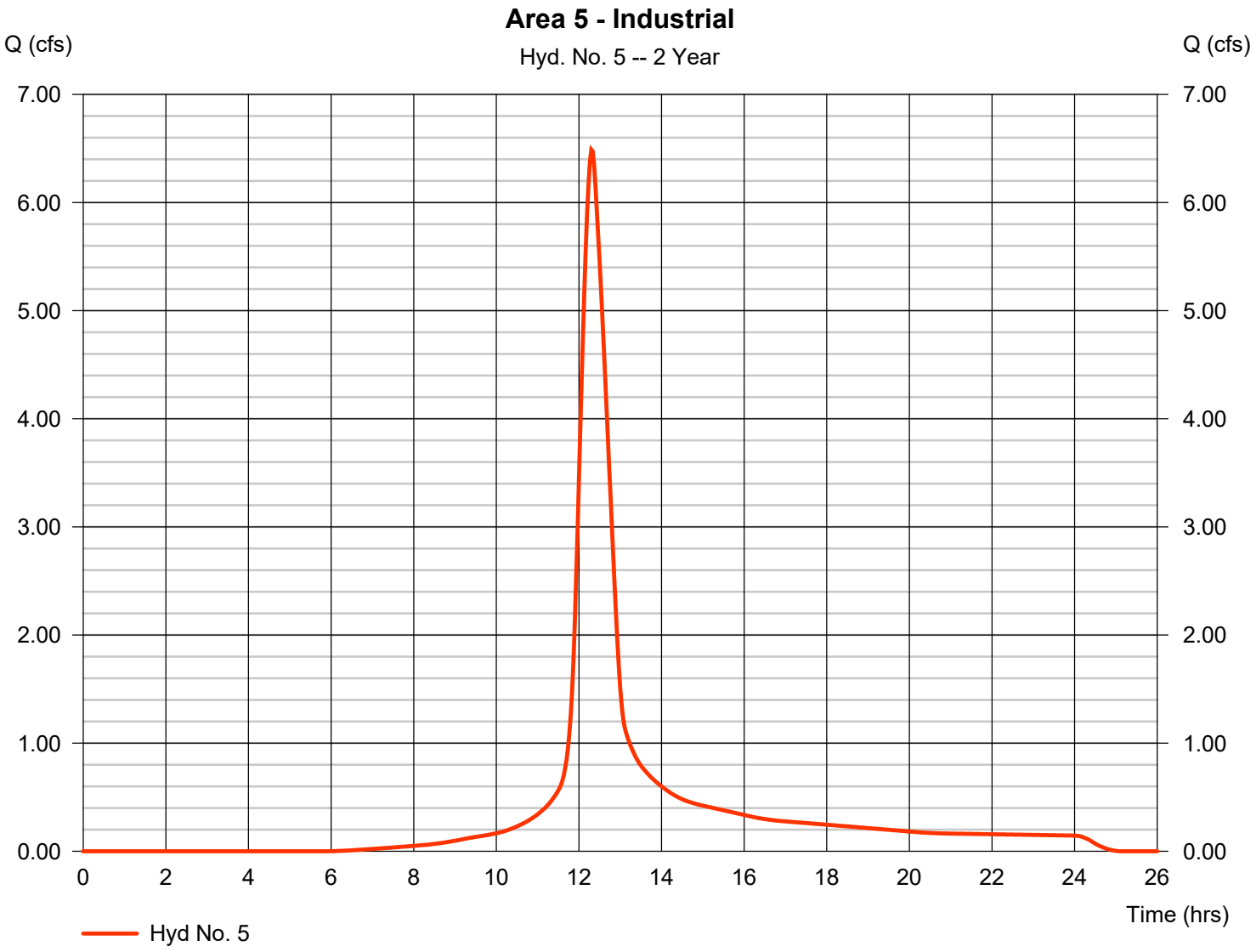


Hydrograph Report

Hyd. No. 5

Area 5 - Industrial

Hydrograph type	= SCS Runoff	Peak discharge	= 6.489 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.30 hrs
Time interval	= 2 min	Hyd. volume	= 33,520 cuft
Drainage area	= 5.100 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 41.90 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

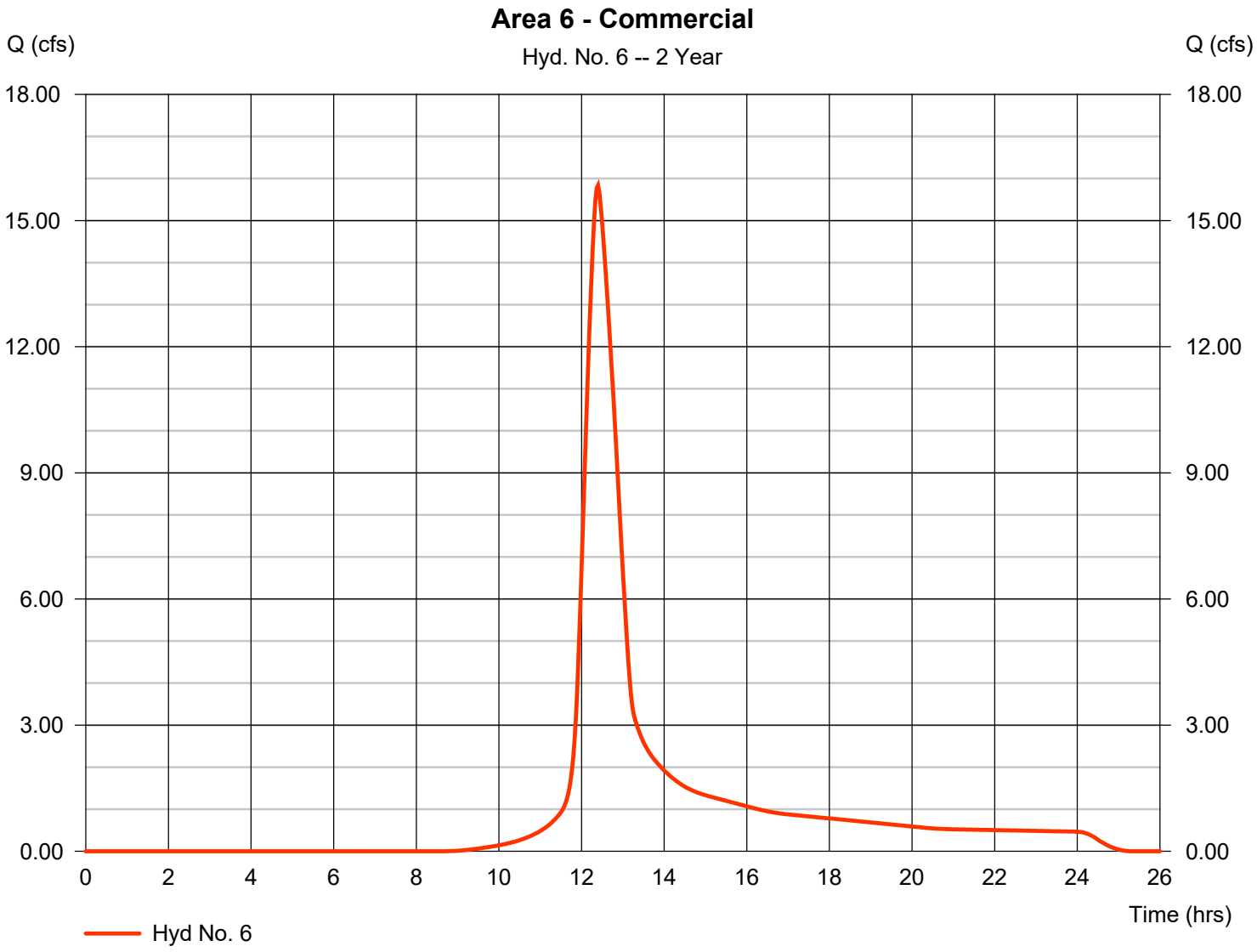


Hydrograph Report

Hyd. No. 6

Area 6 - Commercial

Hydrograph type	= SCS Runoff	Peak discharge	= 15.84 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.40 hrs
Time interval	= 2 min	Hyd. volume	= 90,456 cuft
Drainage area	= 18.600 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 48.80 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

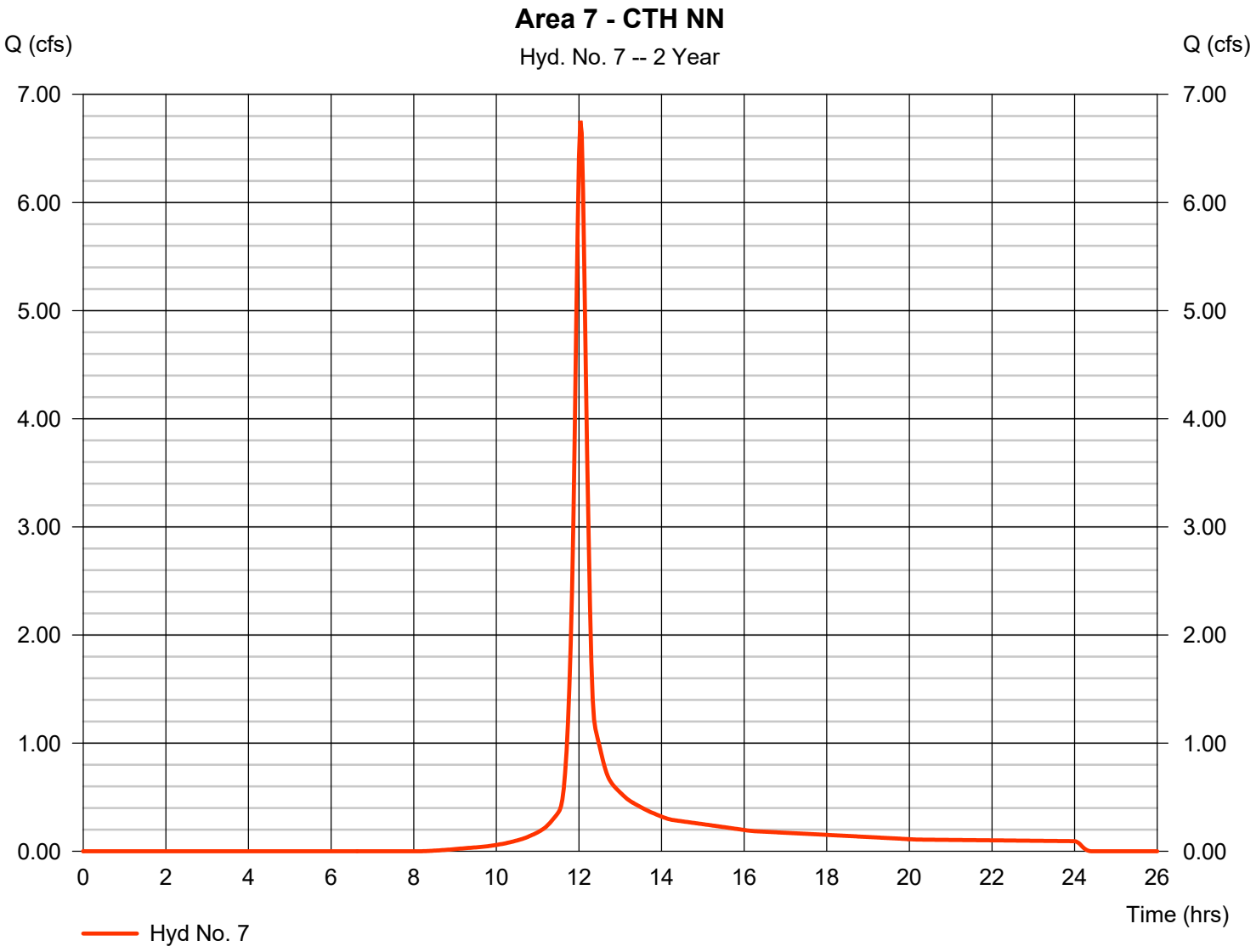


Hydrograph Report

Hyd. No. 7

Area 7 - CTH NN

Hydrograph type	=	SCS Runoff	Peak discharge	=	6.757 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	18,945 cuft
Drainage area	=	3.800 ac	Curve number	=	86
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.70 min
Total precip.	=	2.70 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

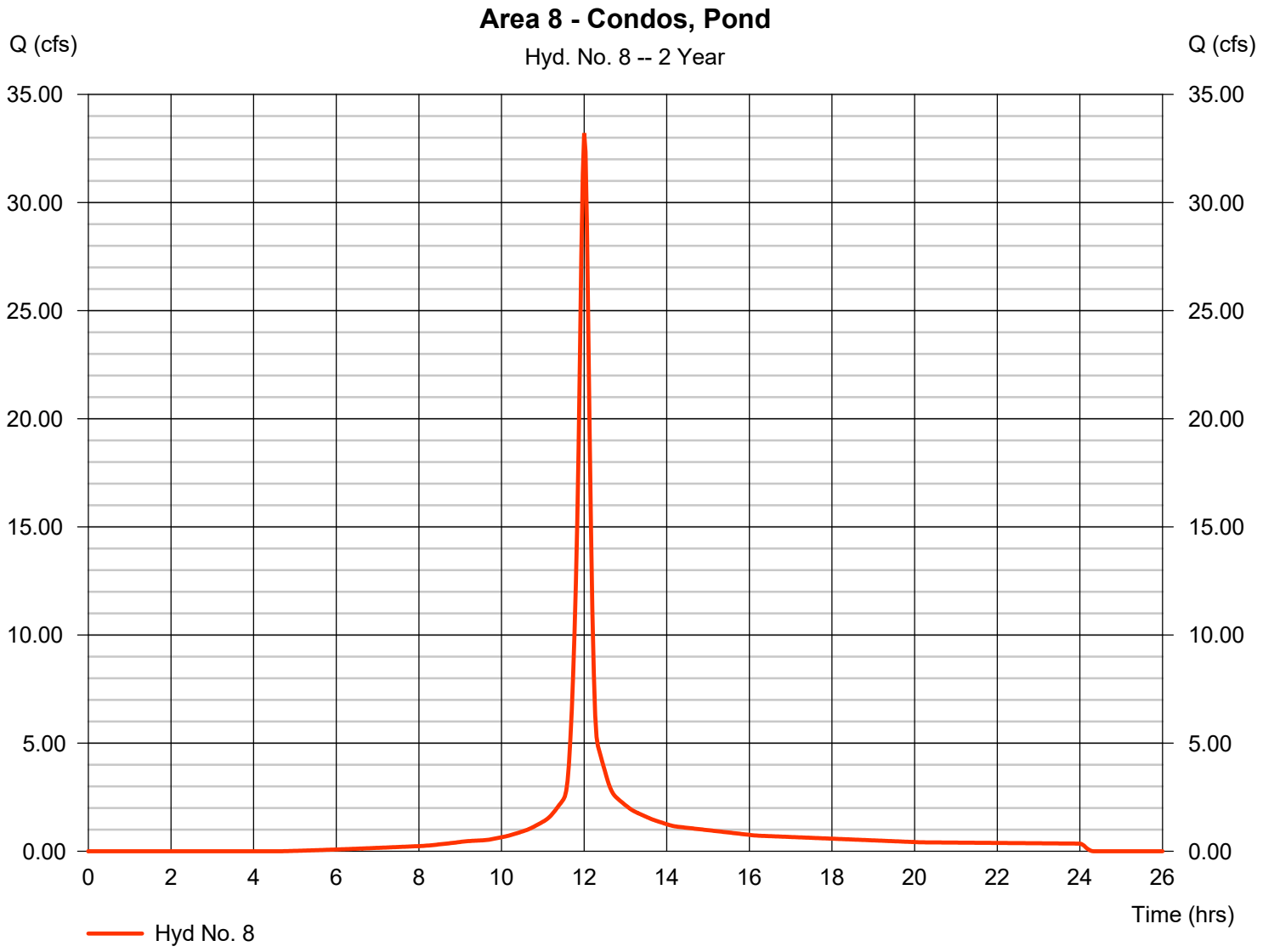


Hydrograph Report

Hyd. No. 8

Area 8 - Condos, Pond

Hydrograph type	= SCS Runoff	Peak discharge	= 33.21 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.00 hrs
Time interval	= 2 min	Hyd. volume	= 88,420 cuft
Drainage area	= 12.000 ac	Curve number	= 93
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.60 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

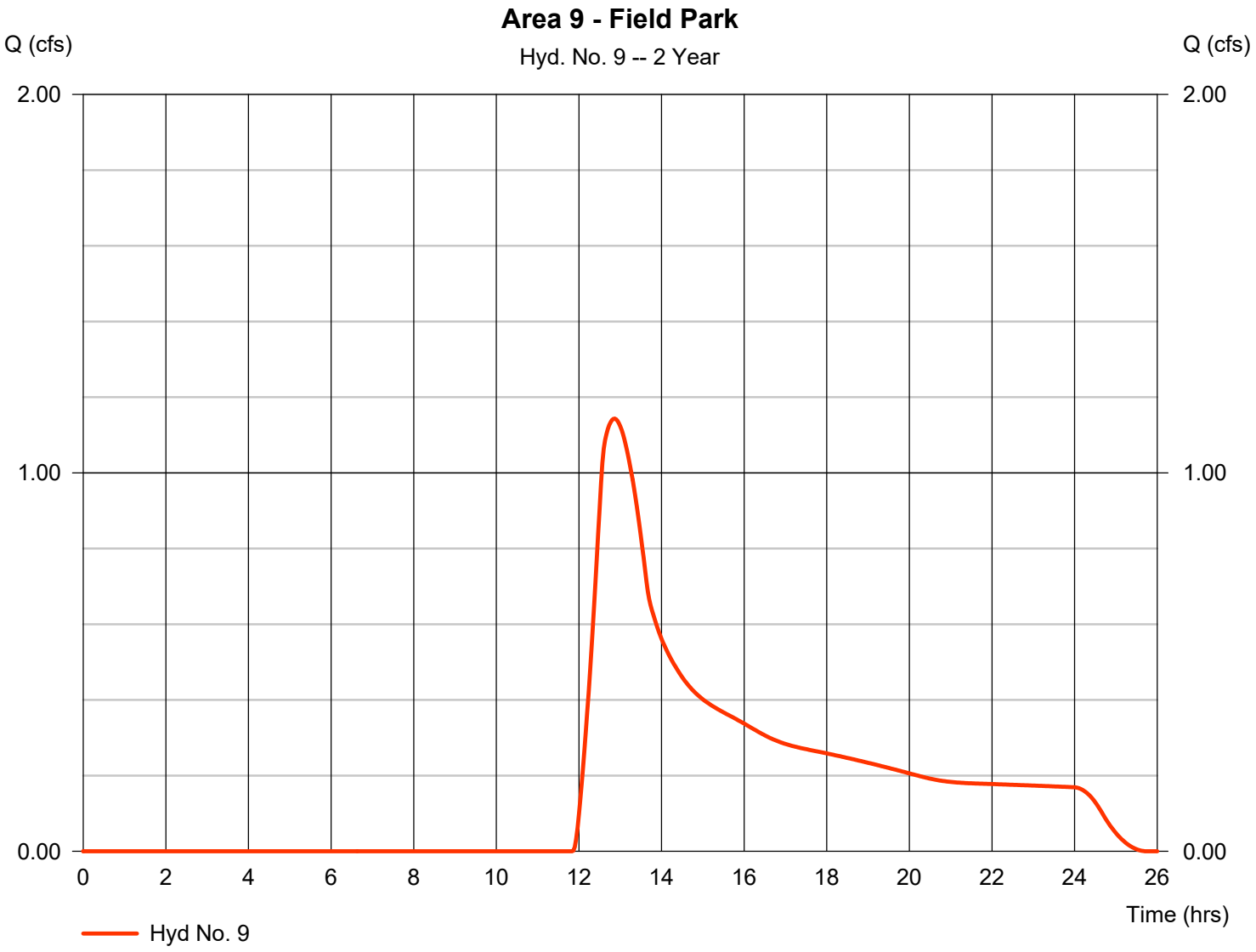


Hydrograph Report

Hyd. No. 9

Area 9 - Field Park

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.143 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.87 hrs
Time interval	=	2 min	Hyd. volume	=	15,665 cuft
Drainage area	=	16.800 ac	Curve number	=	61
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	66.30 min
Total precip.	=	2.70 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

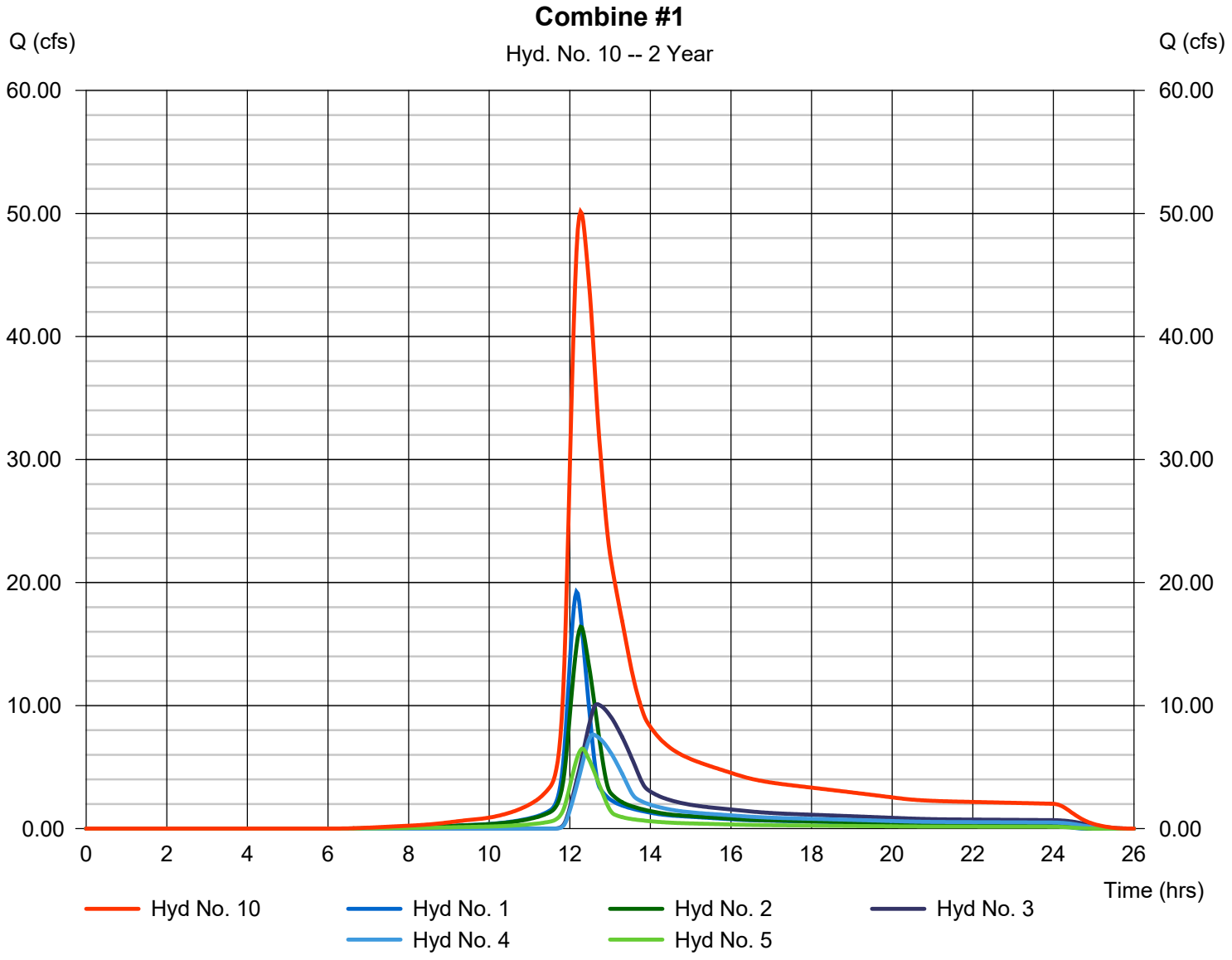


Hydrograph Report

Hyd. No. 10

Combine #1

Hydrograph type	= Combine	Peak discharge	= 50.14 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.27 hrs
Time interval	= 2 min	Hyd. volume	= 347,551 cuft
Inflow hyds.	= 1, 2, 3, 4, 5	Contrib. drain. area	= 100.100 ac

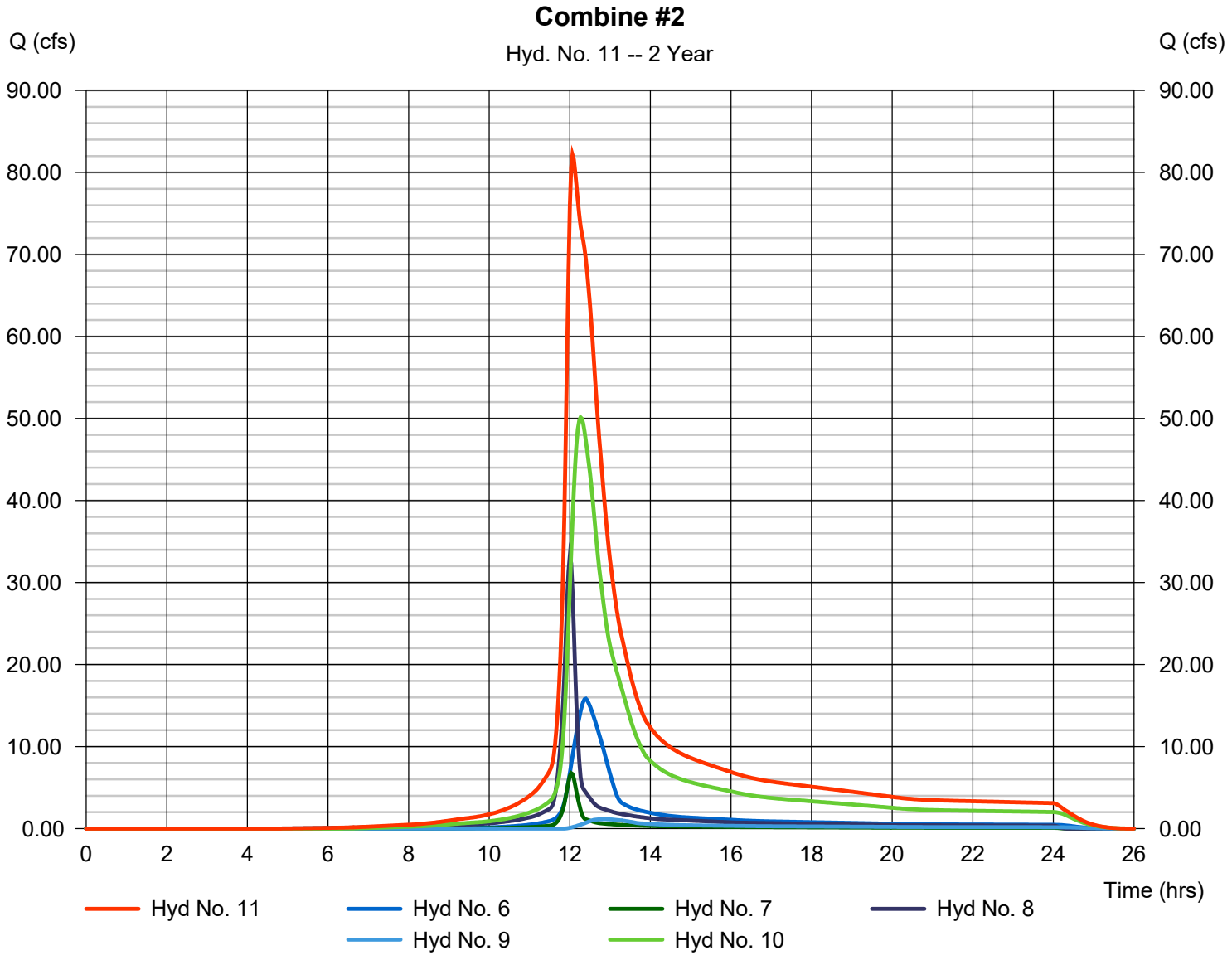


Hydrograph Report

Hyd. No. 11

Combine #2

Hydrograph type	=	Combine	Peak discharge	=	82.14 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.07 hrs
Time interval	=	2 min	Hyd. volume	=	561,038 cuft
Inflow hyds.	=	6, 7, 8, 9, 10	Contrib. drain. area	=	51.200 ac



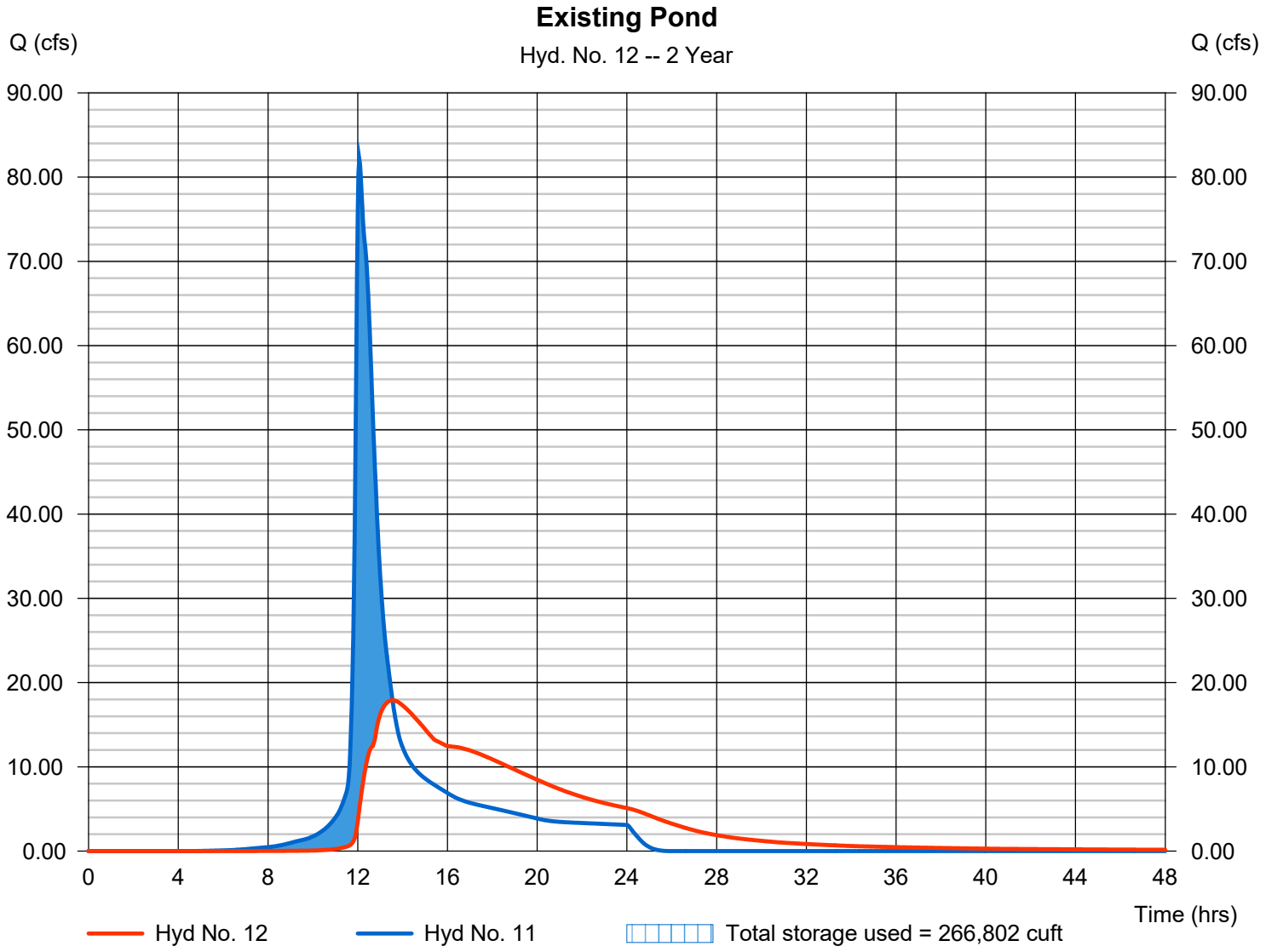
Hydrograph Report

Hyd. No. 12

Existing Pond

Hydrograph type	=	Reservoir	Peak discharge	=	17.90 cfs
Storm frequency	=	2 yrs	Time to peak	=	13.53 hrs
Time interval	=	2 min	Hyd. volume	=	557,318 cuft
Inflow hyd. No.	=	11 - Combine #2	Max. Elevation	=	817.61 ft
Reservoir name	=	Existing Pond Condition	Max. Storage	=	266,802 cuft

Storage Indication method used.



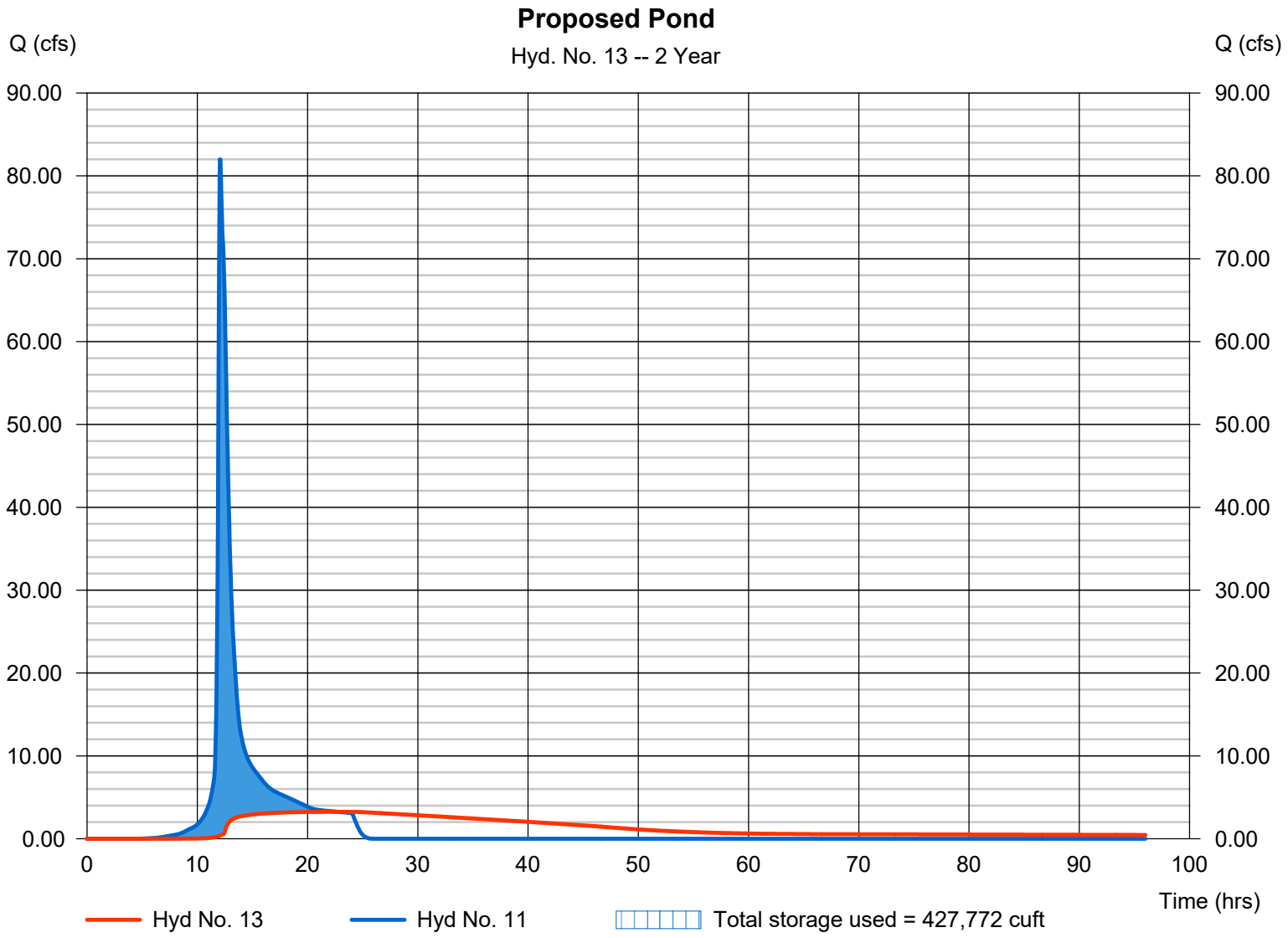
Hydrograph Report

Hyd. No. 13

Proposed Pond

Hydrograph type	=	Reservoir	Peak discharge	=	3.245 cfs
Storm frequency	=	2 yrs	Time to peak	=	22.77 hrs
Time interval	=	2 min	Hyd. volume	=	435,796 cuft
Inflow hyd. No.	=	11 - Combine #2	Max. Elevation	=	819.42 ft
Reservoir name	=	Proposed Pond Condition	Max. Storage	=	427,772 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

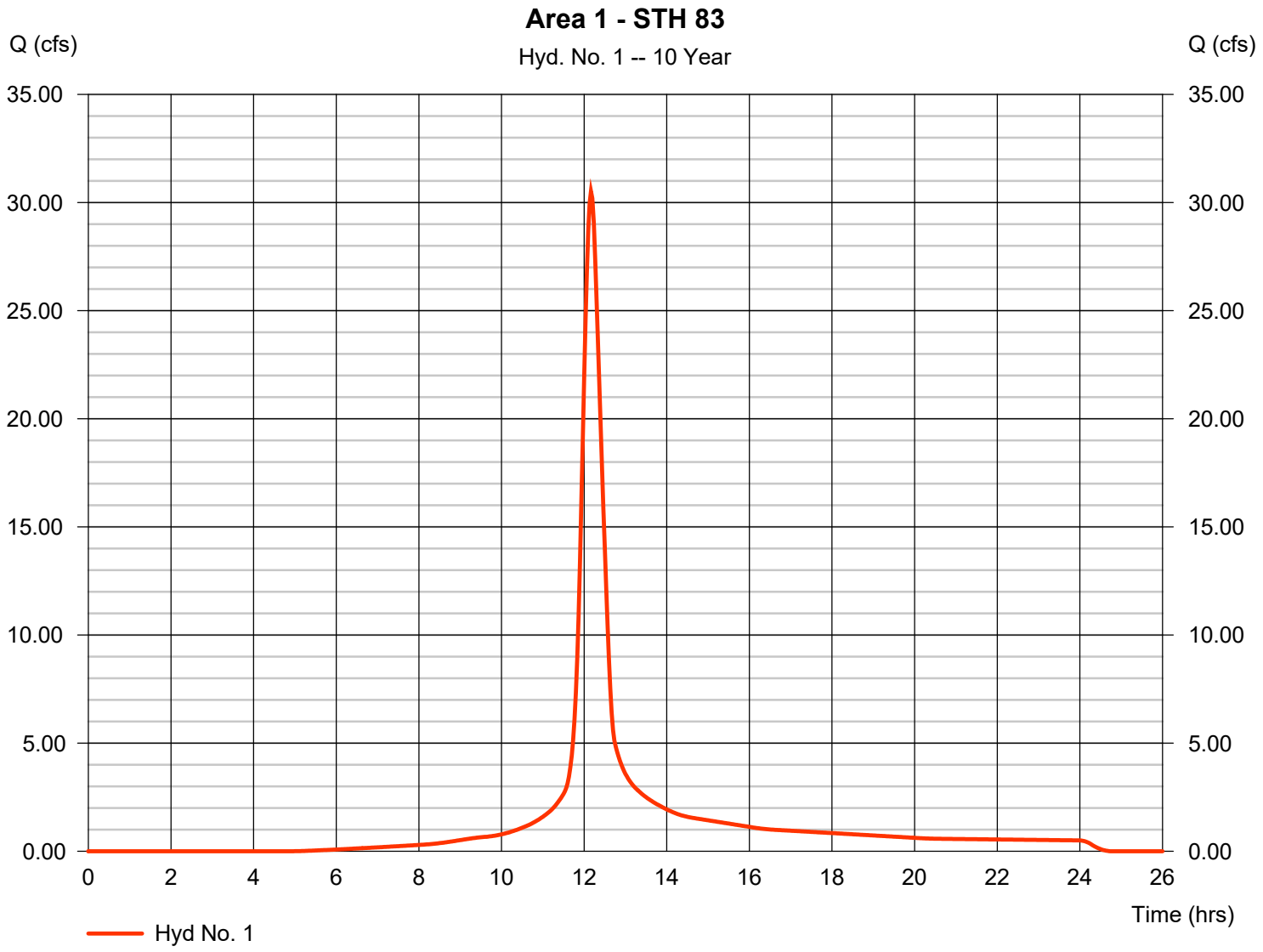
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	30.52	2	730	123,306	------	------	------	Area 1 - STH 83
2	SCS Runoff	26.05	2	736	127,284	------	------	------	Area 2 - Res./Condo
3	SCS Runoff	24.02	2	760	193,987	------	------	------	Area 3 - Med. Dens. Res.
4	SCS Runoff	18.82	2	752	137,824	------	------	------	Area 4 - School
5	SCS Runoff	10.15	2	738	53,003	------	------	------	Area 5 - Industrial
6	SCS Runoff	27.29	2	744	154,531	------	------	------	Area 6 - Commercial
7	SCS Runoff	11.34	2	722	31,940	------	------	------	Area 7 - CTH NN
8	SCS Runoff	50.06	2	720	136,344	------	------	------	Area 8 - Condos, Pond
9	SCS Runoff	4.664	2	758	43,510	------	------	------	Area 9 - Field Park
10	Combine	90.95	2	738	635,405	1, 2, 3, 4, 5,	------	------	Combine #1
11	Combine	139.30	2	726	1,001,730	6, 7, 8, 9, 10	------	------	Combine #2
12	Reservoir	52.10	2	790	997,832	11	819.14	440,145	Existing Pond
13	Reservoir	35.21	2	808	866,738	11	820.67	564,535	Proposed Pond

Hydrograph Report

Hyd. No. 1

Area 1 - STH 83

Hydrograph type	= SCS Runoff	Peak discharge	= 30.52 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.17 hrs
Time interval	= 2 min	Hyd. volume	= 123,306 cuft
Drainage area	= 12.400 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 27.00 min
Total precip.	= 3.81 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

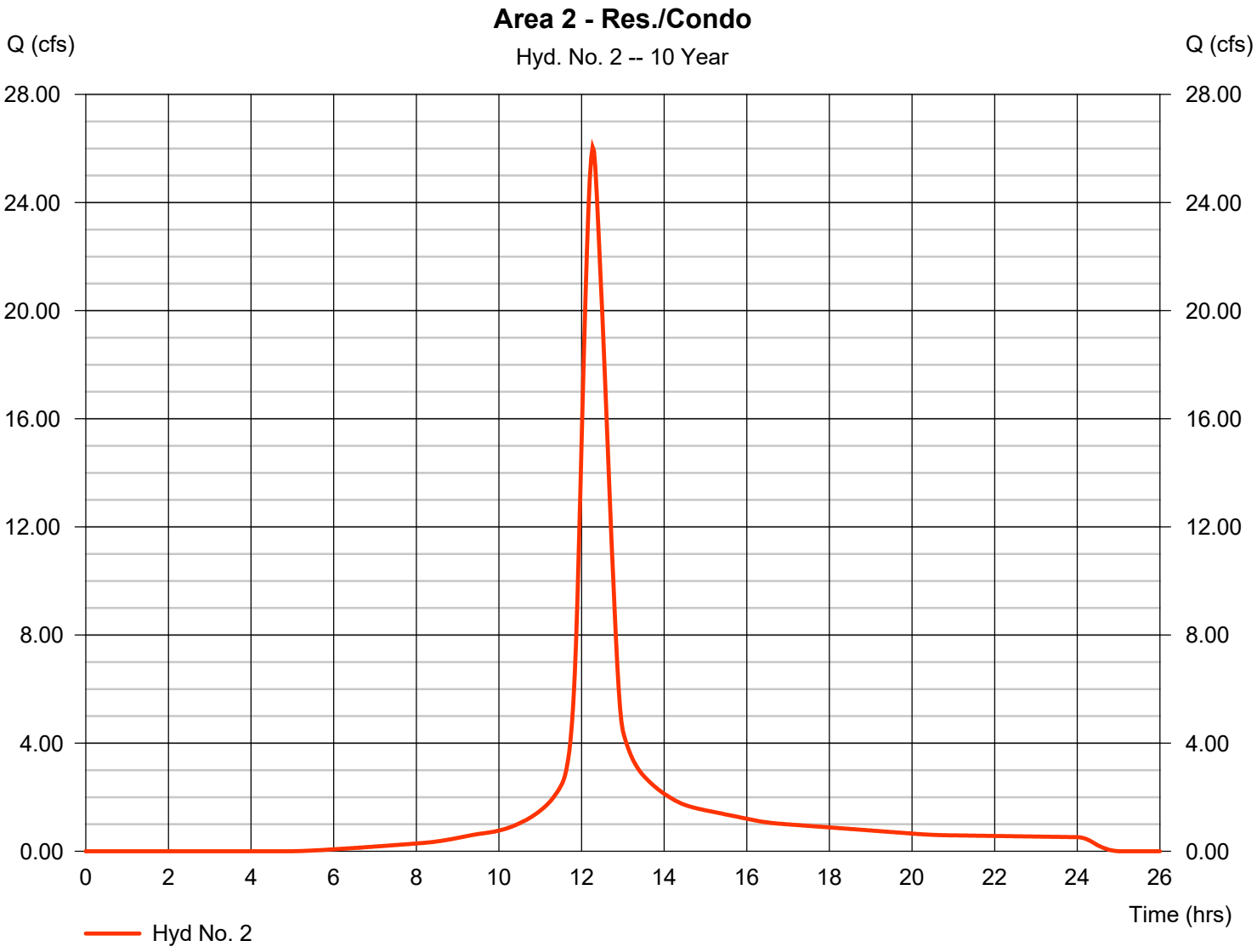


Hydrograph Report

Hyd. No. 2

Area 2 - Res./Condo

Hydrograph type	=	SCS Runoff	Peak discharge	=	26.05 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.27 hrs
Time interval	=	2 min	Hyd. volume	=	127,284 cuft
Drainage area	=	12.800 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	40.10 min
Total precip.	=	3.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

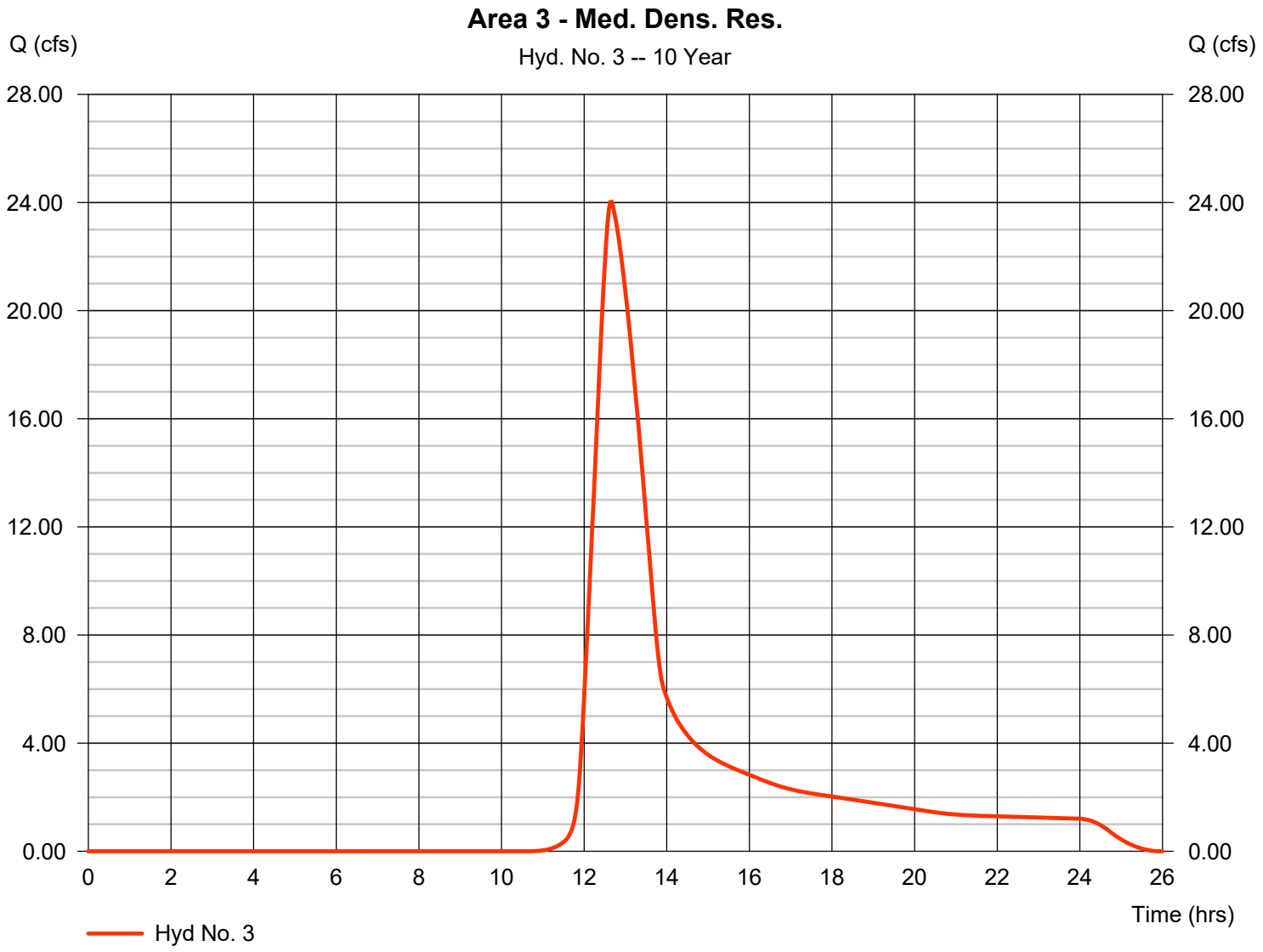


Hydrograph Report

Hyd. No. 3

Area 3 - Med. Dens. Res.

Hydrograph type	= SCS Runoff	Peak discharge	= 24.02 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.67 hrs
Time interval	= 2 min	Hyd. volume	= 193,987 cuft
Drainage area	= 40.000 ac	Curve number	= 72
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 71.40 min
Total precip.	= 3.81 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

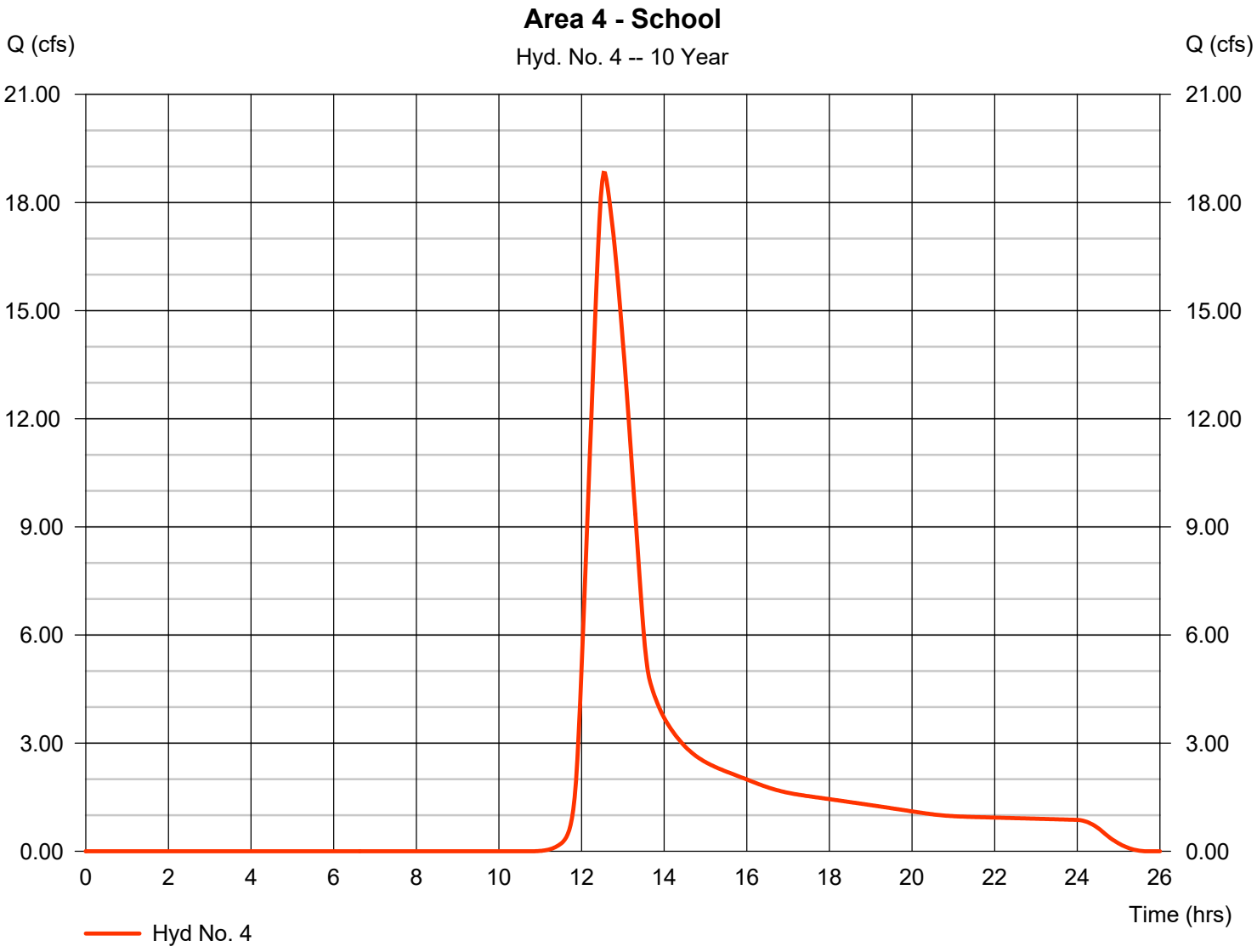


Hydrograph Report

Hyd. No. 4

Area 4 - School

Hydrograph type	=	SCS Runoff	Peak discharge	=	18.82 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.53 hrs
Time interval	=	2 min	Hyd. volume	=	137,824 cuft
Drainage area	=	29.800 ac	Curve number	=	71
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	62.80 min
Total precip.	=	3.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

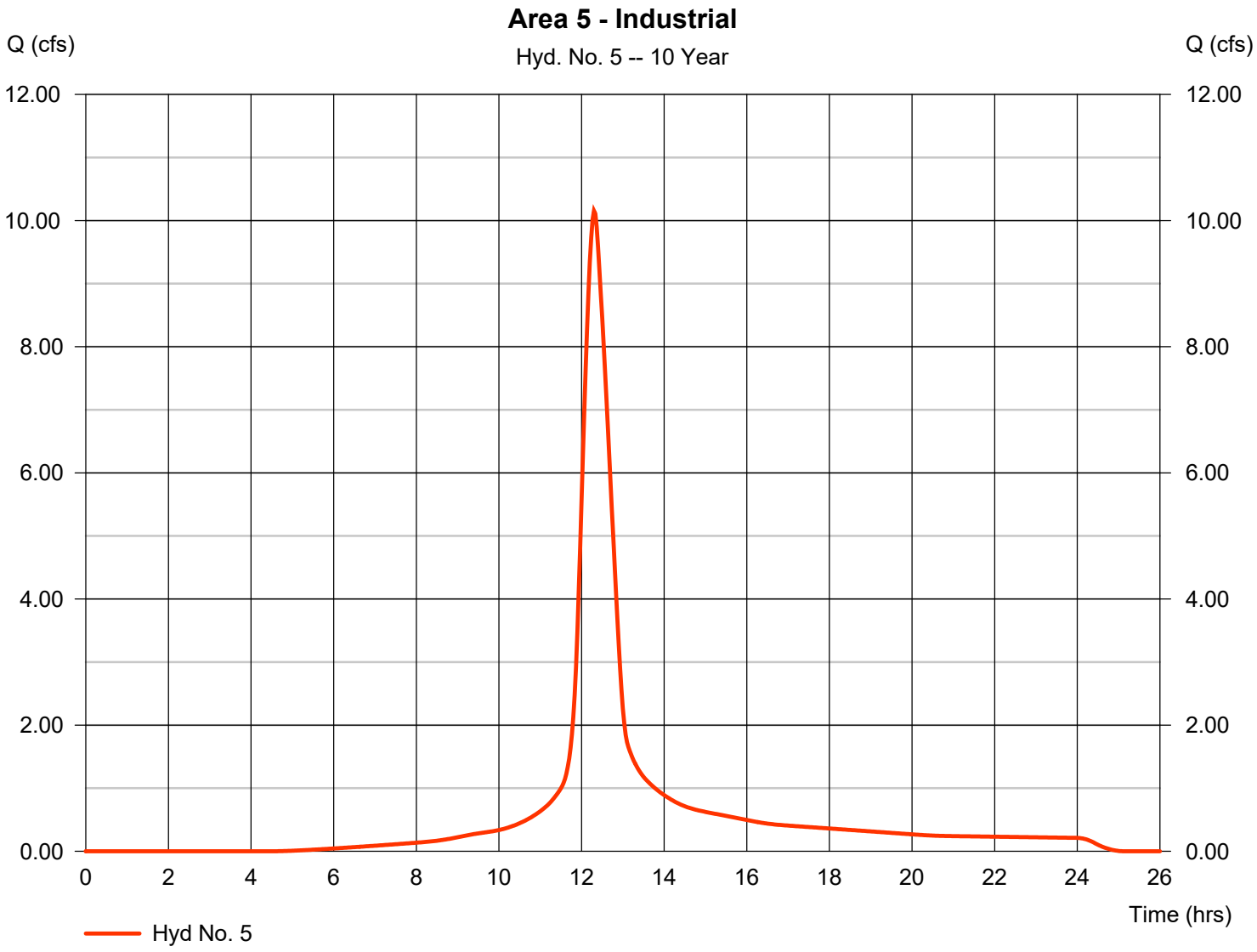


Hydrograph Report

Hyd. No. 5

Area 5 - Industrial

Hydrograph type	=	SCS Runoff	Peak discharge	=	10.15 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.30 hrs
Time interval	=	2 min	Hyd. volume	=	53,003 cuft
Drainage area	=	5.100 ac	Curve number	=	91
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	41.90 min
Total precip.	=	3.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

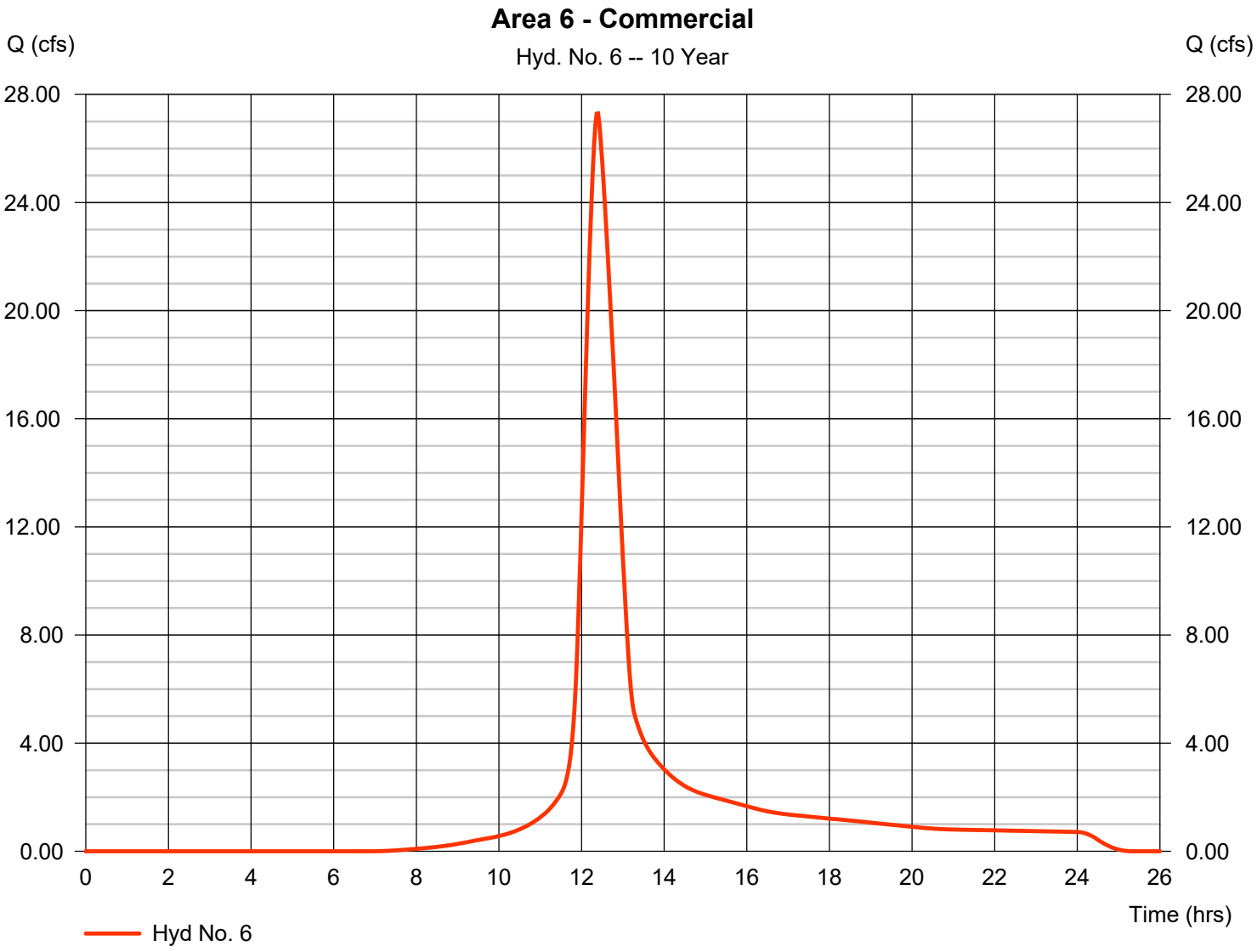


Hydrograph Report

Hyd. No. 6

Area 6 - Commercial

Hydrograph type	=	SCS Runoff	Peak discharge	=	27.29 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.40 hrs
Time interval	=	2 min	Hyd. volume	=	154,531 cuft
Drainage area	=	18.600 ac	Curve number	=	85
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	48.80 min
Total precip.	=	3.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

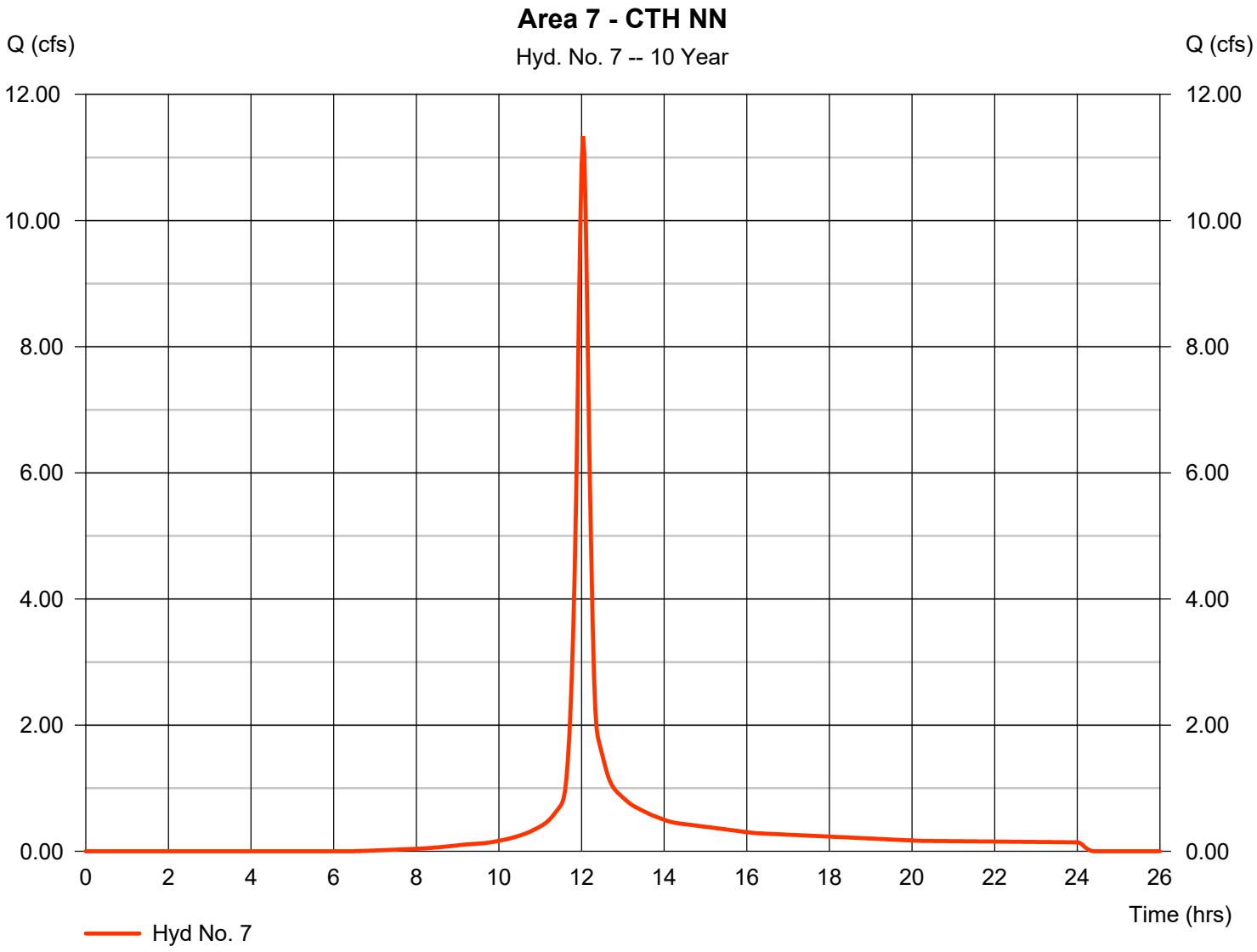


Hydrograph Report

Hyd. No. 7

Area 7 - CTH NN

Hydrograph type	= SCS Runoff	Peak discharge	= 11.34 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 31,940 cuft
Drainage area	= 3.800 ac	Curve number	= 86
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 14.70 min
Total precip.	= 3.81 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

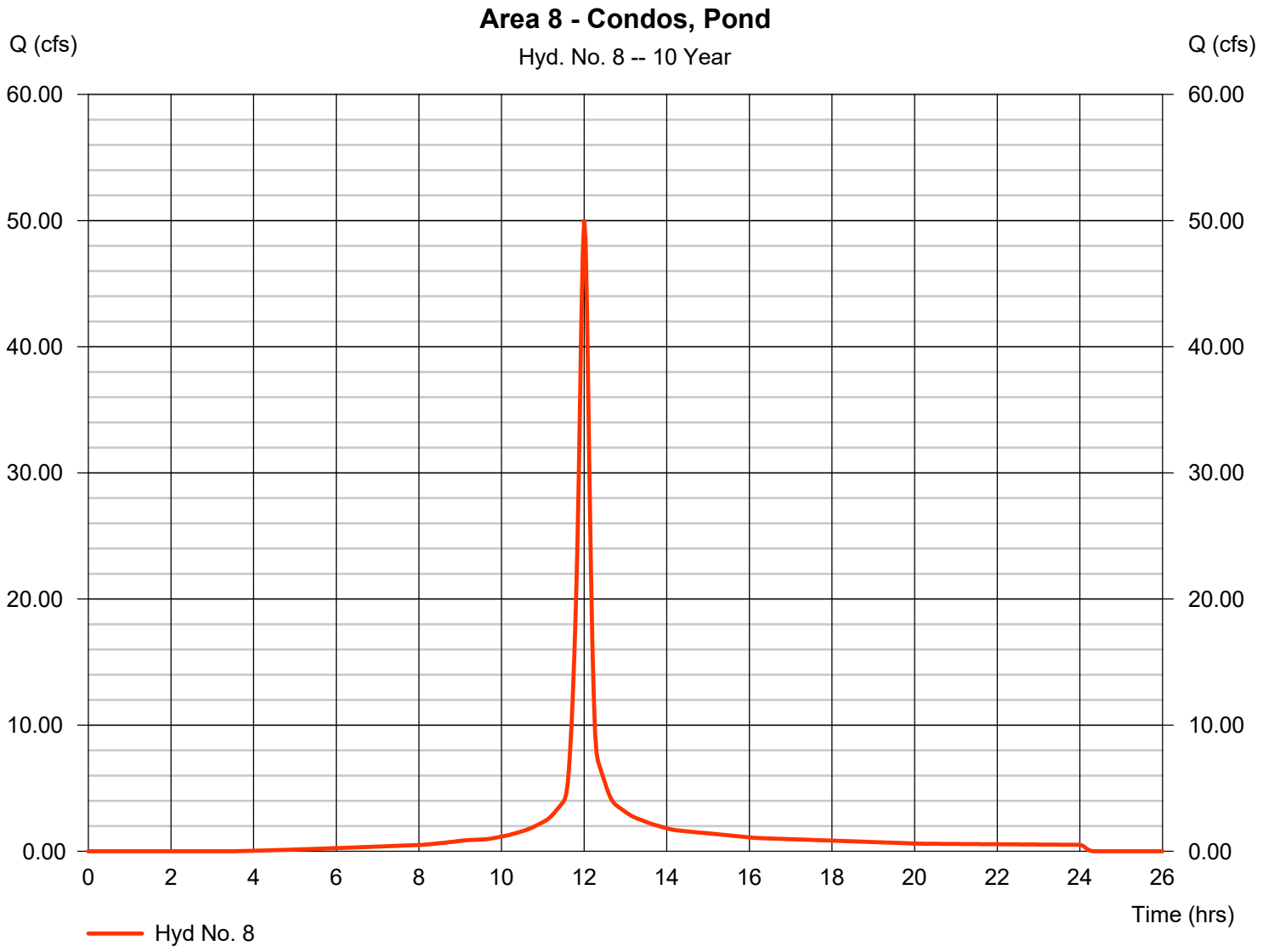


Hydrograph Report

Hyd. No. 8

Area 8 - Condos, Pond

Hydrograph type	= SCS Runoff	Peak discharge	= 50.06 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.00 hrs
Time interval	= 2 min	Hyd. volume	= 136,344 cuft
Drainage area	= 12.000 ac	Curve number	= 93
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.60 min
Total precip.	= 3.81 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

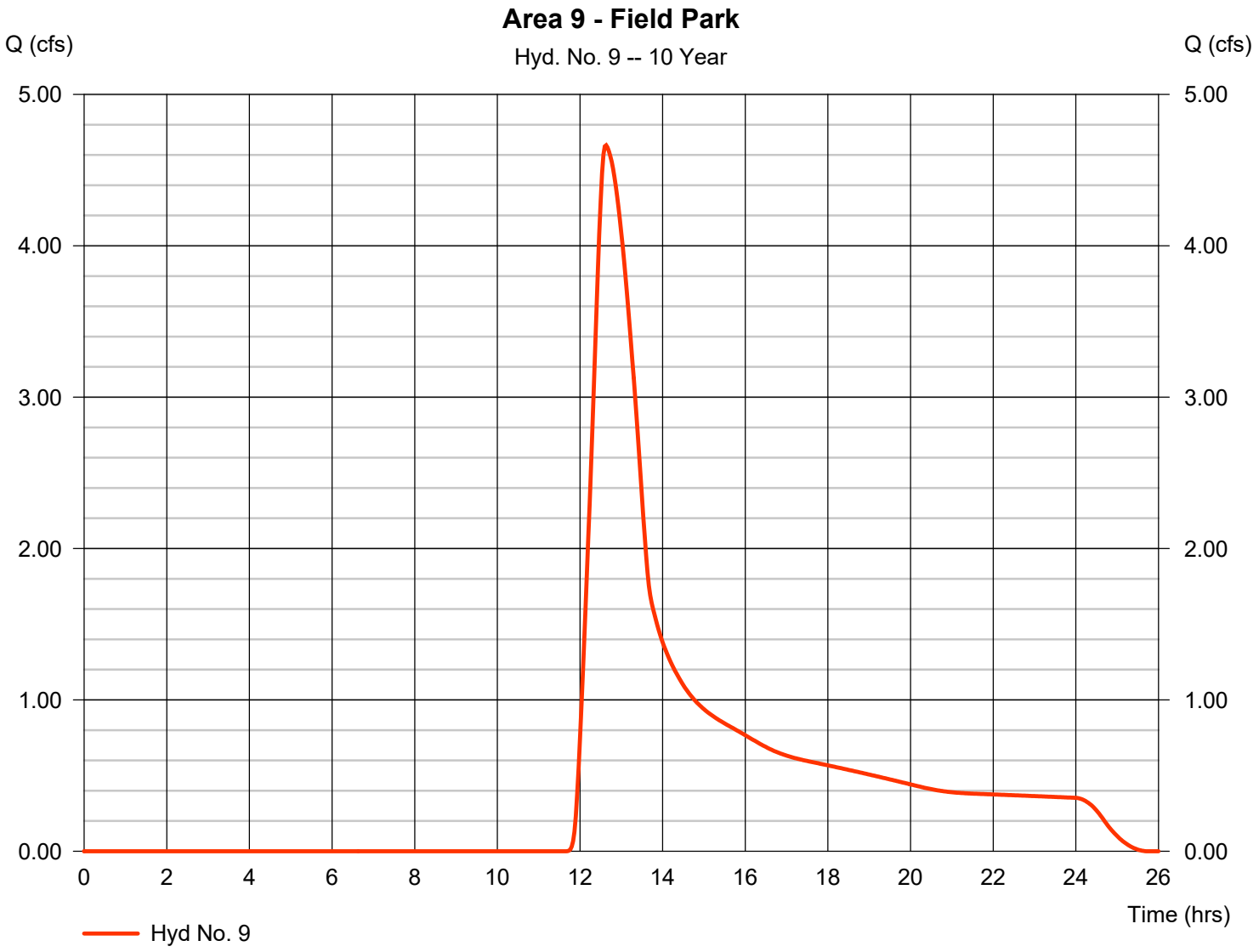


Hydrograph Report

Hyd. No. 9

Area 9 - Field Park

Hydrograph type	= SCS Runoff	Peak discharge	= 4.664 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.63 hrs
Time interval	= 2 min	Hyd. volume	= 43,510 cuft
Drainage area	= 16.800 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 66.30 min
Total precip.	= 3.81 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

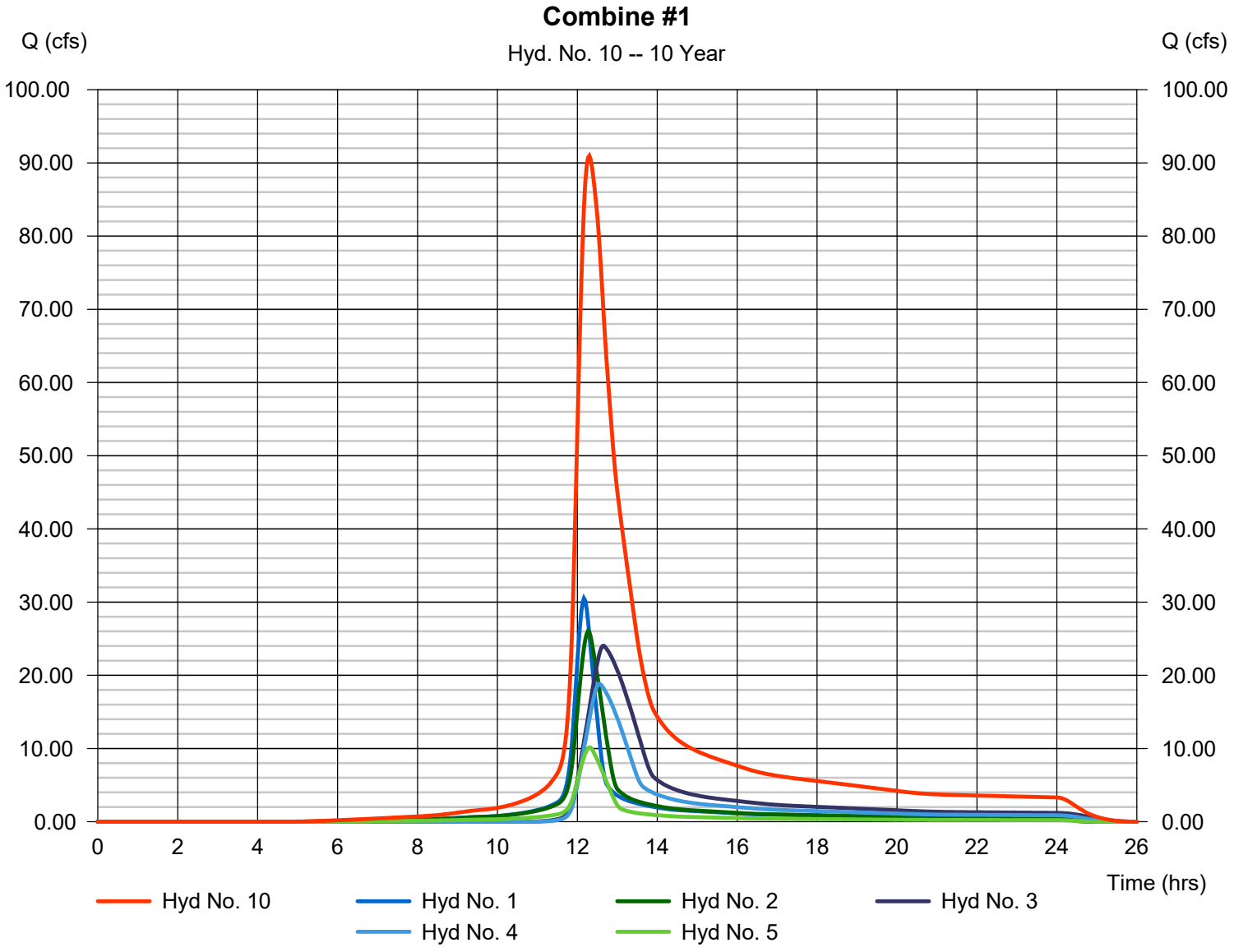


Hydrograph Report

Hyd. No. 10

Combine #1

Hydrograph type	=	Combine	Peak discharge	=	90.95 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.30 hrs
Time interval	=	2 min	Hyd. volume	=	635,405 cuft
Inflow hyds.	=	1, 2, 3, 4, 5	Contrib. drain. area	=	100.100 ac

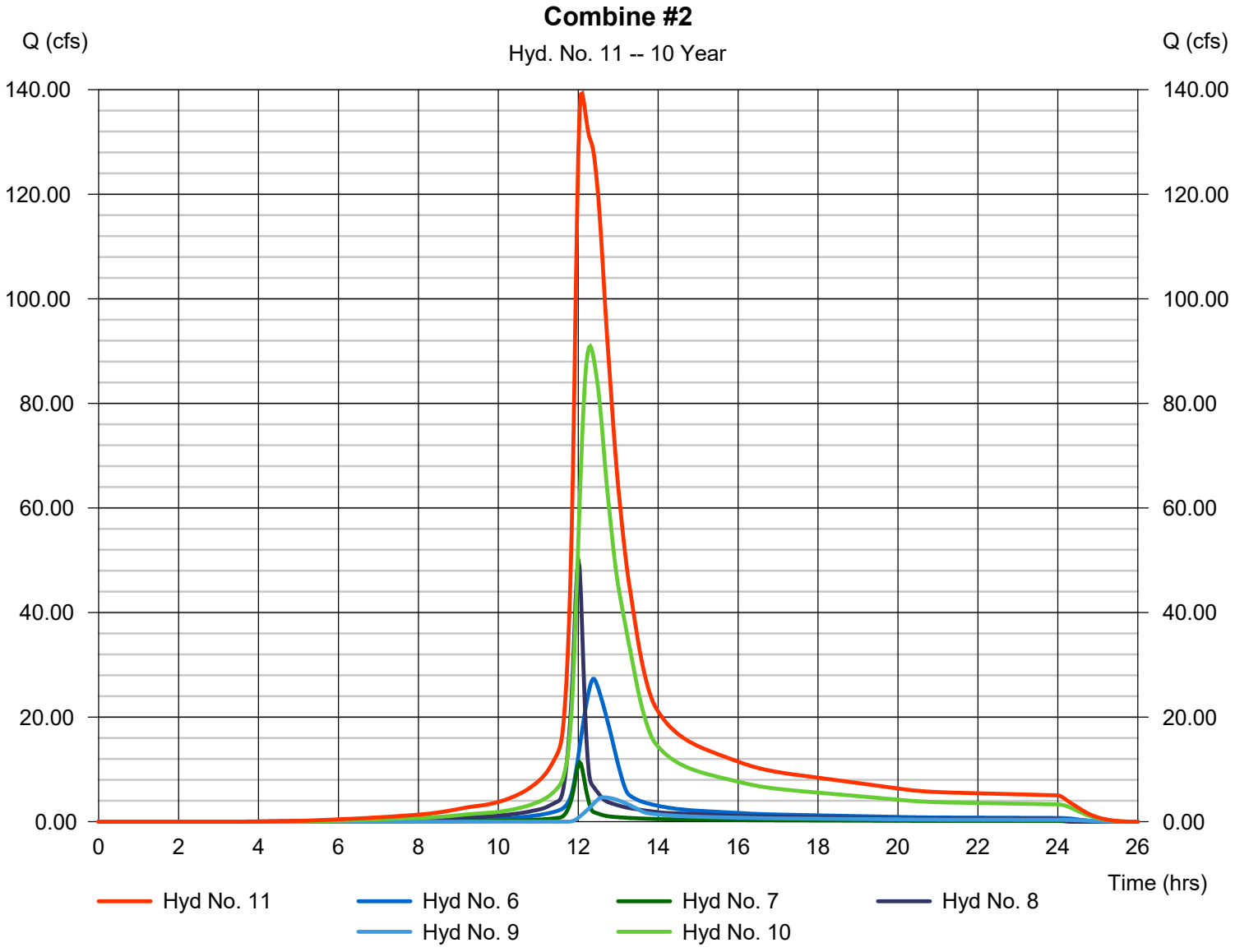


Hydrograph Report

Hyd. No. 11

Combine #2

Hydrograph type	=	Combine	Peak discharge	=	139.30 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.10 hrs
Time interval	=	2 min	Hyd. volume	=	1,001,730 cuft
Inflow hyds.	=	6, 7, 8, 9, 10	Contrib. drain. area	=	51.200 ac



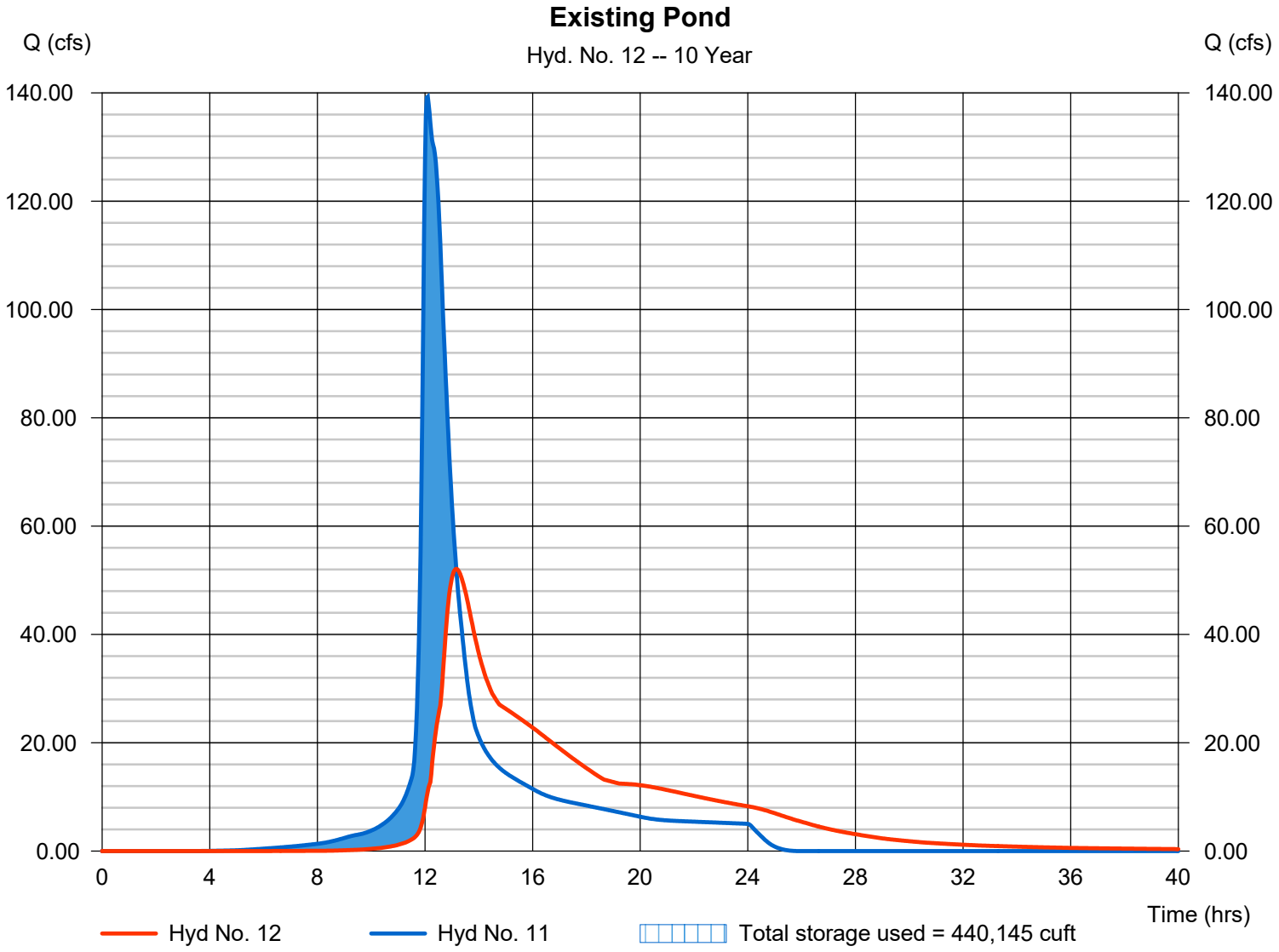
Hydrograph Report

Hyd. No. 12

Existing Pond

Hydrograph type	=	Reservoir	Peak discharge	=	52.10 cfs
Storm frequency	=	10 yrs	Time to peak	=	13.17 hrs
Time interval	=	2 min	Hyd. volume	=	997,832 cuft
Inflow hyd. No.	=	11 - Combine #2	Max. Elevation	=	819.14 ft
Reservoir name	=	Existing Pond Condition	Max. Storage	=	440,145 cuft

Storage Indication method used.



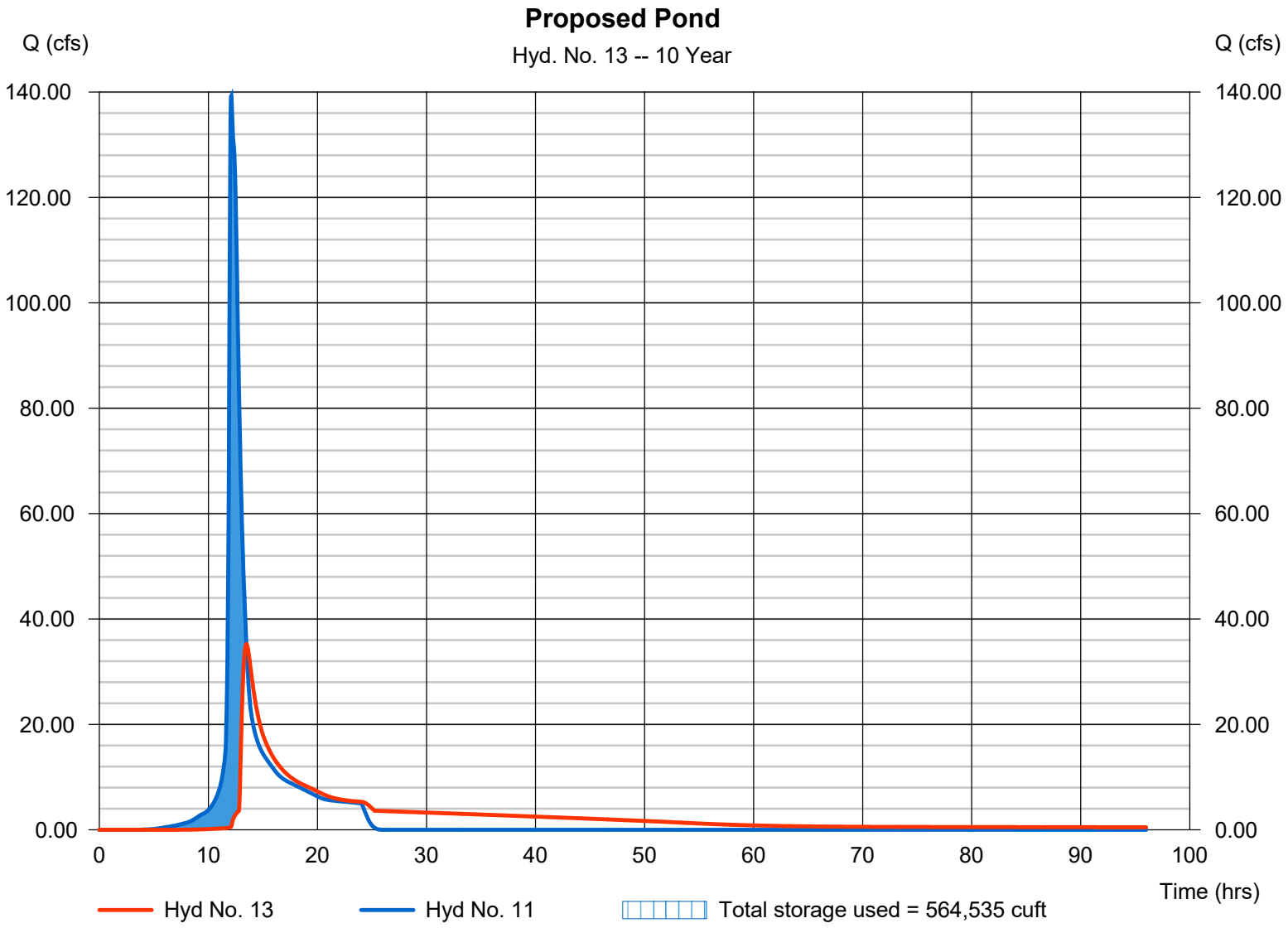
Hydrograph Report

Hyd. No. 13

Proposed Pond

Hydrograph type	=	Reservoir	Peak discharge	=	35.21 cfs
Storm frequency	=	10 yrs	Time to peak	=	13.47 hrs
Time interval	=	2 min	Hyd. volume	=	866,738 cuft
Inflow hyd. No.	=	11 - Combine #2	Max. Elevation	=	820.67 ft
Reservoir name	=	Proposed Pond Condition	Max. Storage	=	564,535 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v2020

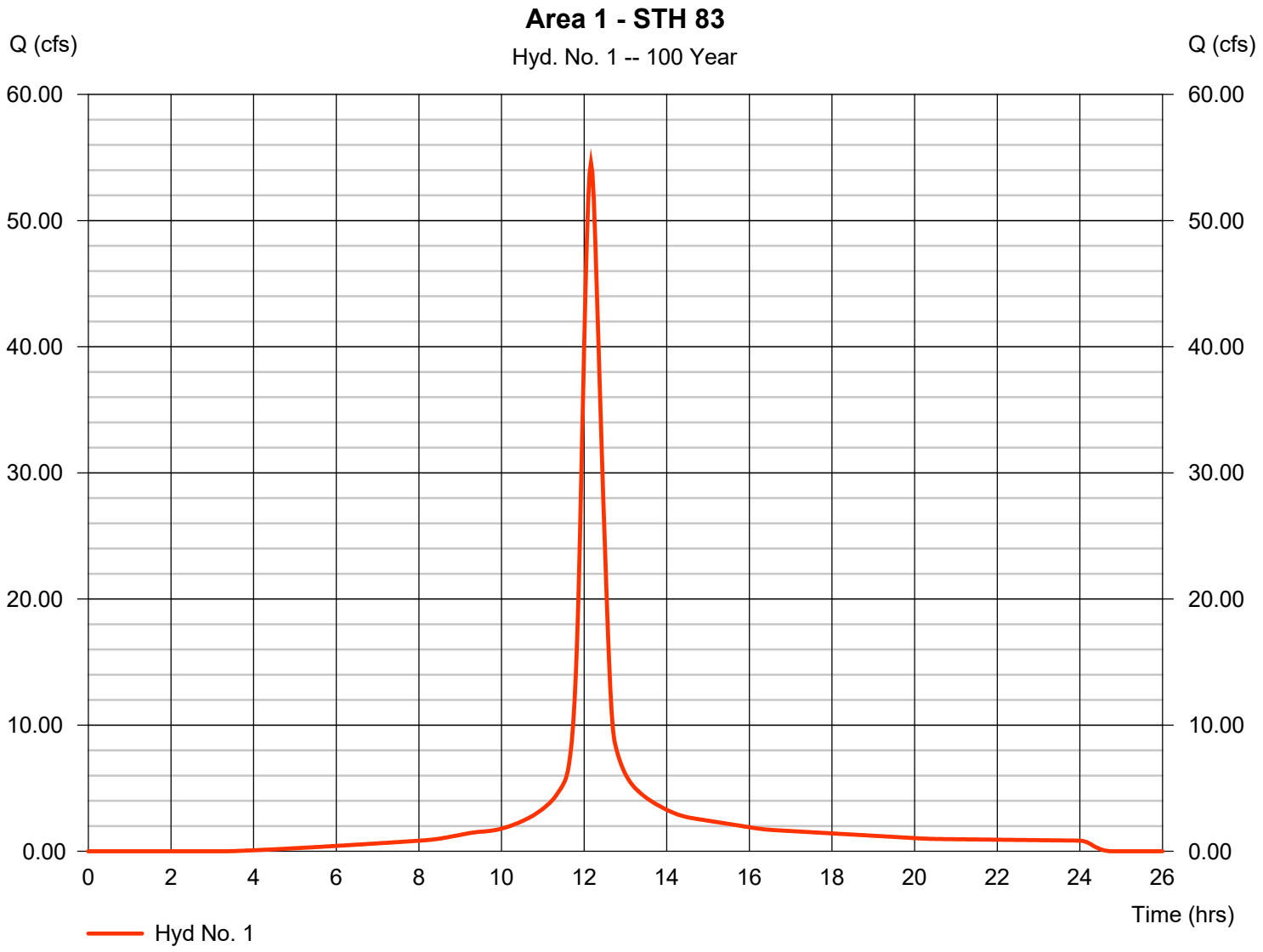
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	54.57	2	730	226,019	------	------	------	Area 1 - STH 83
2	SCS Runoff	46.68	2	736	233,311	------	------	------	Area 2 - Res./Condo
3	SCS Runoff	60.58	2	758	458,675	------	------	------	Area 3 - Med. Dens. Res.
4	SCS Runoff	48.62	2	752	331,498	------	------	------	Area 4 - School
5	SCS Runoff	17.95	2	738	95,950	------	------	------	Area 5 - Industrial
6	SCS Runoff	52.94	2	742	301,978	------	------	------	Area 6 - Commercial
7	SCS Runoff	21.36	2	722	61,606	------	------	------	Area 7 - CTH NN
8	SCS Runoff	85.54	2	720	240,792	------	------	------	Area 8 - Condos, Pond
9	SCS Runoff	17.28	2	754	128,896	------	------	------	Area 9 - Field Park
10	Combine	190.17	2	740	1,345,452	1, 2, 3, 4, 5,	------	------	Combine #1
11	Combine	276.34	2	726	2,078,725	6, 7, 8, 9, 10	------	------	Combine #2
12	Reservoir	195.67	2	766	2,074,614	11	820.99	663,007	Existing Pond
13	Reservoir	144.78	2	780	1,942,656	11	823.03	837,449	Proposed Pond

Hydrograph Report

Hyd. No. 1

Area 1 - STH 83

Hydrograph type	= SCS Runoff	Peak discharge	= 54.57 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.17 hrs
Time interval	= 2 min	Hyd. volume	= 226,019 cuft
Drainage area	= 12.400 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 27.00 min
Total precip.	= 6.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

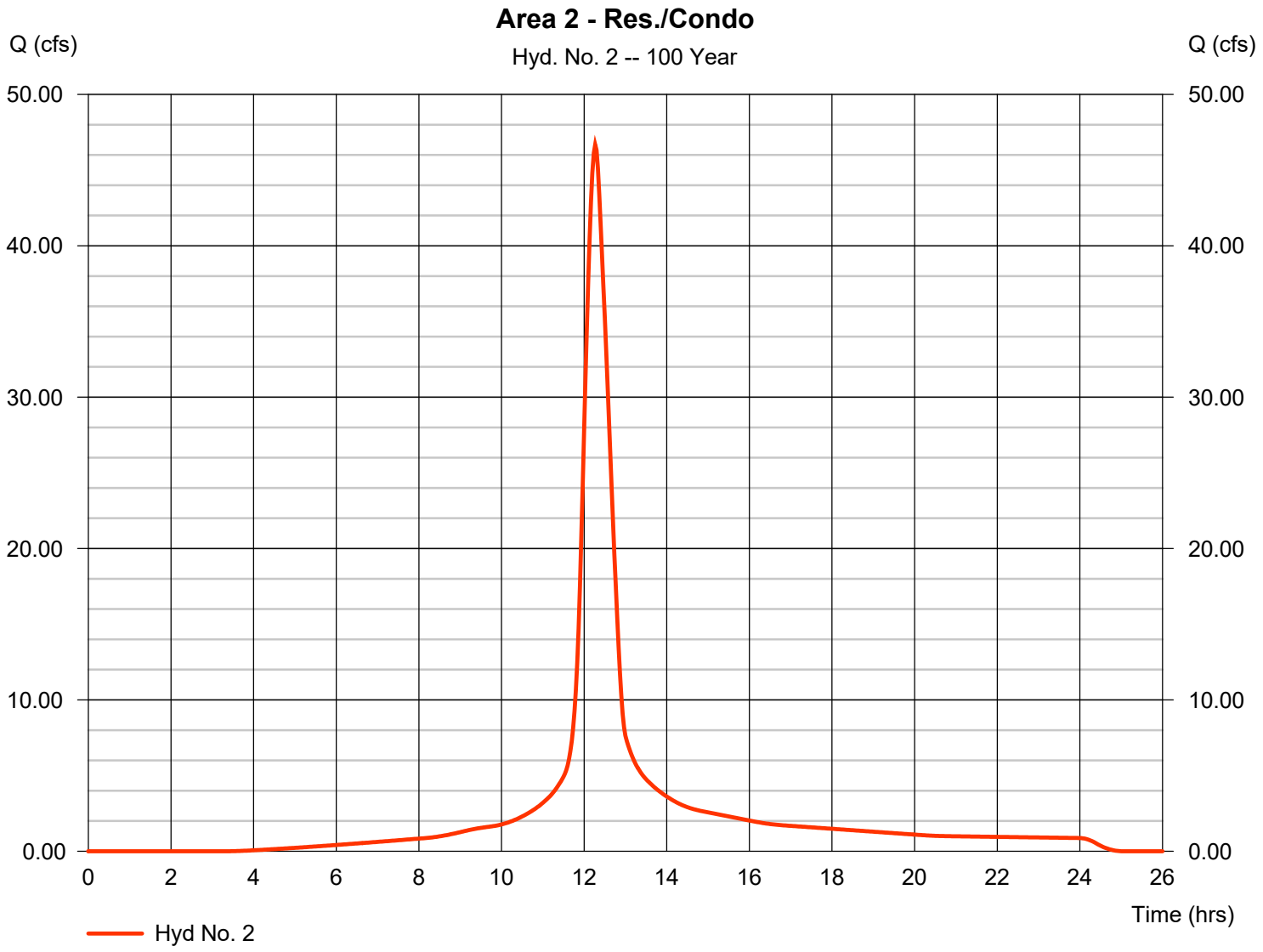


Hydrograph Report

Hyd. No. 2

Area 2 - Res./Condo

Hydrograph type	= SCS Runoff	Peak discharge	= 46.68 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.27 hrs
Time interval	= 2 min	Hyd. volume	= 233,311 cuft
Drainage area	= 12.800 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 40.10 min
Total precip.	= 6.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

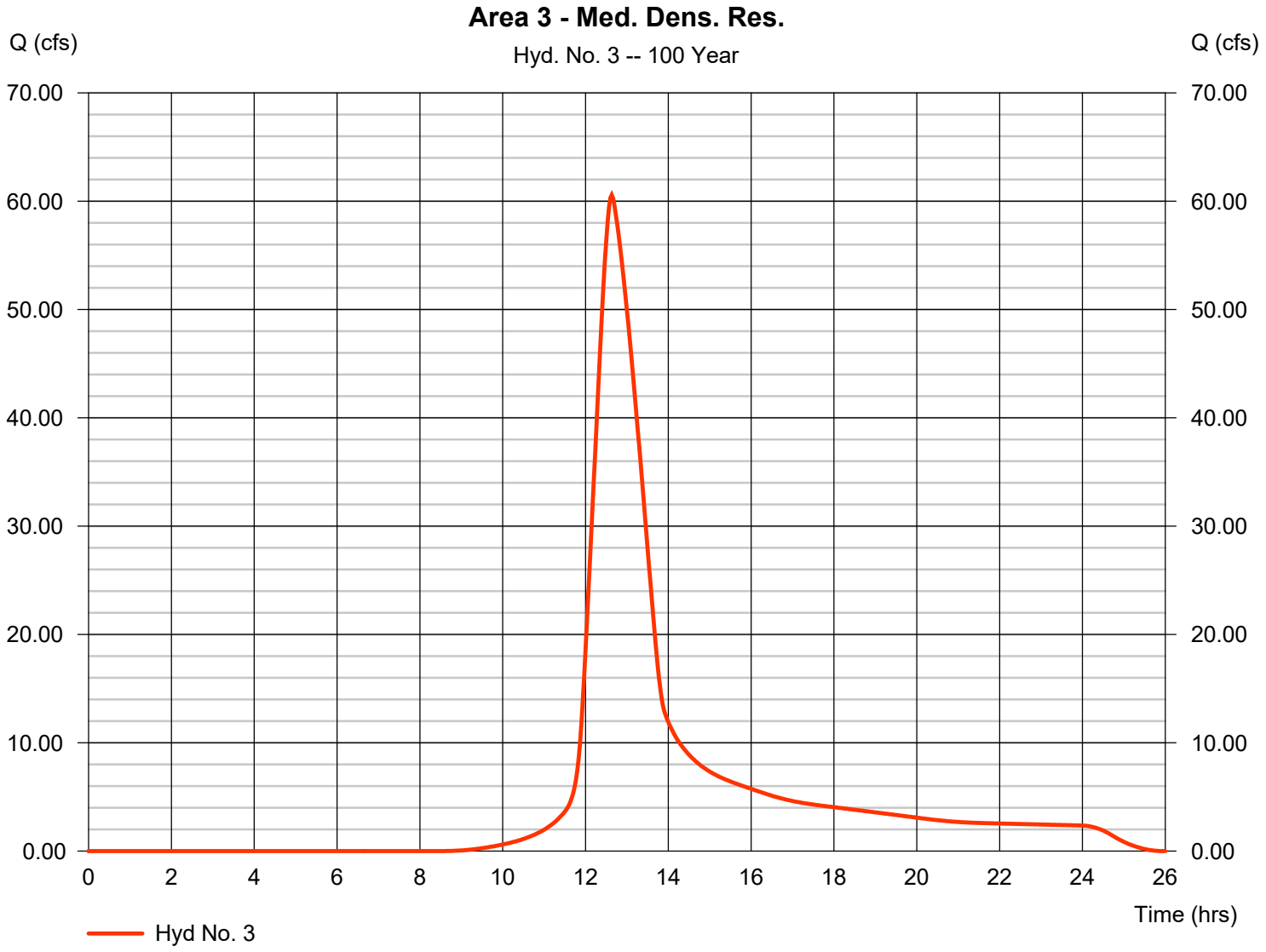


Hydrograph Report

Hyd. No. 3

Area 3 - Med. Dens. Res.

Hydrograph type	=	SCS Runoff	Peak discharge	=	60.58 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.63 hrs
Time interval	=	2 min	Hyd. volume	=	458,675 cuft
Drainage area	=	40.000 ac	Curve number	=	72
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	71.40 min
Total precip.	=	6.18 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

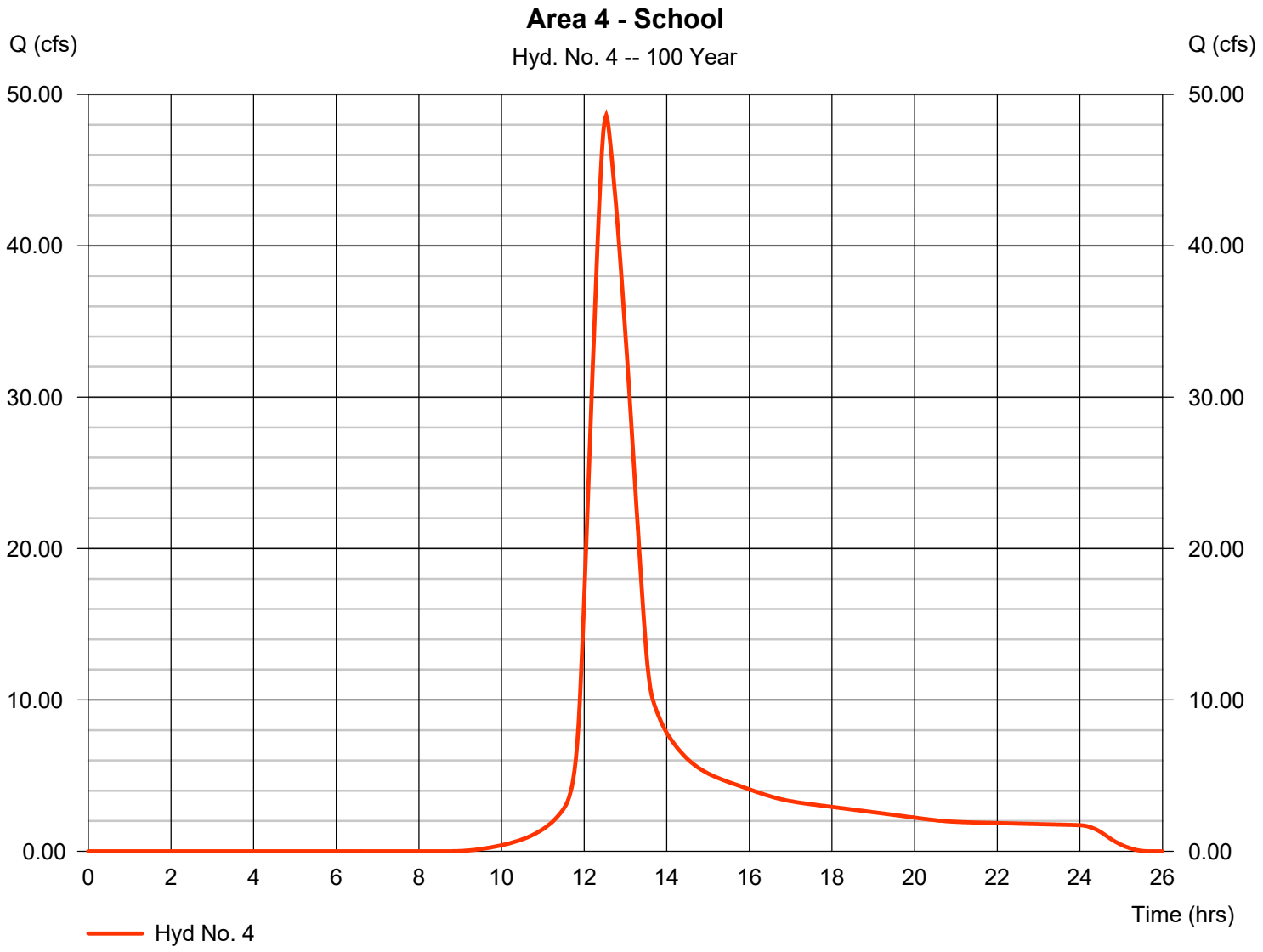


Hydrograph Report

Hyd. No. 4

Area 4 - School

Hydrograph type	=	SCS Runoff	Peak discharge	=	48.62 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.53 hrs
Time interval	=	2 min	Hyd. volume	=	331,498 cuft
Drainage area	=	29.800 ac	Curve number	=	71
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	62.80 min
Total precip.	=	6.18 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

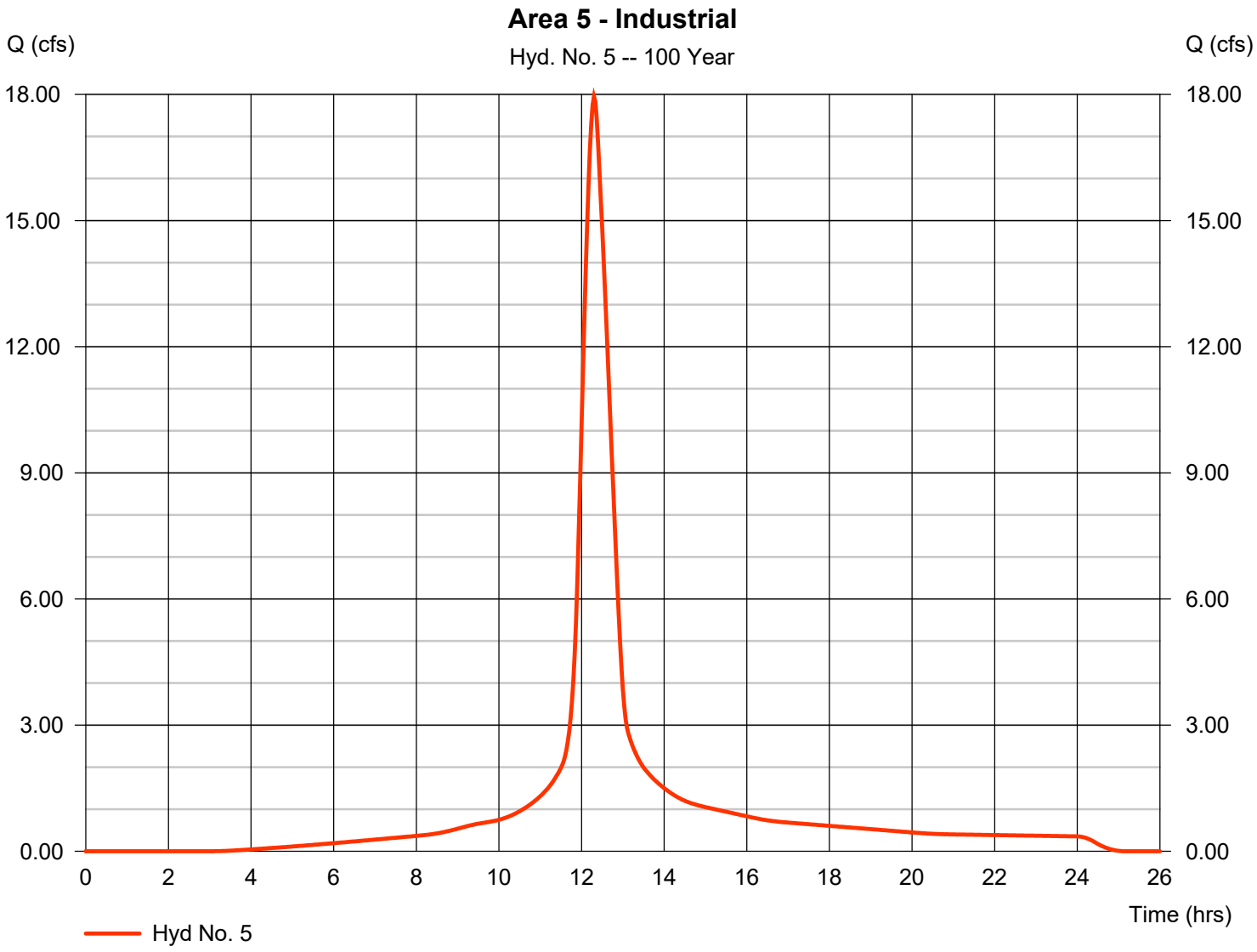


Hydrograph Report

Hyd. No. 5

Area 5 - Industrial

Hydrograph type	=	SCS Runoff	Peak discharge	=	17.95 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.30 hrs
Time interval	=	2 min	Hyd. volume	=	95,950 cuft
Drainage area	=	5.100 ac	Curve number	=	91
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	41.90 min
Total precip.	=	6.18 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

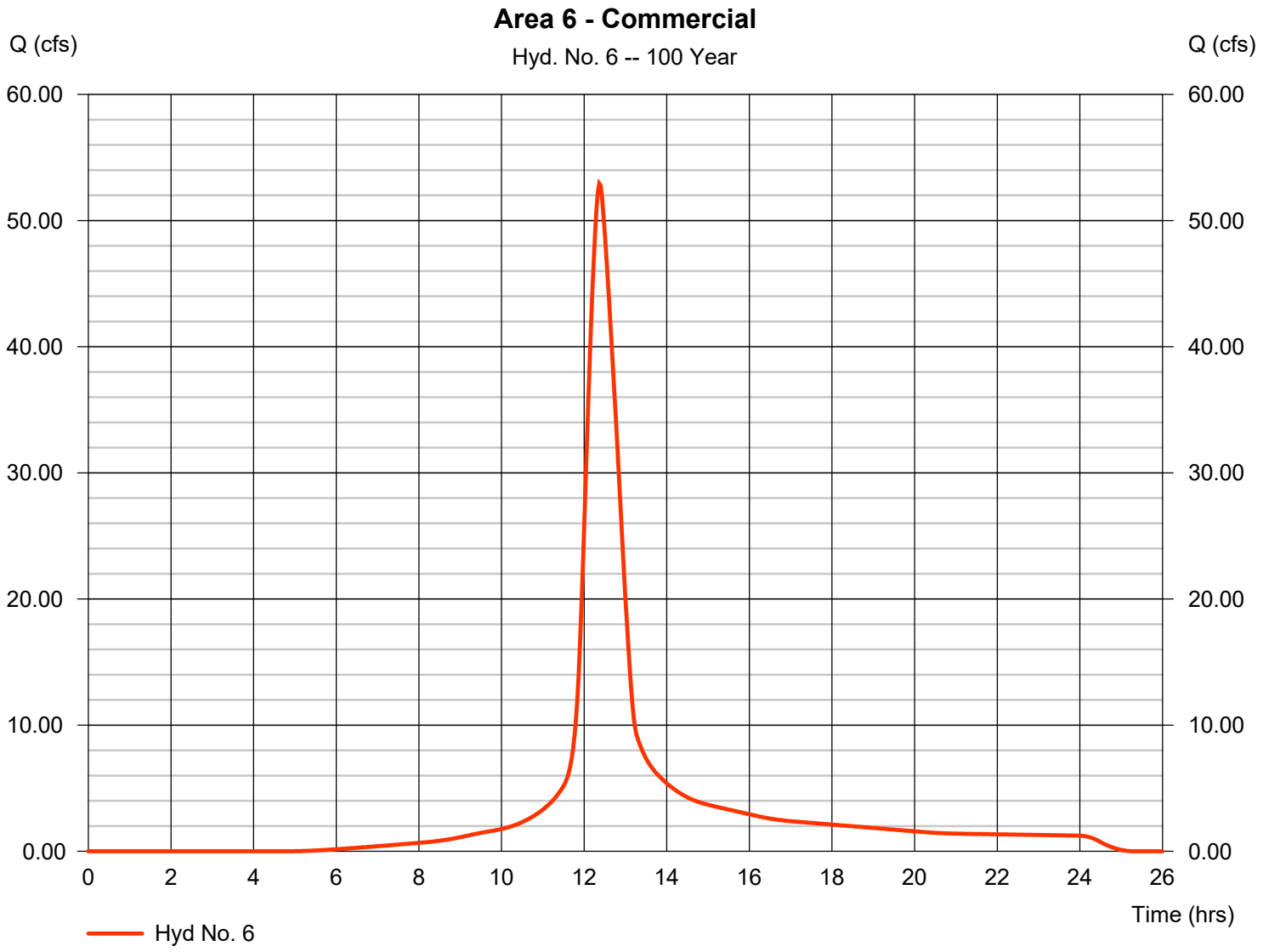


Hydrograph Report

Hyd. No. 6

Area 6 - Commercial

Hydrograph type	= SCS Runoff	Peak discharge	= 52.94 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.37 hrs
Time interval	= 2 min	Hyd. volume	= 301,978 cuft
Drainage area	= 18.600 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 48.80 min
Total precip.	= 6.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

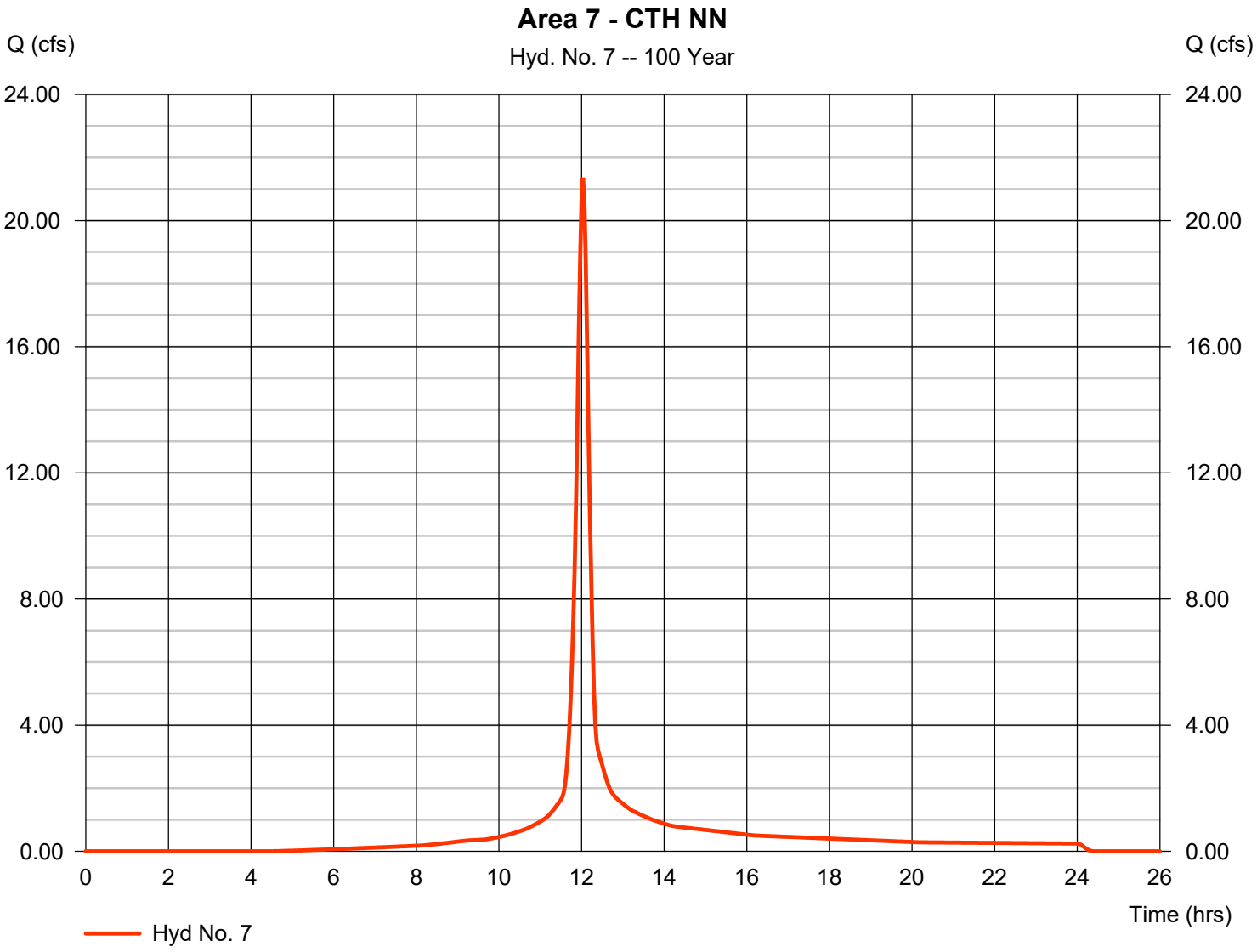


Hydrograph Report

Hyd. No. 7

Area 7 - CTH NN

Hydrograph type	=	SCS Runoff	Peak discharge	=	21.36 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	61,606 cuft
Drainage area	=	3.800 ac	Curve number	=	86
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.70 min
Total precip.	=	6.18 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

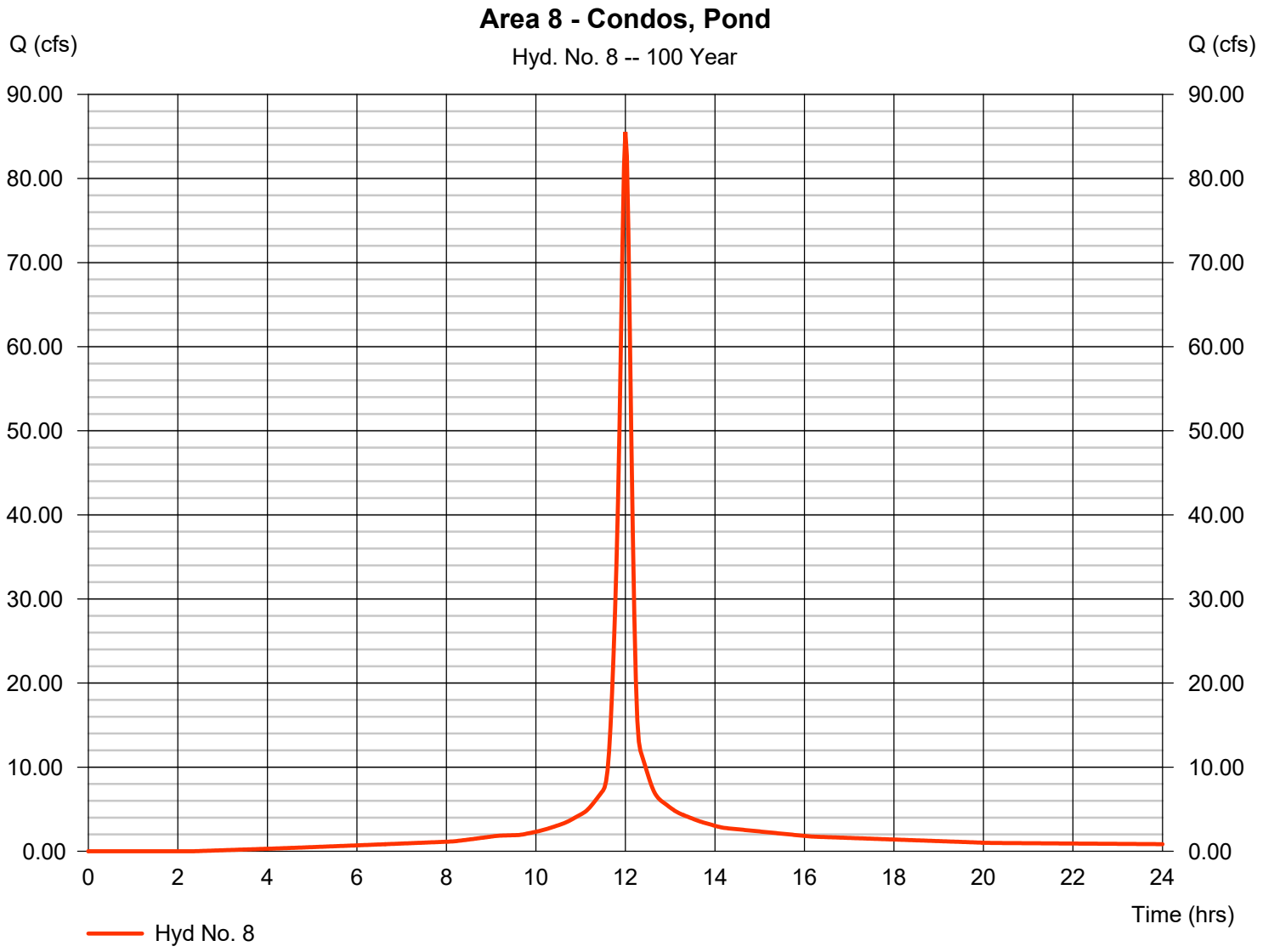


Hydrograph Report

Hyd. No. 8

Area 8 - Condos, Pond

Hydrograph type	=	SCS Runoff	Peak discharge	=	85.54 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.00 hrs
Time interval	=	2 min	Hyd. volume	=	240,792 cuft
Drainage area	=	12.000 ac	Curve number	=	93
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	12.60 min
Total precip.	=	6.18 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

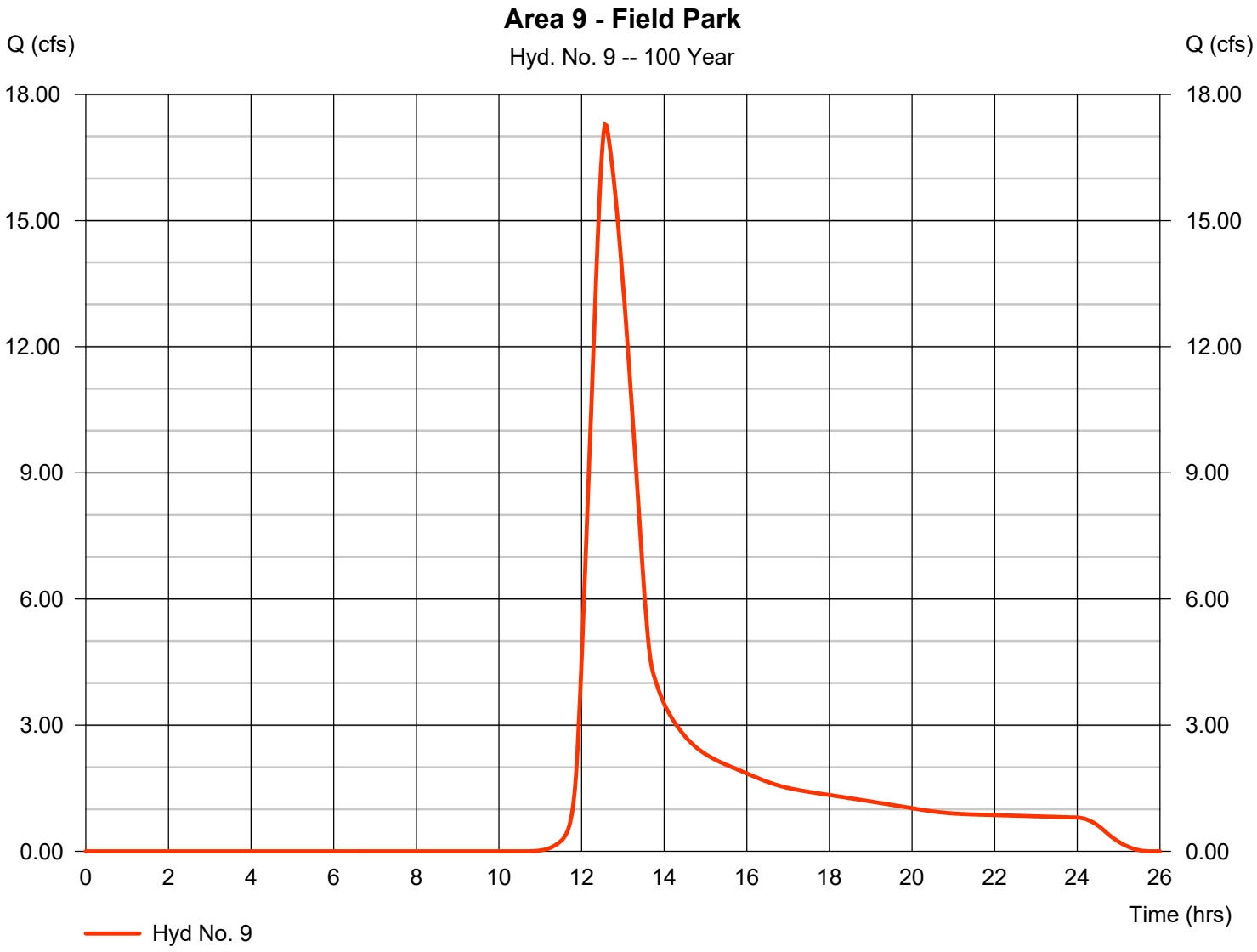


Hydrograph Report

Hyd. No. 9

Area 9 - Field Park

Hydrograph type	=	SCS Runoff	Peak discharge	=	17.28 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.57 hrs
Time interval	=	2 min	Hyd. volume	=	128,896 cuft
Drainage area	=	16.800 ac	Curve number	=	61
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	66.30 min
Total precip.	=	6.18 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

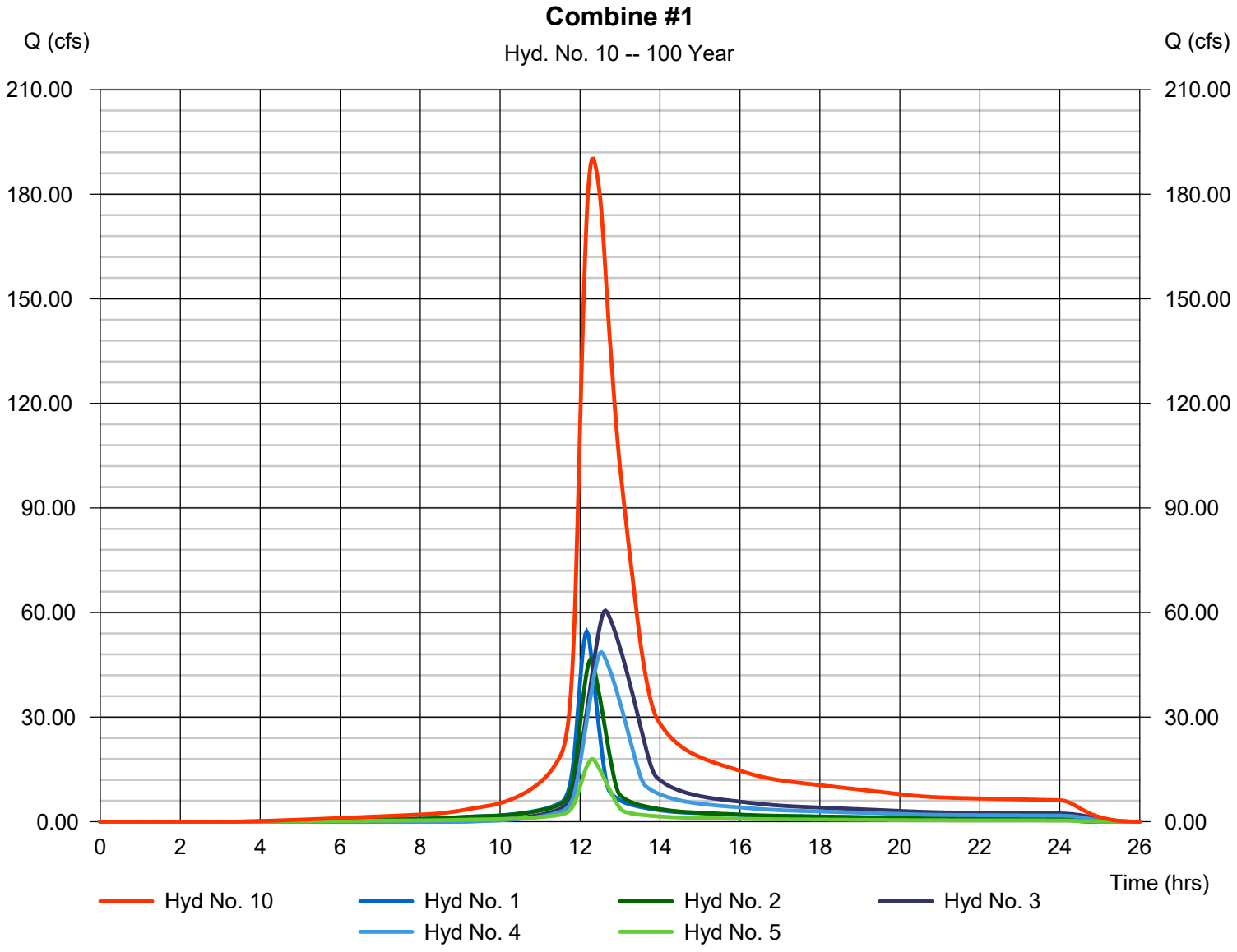


Hydrograph Report

Hyd. No. 10

Combine #1

Hydrograph type	=	Combine	Peak discharge	=	190.17 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.33 hrs
Time interval	=	2 min	Hyd. volume	=	1,345,452 cuft
Inflow hyds.	=	1, 2, 3, 4, 5	Contrib. drain. area	=	100.100 ac

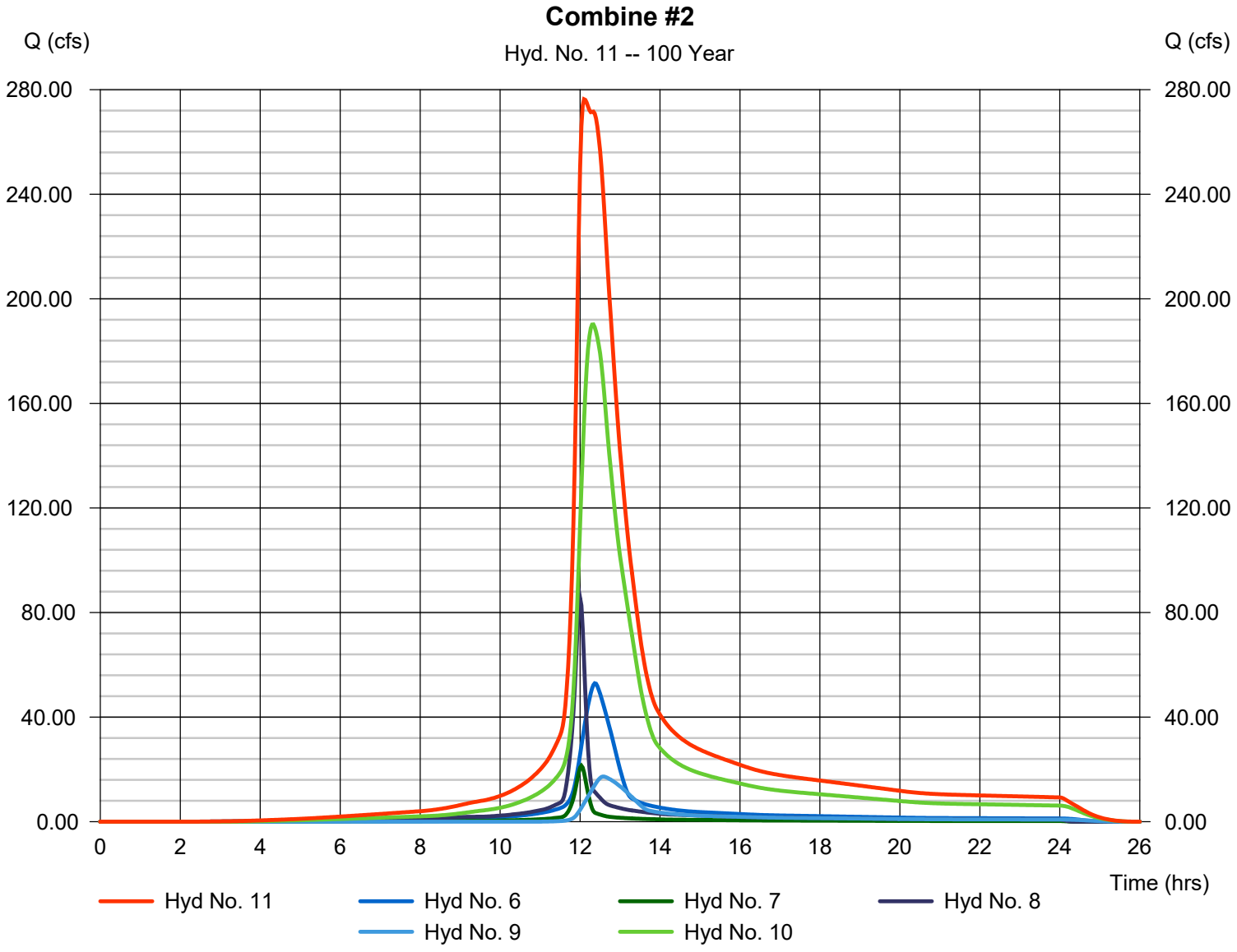


Hydrograph Report

Hyd. No. 11

Combine #2

Hydrograph type	= Combine	Peak discharge	= 276.34 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.10 hrs
Time interval	= 2 min	Hyd. volume	= 2,078,725 cuft
Inflow hyds.	= 6, 7, 8, 9, 10	Contrib. drain. area	= 51.200 ac



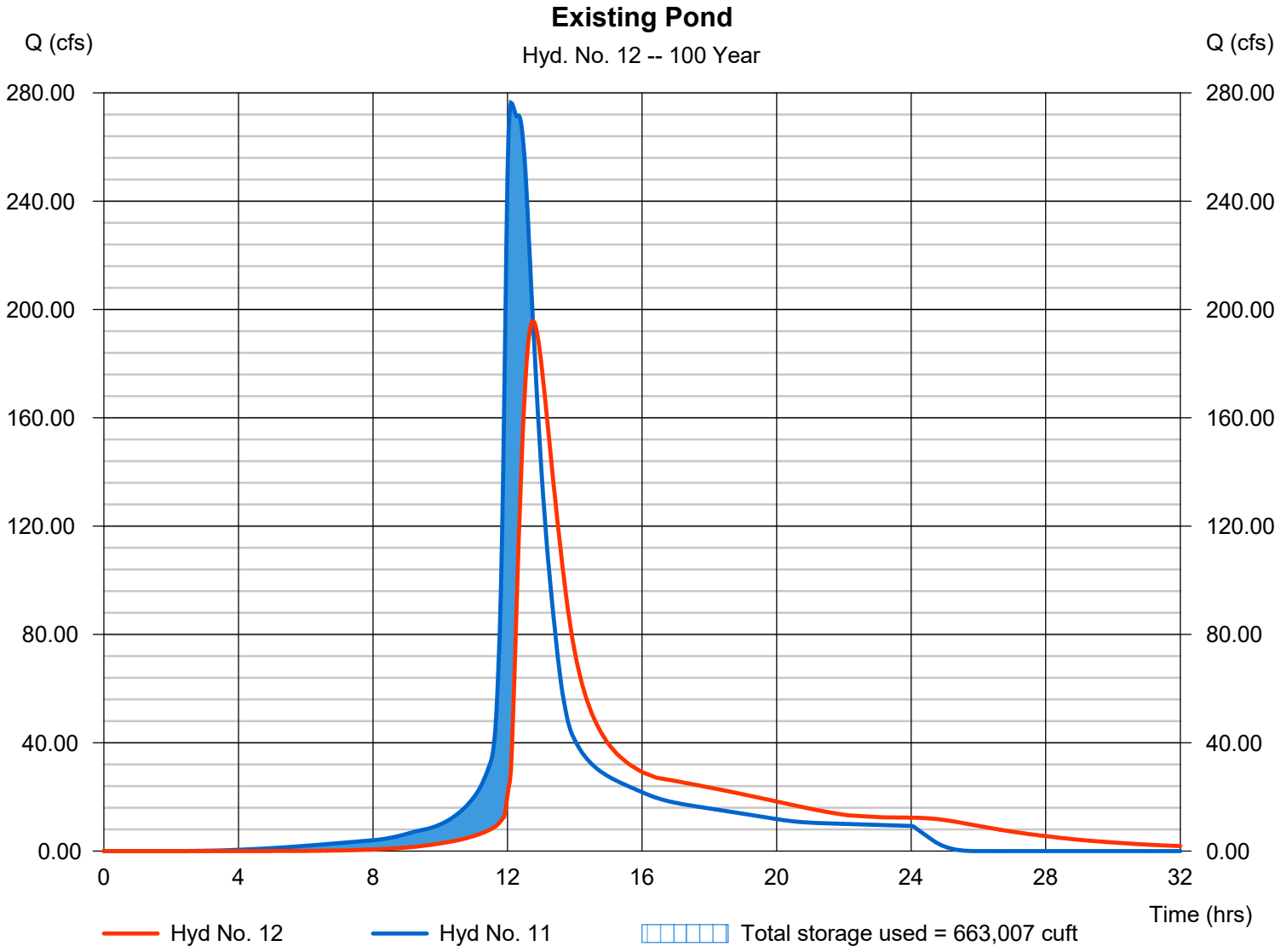
Hydrograph Report

Hyd. No. 12

Existing Pond

Hydrograph type	=	Reservoir	Peak discharge	=	195.67 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.77 hrs
Time interval	=	2 min	Hyd. volume	=	2,074,614 cuft
Inflow hyd. No.	=	11 - Combine #2	Max. Elevation	=	820.99 ft
Reservoir name	=	Existing Pond Condition	Max. Storage	=	663,007 cuft

Storage Indication method used.



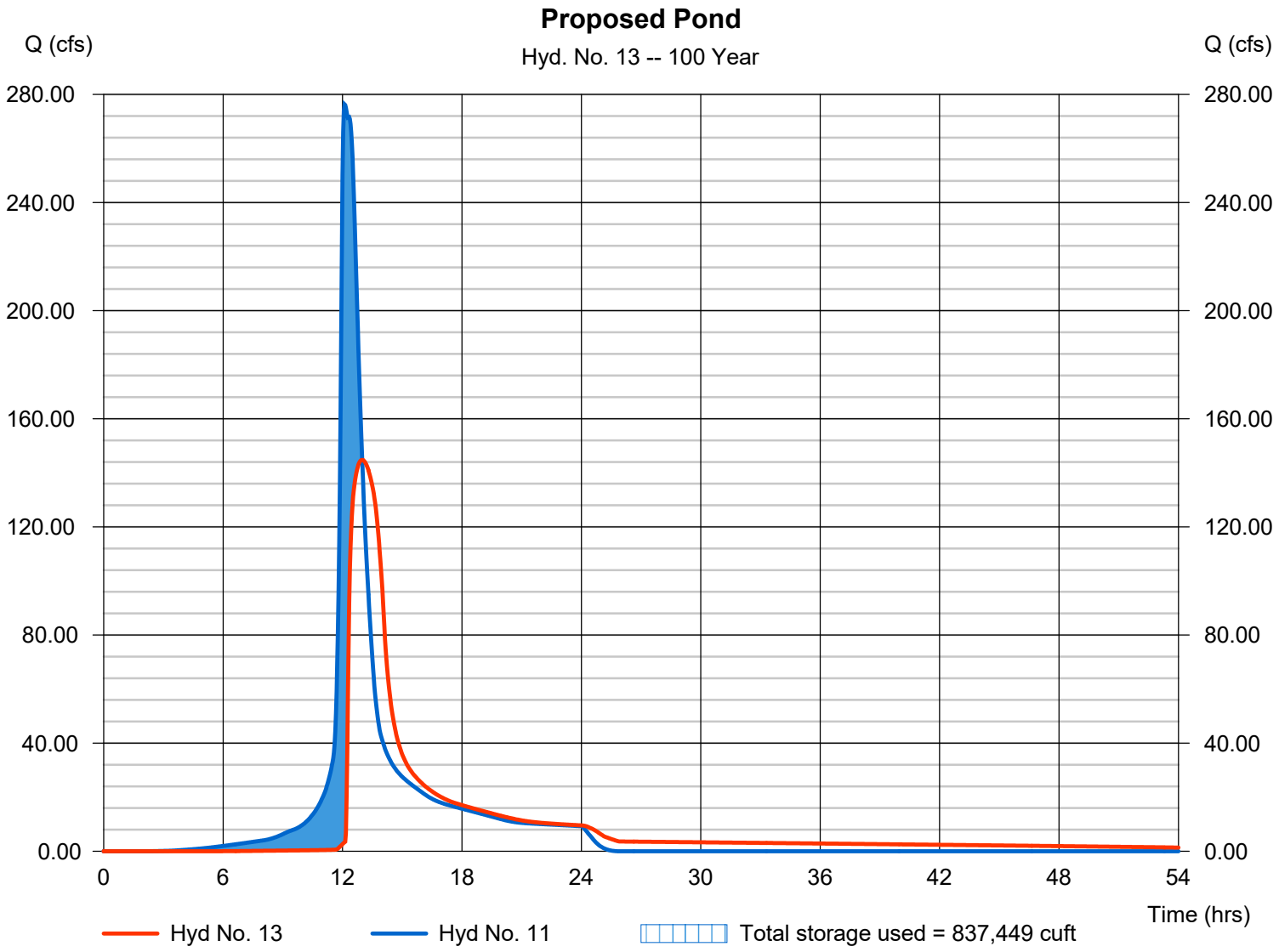
Hydrograph Report

Hyd. No. 13

Proposed Pond

Hydrograph type	=	Reservoir	Peak discharge	=	144.78 cfs
Storm frequency	=	100 yrs	Time to peak	=	13.00 hrs
Time interval	=	2 min	Hyd. volume	=	1,942,656 cuft
Inflow hyd. No.	=	11 - Combine #2	Max. Elevation	=	823.03 ft
Reservoir name	=	Proposed Pond Condition	Max. Storage	=	837,449 cuft

Storage Indication method used.



Hydraflow Rainfall Report

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	30.1424	7.7000	0.7987	--------
2	26.3157	5.8000	0.7259	--------
3	0.0000	0.0000	0.0000	--------
5	25.6132	4.2000	0.6633	--------
10	28.0736	4.0000	0.6438	--------
25	28.8888	2.9000	0.6058	--------
50	29.6692	2.3000	0.5810	--------
100	31.8157	2.1000	0.5703	--------

File name: Atlas14_Racine Co.IDF

Intensity = B / (Tc + D)^E

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	3.96	3.04	2.49	2.12	1.86	1.66	1.50	1.38	1.27	1.18	1.11	1.04
2	4.68	3.55	2.91	2.49	2.19	1.96	1.78	1.64	1.52	1.42	1.33	1.26
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	5.88	4.41	3.61	3.09	2.73	2.46	2.25	2.08	1.93	1.81	1.71	1.62
10	6.82	5.13	4.22	3.63	3.21	2.90	2.65	2.46	2.29	2.15	2.03	1.93
25	8.26	6.14	5.03	4.33	3.85	3.48	3.19	2.96	2.77	2.61	2.47	2.35
50	9.35	6.90	5.66	4.89	4.34	3.94	3.62	3.37	3.16	2.98	2.82	2.69
100	10.40	7.68	6.30	5.44	4.85	4.40	4.05	3.77	3.54	3.34	3.17	3.02

Tc = time in minutes. Values may exceed 60.

Precip. file name: R:\APPS\Autodesk\Hydrology\Hydraflow\Atlas14_Waukesha Co_24hr.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	2.40	2.70	0.00	3.27	3.81	4.66	5.38	6.18
SCS 6-Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX 3

USDA SOIL REPORT

Soil Map—Milwaukee and Waukesha Counties, Wisconsin
(Pick N' Save Pond Retrofit)

Map Scale: 1:8,110 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 100 200 400 600

Feet
0 350 700 1400 2100

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 Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

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

Background

- Aerial Photography

MAP INFORMATION

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

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: Milwaukee and Waukesha Counties, Wisconsin
Survey Area Data: Version 14, Sep 12, 2018

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

Date(s) aerial images were photographed: Apr 29, 2011—Mar 28, 2012

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CeB	Casco loam, 2 to 6 percent slopes	8.9	5.7%
CeC2	Casco loam, 6 to 12 percent slopes, eroded	7.3	4.7%
CeD2	Casco loam, 12 to 20 percent slopes, eroded	0.9	0.6%
FoB	Fox loam, 2 to 6 percent slopes	80.2	51.6%
MxB	Miami loam, sandy loam substratum, 2 to 6 percent slopes	16.9	10.9%
MxD2	Miami loam, sandy loam substratum, 12 to 20 percent slopes, eroded	3.7	2.4%
Sf	Sandy and gravelly land	37.3	24.0%
Sm	Sebewa silt loam, 0 to 2 percent slopes	0.1	0.1%
Totals for Area of Interest		**155.4**	**100.0%**

APPENDIX 4

WINSLAMM LAND USE MAP

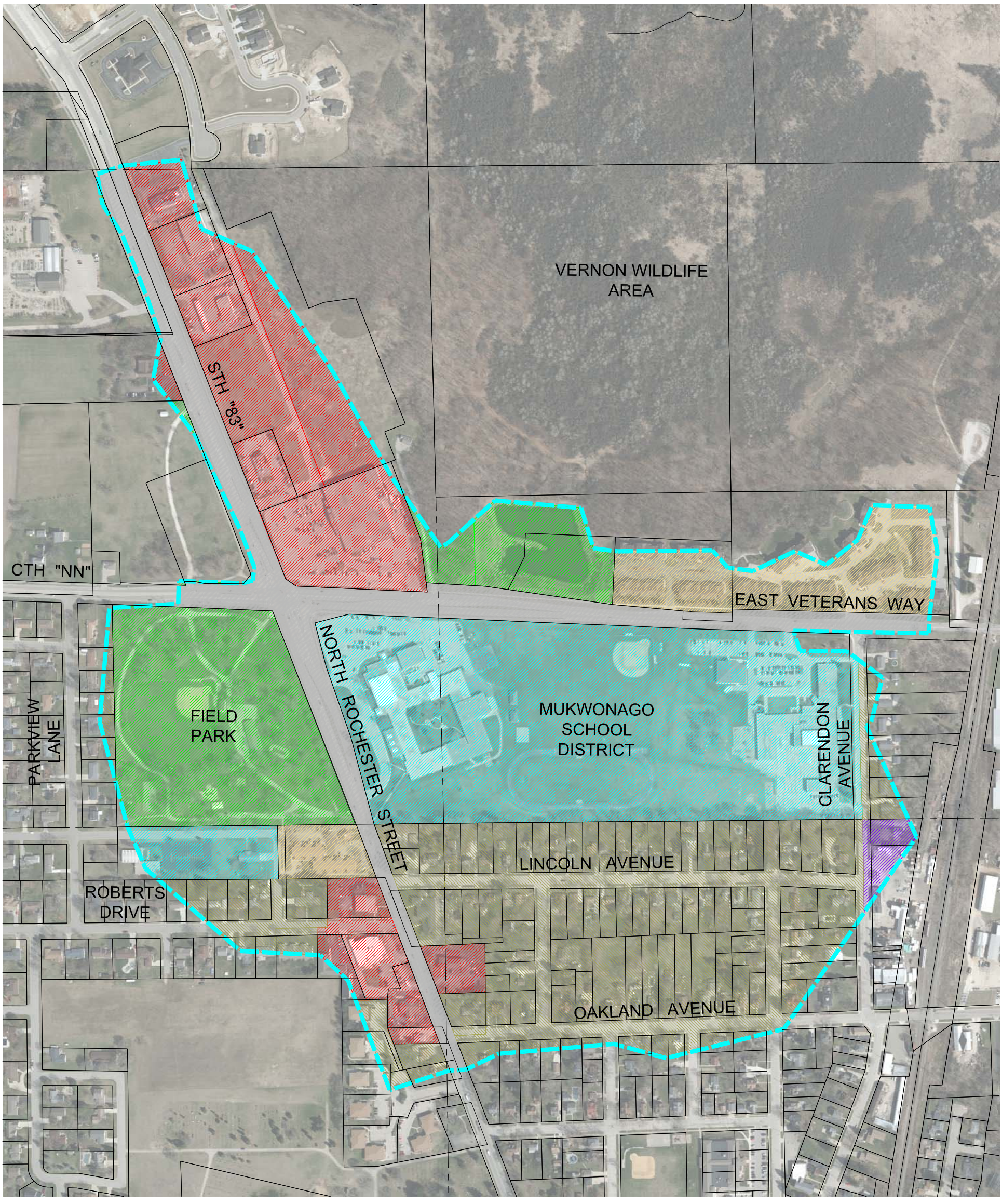
Mar 25, 2019 10:34am PLOTTED BY: MMichalski SAVED BY: MMichalski
G:\C3D_2018\12_Village of Mukwonago\10086_PICK N SAVE POND\dwg\Zcex WinSLAMM Basin Map.dwg Layout1
IMAGES: G:\C3D_2018\12_Village of Mukwonago\10086_PICK N SAVE POND\dwg\im15_6_0518_Clip.sid; G:\SYM\RM SQUARE_Full Color-Print.jpg; G:\C3D_2018\12_Village of Mukwonago\10086_PICK N SAVE POND\dwg\Waukesha County Drainage Exhibit.jpg;
XREFS: .\Waukesha County Drainage Basin.dwg; N:\CADASTRL\WAUK_CO\20081231_DWG\0518.dwg

RM1117LB

EXHIBIT #2

WINSLAMM LAND USE MAP

VILLAGE OF MUKWONAGO
WAUKESHA/ WALWORTH COUNTY, WISCONSIN



LEGEND

- BASIN BOUNDARY
- RESIDENTIAL - HIGH
- RESIDENTIAL - MEDIUM
- INDUSTRIAL
- COMMERCIAL
- INSTITUTIONAL
- OPEN SPACE/ UNDEVELOPED
- MAJOR ROADWAY

The Village of Mukwonago
Where life, leisure and business thrive.

N W E S

0 100 200 400 800

SCALE IN FEET

DATE: FEBRUARY, 2019

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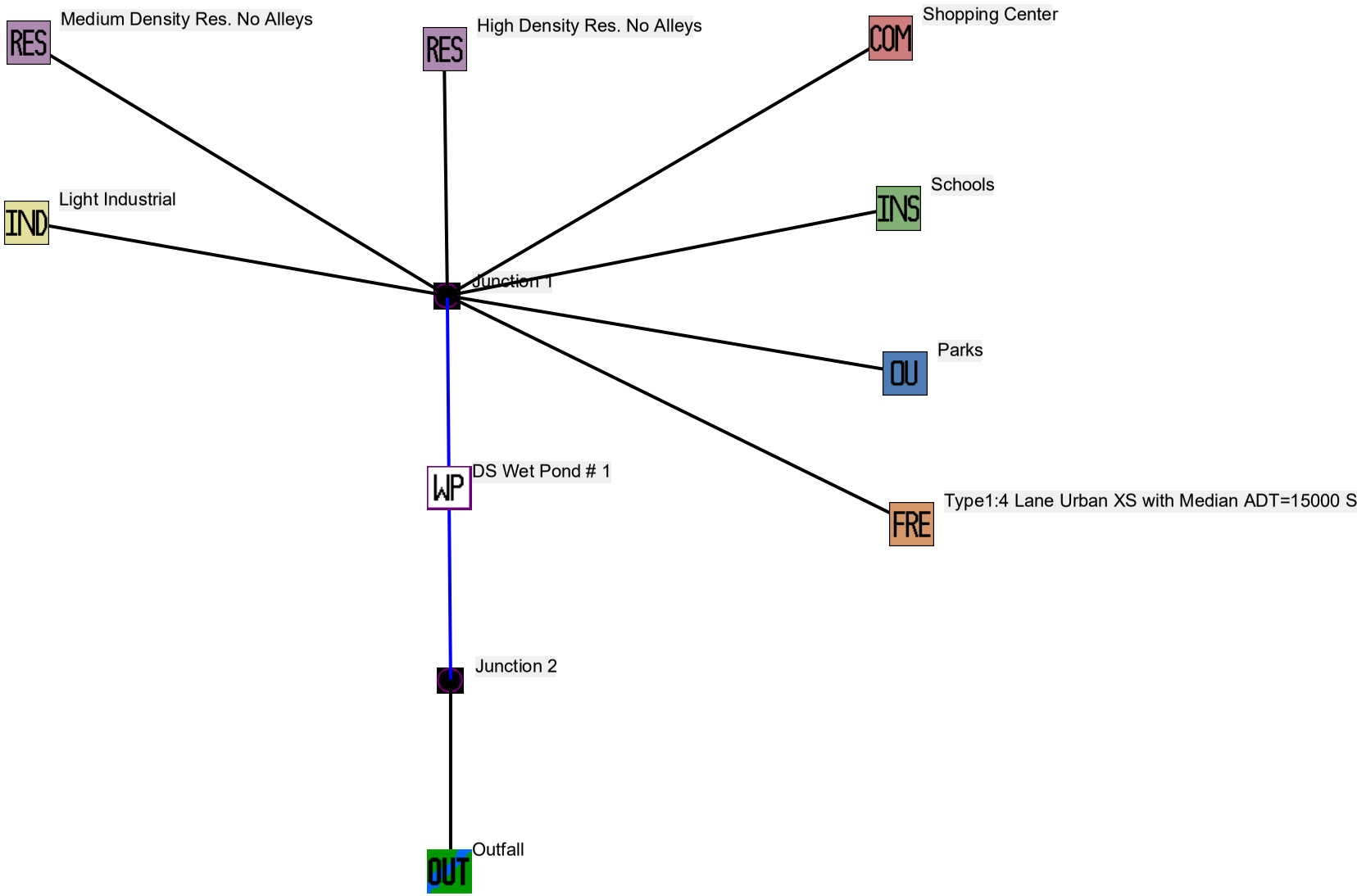
SOURCE:
BASEMAP SOURCE:

Ruekert • Mielk
www.ruekertmielke.com

APPENDIX 5

EXISTING POND CONDITIONS WATER QUALITY ANALYSIS


RES
Medium Density Res. No Alleys
RES
High Density Res. No Alleys
COM
Shopping Center
IND
Light Industrial
INS
Schools
Junction 1
OU
Parks
WP
DS Wet Pond # 1
FRE
Type1:4 Lane Urban XS with Median ADT=15000 S
Junction 2
OUT
Outfall

Data file name: R:\CLIENTS DATA\12 Mukwonago\12-10086\Pick N Save Pond_Existing Conditions-20190401.mdb
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban 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\WI_Com Inst Indust 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:
Seed for random number generator: -42
Study period starting date: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Date: 04-02-2019 Time: 10:03:18
Site information:

LU# 1 - Residential: Medium Density Res. No Alleys Total area (ac): 40.760
- 3 - Roofs 3: 1.834 ac. Pitched Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 6 - Roofs 6: 4.280 ac. Pitched Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 13 - Paved Parking 1: 0.082 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 25 - Driveways 1: 2.283 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 27 - Driveways 3: 0.774 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 31 - Sidewalks 1: 0.448 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 33 - Sidewalks 3: 0.448 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 37 - Streets1: 1.508 ac. Smooth Street Length = 0.8152 curb-mi Street Width (assuming two curb-mi per street mile) = 30.525 ft
  Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 38 - Streets 2: 3.098 ac. Intermediate Street Length = 1.6304 curb-mi Street Width (assuming two curb-mi per street mile) = 31.35 ft
  Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 39 - Streets 3: 0.611 ac. Rough Street Length = 0.32608 curb-mi Street Width (assuming two curb-mi per street mile) = 30.9375 ft
  Default St. Dirt Accum. Annual Winter Load = 2750 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 46 - Large Landscaped Areas 2: 0.082 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 52 - Small Landscaped Areas 2: 23.437 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 58 - Undeveloped Areas 2: 0.163 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 69 - Isolated Areas: 0.082 ac. PSD File: C:\WinSLAMM Files\NURP.cpz
- 72 - Other Pervious Areas 2: 1.630 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Residential: High Density Res. No Alleys Total area (ac): 9.550
- 3 - Roofs 3: 0.984 ac. Pitched Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 6 - Roofs 6: 1.060 ac. Pitched Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 25 - Driveways 1: 1.347 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 31 - Sidewalks 1: 0.191 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 33 - Sidewalks 3: 0.191 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 37 - Streets1: 0.430 ac. Smooth Street Length = 0.2292 curb-mi Street Width (assuming two curb-mi per street mile) = 30.9375 ft
  Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 38 - Streets 2: 0.860 ac. Intermediate Street Length = 0.46795 curb-mi Street Width (assuming two curb-mi per street mile) = 30.30612 ft
  Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 52 - Small Landscaped Areas 2: 3.916 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 69 - Isolated Areas: 0.010 ac. PSD File: C:\WinSLAMM Files\NURP.cpz
- 72 - Other Pervious Areas 2: 0.563 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 3 - Industrial: Light Industrial Total area (ac): 1.070
- 1 - Roofs 1: 0.219 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 3 - Roofs 3: 0.027 ac. Pitched Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 5 - Roofs 5: 0.024 ac. Flat Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 13 - Paved Parking 1: 0.352 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 21 - Unpaved Parking 3: 0.068 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 25 - Driveways 1: 0.027 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 31 - Sidewalks 1: 0.014 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 37 - Streets1: 0.020 ac. Smooth Street Length = 9.095001E-03 curb-mi Street Width (assuming two curb-mi per street mile) = 35.71764 ft
  Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 38 - Streets 2: 0.093 ac. Intermediate Street Length = 0.04387 curb-mi Street Width (assuming two curb-mi per street mile) = 34.93171 ft
  Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 39 - Streets 3: 0.003 ac. Rough Street Length = 0.001605 curb-mi Street Width (assuming two curb-mi per street mile) = 35.2 ft
  Default St. Dirt Accum. Annual Winter Load = 2750 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 46 - Large Landscaped Areas 2: 0.038 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 52 - Small Landscaped Areas 2: 0.106 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 58 - Undeveloped Areas 2: 0.046 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 72 - Other Pervious Areas 2: 0.030 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 79 - Other Part Con Imp Areas 2: 0.002 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 4 - Commercial: Shopping Center Total area (ac): 23.590
- 1 - Roofs 1: 5.098 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 13 - Paved Parking 1: 14.314 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 19 - Unpaved Parking 1: 0.080 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 25 - Driveways 1: 0.427 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 31 - Sidewalks 1: 0.127 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 37 - Streets1: 0.995 ac. Smooth Street Length = 0.271285 curb-mi Street Width (assuming two curb-mi per street mile) = 60.54782 ft
  Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz

38 - Streets 2: 0.512 ac. Intermediate Street Length = 0.139181 curb-mi Street Width (assuming two curb-mi per street mile) = 60.68644 ft
Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
52 - Small Landscaped Areas 2: 1.069 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
58 - Undeveloped Areas 2: 0.691 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
72 - Other Pervious Areas 2: 0.193 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
77 - Other Direct Con Imp Areas: 0.083 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 5 - Institutional: Schools Total area (ac): 39.850
1 - Roofs 1: 5.978 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 4.244 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.789 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 1.160 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
37 - Streets1: 1.068 ac. Smooth Street Length = 0.49414 curb-mi Street Width (assuming two curb-mi per street mile) = 35.66129 ft
Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
38 - Streets 2: 1.726 ac. Intermediate Street Length = 0.797 curb-mi Street Width (assuming two curb-mi per street mile) = 35.7225 ft
Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
39 - Streets 3: 0.654 ac. Rough Street Length = 0.30286 curb-mi Street Width (assuming two curb-mi per street mile) = 35.60527 ft
Default St. Dirt Accum. Annual Winter Load = 2750 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
46 - Large Landscaped Areas 2: 8.803 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
52 - Small Landscaped Areas 2: 6.946 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
58 - Undeveloped Areas 2: 0.167 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
63 - Paved Playgrounds 1: 6.906 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
72 - Other Pervious Areas 2: 0.873 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
79 - Other Part Con Imp Areas 2: 0.538 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 6 - Other Urban: Parks Total area (ac): 21.290
1 - Roofs 1: 0.021 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz
3 - Roofs 3: 0.023 ac. Pitched Connected PSD File: C:\WinSLAMM Files\NURP.cpz
6 - Roofs 6: 0.053 ac. Pitched Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 0.892 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
21 - Unpaved Parking 3: 0.047 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.258 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.104 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
37 - Streets1: 0.213 ac. Smooth Street Length = 0.131998 curb-mi Street Width (assuming two curb-mi per street mile) = 26.6129 ft
Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
38 - Streets 2: 0.483 ac. Intermediate Street Length = 0.293802 curb-mi Street Width (assuming two curb-mi per street mile) = 27.1413 ft
Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
46 - Large Landscaped Areas 2: 16.596 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
52 - Small Landscaped Areas 2: 0.181 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
63 - Paved Playgrounds 1: 0.192 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
65 - Paved Playgrounds 3: 0.192 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
69 - Isolated Areas: 1.507 ac. PSD File: C:\WinSLAMM Files\NURP.cpz
79 - Other Part Con Imp Areas 2: 0.528 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 7 - Freeway: Type1:4 Lane Urban XS with Median ADT=15000 SlopeS1 Total area (ac): 15.190
1 - Paved Lane/Shlder Area 1: 6.026 ac. Poor/Flat C&G Freeway Length = 0.695702 mi Freeway Width (assuming two curb-mi per freeway mile) = 142.9 ft
ADT = 15000 veh/day Default Initial St. Dirt Loading PSD File: C:\WinSLAMM Files\NURP.cpz
20 - Large Turf Areas 2: 9.164 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Wet Detention Pond CP# 1 (DS) - DS Wet Pond # 1
Particle Size Distribution file name: Not needed - calculated by program
Initial stage elevation (ft): 5.5
Peak to Average Flow Ratio: 3.8
Maximum flow allowed into pond (cfs): No maximum value entered
Outlet Characteristics:
Outlet type: Orifice 1
1. Orifice diameter (ft): 2.25
2. Number of orifices: 1
3. Invert elevation above datum (ft): 5.5
Outlet type: Broad Crested Weir
1. Weir crest length (ft): 10
2. Weir crest width (ft): 10
3. Height from datum to bottom of weir opening: 9
Pond stage and surface area

Entry Number	Stage (ft)	Pond Area (acres)	Natural Seepage (in/hr)	Other Outflow (cfs)
0	0.00	0.0000	0.00	0.00
1	0.50	1.3680	0.00	0.00
2	1.50	1.4130	0.00	0.00
3	2.50	1.5030	0.00	0.00
4	3.50	1.5950	0.00	0.00
5	4.50	1.6900	0.00	0.00
6	5.50	2.0920	0.00	0.00
7	6.50	2.2950	0.00	0.00
8	7.50	2.4750	0.00	0.00
9	8.50	2.5770	0.00	0.00
10	9.50	2.6700	0.00	0.00
11	10.50	2.7590	0.00	0.00
12	11.50	2.8460	0.00	0.00

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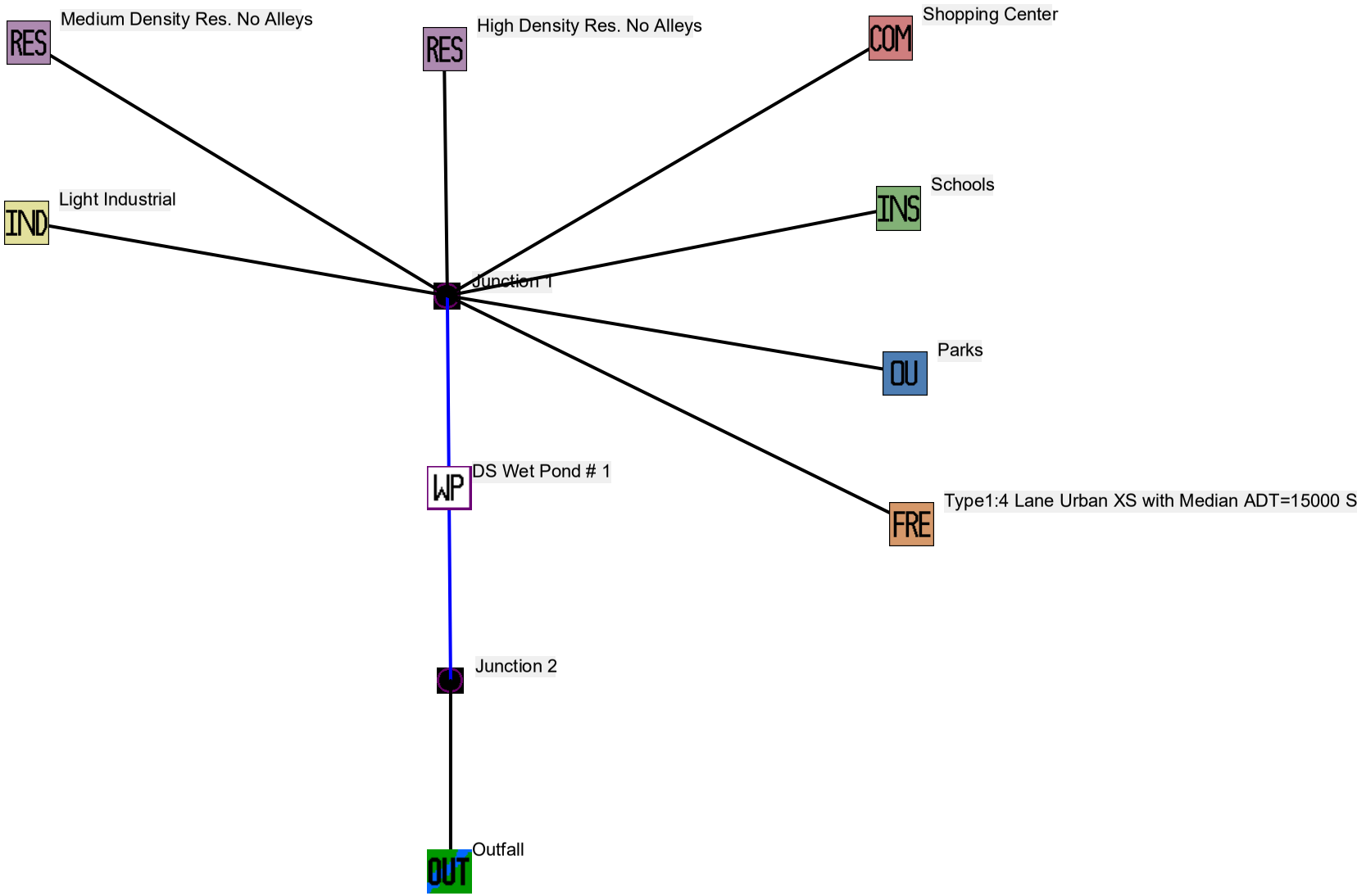
Data file name: R:\CLIENTS DATA\12 Mukwonago\12-10086\Pick N Save Pond_Existing Conditions-20190401.mdb
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
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_Res and Other Urban Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban 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\WI_Com Inst Indust 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:
Seed for random number generator: -42
Study period starting date: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Model Run Start Date: 01/05/69 Model Run End Date: 12/31/69
Date of run: 04-02-2019 Time of run: 10:07:02
Total Area Modeled (acres): 151.300
Years in Model Run: 0.99

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of all Land Uses without Controls:	5.789E+06	-	132.1	47742	-
Outfall Total with Controls:	5.796E+06	-0.12%	44.43	16074	66.33%
Annualized Total After Outfall Controls:	5.876E+06			16297	

Pollutant	Conc. No Controls	Conc. With Controls	Conc. Units	Pollutant Yield No Controls	Pollutant Yield With Controls	Pol. Yield Units	Percent Reduction
Particulate Solids	132.1	44.43	mg/L	47742	16074	lbs	66.33 %
Particulate Phosphorus	0.3144	0.1085	mg/L	113.6	39.24	lbs	65.46 %
Nitrate	0.4064	0.4063	mg/L	146.9	147.0	lbs	-0.11 %

APPENDIX 6

PROPOSED POND CONDITIONS WATER QUALITY ANALYSIS


RES
Medium Density Res. No Alleys
RES
High Density Res. No Alleys
COM
Shopping Center
IND
Light Industrial
INS
Schools
Junction 1
OU
Parks
WP
DS Wet Pond # 1
FRE
Type1:4 Lane Urban XS with Median ADT=15000 S
Junction 2
OUT
Outfall

Data file name: R:\CLIENTS DATA\12 Mukwonago\12-10086\Pick N Save Pond_Proposed Conditions-20190401.mdb
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban 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\WI_Com Inst Indust 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:
Seed for random number generator: -42
Study period starting date: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Date: 04-02-2019 Time: 10:10:12
Site information:

LU# 1 - Residential: Medium Density Res. No Alleys Total area (ac): 40.760
- 3 - Roofs 3: 1.834 ac. Pitched Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 6 - Roofs 6: 4.280 ac. Pitched Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 13 - Paved Parking 1: 0.082 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 25 - Driveways 1: 2.283 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 27 - Driveways 3: 0.774 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 31 - Sidewalks 1: 0.448 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 33 - Sidewalks 3: 0.448 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 37 - Streets1: 1.508 ac. Smooth Street Length = 0.8152 curb-mi Street Width (assuming two curb-mi per street mile) = 30.525 ft
  Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 38 - Streets 2: 3.098 ac. Intermediate Street Length = 1.6304 curb-mi Street Width (assuming two curb-mi per street mile) = 31.35 ft
  Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 39 - Streets 3: 0.611 ac. Rough Street Length = 0.32608 curb-mi Street Width (assuming two curb-mi per street mile) = 30.9375 ft
  Default St. Dirt Accum. Annual Winter Load = 2750 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 46 - Large Landscaped Areas 2: 0.082 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 52 - Small Landscaped Areas 2: 23.437 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 58 - Undeveloped Areas 2: 0.163 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 69 - Isolated Areas: 0.082 ac. PSD File: C:\WinSLAMM Files\NURP.cpz
- 72 - Other Pervious Areas 2: 1.630 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Residential: High Density Res. No Alleys Total area (ac): 9.550
- 3 - Roofs 3: 0.984 ac. Pitched Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 6 - Roofs 6: 1.060 ac. Pitched Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 25 - Driveways 1: 1.347 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 31 - Sidewalks 1: 0.191 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 33 - Sidewalks 3: 0.191 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 37 - Streets1: 0.430 ac. Smooth Street Length = 0.2292 curb-mi Street Width (assuming two curb-mi per street mile) = 30.9375 ft
  Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 38 - Streets 2: 0.860 ac. Intermediate Street Length = 0.46795 curb-mi Street Width (assuming two curb-mi per street mile) = 30.30612 ft
  Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 52 - Small Landscaped Areas 2: 3.916 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 69 - Isolated Areas: 0.010 ac. PSD File: C:\WinSLAMM Files\NURP.cpz
- 72 - Other Pervious Areas 2: 0.563 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 3 - Industrial: Light Industrial Total area (ac): 1.070
- 1 - Roofs 1: 0.219 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 3 - Roofs 3: 0.027 ac. Pitched Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 5 - Roofs 5: 0.024 ac. Flat Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 13 - Paved Parking 1: 0.352 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 21 - Unpaved Parking 3: 0.068 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 25 - Driveways 1: 0.027 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 31 - Sidewalks 1: 0.014 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 37 - Streets1: 0.020 ac. Smooth Street Length = 9.095001E-03 curb-mi Street Width (assuming two curb-mi per street mile) = 35.71764 ft
  Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 38 - Streets 2: 0.093 ac. Intermediate Street Length = 0.04387 curb-mi Street Width (assuming two curb-mi per street mile) = 34.93171 ft
  Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 39 - Streets 3: 0.003 ac. Rough Street Length = 0.001605 curb-mi Street Width (assuming two curb-mi per street mile) = 35.2 ft
  Default St. Dirt Accum. Annual Winter Load = 2750 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
- 46 - Large Landscaped Areas 2: 0.038 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 52 - Small Landscaped Areas 2: 0.106 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 58 - Undeveloped Areas 2: 0.046 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 72 - Other Pervious Areas 2: 0.030 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
- 79 - Other Part Con Imp Areas 2: 0.002 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 4 - Commercial: Shopping Center Total area (ac): 23.590
- 1 - Roofs 1: 5.098 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 13 - Paved Parking 1: 14.314 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 19 - Unpaved Parking 1: 0.080 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 25 - Driveways 1: 0.427 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 31 - Sidewalks 1: 0.127 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
- 37 - Streets1: 0.995 ac. Smooth Street Length = 0.271285 curb-mi Street Width (assuming two curb-mi per street mile) = 60.54782 ft
  Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz

38 - Streets 2: 0.512 ac. Intermediate Street Length = 0.139181 curb-mi Street Width (assuming two curb-mi per street mile) = 60.68644 ft
Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
52 - Small Landscaped Areas 2: 1.069 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
58 - Undeveloped Areas 2: 0.691 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
72 - Other Pervious Areas 2: 0.193 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
77 - Other Direct Con Imp Areas: 0.083 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 5 - Institutional: Schools Total area (ac): 39.850
1 - Roofs 1: 5.978 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 4.244 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.789 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 1.160 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
37 - Streets1: 1.068 ac. Smooth Street Length = 0.49414 curb-mi Street Width (assuming two curb-mi per street mile) = 35.66129 ft
Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
38 - Streets 2: 1.726 ac. Intermediate Street Length = 0.797 curb-mi Street Width (assuming two curb-mi per street mile) = 35.7225 ft
Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
39 - Streets 3: 0.654 ac. Rough Street Length = 0.30286 curb-mi Street Width (assuming two curb-mi per street mile) = 35.60527 ft
Default St. Dirt Accum. Annual Winter Load = 2750 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
46 - Large Landscaped Areas 2: 8.803 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
52 - Small Landscaped Areas 2: 6.946 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
58 - Undeveloped Areas 2: 0.167 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
63 - Paved Playgrounds 1: 6.906 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
72 - Other Pervious Areas 2: 0.873 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
79 - Other Part Con Imp Areas 2: 0.538 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 6 - Other Urban: Parks Total area (ac): 21.290
1 - Roofs 1: 0.021 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz
3 - Roofs 3: 0.023 ac. Pitched Connected PSD File: C:\WinSLAMM Files\NURP.cpz
6 - Roofs 6: 0.053 ac. Pitched Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 0.892 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
21 - Unpaved Parking 3: 0.047 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.258 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.104 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
37 - Streets1: 0.213 ac. Smooth Street Length = 0.131998 curb-mi Street Width (assuming two curb-mi per street mile) = 26.6129 ft
Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
38 - Streets 2: 0.483 ac. Intermediate Street Length = 0.293802 curb-mi Street Width (assuming two curb-mi per street mile) = 27.1413 ft
Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz
46 - Large Landscaped Areas 2: 16.596 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
52 - Small Landscaped Areas 2: 0.181 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
63 - Paved Playgrounds 1: 0.192 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
65 - Paved Playgrounds 3: 0.192 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz
69 - Isolated Areas: 1.507 ac. PSD File: C:\WinSLAMM Files\NURP.cpz
79 - Other Part Con Imp Areas 2: 0.528 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 7 - Freeway: Type1:4 Lane Urban XS with Median ADT=15000 SlopeS1 Total area (ac): 15.190
1 - Paved Lane/Shlder Area 1: 6.026 ac. Poor/Flat C&G Freeway Length = 0.695702 mi Freeway Width (assuming two curb-mi per freeway mile) = 142.9 ft
ADT = 15000 veh/day Default Initial St. Dirt Loading PSD File: C:\WinSLAMM Files\NURP.cpz
20 - Large Turf Areas 2: 9.164 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Wet Detention Pond CP# 1 (DS) - DS Wet Pond # 1

Particle Size Distribution file name: Not needed - calculated by program

Initial stage elevation (ft): 4.5

Peak to Average Flow Ratio: 3.8

Maximum flow allowed into pond (cfs): No maximum value entered

Outlet Characteristics:

Outlet type: Orifice 1

1. Orifice diameter (ft): 0.33
2. Number of orifices: 1
3. Invert elevation above datum (ft): 4.5

Outlet type: Orifice 2

1. Orifice diameter (ft): 0.67
2. Number of orifices: 1
3. Invert elevation above datum (ft): 6.5

Outlet type: Broad Crested Weir

1. Weir crest length (ft): 10
2. Weir crest width (ft): 10
3. Height from datum to bottom of weir opening: 13

Outlet type: Vertical Stand Pipe

1. Stand pipe diameter (ft): 7
2. Stand pipe height above datum (ft): 9.5

Pond stage and surface area

Entry Number	Stage (ft)	Pond Area (acres)	Natural Seepage (in/hr)	Other Outflow (cfs)
0	0.00	0.0000	0.00	0.00
1	0.50	1.2377	0.00	0.00
2	1.50	1.3253	0.00	0.00
3	2.50	1.4151	0.00	0.00
4	3.50	1.5071	0.00	0.00
5	4.50	1.8920	0.00	0.00
6	5.50	2.0784	0.00	0.00
7	6.50	2.2356	0.00	0.00
8	7.50	2.3296	0.00	0.00
9	8.50	2.4177	0.00	0.00
10	9.50	2.5030	0.00	0.00
11	10.50	2.5872	0.00	0.00
12	11.50	2.6702	0.00	0.00
13	12.50	2.7535	0.00	0.00
14	13.50	2.8371	0.00	0.00

SLAMM for Windows Version 10.4.1
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Data file name: R:\CLIENTS DATA\12 Mukwonago\12-10086\Pick N Save Pond_Proposed Conditions-20190401.mdb
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
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_Res and Other Urban Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban 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\WI_Com Inst Indust 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:
Seed for random number generator: -42
Study period starting date: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Model Run Start Date: 01/05/69 Model Run End Date: 12/31/69
Date of run: 04-02-2019 Time of run: 10:11:11
Total Area Modeled (acres): 151.300
Years in Model Run: 0.99

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of all Land Uses without Controls:	5.789E+06	-	132.1	47742	-
Outfall Total with Controls:	5.796E+06	-0.12%	17.95	6496	86.39%
Annualized Total After Outfall Controls:	5.876E+06			6586	

Pollutant	Conc. No Controls	Conc. With Controls	Conc. Units	Pollutant Yield No Controls	Pollutant Yield With Controls	Pol. Yield Units	Percent Reduction
Particulate Solids	132.1	17.95	mg/L	47742	6496	lbs	86.39 %
Particulate Phosphorus	0.3144	0.04648	mg/L	113.6	16.82	lbs	85.20 %
Nitrate	0.4064	0.3999	mg/L	146.9	144.7	lbs	1.48 %

APPENDIX 7

STORM WATER FACILITY MAINTENANCE PLAN

STORM WATER FACILITY MAINTENANCE PLAN

PICK N' SAVE POND RETROFIT
VILLAGE OF MUKWONAGO

The storm water facilities, including outlet structures and spillways, should be inspected semi-annually to assure their functionality. Potential maintenance is likely to include removing debris from the outlet structure, repairing erosion rills or muskrat holes, trapping and removing problem pests, removal of woody vegetation within pond banks, removal or invasives, and dredging sediment as required. The pond should also be examined for erosion after severe storm events and restored as needed. The emergency spillways should also be inspected semi-annually and after severe rainfalls to check for vegetation stability. The Village of Mukwonago shall be responsible for this maintenance. While the Contractor performing the installation shall be responsible for providing site specific maintenance schedule, the following general maintenance schedule is provided:

The Village of Mukwonago owns the storm water facilities and will be responsible for all maintenance activities.

VEGETATION ON-GOING MAINTENANCE SCHEDULE:

Year One (Same year as planting if spring seeding or following year if fall seeding)	1. Control invasive weeds by cutting entire seeded area to a 6-inch height 2 times once each in June and early August. To prevent damage to native plants, do not mow below a 6" height. 2. Remove all clippings to avoid smothering next year's seedlings. 3. DO NOT PULL WEEDS, as pulling may uproot desirable plantings.
Year Two	1. Mow entire area once in mid-spring to help control the spread of cool season weeds. The cutting level should be raised to 10-12" to avoid damage to the warm season plants. 2. Remove all clippings.
After Years One and Two	1. Any major bare areas or areas taken over by invasive species must be sprayed and re-seeded. To clear invasive plants, spot-treat trouble areas with short duration glyphosate herbicide (i.e. Roundup) to kill invasive plants a minimum of 7 days before reseeding. Cut and treat trees growing within the pond side slopes. 2. Mow entire area once in mid-spring or late fall, mowing the vegetation to the ground. Annual burning of the native prairie may be introduced instead of mowing after 2 – 3 growing seasons. 3. Remove all clippings.

Wet Detention Pond/ Sediment Forebay

To ensure proper function of the system, the following list of maintenance activities are recommended in addition to the general list above:

1. The pond should be checked annually for sedimentation. Over time the pond will collect sediment, debris and other pollutants. Once the level of the captured material reaches a height of three feet below the normal water surface elevation, the pond should be dredged to the original design depth and shape. This will prevent re-suspension of captured material and maintain the efficiency of the pond. It is recommended that sedimentation elevations be verified annually. Prior to removing sediment from the pond, it must be tested for hazardous substances. Removal of dredged material may require specific permits from the City and/or the State and may require specific disposal procedures. In addition, a Type A liner (DNR Technical Standard 1001) has been installed as part of the construction of the pond. Exercise extreme caution during excavation and grading of dredged material so as to not excavate through the liner, see the pond detail for planned liner locations and elevations.

PLAN COMMISSION STAFF REPORT

TO: Village of Mukwonago Plan Commission

FROM: Peter Gesch, P.E., Ruekert & Mielke, Inc.

REPORT DATE: May 7, 2025

MEETING DATE: May 13, 2025, 6:30 P.M.

SUBJECT: Park View Middle School – Site Plan & Architectural Review & Conditional Use

BASIC INFORMATION	
Project:	Park View Middle School Expansion
Applicant:	Mukwonago Area School District
Consulting Engineer:	Kapur & Associates, Inc.
Consulting Architect:	Bray Architects
Request:	Site Plan & Architectural Review & Conditional Use
Staff Recommendation:	Approve with Conditions

PARCEL DATA/CHARACTERISTICS	
Tax Key:	MUKV1964992
Acreage:	36.88 Acres
Current Use:	Institutional – Middle School
Proposed Use:	Institutional – Middle School
Reason for Request:	Expansion to Existing Middle School
Land Use Classification:	Public/Semi-Public – Institutional Use
Zoning Classification:	P-1 – Public and Semipublic District

Project Summary & Overview

The Mukwonago Area School District is planning an expansion of Park View Middle School located at 930 N Rochester St. The project entails the demolition of much of the existing Park View middle school building, renovation of the most recent portion of the existing building and a major addition to the East of the existing building. The building expansion will bring the footprint to approximately 120,000 square feet and will be comprised of one-story, two-story, and three-story buildings.

The scope of site development will include new drive lanes and parking surrounding the remaining existing building and addition.

In addition to the site plan and architectural review, the modifications and expansion of the current use requires a re-application for a conditional use permit. Middle schools are a conditional use in the P-1 District provided that they have more than 50 on-site students and are located on a parcel larger than 2 acres and the principal building is more than 50-FT from any lot line, all of which are true.

The conditional use permit in the P-1 District shall take into account any special considerations or conditions or setbacks, height restrictions, lot coverage, etc. that are historically outlined in other zoning districts. The height of the proposed building is similar to the recent MASD High School expansion. All paving and parking lots are located beyond 50-FT from any lot line, except along CTH NN where a 25-FT paving setback was implemented – this mimics the high school parking lot along CTH NN.

Access coordination and improvements on CTH NN and STH 83 are being coordinated with Waukesha County and WisDOT through a TIA that was completed by the applicant. Improvements will address comments made for requirements from WisDOT and Waukesha County.

Conditional Use Request

Attached to this staff report is the justification questions for a Conditional Use Permit that have been answered by the applicant. The Planning Commission shall take these into consideration when making their decisions.

Conditional Use Process / Findings

The established review procedures are that the Plan Commission shall hold a public hearing and make a recommendation to the Village Board whom makes the final decision.

Following the close of the public hearing, the Plan Commission may recommend (1) approval, (2) approval with conditions, or (3) denial.

If approval is recommended, the Plan Commission can recommend conditions deemed necessary to protect public health, safety, and welfare. The Plan Commission, in passing on the matter, will need to make the following determinations consistent with Section 100-354 of Mukwonago's Zoning Regulations:

1. The establishment, maintenance or operation of the conditional use will not be detrimental to or endanger the public health, safety or welfare of the Village.
2. The uses, values and enjoyment of other property in the surrounding neighborhood that are already permitted shall be, in no foreseeable manner, substantially impaired or diminished by the establishment, maintenance or operation of the conditional use.
3. The establishment, maintenance or operation of the conditional use is compatible with surrounding properties, whether in the same or different zoning districts. In making this determination, the Plan Commission and Village Board must determine whether the petitioner has demonstrated there are no adverse effects on surrounding properties or that potentially adverse effects have been eliminated or reduced to an acceptable level. Approaches that could be employed to mitigate potentially adverse effects will depend on the particular circumstances but may include:
    a. Adjusting the location of the use, or parts thereof, on the subject property;
    b. Limiting hours of operation;
    c. Limiting the size or scope of the use, or parts thereof;
    d. Controlling how the use is managed on an ongoing basis;

e. Providing additional landscaping;
f. Providing additional screening; and
g. Limiting operations conducted out-of-doors, if otherwise allowed

4. The establishment of the conditional use will not impede the normal and ordinary development and improvement of the surrounding property for uses permitted within the district and/or which are consistent with the standards in the Comprehensive Plan.
5. Adequate utilities, access roads, drainage and other necessary site improvements have been or are being made to accommodate the use.
6. Adequate measures have been taken or will be taken providing ingress and egress to minimize traffic congestion on public streets so as not to diminish the level of service of any intersection which is impacted by traffic arising from the conditional use.

In addition, the property owner / tenant has shown compliance with the requirements set forth in the Village's zoning regulations for specified use.

The Village Board will carefully review the recommendation of the Plan Commission and concurs with the Plan Commission's findings set forth above, provided the conditional use is operated pursuant to the conditions of approval set forth in this order.

These findings are incorporated into the draft conditional use order which is attached.

The Plan Commission shall approve a conditional use application if the terms and conditions of the zoning regulations are met. However, in the event the terms and conditions of the ordinance are not consented to and complied with by the applicant, the Commission may deny the application. In addition, the Commission may deny the application or place conditions on it if substantial evidence, as defined in §62.23(7) Wis. Stats. is presented. That evidence must demonstrate the inability of the applicant to comply with or meet the conditions of the zoning regulations or that the conditions to be applied by the Plan Commission are necessary to protect the public health, safety or welfare of the community based upon the presentation of substantial evidence. Potential motion for approval to Recommend to the Village Board approval of the project as a conditional use as set forth in the attached conditional use order as drafted, provided the Village Attorney approves the final form of the conditional use order.

Staff Review

Engineering:	See attached comment letter.
Public Works	See attached comment letter.
Utilities	See attached comment letter.
Police	See attached comment letter.
Fire	See attached comment letter.
Building Inspection	See attached comment letter.
Planning	See attached comment letter.

Recommended Action

Conditional Use Permit
Staff recommends the Planning Commission recommend to the Village Board approval of a conditional use permit as set forth in the provided resolution.

To – Grant a Conditional Use Permit for a Middle School with the following on-going conditions deemed necessary to protect the health, safety, and welfare:

1. Ongoing conditions of approval. The following conditions shall constitute an ongoing obligation:
    a. Any modifications to the site, buildings, site improvements, shall require the conditional use application being updated.
    b. 25-FT pavement setback shall be maintained on all perimeters.
    c. Max Principal Structure height shall not exceed 46-FT.
2. The following conditions are also true and are consistent with Section 100-354 of Mukwonago's zoning regulations:
    a. The establishment, maintenance or operation of the conditional use will not be detrimental to or endanger the public health, safety or welfare of the Village.
    b. The uses, values and enjoyment of other property in the surrounding neighborhood that are already permitted shall be, in no foreseeable manner, substantially impaired or diminished by the establishment, maintenance or operation of the conditional use.
    c. The establishment, maintenance or operation of the conditional use is compatible with surrounding properties, whether in the same or different zoning districts.
    d. The establishment of the conditional use will not impede the normal and ordinary development and improvement of the surrounding property for uses permitted within the district and/or which are consistent with the standards in the Comprehensive Plan.
    e. Adequate utilities, access roads, drainage and other necessary site improvements have been or are being made to accommodate the use.
    a. Adequate measures have been taken or will be taken providing ingress and egress to minimize traffic congestion on public streets so as not to diminish the level of service of any intersection which is impacted by traffic arising from the conditional use.

Site Plan and Architectural Review
Staff Recommends the Planning Commission Approve a resolution for the Site Plan and Architectural Review, as set forth in the attached resolution with the included conditions.

Attachments

1. Staff review comments
2. Application and Development Information
3. Plans and Site Drawings

May 1, 2025

Mr. Chris Eger
Bray Architects
829 S 1st Street
Milwaukee, WI 53204

Re: Park View Middle School
Staff Comments

Dear Mr. Eger:

We have reviewed the Plan Commission submittal documents submitted for review on April 2, 2025. The Plan Commission set is dated April 2, 2025 and the storm water management plan is dated April 3, 2025. We offer the following comments:

1. The walkway/emergency access route on the south side of the school needs to be 24-FT wide to accommodate outrigging on the Fire Department's aerial apparatus.

2. Clearly show and label the FDC location. A dedicated hydrant must be provided within 150-FT of the FDC and needs to be counted separately from the hydrants surrounding the building provided at 300-FT max spacing.

3. The distance between the northwestern-most hydrant and the southwestern-most hydrant exceeds the 300-FT maximum spacing requirement. An additional hydrant will need to be added on the west side of the building. Presuming the FDC is located at the northwest side of the building by the mechanical/riser room, two additional hydrants may be needed at the west side of the building. This should be coordinated directly with the Fire Chief.

4. All on-site water main should be private as it is not needed to benefit the Village's water supply system and serves the purpose for fire protection of this site. Additionally, a check valve will need to be provided at each end of the water main loop. This should be further coordinated with the Utilities Director. Public water main sheets also reference the "Village of Pewaukee".

5. Please develop a plan and provide applicable notes regarding the existing storm sewer on-site and how flow from the neighborhood to the south will be managed during the construction of the new storm sewer improvements, such that flooding is not caused and storm water runoff makes it to the north side of CTH NN.

6. Provide updated drawings as necessary to address WisDOT requirements from TIA.

7. Construction sequence indicates construction of building foundations prior of site utilities. How will this work with the existing utilities that cut through the site?

8. A sequencing plan shall be developed for on-site safety, traffic control, protection, phasing, etc. for installation and removals of existing and proposed driveways, site security fence, separation of construction activities from active school activities, contractor access and parking locations, etc. It is not clear how construction activities will coincide with existing school activities, how safe vehicular and pedestrian access will be maintained.

9. With permission of Waukesha County, the primary construction access should be off of CTH NN at the proposed entrance. The Village desires to limit construction access to a single ingress/egress point to limit possibility of tracking from the site.

10. Provide location of topsoil stockpile and measures to protect it.

11. Recommend calling out type of inlet protection on plans such that proper inlet protection is installed in the correct locations – importantly, Type D inlet protection in low lying areas.

12. Silt fence is not shown on the erosion control plan drawings. Will silt fence be installed and if so, where? While the site drains away from adjacent properties and roads in most areas, existing/interim grading conditions may warrant it to be installed in several locations.

13. Please provide details/cross sections for the on-site bioretention basins.

14. Provide Phosphorus modeling results in the SWMP summary tables. This data also needs to be provided in the water quality summary in the Maintenance Agreement.

15. There appear to be minor errors/discrepancies in the totals for peak outflow rates for each bioretention basin and the total summary table for pre-developed vs. post-developed and the hydroCAD modeling outputs. Please review all parts and make sure all numbers match. It appears the site can meet the requirements of the ordinance, but all numbers should be aligned.

16. It appears that the intent is for the public storm sewer through the site to strictly carry the off-site pass-thru flows and pick up the discharge from each bioretention basin after treatment and that the public storm sewer won't be picking up any on-site runoff that isn't first treated by a bioretention basin.

17. Please provide construction details for the on-site utility and pavement improvements.

18. Provide location and details for proposed dumpster enclosure, to be constructed of masonry, meeting Village Code requirements.

19. Provide details for proposed monument signage.

20. All construction shall meet the requirements of the Village's Standard Specifications.

21. Please provide copies of all Waukesha County and WisDOT approvals and permits prior to beginning work. Please also provide copies of any additional drawings associated with the approvals.

22. Provide copy of approved NOI prior to construction.

23. A storm water maintenance agreement will need to be implemented for on-site BMPs and conveyance systems prior to construction. An updated copy of the Village's standard form will be provided to applicant.

24. Provide final storm water management plan for complete review following the development of all additional appendices and attachments.

25. A letter of credit will need to be provided for any public improvements and for all storm water BMP and conveyance systems.

26. Provide copies of all vacated and new easements as part of this project.

27. Final Drawings and Storm Water Management Plan will need to be stamped and signed by a Professional Engineer licensed to practice in the State of Wisconsin.

As plans are developed and finalized, additional comments may be forthcoming prior to final staff approval.

If you should have any questions regarding this, please feel free to contact me at (262) 542-5733.

Respectfully,

RUEKERT & MIELKE, INC.

Peter W. Gesch, P.E., (WI)
Municipal Services Team Lader
pgesch@ruekert-mielke.com

PWG:pwg
cc: Diana Dykstra, Village of Mukwonago
Wayne Castle, Village of Mukwonago
Ron Bittner, Village of Mukwonago
Jeff Stien, Village of Mukwonago
Tim Rutenbeck, Village of Mukwonago

VILLAGE OF MUKWONAGO
WAUKESHA AND WALWORTH COUNTIES

PC RESOLUTION NO. 2025-10

A RESOLUTION FOR A SITE PLAN AND ARCHITECTURAL REVIEW FOR THE PARK VIEW MIDDLE SCHOOL EXPANSION, PARCEL MUKV1964992

WHEREAS, pursuant to Section 100-601 of the Zoning Code, an application for a site plan and architectural review has been filed for the approval of a building expansion and site redevelopment for Park View Middle School located at 930 N Rochester St, which application was filed in the office of the Village Clerk, Village of Mukwonago, Wisconsin, and

WHEREAS, the application has been submitted by the Mukwonago Area School District as the authorized agent, and

WHEREAS, the use of a Middle School and all structures are a conditional use within the P-1 Public and Semipublic District – in which the subject property is located, and

WHEREAS, the plan of operation and plans have been reviewed and recommended by the Plan Commission.

NOW, THEREFORE, BE IT RESOLVED by the Plan Commission of the Village of Mukwonago, Wisconsin hereby approves the site plan and architectural review for the Park View Middle School Expansion to be constructed, based upon the plans submitted to the Village.

NOW, THEREFORE, BE IT FURTHER RESOLVED the site plan and architectural review approval shall be subject to the following conditions:

1. Prior to any land disturbing activity, the applicant must submit a complete and final set of site construction plans to the Village and receive approval of said plans prior to issuance of any building permits. Plans shall include but are not limited to grading, utilities, utility calculations, erosion control, landscaping, lighting, building architecture, building materials and other plans as required. All Village department heads must verify in writing whether they have approved the final plans within their purview. Any outstanding matters must be resolved to staff's satisfaction. Construction shall comply with any conditions of approval issued by staff.
2. All required regulatory agency permits shall be received and provided to the Village prior to the start of construction.
3. Prior to any land-disturbing activity, a pre-construction meeting must be held with the applicant's representatives and primary contractors, and Village department heads and representatives. The applicant representative shall coordinate such meeting.
4. The applicant must obtain all required land disturbance permits within nine months of this date, and start construction within six months of the date of building permit issuance and continue in good faith to completion.
5. The applicant must obtain all required building permits within nine months of this date, and start construction within six months of the date of building permit issuance and continue in good faith to completion.

6. All work related to this project must comply with all project plans approved by the Village.
7. The developer shall comply with all parts of the Municipal Code as it relates to this project.
8. If the approved plans need to be revised to address any of the conditions of approval or to conform to Building and Fire Safety Codes, the Zoning Administrator and the Building Inspectors are authorized to approve minor modifications so long as the overall project elements remain unchanged. If they determine that the revision is substantial, the plans must be submitted to the Plan Commission for review and approval.
9. Any future modification to the site such as modification of parking, lighting, grading, signage, fences, etc. may require Site Plan and Architectural Review.

Passed and adopted by the Village of Mukwonago Plan Commission this 13th day of May, 2025.

VILLAGE OF MUKWONAGO

By: _____
Fred Winchowky, Village President

Attest: _____
Shay Zerfas, Deputy Clerk-Treasurer

PLAN COMMISSION STAFF REPORT

TO: Village of Mukwonago Plan Commission

FROM: Peter Gesch, P.E., Ruekert & Mielke, Inc.

REPORT DATE: May 5, 2025

MEETING DATE: May 13, 2025, 6:30 P.M.

SUBJECT: Historical Society – Log Cabin Trading Post

BASIC INFORMATION	
Project:	Historical Society – Log Cabin Trading Post
Applicant:	Village of Mukwonago DPW
Consulting Engineer:	N/A
Consulting Architect:	N/A
Request:	Site Plan & Architectural Review
Staff Recommendation:	Approve with Conditions

PARCEL DATA/CHARACTERISTICS	
Tax Key:	MUKV1976100
Acreage:	0.088 Acres
Current Use:	Public Museum
Proposed Use:	Public Museum
Reason for Request:	Exterior Remodel
Land Use Classification:	Business
Zoning Classification:	B-2 – General Business (Village Center Retail Center Overlay)

Project Summary & Overview

The Mukwonago Historical and Museum Society is planning to remodel the exterior of the existing "Log Cabin Trading Post" located adjacent to 103 Main Street at the northwest corner of Main Street and Atkinson Street. The existing historical cabin's exterior is deteriorating and needs to be remodeled to preserve its integrity.

The intended remodeling materials are planned to maintain the historical exterior appearance and prevent continued deterioration of the original wood structure. Minor appliance and electrical upgrades are also planned. The attached power point slides detailed the planned material and need for the improvements.

Staff Review

Engineering:	No comments at this time.
Public Works	No comments at this time.
Utilities	No comments at this time.
Police	No comments at this time.
Fire:	No comments at this time.
Building Inspection	No comments at this time.
Planning	No comments at this time.

Recommended Action
Staff recommends the Planning Commission approve with conditions enumerated in the provided resolution for the request to remodel the exterior of the Log Cabin Trading Post.

Attachments

1. Exterior Improvement Plans

Village of Mukwonago GIS

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

SCALE: 1" = 33 '

VILLAGE OF MUKWONAGO
440 River Crest Court
PO Box 206
Mukwonago, WI 53149
262-363-6420

Print Date: 4/16/2025

Maintenance and Modifications to the Log Cabin Trading Post

Mukwonago Historical and Museum Society

April 2025

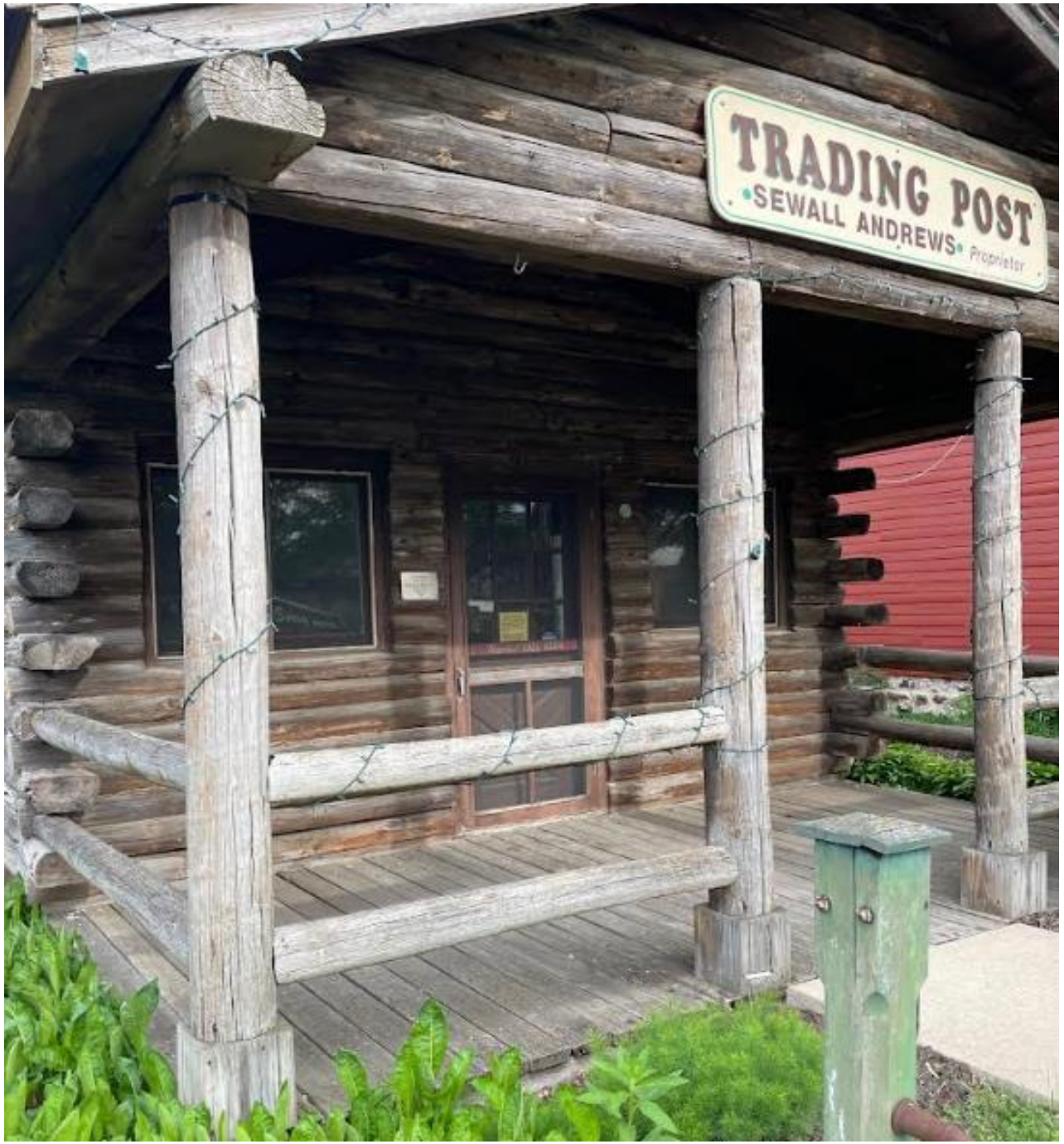
Photos of Current State

North View

South View

West View

East View



Future State: Side with Beveled Wavey Board

Cedar Siding will weather to a grey similar to current log surface

List of Building Features to be Replaced or Modified

1. Rotted pieces of existing logs to be cut and partially replaced by pressure treated lumber (notably the by the north window).
2. The long ends of the butt and pass logs would be trimmed to be flush with the existing log faces.
3. All areas to be covered by new wavy edge siding will be prepped and sealed with Behr Log Home Gloss Finish (per manufacturer instructions). Wavey Siding fastened to vertical furring strips applied to logs.
4. All joints between logs will be caulked with Woodsman log siding caulk, to prevent any potential moisture penetration.
5. Install pressure treated furring strips to existing structure. Install Coravent system over the furring.
6. Install trim and siding over furring/Coravent, per manufacturer instructions.

By others, Stain/Clear coat new exterior

Material List: Exterior

Item	Quantity	Pr
case of 12 Woodsman caulk	4	
Gallons of Behr Log home finish clear	4	
Cora Vent	38	
pressure treated 1x2x8	54	
pressure treated 1x8x8	8	
pressure treated 1x4x8	6	
Miscellaneous fasteners for furring, coravent, trim and siding	1	
sales tax of above items	1	
quote per FP Cedar supply	1	
6"x8' pine logs	2	

The front porch also needs some repair to an extent not known until it is deconstructed.

->

1x6x12 Cedar	15
1x10x8 Cedar	10
15/16" x 10 Wavy Edge Cedar	1168

Electrical Features to be added.

- ***Electrical Service to be brought into the building***
- ***One to two interior lights.***
- ***Small refrigerator freezer.***
- ***Possible mini-split AC/Heater to be used when building occupied.***

Scope of Work

1) **Install new panel and feeder to Log Cabin to include:**
   1-2 pole 40a breaker installed in exiting breaker panel (Tandem existing breakers as panel allows)
   1-120240v 40a underground feeder from main building electrical panel to Log Cabin
   1-8 circuit breaker panel located in Log Cabin
   1-120v duplex outlet next to breaker panel
   Lot-Grounding and bonding per NEC and local codes

2) **Wiring in Log Cabin to include:**
   2-SP switches
   3-Interior light openings (Fixtures by others)
   1-Install exterior light fixture on existing exterior wall fixture opening (Fixture by others)
   1-120v duplex outlet on separate 20a circuit for Freezer
   1-Reconnect exterior WP outlet

VILLAGE OF MUKWONAGO
WAUKESHA AND WALWORTH COUNTIES

PC RESOLUTION NO. 2025-09

A RESOLUTION FOR A SITE PLAN AND ARCHITECTURAL REVIEW FOR THE HISTORICAL SOCIETY LOG CABIN TRADING POST, LOCATED AT 103 MAIN STREET, PARCEL MUKV1976100

WHEREAS, pursuant to Section 100-601 of the Zoning Code, an application for a site plan and architectural review has been filed for the approval of modifications to an existing Public Museum, which application was filed in the office of the Village Clerk, Village of Mukwonago, Wisconsin, and

WHEREAS, the application has been submitted by the Village of Mukwonago DPW, as owner and authorized agent of the property, and

WHEREAS, the application is for modifications related to the exterior remodel of the existing structure, and

WHEREAS, the planned modifications meet all the requirements of the Village Zoning Code.

NOW, THEREFORE, BE IT RESOLVED by the Plan Commission of the Village of Mukwonago, Wisconsin hereby approves the site plan and architectural review for modifications to an existing Public Museum at 103 Main Street, based upon the plans submitted to the Village.

NOW, THEREFORE, BE IT FURTHER RESOLVED the site plan and architectural review approval shall be subject to the following conditions:

1. The applicant must obtain all required building permits within nine months of this date, and start construction within six months of the date of building permit issuance and continue in good faith to completion.
2. All work related to this project must comply with all project plans approved by the Village.
3. The applicant shall comply with all parts of the Municipal Code as it relates to this project.
4. If the approved plans need to be revised to address any of the conditions of approval or to conform to Building and Fire Safety Codes, the Zoning Administrator and the Building Inspectors are authorized to approve minor modifications so long as the overall project elements remain unchanged. If they determine that the revision is substantial, the plans must be submitted to the Plan Commission for review and approval.
5. Any future modification to the site such as modification of parking, lighting, grading, signage, fences, etc. may require Site Plan and Architectural Review.

Passed and adopted by the Village of Mukwonago Plan Commission this 13th day of May, 2025.

VILLAGE OF MUKWONAGO

By: _____
Fred Winchowky, Village President

Attest: _____
Shay Zerfas, Deputy Clerk-Treasurer

PLAN COMMISSION STAFF REPORT

TO: Village of Mukwonago Plan Commission

FROM: Peter Gesch, P.E., Ruekert & Mielke, Inc.

REPORT DATE: May 7, 2025

MEETING DATE: May 13, 2025, 6:30 P.M.

SUBJECT: Tsunami Car Wash – Revised SPAR

BASIC INFORMATION	
Project:	Tsunami Car Wash
Applicant:	The Redmond Company
Consulting Engineer:	Nielson, Madson & Barber, SC
Consulting Architect:	The Redmond Company
Request:	Approval of Revised Site Plan Only
Staff Recommendation:	Approve with conditions

PARCEL DATA/CHARACTERISTICS	
Tax Key:	MUKV2013995001
Acreage:	1.80 Acres
Current Use:	Vacant
Proposed Use:	Car Wash, Stand Alone
Reason for Request:	Development of new Car Wash Facility
Land Use Classification:	Business
Zoning Classification:	B-3 – Commercial Business District

Project Summary & Overview

Tsunami Car Wash is seeking approval of the revised site plan for their previously approved project. The project received approval of a conditional use permit via Resolution 2024-53 at the October 16, 2024 Village Board Meeting. The project received approval of their site plan and architectural drawings via PC-Resolution 2024-10 at the October 8, 2024 Plan Commission and received follow up approval for architectural materials at the November 12, 2024 Plan Commission meeting via simple motion.

After approval of the project, negotiations with the neighboring business yielded the need to revise the ingress/egress point to the proposed car was facility to the existing curb cut location. The site and storm water plans have been adjusted and revised to show these modifications. The overall layout, general flow

of traffic, and intent of site improvements has not changed. Staff has deemed that this is beyond a minor site plan modification and needed to come back to Plan Commission for a revised approval.

This SPAR approval is for the revised site plan only and the applicant is not changing any of the previously approved architectural drawings so those do not need to be reviewed again for approval.

Staff Review

Engineering:	Minor comments for erosion control and storm water being addressed by Civil Engineer.
Public Works	None.
Utilities	Minor comment for sampling manhole being addressed.
Police	None.
Fire:	None.
Building Inspection	None.
Planning	None.

Recommended Action

Staff recommends approval of the revised site plan and execution of the attached resolution.

Attachments

1. Revised Site Plan Drawings and Development Documents

VILLAGE OF MUKWONAGO
WAUKESHA AND WALWORTH COUNTIES

PC RESOLUTION NO. 2025-11

A RESOLUTION FOR A SITE PLAN AND ARCHITECTURAL REVIEW FOR A REVISED SITE PLAN APPROVAL FOR TSUNAMI CAR WASH, PARCEL MUKV2013995001

WHEREAS, the Village Board of the Village of Mukwonago approved a Conditional Use Permit for a stand-alone car wash facility via Resolution 2024-53 at the October 16, 2024 Village Board Meeting, and

WHEREAS, the Plan Commission of the Village of Mukwonago approved a Site Plan and Architectural Review application via PC-Resolution 2024-10 at the October 8, 2024 Plan Commission meeting conditioned on resubmitting architectural drawings for final approval, and

WHEREAS, the Plan Commission of the Village of Mukwonago passed a motion to approve the architectural drawings at the November 12, 2024 Plan Commission meeting, and

WHEREAS, Tsunami Car Wash has revised their site plan and layout to relocate the ingress/egress point in coordination with the adjacent property owner, and

WHEREAS, pursuant to Section 100-601 of the Zoning Code, an application for a site plan and architectural review has been filed for the approval of the revised site plan, which application was filed in the office of the Village Clerk, Village of Mukwonago, Wisconsin, and

WHEREAS, the application has been submitted by The Redmond Company as the authorized agent, and

WHEREAS, the architectural drawings and building design have not changed and are the same as approved on November 12, 2024.

NOW, THEREFORE, BE IT RESOLVED by the Plan Commission of the Village of Mukwonago, Wisconsin hereby approves the revised site plan for Tsunami Car Wash to be constructed on E. Wolf Run, based upon the plans submitted to the Village.

NOW, THEREFORE, BE IT FURTHER RESOLVED the site plan and architectural review approval shall be subject to all conditions enumerated in PC-Resolution 2024-10 and the following conditions:

1. Prior to any land disturbing activity, the applicant must submit a complete and final set of site construction plans to the Village and receive approval of said plans prior to issuance of any building permits. Plans shall include but are not limited to grading, utilities, utility calculations, erosion control, landscaping, lighting, building architecture, building materials and other plans as required. All Village department heads must verify in writing whether they have approved the final plans within their purview. Any outstanding matters must be resolved to staff's satisfaction. Construction shall comply with any conditions of approval issued by staff.

2. A final erosion control plan shall be submitted for review and approval.
3. All required regulatory agency permits shall be received and provided to the Village prior to the start of construction.
4. Prior to any land-disturbing activity, a pre-construction meeting must be held with the applicant's representatives and primary contractors, and Village department heads and representatives. The applicant representative shall coordinate such meeting.
5. The applicant must obtain all required land disturbance permits within nine months of this date, and start construction within six months of the date of building permit issuance and continue in good faith to completion.
6. Prior to any land-disturbing activity, the applicant must reimburse the Village for any outstanding charges and establish an escrow account with the Village as may be required.
7. The Applicant shall establish an escrow in the value of $10,000 prior to the start of construction.
8. The applicant must obtain all required building permits within nine months of this date, and start construction within six months of the date of building permit issuance and continue in good faith to completion.
9. All work related to this project must comply with all project plans approved by the Village.
10. The developer must comply with all requirements related to impact fees imposed by the Village.
11. The developer shall comply with all parts of the Municipal Code as it relates to this project.
12. If the approved plans need to be revised to address any of the conditions of approval or to conform to Building and Fire Safety Codes, the Zoning Administrator and the Building Inspectors are authorized to approve minor modifications so long as the overall project elements remain unchanged. If they determine that the revision is substantial, the plans must be submitted to the Plan Commission for review and approval.
13. Trash enclosure shall be constructed per Village standards and plans submitted.
14. Refuse/Recycling Collection shall be contracted privately.
15. All lighting within the parking lot and building lighting shall be full cut off lighting and meet municipal standards. Building lighting shall not be direct light or the appearance of light towards adjoining properties. The Police Department or Zoning Administrator, after completion or any modification to the lighting in the future, may request adjustments. A photometric lighting plan must be submitted and approved prior to construction.
16. Landscaping shall be installed per Village standards and approved plans.
17. The applicant shall comply with the requirements of the Village Utility Department pertaining to sewer and water services.
18. Any future modification to the site such as modification of parking, lighting, grading, signage, fences, etc. may require Site Plan and Architectural Review.

Passed and adopted by the Village of Mukwonago Plan Commission this 13th day of May, 2025.

VILLAGE OF MUKWONAGO

By: _____
Fred Winchowky, Village President

Attest: _____
Shay Zerfas, Deputy Clerk-Treasurer

Docusign Envelope ID: 0588943D-8B7E-4189-B11D-DA51FC53E9E6

VILLAGE OF MUKWONAGO

SITE PLAN, ARCHITECTURAL, AND PLANNED UNIT DEVELOPMENT (PUD) APPLICATION

Application Fee: Below

Date Submitted: 04/23/2025

FEES

(Please check one)

- ☑ Minor Site Plan (No Building): $160.00
- ☐ Major Site Plan; New Building/Addition (> 600 sq. ft.): $475.00 plus $.02 per sq. ft.
- ☐ Planned Unit Development (PUD) Review: $225.00 plus $50.00/unit
- ☐ Other (See Current Fee Schedule)_____

CONTACTS

Building Department
Contact: Supervisor of Inspections
Tim Rutenbeck
Phone: (262) 363-6419 Option 1
Fax: (262) 363-6425
Email: trutenbeck@villageofmukwonago.gov

Zoning and Planning
Contact: Village Planner
Peter Gesch
Phone: (262) 542-5733
Fax: (262) 363-6425
Email: pgesch@ruekert-mielke.com

GUIDELINES

The undersigned petition is to consider a request, as stated herein, for the specified parcel(s) of land and will be reviewed by the Plan Commission and Village Board of the Village of Mukwonago. The application packet must be filed with the Village Clerk **at least 30 days prior to the meeting** of the Planning Commission at which action is desired. The Plan Commission meets on the second Tuesday of each month at 6:30 p.m.

Materials listed below must be provided to the Village of Mukwonago in accordance with Village Municipal Code Chapter 100 Article IX. Section 100-601(f) and other pertinent sections of Village ordinances, and, as necessary, to permit review that is consistent with proper planning practice. The Village will strive to accommodate reasonable requests for informal preliminary staff review, however the Village shall not place any items on the agenda for Plan Commission consideration until such time as the application is complete in accordance with all requirements specified on this and other attached application forms.

Mail completed applications to:	Village Planner 440 River Crest Ct Mukwonago, WI 53149
Deliver to:	Village Clerk's Office 440 River Crest Ct
Email to:	trutenbeck@villageofmukwonago.gov

Complete, accurate and specific information must be entered. Please Print.

APPLICANT *(Full Legal Name)*

Name: Chris Schuldt

Company: Tsunami Car Wash

Address: 4800 Meadows Rd., Ste 300 **City:** Lake Oswego **State:** OR **Zip:** 97055

Daytime Phone: 503-830-9936 **Fax:**

E-Mail: Chris@tsunamiexpress.com

Docusign Envelope ID: 0588943D-8B7E-4189-B11D-DA51FC53E9E6

Docusign Envelope ID: CCD38969-649B-4359-9640-6C9322461447

APPLICANT IS REPRESENTED BY *(Full Legal Name)*

Name: Jerry Mortier

Company: The Redmond Company

Address: W228 N745 Westmound dr **City:** Waukesha **State:** WI **Zip:** 53186

Daytime Phone: 262-896-8753 **Fax:**

E-Mail: jmortier@theredmondco.com

ARCHITECT

Name: Same as Applicant Representative

Company:

Address: **City:** **State:** **Zip:**

Daytime Phone: **Fax:**

E-Mail:

PROFESSIONAL ENGINEER

Name: Al Jeske

Company: Neilsen Madsen & Barber

Address: 1458 Horizon blvd **City:** Racine **State:** WI **Zip:** 53406

Daytime Phone: 262-634-5588 **Fax:**

E-Mail: ajeske@nmbsc.net

REGISTERED SURVEYOR

Name: Mark Madsen

Company: Neilsen Madsen & Barber

Address: 1458 Horizon blvd **City:** Racine **State:** WI **Zip:** 53406

Daytime Phone: MMadsen@nmbsc.net **Fax:**

E-Mail:

CONTRACTOR

Name: Same as Applicant Representative

Company:

Address: **City:** **State:** **Zip:**

Daytime Phone: **Fax:**

E-Mail:

Docusign Envelope ID: 0588943D-8B7E-4189-B11D-DA51FC53E9E6

Docusign Envelope ID: CCD38969-649B-4359-9640-6C9322461447

PROPERTY INFORMATION

Property Owner (s) *(if different from applicant)*: DC Properties LLP

Address: 1243 Fox River Court **City:** Mukwonago **State:** WI **Zip:** 53149

Daytime Phone: _____ **Fax:** _____

E-Mail: _____

Present Zoning: _____ **Tax Key No(s).:** MUKV2013995001

Location/Address: 115 Wolf Run

Present Use: Vacant **Intended Use:** Car Wash

PROCEDURAL CHECKLIST FOR SITE PLAN/ARCHITECTURAL PLAN/PUD REVIEW AND APPROVAL

Submittals for review must include and be accompanied by the following:

Application:

- ❑ Completed application form including the procedural checklist.
- ❑ Application fee: See page 1.
- ❑ Agreement for Reimbursable Services (separate application).

Other Documents:

- ❑ One(1) complete set of Application and materials, in addition to the original, for Village of Mukwonago review.
- ❑ Project Summary: Please attach a statement detailing the reasons and background for this request including: details of proposal, services provided, wares sold, plans and hours of operation, number of employees, frequency of customer visits, frequency of deliveries to site, description of any interior/exterior modifications or additions to be made to property, any outside storage (dumpsters, trucks, materials…), number of parking stalls, screening/buffer type, any other information available. ***PLEASE EXPLAIN IN DETAIL.***
- ❑ **Electronic Submittals are required.** Email (or CD ROM) with all plans and submittal materials in Adobe PDF to trutenbeck@villageofmukwonago.gov .
- ❑ Any additional information as determined by Village staff.

- **Upon receipt of a complete submittal, staff review will be conducted within ten business days.**
- **All Site Plan, Architectural, and Planned Unit Development review requests require Plan Commission review and Village Board approval.**

Docusign Envelope ID: 0588943D-8B7E-4189-B11D-DA51FC53E9E6

Docusign Envelope ID: CCD38969-649B-4359-9640-6C9322461447

CERTIFICATION

Applicant hereby certifies that:

1. All of the above statements and other information submitted as part of this application are true and correct to the best of his or her knowledge.
2. Affirms that no Village of Mukwonago elected or appointed official or employee has a proprietary interest in the above referenced property for which this applications being filed (except as stated below under "Exceptions").
3. None of the above referenced individuals has been promised or given any contract for consultation, planning or construction in relation to this project (except as stated below under "Exceptions").
4. Applicant has read and understands all information in this packet.

Applicant further understands the policies of the Village regarding change of zonings and property development. Conditions of the resolution regarding all approvals are strictly followed. Certificates of Occupancy are not given until all conditions of approval have been met

By the execution of this application, applicant hereby authorizes the Village of Mukwonago or its agents to enter upon the property during the hours of 7:00 am to 7:00 pm daily for the purpose of inspection. Applicant grants this authorization to enter even if this land has been posted against trespassing pursuant to Section 943.13 WI Stats.

(The applicant's signature must be from a Managing Member if the business is an LLC, or from the President or Vice President if the business is a corporation. A signed applicant's authorization letter may be provided in lieu of the applicant's signature below, and a signed property owner's authorization letter may be provided in lieu of the property owner's signature[s] below. If more than one, all of the owners of the property must sign this Application).

Signed by:
Darwin Greenwald
Signature - Property Owner

Darwin Greenwald
Name & Title (PRINT)

4/23/2025
Date

Signature - Property Owner

Name & Title (PRINT)

Date

DocuSigned by:
Chris Schuldt
Signature - Applicant

Chris Schuldt
Name & Title (PRINT)

4/24/2025
Date

Signature - Applicant's Representative

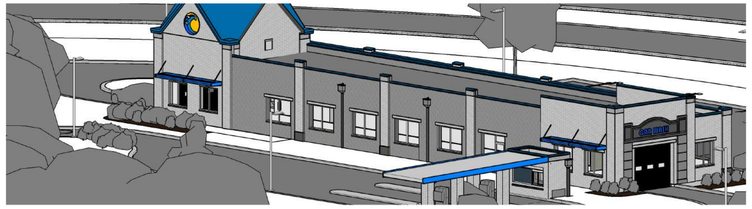
Jerry Mortier - Vice President
Name & Title (PRINT)

04/23/2025
Date

FOR OFFICE USE ONLY	
Date Paid	**Receipt #**
Plan Commission Date(s)	**Village Board Date(s)**
Escrow Required? ☐ Yes ☐ No	**Escrow Amount**
Plan Commission Disposition	
Village Board Disposition	

THE REDMOND COMPANY

Tsunami Express Car Wash



115 East Wolf Run | Mukwonago, WI 53149

PROJECT TEAM

OWNER
Tsunami Express Carwash
4800 Meadows Rd, Suite 300
Oswego, OR 97055

DESIGN / BUILDER
The Redmond Company
W228 N745 Westmound Drive
Waukesha, WI 53186

PROJECT CONTACT: Connor Lenz
EMAIL: CLenz@theredmondco.com
P: 262-896-8726

DESIGN CONTACT: Jerry Mortier
EMAIL: jmortier@theredmondco.com
P: 262-896-8753

CIVIL ENGINEER
NIELSEN MADSEN + BARBER
1458 HORIZON BLVD. SUITE 200
RACINE, WI 53406

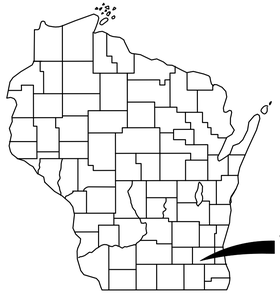
PROJECT CONTACT: AL JESKE
EMAIL: AJESKE@NMBSC.NET
P: 262-634-5588

LANDSCAPE ARCHITECT
HELLER & ASSOCIATES
RACINE, WI 53406

PROJECT CONTACT: DAVID HELLER
EMAIL: DAVID@WDAVIDHELLER.COM
P: 414-614-9733

VICINITY MAP

PROJECT LOCATION
Wolf Run
Meadows
Mapleton
Mapleton
Mapleton



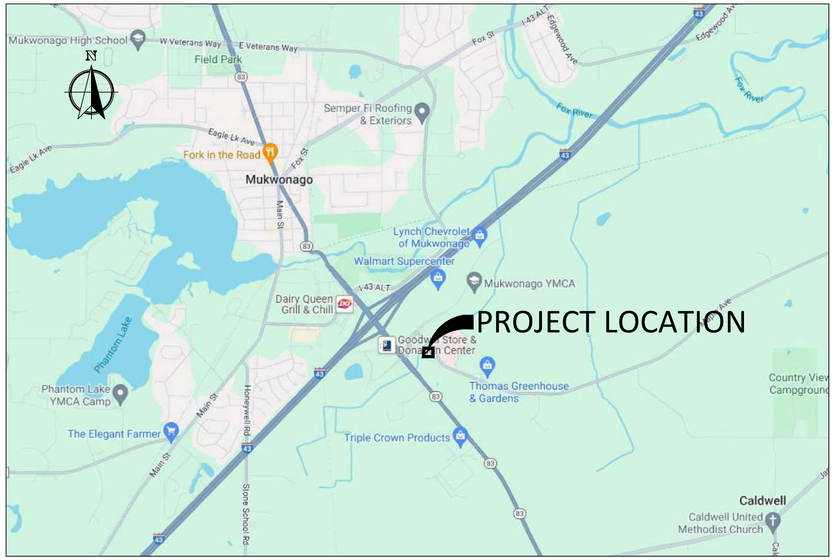
CONSTRUCTION PLANS
for
TSUNAMI EXPRESS CAR WASH
for
TSUNAMI CAR WASH INTERMEDIATE HOLDCO, LLC
115 East Wolf Run, Mukwonago, Wisconsin

LEGEND

Description	Existing	Description	Existing	Proposed
EDGE OF WOODS		WATER SHUT OFF		
DECIDUOUS TREE		WATER MAIN VALVE		
DECIDUOUS TREE REMOVAL		HYDRANT		
CONIFEROUS TREE		WATER MAIN REDUCER		
CONIFEROUS TREE REMOVAL		SANITARY MANHOLE		
BUSH		SANITARY CLEAN OUT		
SOIL BORING	SB 1	STORM MANHOLE		
TELEPHONE BOX	T	CATCH BASIN		
GUY WIRE		LIGHT POLE		
UTILITY POLE		ENDWALL		
GAS VALVE	GV	STORM SEWER	STM	
GAS METER		SANITARY SEWER	SAN	
SEPTIC VENT		WATERMAIN	W	W
ELECTRIC MANHOLE		CONTOURS	650	650
COMMUNICATION MANHOLE		FIRE PROTECTION		FP
WATER MANHOLE		UTILITY CROSSING		
HVAC UNIT		DITCH OR SWALE		
UNDERGROUND VAULT		CULVERT	12" CMP	12" CMP
SECTION CORNER		RAILROAD TRACKS		
MAIL BOX		FENCE	X X	
GUARD POST		NO VEHICULAR ACCESS		
STREET SIGN		UNDERGROUND ELECTRIC	E	
ELECTRIC PEDESTAL		UNDERGROUND GAS MAIN	G	
ELECTRIC METER		UNDERGROUND COMMUNICATIONS	CM	
PAD MOUNT TRANSFORMER		SILT FENCE	//	
FOUND IRON PIPE		OVERHEAD ELECTRIC	OHE	
SET IRON PIPE		FORCE MAIN	\	

ABBREVIATIONS

BASE LINE	BL	INVERT ELEVATION	IE
LONG CORD OF CURVE	CHD	LENGTH OF CURVE	ARC
CURB AND GUTTER	C&G	MANHOLE	MH
CATCH BASIN	CB	NORMAL WATER LEVEL	NWL
CENTERLINE	CL	POINT OF CURVATURE	PC
EDGE OF PAVEMENT	EOP	POINT OF TANGENCY	PT
FINISHED FIRST FLOOR	FFF	TANGENCY OF CURVE	TAN
FINISHED GRADE	FG	POINT OF VERTICAL INTERSECTION	PVI
FLOW LINE	FL	RADIUS	R
FLOODPLAIN	FP	RIGHT OF WAY	ROW
ORDINARY HIGH WATER MARK	OHWM	SANITARY SEWER	SAN
TOP OF BANK	TOB	STORM SEWER	STM
TOP OF CURB	TOC	TOP OF FOUNDATION	TOF
TOP OF WALK	TOW	WATER MAIN	WM



DIGGERS HOTLINE
Call 811 or (800) 242-8511
www.DiggersHotline.com

UTILITY NOTE

EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY FOR PROPOSED UTILITY CONNECTIONS AND / OR TO AVOID DAMAGE THERETO, CONTRACTOR SHALL CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.

SHEET INDEX

PLAN SHEET	SHEET NO.
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DIMENSIONED SITE PLAN	C-3
SITE DEMOLITION PLAN	C-4
SITE GRADING PLAN	C-5
EROSION CONTROL PLAN	C-6
PAVEMENT GRADING PLAN	C-7
SITE UTILITY PLAN	C-8
STORM SEWER PLAN	C-9
TYPICAL SECTIONS & CONSTRUCTION DETAILS	C-10 TO C-14
CONTECH WATER QUALITY STRUCTURE DETAILS	C-15 AND C-16

OWNER

TSUNAMI CAR WASH INTERMEDIATE HOLDCO, LLC.
CHRIS SCHULDT, CEO
4800 MEADOWS ROAD, SUITE 300
LAKE OSWEGO, OR 97035
OFFICE: 920-744-9882
EMAIL: chris@tsunamiexpress.com

GENERAL CONTRACTOR

THE REDMOND COMPANY
JERRY MORTIER
W228 N745 WESTMOUND DR
WAUKESHA, WI 53186
OFFICE: 262-896-8727
EMAIL: jmortier@theredmondco.com

GOVERNING AGENCY CONTACTS

VILLAGE OF MUKWONAGO
VILLAGE CLERK/TREASURER
DIANA DYKSTRA
OFFICE: 262-363-6420 EXT. 2103
EMAIL: ddykstra@villageofmukwonago.gov

COMMUNITY AND ECONOMIC DEVELOPMENT
ADMINISTRATIVE CLERK
ROBIN GALLO
OFFICE: 262-363-6420 EXT. 2102
EMAIL: rgallo@villageofmukwonago.gov

PUBLIC WORKS DIRECTOR
RON BITTNER
OFFICE: 262-363-6447
EMAIL: rbittner@villageofmukwonago.gov

VILLAGE OF MUKWONAGO
BUILDING INSPECTOR
TIM RUTTENBECK
OFFICE: 262-363-6420 EXT. 2109
EMAIL: truttenbeck@villageofmukwonago.gov

POLICE CHIEF
DANIEL J. STREIT
OFFICE: 262-363-6435
EMAIL: dstreit@villageofmukwonago.gov

FIRE CHIEF
JEFFREY R. STEIN
OFFICE: 262-363-6426
EMAIL: jstein@villageofmukwonago.gov

PUBLIC UTILITY CONTACTS

SPECTRUM
ROBERT TUNUTA
UTILITY COORDINATOR
OFFICE: 414-277-4205
CELL: 414-758-5688
EMAIL: tunuta@charter.net

WE-ENERGIES
TOM SCHULTZ
OFFICE: 262-552-3229
EMAIL: tom.schultz@we-energies.com

NATURAL GAS EMERGENCY:
(800) 261-5325
ELECTRICAL EMERGENCY:
(800) 662-4797

AT&T
BRENT LEWIS
MANAGER OSP PLANNING
& ENGINEERING DESIGN
OFFICE: 414-429-4214
EMAIL: bl521d@att.com

TDS TELECOM
SOUTHEAST WISCONSIN
OFFICE: 877-483-7142

Nielsen Madsen + Barber
CIVIL ENGINEERS AND LAND SURVEYORS
1458 Horizon Blvd. Suite 200, Racine, WI. 53406
Tele: (262)634-5588 Website: www.nmbsc.net

TSUNAMI EXPRESS CAR WASH
CONSTRUCTION PLANS
FOR
TSUNAMI CAR WASH INTERMEDIATE HOLDCO, LLC
VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN

NO.	REVISION	BY	DATE

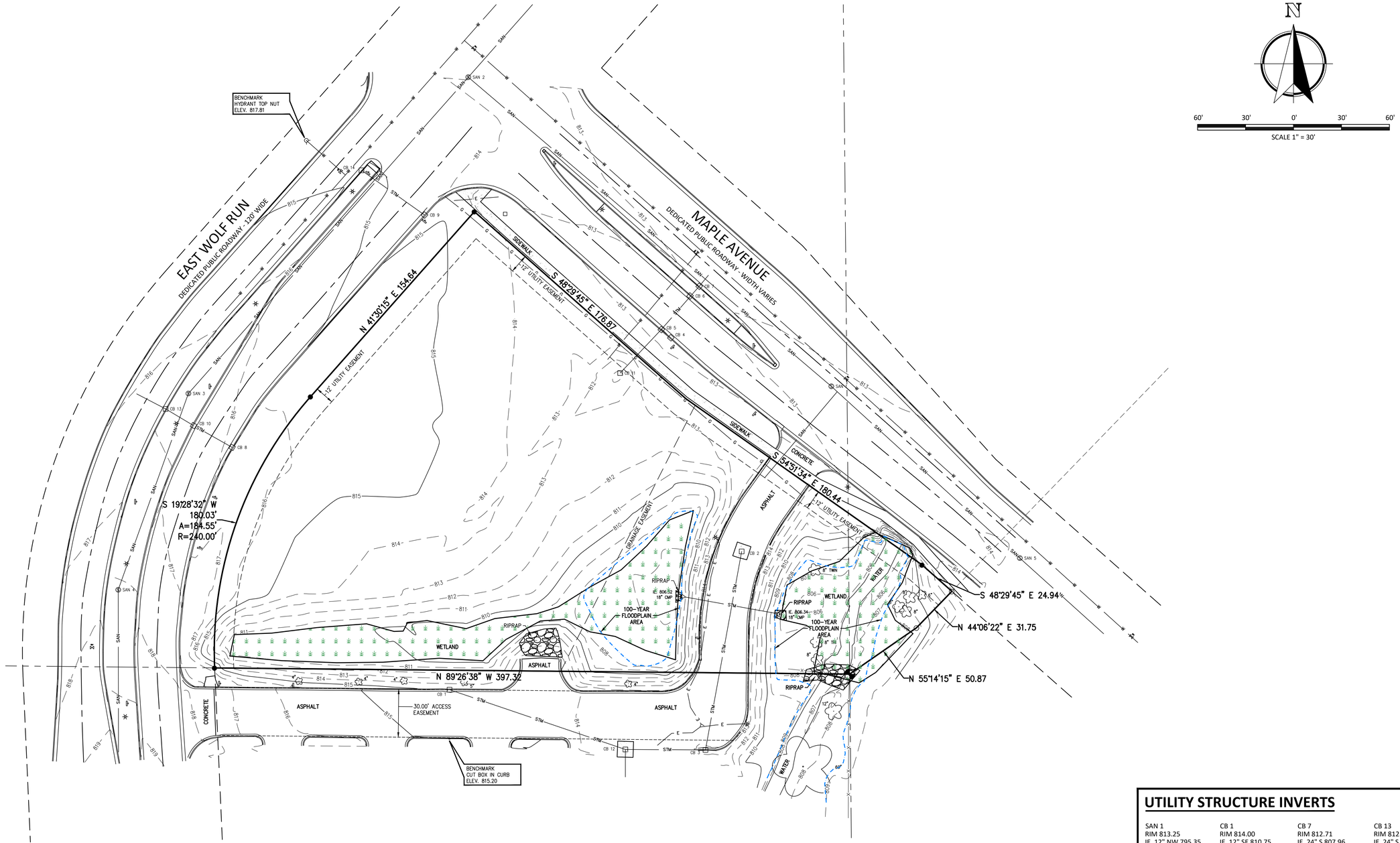
PROJ. MGR:	JJC
DRAFTED:	JWR
DATE:	4-10-2025
CHECKED:	ALJ
DATE:	4-11-2025

2024.0060.01

SHEET
C-1

ISSUE FOR REVIEW: 4-12-2025

Friday, April 11, 2025 8:05:34 AM



NOTES

BEARINGS BASE: GRID NORTH, WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE NAD 1983/2011.

ALL ELEVATIONS REFER TO NAVD 1988 (12)

FIELD WORK: 3-29-2024 ETM / KRF
4-01-2024 ETM / KRF

DIGGERS HOTLINE
Call 811 or (800) 242-8511
www.DiggersHotline.com

LEGEND

- STORM MANHOLE
- CATCH BASIN
- STORM SEWER
- SANITARY MANHOLE
- SANITARY SEWER
- HYDRANT
- WATER VALVE
- WATER MAIN
- COMMUNICATION BOX
- COMMUNICATION LINE
- LIGHT POLE
- ELECTRIC LINE
- SIGN
- DECIDUOUS TREE
- 1-1/4" REBAR FOUND

UTILITY NOTE

EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY FOR PROPOSED UTILITY CONNECTIONS AND / OR TO AVOID DAMAGE THERETO, CONTRACTOR SHALL CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.

UTILITY STRUCTURE INVERTS

SAN 1 RIM 813.25 IE. 12" NW 795.35 IE. 12" SE 795.35	CB 1 RIM 814.00 IE. 12" SE 810.75	CB 7 RIM 812.71 IE. 24" S 807.96 IE. 24" N 807.86	CB 13 RIM 812.71 IE. 24" S 807.96 IE. 24" N 807.86
SAN 2 RIM 814.31 IE. 36" NE 792.86 IE. 36" SW 792.86 IE. 12" SE 794.66	CB 2 RIM 813.21 IE. 8" S 810.81	CB 8 RIM 815.71 IE. 15" W 811.86	CB 14 RIM 814.84 IE. 15" SE 810.24 IE. 15" NW 810.14
SAN 3 RIM 816.97 IE. 36" NW 793.47 IE. 36" SE 793.47	CB 3 RIM 812.84 IE. 12" W 809.44 IE. 8" NE 810.44	CB 9 RIM 814.20 IE. 15" W 810.70	
SAN 4 RIM 818.12 IE. 36" NE 793.97 IE. 36" S 793.97	CB 4 RIM 812.02 IE. 15" W 808.97	CB 10 RIM 816.31 IE. 15" W 811.51 IE. 15" E 811.61	
SAN 5 RIM 814.11 IE. 12" NW 796.01 IE. 12" SE 796.01	CB 5 RIM 811.97 IE. 24" S 808.17 IE. 24" N 808.07 IE. 15" E 808.82	CB 11 RIM 810.83 IE. 24" W 808.48	
	CB 6 RIM 812.52 IE. 24" S 807.97 IE. 24" N 807.87	CB 12 RIM 813.46 IE. 12" W 810.41 IE. 12" E 810.46 IE. 15" S 810.36	

Nielsen Madsen + Barber
CIVIL ENGINEERS AND LAND SURVEYORS
1458 Horizon Blvd. Suite 200, Racine, WI. 53406
Tele: (262)634-5588 Website: www.nmbsc.net

TSUNAMI EXPRESS CAR WASH
EXISTING CONDITIONS
FOR
TSUNAMI CAR WASH INTERMEDIATE HOLDCO, LLC
VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN

NO.	REVISION	BY	DATE

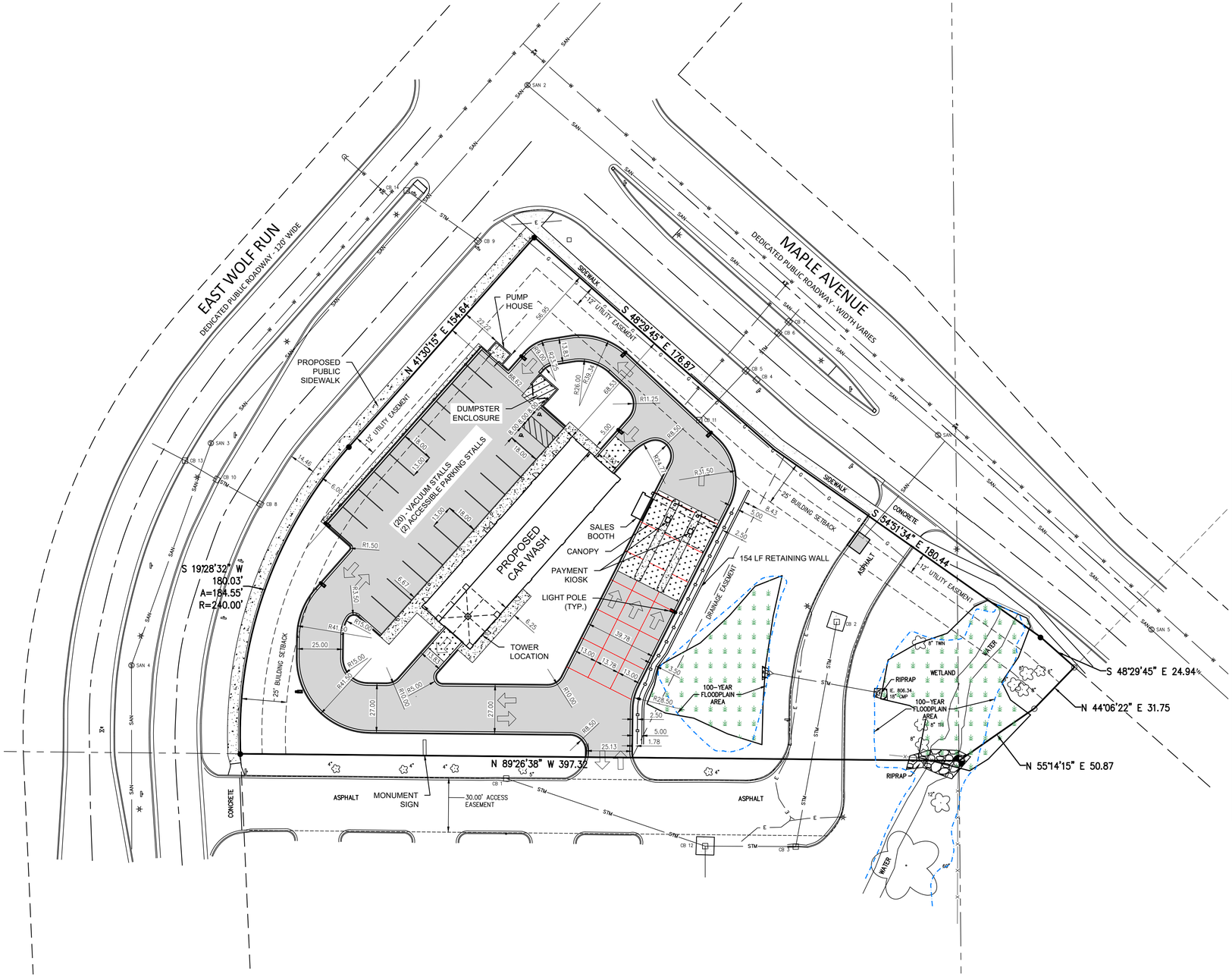
PROJ. MGR: JJC
DRAFTED: JWB
DATE: 4-10-2025
CHECKED: ALJ
DATE: 4-11-2025

2024.0060.01

SHEET
C-2

ISSUE FOR REVIEW: 4-12-2025

Friday, April 11, 2025 8:05:42 AM



N

60' 30' 0' 30' 60'

SCALE 1" = 30'

SITE DATA

PARCEL NUMBER:	MUKV2013995001
EXISTING ZONING:	C-4 CENTRAL BUSINESS DISTRICT C-4 REGIONAL BUSINESS DISTRICT
EXISTING LAND USE:	VACANT
EXISTING FLOOD ZONE:	NOT IN A FLOOD ZONE
DEVELOPMENT TYPE:	COMMERCIAL
PROPOSED LAND USE:	RETAIL

EXISTING IMPERVIOUS SURFACE CALCULATIONS

TOTAL IMPERVIOUS SURFACE AREA:	5,056 S.F. (6.45%)
TOTAL GREEN SPACE AREA:	73,284 S.F (93.55%)
TOTAL PARCEL AREA:	78,340 S.F (1.80 ACRES)

PROPOSED IMPERVIOUS SURFACE CALCULATIONS

PROPOSED BUILDING AREA:	4,994 S.F.
PROPOSED PAVEMENT AREA:	31,043 S.F.
TOTAL IMPERVIOUS SURFACE AREA:	36,037 S.F. (46.00%)
PROPOSED LANDSCAPED AREA:	42,303 S.F. (54.00%)
TOTAL GREEN SPACE AREA:	42,303 S.F (54.00%)
TOTAL PARCEL AREA:	78,340 S.F (1.80 ACRES)
FLOOR AREA RATIO:	0.07
LANDSCAPE SURFACE RATIO:	54.00%

PROPOSED PARKING DATA

RETAIL (1 SPACE PER 300 S.F. GFA):	5,000/300 = 17 SPACES
TOTAL REQUIRED PARKING:	17 SPACES
TOTAL PROPOSED PARKING:	22 SPACES (INCLUDING 2 ADA SPACES)

DIGGERS HOTLINE
Call 811 or (800) 242-8511
www.DiggersHotline.com

UTILITY NOTE

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Nielsen Madsen + Barber
CIVIL ENGINEERS AND LAND SURVEYORS
1458 Horizon Blvd. Suite 200, Racine, WI. 53406
Tele: (262)634-5588 Website: www.nmbsc.net

TSUNAMI EXPRESS CAR WASH
DIMENSIONED SITE PLAN
FOR
TSUNAMI CAR WASH INTERMEDIATE HOLDCO, LLC
VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN

NO.	REVISION	BY	DATE

PROJ. MGR:	JJC
DRAFTED:	JWR
DATE:	4-10-2025
CHECKED:	ALJ
DATE:	4-11-2025

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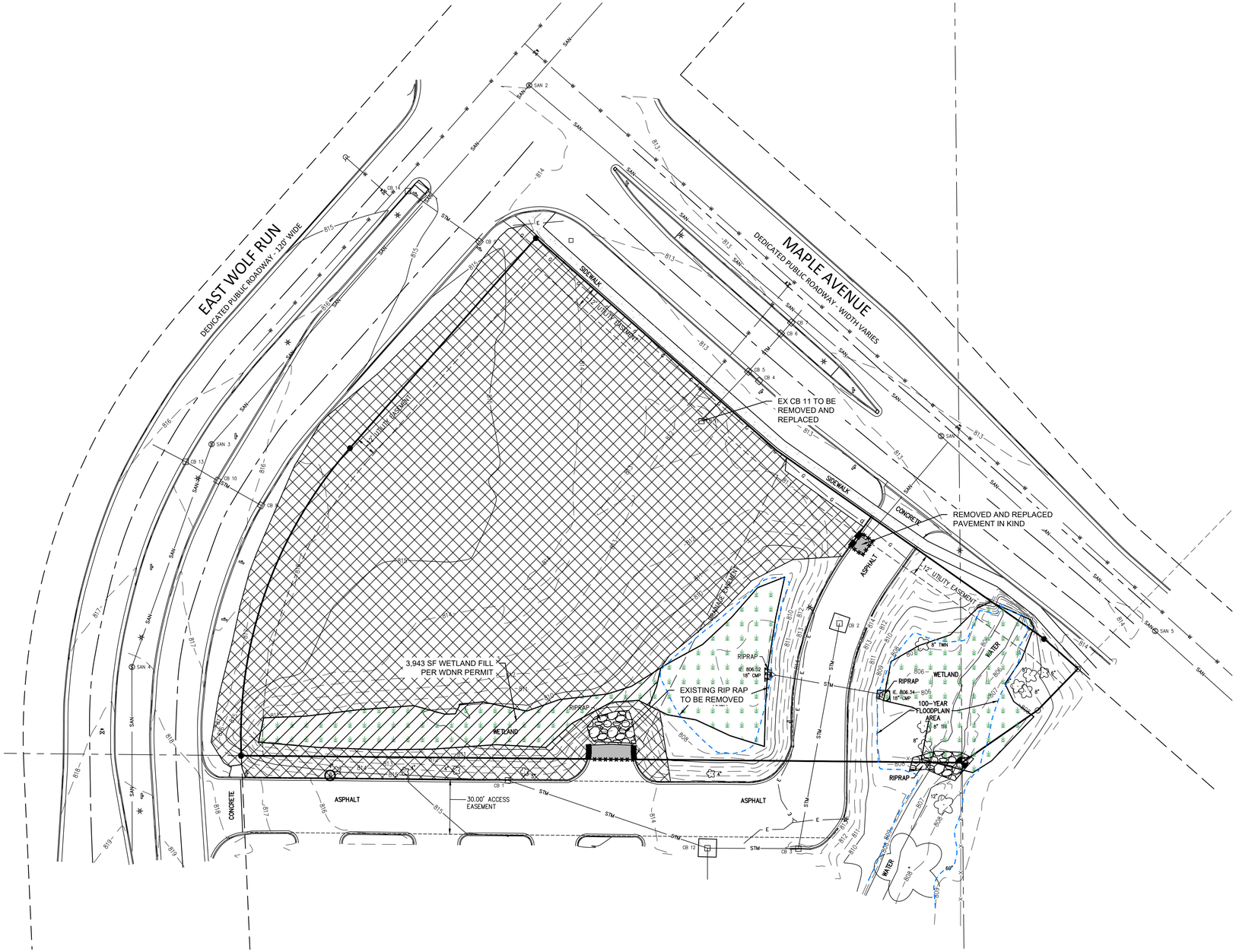

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60' 30' 0' 30' 60'

SCALE 1" = 30'

DEMOLITION NOTES

THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL AT A LOCATION APPROVED (BY ALL GOVERNING AUTHORITIES) OF ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PAVEMENTS, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLY COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.

THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION, SITE CLEARING, AND DISPOSAL.

THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE LAND SURVEYOR AND ENGINEER OF RECORD ASSUME NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ON-SITE LOCATIONS OF EXISTING UTILITIES.

ALL EXISTING SEWERS, PIPING, AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CALL DIGGERS HOTLINE AT 1-800-242-8511 A MINIMUM OF 3 WORKING DAYS PRIOR TO EXCAVATION ACTIVITIES TO LOCATE AND MARK ALL UNDERGROUND UTILITIES.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HIRE A PRIVATE UTILITY LOCATING SERVICE TO LOCATE AND MARK ALL UNDERGROUND PRIVATE UTILITIES.

CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH SIGNS, FENCING, BARRICADES, ENCLOSURES, ETC., (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES) AS APPROVED BY THE CONSTRUCTION MANAGER. TEMPORARY CLOSURE OF ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE APPROVED BY THE AUTHORITY HAVING JURISDICTION.

CONTINUOUS ACCESS SHALL BE MAINTAINED FOR THE SURROUNDING PROPERTIES AT ALL TIMES DURING THE COURSE OF WORK.

PRIOR TO DEMOLITION OCCURRING, THE VILLAGE OF MUKWONAGO EROSION CONTROL PERMIT AND WDNR WRAPP PERMIT SHALL BE OBTAINED. ALL EROSION CONTROL DEVICES SHALL BE INSTALLED BEFORE DEMOLITION CAN OCCUR. ORANGE CONSTRUCTION FENCE TO BE INSTALLED ALONG ALL WETLAND AREAS AS SHOWN ON THE SITE GRADING PLAN.

EXISTING ITEMS TO REMAIN INCLUDING, BUT NOT LIMITED TO, FENCES, SIGNS, UTILITIES, BUILDINGS, TREES, PAVEMENTS, AND LIGHT POLES SHALL BE CAREFULLY PROTECTED DURING THE DEMOLITION PROCESS. ANY DAMAGE SUSTAINED TO ITEMS TO REMAIN IN PLACE SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE OWNER.

PROPERTY CORNERS AND BENCHMARKS SHALL BE CAREFULLY PROTECTED UNTIL THEY HAVE BEEN REFERENCED BY A PROFESSIONAL LAND SURVEYOR. PROPERTY MONUMENTS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE OWNER.

CONTRACTOR SHALL LIMIT PAVEMENT REMOVALS TO ONLY THOSE AREAS WHERE IT IS NECESSARY AS SHOWN ON THESE CONSTRUCTION PLANS. CONCRETE SIDEWALK AND CURB & GUTTER IS TO BE REMOVED TO NEAREST JOINT IN ORDER TO ACCOMMODATE PROPOSED IMPROVEMENTS. IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENTS AND/OR OTHER IMPROVEMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REPAIR OF DAMAGED PAVEMENT AND OTHER ITEMS AT NO ADDITIONAL COST TO THE OWNER.

CONTRACTOR TO REMOVE ALL EXISTING SIGNS WITHIN PROPERTY LIMITS EXCEPT FOR THOSE CALLED TO BE SALVAGED TO THE OWNER OR SALVAGED AND RELOCATED.

IF PREVIOUSLY UNIDENTIFIED HAZARDOUS, CONTAMINATED MATERIALS, OR OTHER ENVIRONMENTAL RELATED CONDITIONS ARE DISCOVERED, STOP WORK IMMEDIATELY AND NOTIFY THE PROJECT CONSTRUCTION MANAGER FOR ACTION TO BE TAKEN. DO NOT RESUME WORK UNTIL SPECIFICALLY AUTHORIZED BY THE CONSTRUCTION MANAGER.

AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED, EXCESS, WASTE, STOCKPILED AND SPOIL MATERIAL IN ACCORDANCE WITH SECTION 205.3.12 OF THE "STATE SPECIFICATIONS". THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

DEMOLITION LEGEND

- SAW CUT PAVEMENT (FULL DEPTH)
- STRIP & SALVAGE TOPSOIL
- REMOVE ASPHALT PAVEMENT
- REMOVE CONCRETE CURB AND GUTTER
- WETLAND FILL AREA
- REMOVE SIGN

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SITE DEMOLITION PLAN
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VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN

NO.	REVISION	BY	DATE

PROJ. MGR: JJC
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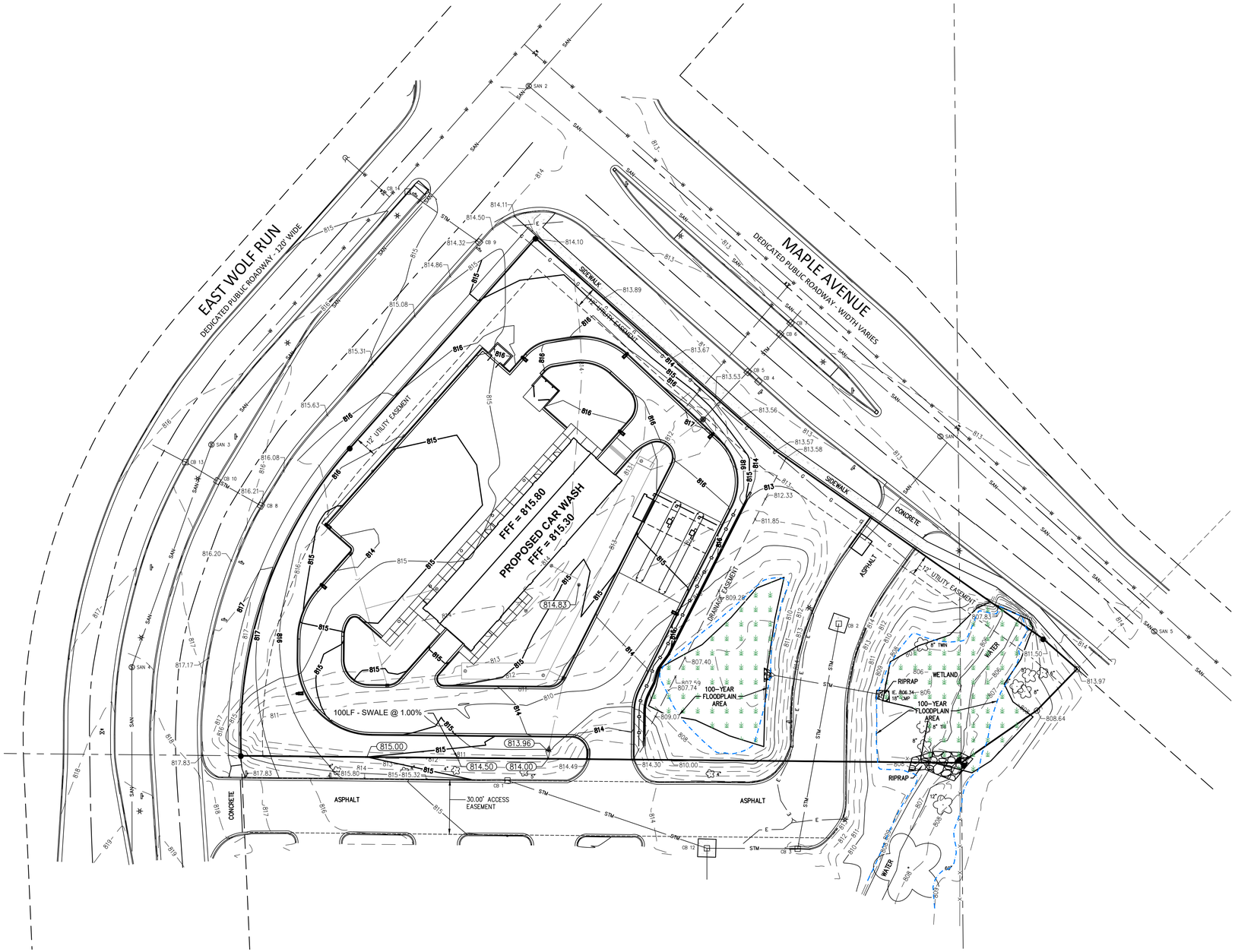

SCALE 1" = 30'

SITE GRADING & SUB-GRADE PREPARATION

ALL EXISTING TOPSOIL AND OTHER NON-STRUCTURAL MATERIAL WITHIN THE PROPOSED BUILDING PADS, PAVEMENT SECTIONS AND STRUCTURAL FILL AREAS SHALL BE STRIPPED AND STOCKPILED AT THE LOCATION SHOWN OR AS DIRECTED BY THE GENERAL CONTRACTOR.

EXCAVATE, GRADE AND SHAPE SUBGRADE TO THE LINES AND GRADES SHOWN ON THE PLANS. SEE TYPICAL SECTIONS FOR PAVEMENT THICKNESS AND MATERIALS.

FOR STRUCTURAL FILL DEPTHS LESS THAN 20 FEET, THE DENSITY OF THE STRUCTURAL COMPACTED FILL AND SCARIFIED SUBGRADE AND GRADES SHALL NOT BE LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY STANDARD PROCTOR (ASTM D-698) WITH THE EXCEPTION OF THE TOP 12 INCHES OF PAVEMENT SUBGRADE WHICH SHALL HAVE A MINIMUM IN-SITU DENSITY OF 100 PERCENT OF MAXIMUM DRY DENSITY, OR 5 PERCENT HIGHER THAN UNDERLYING FILL MATERIALS.

THE MOISTURE CONTENT OF COHESIVE SOIL SHALL NOT VARY BY MORE THAN -1 TO +3 PERCENT AND GRANULAR SOIL ±3 PERCENT OF THE OPTIMUM WHEN PLACED AND COMPACTED OR RECOMPACTED, UNLESS SPECIFICALLY RECOMMENDED / APPROVED BY THE SOILS ENGINEER MONITORING THE PLACEMENT AND COMPACTION. COHESIVE SOILS WITH MODERATE TO HIGH EXPANSIVE POTENTIALS (PI>15) SHOULD, HOWEVER, BE PLACED, COMPACTED AND MAINTAINED PRIOR TO CONSTRUCTION AT A MOISTURE CONTENT OF 3±1 PERCENT ABOVE OPTIMUM MOISTURE CONTENT TO LIMIT FUTURE HEAVE.

THE FILL SHALL BE PLACED IN LAYERS WITH A MAXIMUM LOOSE THICKNESS OF 9 INCHES. THE COMPACTION EQUIPMENT SHOULD CONSIST OF SUITABLE MECHANICAL EQUIPMENT SPECIFICALLY DESIGNED FOR SOIL COMPACTION. BULLDOZERS OR SIMILAR TRACKED VEHICLES ARE TYPICALLY NOT SUITABLE FOR COMPACTION.

UPON COMPLETION OF THE GRADING AND COMPACTION OF THE SUBGRADE, A PROOF ROLL SHALL BE CONDUCTED BY THE CONTRACTOR ON ALL SUBGRADES THAT RECEIVE DENSE AGGREGATE BASE COURSE. THE CONTRACTOR SHALL PROVIDE A FULLY LOADED QUAD-AXLE TRUCK (18 TON MINIMUM LOAD) TO PERFORM THE PROOF ROLL. CONTRACTOR SHALL COORDINATE THE PROOF ROLL WITH THE OWNER AND THE GENERAL CONTRACTOR'S GEOTECHNICAL ENGINEER.

SOIL COMPACTION IN ALL FILL AND EMBANKMENT AREAS SHALL BE APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER.

TEMPORARY SEEDING IS REQUIRED FOR ALL STOCKPILES AND OTHER EXPOSED LAND AREAS IF NOT ACTIVELY WORKED WITHIN 30 DAYS. AT THE COMPLETION OF THE GRADING WORK, RE-SPREAD SALVAGED TOPSOIL OR IMPORT TOPSOIL AS NECESSARY TO PROVIDE A MINIMUM SIX-INCH (6") LAYER IN ALL LANDSCAPE AND LAWN AREAS.

ALL DISTURBED AREAS SHALL BE RESTORED PER LANDSCAPE PLAN.

SEEDING SHALL BE IN ACCORDANCE WITH STATE SPECIFICATION 630, EXCEPT AS MODIFIED HEREIN.

A. AREAS DESIGNATED ON THE PLANS TO BE SEEDED OR AREAS WHERE GRASS IS TO BE REPLACED SHALL BE SEEDED AT A RATE OF FOUR POUNDS PER 1,000 SQUARE FEET WITH GRASS SEED MEETING THE REQUIREMENTS OF REINDEERS DELUXE 50 OR AN APPROVED EQUAL.

B. DISTURBED TURF AREAS SHALL BE SEEDED, FERTILIZED, AND RESTORED WITH EROSION MAT AS NECESSARY TO OBTAIN VIGOROUS, DENSE VEGETATIVE COVER.

AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED, EXCESS, WASTE, STOCKPILED AND SPOIL MATERIAL IN ACCORDANCE WITH SECTION 205.3.12 OF THE "STATE SPECIFICATIONS". THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

CONSTRUCTION SEQUENCING

1. OBTAIN PLAN APPROVAL AND ALL APPLICABLE PERMITS.
2. NOTIFY THE VILLAGE OF THE PROJECT START DATE.
3. HOLD A PRE-CONSTRUCTION CONFERENCE AT LEAST ONE (1) WEEK PRIOR TO STARTING CONSTRUCTION.
4. INSTALL CONSTRUCTION ENTRANCE.
5. INSTALL SILT FENCE BARRIER.
6. INSTALL INLET PROTECTION.
7. BEGIN DEMOLITION WORK.
8. BEGIN BUILDING STRUCTURE.
9. INSTALL ALL UTILITIES.
10. GRADE PAVEMENT AREAS.
13. FINAL GRADE STONE IN PAVEMENT AREAS.
14. INSTALL CURB & GUTTER AND SIDEWALKS.
15. RE-GRADE STONE & INSTALL PAVEMENTS.
16. RESTORE AND INSTALL EROSION MAT WHERE NOTED ON PLANS.
17. AT CONCLUSION OF GRADING ACTIVITIES ALL NON-EROSION CONTROL MAT AREAS SHALL BE SEEDED AND MULCHED.

GRADING LEGEND

- 692 — EXISTING CONTOURS
- 702 — PROPOSED CONTOURS
- 604.88 EXISTING SPOT GRADES
- 604.88 PROPOSED SPOT GRADES

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TSUNAMI EXPRESS CAR WASH
SITE GRADING PLAN
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Friday, April 11, 2025 8:05:56 AM

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60' 30' 0' 30' 60'

SCALE 1" = 30'

EROSION CONTROL LEGEND

- 3 / C-10 — STORM SEWER INLET PROTECTION (TYPE "C" UNLESS SPECIFIED DIFFERENTLY)
- 1 / C-10 — SILT FENCE
- 4 / C-10 — SLOPE EROSION MAT (CLASS 1, TYPE A, URBAN)
- 5 / C-10 — CHANNEL EROSION MAT (CLASS 1, TYPE B)
- 2 / C-10 — STONE TRACKING PAD
- LIMITS OF DISTURBANCE (1.438 AC)

INSTALL SILT FENCE PER SECTION 628 OF THE "STATE SPECIFICATIONS" AND WDNR TECHNICAL STANDARD 1056 AT THE LOCATIONS SHOWN ON THE PLAN. ERECT SILT FENCE PRIOR TO STARTING A CONSTRUCTION OPERATION THAT MIGHT CAUSE SEDIMENTATION OR SILTATION AT THE SITE OF THE PROPOSED SILT FENCE. CONTRACTOR SHALL INSTALL SILT FENCING AT DOWNSLOPE SIDE OF STOCKPILES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION, MAINTENANCE AND REMOVAL OF ALL REQUIRED SILT FENCE MATERIAL.

ALL PROPOSED STORM SEWER STRUCTURES AND ADJACENT EXISTING STORM INLETS SHALL HAVE A LAYER OF GEOTEXTILE FABRIC (TYPE "FF") INSTALLED BETWEEN THE FRAME & GRATE TO PREVENT SEDIMENT OR SILT FROM ENTERING THE SYSTEM. THE INLET PROTECTION SHALL BE INSPECTED BY THE CONTRACTOR AND REPLACED EVERY 14 DAYS AND AFTER EACH RAINFALL EVENT. FABRIC TO BE REPLACED AS NEEDED TO MEET FIELD CONDITIONS.

THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING WIND EROSION (DUST) DURING CONSTRUCTION AT HIS/HER EXPENSE (WHEN NECESSARY OR AS REQUIRED BY LOCAL INSPECTORS AND/OR ENGINEER OF RECORD).

EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, SANITARY SEWER, WATER MAIN, ETC.):

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

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

C. ANY WATER PUMPED FROM PITS, TRENCHES, WELLS OR PONDS SHALL BE DISCHARGED INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061 AND BMP'S PRIOR TO RELEASE INTO THE STORM SEWER, RECEIVING STREAM OR DRAINAGE DITCH. PUMPED WATER CAN BE TREATED IN FILTER BAGS, STONE FILTERS OR SIMILAR DEVICES. QUALITY OF PUMPED WATER SHALL BE CONTINUOUSLY MONITORED DURING PUMPING OPERATIONS.

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

DITCH CHECKS AND APPLICABLE EROSION NETTING/MATTING SHALL BE INSTALLED IMMEDIATELY AFTER COMPLETION OF GRADING EFFORTS WITHIN DITCHES/SWALES TO PREVENT SOIL TRANSPORTATION.

CONCRETE WASHOUT BASIN SHALL BE LOCATED ON SITE IN AN AREA THAT IS STABILIZED AND DRAINS INTO SUITABLE SEDIMENT TRAPPING OR SETTLING DEVICE. MONITOR THE WASHOUT BASIN FOR SEDIMENT ACCUMULATION, CLOGGED HOSES, APPROPRIATE WATER LEVELS, AND EFFECTIVENESS.

ALL EXPOSED SOIL AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 14 DAYS AND REQUIRE VEGETATIVE COVER FOR LESS THAN 1 YEAR, REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1059 AND THE VILLAGE OF MUKWONAGO ORDINANCE.

ALL DISTURBED SLOPES EXCEEDING 5:1, SHALL BE STABILIZED WITH CLASS I, TYPE A EROSION MATTING OR APPLICATION OF A WISCONSIN DEPARTMENT OF TRANSPORTATION (WisDOT) APPROVED (POLYMER) SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. EROSION MATTING AND/OR NETTING USED ONSITE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES AND WDNR TECHNICAL STANDARDS 1052.

PAVED SURFACES ADJACENT TO CONSTRUCTION SITE VEHICLE ACCESS SHALL BE SWEPT AND/OR SCRAPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR DUST AT THE END OF EACH WORK DAY AND AS REQUESTED BY THE VILLAGE OF MUKWONAGO.

EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.

AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED, EXCESS, WASTE, STOCKPILED AND SPOIL MATERIAL IN ACCORDANCE WITH SECTION 205.3.12 OF THE "STATE SPECIFICATIONS". THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

EROSION & SEDIMENT CONTROL NOTES

THE EROSION AND SEDIMENT CONTROL PROVISIONS DETAILED ON THE DRAWINGS AND SPECIFIED HEREIN ARE THE MINIMUM REQUIREMENTS FOR EROSION CONTROL.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE ANY REVISIONS, ADJUSTMENTS OR PROPOSED ALTERATIONS TO THE CONSTRUCTION SEQUENCING AND/OR EROSION CONTROL PLANS. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ENGINEER OF RECORD AND REGULATORY OFFICIALS OF ANY CHANGES TO THE EROSION CONTROL AND STORMWATER MANAGEMENT PLANS. MODIFICATIONS TO THE APPROVED EROSION CONTROL DESIGN IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS IS ALLOWED IF MODIFICATIONS CONFORM TO BEST MANAGEMENT PRACTICES (BMP'S). ALL SIGNIFICANT DEVIATIONS FROM THE PLANS MUST BE SUBMITTED AND APPROVED BY THE VILLAGE OF MUKWONAGO.

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION, MAINTENANCE, REPAIR AND REMOVAL OF ALL EROSION CONTROL DEVICES REQUIRED FOR THE PROJECT WHICH SHALL BE DONE IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (DNR) TECHNICAL STANDARDS (REFERRED TO AS BMP'S) AND THE VILLAGE OF MUKWONAGO ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL CONTROL MEASURES WHICH MAY BE NECESSARY TO MEET UNFORESEEN FIELD CONDITIONS. SEE VILLAGE OF MUKWONAGO AND WDNR EROSION CONTROL PERMITS FOR ADDITIONAL DETAILS OR REQUIREMENTS.

ALL EROSION AND SEDIMENT CONTROL MEASURES AND DEVICES SHALL BE INSPECTED BY THE CONTRACTOR AS REQUIRED IN THE WISCONSIN ADMINISTRATIVE CODE (SPS 360.21) AND MAINTAINED PER SPS 360.22.

INSPECTIONS AND MAINTENANCE OF ALL EROSION CONTROL MEASURES SHALL BE ROUTINE (ONCE PER WEEK MINIMUM) TO ENSURE PROPER FUNCTION OF EROSION CONTROLS AT ALL TIMES. SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE IN WORKING ORDER AT THE END OF EACH WORK DAY. THE CONTRACTOR SHALL CHECK THE EROSION AND SEDIMENT CONTROL PRACTICES FOR MAINTENANCE NEEDS AT ALL THE FOLLOWING INTERVALS UNTIL THE SITE IS STABILIZED:

A. AT LEAST WEEKLY.

B. WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER. A RAINFALL EVENT SHALL BE CONSIDERED TO BE THE TOTAL AMOUNT OF RAINFALL RECORDED IN ANY CONTINUOUS 24-HOUR PERIOD. ALL EROSION AND SEDIMENT CONTROL ITEMS SHALL BE INSPECTED WITHIN 24 HOURS OF ALL RAIN EVENTS EXCEEDING 0.5 INCHES. IMMEDIATELY REPAIR ANY DAMAGE OBSERVED DURING THE INSPECTION.

EROSION AND SEDIMENT CONTROL INSPECTIONS AND ENFORCEMENT ACTIONS MAY BE CONDUCTED BY WDNR, THE VILLAGE OF MUKWONAGO OR THEIR AUTHORIZED AGENTS DURING AND AFTER THE CONSTRUCTION OF THIS PROJECT. ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED BY STATE OR LOCAL INSPECTORS AND/OR THE ENGINEER OF RECORD, SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.

ALL SEDIMENT AND EROSION CONTROL DEVICES, INCLUDING PERIMETER EROSION CONTROL MEASURES SUCH AS CONSTRUCTION ENTRANCES, SILT FENCE AND EXISTING INLET PROTECTION SHALL BE INSTALLED PRIOR TO COMMENCING EARTH DISTURBING ACTIVITIES. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES UNTIL THE SITE HAS ESTABLISHED A VEGETATIVE COVER AND IS STABILIZED.

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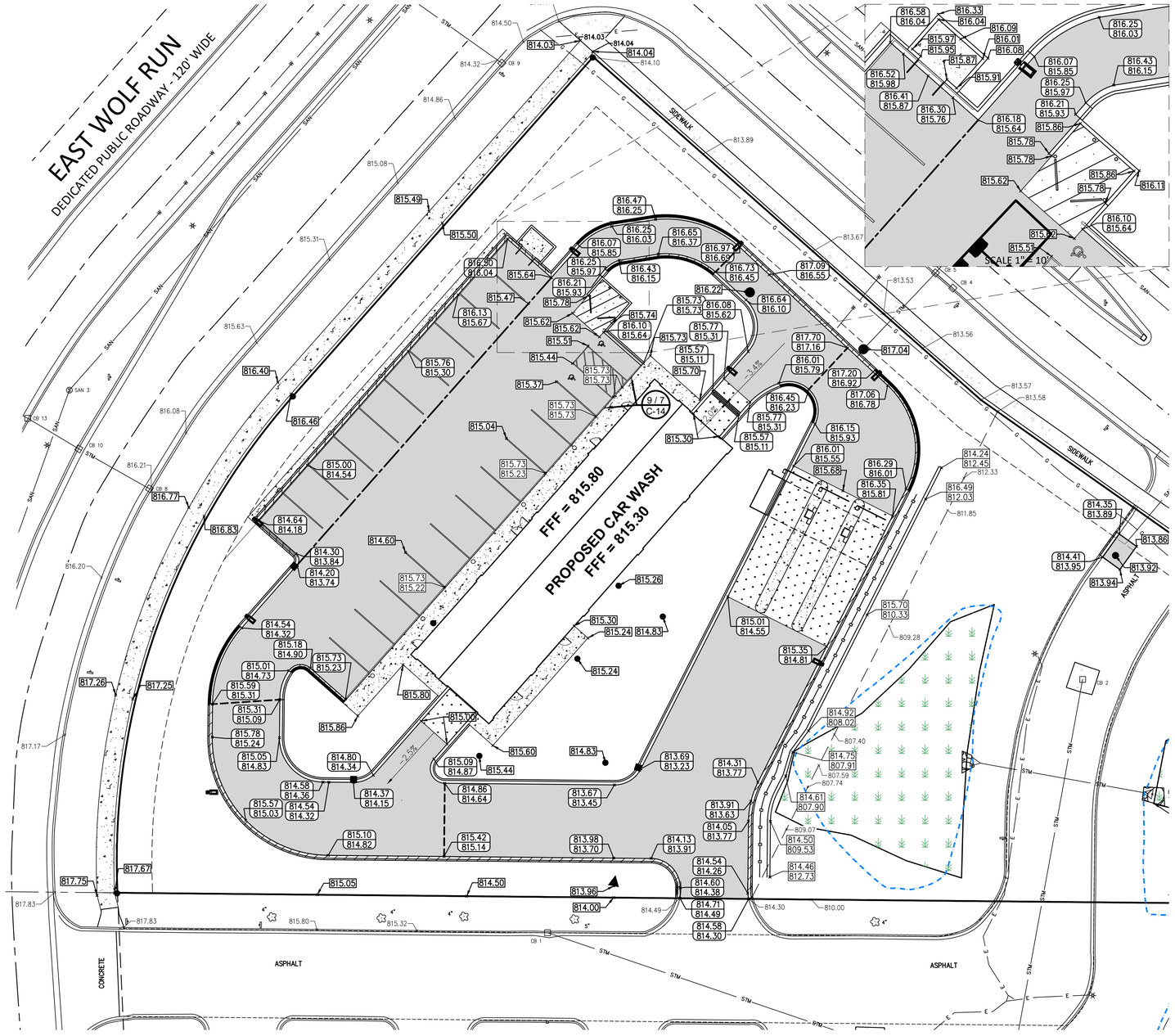

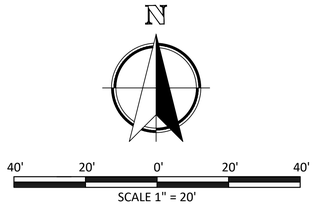

REFERENCES

STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, 2025 EDITION, HEREIN REFERRED TO AS "STATE SPECIFICATIONS." THE CURRENT VERSION OF THE "STATE SPECIFICATIONS" IS AVAILABLE ON THE WisDOT WEBSITE AT http://roadwaystandards.dot.wi.gov/standards/stndspec/index.htm

"MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), 11TH EDITION (DECEMBER 2023).

EROSION CONTROL, EARTHWORK, SITE GRADING AND PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "STATE SPECIFICATIONS".

PAVEMENT SPECIFICATIONS

DENSE AGGREGATE BASE COURSE SHALL MEET THE REQUIREMENTS OF SECTION 305 OF THE "STATE SPECIFICATIONS". THE COMPLETED BASE SHALL BE IN ACCORDANCE WITH THE "TYPICAL SECTIONS & CONSTRUCTION DETAILS" SHEET(S) OF THE PLAN SET AND SHALL BE CONSTRUCTED IN FOUR-INCH (4") LIFTS AND COMPACTED ACCORDING TO SUBSECTION 305.3.2.2 OF THE "STATE SPECIFICATIONS".

ASPHALTIC CONCRETE PAVEMENT SHALL BE WISDOT LT 58-28 S MEETING THE REQUIREMENTS OF SECTION 460 OF THE "STATE SPECIFICATIONS". PAVEMENT SHALL BE INSTALLED IN TWO (2) LIFTS IN ACCORDANCE WITH THE "TYPICAL SECTIONS & CONSTRUCTION DETAILS" SHEET(S) OF THE PLAN SET. A TACK COAT SHALL BE INSTALLED BETWEEN THE LOWER AND UPPER COURSES IN ACCORDANCE WITH SECTION 455.3.2 OF THE "STATE SPECIFICATIONS".

CONCRETE FOR PAVEMENT(S), SIDEWALKS, CURB & GUTTER AND DRIVEWAY APRONS SHALL BE GRADE A-FA, AIR-ENTRAINED, AS SPECIFIED IN SUBSECTION 501.3.1 OF THE "STATE SPECIFICATIONS". ALL EXTERIOR CONCRETE SHALL BE "READY-MIXED" AND RECEIVE A BROOM FINISH. ALL CONCRETE WORK SHALL BE CURED IN ACCORDANCE WITH THE REQUIREMENTS OF SUBSECTION 415.2.4 OF THE "STATE SPECIFICATIONS".

LIGHT-DUTY CONCRETE SHALL BE FOUR INCHES (4") IN THICKNESS ON FOUR INCHES (4") OF DENSE AGGREGATE BASE COURSE AND BE CONSTRUCTED IN ACCORDANCE WITH THE "TYPICAL SECTIONS & CONSTRUCTION DETAILS" SHEET(S) OF THE PLAN SET.

MEDIUM-DUTY CONCRETE SHALL BE SIX INCHES (6") IN THICKNESS ON EIGHT INCHES (8") OF DENSE AGGREGATE BASE COURSE AND BE CONSTRUCTED IN ACCORDANCE WITH THE "TYPICAL SECTIONS & CONSTRUCTION DETAILS" SHEET(S) OF THE PLAN SET.

HEAVY-DUTY CONCRETE SHALL BE EIGHT INCHES (8") IN THICKNESS ON SIX INCHES (6") OF DENSE AGGREGATE BASE COURSE AND BE CONSTRUCTED IN ACCORDANCE WITH THE "TYPICAL SECTIONS & CONSTRUCTION DETAILS" SHEET(S) OF THE PLAN SET.

ALL CONCRETE CURB AND GUTTER SHALL BE 18" VERTICAL FACE OR 18" MOUNTABLE CONFORMING TO THE "TYPICAL SECTIONS & CONSTRUCTION DETAILS" SHEET(S) OF THE PLAN SET AND SECTION 601 OF THE "STATE SPECIFICATIONS". CURB & GUTTER SHALL BE "REVERSE PAN CURB" OR "STANDARD CURB" AS INDICATED BY THE LEGEND BELOW AND INSTALLED IN A MANNER TO SHED ALL STORM WATER RUNOFF TOWARDS THE DRAINAGE STRUCTURES.

CONTRACTION JOINTS SHALL BE AT TEN-FOOT (10') INTERVALS FOR CURB AND GUTTER AND FIVE-FOOT (5') INTERVALS FOR FIVE-FOOT (5') WIDE SIDEWALK. FINAL JOINTING PLAN FOR CONCRETE PAVEMENT TO BE PREPARED BY THE CONTRACTOR.

EXPANSION JOINTS SHALL BE PLACED AS OUTLINED IN SUBSECTION 601.3.6 OF THE "STATE SPECIFICATIONS". FILLER MATERIAL FOR EXPANSION JOINTS SHALL BE 1/2" FIBER MATERIAL.

CONTRACTOR SHALL ADJUST AND/OR RECONSTRUCT ALL UTILITY COVERS (SUCH AS MANHOLES, VALVE BOXES, ETC.) TO MATCH THE FINISHED GRADES OF THE AREA AFFECTED BY THE CONSTRUCTION.

PARKING LOT STRIPING, STOP BARS AND HANDICAPPED ACCESSIBLE SYMBOLS SHALL BE INSTALLED WITH WISCONSIN DOT APPROVED TRAFFIC PAINT IN ACCORDANCE WITH SECTION 646 OF THE "STATE SPECIFICATIONS". ALL PARKING STALL STRIPING SHALL BE FOUR INCHES (4") IN WIDTH AND SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE OWNER. SEE THE TYPICAL SECTIONS AND CONSTRUCTION DETAILS SHEET(S) OF THE PLAN SET FOR ADDITIONAL INFORMATION REGARDING PAVEMENT MARKINGS.

PAVEMENT GRADING LEGEND

- 804.85 — EXISTING SPOT GRADES
- 804.85 — FINISHED PAVEMENT GRADES
- 804.85 / 804.35 — FINISHED TOP OF CURB GRADES / FINISHED CURB FLANGE GRADES
- 4 / C-13 — 804.85 / 804.35 — TOP OF WALL GRADES / BOTTOM OF WALL GRADES
- PAVEMENT GRADING RIDGE LINE
- PAVEMENT GRADING SWALE
- 9 / C-11 — MEDIUM-DUTY ASPHALT PAVEMENT
- 10 / C-11 — LIGHT-DUTY CONCRETE PAVEMENT
- 11 / C-11 — MEDIUM-DUTY CONCRETE PAVEMENT
- 12 / C-11 — HEAVY-DUTY CONCRETE PAVEMENT
- 5 / C-11 — VERTICAL FACE, CURB & GUTTER
- 6 / C-11 — REVERSE PAN, CURB & GUTTER
- 7 / 8 / C-11 — MOUNTABLE, CURB & GUTTER
- −2.0% — PAVEMENT SLOPE GRADE

PAVEMENT MARKING LEGEND

6 / C-14 — ISA-W/B - INTERNATIONAL SYMBOL FOR ACCESSIBILITY - WHITE ON BLUE BACKGROUND

SWSL/4"/45°/4' - SINGLE WHITE SOLID LINE / 4" WIDE EACH, 45°, 4' O.C.

SWSL/4" - SINGLE WHITE SOLID LINE / 4" WIDE EACH

SIGN/POST LEGEND

9 / 7 / C-14 = SIGN (DETAIL 9) MOUNTED ON POST (DETAIL 7) / AS SHOWN ON SHEET C-14

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UTILITY NOTE

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Nielsen Madsen + Barber
CIVIL ENGINEERS AND LAND SURVEYORS
1458 Horizon Blvd. Suite 200, Racine, WI. 53406
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TSUNAMI EXPRESS CAR WASH
PAVEMENT GRADING PLAN
FOR
TSUNAMI CAR WASH INTERMEDIATE HOLDCO, LLC
VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN

NO.	REVISION	BY	DATE

PROJ. MGR:	JJC
DRAFTED:	JWR
DATE:	4-10-2025
CHECKED:	ALJ
DATE:	4-11-2025

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SHEET
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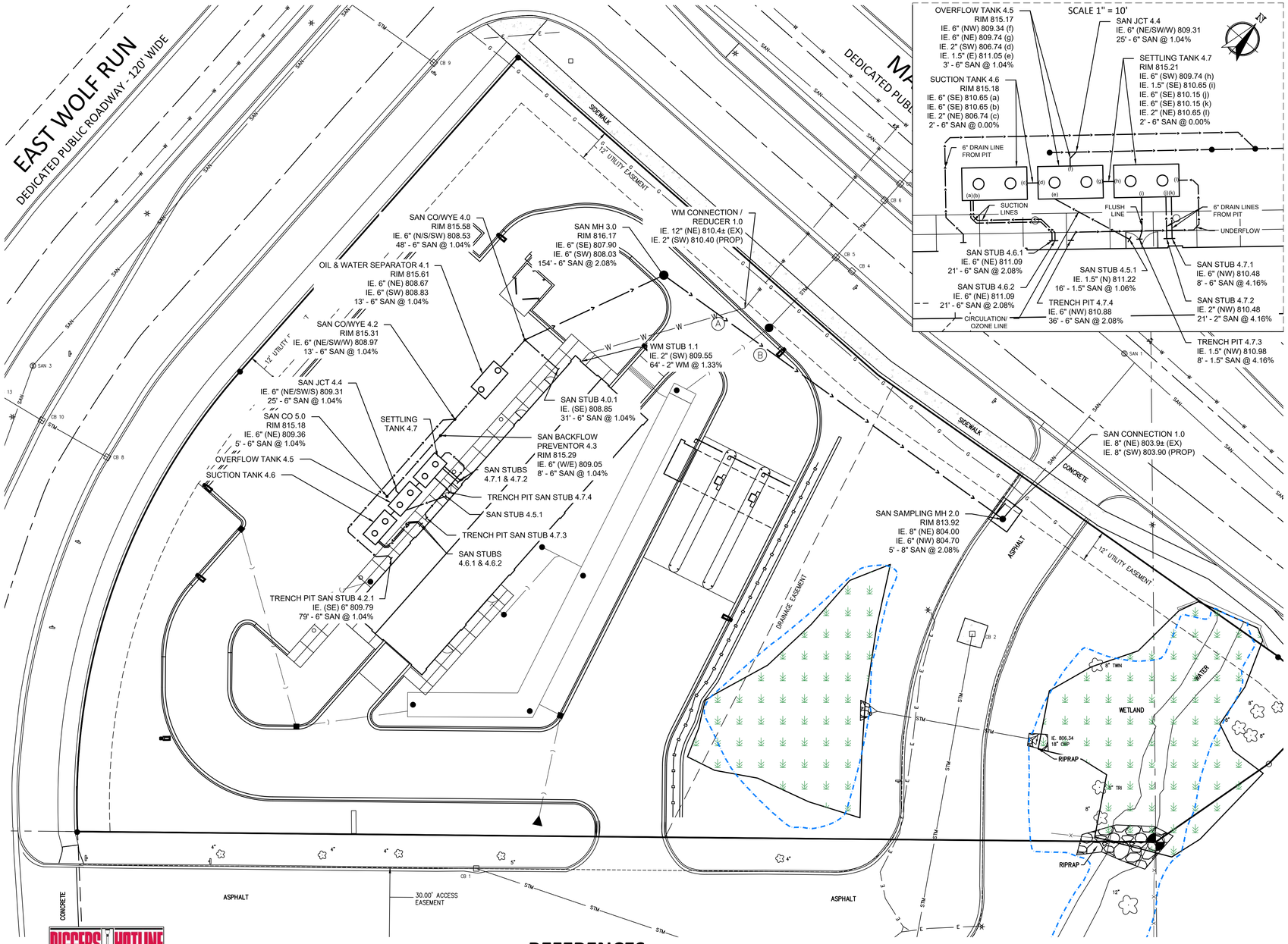
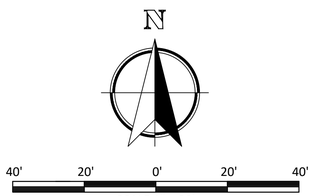
ISSUE FOR REVIEW: 4-12-2025

Friday, April 11, 2025 8:06:08 AM





AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED, EXCESS, WASTE, STOCKPILED AND SPOIL MATERIAL IN ACCORDANCE WITH SECTION 205.3.12 OF THE "STATE SPECIFICATIONS". THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

SANITARY SEWER & WATERMAIN SPECIFICATIONS

MATERIALS FOR WATERMAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STATE OF WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (SPS) AND VILLAGE OF MUKWONAGO SPECIFICATIONS.

SANITARY SEWER AND WATER MAIN CONSTRUCTION SHALL BE CONSTRUCTED PER THE VILLAGE OF MUKWANAGO'S DEVELOPMENT HANDBOOK AND STANDARD CONSTRUCTION SPECIFICATIONS.

A 10-GAUGE TRACER WIRE SHALL BE INSTALLED THE ENTIRE LENGTH OF ALL PRIVATE SANITARY SEWERS AND LATERALS PER SPS 382.30(11)(h). THE TRACER WIRE SHALL BE EXTENDED TO THE SURFACE WITHIN THE PROPOSED STRUCTURES. FOR THE SANITARY SEWER LATERALS, THE TRACER WIRE SHALL BE EXTENDED TO THE SURFACE AT THE BUILDING WALL AND ALL OTHER SYSTEM LIMITS (FOR EACH SYSTEM INSTALLED) AND ENCLOSED IN A RISER BOX WITH "SEWER" ON THE COVER.

A 10-GAUGE TRACER WIRE SHALL BE INSTALLED THE ENTIRE LENGTH OF ALL PRIVATE WATER MAINS, HYDRANT LEADS, FIRE DEPARTMENT CONNECTION LEADS AND LATERALS PER SPS 382.40(8)(k). THE TRACER WIRE SHALL BE EXTENDED TO THE SURFACE AT THE BUILDING WALL AND ALL OTHER SYSTEM LIMITS (FOR EACH SYSTEM INSTALLED) AND ENCLOSED IN A RISER BOX WITH "WATER" OR "FDC" ON THE COVER. THE TRACER WIRE SHALL BE CONNECTED TO THE TRACER WIRE ON THE WATER MAIN.

1. WIRE SPLICES SHALL BE IN ACCORDANCE WITH STANDARD ELECTRICAL PRACTICES. ACCEPTABLE WIRE SPLICES ARE BRASS SPLIT BOLTS, DRYCONN WATERPROOF CONNECTORS, SNAP-LOC MODEL LV 9500, OR APPROVED EQUAL. WIRE NUTS ARE NOT ACCEPTABLE
2. BRANCH CONNECTIONS UTILIZING SPLIT BOLTS - SPLICE BRANCH TRACER WIRE TO MAIN TRACER WIRE USING THE FOLLOWING PROCEDURE: BARE TRACER WIRE ON MAIN LINE (DO NOT CUT); CONNECT BRANCH WIRE TO MAIN LINE WITH BRASS SPLIT BOLT; AND SEAL CONNECTION WITH RUBBER ELECTRICAL TAPE AND OVER WRAP WITH TWO LAYER OF POLYETHYLENE ADHESIVE TAPE 1-1/2" WIDE AND 8MM THICK.
3. BRANCH CONNECTIONS UTILIZING OTHER APPROVED CONNECTORS - FOLLOW MANUFACTURER'S RECOMMENDATIONS.

SANITARY SEWER LATERAL PIPE MATERIAL SHALL BE FOUR-INCH (4") PVC CLASS SDR-35 WITH INTEGRAL BELL TYPE ELASTOMERIC JOINTS CONFORMING TO THE REQUIREMENTS OF ASTM D3034, ASTM D3212 AND F-789/P546 WITH RUBBER GASKETS. SANITARY LATERALS SHALL BE PROVIDED WITH A CLEANOUT AT THE BUILDING PER SPS 382.35. LATERAL CLEAN-OUT RISERS SHALL BE SIX-INCH (6") DIAMETER WITH EIGHT-INCH (8") DIAMETER FROST SLEEVE CONSTRUCTED OF THE SAME MATERIAL. THE CLEANOUT RISERS SHALL TERMINATE FOUR INCHES (4") BELOW FINISHED GRADE WITH A SCREW ON CAP. THE FROST SLEEVE SHALL BE BROUGHT UP TO JUST BELOW FINISHED GRADE AND COVERED WITH A NEENAH R-3487 FRAME WITH A SOLID LID.

SANITARY SEWER BACKFLOW PREVENTOR SHALL BE CONSTRUCTED WITH A CLEAN CHECK EXTENDABLE BACKWATER VALVE MODEL MADE BY RECTORSEAL OR AN APPROVED EQUAL.

WATER SERVICE SHALL BE SIX INCH (6") MINIMUM COPPER TYPE "K". WATER SERVICE CONNECTION SHALL BE CONSTRUCTED WITH MUELLER MODEL NUMBER H-15000 CORPORATIONS, MUELLER "ORI SEAL" MODEL NUMBER H-15201 CURB VALVES, AND MUELLER 1-1/4" ARCH PATTERN CURB BOX (MODEL NUMBER H-10385).

SANITARY SEWER LATERAL PIPE MATERIAL SHALL BE 6" PVC CLASS SDR-26, CONFORMING TO THE REQUIREMENTS OF ASTM D3034 AND F-789/P546 WITH RUBBER GASKETS. CLEAN-OUT RISERS SHALL BE 6" DIAMETER WITH 8" DIAMETER FROST SLEEVE CONSTRUCTED OF THE SAME MATERIAL.

ALL SEWER AND WATER LINES INSTALLED IN PROPOSED PRIVATE PAVED AREAS SHALL BE BACKFILLED WITH COMPACTED GRANULAR MATERIAL IN ACCORDANCE WITH TABLE 37, CHAPTER 8.43.4 OF THE "STANDARD SPECIFICATIONS". BACKFILL MATERIAL SHALL EXTEND A MINIMUM OF FIVE FEET (5') OUTSIDE OF THE PAVEMENT LIMITS. TRENCHES RUNNING PARALLEL TO AND LESS THAN FIVE FEET (5') FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE COMPACTED GRANULAR BACKFILL.

SLURRY BACKFILL SHALL BE USED WHERE INDICATED ON THE PLANS. MATERIALS SHALL BE PLACED IN A CLEAN CEMENT MIXER TRUCK AND THOROUGHLY MIXED, IN THE FOLLOWING QUANTITIES:

1,350 LBS	SAND
775 LBS	#1 STONE
1,150 LBS	#2 STONE
25 GAL	(+0 TO 0.5 GALS) WATER/CU. YD.

THE SLURRY BACKFILL MATERIAL SHALL BE PLACED AND MECHANICALLY COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES IN DEPTH. NO ADDITIONAL WATER SHALL BE ALLOWED. THE ABOVE WEIGHTS ARE DAMP WEIGHTS. JUST PRIOR TO PLACING THE SLURRY, THE MIXER SHALL BE RUN AT MIXING SPEED FOR ONE FULL MINUTE TO ENSURE AN EVEN MIXTURE.

ALL SEWER AND WATER LINES INSTALLED IN THE PUBLIC RIGHT-OF-WAY SHALL BE BACKFILLED WITH SLURRY MATERIAL IN ACCORDANCE WITH CHAPTER 8.43.8 OF THE "STANDARD SPECIFICATIONS". BACKFILL MATERIAL SHALL EXTEND A MINIMUM OF FIVE FEET (5') OUTSIDE OF THE PAVEMENT/SIDEWALK LIMITS.

PROVIDE FIVE FEET (5') OF COVER OVER ALL SANITARY SEWERS AND FIVE AND ONE HALF FEET (5-1/2') OF COVER OVER ALL WATER MAINS. MINIMUM HORIZONTAL SEPARATION OF UTILITY MAINS IS EIGHT FEET (8'). PROVIDE VERTICAL SEPARATION OF UTILITIES PER CODE.

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UTILITY NOTE

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UTILITY LEGEND

- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY LATERAL
- EXISTING SANITARY SEWER
- PROPOSED WATER SERVICE
- EXISTING WATERMAIN

UTILITY CONFLICT RESOLUTION TABLE

LOCATION	UTILITY	BOTTOM OF PIPE	TOP OF PIPE	CLEARANCE
Ⓐ	2" WTR	810.25	810.43	2.36'
	6" SAN	807.35	807.89	
Ⓑ	6" SAN	807.05	807.59	1.14'
	15" STM	808.73	810.03	

REFERENCES

STORM SEWER CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN", 6TH EDITION, DECEMBER 22, 2003 WITH ADDENDA NO. 1 AND NO. 2, HEREIN REFERRED TO AS THE "STANDARD SPECIFICATIONS".

UTILITY CONSTRUCTION GENERAL NOTES

ALL APPLICATIONS AND CONNECTION FEES FOR WATER SERVICES MUST BE SUBMITTED AND PAID PRIOR TO CONNECTION TO THE PUBLIC SYSTEMS.

THE CONTRACTOR SHALL PROVIDE 7 DAYS NOTICE TO THE VILLAGE OF MUKWONAGO WATER UTILITY BEFORE COMMENCING CONSTRUCTION ON ANY WATERMAIN IMPROVEMENTS.

THE CONTRACTOR SHALL CONTACT VILLAGE OF MUKWONAGO WATER UTILITY 72 HOURS PRIOR TO PROPOSED WATERMAIN SHUTDOWNS OR ANY WORK THAT MAY INTERFERE WITH EXISTING WATER SERVICE. ALL EXISTING VALVES, HYDRANTS, AND OTHER WATERMAIN INFRASTRUCTURE SHALL ONLY BE OPERATED BY VILLAGE OF MUKWONAGO WATER UTILITY.

CONTRACTOR SHALL VERIFY ALL ELEVATIONS, LOCATIONS AND SIZES OF EXISTING SANITARY AND STORM SEWERS, WATER MAINS, GAS & ELECTRIC LINES AND OTHER ADJACENT UTILITIES PRIOR TO COMMENCING CONSTRUCTION. AS-BUILT (FIELD) DATA SHALL BE USED TO CHECK ALL PROPOSED UTILITY CROSSINGS FOR CONFLICTS.

CONTRACTOR SHALL CONTACT DIGGER'S HOTLINE A MINIMUM OF 72 HOURS BEFORE THE START OF CONSTRUCTION TO HAVE THE ADJACENT UNDERGROUND PUBLIC UTILITIES LOCATED. THE LOCATION OF EXISTING PRIVATE UTILITIES MAY NOT BE SHOWN ON THE PLANS AND SHOULD BE LOCATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

ANY WATER PUMPED FROM PITS, TRENCHES, WELLS OR PONDS SHALL BE TREATED FOR SEDIMENT REMOVAL PRIOR TO DISCHARGE OFF-SITE. PUMPING OPERATIONS SHALL BE IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061. PUMPED WATER CAN BE TREATED IN RETENTION BASINS, FILTER BAGS, STONE FILTERS OR BY OTHER WDNR APPROVED METHODS. QUALITY OF PUMPED WATER SHALL BE CONTINUOUSLY MONITORED DURING PUMPING OPERATIONS.

THE EXACT LOCATION OF THE SANITARY SEWER LATERAL, DOMESTIC WATER LINE, FIRE PROTECTION LEAD, NATURAL GAS SERVICE, ELECTRIC, PHONE AND CABLE LINES (AS THEY ENTER THE BUILDING) SHALL BE PER THE ARCHITECTURAL OR MECHANICAL DRAWINGS.

EXISTING SEWERS LATERALS MAY BE USED WITH NEW STRUCTURES OR PLUMBING SYSTEMS ONLY WHEN SUCH SEWER LATERALS ARE FOUND ON EXAMINATION AND TESTS TO CONFORM IN ALL RESPECTS TO THE REGULATIONS RELATING TO SEWER LATERALS. IF THE EXISTING SEWER LATERALS ARE FOUND TO BE DEFECTIVE, THE DEPARTMENT SHALL NOTIFY THE OWNER OF THE PREMISES IN WRITING OF THE NECESSARY CHANGES TO MAKE THE SEWER LATERALS CONFORM WITH REGULATIONS.

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FOR
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VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN

NO.	REVISION	BY	DATE

PROJ. MGR:	JJC
DRAFTED:	JWR
DATE:	4-10-2025
CHECKED:	AJJ
DATE:	4-11-2025

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ISSUE FOR REVIEW: 4-12-2025

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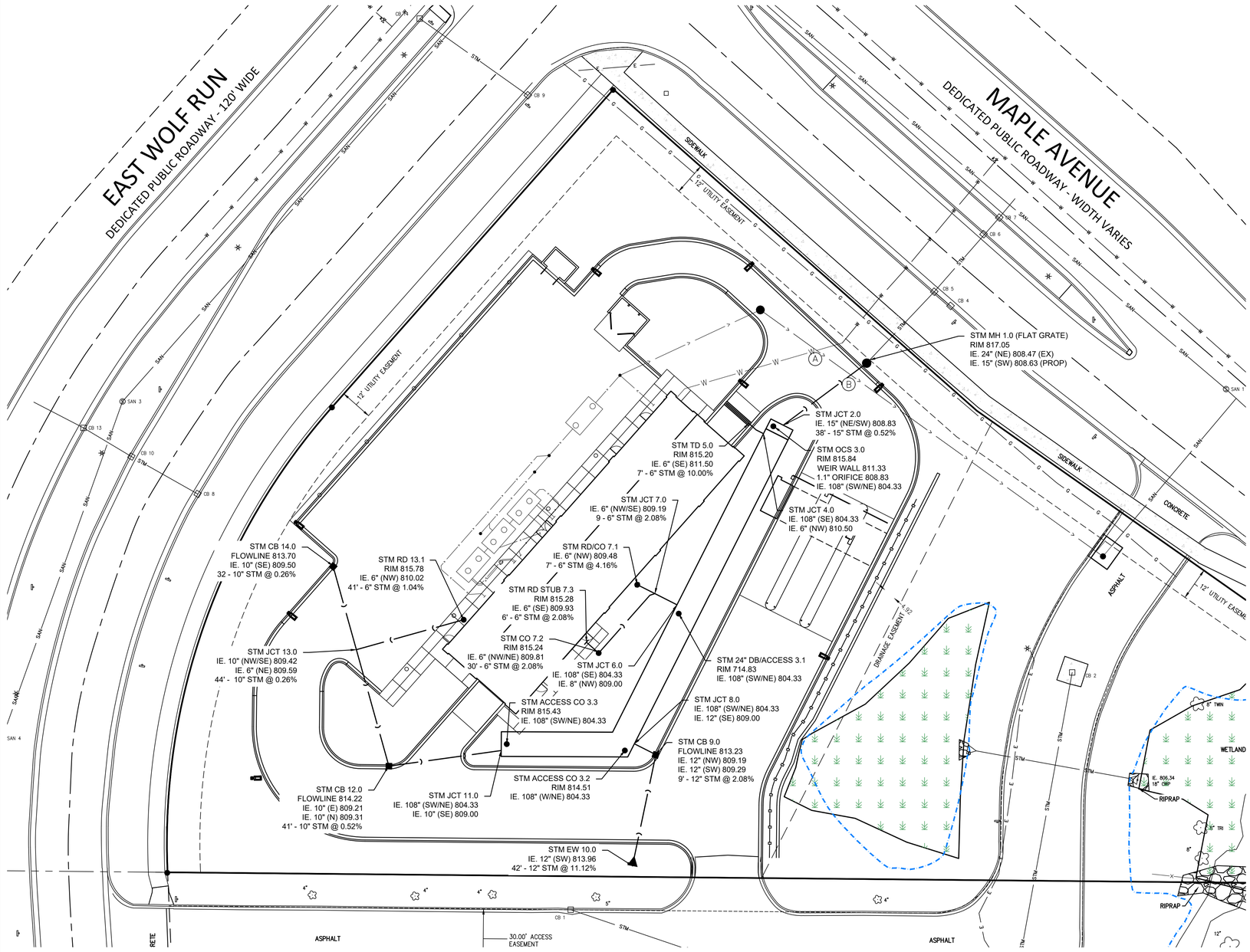

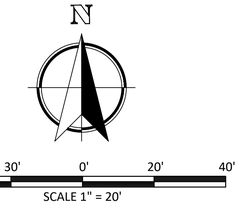

REFERENCES

MATERIALS FOR STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STATE OF WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (SPS) AND THE VILLAGE OF MUKWONAGO STANDARD CONSTRUCTION SPECIFICATIONS.

STORM SEWER CONSTRUCTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN", 6TH EDITION, DECEMBER 22, 2003 WITH ADDENDA NO. 1 AND NO. 2, HEREIN REFERRED TO AS THE "STANDARD SPECIFICATIONS" AND THE VILLAGE OF MUKWONAGO STANDARD CONSTRUCTION SPECIFICATIONS.

PUBLIC UTILITY NOTES

CABLE TV AND TELEPHONE SERVICE INSTALLATION TO BE COORDINATED WITH THE ELECTRICAL SERVICE.

ELECTRICAL SERVICE TO BE COORDINATED WITH WE ENERGIES. EXACT LOCATION OF THE SERVICE ENTRANCE / METER TO BE COORDINATED WITH WE ENERGIES, THE MECHANICAL DESIGNER AND THE ARCHITECT.

IF ANY VILLAGE OF MUKWONAGO OWNED UNDERGROUND ELECTRIC MAY NEED TO BE RELOCATED, THE OWNER/DEVELOPER TO PAY ALL COSTS FOR RELOCATION. CONSTRUCTION TO BE PERFORMED TO MEET THE VILLAGE OF MUKWONAGO STANDARD CONSTRUCTION SPECIFICATIONS. CONTACT THE VILLAGE OF MUKWONAGO ENGINEERING DIVISION TO SCHEDULE INSPECTION.

THE EXACT LOCATION OF THE SANITARY SEWER LATERAL, DOMESTIC WATER LINE, FIRE PROTECTION LEAD, NATURAL GAS SERVICE, ELECTRIC, AND PHONE LINES (AS THEY ENTER THE BUILDING) SHALL BE PER THE ARCHITECTURAL OR MECHANICAL DRAWINGS.

UTILITY CONSTRUCTION GENERAL NOTES

CONTRACTOR SHALL VERIFY ALL ELEVATIONS, LOCATIONS AND SIZES OF EXISTING SANITARY AND STORM SEWERS, WATER MAINS, GAS & ELECTRIC LINES OR OTHER UTILITIES PRIOR TO STARTING CONSTRUCTION. AS-BUILT (FIELD) DATA SHALL BE USED TO CHECK ALL PROPOSED UTILITY CROSSINGS FOR CONFLICTS.

CONTRACTOR SHALL CONTACT DIGGER'S HOTLINE A MINIMUM OF 72 HOURS BEFORE THE START OF CONSTRUCTION TO IDENTIFY ADJACENT UNDERGROUND UTILITIES. THE LOCATION OF EXISTING PRIVATE UTILITIES MAY NOT BE SHOWN ON THE PLANS AND SHOULD BE LOCATED BY THE OWNER PRIOR TO CONSTRUCTION.

ANY WATER PUMPED FROM PITS, TRENCHES, WELLS OR PONDS SHALL BE TREATED FOR SEDIMENT REMOVAL PRIOR TO DISCHARGE OFF-SITE. PUMPING OPERATIONS SHALL BE IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061. PUMPED WATER CAN BE TREATED IN RETENTION BASINS, FILTER BAGS, STONE FILTERS OR BY OTHER WDNR APPROVED METHODS. QUALITY OF PUMPED WATER SHALL BE CONTINUOUSLY MONITORED DURING PUMPING OPERATIONS.

THE EXACT LOCATION OF ALL BUILDING LATERALS, ROOF DRAIN RISERS AND DOWNSPOUTS (IF APPLICABLE) SHALL BE PER THE ARCHITECTURAL OR MECHANICAL DRAWINGS.

STORM SEWER SPECIFICATIONS

STORM SEWERS WERE SIZED IN ACCORDANCE WITH SPS TABLE 382.36-4 "MAXIMUM CAPACITY OF STORM WATER HORIZONTAL CONVEYANCE PIPING FOR CONCRETE, ASTM C76 AND ASTM C14". ANY MATERIAL APPROVED BY THE VILLAGE OF MUKWONAGO AND THE WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES MAY BE USED AT THE SLOPES AND SIZES DESIGNED.

STORM SEWER, ROOF DRAIN AND STORM BUILDING SEWER PIPE AND TUBING MATERIALS SHALL CONFORM TO SPS 384.30 OF THE WISCONSIN ADMINISTRATIVE CODE. REINFORCED CONCRETE PIPE (RCP) AND POLYVINYL CHLORIDE (PVC) MATERIALS SHALL BE SELECTED FROM TABLE 384.30-6. CORRUGATED HIGH DENSITY POLYETHYLENE (HDPE) PIPE MATERIAL (IF SELECTED) SHALL MEET THE REQUIREMENTS OF AASHTO M-252 FOR 4"-10" DIAMETER SIZES AND AASHTO M294 FOR 12"-48" DIAMETER SIZES.

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

ALL STORM SEWERS INSTALLED IN EXISTING OR PROPOSED PAVED AREAS SHALL BE BACKFILLED WITH COMPACTED GRANULAR MATERIAL IN ACCORDANCE WITH TABLE 37, CHAPTER 8.43.4 OF THE "STANDARD SPECIFICATIONS". BACKFILL MATERIAL SHALL EXTEND A MINIMUM OF FIVE FEET (5') OUTSIDE OF THE PAVEMENT LIMITS. TRENCHES RUNNING PARALLEL TO AND LESS THAN FIVE FEET (5') FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE COMPACTED GRANULAR BACKFILL.

A 10-GAUGE TRACER WIRE SHALL BE INSTALLED THE ENTIRE LENGTH OF ALL PRIVATE STORM SEWERS, ROOF DRAINS AND STORM BUILDING SEWER LATERALS PER SPS 382.36(7)(d)10. THE TRACER WIRE SHALL BE EXTENDED TO THE SURFACE AT THE BUILDING WALL AND ALL OTHER SYSTEM LIMITS (FOR EACH SYSTEM INSTALLED) AND ENCLOSED IN A RISER BOX WITH "STORM" ON THE COVER.

ALL MANHOLES AND/OR CATCH BASINS INSTALLED IN PAVED SURFACES AND ACCEPTING RUNOFF SHALL BE FURNISHED WITH THE NEENAH FOUNDRY R-2080-D FRAME AND GRATE.

ALL MANHOLES AND/OR DRAIN BASINS INSTALLED IN LAWN AREAS AND ACCEPTING RUNOFF SHALL BE FURNISHED WITH THE NEENAH FOUNDRY R-2080-D FRAME AND GRATE.

ALL MANHOLES, CATCH BASINS AND DRAIN BASINS SHALL BE FURNISHED WITH A MINIMUM 12" SUMP.

ALL STORM SEWERS, MANHOLES, CATCH BASINS AND/OR DRAIN BASINS SHALL BE CONSTRUCTED WITH WATER AND GAS TIGHT JOINTS IN CONFORMANCE WITH SPS 384.40.

UTILITY LEGEND

- PROPOSED STORM SEWER
- STM — EXISTING STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY LATERAL
- SAN — EXISTING SANITARY SEWER
- W — PROPOSED WATER SERVICE
- W — EXISTING WATERMAIN

UTILITY CONFLICT RESOLUTION TABLE

LOCATION	UTILITY	BOTTOM OF PIPE	TOP OF PIPE	CLEARANCE
(A)	2" WTR	810.25	810.43	2.36'
	6" SAN	807.35	807.89	
(B)	6" SAN	807.05	807.59	1.14'
	15" STM	808.73	810.03	

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TSUNAMI CAR WASH INTERMEDIATE HOLDCO, LLC
VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN

NO.	REVISION	BY	DATE

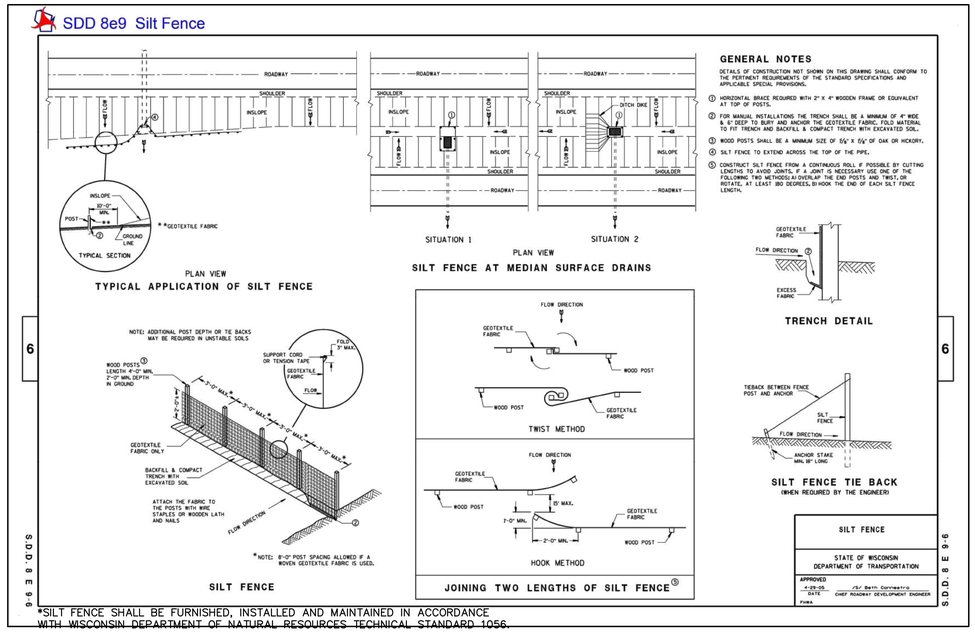
PROJ. MGR:	JJC
DRAFTED:	JWR
DATE:	4-10-2025
CHECKED:	AJJ
DATE:	4-11-2025

2024.0060.01

SHEET
C-9

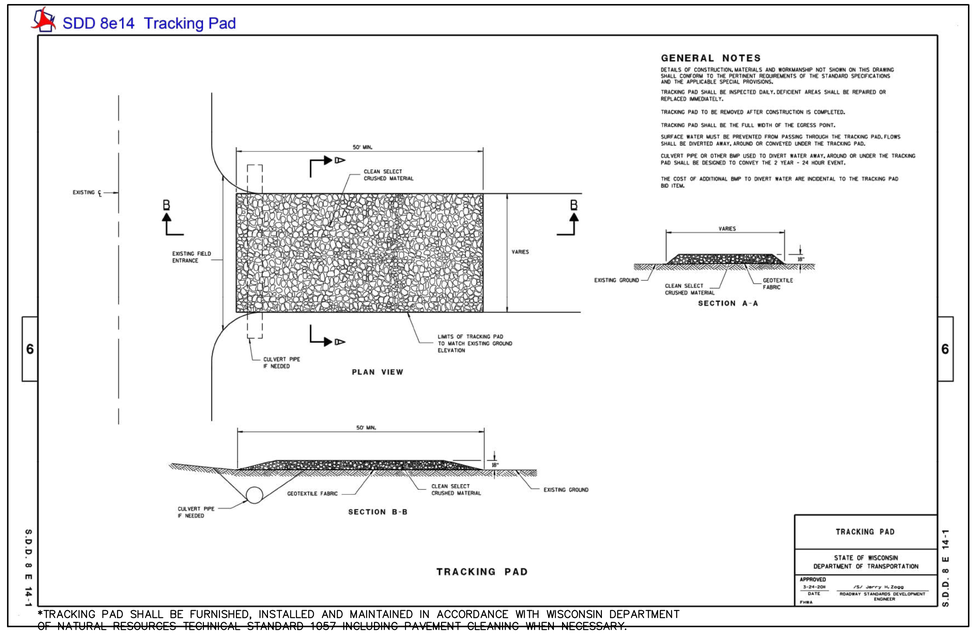
ISSUE FOR REVIEW: 4-12-2025

Friday, April 11, 2025 8:06:16 AM



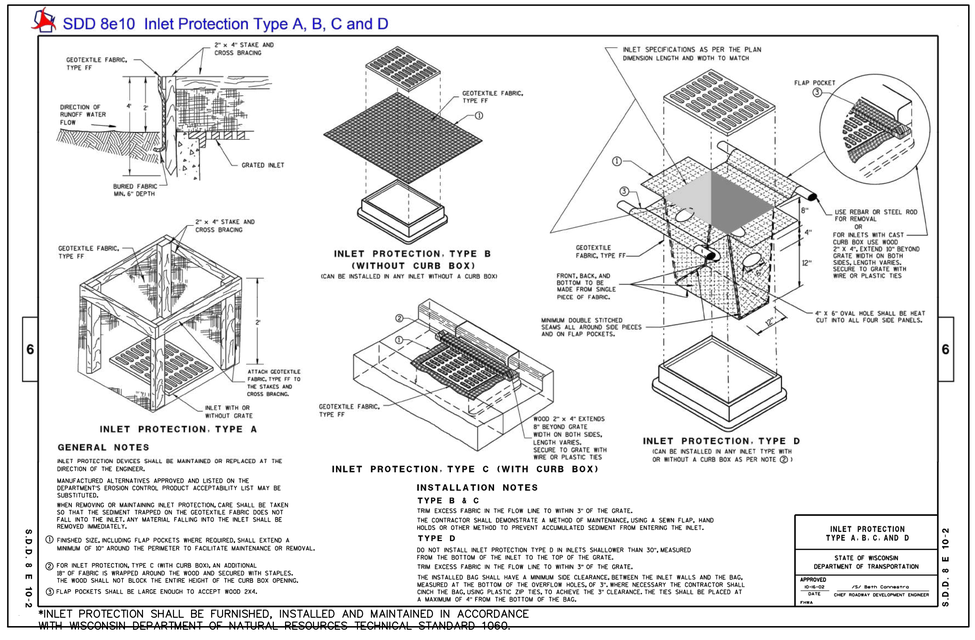
*SILT FENCE SHALL BE FURNISHED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARD 1056.

1 SILT FENCE DETAIL N.T.S.



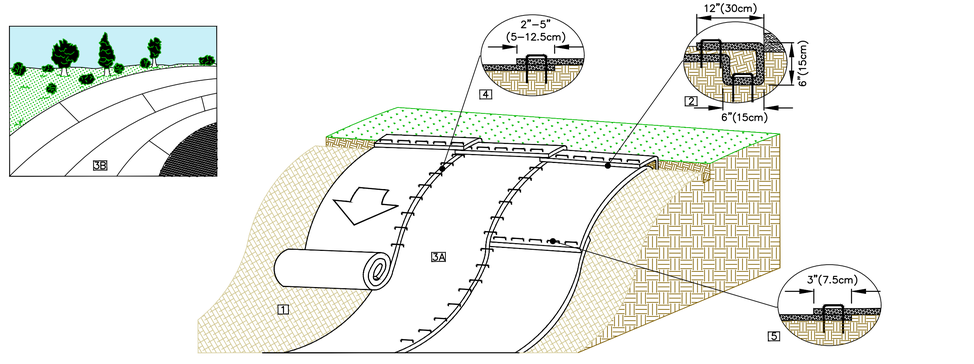
*TRACKING PAD SHALL BE FURNISHED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARD 1057 INCLUDING PAVEMENT CLEANING WHEN NECESSARY.

2 TRACKING PAD DETAIL N.T.S.

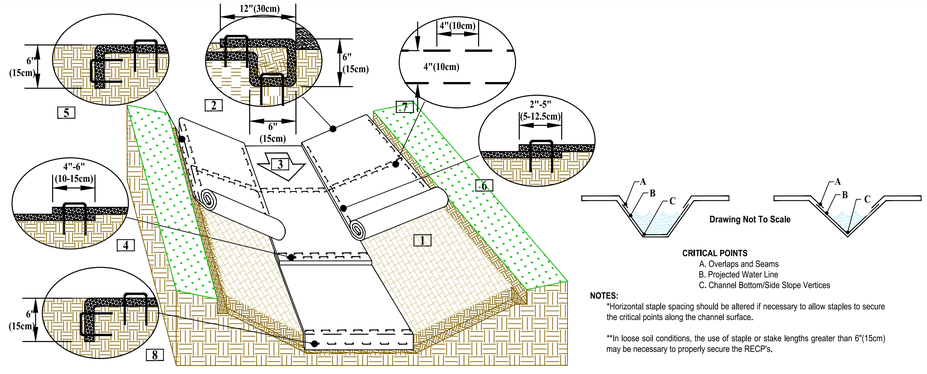


*INLET PROTECTION SHALL BE FURNISHED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARD 1060.

3 INLET PROTECTION DETAIL N.T.S.



4 SLOPE INSTALLATION OF EROSION MAT DETAIL N.T.S.



5 CHANNEL INSTALLATION OF EROSION MAT DETAIL N.T.S.

Nielsen Madsen + Barber
CIVIL ENGINEERS AND LAND SURVEYORS
1458 Horizon Blvd. Suite 200, Racine, WI. 53406
Tele: (262)634-5588 Website: www.nmbsc.net

TSUNAMI EXPRESS CAR WASH
TYPICAL SECTIONS & CONSTRUCTION DETAILS
FOR
TSUNAMI CAR WASH INTERMEDIATE HOLDCO, LLC
VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN

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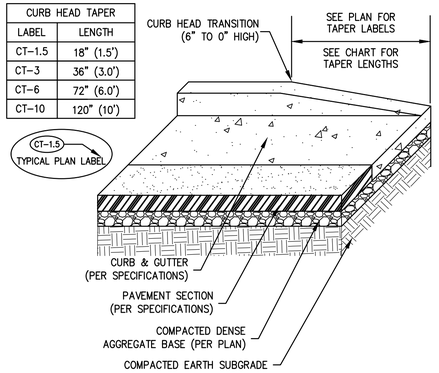
INSTALLATION NOTES FOR CURB AND GUTTER DETAILS

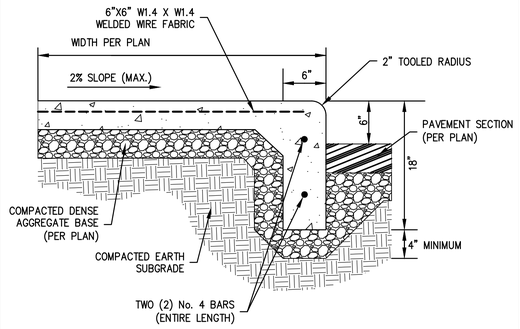
1. CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED DENSE AGGREGATE BASE COURSE EXTENDING A MINIMUM OF 12 INCHES BEHIND THE BACK OF CURB.
2. CURB PAN SHALL BE A MINIMUM OF SIX INCHES (6") THICK, EXPECT AT DRIVEWAY LOCATIONS WHERE IT SHALL BE A MINIMUM OF EIGHT INCHES (8") THICK.
3. INSTALL TWO (2) NO. 4, 18–INCH LONG EPOXY COATED TIE BARS ANCHORED WITH AN EPOXY, EVENLY SPACED, DRIVEN NINE INCHES (9") INTO TO EXISTING OR PREVIOUSLY INSTALLED CURB AND GUTTER.
4. WHEN PLACED ADJACENT TO NEW CONCRETE, INSTALL NO. 4 18–INCH LONG EPOXY COATED TIE BARS, 36" ON CENTER PLACED A MINIMUM OF THREE AND ONE HALF INCHES ($3\frac{1}{2}$") BELOW THE TOP OF THE CURB PAN.
5. LATERAL CONTRACTION JOINTS TO BE PLACED AT AN INTERVAL OF 10 FEET TO A MINIMUM DEPTH OF TWO INCHES (2").
6. EXPANSION JOINTS SHALL BE PLACED TRANSVERSELY AT POINTS OF CURVATURE, ANGLE POINTS, THREE FEET (3') FROM EACH SIDE OF EVERY INLET AND EVERY 300 FEET ALONG TANGENT SECTIONS OR AS DIRECTED BY THE ENGINEER. EXPANSION JOINT FILLER MATERIAL SHALL MEET WISDOT SPECIFICATIONS HAVING THE SAME DIMENSIONS AS THE CURB & GUTTER WITH A 3/4" THICKNESS.
7. APPLY CONCRETE CURING COMPOUND PER WISDOT SPECIFICATIONS.

1 CONCRETE CURB AND GUTTER DETAIL NOTES N.T.S.

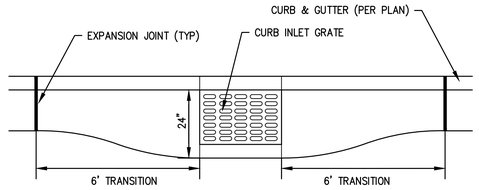
CURB HEAD TAPER	
LABEL	LENGTH
CT–1.5	18" (1.5')
CT–3	36" (3.0')
CT–6	72" (6.0')
CT–10	120" (10')



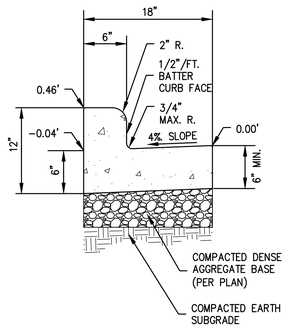
2 CURB HEAD TAPER DETAIL N.T.S.



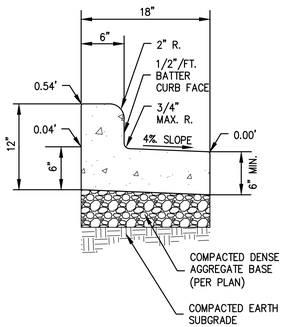
3 INTEGRAL CONCRETE SIDEWALK / BARRIER CURB DETAIL N.T.S.



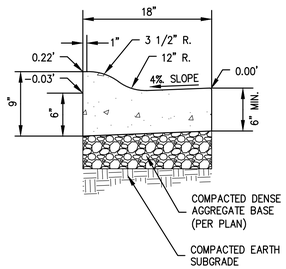
4 CONCRETE CURB AND GUTTER / STORM SEWER INLET TRANSITION DETAIL N.T.S.



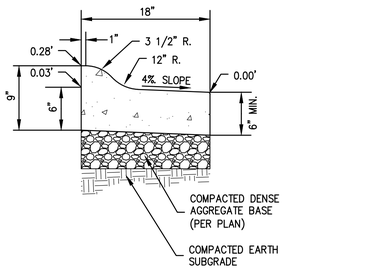
5 18" VERTICAL FACE CONCRETE CURB AND GUTTER DETAIL N.T.S.



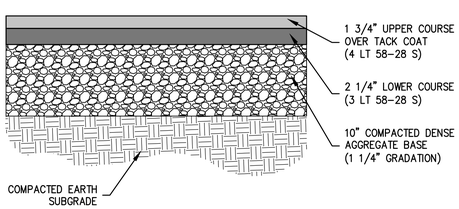
6 18" VERTICAL FACE REVERSE PAN CONCRETE CURB AND GUTTER DETAIL N.T.S.



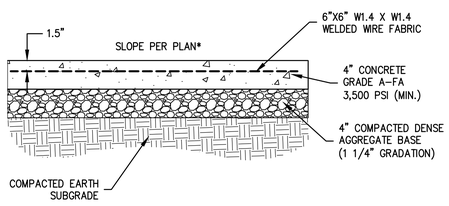
7 3" MOUNTABLE 18" CONCRETE CURB AND GUTTER DETAIL N.T.S.



8 3" MOUNTABLE 18" REVERSE PAN CONCRETE CURB AND GUTTER DETAIL N.T.S.

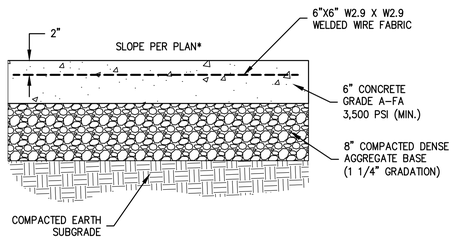


9 MEDIUM-DUTY ASPHALT PAVEMENT (4") (TYPICAL SECTION) N.T.S.



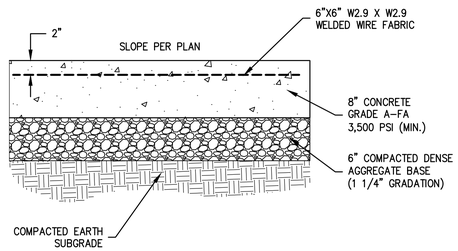
* SIDEWALKS: 1.5% CROSS–SLOPE (TYP.) 2.08% CROSS–SLOPE (MAX.)
PATIOS, PLAZAS, AND LANDINGS: 2.08% SLOPE IN ANY DIRECTION (MAX.)
ALL OTHER PAVEMENTS: SLOPE PER PLAN

10 LIGHT-DUTY CONCRETE PAVEMENT (4") (TYPICAL SECTION) N.T.S.



* SIDEWALKS: 1.5% CROSS–SLOPE (TYP.) 2.08% CROSS–SLOPE (MAX.)
PATIOS, PLAZAS, AND LANDINGS: 2.08% SLOPE IN ANY DIRECTION (MAX.)
ALL OTHER PAVEMENTS: SLOPE PER PLAN

11 MEDIUM-DUTY CONCRETE PAVEMENT (6") (TYPICAL SECTION) N.T.S.



12 HEAVY-DUTY CONCRETE PAVEMENT (8") (TYPICAL SECTION) N.T.S.

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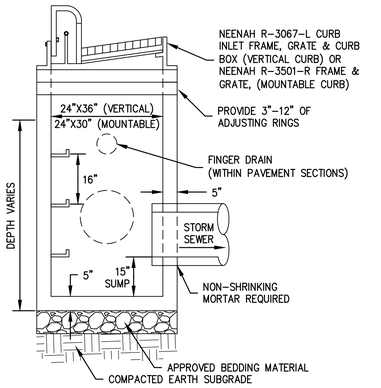
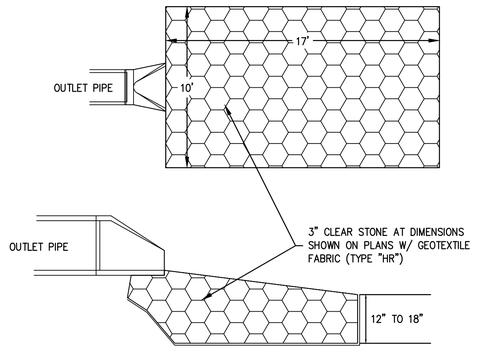
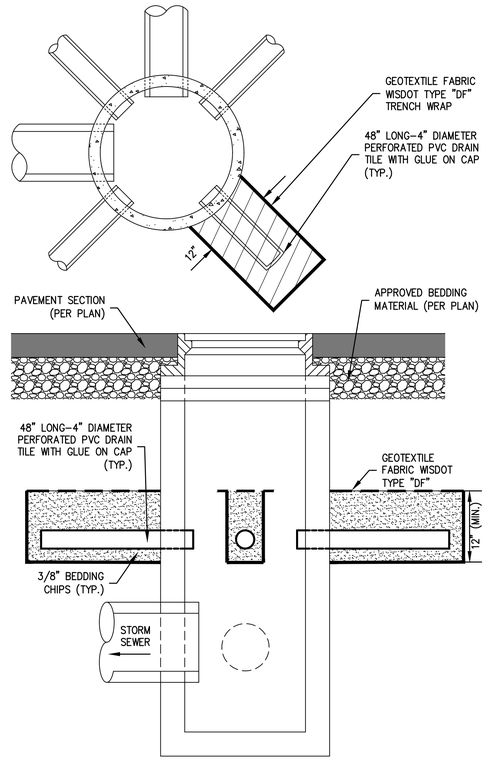


1 **STANDARD STORM SEWER INLET/CATCH BASIN DETAIL** N.T.S.



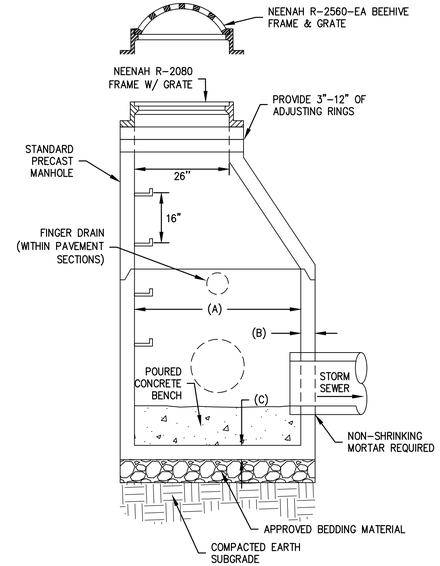
NOTES:
FINAL SIZE AND SHAPE OF LEVELING TRENCH TO MATCH DIMENSIONS SHOWN ON THE GRADING PLAN SHEET

2 **LEVELING TRENCH DETAIL** N.T.S.



NOTE:
1. FINGER DRAINS SHALL BE INSTALLED IN ALL DRAINAGE STRUCTURES (WITHIN OR ADJACENT TO) PAVED SURFACES.
2. FINGER DRAIN OPENINGS IN STRUCTURE SHALL BE PRECAST.
3. VERTICAL LOCATION OF FINGER DRAIN MAY VARY DEPENDING ON PIPE CONFIGURATION.
4. FINGER DRAIN MUST BE ABOVE THE TOP OF ALL STORM SEWER INVERTS.
5. FINGER DRAINS SHALL HAVE ??? PERFORATIONS.

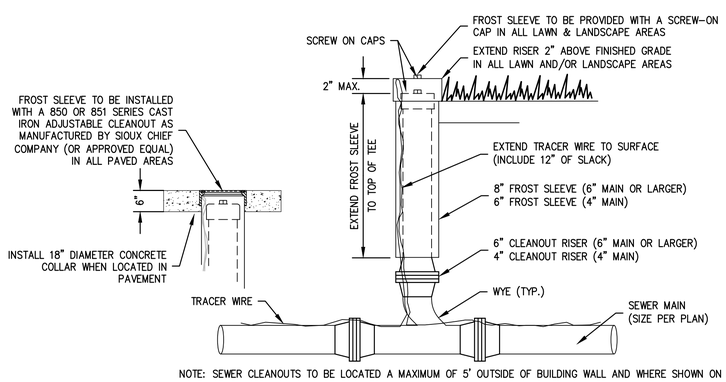
4 **STORM SEWER STRUCTURE FINGER DRAIN DETAIL** N.T.S.



STRUCTURE DIAMETER (A)*	MINIMUM WALL THICKNESS (B)**	MINIMUM BASE AND TOP THICKNESS (C)**
4'	5"	6"
5'	6"	8"
6'	7"	8"
7'	8"	8"
8'≥	9"	8"

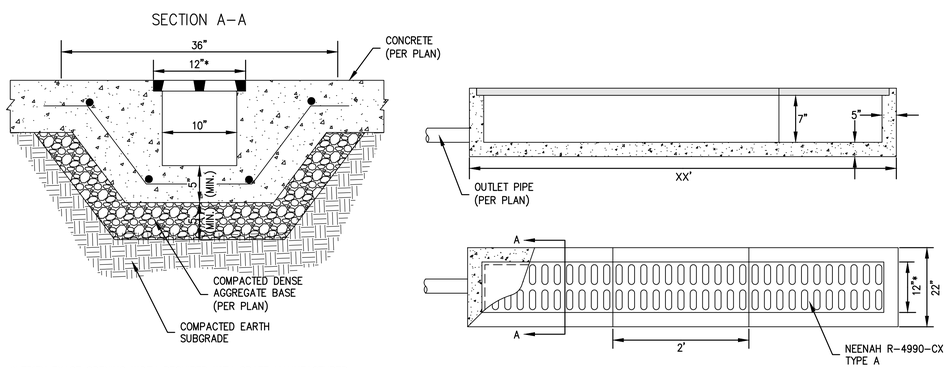
*STRUCTURE DIAMETER SHALL BE STANDARD 48" UNLESS OTHERWISE NOTED ON PLAN
**MINIMUM THICKNESS SHALL NOT BE LESS THAN THAT REQUIRED TO MEET AASHTO H-20 LOADINGS

5 **STANDARD STORM SEWER MANHOLE DETAIL** N.T.S.



NOTE: SEWER CLEANOUTS TO BE LOCATED A MAXIMUM OF 5' OUTSIDE OF BUILDING WALL AND WHERE SHOWN ON PLAN

3 **SEWER CLEANOUT (CO) RISER DETAIL** N.T.S.



*VERIFY EXACT OPENING WIDTH REQUIRED WITH GRATE MANUFACTURER

6 **CAST IN PLACE TRENCH DRAIN DETAIL** N.T.S.

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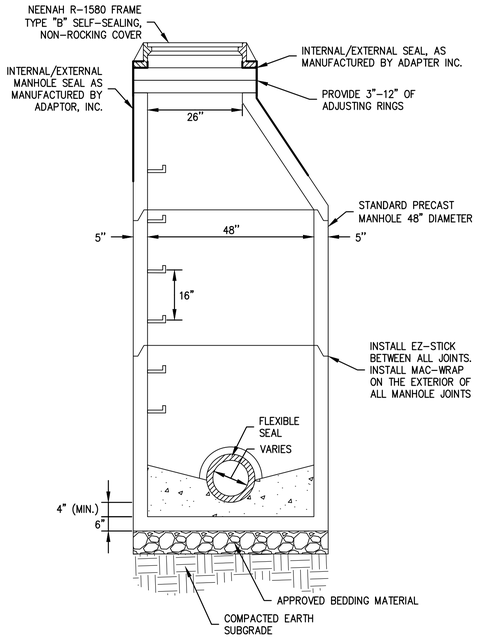
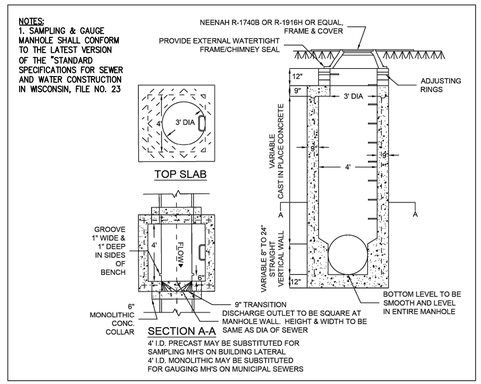
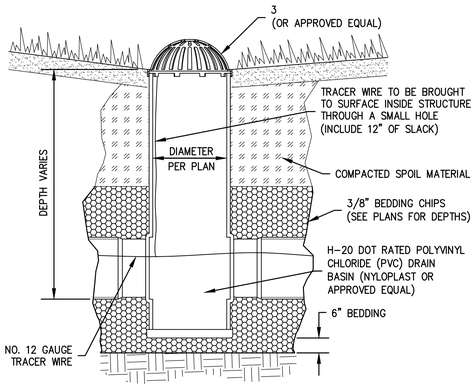


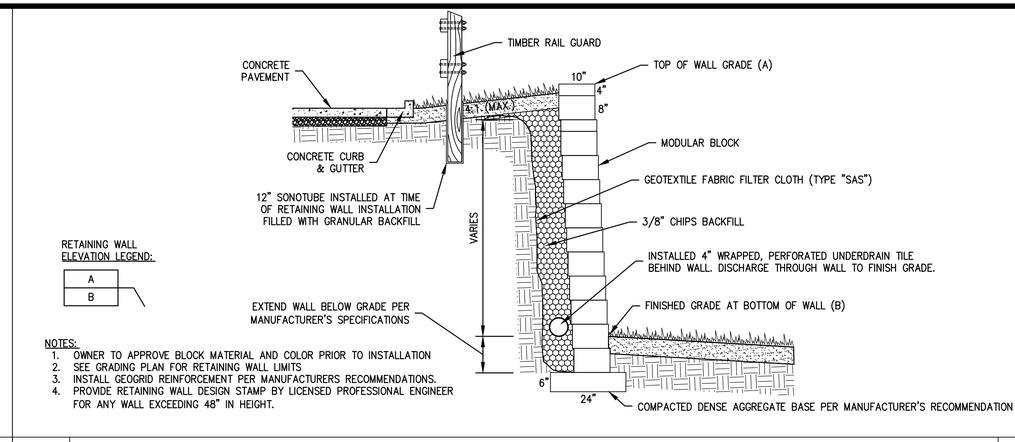
1 STANDARD SANITARY SEWER MANHOLE DETAIL (PRIVATE) N.T.S.



2 SANITARY SEWER SAMPLING & GAUGE MAHOLE DETAIL N.T.S.

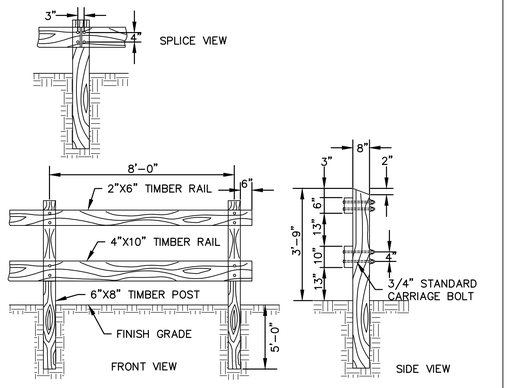


3 NYLOPLAST DRAIN BASIN W/ DOME GRATE DETAIL N.T.S.

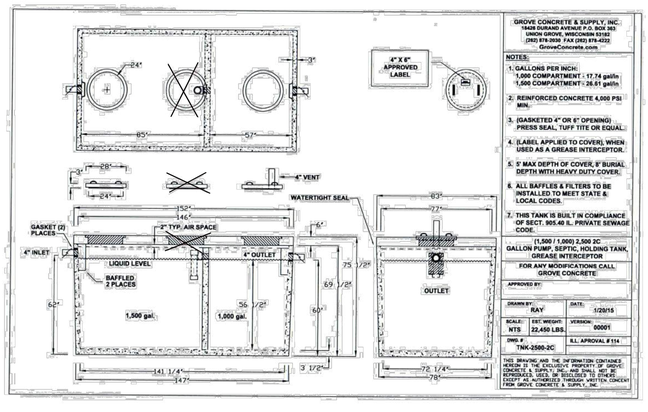


NOTES:
1. OWNER TO APPROVE BLOCK MATERIAL AND COLOR PRIOR TO INSTALLATION
2. SEE GRADING PLAN FOR RETAINING WALL LIMITS
3. INSTALL GEOGRID REINFORCEMENT PER MANUFACTURERS RECOMMENDATIONS.
4. PROVIDE RETAINING WALL DESIGN STAMP BY LICENSED PROFESSIONAL ENGINEER FOR ANY WALL EXCEEDING 48" IN HEIGHT.

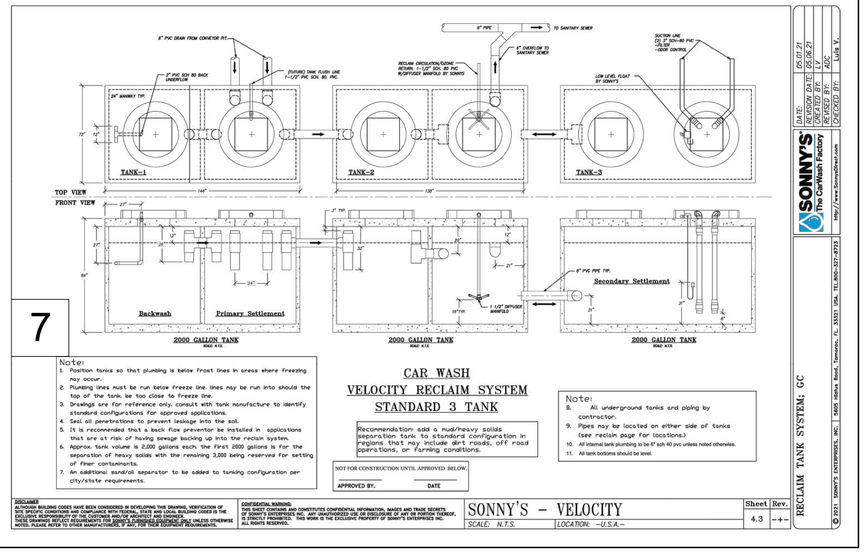
4 DECORATIVE BLOCK RETAINING WALL WITH GUARDRAIL DETAIL N.T.S.



5 TIMBER RAIL GUARD DETAIL N.T.S.



6 GREASE INTERCEPTOR VAULT DETAIL N.T.S.



7

DISCLAIMER
ALTHOUGH BUILDING CODES HAVE BEEN CONSIDERED IN DEVELOPING THIS DRAWING, VERIFICATION OF VARIOUS BUILDING CONDITIONS AND COMPLIANCE WITH FEDERAL, STATE AND LOCAL BUILDING CODES IS THE EXCLUSIVE RESPONSIBILITY OF THE CUSTOMER AND/OR ARCHITECT AND ENGINEER.
NOTED DRAWINGS REFLECT REQUIREMENTS FOR SONNY'S ENTERPRISES, INC. EQUIPMENT ONLY UNLESS OTHERWISE NOTED. PLEASE REFER TO OTHER MANUFACTURER'S, IF ANY, FOR THEIR EQUIPMENT REQUIREMENTS.
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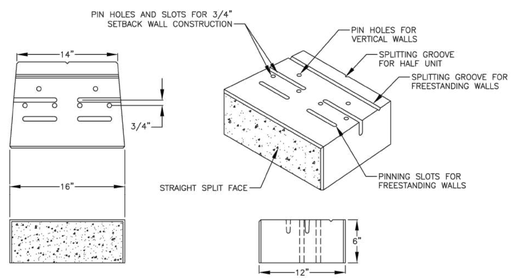


VERSA-LOK UNIT
UNIT DIMENSIONS
SCALE: NONE

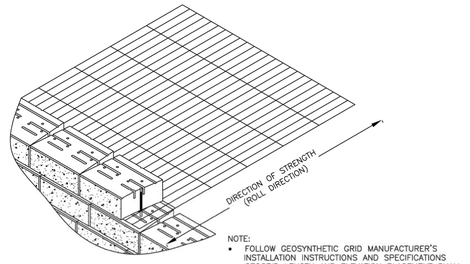
1

THESE PRELIMINARY DETAILS ARE INTENDED AS AN AID IN DESIGNING ATTRACTIVE, DURABLE RETAINING WALLS WITH VERSA-LOK UNITS. FINAL DETERMINATION OF THE SUITABILITY OF ANY INFORMATION OR MATERIAL FOR THE USE CONTEMPLATED, AND ITS MANNER OF USE, IS THE SOLE RESPONSIBILITY OF THE USER. A FINAL PROJECT SPECIFIC DESIGN SHOULD BE PREPARED BY A QUALIFIED, LICENSED, PROFESSIONAL ENGINEER.

VERSA-LOK® Retaining Wall Systems (800)770-4520 fax(651)770-4599 6348 Hwy36 Stwt, Oakdale,MN 55128 Solid Solutions.™

VERSA-LOK STANDARD DETAILS | STANDARD UNIT

SCALE: 1 1/2"=1' | DRAWN BY: PPS | CHECKED BY: | DATE: 10/2007 | DWG. NO.: detail standard unit



NOTE:
- FOLLOW GEOSYNTHETIC GRID MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SPECIFICATIONS
- GEOGRID LENGTH AND ELEVATION PLACEMENT SHALL BE DETERMINED BY WALL DESIGN ENGINEER

GEOSYNTHETIC INSTALLATION DETAIL
SCALE: NONE

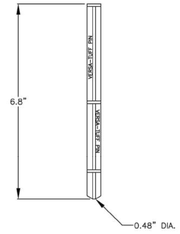
2

THESE PRELIMINARY DETAILS ARE INTENDED AS AN AID IN DESIGNING ATTRACTIVE, DURABLE RETAINING WALLS WITH VERSA-LOK UNITS. FINAL DETERMINATION OF THE SUITABILITY OF ANY INFORMATION OR MATERIAL FOR THE USE CONTEMPLATED, AND ITS MANNER OF USE, IS THE SOLE RESPONSIBILITY OF THE USER. A FINAL PROJECT SPECIFIC DESIGN SHOULD BE PREPARED BY A QUALIFIED, LICENSED, PROFESSIONAL ENGINEER.

VERSA-LOK® Retaining Wall Systems (800)770-4520 fax(651)770-4599 6348 Hwy36 Stwt, Oakdale,MN 55128 Solid Solutions.™

VERSA-LOK STANDARD DETAILS | GEOSYNTHETIC INSTALLATION

SCALE: 3/4"=1' | DRAWN BY: PPS | CHECKED BY: | DATE: 10/2007 | DWG. NO.: detail geogrid installation



VERSA-TUFF PIN
PIN DIMENSIONS
SCALE: NONE

3

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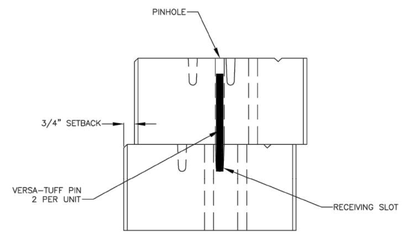
VERSA-LOK STANDARD DETAILS | PIN

SCALE: 6"=1' | DRAWN BY: PPS | CHECKED BY: | DATE: 10/2007 | DWG. NO.: detail pin



PINNING DETAIL
CROSS SECTION
SCALE: NONE

4

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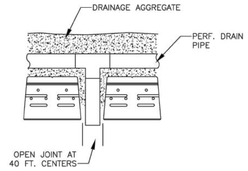
VERSA-LOK STANDARD DETAILS | PINNING

SCALE: 3"=1' | DRAWN BY: PPS | CHECKED BY: | DATE: 10/2007 | DWG. NO.: detail pinning



DRAIN DETAIL
SCALE: NONE

5

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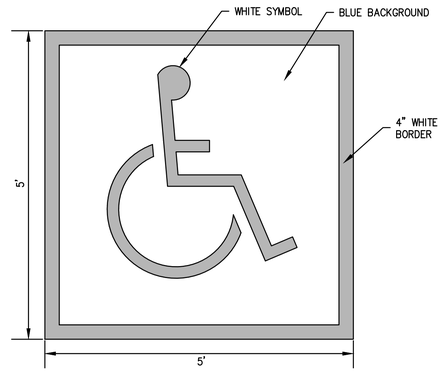
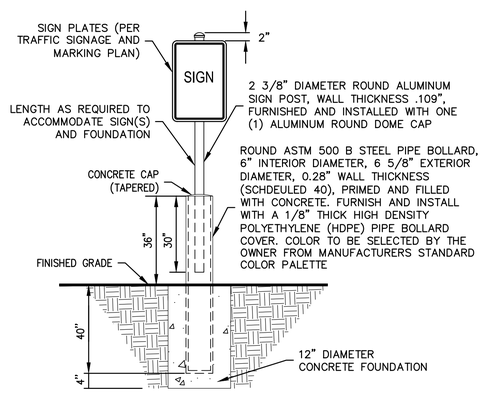
VERSA-LOK STANDARD DETAILS | DRAIN DETAIL

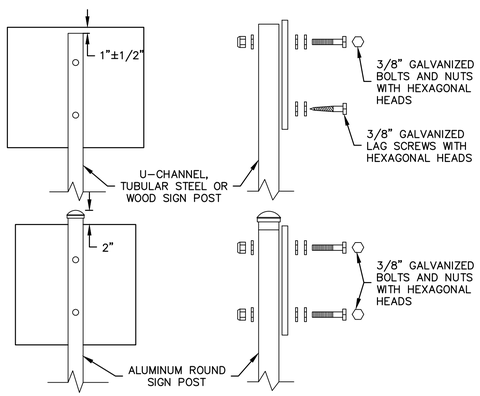
SCALE: 3/4"=1' | DRAWN BY: PPS | CHECKED BY: | DATE: 10/2007 | DWG. NO.: detail drain detail



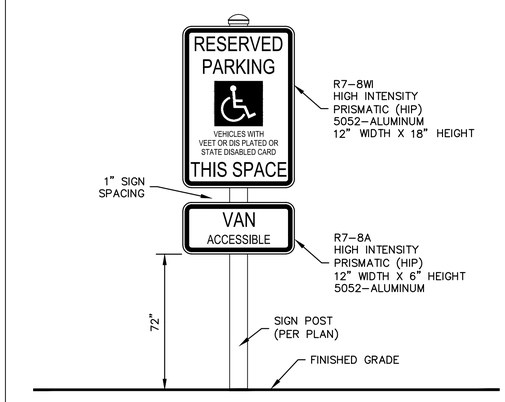
6 PAINTED INTERNATIONAL SYMBOL FOR ACCESSIBILITY DETAIL N.T.S.



7 ALUMINUM ROUND SIGN POST W/ 6" STEEL PIPE BOLLARD DETAIL N.T.S.



8 SIGN MOUNTING HARDWARE DETAIL N.T.S.



9 ADA "RESERVED PARKING VAN ACCESSIBLE" SIGN DETAIL N.T.S.

Nielsen Madsen + Barber
CIVIL ENGINEERS AND LAND SURVEYORS
1458 Horizon Blvd. Suite 200, Racine, WI. 53406
Tele: (262)634-5588 Website: www.nmbsc.net

TSUNAMI EXPRESS CAR WASH
TYPICAL SECTIONS & CONSTRUCTION DETAILS
FOR
TSUNAMI CAR WASH INTERMEDIATE HOLDCO, LLC
VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN

NO.	REVISION	BY	DATE

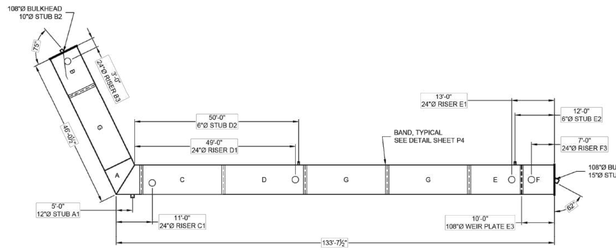
PROJ. MGR: JJC
DRAFTED: JWR
DATE: 4-10-2025
CHECKED: ALJ
DATE: 4-11-2025

2024.0060.01

SHEET C-14

ISSUE FOR REVIEW: 4-12-2025

Friday, April 11, 2025 8:06:45 AM



STUB INFORMATION		
PIECE	STUB INVERT	SYSTEM INVERT
12"Ø STUB A1	809.00	804.33
10"Ø STUB B2	809.00	804.33
6"Ø STUB D2	809.00	804.33
6"Ø STUB E2	810.50	804.33
15"Ø STUB F2	808.83	804.33

RISER INFORMATION		
PIECE	RIM ELEV.	SYSTEM INVERT
24"Ø RISER B3	815.43	804.33
24"Ø RISER C1	814.51	804.33
24"Ø RISER D1	814.83	804.33
24"Ø RISER E1	815.84	804.33
24"Ø RISER F3	815.84	804.33

THE UNDERSIGNED HEREBY APPROVES THE ATTACHED (5) PAGES INCLUDING THE FOLLOWING:

- **PIPE STORAGE = 11,426 CF**
- **MAINLINE PIPE GAGE = 10**
- **WALL TYPE = SOLID**
- **DIAMETER = 108"**
- **FINISH = ALT2**
- **CORRUGATION = 5x1**

CUSTOMER _____ DATE _____

NORTH ARROW PROVIDED FOR REFERENCE ONLY. REFER TO ENGINEERED SITE PLANS FOR EXACT LOCATION AND ORIENTATION

ASSEMBLY
SCALE: 1" = 20'
LOADING: H20
PIPE INV. = 804.33'±

NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE.
- ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD (EOR) PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅔" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE AS REQUIRED, BY CONTRACTOR.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL ACCESS CASTINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE NOT SUPPLIED BY CONTECH
- BULKHEADS SHALL BE CONSTRUCTED USING 12 GAGE OR HEAVIER MATERIAL, WITH BOTH THE WATER AND SOIL SIDE FINAL COATINGS MATCHING THE SPECIFIED CMP COATING. BULKHEAD PLATES MUST BE FULLY WELDED TO THE CONNECTING PIPE. THE DESIGN OF BULKHEADS SHALL ADHERE TO CHAPTER 8 OF THE NCSPA CSP DESIGN MANUAL, MEETING THE HEIGHT OF COVER DESIGN REQUIREMENTS WITH APPROPRIATE REINFORCEMENTS OR A MINIMUM REQUIRED PLATE THICKNESS. ADDITIONALLY, REINFORCING MEMBERS SHALL BE POST-COATED WITH ZINC RICH PAINT IN ACCORDANCE WITH AASHTO M36 FOR GALVANIZED AND ALUMINUM CMP SYSTEMS, OR AASHTO M245 FOR POLYMER CMP SYSTEMS.

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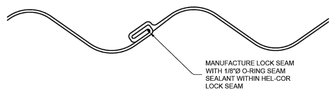
A QUIKRETE COMPANY
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

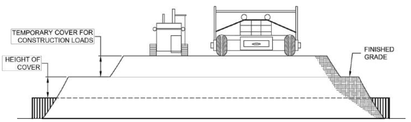
CONTECH CMP DETENTION SYSTEMS
CONTECH PROPOSAL DRAWING

108"Ø UNDERGROUND DETENTION SYSTEM - 830881-010
TSUNAMI EXPRESS CAR WASH - MUKWONAGO
MUKWONAGO, WI
SITE DESIGNATION: UNDERGROUND DETENTION

PROJECT No.:	SEQ. No.:	DATE:
830881	010	4/9/2025
DESIGNED: CEU	DRAWN: CEU	
CHECKED: MSB	APPROVED: CEU	
SHEET NO.: P1	OF 5	



LOCK SEAM DETAIL
NOT TO SCALE



CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM
NOT TO SCALE

SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL

SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

MATERIAL

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M274 OR ASTM A929.

PIPE

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSPA)

INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

ANTI-FLOTATION PROVISIONS DUE TO HIGH GROUNDWATER OR OTHER FLOTATION CONCERNS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.

MATERIAL SPECIFICATION
NOT TO SCALE

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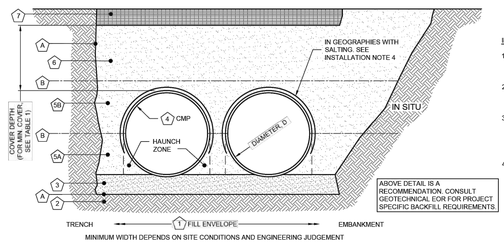
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH PROPOSAL DRAWING

108"Ø UNDERGROUND DETENTION SYSTEM - 830881-010
TSUNAMI EXPRESS CAR WASH - MUKWONAGO
MUKWONAGO, WI
SITE DESIGNATION: UNDERGROUND DETENTION

PROJECT No.:	SEQ. No.:	DATE:
830881	010	4/9/2025
DESIGNED: CEU	DRAWN: CEU	
CHECKED: MSB	APPROVED: CEU	
SHEET NO.: P2	OF 5	



MINIMUM WIDTH DEPENDS ON SITE CONDITIONS AND ENGINEERING JUDGEMENT

ABOVE DETAIL IS A RECOMMENDATION. CONSULT GEOTECHNICAL EOR FOR PROJECT SPECIFIC BACKFILL REQUIREMENTS.

TABLE 1:

DIAMETER, D	MIN. COVER	CORR. PROFILE
6"-10"	12"	1 1/2" x 1/4"
12"-48"	12"	2 2/3" x 1/2"
>48"-96"	12"	3" x 1", 5" x 1"
>96"	D/8	3" x 1", 5" x 1"

- STRUCTURAL BACKFILL MUST EXTEND TO LIMITS OF THE TABLE.
- TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT
- ULTRAFLO ALSO AVAILABLE FOR SIZES 18" - 120" WITH 3/4"x 3/4"x 7 1/2" CORRUGATION

INSTALLATION NOTES

1. WHEN PLACING THE FIRST LIFTS OF BACKFILL IT IS IMPORTANT TO MAKE SURE THAT THE BACKFILL IS PROPERLY COMPACTED UNDER AND AROUND THE PIPE HAUNCHES.
2. OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS, AS APPROVED BY SITE ENGINEER.
3. BACKFILL USING CONTROLLED LOW-STRENGTH MATERIAL (CLSM, "FLASH FILL" OR "FLOWABLE FILL") MAY BE USED WHEN THE SPACING BETWEEN THE PIPES WILL NOT ALLOW FOR PLACEMENT AND ADEQUATE COMPACTION OF THE BACKFILL. CONTACT CONTECH FOR FURTHER EVALUATION.
4. IF SALTING AGENTS FOR SNOW AND ICE REMOVAL ARE USED ON OR NEAR THE PROJECT, A GEOMEMBRANE BARRIER IS RECOMMENDED OVER THE UPPER HALF OF THE PIPE. THE GEOMEMBRANE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM A CHANGE IN THE SURROUNDING ENVIRONMENT OVER A PERIOD OF TIME. PLEASE REFER TO THE CORRUGATED METAL PIPE DETENTION DESIGN GUIDE FOR ADDITIONAL INFORMATION.

TABLE 2:

CMP DETENTION AND CMP DRAINAGE STANDARD BACKFILL SPECIFICATIONS

	MATERIAL LOCATION	MATERIAL SPECIFICATION	DESCRIPTION	
1	FILL ENVELOPE WIDTH	PER ENGINEER OF RECORD	MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE. THE SUGGESTED MINIMUM TRENCH WIDTH, OR EOR RECOMMENDATION: PIPE ≤ 12": D + 16" PIPE > 12": 1.5D + 12"	MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE: PIPE < 24": 3.0D PIPE 24" - 144": D + 4'0" PIPE > 144": D + 10'0"
2	FOUNDATION	**AASHTO 26.5.2** OR PER ENGINEER OF RECORD	PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND FOUNDATION BROUGHT BACK TO GRADE WITH A FILL MATERIAL APPROVED BY THE ENGINEER OF RECORD.	
3	BEDDING	**AASHTO M 43: 3, 357, 4, 467, 5, 56, 57** (APPROVED REGIONAL EQUIVALENTS INCLUDE CA-7)	ENGINEER OF RECORD TO DETERMINE IF BEDDING IS REQUIRED. PIPE MAY BE PLACED ON THE TRENCH BOTTOM OF A RELATIVELY LOOSE, NATIVE SUITABLE WELL GRADED GRANULAR MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, 2" MIN DEPTH. THE BEDDING MATERIAL MAY BE SUITABLE FOUNDATION SOILS CONFORMING TO AASHTO SOIL CLASSIFICATIONS A1, A2, OR A3 WITH MAXIMUM PARTICLE SIZE OF 3" PER AASHTO 26.3.8.1	
4		CORRUGATED METAL PIPE		
5A	CRITICAL BACKFILL	**AASHTO M 145: A-1, A-2, A-3 ***	HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION WITHOUT SOFT SPOTS. BACKFILL SHALL BE PLACED IN 8" +/- LOOSE LIFTS AND COMPACTED TO 90% STANDARD PROCTOR PER AASHTO T 99. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A THREE LIFT (24") DIFFERENTIAL BETWEEN ANY OF THE PIPES AT ANY TIME DURING THE BACKFILL PROCESS. THE BACKFILL SHOULD BE ADVANCED ALONG THE LENGTH OF THE SYSTEM TO AVOID DIFFERENTIAL LOADING. WELL GRADED GRANULAR MATERIAL WHICH MAY CONTAIN SMALL AMOUNTS OF SILT OR CLAY AND MAXIMUM PARTICLE SIZE OF 3" (PER AASHTO 26.3.8.1 AND 12.4-1.3).	
5B	BACKFILL	**AASHTO M 145: A-1, A-2, A-3**		
6	COVER MATERIAL	UP TO MIN. COVER - SEE 5A AND 5B ABOVE ABOVE MIN. COVER - PER ENGINEER OF RECORD	COVER MATERIAL MAY INCLUDE NON-BITUMINOUS, GRANULAR ROAD BASE MATERIAL WITHIN MIN COVER LIMITS	
7	RIGID OR FLEXIBLE PAVEMENT (IF APPLICABLE)	PER ENGINEER OF RECORD	FLEXIBLE PAVEMENT SHOULD NOT BE COUNTED AS PART OF THE FILL HEIGHT OVER THE CMP. FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD.	
A	OPTIONAL SIDE GEOTEXTILE	NONE	GEOTEXTILE LAYER IS RECOMMENDED ON SIDES OF EXCAVATION TO PREVENT SOIL MIGRATION.	
B	OPTIONAL GEOTEXTILE BETWEEN LAYERS	NONE	IF SOIL TYPES DIFFER AT ANY POINT ABOVE PIPE INVERT, A GEOTEXTILE LAYER IS RECOMMENDED TO BE PLACED BETWEEN THE LAYERS TO PREVENT SOIL MIGRATION.	

NOTES:
- FOR MULTIPLE BARREL INSTALLATIONS, THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE THE PIPE DIAMETER /2 BUT NO LESS THAN 12" FOR DIAMETERS <72". FOR 72" AND LARGER DIAMETERS, THE MINIMUM SPACING IS 36". CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING.
- * APPROVED REGIONAL EQUIVALENTS FOR SECTION 5A INCLUDE CA-7, MIDOT 2G, 34G, OR 21AA STONE OR GRAVEL; #8; #57; MIDOT 6A, 2G, 3G, 34G.

MANUFACTURER RECOMMENDED BACKFILL
NOT TO SCALE

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CONTECH CMP DETENTION SYSTEMS
CONTECH PROPOSAL DRAWING

108"Ø UNDERGROUND DETENTION SYSTEM - 830881-010
TSUNAMI EXPRESS CAR WASH - MUKWONAGO
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SITE DESIGNATION: UNDERGROUND DETENTION

PROJECT No.:	SEQ. No.:	DATE:
830881	010	4/9/2025
DESIGNED: CEU	DRAWN: CEU	
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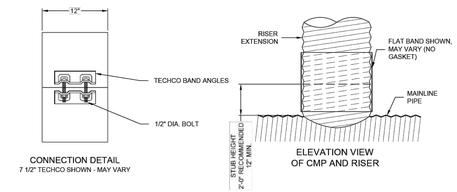
SHEET NO.: P3	OF 5	



CONNECTION DETAIL
7 1/2" TECHCO SHOWN - MAY VARY

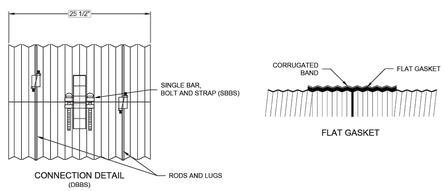
ELEVATION VIEW OF CMP AND RISER

PLAIN END CMP RISER PIPE

GENERAL NOTES:

1. **DELIVERED BAND STYLE AND FASTENER TYPE MAY VARY BY FABRICATION PLANT.**
2. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
3. BAND MATERIAL AND GAGE TO BE SAME AS RISER MATERIAL.
4. IF RISER HAS A HEIGHT OF COVER OF 10' OR MORE, USE A SLIP JOINT.
5. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54" 2-PIECES
6. ALL RISER JOINT COMPONENTS WILL BE FIELD ASSEMBLED.
7. MANHOLE RISERS IN APPLICATIONS WHERE TRAFFIC LOADS ARE IMPOSED REQUIRE SPECIAL DESIGN CONSIDERATIONS.
8. DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

12" RISER BAND DETAIL
NOT TO SCALE



2 2/3"x1/2" RE-ROLLED END HEL-COR PIPE

GENERAL NOTES:

1. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
2. BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
3. BANDS ARE SHAPED TO MATCH THE PIPE-ARCH WHEN APPLICABLE.
4. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54" THRU 96" 2-PIECES
   - 102" THRU 144" 3-PIECES
5. BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
6. ALL CMP IS REROLLED TO HAVE ANNULAR END CORRUGATIONS OF 2 2/3"x1/2"
7. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
8. ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).

10-C BAND DETAIL
NOT TO SCALE

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MARK	DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
A QUIKRETE COMPANY
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH PROPOSAL DRAWING

108"Ø UNDERGROUND DETENTION SYSTEM - 830881-010
TSUNAMI EXPRESS CAR WASH - MUKWONAGO
MUKWONAGO, WI
SITE DESIGNATION: UNDERGROUND DETENTION

PROJECT No.:	SEQ. No.:	DATE:
830881	010	4/9/2025
DESIGNED: CEU	DRAWN: CEU	
CHECKED: MSB	APPROVED: CEU	
SHEET NO.: P4	OF 5	

Nielsen Madsen + Barber
CIVIL ENGINEERS AND LAND SURVEYORS
1458 Horizon Blvd. Suite 200, Racine, WI. 53406
Tele: (262)634-5588 Website: www.nmbsc.net

TSUNAMI EXPRESS CAR WASH
CONTECH WATER QUALITY STRUCTURE DETAILS
FOR
TSUNAMI CAR WASH INTERMEDIATE HOLDCO, LLC
VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN

NO.	REVISION	BY	DATE

PROJ. MGR: JJC
DRAFTED: JWR
DATE: 4-10-2025
CHECKED: ALJ
DATE: 4-11-2025

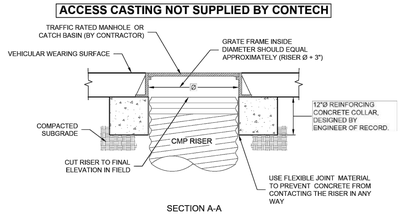
2024.0060.01

SHEET C-15

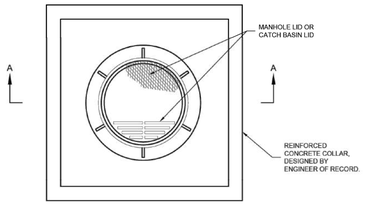
ISSUE FOR REVIEW: 4-12-2025

Friday, April 11, 2025 8:06:50 AM

ACCESS CASTING NOT SUPPLIED BY CONTECH



SECTION A-A



PLAN VIEW

NOTES:

1. REINFORCED CONCRETE COLLAR SHALL BE SIZED AND DESIGNED BY ENGINEER OF RECORD SO THAT THE LOADS ARE TRANSMITTED TO THE SOIL, AND NOT THE RISER.
2. REINFORCED CONCRETE COLLAR SHALL BE SIZED TO PROVIDE AN ADEQUATE BOTTOM AREA BASED ON THE ALLOWABLE BEARING CAPACITY OF THE SOIL.
3. THE FLEXIBLE JOINT MATERIAL (RECYCLED VINYL OR EQUIVALENT) TO BE STIFF ENOUGH SO THAT THE CONCRETE CAN NEVER ENGAGE WITH THE RISER CORRUGATIONS.

MANHOLE CAP DETAIL
NOT TO SCALE

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A QUIKRETE COMPANY
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS

SUBMITTED AS: PROPOSAL DRAWING

108"Ø UNDERGROUND DETENTION SYSTEM - 830881-010
TSUNAMI EXPRESS CAR WASH - MUKWONAGO
MUKWONAGO, WI
SITE DESIGNATION: UNDERGROUND DETENTION

PROJECT No.	SEQ. No.	DATE
830881	010	4/9/2025
DESIGNED: CEU	DRAWN: CEU	
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SHEET NO: P5	OF 5	

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STRUCTURE DETAILS
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NO.	REVISION	BY	DATE

PROJ. MGR: JJC
DRAFTED: JWR
DATE: 4-10-2025
CHECKED: ALJ
DATE: 4-11-2025

2024.0060.01

SHEET
C-16

ISSUE FOR REVIEW: 4-12-2025

\\QUIKRETE.NET\CONTECH\ENGINEERING\PROJECTS\CAD\STANDARDS\830881-010\SR - CU CMP CSTTE\OTHER\PANDS\830881-010-SR-CU CMP CSTTE-DTL.DWG - 4/9/2025 - 11:47 AM

Friday, April 11, 2025 8:06:59 AM

Schedule

Symbol	Label	Image	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage	Polar Plot
◯	M		2	Gardco	GWM-A06-740-T4M-UNV-BZ	Gardco GeoForm wedge medium LED wall sconce, 40 LED's, 4000K CCT, TYPE T4M OPTIC, 70CRI	(2) LDGN66 Reduced Pixelated Array(s) DRIVEN AT 526mA	1	2898	0.9	16.3	Max: 1454cd
▯	NA2		10	Daybrite	DWAE3SL840-4-UNV	PHILIPS 4' VAPORLUME 2-LP3.2.1 4000K BOARDS 54W DRIVER 2.7K RESISTOR	LED, LUMINAIRE OUTPUT = 3699 LMS	1	3698	0.9	31.5	Max: 1252cd
▫ ▫	PA3 H		4	Gardco	ECF-S-32L-700-NW-G2-3-HIS	EcoForm Area LED ECF - Small, 32 LED's, 4000K CCT, TYPE 3-HIS OPTIC, House-side Internal Shielding	(2) LEDGINE SLD LIGHT ARRAY(S) DRIVEN AT 700mA	1	7576	0.9	72.9	Max: 6917cd
▫ ▫	PA4 H		3	Gardco	ECF-S-32L-1A-NW-G2-4-HIS	EcoForm Area LED ECF - Small, 32 LED's, 4000K CCT, TYPE 4-HIS OPTIC, House-side Internal Shielding	(2) LEDGINE SLD LIGHT ARRAY(S) DRIVEN AT 1050mA	1	10983	0.9	105.6	Max: 8445cd
◯	RA		3	Gardco	SFC-CD-DL-4BL-250-NW-G2-UNV-MGY-DL	SLENDERFORM CANOPY, 48 LED's, 4000K CCT, TYPE CD-DL OPTIC, DIFFUSE LENS	(3) LEDGINE 3 IP66 DRIVEN AT 250mA	1	4310	0.9	38.3	Max: 2148cd
◯	SA		11	Gardco	GWM-A06-740-T4M-UNV-BZ	Gardco GeoForm wedge medium LED wall sconce, 40 LED's, 4000K CCT, TYPE T4M OPTIC, 70CRI	(2) LDGN66 Reduced Pixelated Array(s) DRIVEN AT 526mA	1	2898	0.9	16.3	Max: 1454cd

*No substitutions shall be allowed without prior approval from engineer of record and lighting designer.

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking/Drive Area	+	2.3 fc	17.7 fc	0.4 fc	44.3:1	5.8:1

Plan View

All light levels are approximate.
Values will vary due to actual LED/driver combinations, reflectances (currently set at 80/50/20), environmental conditions, and obstructions.
Calculations are based on our interpretation of information provided to us.
This design remains the property of Spectrum Lighting and may not be altered without written permission.

SPECTRUM lighting

Tsunami Carwash
Mukwonago, WI

Designer
BGG
Date
04/18/2025
Scale
Not to Scale
Drawing No.

Summary

Sec 36-1442 — *Street Frontage Landscape Requirements*

Minimum Requirement

A minimum of 60 landscape points shall be provided along a public right-of-way on a prorated basis for every 100 LF of right-of-way frontage

Street Frontage	LF of Frontage	Required Points
East Wolf Run	339.07 LF	203.4
Maple Avenue	382.22 LF	229.3
		432.8

Required Tall Trees: **10.8**

Located within ten (10) feet of the public right-of-way

Only Tall Trees may be used for street frontage landscaping

Sec 36-1443 — *Building Foundation Landscape Requirements*

Minimum Requirement

A minimum of 25 landscape points shall be provided on a prorated basis for every 100 LF of building foundation perimeter.

Proposed Building Founation Perimeter: 377.3 LF

Required Landscape Points: 94 Points

Generally located within ten (10) feet of building foundation

Sec 36-1444 — *Parking Lot Landscape Requirements*

Minimum Requirement

A minimum of 120 landscape points shall be provided on a prorated basis for every 10,000 SF of paved area.

Proposed Paved Area: 21,563 SF

Required Landscape Points: 259 Points

A minimum of 60 percent of all landscape points shall be devoted to tall trees

Required Landscape Points: 155

Required Tall Trees: 4 trees

A minimum of 20 percent of all landscape points shall be devoted to shrubs

Required Landscape Points: 52

Required Shrubs: 17 shrubs

Placement within landscape area:

a minimum of 325 SF of landscaped area shall be located withing ten (10) feet of the perimeter of the paved area for the placement of every 100 landscape points or fraction thereof. A landscaped island consisting of a minimum of 380 SF shall be located at the end of a parking aisle (i.e. two rows of stalls). In addition, an intermediate island consisting of a minimum of 180 SF per row of stalls shall be used to separate a continuous run of 20 parking stalls in a single row.

Required 325 SF interior landscaped area: 2.6 SF

Required total interior landcaped areas: 841 SF

This requirement is part of the overall parking lot landscape requirements

Sec 36-1445 — *Lot Interior Landscape Requirements*

a minimum of ten (10) landscape points shall be provided within the interior of the lot on a pro rated basis for every 1,000 SF of building floor area.

Proposed Building Floor Area: 5321 SF

Required Landscape Points: 53 Points

Located away from other landscape requirements: Street Frontages, Building Foundations, and Parking Lot areas.

Sec 36-1446 — *Landscaping around exterior features*

Exterior perimeter appurtenses, such as HVAC/utility boxes, stand pipes, stormwater discharge pipes and other pipes, shall be screened from sight by landscape plantings of a minimum of five feet in height.

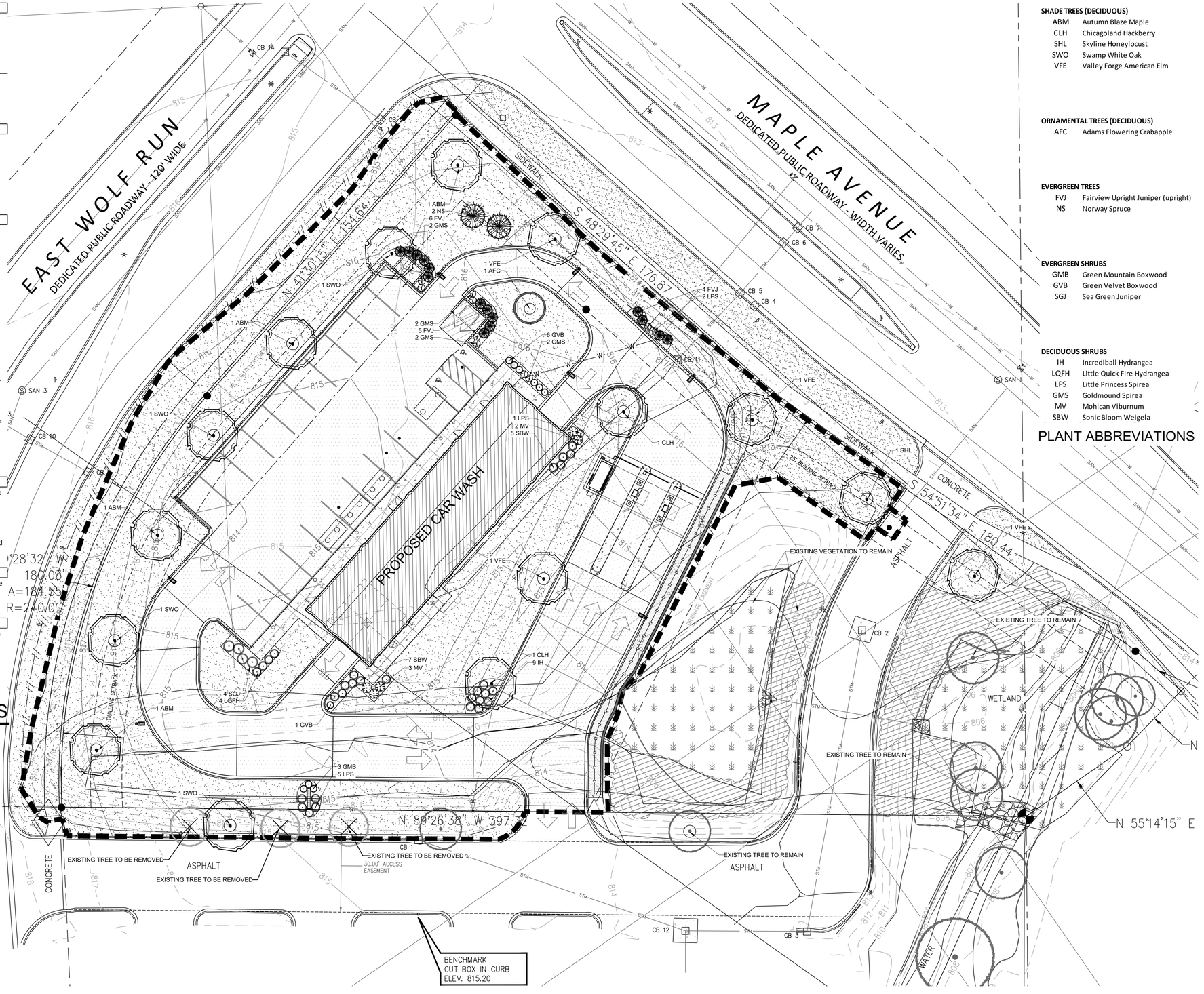
Sec 36-1447 — *Landscaping for outdoor storage areas*

When a permitted land use includes an outdoor storage area, such area shall be screened from view from public streets and public use areas on adjoining properties. Such screening may consist of a berm, non-metallic fencing, a decorative wall, landscaping, or any combination, as determined by the plan commission.

Total Required Landscape Points: 787

Total Landscape Points shown on Landscape Plan: 836

CODE REQUIREMENTS



SHADE TREES (DECIDUOUS)

ABM	Autumn Blaze Maple
CLH	Chicagoland Hackberry
SHL	Skyline Honeylocust
SWO	Swamp White Oak
VFE	Valley Forge American Elm

ORNAMENTAL TREES (DECIDUOUS)

AFC	Adams Flowering Crabapple

EVERGREEN TREES

FVJ	Fairview Upright Juniper (upright)
NS	Norway Spruce

EVERGREEN SHRUBS

GMB	Green Mountain Boxwood
GVB	Green Velvet Boxwood
SGJ	Sea Green Juniper

DECIDUOUS SHRUBS

IH	Incrediball Hydrangea
LQFH	Little Quick Fire Hydrangea
LPS	Little Princess Spirea
GMS	Goldmound Spirea
MV	Mohican Viburnum
SBW	Sonic Bloom Weigela

PLANT ABBREVIATIONS

NORTH

OVERALL LANDSCAPE PLAN

Scale: 1" = 8'0"

0 4 8 16

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

PROJECT

TSUNAMI EXPRESS

East Wolf Run
at Maple Ave.
Mukwanago, WI

ISSUANCE AND REVISIONS

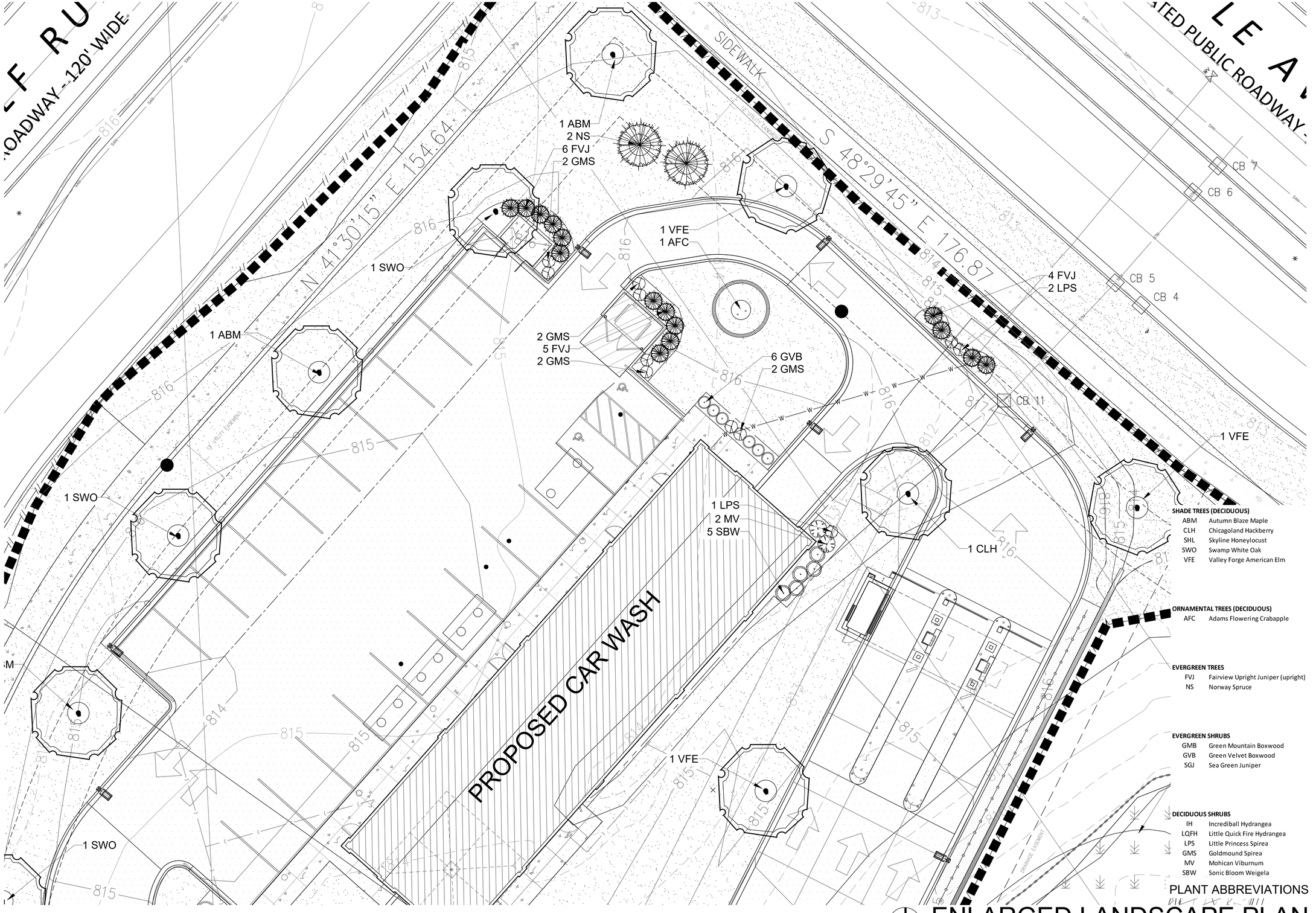
DATE	DESCRIPTION
8.08.24	FIRST ISSUE
4.17.25	REV. SITE PLAN

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

SHEET TITLE

OVERALL LANDSCAPE PLAN

PROJECT MANAGER	WDH
PROJECT NUMBER	24-038
DATE	04.17.25
SHEET NUMBER	L 1.0



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SBW	Sonic Bloom Weigela

PLANT ABBREVIATIONS

NORTH

ENLARGED LANDSCAPE PLAN

Scale: 1" = 10'0"

0 5 10 20

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LANDSCAPE ARCHITECTURE
P.O. Box 1359
Lake Geneva, Wisconsin 53147-1359
ph 262.639.9733
david@wdavidheller.com
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PROJECT

TSUNAMI EXPRESS

East Wolf Run
at Maple Ave.
Mukwanago, WI

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
8.08.24	FIRST ISSUE
4.17.25	REV. SITE PLAN

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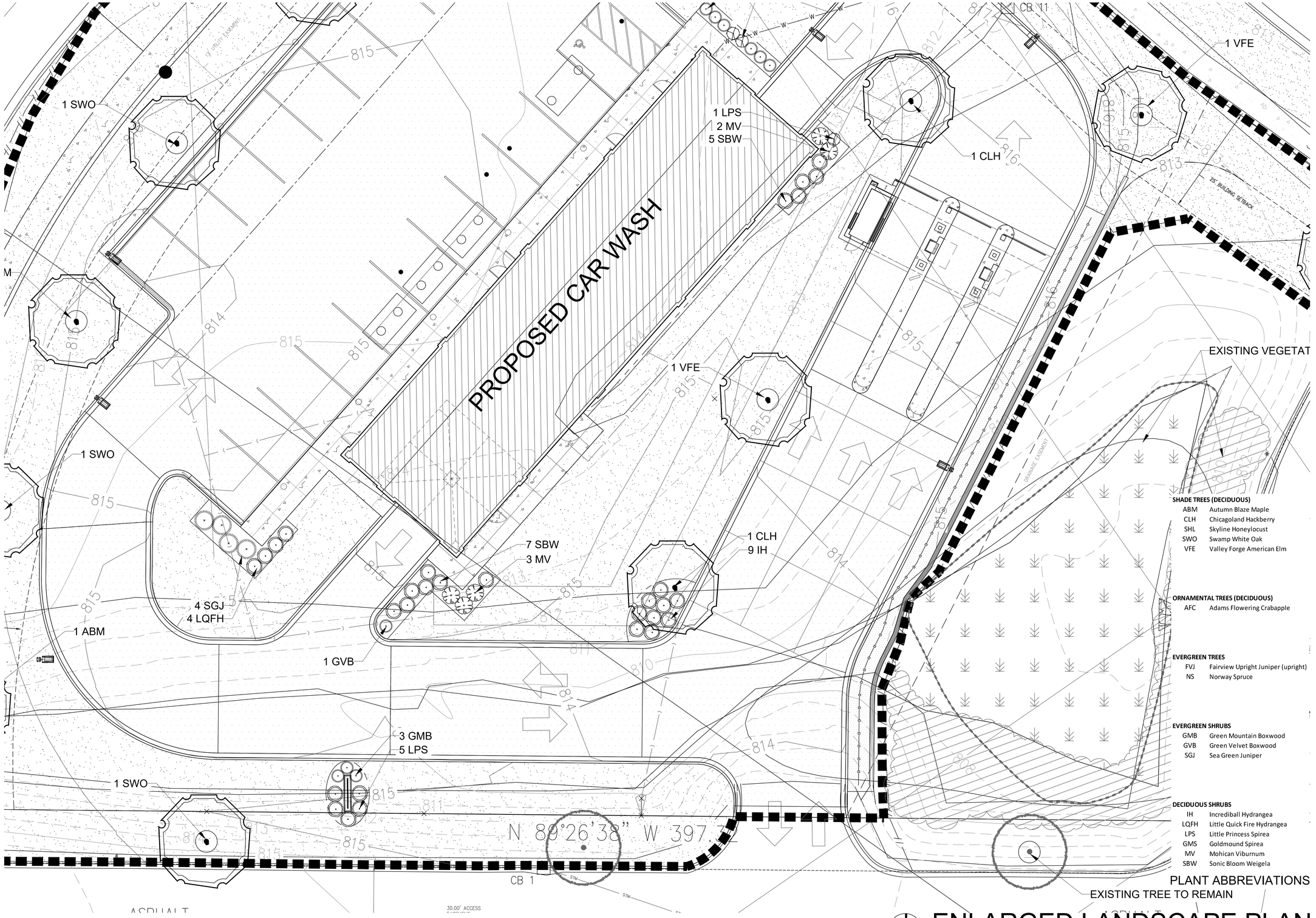
SHEET TITLE

ENLARGED LANDSCAPE PLAN

PROJECT MANAGER	WDH
PROJECT NUMBER	24-038
DATE	04.17.25
SHEET NUMBER	L 1.1



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GMS	Goldmound Spirea
MV	Mohican Viburnum
SBW	Sonic Bloom Weigela

PLANT ABBREVIATIONS

EXISTING TREE TO REMAIN

NORTH

ENLARGED LANDSCAPE PLAN

Scale: 1" = 10'0"

0 5 10 20

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P.O. Box 1359
Lake Geneva, Wisconsin 53147-1359
ph 262.639.9733
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PROJECT

TSUNAMI EXPRESS

East Wolf Run
at Maple Ave.
Mukwanago, WI

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
8.08.24	FIRST ISSUE
4.17.25	REV. SITE PLAN

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

SHEET TITLE

ENLARGED LANDSCAPE PLAN

PROJECT MANAGER	WDH
PROJECT NUMBER	24-038
DATE	04.17.25
SHEET NUMBER	L 1.2

1. Contractor responsible for contacting Diggers Hotline (811 or 800-242-8511) to have site marked prior to excavation or planting.

2. Contractor to verify all plant quantities shown on Plant & Material List and landscape planting symbols and report any discrepancies to Landscape Architect or General Contractor.

3. All plantings shall comply with standards as described in American Standard of Nursery Stock - Z60.1 ANSI (latest version). Landscape Architect reserves the right to inspect, and potentially reject any plants that are inferior, compromised, undersized, diseased, improperly transported, installed incorrectly or damaged. No sub-standard "B Grade" or "Park Grade" plant material shall be accepted. Plant material shall originate from nursery(ies) with a similar climate as the planting site.

4. Any potential plant substitutions must be approved by Landscape Architect or Owner. All plants must be installed as per sizes indicated on Plant & Material Schedule, unless approved by Landscape Architect. Any changes to sizes shown on plan must be submitted in writing to the Landscape Architect prior to installation.

5. Topspoil in Parking Lot Islands (if applicable): All parking lot islands to be backfilled with topsoil to a minimum depth of 12" to insure long-term plant health. Topsoil should be placed within 3" of finish grade by General Contractor / Excavation Contractor during rough grading operations/activity. The landscape contractor shall be responsible for the fine grading of all disturbed areas, planting bed areas, and lawn areas. Crown all parking lot islands a minimum of 4" to provide proper drainage, unless otherwise specified.

6. Tree Planting: Plant all trees slightly higher than finished grade at the root flare. Remove excess soil from the top of the root ball, if needed. Remove and discard non-biodegradable ball wrapping and support wire. Removed biodegradable burlap and wire cage (if present) from the top $\frac{1}{3}$ of the rootball and carefully bend remaining wire down to the bottom of the hole. Once the tree has been placed into the hole and will no longer be moved, score the remaining $\frac{2}{3}$ of the burlap and remove the twine. Provide one slow release fertilizer packets (per 1" caliper) for each tree planted.

7. Tree Planting: Backfill tree planting holes 80% existing soils removed from excavation and 20% Soil Amendments (see Note 11). Avoid air pockets and do not tamp soil down. Discard any gravel, rocks, heavy clay, or concrete pieces. When hole is $\frac{2}{3}$ full, trees shall be watered thoroughly, and water left to soak in before proceeding to fill the remainder of the hole. Water again to full soak in the new planting. Each tree shall receive a 3" deep, 4-5' diameter (see planting details or planting plan) shredded hardwood bark mulch ring / saucer around all trees. Do not build up any mulch onto the trunk of any tree. Trees that are installed incorrectly will be replaced at the time and expense of the Landscape Contractor.

8. Shrub Planting: All shrubs to be planted in groupings as indicated on the Landscape Plan. Install with the planting of shrubs a 50/50 mix of Soil Amendments with blended, pulverized topsoil. Install topsoil into all plant beds as needed to achieve proper grade and displace undesirable soils (see planting detail). Remove all excessive gravel, clay and stones from plant beds prior to planting. When hole(s) are $\frac{2}{3}$ full, shrubs shall be watered thoroughly, and water left to soak in before proceeding. Provide slow-release fertilizer packets at the rater of 1 per 24" height/diameter of shrub at planting.

9. Mulching: All tree rings to receive a 3" deep layer of high quality shredded hardwood bark mulch (not pigment dyed or enviro-mulch). All shrub planting and perennial planting bed areas (groupings) shall receive a 2" layer of double-shredded hardwood bark mulch, and groundcover areas a 2" layer of the same mulch. Do not mulch annual flower beds (if applicable). Do not allow mulch to contact plant stems and tree trunks.

10. Edging: All planting beds shall be edged with a 4" deep spade edge using a flat landscape spade or a mechanical edger. Bedlines are to be cut crisp, smooth as per plan. A clean definition between landscape beds and lawn is required. Pack mulch against lawn edge to hold in place.

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

Per 100 SF of bed area (Soil Amendment composition):
¾ CY Peat Moss or Mushroom Compost
¾ CY blended/pulverized Topsoil
¼ CY composted manure

In roto-tilled beds only, also include in above mixture:
2 lbs Starter Fertilizer

12. Installation preparation for all seeded areas: remove/kill off any existing unwanted vegetation prior to seeding. Prepare the topsoil (if adequate or provide as in item #6 above) and seed bed by removing all surface stones 1" or larger. Apply a starter fertilizer (20-10-5, or approved comparable) and specified seed uniformly at the specified rate, and provide mulch covering suitable to germinate and establish turf. Provide seed and fertilizer specifications to Landscape Architect and Owner prior to installation. Erosion control measures are to be used in swales and on slopes in excess of 1:3 and where applicable (see Civil Engineering Drawings). Methods of installation may vary are the discretion of the Landscape Contractor on his/her responsibility to establish and guarantee a smooth, uniform, quality turf. A minimum of 2" of blended, prepared and non-compacted topsoil is required for all lawn areas. If straw mulch is used as a mulch covering, a tackifier may be necessary to avoid wind dispersal of mulch covering. Marsh hay containing reed canary grass is NOT acceptable as a mulch covering.

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

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

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

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

LANDSCAPE GENERAL NOTES

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CALIPER/HEIGHT SIZE	ROOT	SPECIFICATION / NOTES	PLANT SPACING	LANDSCAPE POINTS EACH	TOTAL
Proposed Landscape Materials									
SHADE TREES (DECIDUOUS)									
ABM	4	Acer xfreemanii 'Autumn Blaze'	Autumn Blaze Maple	2.0"	B&B	Straight central leader, full and even crown. Prune only after planting		30	120
CLH	2	Celtis occidentalis 'Chicagoland'	Chicagoland Hackberry	2.0"	B&B	Straight central leader, full and even crown. Prune only after planting		30	60
SHL	1	Gleditsia triacanthos 'Skyline'	Skyline Honeylocust	2.0"	B&B	Straight central leader, full and even crown. Prune only after planting		30	30
SWO	4	Quercus bicolor	Swamp White Oak	2.0"	B&B	Straight central leader, full and even crown. Prune only after planting		30	120
VFE	4	Ulmus americana 'Valley Forge'	Valley Forge American Elm	2.0"	B&B	Straight central leader, full and even crown. Prune only after planting		30	120
							Total Points Proposed		***450***

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	HEIGHT SIZE	ROOT	SPECIFICATION / NOTES	PLANT SPACING	LANDSCAPE POINTS EACH	TOTAL
ORNAMENTAL TREES (DECIDUOUS)									
AFC	1	Malus x 'Adams'	Adams Flowering Crabapple	6' H	B&B	Well balanced multi-stemmed tree with minimum four canes, and full appearance		10	10
							Total Points Proposed		***10***

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	HEIGHT SIZE	ROOT	SPECIFICATION / NOTES	PLANT SPACING	LANDSCAPE POINTS EACH	TOTAL
EVERGREEN TREES									
FVJ	15	Juniperus scopulorum 'Fairview'	Fairview Upright Juniper (upright)	5' H	B&B	Evenly shaped tree with branching to the ground	60"	12	180
NS	2	Picea abies	Norway Spruce	6' H	B&B	Evenly shaped tree with branching to the ground	17'	40	80
							Total Points Proposed		***260***

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	SHRUB SIZE (HEIGHT)	ROOT/ CONT.	SPECIFICATION / NOTES	PLANT SPACING	LANDSCAPE POINTS EACH	TOTAL
EVERGREEN SHRUBS									
GMB	3	Buxus 'Green Mountain'	Green Mountain Boxwood	24"	B&B	Full rounded well branched shrub	24"	3	9
GVB	7	Buxus 'Green Velvet'	Green Velvet Boxwood	18"	Cont.	Full rounded well branched shrub	24-30"	3	21
SGJ	4	Juniperus chinensis 'Sea Green'	Sea Green Juniper	#5	Cont.	Full rounded well branched shrub	54"	5	20
							Total Points Proposed		***50***

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	SHRUB SIZE (HEIGHT)	ROOT/ CONT.	SPECIFICATION / NOTES	PLANT SPACING	LANDSCAPE POINTS EACH	TOTAL
DECIDUOUS SHRUBS									
IH	9	Hydrangea arborescens 'Abetwo'	Incrediball Hydrangea	#5	Cont.	Full, well rooted plant, evenly shaped	48"	1	9
LQFH	4	Hydrangea paniculata 'SMPHLQF'	Little Quick Fire Hydrangea	#5	Cont.	Full, well rooted plant, evenly shaped	60"	1	4
LPS	8	Spirea japonica 'Little Princess'	Little Princess Spirea	#3	Cont.	Full, well rooted plant, evenly shaped	30"	1	8
GMS	8	Spirea xbumalda 'Goldmound'	Goldmound Spirea	24"	Cont.	Full, well rooted plant, evenly shaped	36"	1	8
MV	5	Viburnum lantana 'Mohican'	Mohican Viburnum	42"	B&B	Full, well rounded plant with moist rootball and healthy appearance	60"	5	25
SBW	12	Weigela florida 'Sonic Bloom'	Sonic Bloom Weigela	24"	Cont.	Full, well rooted plant, evenly shaped	42"	1	12
							Total Points Proposed		***66***
							Total Points Proposed (all plantings):		***836***

PLAN KEY	QUANTITY	PLANT MATERIAL PROPOSED SPECIFIED SEED MIX / SOD	CONTAINER SIZE		SPECIFICATION / NOTES	PLANT SPACING
LAWN	4049	Lawn Establishment Area / Grading Area		SY	Reinder's Deluxe 50 Seed Mix (800-785-3301)	
	36437	Erosion Matting for sloped lawn areas	*see plan for area delineation*	SF	EroTex DS75 Erosion Control Blanket (or approved equal)	
Hardscape Materials						
	18	Shredded Hardwood Mulch (3" depth)	*Area: 1,925 SF*	CY	Bark Mulch; apply Preemergent after installation of mulch	
	12	Soil Amendments (2" depth)	*Area: 1,925 SF*	CY		
	112	Pulverized Topsoil (Lawn Area)	*Area: 36,440 SF*	CY		
	12	Pulverized Topsoil (2" over bed areas)	*Area: 1,925 SF*	CY		
		Downspout Extentions	*determine at time of installation*	LF		
		Downspout Adapters	*determine at time of installation*	EA		

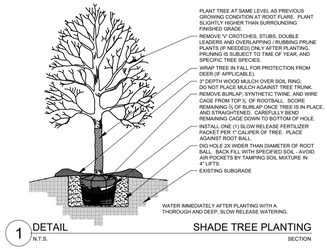
*Landscape counts & quantities are provided as a service to the Landscape Contractor; Landscape Contractor is responsible for verifying these counts and quantities in order to provide a complete landscape installation as outlined on this Landscape Master Plan. In the event that a discrepancy occurs between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

Seed Compositions:

Reinder's Deluxe 50 Seed Mix (800-785-3301): Seed at rate of 150-200# per acre

20% Kentucky Bluegrass (Sod Quality)
15% Newport Kentucky Bluegrass
15% Ken Blue Kentucky Bluegrass
25% Creeping Red Fescue
15% Quebec Perennial Ryegrass
10% Fiesta III Perennial Ryegrass

PLANT & MATERIAL SCHEDULE



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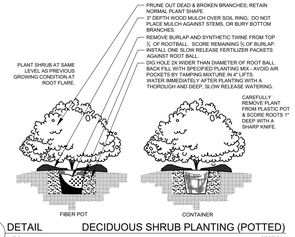
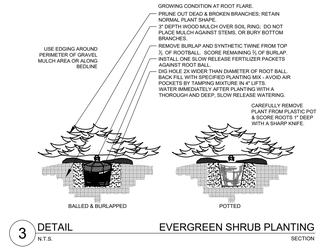
N.T.S. SECTION



2 DETAIL DECIDUOUS SHRUB PLANTING (POTTED)
N.T.S. SECTION



3 DETAIL EVERGREEN SHRUB PLANTING
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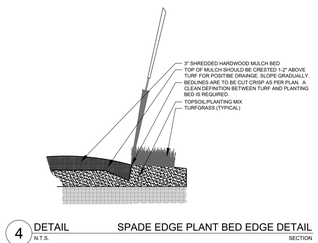
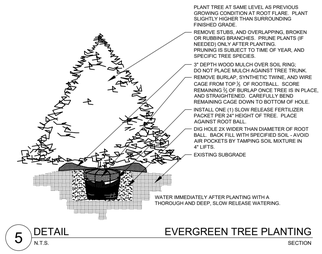
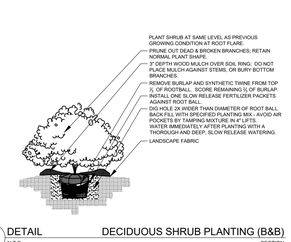


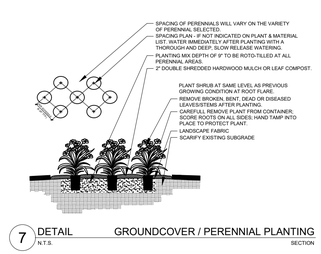
4 DETAIL SPADE EDGE PLANT BED EDGE DETAIL
N.T.S. SECTION



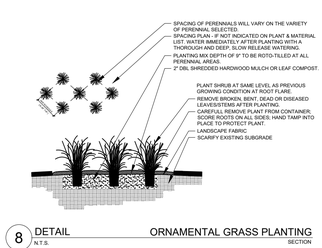
5 DETAIL EVERGREEN TREE PLANTING
N.T.S. SECTION



6 DETAIL DECIDUOUS SHRUB PLANTING (B&B)
N.T.S. SECTION



7 DETAIL GROUNDCOVER / PERENNIAL PLANTING
N.T.S. SECTION



8 DETAIL ORNAMENTAL GRASS PLANTING
N.T.S. SECTION

PLANTING & HARDSCAPE DETAILS

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

PROJECT

TSUNAMI EXPRESS

East Wolf Run
at Maple Ave.
Mukwanago, WI

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
8.08.24	FIRST ISSUE
4.17.25	REV. SITE PLAN

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

SHEET TITLE

LANDSCAPE DETAILS, NOTES & SCHEDULES

PROJECT MANAGER WDH

PROJECT NUMBER 24-038

DATE 04.17.25

SHEET NUMBER

L 1.3

E-ONE Emergency One Ocala FL

Overall Length	46.333ft
Overall Width	8.333ft
Overall Body Height	11.833ft
Min Body Ground Clearance	1.393ft
Track Width	8.333ft
Lock-to-lock time	6.00s
Max Wheel Angle	45.00°

Nielsen Madsen + Barber
CIVIL ENGINEERS AND LAND SURVEYORS
1458 Horizon Blvd. Suite 200, Racine, WI. 53406
Tele: (262)634-5588 Website: www.nmbsc.net

TSUNAMI EXPRESS CAR WASH
FIRE TRUCK TURNING MOVEMENT - WB-50
FOR
TSUNAMI CAR WASH INTERMEDIATE HOLDCO, LLC
VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN

NO.	REVISION	BY	DATE

PROJ. MGR:	MRM
DRAFTED:	JWR
DATE:	4-7-2025
CHECKED:	ALJ
DATE:	4-7-2025

2024.0060.01

SHEET
EVTE-1

Monday, April 07, 2025 7:54:03 AM

STORM WATER MANAGEMENT PLAN

FOR

TSUNAMI EXPRESS CAR WASH

Village of Mukwonago, Waukesha County, Wisconsin

August 9, 2024
Revised: April 11, 2025

PREPARED FOR:
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The Redmond Company
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PREPARED BY:
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STORM WATER MANAGEMENT PLAN

FOR

Tsunami Express Car Wash

TABLE OF CONTENTS

1. Introduction
2. Method of Analysis
3. Pre-Developed Conditions
4. Post-Developed Conditions
5. Storm Water Quality and Quantity
6. Routing Data
7. Conclusion

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- Soil Map

Appendix B
- WinSLAMM Water Quality Analysis

Appendix C
- HydroCAD Routing Details

Appendix D
- Storm Sewer Drainage Area Map and Calculations (STM-1)

Appendix E
- Post-Developed Conditions Map (DEV-1)

INTRODUCTION

Nielsen Madsen + Barber (NMB) was retained by The Redmond Company to prepare site grading, drainage, paving, utility, and a Storm Water Management Plan for the proposed Tsunami Express Car Wash located south of the intersection of East Wolf Run and Maple Avenue in the Village of Mukwonago, Waukesha County, Wisconsin.

The proposed improvements include the car wash and associated driveway and parking areas, landscaping, and storm water management facilities.

The proposed project will disturb approximately 1.44 acres and increase the impervious area by about 0.7 acres requiring the project to meet the Village of Mukwonago's storm water quality and peak discharge requirements, which includes storm water runoff management as required by the Wisconsin Department of Natural Resources (WDNR) Chapter NR 151 of the State of Wisconsin Administrative Code. The peak discharge control requirements are met by a regional storm water basin at the end of East Wolf Run.

To address the water quality requirements, an underground detention and water quality system (WQS) has been designed to serve the site.

METHOD OF ANALYSIS

The method used for this storm water analysis was the United States Department of Agriculture, Natural Resources Conservation Service, Urban Hydrology for Small Watersheds, Technical Release No. 55 (TR-55). The specific software is HydroCAD V10, as produced by HydroCAD Software Solutions, LLC. In running this model, NMB determined runoff curve numbers (CN) and times of concentration (Tc) for the individual drainage areas. This information was then used to generate storm hydrographs and peak discharge rates. In addition, WinSLAMM V10.5, as produced by PV and Associates, LLC., was utilized to analyze the water quality of the post-developed runoff.

PRE - DEVELOPED CONDITIONS

Pre-Developed conditions at the site consist of grassed and wetland areas. Since the peak discharges requirements are met by a regional storm water basin, an existing conditions, or pre-developed conditions, model was not prepared.

POST - DEVELOPED CONDITIONS

Post-Developed conditions at the site will consist of a building, pavement areas, and grassed areas. An underground WQS has been designed to meet the water quality requirements for the site.

A storm sewer system has been designed to accommodate runoff from the 10-year storm. Calculations for the storm sewer sizing can be found in Appendix "D" of this report.

A Post-Developed Conditions map can be found in Appendix "E" of this report.

The post-developed drainage area is further described as follows:

DEV-1 (Area tributary to the proposed underground WQS)

Sub-basin DEV-1 totals 1.171 acres and consists of roof, pavement and grassed areas tributary to the proposed underground WQS that discharges to the existing Maple Avenue storm sewer.

STORM WATER QUALITY AND QUANTITY

The Village of Mukwonago has established stormwater quality and peak discharge requirements in its Stormwater Management Ordinance. Water quality management standards are as required by WDNR Chapter NR 151.

Due to the increase in impervious surface of about 0.7 acres and a total disturbed area of approximately 1.44 acres, the proposed Tsunami Express Car Wash development will be required to follow the stormwater runoff management requirements established by the Village of Mukwonago and WDNR Chapter NR 151 which apply as follows:

Soil Data and Infiltration: Existing soils have been reviewed using the Web Soil Survey developed by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). The Web Soil Survey indicates Brookston silt loam, Griswold silt loam, and Kane silt loam throughout the site. From the WDNR Technical Standard 1002, "Site Evaluation for Stormwater Infiltration" silt loam is listed with a design infiltration rate of 0.13 inches/hour. This infiltration rate is less than the 0.6 inches/hour exemption threshold rate. A map of the existing soils on site is included in Appendix "A".

Total Suspended Solids Load Reduction: The Village of Mukwonago and WDNR Chapter NR 151 require an 80% reduction of the Total Suspended Solids (TSS) load for new developments. An underground WQS has been designed to treat runoff from the site.

The WQS consists of 170 linear feet of 108" corrugated metal pipe (CMP) enclosed on both ends with a designed outlet control structure. The outlet control structure is a multi-stage device with an orifice and weir opening and requires an additional four (4) linear feet of 108" CMP that was not included in calculations for a total system length of 174 linear feet. The discharge from this device will then enter a 15" PVC culvert that discharges to the existing Maple Avenue storm sewer system. The WQS is designed to have a 4.5' deep permanent wet pool which will act as a settling basin. The 'wet pond' control practice was used to model the WQS in accordance with WDNR and WinSLAMM guidance.

When these parameters were analyzed in WinSLAMM, the WQS was found to remove a total of 361.0 lbs of particulate solids from the DEV-1 area, resulting in a TSS reduction of 80.93% for the

1.171-acre site (DEV-1). In addition, the WQS removed 0.6806 lbs of total phosphorus from the DEV-1 area, resulting in a phosphorus reduction of 66.34%.

The proposed treatment system, as designed, meets the Village's and WDNR's treatment goals by achieving a TSS reduction of 80%. The WinSLAMM input data and output summaries can be found in Appendix "B" of this report.

Peak Discharge Management: The peak discharge control requirements are met by a regional storm water basin at the end of East Wolf Run.

Detailed routing information can be found in Appendix "C" of this report.

A summary of the proposed design is as follows:

Proposed Water Quality System

Contributory Watershed:	1.171 Acres (DEV-1)
System Design:	170 LF – 108" CMP
Design Surface Area:	1447 Square Feet
Normal Water Level (NWL):	808.83
Bottom of WQS:	804.33
Top of WQS:	813.33
High Water Mark (100-Year):	811.83
High Water Mark (10-Year):	811.65
High Water Mark (2-Year):	811.43
High Water Mark (1-Year):	811.37
Outlet Control:	1-1.1" Orifice @ 808.83
	7.5' Sharp Crested Weir @ 811.33
	38'-15" PVC @ 0.53%, IE @ 808.83

Emergency Spillway Conditions:
A 100-year emergency spillway condition was routed for the proposed WQS assuming the 1.1" orifice was plugged and flow over the weir was the only available outflow for the system. The resultant routing indicates a peak discharge of 8.33 cfs and an elevation of 811.83.

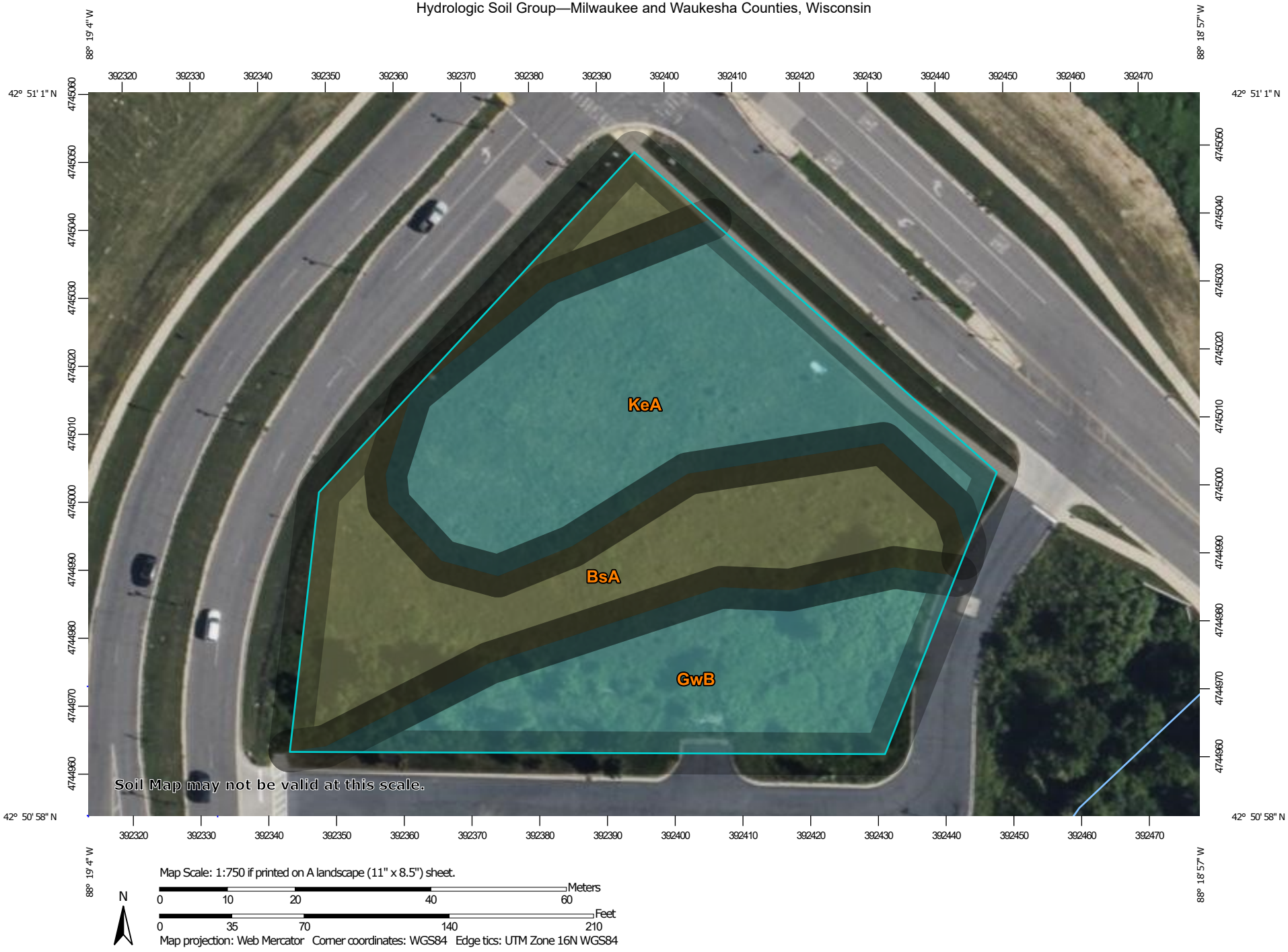
ROUTING DATA

WQS	NWL	Peak Inflow	Peak Outflow	HWM	Storage Above NWL (Ac-ft)
1-Yr. 24-Hour Storm	808.83	2.51 cfs	0.26 cfs	811.37	0.084
2-Yr. 24-Hour Storm	808.83	2.98 cfs	0.81 cfs	811.43	0.086
10-Yr. 24-Hour Storm	808.83	4.75 cfs	4.47 cfs	811.65	0.092
100-Yr. 24-Hour Storm	808.83	8.52 cfs	8.32 cfs	811.83	0.097

CONCLUSION

By utilizing the proposed WQS, the Village of Mukwinago's and WDNR's water quality goals have been met reducing TSS loading by 80%, on an average annual basis.

APPENDIX
“A”


88° 19' 4" W
88° 18' 57" W
42° 51' 1" N
42° 50' 58" N
392320
392330
392340
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392380
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4745050
4745040
4745030
4745020
4745010
4745000
4744990
4744980
4744970
4744960
KeA
BsA
GwB
Soil Map may not be valid at this scale.
Map Scale: 1:750 if printed on A landscape (11" x 8.5") sheet.
N
Meters
0 10 20 40 60
Feet
0 35 70 140 210
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: Milwaukee and Waukesha Counties, Wisconsin
Survey Area Data: Version 19, 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: Jul 30, 2022—Aug 18, 2022

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BsA	Brookston silt loam, 0 to 2 percent slopes	C/D	0.5	35.7%
GwB	Griswold silt loam, mottled subsoil variant, 2 to 6 percent slopes	C	0.4	25.4%
KeA	Kane silt loam, 1 to 3 percent slopes	C	0.6	38.9%
Totals for Area of Interest			**1.5**	**100.0%**

Description

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

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

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

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

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

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

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

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

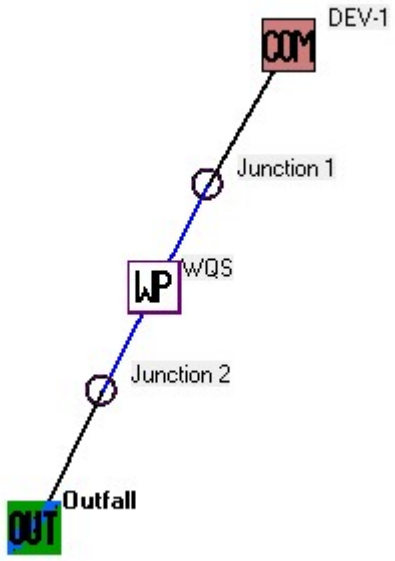
Tie-break Rule: Higher

APPENDIX
“B”

Tsunami Express Car Wash

Water Quality Analysis

System Map



1458 Horizon Blvd, Suite 200, Racine, WI 53406
Ph: (262) 634-5588 * Fax: (262) 634-5024
www.nmbsc.net

Data file name: Z:\2024\2024.0060.01\Design Documents\Stormwater Management\WinSLAMM\2024.0060.01-WinSLAMM.mdb
WinSLAMM Version 10.5.0
Rain file name: C:\WinSLAMM Files\Rain Files\WI Milwaukee 69.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: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Date: 04-10-2025 Time: 07:23:33
Site information:

LU# 1 - Commercial: DEV-1 Total area (ac): 1.171
1 - Roofs 1: 0.117 ac. Pitched Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 0.627 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.427 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Wet Detention Pond CP# 1 (DS) - WQS
Particle Size Distribution file name: Not needed - calculated by program
Initial stage elevation (ft): 4.5
Peak to Average Flow Ratio: 3.8
Maximum flow allowed into pond (cfs): No maximum value entered
Outlet Characteristics:
Outlet type: Orifice 1
1. Orifice diameter (ft): 0.09
2. Number of orifices: 1
3. Invert elevation above datum (ft): 4.5
Outlet type: Broad Crested Weir
1. Weir crest length (ft): 7.48
2. Weir crest width (ft): 0.05
3. Height from datum to bottom of weir opening: 7
Pond stage and surface area

Entry Number	Stage (ft)	Pond Area (acres)	Natural Seepage (in/hr)	Other Outflow (cfs)
0	0.00	0.0000	0.00	0.00
1	0.01	0.0332	0.00	0.00
2	1.00	0.0332	0.00	0.00
3	2.00	0.0332	0.00	0.00
4	3.00	0.0332	0.00	0.00
5	4.00	0.0332	0.00	0.00
6	5.00	0.0332	0.00	0.00
7	6.00	0.0332	0.00	0.00
8	7.00	0.0332	0.00	0.00
9	8.00	0.0332	0.00	0.00
10	9.00	0.0332	0.00	0.00

SLAMM for Windows Version 10.5.0
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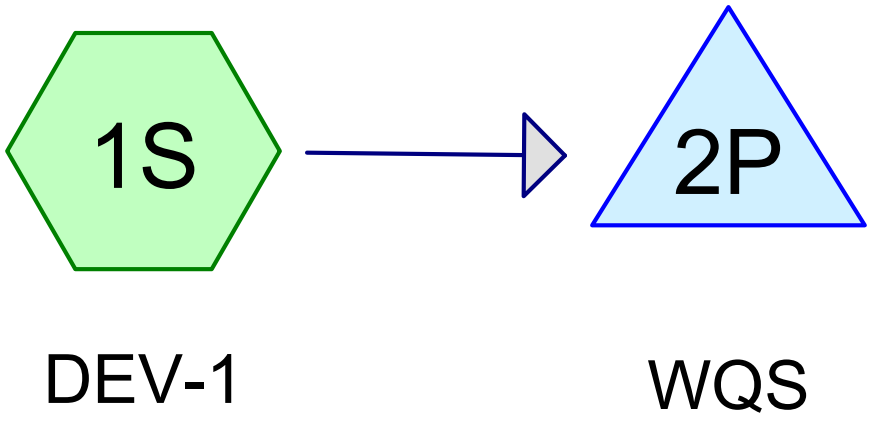
Data file name: Z:\2024\2024.0060.01\Design Documents\Stormwater Management\WinSLAMM\2024.0060.01-WinSLAMM.mdb
WinSLAMM Version 10.5.0
Rain file name: C:\WinSLAMM Files\Rain Files\WI Milwaukee 69.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient 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: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Model Run Start Date: 01/05/69 Model Run End Date: 12/31/69
Date of run: 04-10-2025 Time of run: 07:23:03
Total Area Modeled (acres): 1.171
Years in Model Run: 0.99

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of all Land Uses without Controls:	61744	-	115.7	446.0	-
Outfall Total with Controls:	61767	-0.04%	22.05	85.03	80.93%
Annualized Total After Outfall Controls:	62625			86.21	

Pollutant	Conc. No Controls	Conc. With Controls	Conc. Units	Pollutant Yield No Controls	Pollutant Yield With Controls	Pol. Yield Units	Percent Reduction
Particulate Solids	115.7	22.05	mg/L	446.0	85.03	lbs	80.93 %
Total Phosphorus	0.2663	0.08958	mg/L	1.026	0.3454	lbs	66.34 %

APPENDIX
"C"

POST-DEVELOPED CONDITIONS



Subcat Reach Pond Link

Routing Diagram for 2024.0060.01-Post-Developed
Prepared by Nielsen Madsen & Barber, Printed 4/9/2025
HydroCAD® 10.20-5c s/n 10479 © 2023 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-yr	MSE 24-hr	3	Default	24.00	1	2.40	2
2	2-yr	MSE 24-hr	3	Default	24.00	1	2.70	2
3	10-yr	MSE 24-hr	3	Default	24.00	1	3.81	2
4	100-yr	MSE 24-hr	3	Default	24.00	1	6.18	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.427	74	>75% Grass cover, Good, HSG C (1S)
0.627	98	Pavement (1S)
0.117	98	Roofs (1S)
1.171	**89**	**TOTAL AREA**

Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: DEV-1 Runoff Area=1.171 ac 63.54% Impervious Runoff Depth=1.37"
Flow Length=299' Tc=9.6 min CN=89 Runoff=2.51 cfs 0.133 af

Pond 2P: WQS Peak Elev=811.37' Storage=0.208 af Inflow=2.51 cfs 0.133 af
Outflow=0.26 cfs 0.133 af

Total Runoff Area = 1.171 ac Runoff Volume = 0.133 af Average Runoff Depth = 1.37"
36.46% Pervious = 0.427 ac 63.54% Impervious = 0.744 ac

Summary for Subcatchment 1S: DEV-1

Runoff = 2.51 cfs @ 12.17 hrs, Volume= 0.133 af, Depth= 1.37"
Routed to Pond 2P : WQS

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
MSE 24-hr 3 1-yr Rainfall=2.40"

	Area (ac)	CN	Description
*	0.117	98	Roofs
*	0.627	98	Pavement
	0.427	74	>75% Grass cover, Good, HSG C
	1.171	89	Weighted Average
	0.427		36.46% Pervious Area
	0.744		63.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	37	0.0140	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
0.9	145	0.0160	2.57		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.6	117	0.0040	3.39	2.66	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.011 PVC, smooth interior
9.6	299	Total			

Summary for Pond 2P: WQS

Inflow Area = 1.171 ac, 63.54% Impervious, Inflow Depth = 1.37" for 1-yr event
Inflow = 2.51 cfs @ 12.17 hrs, Volume= 0.133 af
Outflow = 0.26 cfs @ 12.89 hrs, Volume= 0.133 af, Atten= 90%, Lag= 42.8 min
Primary = 0.26 cfs @ 12.89 hrs, Volume= 0.133 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Starting Elev= 808.83' Surf.Area= 0.035 ac Storage= 0.124 af
Peak Elev= 811.37' @ 12.89 hrs Surf.Area= 0.029 ac Storage= 0.208 af (0.084 af above start)

Plug-Flow detention time= 2,580.1 min calculated for 0.009 af (7% of inflow)
Center-of-Mass det. time= 819.0 min (1,622.8 - 803.7)

Volume	Invert	Avail.Storage	Storage Description
#1	804.33'	0.248 af	**108.0" Round CMP_Round 108"** L= 170.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	808.83'	**15.0" Round Culvert** L= 38.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 808.83' / 808.63' S= 0.0053 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 1.23 sf
#2	Device 1	808.83'	**1.1" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	811.33'	**7.5' long x 2.00' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=0.21 cfs @ 12.89 hrs HW=811.37' (Free Discharge)
└**1=Culvert** (Passes 0.21 cfs of 8.17 cfs potential flow)
  ├**2=Orifice/Grate** (Orifice Controls 0.05 cfs @ 7.60 fps)
  └**3=Sharp-Crested Rectangular Weir** (Weir Controls 0.16 cfs @ 0.61 fps)

Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: DEV-1 Runoff Area=1.171 ac 63.54% Impervious Runoff Depth=1.63"
Flow Length=299' Tc=9.6 min CN=89 Runoff=2.98 cfs 0.159 af

Pond 2P: WQS Peak Elev=811.43' Storage=0.210 af Inflow=2.98 cfs 0.159 af
Outflow=0.81 cfs 0.159 af

Total Runoff Area = 1.171 ac Runoff Volume = 0.159 af Average Runoff Depth = 1.63"
36.46% Pervious = 0.427 ac 63.54% Impervious = 0.744 ac

Summary for Subcatchment 1S: DEV-1

Runoff = 2.98 cfs @ 12.17 hrs, Volume= 0.159 af, Depth= 1.63"
Routed to Pond 2P : WQS

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
MSE 24-hr 3 2-yr Rainfall=2.70"

	Area (ac)	CN	Description
*	0.117	98	Roofs
*	0.627	98	Pavement
	0.427	74	>75% Grass cover, Good, HSG C
	1.171	89	Weighted Average
	0.427		36.46% Pervious Area
	0.744		63.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	37	0.0140	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
0.9	145	0.0160	2.57		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.6	117	0.0040	3.39	2.66	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.011 PVC, smooth interior
9.6	299	Total			

Summary for Pond 2P: WQS

Inflow Area = 1.171 ac, 63.54% Impervious, Inflow Depth = 1.63" for 2-yr event
Inflow = 2.98 cfs @ 12.17 hrs, Volume= 0.159 af
Outflow = 0.81 cfs @ 12.46 hrs, Volume= 0.159 af, Atten= 73%, Lag= 17.0 min
Primary = 0.81 cfs @ 12.46 hrs, Volume= 0.159 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Starting Elev= 808.83' Surf.Area= 0.035 ac Storage= 0.124 af
Peak Elev= 811.43' @ 12.46 hrs Surf.Area= 0.029 ac Storage= 0.210 af (0.086 af above start)

Plug-Flow detention time= 1,994.2 min calculated for 0.035 af (22% of inflow)
Center-of-Mass det. time= 712.4 min (1,512.6 - 800.2)

Volume	Invert	Avail.Storage	Storage Description
#1	804.33'	0.248 af	**108.0" Round CMP_Round 108"** L= 170.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	808.83'	**15.0" Round Culvert** L= 38.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 808.83' / 808.63' S= 0.0053 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 1.23 sf
#2	Device 1	808.83'	**1.1" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	811.33'	**7.5' long x 2.00' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=0.77 cfs @ 12.46 hrs HW=811.43' (Free Discharge)
└**1=Culvert** (Passes 0.77 cfs of 8.29 cfs potential flow)
  ├**2=Orifice/Grate** (Orifice Controls 0.05 cfs @ 7.69 fps)
  └**3=Sharp-Crested Rectangular Weir** (Weir Controls 0.72 cfs @ 1.01 fps)

Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: DEV-1 Runoff Area=1.171 ac 63.54% Impervious Runoff Depth=2.65"
Flow Length=299' Tc=9.6 min CN=89 Runoff=4.75 cfs 0.258 af

Pond 2P: WQS Peak Elev=811.65' Storage=0.216 af Inflow=4.75 cfs 0.258 af
Outflow=4.47 cfs 0.258 af

Total Runoff Area = 1.171 ac Runoff Volume = 0.258 af Average Runoff Depth = 2.65"
36.46% Pervious = 0.427 ac 63.54% Impervious = 0.744 ac

Summary for Subcatchment 1S: DEV-1

Runoff = 4.75 cfs @ 12.17 hrs, Volume= 0.258 af, Depth= 2.65"
Routed to Pond 2P : WQS

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
MSE 24-hr 3 10-yr Rainfall=3.81"

	Area (ac)	CN	Description
*	0.117	98	Roofs
*	0.627	98	Pavement
	0.427	74	>75% Grass cover, Good, HSG C
	1.171	89	Weighted Average
	0.427		36.46% Pervious Area
	0.744		63.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	37	0.0140	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
0.9	145	0.0160	2.57		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.6	117	0.0040	3.39	2.66	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.011 PVC, smooth interior
9.6	299	Total			

Summary for Pond 2P: WQS

Inflow Area = 1.171 ac, 63.54% Impervious, Inflow Depth = 2.65" for 10-yr event
Inflow = 4.75 cfs @ 12.17 hrs, Volume= 0.258 af
Outflow = 4.47 cfs @ 12.21 hrs, Volume= 0.258 af, Atten= 6%, Lag= 2.5 min
Primary = 4.47 cfs @ 12.21 hrs, Volume= 0.258 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Starting Elev= 808.83' Surf.Area= 0.035 ac Storage= 0.124 af
Peak Elev= 811.65' @ 12.21 hrs Surf.Area= 0.027 ac Storage= 0.216 af (0.092 af above start)

Plug-Flow detention time= 1,029.6 min calculated for 0.134 af (52% of inflow)
Center-of-Mass det. time= 473.8 min (1,264.4 - 790.6)

Volume	Invert	Avail.Storage	Storage Description
#1	804.33'	0.248 af	**108.0" Round CMP_Round 108"** L= 170.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	808.83'	**15.0" Round Culvert** L= 38.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 808.83' / 808.63' S= 0.0053 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 1.23 sf
#2	Device 1	808.83'	**1.1" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	811.33'	**7.5' long x 2.00' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=4.41 cfs @ 12.21 hrs HW=811.65' (Free Discharge)
└**1=Culvert** (Passes 4.41 cfs of 8.75 cfs potential flow)
  ├**2=Orifice/Grate** (Orifice Controls 0.05 cfs @ 8.02 fps)
  └**3=Sharp-Crested Rectangular Weir** (Weir Controls 4.35 cfs @ 1.84 fps)

Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: DEV-1 Runoff Area=1.171 ac 63.54% Impervious Runoff Depth=4.91"
Flow Length=299' Tc=9.6 min CN=89 Runoff=8.52 cfs 0.479 af

Pond 2P: WQS Peak Elev=811.83' Storage=0.221 af Inflow=8.52 cfs 0.479 af
Outflow=8.32 cfs 0.479 af

Total Runoff Area = 1.171 ac Runoff Volume = 0.479 af Average Runoff Depth = 4.91"
36.46% Pervious = 0.427 ac 63.54% Impervious = 0.744 ac

Summary for Subcatchment 1S: DEV-1

Runoff = 8.52 cfs @ 12.17 hrs, Volume= 0.479 af, Depth= 4.91"
Routed to Pond 2P : WQS

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
MSE 24-hr 3 100-yr Rainfall=6.18"

	Area (ac)	CN	Description
*	0.117	98	Roofs
*	0.627	98	Pavement
	0.427	74	>75% Grass cover, Good, HSG C
	1.171	89	Weighted Average
	0.427		36.46% Pervious Area
	0.744		63.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	37	0.0140	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
0.9	145	0.0160	2.57		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.6	117	0.0040	3.39	2.66	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.011 PVC, smooth interior
9.6	299	Total			

Summary for Pond 2P: WQS

Inflow Area = 1.171 ac, 63.54% Impervious, Inflow Depth = 4.91" for 100-yr event
Inflow = 8.52 cfs @ 12.17 hrs, Volume= 0.479 af
Outflow = 8.32 cfs @ 12.18 hrs, Volume= 0.479 af, Atten= 2%, Lag= 0.9 min
Primary = 8.32 cfs @ 12.18 hrs, Volume= 0.479 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Starting Elev= 808.83' Surf.Area= 0.035 ac Storage= 0.124 af
Peak Elev= 811.83' @ 12.18 hrs Surf.Area= 0.026 ac Storage= 0.221 af (0.097 af above start)

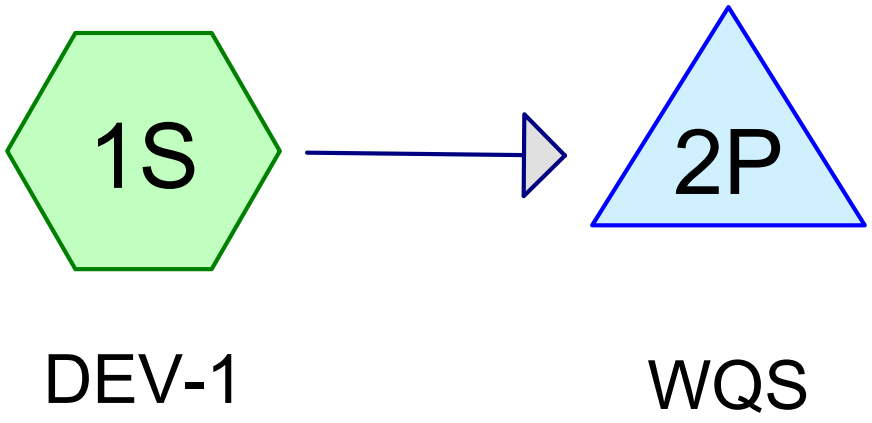
Plug-Flow detention time= 457.1 min calculated for 0.355 af (74% of inflow)
Center-of-Mass det. time= 275.8 min (1,054.2 - 778.3)

Volume	Invert	Avail.Storage	Storage Description
#1	804.33'	0.248 af	**108.0" Round CMP_Round 108"** L= 170.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	808.83'	**15.0" Round Culvert** L= 38.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 808.83' / 808.63' S= 0.0053 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 1.23 sf
#2	Device 1	808.83'	**1.1" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	811.33'	**7.5' long x 2.00' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=8.57 cfs @ 12.18 hrs HW=811.83' (Free Discharge)
└**1=Culvert** (Passes 8.57 cfs of 9.10 cfs potential flow)
  ├**2=Orifice/Grate** (Orifice Controls 0.05 cfs @ 8.27 fps)
  └**3=Sharp-Crested Rectangular Weir** (Weir Controls 8.52 cfs @ 2.31 fps)

POST-DEVELOPED CONDITIONS (EMERGENCY)



Subcat Reach Pond Link

Routing Diagram for 2024.0060.01-Post-Developed-Emergency Spillway
Prepared by Nielsen Madsen & Barber, Printed 4/9/2025
HydroCAD® 10.20-5c s/n 10479 © 2023 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	100-yr	MSE 24-hr	3	Default	24.00	1	6.18	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.427	74	>75% Grass cover, Good, HSG C (1S)
0.627	98	Pavement (1S)
0.117	98	Roofs (1S)
1.171	**89**	**TOTAL AREA**

Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: DEV-1 Runoff Area=1.171 ac 63.54% Impervious Runoff Depth=4.91"
Flow Length=299' Tc=9.6 min CN=89 Runoff=8.52 cfs 0.479 af

Pond 2P: WQS Peak Elev=811.83' Storage=0.221 af Inflow=8.52 cfs 0.479 af
Outflow=8.33 cfs 0.396 af

Total Runoff Area = 1.171 ac Runoff Volume = 0.479 af Average Runoff Depth = 4.91"
36.46% Pervious = 0.427 ac 63.54% Impervious = 0.744 ac

Summary for Subcatchment 1S: DEV-1

Runoff = 8.52 cfs @ 12.17 hrs, Volume= 0.479 af, Depth= 4.91"
Routed to Pond 2P : WQS

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
MSE 24-hr 3 100-yr Rainfall=6.18"

	Area (ac)	CN	Description
*	0.117	98	Roofs
*	0.627	98	Pavement
	0.427	74	>75% Grass cover, Good, HSG C
	1.171	89	Weighted Average
	0.427		36.46% Pervious Area
	0.744		63.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	37	0.0140	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
0.9	145	0.0160	2.57		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.6	117	0.0040	3.39	2.66	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.011 PVC, smooth interior
9.6	299	Total			

Summary for Pond 2P: WQS

Inflow Area = 1.171 ac, 63.54% Impervious, Inflow Depth = 4.91" for 100-yr event
Inflow = 8.52 cfs @ 12.17 hrs, Volume= 0.479 af
Outflow = 8.33 cfs @ 12.18 hrs, Volume= 0.396 af, Atten= 2%, Lag= 0.9 min
Primary = 8.33 cfs @ 12.18 hrs, Volume= 0.396 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Starting Elev= 808.83' Surf.Area= 0.035 ac Storage= 0.124 af
Peak Elev= 811.83' @ 12.18 hrs Surf.Area= 0.026 ac Storage= 0.221 af (0.097 af above start)

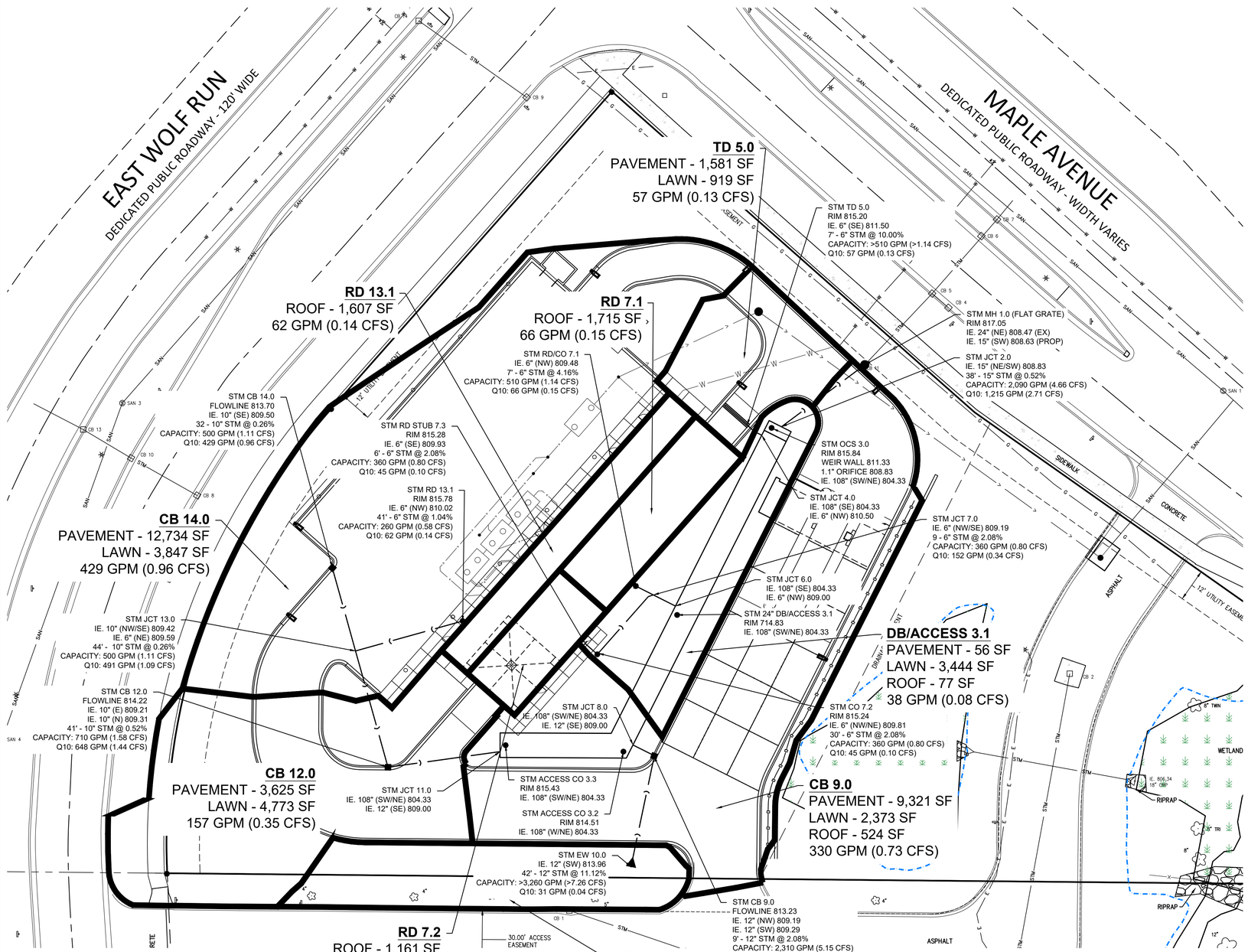
Plug-Flow detention time= 145.5 min calculated for 0.272 af (57% of inflow)
Center-of-Mass det. time= 30.5 min (808.9 - 778.3)

Volume	Invert	Avail.Storage	Storage Description
#1	804.33'	0.248 af	**108.0" Round CMP_Round 108"** L= 170.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	808.83'	**15.0" Round Culvert** L= 38.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 808.83' / 808.63' S= 0.0053 '/' Cc= 0.900 n= 0.011 PVC, smooth interior, Flow Area= 1.23 sf
#2	Device 1	811.33'	**7.5' long x 2.00' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=8.59 cfs @ 12.18 hrs HW=811.83' (Free Discharge)
└**1=Culvert** (Passes 8.59 cfs of 9.11 cfs potential flow)
└**2=Sharp-Crested Rectangular Weir** (Weir Controls 8.59 cfs @ 2.32 fps)

APPENDIX
“D”



REFERENCES

MATERIALS FOR STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STATE OF WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (SPS) AND THE VILLAGE OF MUKWONAGO STANDARD CONSTRUCTION SPECIFICATIONS.

STORM SEWER CONSTRUCTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN", 6TH EDITION, DECEMBER 22, 2003 WITH ADDENDA NO. 1 AND NO. 2, HEREIN REFERRED TO AS THE "STANDARD SPECIFICATIONS" AND THE VILLAGE OF MUKWONAGO STANDARD CONSTRUCTION SPECIFICATIONS.

PUBLIC UTILITY NOTES

CABLE TV AND TELEPHONE SERVICE INSTALLATION TO BE COORDINATED WITH THE ELECTRICAL SERVICE.

ELECTRICAL SERVICE TO BE COORDINATED WITH WE ENERGIES. EXACT LOCATION OF THE SERVICE ENTRANCE / METER TO BE COORDINATED WITH WE ENERGIES, THE MECHANICAL DESIGNER AND THE ARCHITECT.

IF ANY VILLAGE OF MUKWONAGO OWNED UNDERGROUND ELECTRIC MAY NEED TO BE RELOCATED, THE OWNER/DEVELOPER TO PAY ALL COSTS FOR RELOCATION. CONSTRUCTION TO BE PERFORMED TO MEET THE VILLAGE OF MUKWONAGO STANDARD CONSTRUCTION SPECIFICATIONS. CONTACT THE VILLAGE OF MUKWONAGO ENGINEERING DIVISION TO SCHEDULE INSPECTION.

THE EXACT LOCATION OF THE SANITARY SEWER LATERAL, DOMESTIC WATER LINE, FIRE PROTECTION LEAD, NATURAL GAS SERVICE, ELECTRIC, AND PHONE LINES (AS THEY ENTER THE BUILDING) SHALL BE PER THE ARCHITECTURAL OR MECHANICAL DRAWINGS.

UTILITY CONSTRUCTION GENERAL NOTES

CONTRACTOR SHALL VERIFY ALL ELEVATIONS, LOCATIONS AND SIZES OF EXISTING SANITARY AND STORM SEWERS, WATER MAINS, GAS & ELECTRIC LINES OR OTHER UTILITIES PRIOR TO STARTING CONSTRUCTION. AS-BUILT (FIELD) DATA SHALL BE USED TO CHECK ALL PROPOSED UTILITY CROSSINGS FOR CONFLICTS.

CONTRACTOR SHALL CONTACT DIGGER'S HOTLINE A MINIMUM OF 72 HOURS BEFORE THE START OF CONSTRUCTION TO IDENTIFY ADJACENT UNDERGROUND UTILITIES. THE LOCATION OF EXISTING PRIVATE UTILITIES MAY NOT BE SHOWN ON THE PLANS AND SHOULD BE LOCATED BY THE OWNER PRIOR TO CONSTRUCTION.

ANY WATER PUMPED FROM PITS, TRENCHES, WELLS OR PONDS SHALL BE TREATED FOR SEDIMENT REMOVAL PRIOR TO DISCHARGE OFF-SITE. PUMPING OPERATIONS SHALL BE IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061. PUMPED WATER CAN BE TREATED IN RETENTION BASINS, FILTER BAGS, STONE FILTERS OR BY OTHER WDNR APPROVED METHODS. QUALITY OF PUMPED WATER SHALL BE CONTINUOUSLY MONITORED DURING PUMPING OPERATIONS.

THE EXACT LOCATION OF ALL BUILDING LATERALS, ROOF DRAIN RISERS AND DOWNSPOUTS (IF APPLICABLE) SHALL BE PER THE ARCHITECTURAL OR MECHANICAL DRAWINGS.

STORM SEWER SPECIFICATIONS

STORM SEWERS WERE SIZED IN ACCORDANCE WITH SPS TABLE 382.36-4 "MAXIMUM CAPACITY OF STORM WATER HORIZONTAL CONVEYANCE PIPING FOR CONCRETE, ASTM C76 AND ASTM C14". ANY MATERIAL APPROVED BY THE VILLAGE OF MUKWONAGO AND THE WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES MAY BE USED AT THE SLOPES AND SIZES DESIGNED.

STORM SEWER, ROOF DRAIN AND STORM BUILDING SEWER PIPE AND TUBING MATERIALS SHALL CONFORM TO SPS 384.30 OF THE WISCONSIN ADMINISTRATIVE CODE. REINFORCED CONCRETE PIPE (RCP) AND POLYVINYL CHLORIDE (PVC) MATERIALS SHALL BE SELECTED FROM TABLE 384.30-6. CORRUGATED HIGH DENSITY POLYETHYLENE (HDPE) PIPE MATERIAL (IF SELECTED) SHALL MEET THE REQUIREMENTS OF AASHTO M-252 FOR 4"-10" DIAMETER SIZES AND AASHTO M294 FOR 12"-48" DIAMETER SIZES.

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

ALL STORM SEWERS INSTALLED IN EXISTING OR PROPOSED PAVED AREAS SHALL BE BACKFILLED WITH COMPACTED GRANULAR MATERIAL IN ACCORDANCE WITH TABLE 37, CHAPTER 8.43.4 OF THE "STANDARD SPECIFICATIONS". BACKFILL MATERIAL SHALL EXTEND A MINIMUM OF FIVE FEET (5') OUTSIDE OF THE PAVEMENT LIMITS. TRENCHES RUNNING PARALLEL TO AND LESS THAN FIVE FEET (5') FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE COMPACTED GRANULAR BACKFILL.

A 10-GAUGE TRACER WIRE SHALL BE INSTALLED THE ENTIRE LENGTH OF ALL PRIVATE STORM SEWERS, ROOF DRAINS AND STORM BUILDING SEWER LATERALS PER SPS 382.36(7)(d)10. THE TRACER WIRE SHALL BE EXTENDED TO THE SURFACE AT THE BUILDING WALL AND ALL OTHER SYSTEM LIMITS (FOR EACH SYSTEM INSTALLED) AND ENCLOSED IN A RISER BOX WITH "STORM" ON THE COVER.

ALL MANHOLES, CATCH BASINS AND/OR DRAIN BASINS INSTALLED IN PAVED SURFACES AND ACCEPTING RUNOFF SHALL BE FURNISHED WITH THE NEENAH FOUNDRY R-2080-D FRAME AND GRATE.

ALL MANHOLES, CATCH BASINS AND/OR DRAIN BASINS INSTALLED IN LAWN AREAS AND ACCEPTING RUNOFF SHALL BE FURNISHED WITH THE NEENAH FOUNDRY R-2560-EA BEEHIVE FRAME AND GRATE.

ALL MANHOLES, CATCH BASINS AND DRAIN BASINS SHALL BE FURNISHED WITH A MINIMUM 12" SUMP.

ALL STORM SEWERS, MANHOLES, CATCH BASINS AND/OR DRAIN BASINS SHALL BE CONSTRUCTED WITH WATER AND GAS TIGHT JOINTS IN CONFORMANCE WITH SPS 384.40.

PRIVATE STORM SEWER DESIGN CALCULATIONS

	Upstream Flow (GPM)	Pipe Inflow (GPM)	Total Flow (GPM)	Pipe Length (feet)	Min. Pipe Diameter (inches)	Min. Slope (%)	Design Pipe Diameter	Design Slope (%)	Design Pipe Capacity (CFS/GPM)
CB 14.0 - JCT 13.0	0	429	429	32	10"	0.26%	10"	0.26%	1.11 / 500
RD 13.1 - JCT 13.0	0	62	62	41	6"	0.26%	6"	1.04%	0.58 / 260
JCT 13.0 - CB 12.0	491	0	491	44	10"	0.26%	10"	0.26%	1.11 / 500
CB 12.0 - JCT 11.0 (UDS)	491	157	648	41	10"	0.52%	10"	0.52%	1.58 / 710
EW 10.0 - CB 9.0	0	31	31	42	12"	0.26%	12"	11.12%	>7.26 / >3,260
CB 9.0 - JCT 8.0 (UDS)	31	330	361	9	12"	0.26%	12"	2.08%	5.15 / 2,310
RD 7.3 - CO 7.2	0	45	45	6	6"	0.26%	6"	2.08%	0.80 / 360
CO 7.2 - JCT 7.0	45	0	45	30	6"	0.26%	6"	2.08%	0.80 / 360
RD 7.1 - JCT 7.0	0	66	66	7	6"	0.26%	6"	4.16%	1.14 / 510
JCT 7.0 - JCT 6.0 (UDS)	111	0	111	9	6"	0.26%	6"	2.08%	0.80 / 360
TD 5.0 - JCT 4.0 (UDS)	0	57	57	7	6"	0.26%	6"	10.00%	>1.14 / >510
DB/ACCESS 3.1 (UDS)	0	38	38	-	108"	0.00%	108"	0.00%	N/A
OCS 3.0 (UDS) - JCT 2.0	1215	0	1215	-	108"	0.00%	108"	0.00%	N/A
JCT 2.0 - MH 1.0	1215	0	1215	38	15"	0.26%	15"	0.52%	4.66 / 2,090

UTILITY LEGEND

- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY LATERAL
- EXISTING SANITARY SEWER
- PROPOSED WATER SERVICE
- EXISTING WATERMAIN

DIGGERS HOTLINE
Call 811 or (800) 242-8511
www.DiggersHotline.com

UTILITY NOTE

EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY FOR PROPOSED UTILITY CONNECTIONS AND / OR TO AVOID DAMAGE THERETO, CONTRACTOR SHALL CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.

Nielsen Madsen + Barber
CIVIL ENGINEERS AND LAND SURVEYORS
1458 Horizon Blvd. Suite 200, Racine, WI. 53406
Tele: (262)634-5588 Website: www.nmbsc.net

TSUNAMI EXPRESS CAR WASH
STORM SEWER & DRAINAGE PLAN
FOR
TSUNAMI CAR WASH INTERMEDIATE HOLDCO, LLC
VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN

NO.	REVISION	BY	DATE

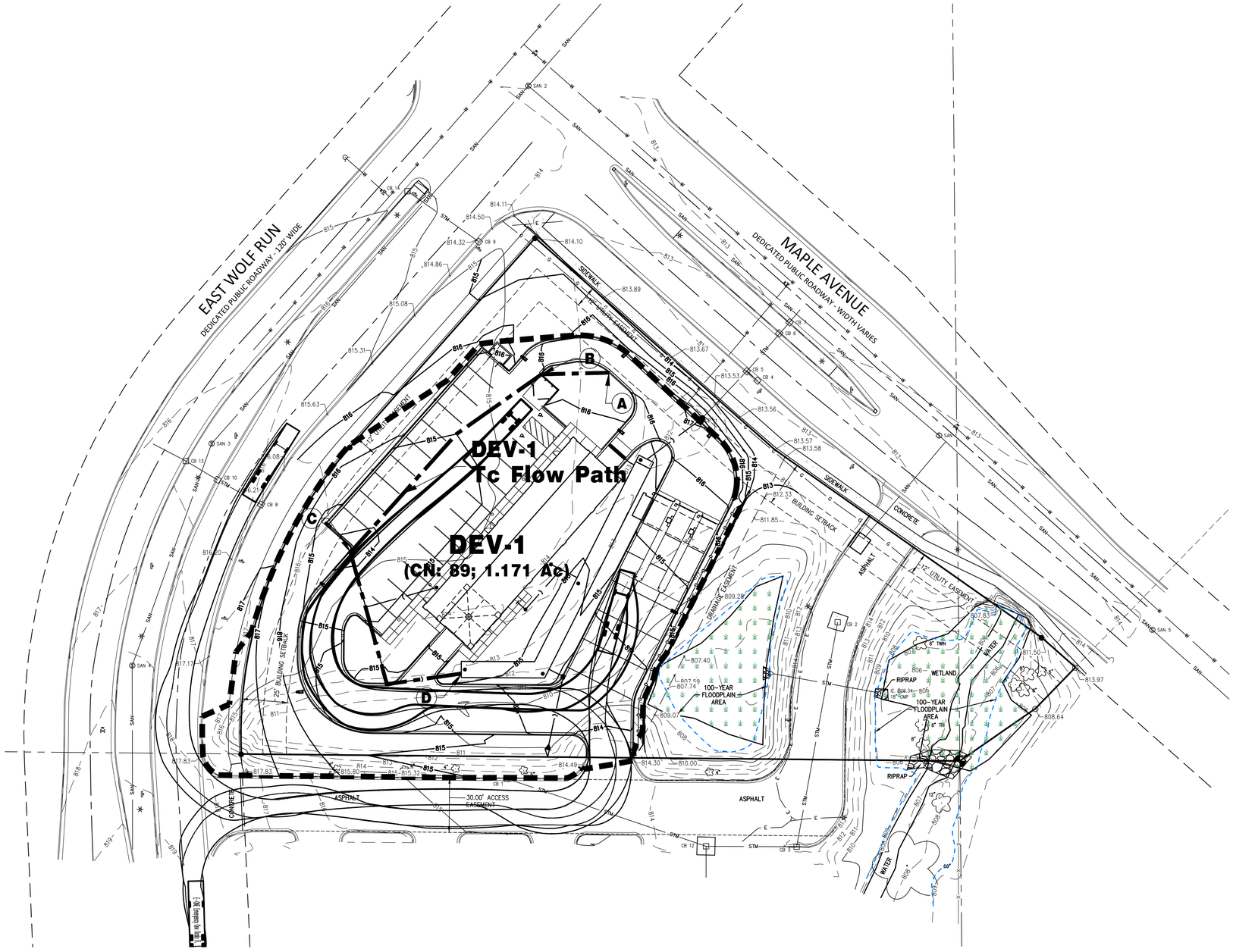
PROJ. MGR: JJC
DRAFTED: JWR
DATE: 4-3-2025
CHECKED: ALJ
DATE: 4-4-2025

2024.0060.01

SHEET
STM-1

Thursday, April 10, 2025 1:07:16 PM

APPENDIX
“E”



N

60' 30' 0' 30' 60'

SCALE 1" = 30'

LEGEND

- 692 — EXISTING CONTOURS
- —702— PROPOSED CONTOURS
- 604.88 EXISTING SPOT GRADES
- VERTICAL FACE, CURB & GUTTER
- REVERSE PAN, CURB & GUTTER
- POST-DEVELOPED DRAINAGE AREA
- POST-DEVELOPED TC FLOW PATH

DIGGERS HOTLINE
Call 811 or (800) 242-8511
www.DiggersHotline.com

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1458 Horizon Blvd. Suite 200, Racine, WI. 53406
Tele: (262)634-5588 Website: www.nmbsc.net

TSUNAMI EXPRESS CAR WASH
POST-DEVELOPED DRAINAGE EXHIBIT
FOR
TSUNAMI CAR WASH INTERMEDIATE HOLDCO, LLC
VILLAGE OF MUKWONAGO, COUNTY OF WAUKESHA, STATE OF WISCONSIN

NO.	REVISION	BY	DATE

PROJ. MGR:	JJC
DRAFTED:	JWR
DATE:	4-4-2025
CHECKED:	JAM
DATE:	4-9-2025

2024.0060.01

SHEET
DEV-1

Thursday, April 10, 2025 7:49:22 AM

PLAN COMMISSION STAFF REPORT

TO: Village of Mukwonago Plan Commission

FROM: Peter Gesch, P.E., Ruekert & Mielke, Inc.

REPORT DATE: May 6, 2025

MEETING DATE: May 13, 2025, 6:30 P.M.

SUBJECT: St. James Church – Concept Review

BASIC INFORMATION	
Project:	St. James Church – Concept Review
Applicant:	St. James Church
Consulting Engineer:	TRIO Engineering
Request:	Concept Review in advance of Comp Plan Amendment and Rezoning
Staff Recommendation:	No Action – Concept Review Only

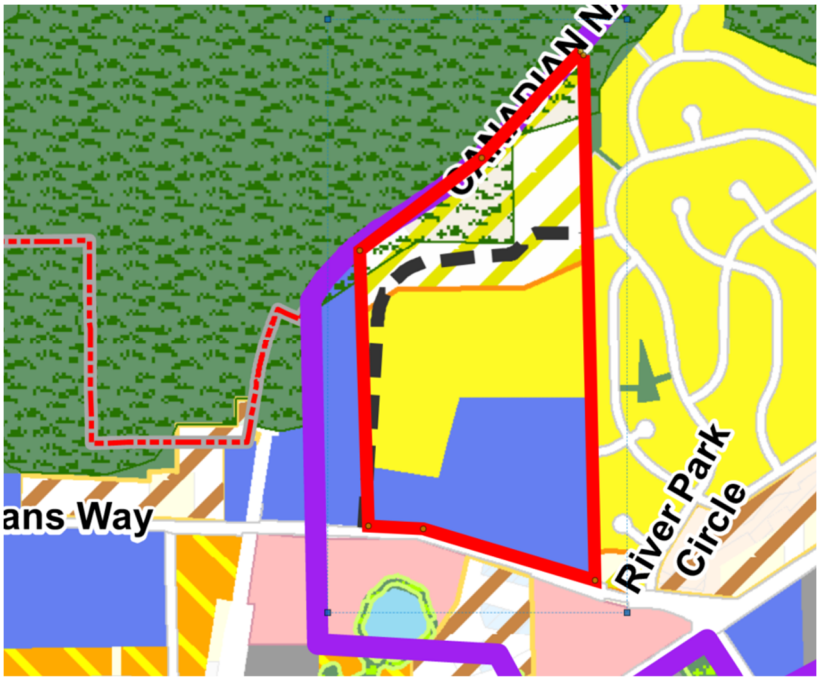
PARCEL DATA/CHARACTERISTICS	
Tax Key:	MUKV1964988002
Acreage:	90.80 Acres
Current Use:	Institutional
Proposed Use:	Institutional, Agriculture, Residential
Reason for Request:	Concept Review for Possible Rezoning & Improvements
Land Use Classification:	Residential
Zoning Classification:	R-2 – Single Family Historical Lot Residential

Project Summary & Overview

St. James Church, located at 830 E. Veterans is presenting a conceptual plan for proposes immediate and future improvements for ways that they will utilize their existing land. The existing parcel currently contains cultivated farm land and the existing church/school and athletic fields.

St. James Church is proposing to utilize 42-Acres for a regenerative farm/grazing meadow with livestock to be utilized as described in the attached proposal. The remainder of the land is proposed to be used as a columbarium/cemetery, possible school expansion, possible church expansion, possible daycare, athletic fields, and future residential.

The Village's Comprehensive Plan (Adopted in 2009 and Amended in 2016) calls for the St. James property to be a mix of Institutional, single family residential, and multi-family residential as shown in the image below:



The Village Zoning Code does not permit the keeping of livestock within corporate limits in any zoning district except the A-1 Agricultural zoning district. The A-1 district is historically meant for new land in the Village that does not yet have a plan for development, to maintain existing cultivated farmland. There are no provisions in the Zoning Code that prevent the rezoning of a parcel to A-1 after being zoned as one of the other allowed zoning districts.

A columbarium/cemetery is a conditional use in all business districts except B-2 and is a permitted use in the P-1 Public/Semi-Public zoning district. A Church is also a permitted use in the P-1 District, and a conditional use in the Residential and Business Districts.

In order for the Village Board to rezone portions of the existing property, a CSM would need to be prepared to split the land into separate parcels. This is needed because the Village Code does not have any provisions that allow for split zoning of a single parcel and Section 100-51(c) identifies that district boundaries shall be construed along corporate limits, U.S. Public Land Survey Lines, lot or property lines, centerlines of streets, highways, alleys, easements and railroad rights-of-way or such lines extended.

Additionally, in order for the Village Board to rezone portions of the existing property, the Village's Comprehensive Plan would need to be amended such that the rezoning is in conformance with the Municipality's Master Plan as required by State Statute 66.1001(3)(k).

St. James is presenting their concept plan for their property to receive feedback from Plan Commissioners on their proposal. Pending the outcome of the concept review, the proper applications,

public notices, public hearings, and reviews by Plan Commission and Village Board will need to be filed and take place before any proposed plan may proceed.

Staff Review

Engineering:	Future site improvements will warrant additional review.
Public Works	Future site improvements will warrant additional review.
Utilities	Future site improvements will warrant additional review.
Police	Future site improvements will warrant additional review.
Fire:	Future site improvements will warrant additional review.
Building Inspection	Future site improvements will warrant additional review.
Planning	See Project Description for notes on process and requirements.

Recommended Action

No Action – Concept Review Only

Attachments

1. Application
2. Grazing Meadow Proposal
3. Overall Zoning Plan
4. Master Site Plan

VILLAGE OF MUKWONAGO
SITE PLAN, ARCHITECTURAL, AND PLANNED UNIT DEVELOPMENT (PUD) APPLICATION
Application Fee: Below

Date Submitted: May 1st, 2025

FEES

(Please check one)

- ☐ Minor Site Plan (No Building): $160.00
- ☐ Major Site Plan; New Building/Addition (> 600 sq. ft.): $475.00 plus $.02 per sq. ft.
- ☐ Planned Unit Development (PUD) Review: $225.00 plus $50.00/unit
- ☒ Other (See Current Fee Schedule) 525.00 CONCEPT REVIEW

CONTACTS

Building Department
Contact: Supervisor of Inspections
Tim Rutenbeck
Phone: (262) 363-6419 Option 1
Fax: (262) 363-6425
Email: trutenbeck@villageofmukwonago.gov

Zoning and Planning
Contact: Village Planner
Peter Gesch
Phone: (262) 542-5733
Fax: (262) 363-6425
Email: pgesch@ruekert-mielke.com

GUIDELINES

The undersigned petition is to consider a request, as stated herein, for the specified parcel(s) of land and will be reviewed by the Plan Commission and Village Board of the Village of Mukwonago. The application packet must be filed with the Village Clerk **at least 30 days prior to the meeting** of the Planning Commission at which action is desired. The Plan Commission meets on the second Tuesday of each month at 6:30 p.m.

Materials listed below must be provided to the Village of Mukwonago in accordance with Village Municipal Code Chapter 100 Article IX. Section 100-601(f) and other pertinent sections of Village ordinances, and, as necessary, to permit review that is consistent with proper planning practice. The Village will strive to accommodate reasonable requests for informal preliminary staff review, however the Village shall not place any items on the agenda for Plan Commission consideration until such time as the application is complete in accordance with all requirements specified on this and other attached application forms.

Mail completed applications to:	Village Planner 440 River Crest Ct Mukwonago, WI 53149
Deliver to:	Village Clerk's Office 440 River Crest Ct
Email to:	trutenbeck@villageofmukwonago.gov

Complete, accurate and specific information must be entered. Please Print.

APPLICANT *(Full Legal Name)*

Name: St. James Congregation

Company:

Address: 830 E. Veterans Way **City:** Mukwonago **State:** WI **Zip:** 53149

Daytime Phone: 262-363-7615 **Fax:**

E-Mail: frjordan@stjmuk.org

APPLICANT IS REPRESENTED BY *(Full Legal Name)*

Name: _____

Company: _____

Address: _____ City: _____ State: ____ Zip: _____

Daytime Phone: _____ Fax: _____

E-Mail: _____

ARCHITECT

Name: _____

Company: _____

Address: _____ City: _____ State: ____ Zip: _____

Daytime Phone: _____ Fax: _____

E-Mail: _____

PROFESSIONAL ENGINEER

Name: Josh Pudelko

Company: Trio Engineering

Address: 4100 N. Calhoun Road Suite 100 City: Brookfield State: WI Zip: 53005

Daytime Phone: 262-790-1480 Fax: _____

E-Mail: jpudelko@trioeng.com

REGISTERED SURVEYOR

Name: _____

Company: _____

Address: _____ City: _____ State: ____ Zip: _____

Daytime Phone: _____ Fax: _____

E-Mail: _____

CONTRACTOR

Name: Sam Camut

Company: Mission Agriculture LLC

Address: 4380 67th Dr. #1035 City: Union Grove, WI State: W Zip: 53182

Daytime Phone: 704-609-9674 Fax: _____

E-Mail: skcamut@gmail.com

PROPERTY INFORMATION

Property Owner (s) *(if different from applicant)*: Fr. Jordan Berghouse

Address: 830 E. Veterans Way **City:** Mukwonago **State:** WI **Zip:** 53149

Daytime Phone: 262-363-7615 **Fax:**

E-Mail: frjordan@stjmuk.org

Present Zoning: R-2 **Tax Key No(s).:**

Location/Address:

Present Use: Crop Farming **Intended Use:** Regenerative Agri Education and Grazing

PROCEDURAL CHECKLIST FOR SITE PLAN/ARCHITECTURAL PLAN/PUD REVIEW AND APPROVAL

Submittals for review must include and be accompanied by the following:

Application:

- ☐ Completed application form including the procedural checklist.
- ☐ Application fee: See page 1.
- ☐ Agreement for Reimbursable Services (separate application).

Other Documents:

- ☐ One(1) complete set of Application and materials, in addition to the original, for Village of Mukwonago review.
- ☐ Project Summary: Please attach a statement detailing the reasons and background for this request including: details of proposal, services provided, wares sold, plans and hours of operation, number of employees, frequency of customer visits, frequency of deliveries to site, description of any interior/exterior modifications or additions to be made to property, any outside storage (dumpsters, trucks, materials...), number of parking stalls, screening/buffer type, any other information available. ***PLEASE EXPLAIN IN DETAIL.***
- ☐ **Electronic Submittals are required.** Email (or CD ROM) with all plans and submittal materials in Adobe PDF to trutenbeck@villageofmukwonago.gov .
- ☐ Any additional information as determined by Village staff.

- **Upon receipt of a complete submittal, staff review will be conducted within ten business days.**
- **All Site Plan, Architectural, and Planned Unit Development review requests require Plan Commission review and Village Board approval.**

CERTIFICATION

Applicant hereby certifies that:

1. All of the above statements and other information submitted as part of this application are true and correct to the best of his or her knowledge.
2. Affirms that no Village of Mukwonago elected or appointed official or employee has a proprietary interest in the above referenced property for which this applications being filed (except as stated below under "Exceptions").
3. None of the above referenced individuals has been promised or given any contract for consultation, planning or construction in relation to this project (except as stated below under "Exceptions").
4. Applicant has read and understands all information in this packet.

Applicant further understands the policies of the Village regarding change of zonings and property development. Conditions of the resolution regarding all approvals are strictly followed. Certificates of Occupancy are not given until all conditions of approval have been met

By the execution of this application, applicant hereby authorizes the Village of Mukwonago or its agents to enter upon the property during the hours of 7:00 am to 7:00 pm daily for the purpose of inspection. Applicant grants this authorization to enter even if this land has been posted against trespassing pursuant to Section 943.13 WI Stats.

(The applicant's signature must be from a Managing Member if the business is an LLC, or from the President or Vice President if the business is a corporation. A signed applicant's authorization letter may be provided in lieu of the applicant's signature below, and a signed property owner's authorization letter may be provided in lieu of the property owner's signature[s] below. If more than one, all of the owners of the property must sign this Application).

Signature - Property Owner

Rev. Jordan Bergthorse, Vice President
Name & Title (PRINT)

9/30/25
Date

Signature - Applicant

SAMUEL CAMUT, CONTRACTOR
Name & Title (PRINT)

9/30/25
Date

Signature - Property Owner

Name & Title (PRINT)

Date

Signature – Applicant's Representative

Name & Title (PRINT)

Date

FOR OFFICE USE ONLY	
Date Paid	**Receipt #**
Plan Commission Date(s)	**Village Board Date(s)**
Escrow Required? ☐ Yes ☐ No	**Escrow Amount**
Plan Commission Disposition	
Village Board Disposition	

St. James the Less Catholic Parish
830 E Veterans Way Mukwonago, WI 53149

Proposed Grazing Meadow

Date: 04/29/2025

Introduction:
The St. James the Less parish community requests to create a ~ **42- acre meadow** on its property for education and community supported agriculture. This project supports the mission and long-term vision of the Parish property. St. James the Less Academy will incorporate agricultural education into its daily curriculum.

The meadow and animals will be managed by the Contractor, Sam Camut, who is a U.S. Marine Corps Veteran, regenerative farmer, and member of the St. James community. This project entails an investment of $50,000 over a 2-year period by the Contractor in order to build fencing and improve the site's soil quality through *managed grazing* – a practice recognized for land conservation by Waukesha County, DATCP (State) and NRCS (Federal).

Goals:
1. Provide agricultural education for the students of St. James the Less Academy (K-7th) and for other schools and members of the Mukwonago community
2. Produce local food for Mukwonago area residents

Benefits to the Village of Mukwonago:
1. *Improve the Land* – aesthetically pleasing meadow that reduces runoff and captures rainwater, NO pesticides/herbicides, and improved soil health from animal impact
2. *Agricultural Education that benefits all residents of Mukwonago*.
3. *Source of locally produced meat for Mukwonago residents*.

Parcel Information:
- St. James the Less Parish is located at 830 E. Veteran Way within the Village of Mukwonago. The original ~100-acre parcel was purchased in 1950 by the church congregation. The parish church and school have been located on the current site for over 50 years. The elementary school re-opened this past academic year.
- The Village of Mukwonago recently acquired 7 acres on the western border of the parcel for future Department of Public Works expansion. Waukesha County created a storm water retention pond in the southwestern corner of the church property to accommodate the County Road NN reconstruction project.
- The Parish master plan includes the potential to add a school building, day care, church expansion, a cemetery & columbarium on its campus. The master plan anticipates the potential for single family residential development along its eastern border at some point in the future.

Current Use of Project Area:
Since the 1950s, the acreage under consideration in this project has been cultivated for crops. From October-June it is a barren-tilled dirt field.

Proposed land uses and timeline:

- *Summer 2025* – Plant diverse meadow of grass, clover and flowers.
  - The land will be covered in meadow during all seasons – improved rainwater conditions
- *Fall 2025 or Spring 2026* - Fence constructed
  - 5-strand high-tensile will be constructed around the proposed area.
- *Spring 2026*: ~20 Cattle will graze the meadow inside the fence.
  - Animals will be moved to fresh pasture each day.
  - Manure absorbed into the soil. ***NO*** large manure pits.
  - Cattle will only inhabit the wooded areas during inclement weather for the comfort of the animals (i.e heat, snow).
- *Annually:*
  - May-November: Cattle will graze the meadow, moving daily to different pasture areas.
  - December – April: Cattle will be fed hay bales from the meadow.
- ***NO*** buildings, barns, lighting, or parking lots will be constructed.
- No employees needed besides the Contractor. Operated during normal business hours.
- The proposed area will adhere to all required setbacks and is located on the North side of the property
- The general public will not have access to the site without permission from the Parish/Contractor.
- Since the grazing meadow area is far (~500') away from Veterans Way, the general public will likely not be aware of the grazing cattle or fence.

PROPOSED APPROVAL PROCESS and/or OPTIONS FOR VILLAGE CONSIDERATION:

- **Rezoning to A-1 agricultural district**
  - Option 1: Rezone the entire 90.17-acre St. James parish property to A-1.
  - Option 2: Rezone the 42-acre meadow to A-1 and have the remaining 48.17 acres stay R-2.
  - Rezoning is required for the proposed cattle in the grazing meadow.
    - *The current use of the site would justify rezoning to the A-1 district.*
  - Per Village zoning code par 100-71, the A-1 district is intended to provide for the continuation of general farming and related use in those areas…not yet committed to urban development. It is further the intent of this district to protect lands…from urban development until an orderly transition to urban-oriented districts is required.
  - The church and school would continue to operate on its site. If the entirety is rezoned to A-1, the church would need to seek rezoning should they ever decide to sell land for development.

- **Comprehensive Plan considerations**
  - Option 1: Do not change the Comprehensive Plan. It will continue to show "Government and Institutional" along Veterans Way, "Small Lot Single Family" for the back fields, and "Open Space" for the PEC area.
    - This would preserve the Village's current long-term plan for single-family residential in the project area.
    - The Village could consider the proposed A-1 rezoning as aligning with the current use of the land.
  - Option 2: Change the Comprehensive Plan for the 42-acre meadow area to "Agriculture/Large Lot Single Family" land use,
    - The project area was shown as this use on the 2000 Land Use map.

GRAZING MEADOW INFORMATION

The ~20 cattle will generally graze together, with the Contractor moving the daily pasture in a thoughtful way. The following photograph shows what a grazing meadow will look like. This photo was taken of another meadow that the Contractor currently manages:

The benefit of proper land management through this grazing meadow is apparent from these aerial images:

A meadow managed by the Contractor

The different shades of green show the daily pastures

- This comparison shows the difference between regenerative land management ("grazing meadow") and conventional farming.
- Both aerial images depict a similar sized area as the St. James grazing meadow.
- These images were obtained from Google Maps on 2/28/2025

A conventional farm

DESIGN • LAND SURVEYING
TRIO
CIVIL ENGINEERING

4100 N. CALHOUN ROAD,
BROOKFIELD, WI 53005
t: (262) 790-1480
e: info@trioeng.com

Primary Environmental Corridor (PEC)

Primary Environmental Corridor (PEC) Wooded Area

PRIMARY ENVIRONMENTAL CORRIDOR

CANADIAN NATIONAL RAILROAD

PROPOSED "GRAZING MEADOW"
A-1
AGRICULTURAL AREA
42.0 acres

Existing Treeline

Proposed Fence

350'

350'

50'

ST. JAMES STREET

RIVER PARK CIRCLE W

CHURCHWAY COURT

WESTERN TRAIL

SUNDOWN CT.

Village of Mukwonago

ST. JAMES CAMPUS
48.17 acres

ST. JAMES CATHOLIC CHURCH

E. VETERANS WAY
(C.T.H. "NN")

Waukesha County

0 150 300 600

OVERALL SITE PLAN

St. James Catholic Church (90.17 acres)

Village of Mukwonago, WI

Owned by:
St. James Congregation
830 E. Veterans Way
Mukwonago, WI 53149

Scale: 1" = 150' (22"X34")
Scale: 1" = 300' (11"X17")
DATE: 04/29/2025

x:\2025\25-14-1161 st james church - mukwonago\drawings\concepts\base site_2025-04-29.dwg

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4100 N. CALHOUN ROAD,
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Primary Environmental Corridor (PEC)

Primary Environmental Corridor (PEC)

PRIMARY ENVIRONMENTAL CORRIDOR

CANADIAN NATIONAL RAILROAD

PROPOSED COLUMBARIUM & CEMETERY 4.74 acres

A-1
GRAZING MEADOW
42.00 acres

R-2
FUTURE POSSIBLE RESIDENTIAL
18.41 acres

ST. JAMES STREET

RIVER PARK CIRCLE W

Natural Barrier by Village of Mukwonago per land sale

Proposed Gravel Drive (1,300')

Village of Mukwonago

POSSIBLE SCHOOL EXPANSION 5.8 acres

POSSIBLE DAYCARE

Athletic Field(s)

ST. JAMES CATHOLIC CHURCH

POSSIBLE CHURCH EXPANSION

FUTURE INFILTRATION AREA (with Native Prairie plantings)

CHURCHWAY COURT

WESTERN TRAIL

SUNDOWN CT.

E. VETERANS WAY

(C.T.H. "NN")

MASTER SITE PLAN

St. James Catholic Church (90.17 acres)

Village of Mukwonago, WI

Owned by:
St. James Congregation
830 E. Veterans Way
Mukwonago, WI 53149

0 150 300 600

Scale: 1" = 150' (22"X34")

Scale: 1" = 300' (11"X17")

DATE: 04/29/2025

x:\2025\25-14-1161 st james church - mukwonago\drawings\concepts\base site_2025-04-29.dwg

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VILLAGE OF MUKWONAGO

SITE PLAN, ARCHITECTURAL, AND PLANNED UNIT DEVELOPMENT (PUD) APPLICATION

Application Fee: Below

Date Submitted: 04/23/2025

FEES

(Please check one)

- ☑ Minor Site Plan (No Building): $160.00
- ☐ Major Site Plan; New Building/Addition (> 600 sq. ft.): $475.00 plus $.02 per sq. ft.
- ☐ Planned Unit Development (PUD) Review: $225.00 plus $50.00/unit
- ☐ Other (See Current Fee Schedule)_____

CONTACTS

Building Department
Contact: Supervisor of Inspections
Tim Rutenbeck
Phone: (262) 363-6419 Option 1
Fax: (262) 363-6425
Email: trutenbeck@villageofmukwonago.gov

Zoning and Planning
Contact: Village Planner
Peter Gesch
Phone: (262) 542-5733
Fax: (262) 363-6425
Email: pgesch@ruekert-mielke.com

GUIDELINES

The undersigned petition is to consider a request, as stated herein, for the specified parcel(s) of land and will be reviewed by the Plan Commission and Village Board of the Village of Mukwonago. The application packet must be filed with the Village Clerk **at least 30 days prior to the meeting** of the Planning Commission at which action is desired. The Plan Commission meets on the second Tuesday of each month at 6:30 p.m.

Materials listed below must be provided to the Village of Mukwonago in accordance with Village Municipal Code Chapter 100 Article IX. Section 100-601(f) and other pertinent sections of Village ordinances, and, as necessary, to permit review that is consistent with proper planning practice. The Village will strive to accommodate reasonable requests for informal preliminary staff review, however the Village shall not place any items on the agenda for Plan Commission consideration until such time as the application is complete in accordance with all requirements specified on this and other attached application forms.

Mail completed applications to:	Village Planner 440 River Crest Ct Mukwonago, WI 53149
Deliver to:	Village Clerk's Office 440 River Crest Ct
Email to:	trutenbeck@villageofmukwonago.gov

Complete, accurate and specific information must be entered. Please Print.

APPLICANT *(Full Legal Name)*

Name: Chris Schuldt

Company: Tsunami Car Wash

Address: 4800 Meadows Rd., Ste 300 **City:** Lake Oswego **State:** OR **Zip:** 97055

Daytime Phone: 503-830-9936 **Fax:**

E-Mail: Chris@tsunamiexpress.com

Docusign Envelope ID: 0588943D-8B7E-4189-B11D-DA51FC53E9E6

Docusign Envelope ID: CCD38969-649B-4359-9640-6C9322461447

APPLICANT IS REPRESENTED BY *(Full Legal Name)*

Name: Jerry Mortier

Company: The Redmond Company

Address: W228 N745 Westmound dr **City:** Waukesha **State:** WI **Zip:** 53186

Daytime Phone: 262-896-8753 **Fax:**

E-Mail: jmortier@theredmondco.com

ARCHITECT

Name: Same as Applicant Representative

Company:

Address: **City:** **State:** **Zip:**

Daytime Phone: **Fax:**

E-Mail:

PROFESSIONAL ENGINEER

Name: Al Jeske

Company: Neilsen Madsen & Barber

Address: 1458 Horizon blvd **City:** Racine **State:** WI **Zip:** 53406

Daytime Phone: 262-634-5588 **Fax:**

E-Mail: ajeske@nmbsc.net

REGISTERED SURVEYOR

Name: Mark Madsen

Company: Neilsen Madsen & Barber

Address: 1458 Horizon blvd **City:** Racine **State:** WI **Zip:** 53406

Daytime Phone: MMadsen@nmbsc.net **Fax:**

E-Mail:

CONTRACTOR

Name: Same as Applicant Representative

Company:

Address: **City:** **State:** **Zip:**

Daytime Phone: **Fax:**

E-Mail:

Docusign Envelope ID: 0588943D-8B7E-4189-B11D-DA51FC53E9E6

Docusign Envelope ID: CCD38969-649B-4359-9640-6C9322461447

PROPERTY INFORMATION

Property Owner (s) *(if different from applicant)*: DC Properties LLP

Address: 1243 Fox River Court **City:** Mukwonago **State:** WI **Zip:** 53149

Daytime Phone: _____ **Fax:** _____

E-Mail: _____

Present Zoning: _____ **Tax Key No(s).:** MUKV2013995001

Location/Address: 115 Wolf Run

Present Use: Vacant **Intended Use:** Car Wash

PROCEDURAL CHECKLIST FOR SITE PLAN/ARCHITECTURAL PLAN/PUD REVIEW AND APPROVAL

Submittals for review must include and be accompanied by the following:

Application:

- ❑ Completed application form including the procedural checklist.
- ❑ Application fee: See page 1.
- ❑ Agreement for Reimbursable Services (separate application).

Other Documents:

- ❑ One(1) complete set of Application and materials, in addition to the original, for Village of Mukwonago review.
- ❑ Project Summary: Please attach a statement detailing the reasons and background for this request including: details of proposal, services provided, wares sold, plans and hours of operation, number of employees, frequency of customer visits, frequency of deliveries to site, description of any interior/exterior modifications or additions to be made to property, any outside storage (dumpsters, trucks, materials…), number of parking stalls, screening/buffer type, any other information available. ***PLEASE EXPLAIN IN DETAIL.***
- ❑ **Electronic Submittals are required.** Email (or CD ROM) with all plans and submittal materials in Adobe PDF to trutenbeck@villageofmukwonago.gov .
- ❑ Any additional information as determined by Village staff.

- **Upon receipt of a complete submittal, staff review will be conducted within ten business days.**
- **All Site Plan, Architectural, and Planned Unit Development review requests require Plan Commission review and Village Board approval.**

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CERTIFICATION

Applicant hereby certifies that:

1. All of the above statements and other information submitted as part of this application are true and correct to the best of his or her knowledge.
2. Affirms that no Village of Mukwonago elected or appointed official or employee has a proprietary interest in the above referenced property for which this applications being filed (except as stated below under "Exceptions").
3. None of the above referenced individuals has been promised or given any contract for consultation, planning or construction in relation to this project (except as stated below under "Exceptions").
4. Applicant has read and understands all information in this packet.

Applicant further understands the policies of the Village regarding change of zonings and property development. Conditions of the resolution regarding all approvals are strictly followed. Certificates of Occupancy are not given until all conditions of approval have been met

By the execution of this application, applicant hereby authorizes the Village of Mukwonago or its agents to enter upon the property during the hours of 7:00 am to 7:00 pm daily for the purpose of inspection. Applicant grants this authorization to enter even if this land has been posted against trespassing pursuant to Section 943.13 WI Stats.

(The applicant's signature must be from a Managing Member if the business is an LLC, or from the President or Vice President if the business is a corporation. A signed applicant's authorization letter may be provided in lieu of the applicant's signature below, and a signed property owner's authorization letter may be provided in lieu of the property owner's signature[s] below. If more than one, all of the owners of the property must sign this Application).

Signed by:
Darwin Greenwald
Signature - Property Owner

Darwin Greenwald
Name & Title (PRINT)

4/23/2025
Date

Signature - Property Owner

Name & Title (PRINT)

Date

DocuSigned by:
Chris Schuldt
Signature - Applicant

Chris Schuldt
Name & Title (PRINT)

4/24/2025
Date

Signature - Applicant's Representative

Jerry Mortier - Vice President
Name & Title (PRINT)

04/23/2025
Date

FOR OFFICE USE ONLY	
Date Paid	**Receipt #**
Plan Commission Date(s)	**Village Board Date(s)**
Escrow Required? ☐ Yes ☐ No	**Escrow Amount**
Plan Commission Disposition	
Village Board Disposition	