



PLAN COMMISSION MEETING AGENDA

MONDAY, MARCH 25, 2024 AT 4:30 PM

COUNCIL CHAMBERS, SECOND FLOOR, MUNICIPAL BUILDING, 106 JONES STREET,
WATERTOWN, WI 53094

By Phone or GoToMeeting: Members of the media and the public may attend by calling:
1 877 309 2073 Access Code: 637-396-357 or <https://meet.goto.com/637396357>

All public participants' phones will be muted during the meeting except during the public comment period.

1. CALL TO ORDER

2. APPROVAL OF MINUTES

- A. Review and take action: Site Plan Review minutes dated March 11, 2024
- B. Review and take action: Plan Commission minutes dated March 11, 2024

3. BUSINESS

- A. Conduct public hearing: 1207 Boomer Street – Conditional Use Permit (CUP) request for a nonresidential accessory structures greater than 1,250 square feet of gross floor area under Sections § 550-56CC(2)
- B. Review and take action: 1207 Boomer Street – Conditional Use Permit (CUP) request for a nonresidential accessory structures greater than 1,250 square feet of gross floor area under Sections § 550-56CC(2)
- C. Conduct public hearing: 672 Johnson Street – Conditional Use Permit (CUP) request for a Group Development under Sections §550-68A(2) and §550-68A(4)
- D. Review and take action: 672 Johnson Street – Conditional Use Permit (CUP) request for a Group Development under Sections §550-68A(2) and §550-68A(4)
- E. Review public hearing comments and make recommendation to Council: Zoning Text Amendments: Amend Chapter 550 Zoning
- F. Presentation: GWCHF on updated Southwest Neighborhood Plans
- G. Convene into closed session per § 19.85(e) Deliberating or negotiating the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session (consideration of potential sale of public property located at 315 Mary St).
- H. Reconvene into open session
- I. Take possible action: Recommendation on possible zoning or land use to the Finance Committee.

4. ADJOURNMENT

Persons requiring other reasonable accommodations for any of the above meetings, may contact the office of the City Clerk at mdunneisen@watertownwi.gov, phone 920-262-4006

A quorum of any City of Watertown Council, Committee, Board, Commission, or other body, may be present at this meeting for observing and gathering of information only

SITE PLAN REVIEW COMMITTEE
March 11, 2024

Section 2, Item A.

The Site Plan Review Committee met on the above date at 1:30 P.M. in the Council Chambers on the second floor of City Hall. The following members were present: Mayor Emily McFarland; Brian Zirbes of Building, Safety & Zoning; Doug Zwieg of Building, Safety & Zoning; Andrew Beyer of Engineering; Maureen McBroom of Stormwater Utility; Stacy Winkelman of the Street Department; Mike Zitelman of the Water/Wastewater Department; Kristine Butteris of Park & Rec; Strategic Initiatives and Development Coordinator Mason Becker; and Jeff Meloy of the Police Department. Also in attendance were Nikki Zimmerman, Ritchie Piltz, Jon Lange of YMCA, Ken Krahe of MSI General, Brad Seubert of Harwood, Mark Natzke of Zimmerman Architectural Studios, and Nathan Peters of GWCHF.

1. Call to Order

The meeting was called to order by Chairperson Brian Zirbes.

2. Approval of Minutes

A. Review and take action: Site Plan Review Minutes Dated February 12, 2204

Motion was made by Maureen McBroom and seconded by Doug Zwieg to approve the February 12, 2024 Site Plan Review minutes as submitted. Unanimously approved.

3. Business

A. Review and take action: 672 Johnson Street – Group Development

Nate Peters of the Collective was present to explain the project. This project will include 2 units and a common place. There will be roughly 110,000 square feet total. A new YMCA with a new aquatic center will be part of this development. There will be multiple phases of this project.

The following was presented by staff:

| | |
|--------------------------|--|
| Building: | The building plans will have to be approved at state. |
| Engineering: | Requested clarification of Phase 1 and Phase 2. This was answered in conjunction with the stormwater clarification. |
| Stormwater: | The stormwater will be Phase 1 will be the replacement of the old high school facilities, Phase 2 will be the aquatic center. The stormwater facilities will be separated between these 2 phases. Approval will be contingent upon submission and approval of the erosion control and stormwater permit. |
| Streets and Solid Waste: | City does not provide garbage services for commercial properties. |
| Water/Wastewater: | No comments. |
| Police: | No comments. |
| Zoning: | No comments. |
| Parks: | No comments. |

Motion was made by Doug Zwieg and seconded by Emily McFarland to recommend approval of this proposal to Plan Commission contingent upon feedback from the Fire Department and contingent upon approval of building plans at state and submission and approval of the erosion control and stormwater permit.

Unanimously approved.

B. Review and take action: 1207 Boomer Street – proposed 1,086 sf building addition

Ken Krah from MSI General was present to explain the proposed project. This will be for an addition for additional blasting.

The following was presented by staff:

| | |
|--------------------------|---|
| Building: | Provide architectural, stamped drawings when submitting the building permit. |
| Engineering: | Coordinate with the airport during construction. |
| Stormwater: | If the project gets to be 3,000 square feet or more, an erosion control and stormwater permit will be required. |
| Police: | No comments. |
| Streets and Solid Waste: | No comments. |
| Water/Wastewater: | No comments. |

Zoning: No comments.

Parks: No comments.

Mayor: The Fire Department should provide their feedback.

Motion was made by Kristine Butteris and seconded by Maureen McBroom to recommend approval of this proposal to Plan Commission contingent upon feedback from the Fire Department.

Unanimously approved.

C. Review and take action: 916 Labaree Street – Architectural and location review of Riverside Park restrooms

Andrew Beyer came before in 2022 as a larger project. This has now been revised to have 8 stalls on the women's side, 4 stalls and 5 urinals, as well as a Mother's Room and a Family restroom.

This has been approved by the Finance Committee and the hope is to begin the project in April 2024 with an end in late summer.

The following was presented by staff:

Building: Be sure to contact the Inspection Department for inspections. A demolition permit will not need to be submitted for the current structure since it's an accessory structure.

Engineering: No comments.

Stormwater: There was an erosion control and stormwater permit that was submitted and covers all of the phases. Be sure to submit updated plans for each phase to Maureen McBroom. Post construction stormwater controls will not be a part of this project.

Police: No comments.

Mayor: No comments.

Streets and Solid Waste: No comments.

Water/Wastewater: No comments.

Zoning: No comments.

Parks: No comments.

Motion was made by Doug Zwieg and seconded by Mike Zitelman to recommend approval of this proposal to Plan Commission with inclusion of the above items.

Unanimously approved with Kristine Butteris abstaining.

4. Adjournment

Motion was made by Andrew Beyer and seconded by Kristine Butteris to adjourn. Unanimously approved.

Respectfully submitted,
Nikki Zimmerman
Recording Secretary

NOTE: These minutes are uncorrected, and any corrections made thereto will be noted in the proceedings at which these minutes are approved.

**PLAN COMMISSION
MINUTES
March 11, 2024**

Section 2, Item B.

The Plan Commission met on the above date in the Council Chambers.

The following members were present: Mayor McFarland, Alderman Blanke, Beyer, Krueger (virtual), Lampe, Talaga, Zirbes

Also in attendance: Mason Becker, Stephanie Bratz, Rich Piltz.

1. Call to order

2. Approval of Minutes

A. Plan Commission minutes February 26, 2024

Motion to approve Plan Commission minutes was made by Lampe and seconded by Blanke, passed on unanimous voice vote.

3. Business

A. Review and take action: W7880 County Road Q – Extraterritorial Certified Survey Map (CSM)

Motion to approve the CSM was made by Lampe and seconded by Talaga, passed on a unanimous voice vote.

B. Review and take action: 916 Labaree Street – Architectural and location review of Riverside Park restrooms
The Commission reviewed the revised plans for the Riverside Park restrooms.

Motion was made to proceed with the revised plans by Lampe and seconded by Blanke, passed on a unanimous voice vote.

C. Review and take action: Plan Commission confirmation of zoning code interpretation – Density Standards
Brian Zirbes presented the current interpretation of the zoning code in regard to density standards with specific detail on infill developments and Maximum Gross Density (MGD) and was requesting the commissions input on this interpretation.

Motion was made to confirm the interpretation of Density Standards as presented to the commission by Talaga and seconded by Lampe, passed on a unanimous voice vote.

D. Convene into closed session per Wis. Stat. Sec. 19.85(1)(e) to deliberate or negotiate the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session. (Town of Emmet Boundary Agreement)

Motion was made by Lampe and seconded by Beyer to convene to closed session, passed on a unanimous roll call vote.

E. Reconvene to open session

Motion was made by Talaga and seconded by Lampe to reconvene to open session, passed on a unanimous voice vote.

4. Adjournment

Motion to adjourn was made by Lampe and seconded by McFarland and passed on a unanimous voice vote.

Respectfully Submitted,

Alderman Brad Blanke

All materials discussed at this meeting can be found at:

<https://cms4files.revize.com/watertownwi/March%2011,%202024%20PC%20Packet.pdf>

NOTICE OF PUBLIC HEARING

Section 3, Item A.

In accordance with Wis. Stat. § 62.23(7)(de) and Section § 550-142E(1) of the City of Watertown Municipal Code, a notice is hereby given by the Plan Commission of the City of Watertown, Wisconsin, that a public hearing will be held on the 25th day of March, 2024 at 4:30 P.M., or shortly thereafter, in the Council Chambers of the Municipal Building, 106 Jones Street, Watertown, Wisconsin, or via GoToMeeting using the following instructions:

Members of the media and the public may attend by
calling (Toll Free): 1 877 309 2073 Access Code: 637-396-357
or <https://meet.goto.com/637396357>

All public participants' phones will be muted during the meeting except during the public comment period.

This public hearing will be to consider the request of TJ Reiss JR Properties Holding, LLC (applicant and owner) for a Conditional Use Permit for a nonresidential accessory structures greater than 1,250 square feet of gross floor area under Sections § 550-56CC(2). 1207 Boomer Street is zoned GI, General Industrial, is further described as follows:

A tract of land in the West half of the Southwest Quarter of Section 10, in Township 8 North, Range 15 East of the Fourth Principal Meridian, being a part of Outlot 58 in the former Seventh Ward, now the Eighth Ward, in the City of Watertown, Wisconsin, and more particularly described as follows: Commencing at the Northwest corner of said Southwest Quarter of Section 10 and running thence East along the North line of said Southwest Quarter a distance of 33 feet to the Easterly line of Twelfth Street; thence Southerly along said Easterly line at an angle of 89° 13' measured clockwise from the North line of said Southwest Quarter a distance of 33.35 feet to the point of beginning of the hereinafter described tract of land; thence continuing Southerly along a continuation of the last described course a distance of 305.00 feet to the South line of said Outlot 58; thence East along said South line and at an angle of 90° and 24' measured clockwise from the last described course a distance of 630.30 feet; thence Northerly at an angle of 90° and 33' measured clockwise from the last described course a distance of 305.00 feet; thence Westerly at an angle of 89° 27' measured clockwise from the last described course a distance of 635.36 feet to the point of beginning, containing 4.46 acres, more or less.

Also Lot 2 of Certified Survey Map Number 2578 Recorded in the Office of the Jefferson County Register of Deeds on March 11, 1992 in Volume 9 of the Certified Surveys on Pages 226 and 227. (Parcel Number 291-0815-1032-001).

All persons wishing to be heard are invited to be present. Written comments may be submitted to the Building, Safety, & Zoning Department at nzimmerman@watertownwi.gov.

CITY OF WATERTOWN
Brian Zirbes
Zoning & Floodplain Administrator

BZ/nmz

PUBLISH: March 11, 2024
and
March 18, 2024

(BLOCK AD)

Main Office
920-262-4060

Brian Zirbes
920-262-4041

Mark Hady
920-342-0986

Nikki Zimmerman
920-262-4045

Dell Zwig
920-262-4042

Doug Zwig
920-262-4062

Dennis Quest
920-262-4061

TO: Plan Commission
DATE: March 25th, 2024
SUBJECT: 1207 Boomer Street, Conditional Use Permit - CUP

A request by Ken Krahe, agent for Reiss Industries, for a Conditional Use Permit (CUP) for a Non-Residential Accessory Structure greater than 1,250 square feet. Parcel PIN(s): 291-0815-1032-001

SITE DETAILS:

Acres: 4.84
Current Zoning: General Industrial
Existing Land Use: Industrial
Future Land Use Designation: Mixed Industrial

BACKGROUND AND APPLICATION DESCRIPTION:

The applicant is seeking approval of a conditional use permit for a Non-Residential Accessory Structure greater than 1,250 square feet. The applicant will be constructing a 1,086 sq ft addition to an existing accessory building used for storing media blasting material. The total square footage of the existing building and the addition will be 3,387 square feet. The addition will match the masonry construction of the existing building.

STAFF EVALUATION:

Site Plan Review Committee:
See Minutes of March 11, 2024.

Land Use and Zoning:

1. Within the General Industrial (GI) Zoning District a 'Non-Residential Accessory Structure' is an Accessory land uses permitted by right *[per § 550-36C(1)(m)]*. A 'Non-Residential Accessory Structure' greater than 1,250 square feet of gross floor area shall require a conditional use permit *[per § 550-56CC(2)]*.

Applicable regulations for 'Non-Residential Accessory Structure' land uses include the following: *[per § 550-56CC]*

- Three total nonresidential accessory structures shall be permitted by right.
- Nonresidential accessory structures greater than 1,250 square feet of gross floor area shall require a conditional use permit.
- Shall not exceed the maximum building height of the zoning district.
- Setback shall not be less than the minimum accessory structure setback of the zoning district. Nonresidential accessory structures in the Central Business Zoning District may have a minimum setback of zero feet.

2. Applicable nonresidential use requirements in the General Industrial Zoning District including building and paving setbacks as well as building separation requirements have been met by the site plan *[per § 550-36G]*.

106 Jones Street • P.O. Box 477 • Watertown, WI 53094-0477 • Phone 920.262.4060

Opportunity Runs Through It

WISCONSIN STATUTES:

All Conditional Use Permits are subject to the requirements of Wisconsin Act 67.

Under 2017 Wisconsin Act 67: Section 16. 62.23 (7) (de) Conditional Use Permits.

1. 62.23 (7) (de)(1) In this paragraph:

- a. "Conditional use" means a use allowed under a conditional use permit, special exception, or other special zoning permission issued by a city, but does not include a variance.
- b. "Substantial evidence" means facts and information, other than merely personal preferences or speculation, directly pertaining to the requirements and conditions an applicant must meet to obtain a conditional use permit and that reasonable persons would accept in support of a conclusion.

2. 62.23 (7) (de)(2)

- a. If an applicant for a conditional use permit meets or agrees to meet all of the requirements and conditions specified in the city ordinance or those imposed by the city zoning board, the city shall grant the conditional use permit. Any condition imposed must be related to the purpose of the ordinance and be based on substantial evidence.
- b. The requirements and conditions described under subd. 2. a. must be reasonable and, to the extent practicable, measurable and may include conditions such as the permit's duration, transfer, or renewal. The applicant must demonstrate that the application and all requirements and conditions established by the city relating to the conditional use are or shall be satisfied, both of which must be supported by substantial evidence. The city's decision to approve or deny the permit must be supported by substantial evidence.

3. 62.23 (7) (de)(3)

Upon receipt of a conditional use permit application and following publication in the city of a class 2 notice under ch. 985, the city shall hold a public hearing on the application.

4. 62.23 (7) (de)(4)

Once granted, a conditional use permit shall remain in effect as long as the conditions upon which the permit was issued are followed, but the city may impose conditions such as the permit's duration, transfer, or renewal, in addition to any other conditions specified in the zoning ordinance or by the city zoning board.

5. 62.23 (7) (de)(5)

If a city denies a person's conditional use permit application, the person may appeal the decision to the circuit court under the procedures contained in par. (e) 10.

PLAN COMMISSION DECISIONS:

| Non-Residential Accessory Structure Land Use Criteria | Applicant Provided Substantial Evidence | | Opponent Provided Substantial Evidence | | PC Finds Standards Met | |
|--|---|----|--|-----------|------------------------|----|
| | Yes | No | Yes | No | Yes | No |
| 1. Three total nonresidential accessory structures shall be permitted by right. | <u>Yes</u> | No | Yes | <u>No</u> | <u>Yes</u> | No |
| 2. Nonresidential accessory structures greater than 1,250 square feet of gross floor area shall require a conditional use permit. | <u>Yes</u> | No | Yes | <u>No</u> | <u>Yes</u> | No |
| 3. Shall not exceed the maximum building height of the zoning district. | <u>Yes</u> | No | Yes | <u>No</u> | <u>Yes</u> | No |
| 4. Setback shall not be less than the minimum accessory structure setback of the zoning district. Nonresidential accessory structures in the Central Business Zoning District may have a minimum setback of zero feet. | <u>Yes</u> | No | Yes | <u>No</u> | <u>Yes</u> | No |

If Plan Commission answers "no" to any of the questions, above, the CU permit must be denied. Otherwise, proceed to the conditions of approval.

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Opportunity Runs Through It

PLAN COMMISSION OPTIONS:

The following are possible options for the Plan Commission:

1. Deny the Conditional Use Permit, based on failure to provide substantial evidence to meet one or more of the regulatory standards.
2. Approve the Conditional Use Permit without conditions, based on successfully providing substantial evidence of regulatory compliance.
3. Approve the Conditional Use Permit with conditions as identified by the Plan Commission.

ATTACHMENTS:

- Application materials



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

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ISSUE DATES:

| | |
|---------------------------|------------|
| Budget Set: | 02/20/2024 |
| Proposal: | xx/xx/xxxx |
| Contract: | xx/xx/xxxx |
| State Submittal / Permit: | xx/xx/xxxx |
| Record Drawings: | xx/xx/xxxx |

REVISIONS:

[illegible]

PROJECT ADDRESS:

PROJECT NAME
Consoildated Ind. Media Blast Add.
STREET ADDRESS
1207 Boomer Street
CITY/ STATE / ZIP
Watertown WI 53094

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

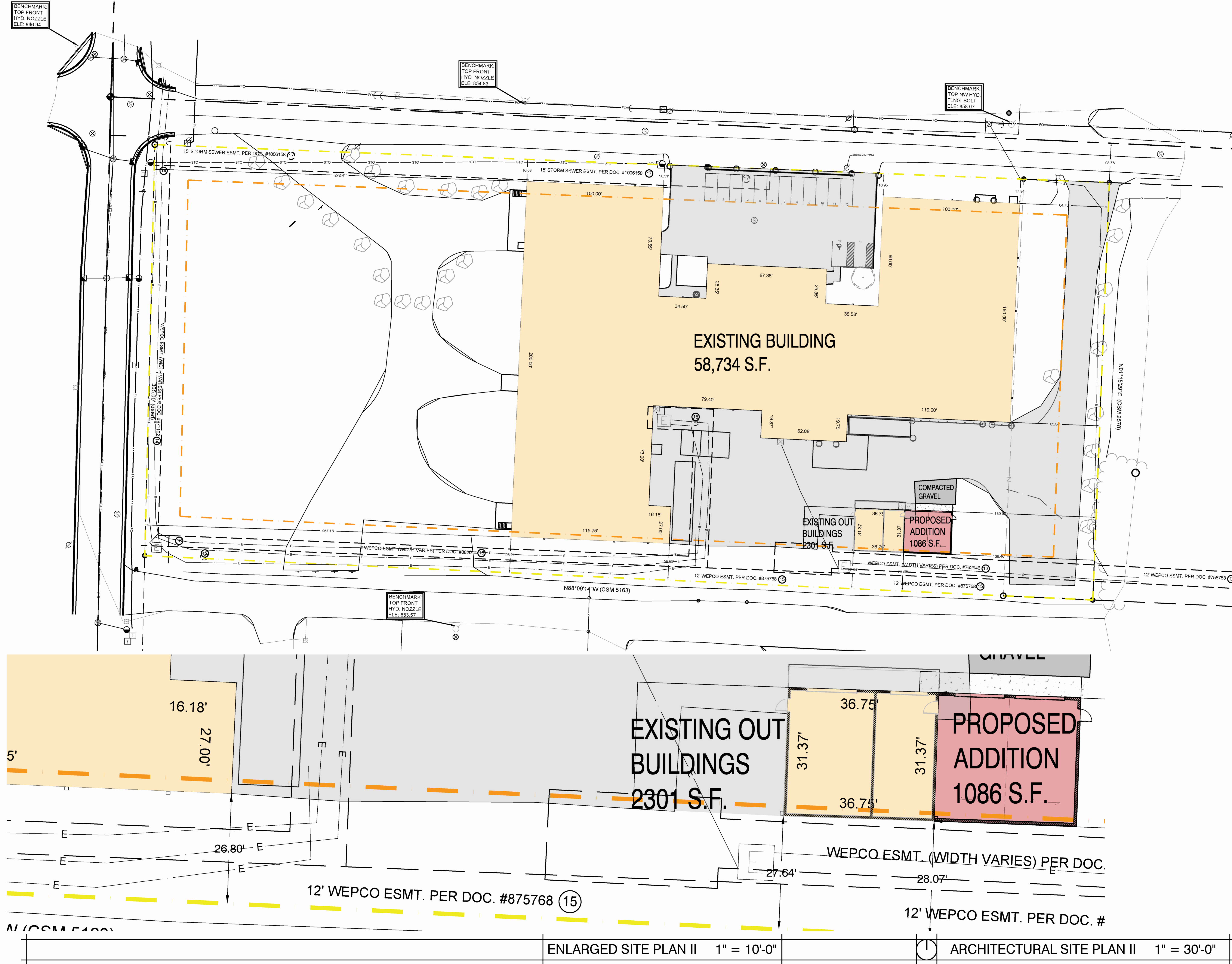
Architect: BJZ Engineer: Reviewed By:

Sheet Title:
**ARCHITECTURAL
SITE PLAN II**

Sheet Number:
C-102

Project Number:

P13592



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

P13592



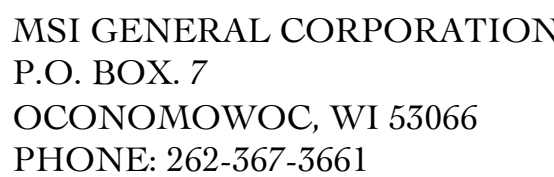
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REVISIONS

PROJECT NAME
CONSOLIDATED IND. MEDIA BLAST
ADDITION
STREET ADDRESS
1207 BOOMER STREET
CITY/ STATE / ZIP
WATERTOWN, WI 53094

P13592





| | |
|---------------------------|------------|
| ISSUE DATES: | |
| Budget Set: | 02/20/2021 |
| Proposal: | |
| Contract: | |
| State Submittal / Permit: | |
| Record Drawings: | |

PROJECT NAME
CONSOLIDATED IND. MEDIA BLAST
ADDITION
STREET ADDRESS
1207 BOOMER STREET
CITY/ STATE / ZIP
WATERTOWN, WI 53094

| | | |
|------------|-----------|--------------|
| Architect: | Engineer: | Reviewed By: |
| BJZ | AKH | --- |

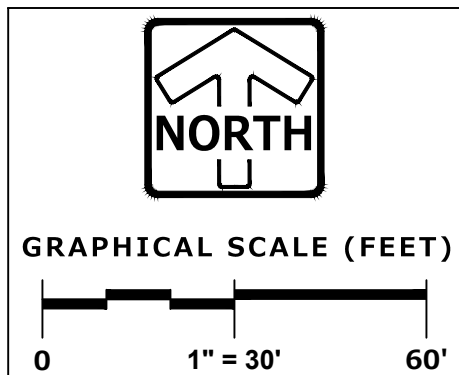
C-3
Project Number

P13592

CONSTRUCTION SEQUENCE

ALL WORK SHALL BE IN CONFORMANCE WITH THE DNR WPDES PERMIT AND CITY OF WATERTOWN EROSION CONTROL PERMIT. SITE SEQUENCING IS ANTICIPATED BASED ON THE BEST INFORMATION AVAILABLE PRIOR TO CONSTRUCTION. DEVIATIONS FROM THE SEQUENCE MAY OCCUR WHEN THERE IS GOOD REASON TO DO SO. ALL CHANGES SHALL BE DOCUMENTED IN WRITING AND REVIEWED/APPROVED BY THE OWNER AND/OR ENGINEER IF NECESSARY.

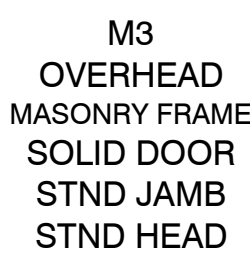
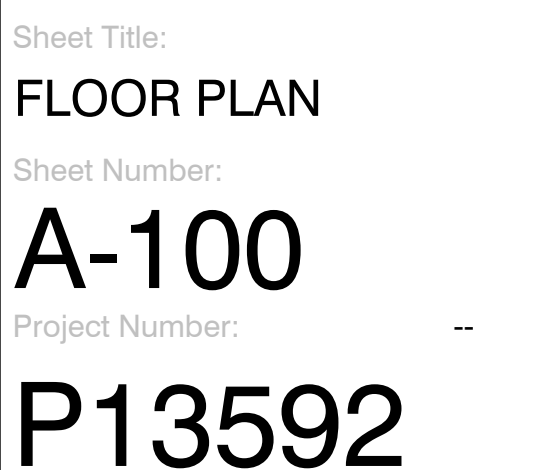
1. INSTALL PERIMETER SILT FENCE AND TEMPORARY CONSTRUCTION ENTRANCE.
2. REMOVAL OF ALL SITE FEATURES THAT INTERFERE WITH NEW DEVELOPMENT INCLUDING GRAVEL & LANDSCAPING.
3. CONDUCT ROUGH GRADING EFFORTS.
4. BEGIN BUILDING CONSTRUCTION.
5. COMPLETE FINAL GRADING, WALKS, ETC
6. EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.



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BROOKFIELD, WI 53186
(262) 754-8888

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FLOOR PLAN 1/4" = 1'-0"



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

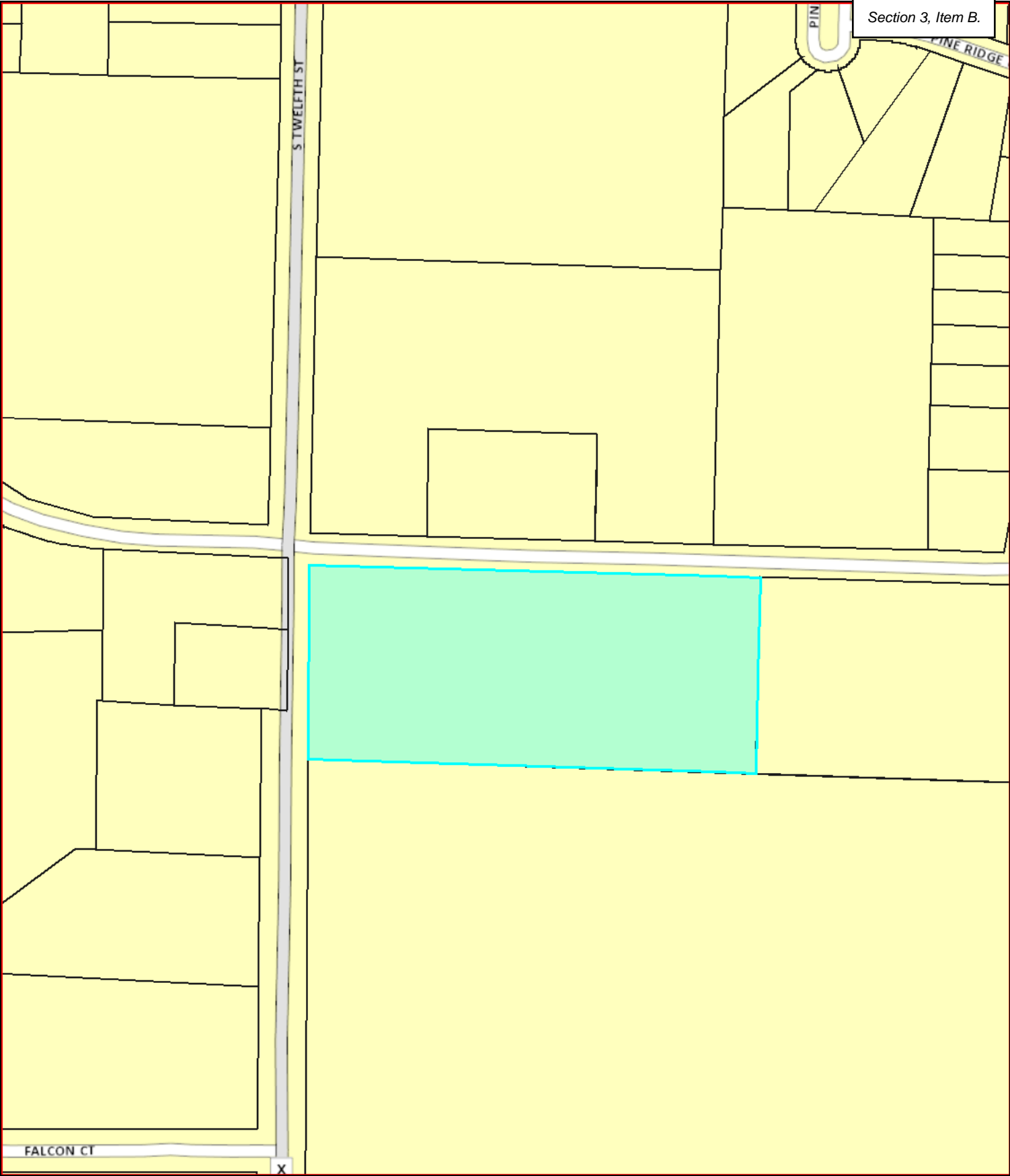
P13592

ARCHITECTS



ELEVATIONS 1/4" = 1'-0"

Section 3, Item B.



Parcels



Subject Parcel



City Limits



City of Watertown Geographic Information System

Scale: 1 inch = 200 feet
SCALE BAR = 1"

Printed on: March 18

DISCLAIMER: This map is not a substitute for an actual field survey or on-site investigation. The accuracy of this map is limited to the quality of the records from which it was assembled. Other inherent inaccuracies occur during the compilation process. City of Watertown makes no warranty whatsoever concerning this information.

NOTICE OF PUBLIC HEARING

Section 3, Item C.

In accordance with Wis. Stat. § 62.23(7)(de) and Section § 550-142E(1) of the City of Watertown Municipal Code, a notice is hereby given by the Plan Commission of the City of Watertown, Wisconsin, that a public hearing will be held on the 25th day of March, 2024 at 4:30 P.M., or shortly thereafter, in the Council Chambers of the Municipal Building, 106 Jones Street, Watertown, Wisconsin, or via GoToMeeting using the following instructions:

Members of the media and the public may attend by
calling (Toll Free): 1 877 309 2073 Access Code: 637-396-357
or <https://meet.goto.com/637396357>

All public participants' phones will be muted during the meeting except during the public comment period.

This public hearing will be to consider the request of Watertown Collective, LLC (applicant and owner) for a Conditional Use Permit for a Group Development under Sections §550-68A(2) and §550-68A(4). 672 Johnson Street is zoned PO, Planned Office and Institutional, is further described as follows:

Also including all that portion of Outlot 25 and Outlot 27 of the Twelfth Ward, formerly the Third Ward in the City of Watertown, located in the Southeast ¼ of Section 5, Township 8 North, Range 15 East, lying easterly of Johnson Street and Northwesterly of Fairview Drive, in the City of Watertown, Jefferson County, Wisconsin. Excepting therefrom Hoffman Drive. Further excepting therefrom Eicksteadt Lane. Further excepting Certified Survey Map No. 5747 recorded in Volume 32 of Certified Surveys on Page 242 as Document No. 1375269. Further excepting land lying Northeasterly of Hoffman Drive. (291-0815-0544-004).

All persons wishing to be heard are invited to be present. Written comments may be submitted to the Building, Safety, & Zoning Department at nzimmerman@watertownwi.gov.

CITY OF WATERTOWN
Brian Zirbes
Zoning & Floodplain Administrator

BZ/nmz

PUBLISH: March 11, 2024
and
March 18, 2024
(BLOCK AD)

Main Office
920-262-4060

Brian Zirbes
920-262-4041

Mark Hady
920-342-0986

Nikki Zimmerman
920-262-4045

Dell Zwig
920-262-4042

Doug Zwig
920-262-4062

Dennis Quest
920-262-4061

TO: Plan Commission
DATE: March 25th, 2024
SUBJECT: 672 Johnson Street, Conditional Use Permit - CUP

A request by Nathan Peters, agent for the Collective/YMAC Condominium Association, for a Conditional Use Permit (CUP) for a 'Group Development'. Parcel PIN(s): 291-0815-0544-004

SITE DETAILS:

Acres: 6.01

Current Zoning: Planned Office and Institutional (PO)

Existing Land Use: Office/YMCA

Future Land Use Designation: Institutional

BACKGROUND AND APPLICATION DESCRIPTION:

The applicant is seeking approval of a Conditional Use Permit (CUP) for a 'Group Development'. This development proposal meets the definition of a 'Group Development' due to it including two or more non-residential uses within a single structure and due to the proposed addition resulting in a total building size of over 5,000 gross square feet. The structure on this parcel along with the proposed addition will be shared by two primary uses, the Collective with its tenant spaces including the previously permitted group daycare, as well as the YMCA that will occupy the proposed addition. A Certified Survey Map (CSM) dedicating additional right-of-way width for Johnson Street and a Condominium Plat associated with this 'Group Development' will come before the Plan Commission at a future date.

STAFF EVALUATION:

Site Plan Review Committee:

See Minutes of March 11th, 2024

Land Use and Zoning:

1. Group Development: Any development proposal that meets the definition of a 'Group Development' per Section § 550-68 shall be subject to the 'Use Regulations' under § 550-69.
2. Under section § 550-68A(2) '*Any single structure on a single lot which contains five or more dwelling units or two or more nonresidential uses*' is defined as a 'Group Development'.
3. Under section § 550-68A(4) '*Any building additions to institutional, commercial and office buildings that bring the total building size to over 5,000 gross square feet*' is defined as a 'Group Development'. Common examples of group developments include six-unit apartment buildings, apartment complexes, condominium complexes, strip centers, shopping centers, and office centers *[per § 550-68B]*.
4. Under section § 550-69 there are no permitted by right uses and all uses shall be conditional uses. All land uses permitted under the applicable zoning district are allowed within the 'Group Development'.

Section § 550-69:

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Opportunity Runs Through It

A. Permitted by right: not applicable.

B. Conditional use regulations. Any land use that is permitted as a permitted by right land use or as a conditional land use within the applicable zoning district(s) is permitted to locate within a group development. The detailed land use regulations of this section that pertain to individual land uses shall also apply to individual land uses within a group development, as will all other applicable provisions of this chapter. Therefore, land uses permitted by right in the zoning district shall be permitted by right within an approved group development (unless otherwise restricted by the conditions of approval imposed during the conditional use approval for the group development as a whole), and land uses permitted as a conditional use in the zoning district shall be permitted within the group development only with conditional use approval for the specific use. In all cases, the following conditional use conditions shall be applied to the group development as a whole and to individual uses within the group development:

(1) All required off-street parking spaces and access drives shall be located entirely within the boundaries of the group development. **Meets Standard.**

(2) The development shall contain a sufficient number of waste bins to accommodate all trash and waste generated by the land uses in a convenient manner. **Meets Standard.**

(3) No group development shall take access to a local residential street. **Meets Standard.**

(4) All development located within a group development shall be located so as to comply with the intent of this chapter regarding setbacks of structures and buildings from lot lines. As such, individual principal and accessory structures and buildings located within group developments shall be situated within building envelopes that serve to demonstrate complete compliance with said intent. Said building envelopes shall be depicted on the site plan required for review of group developments. The use of this approach to designing group developments will also ensure the facilitation of subdividing group developments in the future (if such action is so desired). **Meets Standard.**

(5) The following standards shall apply to all group developments:

(a) Building exterior materials shall be of high quality on all sides of the structure, including glass, brick, decorative concrete block or stucco. Decorative architectural metal with concealed fasteners may be approved with special permission from the City. **Meets Standard.**

(b) Building exterior design shall be unified in design and materials throughout the structure and shall be complementary to other structures in the vicinity. However, the development shall employ varying building setbacks, height, roof, treatments, door and window openings, and other structural and decorative elements to reduce the apparent size and scale of the structure. A minimum of 20% of the combined facades of the structure shall employ actual facade protrusions or recesses. A minimum of 20% of the combined linear roof eave or parapet lines of the structure shall employ differences in height of eight feet or more. Roofs with particular slopes may be required by the City to complement existing buildings or otherwise establish a particular aesthetic objective. **Meets Standard.**

(c) Mechanical equipment, refuse containers and any permitted outdoor storage shall be fully concealed from on-site and off-site ground-level views with materials identical to those used on the building exterior. **Meets Standard.**

(d) Standard corporate trademark building designs, materials, architectural elements and colors all shall be acceptable, as determined by the City, only as subtly integrated into the more generic design of the building as a whole. Color schemes of all architectural elements shall be muted, neutral, nonreflective, and nonuse or non-tenant specific. **Meets Standard.**

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- (e) Public entryways shall be prominently indicated from the building's exterior design and shall be emphasized by on-site traffic flow patterns. All sides of the building that directly face or abut a public street shall have public entrances. **Meets Standard.**
- (f) Loading areas shall be completely screened from surrounding roads and residential, office and commercial properties. Said screening may be through internal loading areas, screening wall that will match the building exterior in materials and design, fully opaque landscaping at time of planting, or combinations of the above. Gates and fencing may be used for security purposes but not for screening and shall be of high aesthetic quality. **N/A.**
- (g) Vehicle access from public streets shall be designed to accommodate peak traffic volumes without disrupting traffic on public streets from inadequate throat length, access drive width or design or inadequate driveway location. The impact of traffic generated by the proposed development shall be demonstrated by a traffic impact analysis performed by the applicant's traffic engineer so as to not adversely impact off-site public roads, intersections and interchanges during the traffic peak associated with a full parking lot. Where the project shall adversely impact off-site traffic, the City may deny the application, may require a size reduction in the proposed development, or may require off-site improvements. **Meets Standard.**
- (h) Parking lot design shall employ interior landscaped islands with a minimum of 400 square feet at all parking islands, and in addition shall provide a minimum of one landscaped island of a minimum of 400 square feet in each parking aisle for every 20 cars in that aisle. Aisle-end islands shall count toward meeting this requirement. Landscaped medians shall be used to break large parking areas into distinct pods, with a maximum of 100 spaces in any one pod. **Needs to be waived, requesting removal of the median island requirements in certain locations.**
- (i) A minimum of one cart-return area of 200 square feet shall be provided for every parking area pod. There shall be no exterior cart-return or cart-storage areas located within 25 feet of the building in areas located between the building and a public street. **N/A.**
- (j) The applicant shall demonstrate full compliance with City standards for stormwater, utilities, erosion control and public safety. **Meets Standard.**
- (k) On-site landscaping shall be provided per the landscaping requirements of this chapter, except that building foundation landscaping and paved area landscaping shall be provided at 1.5 times the required landscape points for development in the zoning district. **Needs to be waived, proposal does not meet 1.5 times landscaping points requirement, meets all standard landscaping requirements.**
- (l) A conceptual plan for exterior signage shall be provided at time of detailed site plan or GDP that provides for coordinated and complementary exterior sign location, configurations and colors throughout the planned development. All freestanding signage within the development shall complement the on-building signage. Freestanding sign materials and design shall complement the building exterior and may not exceed the maximum height requirement of this chapter and the Building Code. **Meets Standard.**
- (m) The entire development shall provide for full and safe pedestrian and bicycle access within the development and shall provide appropriate connections to the existing and planned pedestrian and bicycle facilities in the community and in surrounding neighborhoods, including sidewalk connections to all building entrances from all public streets. The development shall provide secure bicycle parking and pedestrian furniture in appropriate quantities and location. A central pedestrian gathering area shall be provided. **Meets Standard.**

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- (n) Where such developments are proposed to provide a new location for a business already located within the community, a required condition of approval for the new development shall be a prohibition on conditions of sale, lease or use of the previously occupied building or site which provide limits beyond the range of applicable local, state or federal regulations. If such limits are required, the applicant may seek City approval to demolish the previously occupied structure and prepare the site for some future development. **Needs to be waived, the use of existing YMCA site to be determined at a later date.**
 - (o) The applicant shall provide adequate evidence that the proposed development and uses cannot be adequately sited within or on existing developed properties or buildings within the community. **Meets Standard.**
 - (p) The Plan Commission may waive any of the above standards by a three-fourths' vote of members in attendance, but only if supplemental design elements or improvements are incorporated into the project that compensate for the waiver of the particular standard. **Three standards will need to be waived to approve this proposal.**
4. Lighting requirements. Lighting of structures, parking areas, and traffic circulation areas will utilize existing lighting fixtures as well as new light pole and fixtures. All exterior lighting shall meet the requirements of § 550-110.

WISCONSIN STATUTES:
All Conditional Use Permits are subject to the requirements of Wisconsin Act 67.

Under 2017 Wisconsin Act 67: Section 16. 62.23 (7) (de) Conditional Use Permits.

1. 62.23 (7) (de)(1) In this paragraph:

- a. "Conditional use" means a use allowed under a conditional use permit, special exception, or other special zoning permission issued by a city, but does not include a variance.
- b. "Substantial evidence" means facts and information, other than merely personal preferences or speculation, directly pertaining to the requirements and conditions an applicant must meet to obtain a conditional use permit and that reasonable persons would accept in support of a conclusion.

2. 62.23 (7) (de)(2)

- a. If an applicant for a conditional use permit meets or agrees to meet all of the requirements and conditions specified in the city ordinance or those imposed by the city zoning board, the city shall grant the conditional use permit. Any condition imposed must be related to the purpose of the ordinance and be based on substantial evidence.
- b. The requirements and conditions described under subd. 2. a. must be reasonable and, to the extent practicable, measurable and may include conditions such as the permit's duration, transfer, or renewal. The applicant must demonstrate that the application and all requirements and conditions established by the city relating to the conditional use are or shall be satisfied, both of which must be supported by substantial evidence. The city's decision to approve or deny the permit must be supported by substantial evidence.

3. 62.23 (7) (de)(3)
Upon receipt of a conditional use permit application and following publication in the city of a class 2 notice under ch. 985, the city shall hold a public hearing on the application.

4. 62.23 (7) (de)(4)
Once granted, a conditional use permit shall remain in effect as long as the conditions upon which the permit was issued are followed, but the city may impose conditions such as the permit's duration, transfer, or renewal, in addition to any other conditions specified in the zoning ordinance or by the city zoning board.

62.23 (7) (de)(5)
If a city denies a person's conditional use permit application, the person may appeal the decision to the circuit court under the procedures contained in par. (e) 10.

PLAN COMMISSION DECISION:

| Group Development Criteria | Applicant Provided Substantial Evidence | | Opponent Provided Substantial Evidence | | PC Finds Standards Met | |
|-------------------------------|--|----|---|----|---------------------------|----|
| | Yes | No | Yes | No | Yes | No |
| Review § 550-69B | | | | | | |

If Plan Commission answers "no" to any of the questions, above, the CUP must be denied. Otherwise, proceed to the conditions of approval.

PLAN COMMISSION OPTIONS:

The following are possible options for the Plan Commission:

1. Deny the Conditional Use Permit, based on failure to provide substantial evidence to meet one or more of the regulatory standards.
2. Approve the Conditional Use Permit without conditions, based on successfully providing substantial evidence of regulatory compliance.
3. Approve the Conditional Use Permit with conditions as identified by the Plan Commission:
 - a. Waive Sections § 550-69B(5)(h), 550-69B(5)(k), & 550-69B(5)(n).
 - b. Obtain Plan Commission approval of a CSM that dedicates additional right-of-way width for Johnson St.
 - c. Obtain Plan Commission approval of a condominium plat for this development.

ATTACHMENTS:

- Application materials

Brief Business Overview:

Unit 1 (Collective) of the Collective/YMCA Condominium Association

Historical Use of 672 Johnson St was the corporate office center of Ablelight (formally Bethesda).

August 2022 – Greater Watertown Community Health Foundation purchased the 48,000 SF office building and renovated so it could better serve the community. With that focus, the building was repurposed for 3 different business functions.

- 1st Floor – Fitness (Entertainment), Assembly, Commercial Kitchen for Childcare
 - Floors main purpose is Entertainment and Fitness for the YMCA. The Parking needs are understood for conditional use permitting to need allocation of 1 stall per 3 Lockers. Their will be 50 lockers in the facility matching their max occupancy. That assigned 17 parking slots to this user
 - Number of Employees – 15 on this floor
- 2nd Floor – Full floor will be dedicated to licensed childcare with a total capacity to up to 220 children, of which 126 slots will be new supply to the community.
 - Floor's purpose is Childcare. Code requires 1 stall for every 5 children plus 1 stall per staff member. Head start program will be 80 children with the ability to flex up to 100 and YMCA will be 126. Head Start will have 12 staff members and YMCA will have 19 on site. The parking allocation for this floor ranges from 72-76 depending on Head Starts enrollment.
 - Number of Employees – 35 on this floor
- 3rd Floor – Remained office space, designed as a co-working environment to serve both non-profit support partners of the foundation as well as mission driven for profit businesses.
 - Code states 1 stall for every 300 SF of office space. In the building, 14,997 SF will be used for office purposes. This allocates 50 stalls for the office users.
 - Number of Employees – 60 on this floor
- In total parking needs are 139-143 stall. The current parking lot was designed for 158 stalls, of which 7 are assigned for handicap assessable needs.

Hours of operation:

- Normal operating hours 6am-9pm for main entrances of the building
 - After hour access with security access for those who work in the building.
- YMCA Ehlinger Center is a 24-hour model (staffed 7am-7pm M-F, 7-12 on Sat) – After normal business hours, they have a secured door on the east side of the building for members to enter and exist. After hours, YMCA members will only be able to access the YMCA Express space.
- Childcare normal operation is 6am – 6pm. There is a dedicated, secure, entrance created for this service specifically.

Unit 2 – New Watertown Are YMCA of the Collective/YMCA Condominium Association

June of 2024 – Glacial Community YMCA will be expanding on the site. The new building has a footprint of 55,347 SF on a two floor design and will be constructed over an estimated 12 month period. This building will share a wall with the existing building on the south end of the existing structure with a connection point through the existing fitness center (Ehlinger Center). See plans for details.

Hours of Operation with be as follows:

Monday – Thursday: 5am-9pm
Friday: 5am-8pm
Saturday: 6am-4pm
Sunday: 10am-2pm

Code Standards for Parking:

Parking needs for this use is understood to be 1 stall per 3 lockers. The newly constructed building will have 267 lockers which requires 89 parking stalls. In addition, 1 stall per employee. An estimated 18 staff members will be on site daily resulting in a need for 107 newly created stalls to meet code.

Adding the existing parking needs to the new demand, a minimum of 250 parking spaces will be required to handle day-to-day parking needs. The designed plan will have 330 parking spaces on the site, exceeding the minimum target by 80 stalls.

Possible Nuisances:

- 12-month new construction
- After Certificate of Occupancy – this facility is expected to be used frequently, which could pose a risk of nuisance behavior. To mitigate, the foundation and the YMCA have invested heavily in camera security systems to have full, time stamped, coverage of the building (exterior and interior), parking lots and playgrounds being developed and expanded to accommodate new uses.
- Collective and YMCA location will precede and actually catalyze future developments

§ 550-68. Definition.

- A. A "group development" is any development containing:
- (1) Two or more structures containing principal land uses on the same lot.
 - (2) Any single structure on a single lot which contains five or more dwelling units or two or more nonresidential uses.
 - (3) Any new institutional, commercial and office buildings in excess of 5,000 gross square feet and all multibuilding group developments in which the combined total of all structures on a site, regardless of diverse ownership, use or tenancy, exceeds 5,000 square feet.
 - (4) Any building additions to institutional, commercial and office buildings that bring the total building size to over 5,000 gross square feet. These regulations shall apply to the building addition, the older portions of the building constructed prior to the adoption of this article, and to the site.
 - (5) Any new development other than single-family residential in the overlay zoning districts described in §§ 550-149, 550-150 and 550-151.
- B. Common examples of group developments include six-unit apartment buildings, apartment complexes, condominium complexes, strip centers, shopping centers and office centers. (One-tenant office or commercial buildings containing less than 5,000 square feet of gross floor area, four-unit apartment buildings, and other land uses in which each nonresidential building contains only one tenant, or where the lot contains only one structure, or where each residential building contains four or fewer dwelling units, are not group developments even though such developments may contain parcels under common ownership.)
- C. A group development does not offer the ability to customize the regulations of this chapter as could be achieved using a planned development per § 550-38. A group development approval is not required for an approved specific implementation plan.

§ 550-69. Use regulations.

- A. Permitted by right: not applicable.
- B. Conditional use regulations. Any land use that is permitted as a permitted by right land use or as a conditional land use within the applicable zoning district(s) is permitted to locate within a group development. The detailed land use regulations of this section that pertain to individual land uses shall also apply to individual land uses within a group development, as will all other applicable provisions of this chapter. Therefore, land uses permitted by right in the zoning district shall be permitted by right within an approved group development (unless otherwise restricted by the conditions of approval imposed during the conditional use approval for the group development as a whole), and land uses permitted as a conditional use in the zoning district shall be permitted within the group development only with conditional use approval for the specific use. In all cases,

the following conditional use conditions shall be applied to the group development as a whole and to individual uses within the group development:

- (1) All required off-street parking spaces and access drives shall be located entirely within the boundaries of the group development.
- (2) The development shall contain a sufficient number of waste bins to accommodate all trash and waste generated by the land uses in a convenient manner.
- (3) No group development shall take access to a local residential street.
- (4) All development located within a group development shall be located so as to comply with the intent of this chapter regarding setbacks of structures and buildings from lot lines. As such, individual principal and accessory structures and buildings located within group developments shall be situated within building envelopes that serve to demonstrate complete compliance with said intent. Said building envelopes shall be depicted on the site plan required for review of group developments. The use of this approach to designing group developments will also ensure the facilitation of subdividing group developments in the future (if such action is so desired).
- (5) The following standards shall apply to all group developments:
 - (a) Building exterior materials shall be of high quality on all sides of the structure, including glass, brick, decorative concrete block or stucco. Decorative architectural metal with concealed fasteners may be approved with special permission from the City.
 - (b) Building exterior design shall be unified in design and materials throughout the structure and shall be complementary to other structures in the vicinity. However, the development shall employ varying building setbacks, height, roof, treatments, door and window openings, and other structural and decorative elements to reduce the apparent size and scale of the structure. A minimum of 20% of the combined facades of the structure shall employ actual facade protrusions or recesses. A minimum of 20% of the combined linear roof eave or parapet lines of the structure shall employ differences in height of eight feet or more. Roofs with particular slopes may be required by the City to complement existing buildings or otherwise establish a particular aesthetic objective.
 - (c) Mechanical equipment, refuse containers and any permitted outdoor storage shall be fully concealed from on-site and off-site ground-level views with materials identical to those used on the building exterior.
 - (d) Standard corporate trademark building designs, materials, architectural elements and colors all shall be acceptable, as determined by the City, only as subtly integrated into the more generic design of the building as a whole. Color schemes of all architectural elements shall be muted, neutral, nonreflective and nonuse- or nontenant-specific.

- (e) Public entryways shall be prominently indicated from the building's exterior design and shall be emphasized by on-site traffic flow patterns. All sides of the building that directly face or abut a public street shall have public entrances.
- (f) Loading areas shall be completely screened from surrounding roads and residential, office and commercial properties. Said screening may be through internal loading areas, screening wall that will match the building exterior in materials and design, fully opaque landscaping at time of planting, or combinations of the above. Gates and fencing may be used for security purposes but not for screening and shall be of high aesthetic quality.
- (g) Vehicle access from public streets shall be designed to accommodate peak traffic volumes without disrupting traffic on public streets from inadequate throat length, access drive width or design or inadequate driveway location. The impact of traffic generated by the proposed development shall be demonstrated by a traffic impact analysis performed by the applicant's traffic engineer so as to not adversely impact off-site public roads, intersections and interchanges during the traffic peak associated with a full parking lot. Where the project shall adversely impact off-site traffic, the City may deny the application, may require a size reduction in the proposed development, or may require off-site improvements.
- (h) Parking lot design shall employ interior landscaped islands with a minimum of 400 square feet at all parking islands, and in addition shall provide a minimum of one landscaped island of a minimum of 400 square feet in each parking aisle for every 20 cars in that aisle. Aisle-end islands shall count toward meeting this requirement. Landscaped medians shall be used to break large parking areas into distinct pods, with a maximum of 100 spaces in any one pod.
- (i) A minimum of one cart-return area of 200 square feet shall be provided for every parking area pod. There shall be no exterior cart-return or cart-storage areas located within 25 feet of the building in areas located between the building and a public street.
- (j) The applicant shall demonstrate full compliance with City standards for stormwater, utilities, erosion control and public safety.
- (k) On-site landscaping shall be provided per the landscaping requirements of this chapter, except that building foundation landscaping and paved area landscaping shall be provided at 1.5 times the required landscape points for development in the zoning district.
- (l) A conceptual plan for exterior signage shall be provided at time of detailed site plan or GDP that provides for coordinated and complementary exterior sign location, configurations and colors

§ 550-69

§ 550-70

throughout the planned development. All freestanding signage within the development shall complement the on-building signage. Freestanding sign materials and design shall complement the building exterior and may not exceed the maximum height requirement of this chapter and the Building Code.

- (m) The entire development shall provide for full and safe pedestrian and bicycle access within the development and shall provide appropriate connections to the existing and planned pedestrian and bicycle facilities in the community and in surrounding neighborhoods, including sidewalk connections to all building entrances from all public streets. The development shall provide secure bicycle parking and pedestrian furniture in appropriate quantities and location. A central pedestrian gathering area shall be provided.
- (n) Where such developments are proposed to provide a new location for a business already located within the community, a required condition of approval for the new development shall be a prohibition on conditions of sale, lease or use of the previously occupied building or site which provide limits beyond the range of applicable local, state or federal regulations. If such limits are required, the applicant may seek City approval to demolish the previously occupied structure and prepare the site for some future development.
- (o) The applicant shall provide adequate evidence that the proposed development and uses cannot be adequately sited within or on existing developed properties or buildings within the community.
- (p) The Plan Commission may waive any of the above standards by a three-fourths' vote of members in attendance, but only if supplemental design elements or improvements are incorporated into the project that compensate for the waiver of the particular standard.

§ 550-70. Discrimination against condominium forms of ownership.

It is not the intent of this article, nor any other provision of this chapter, to discriminate against condominium forms of ownership in any manner which conflicts with § 703.27, Wis. Stats. As such, the provisions of this article are designed to ensure that condominium forms of ownership are subject to the same standards and procedures of review and development as other physically identical forms of development.

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| (e) | Public entryways shall be prominently indicated from the building's exterior design and shall be emphasized by on-site traffic flow patterns. All sides of the building that directly face or abut a public street shall have public entrances |
| Response | Building will fully meet the standard |
| (f) | Loading areas shall be completely screened from surrounding roads and residential, office and commercial properties. Said screening may be through internal loading areas, screening wall that will match the building exterior in materials and design, fully opaque landscaping at time of planting, or combinations of the above. Gates and fencing may be used for security purposes but not for screening and shall be of high aesthetic quality. |
| Response | Waiver requested, does not apply to design nor programing of the building and it's users |
| (g) | Vehicle access from public streets shall be designed to accommodate peak traffic volumes without disrupting traffic on public streets from inadequate throat length, access drive width or design or inadequate driveway location. The impact of traffic generated by the proposed development shall be demonstrated by a traffic impact analysis performed by the applicant's traffic engineer so as to not adversely impact off-site public roads, intersections and interchanges during the traffic peak associated with a full parking lot. Where the project shall adversely impact off-site traffic, the City may deny the application, may require a size reduction in proposed development, or may require off-site improvements. |
| Response | Infrastructure in place should be adequate to compile with this requirement |
| (h) | Parking lot design shall employ interior landscape islands with a minimum of 400 square feet at all parking islands, and in addition shall provide a minimum of one landscaped island of a minimum of 400 square feet in each parking aisle for every 20 cars in that aisle. Aisle-end islands shall count toward meeting this requirement. Landscaped medians shall be used to break large parking areas into distinct pods, with a maximum of 100 spaces in any one pod. |
| Response | Requesting a waiver separating the 97 stalls from the 100 stalls on south end of the parking lot. Site is land locked and for program purposes to maximize parking, requesting to removed the requirement of the Median island only. |

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|----------|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | |
| (i) | A minimum of one cart-return area of 200 SF shall be provided by every parking area pod. There shall be no exterior cart return or cart-storage areas located within 25 feet of the building in areas located between the building and public street. | | | | | | | | | |
| Response | Waiver request, this does not apply. The operating businesses do not use carts | | | | | | | | | |
| (j) | The applicant shall demonstrate full compliance with City standards for stormwater, utilities, erosion control and public safety | | | | | | | | | |
| Response | Standard will be met. We have coordinated with City staff and designed this project to meet City and state standards with regards to Utilities, stormwater management and erosion control. In addition the project will be submitted to the Wisconsin DNR for their review and approval of erosion control and stormwater management. The project will meet all City and NFPA codes related to fire protection and public safety. Refer to the included plans and stormwater management report which demonstrates compliance. | | | | | | | | | |
| (k) | On-site landscaping shall be provided per the landscaping requirements of this chapter, except that building foundation landscaping and paved area landscaping shall be provided at 1.5 times the required landscape points for development in the zoning district | | | | | | | | | |
| Response | Will fully meet the set standard | | | | | | | | | |
| (l) | A conceptual plan for exterior signage shall be provided at time of detailed site plan for GDP that provides for coordinated and complementary exterior sign location, configurations and colors throughout the planned development. Freestanding sign materials and design shall complement the building exterior and may not exceed the maximum height requirement of this chapter and the Building Code. | | | | | | | | | |
| Response | Fully meets the standard | | | | | | | | | |
| (m) | The entire development shall provide for full and safe pedestrian and bicycle access within the development and shall provide appropriate connections to the existing and planned pedestrian and bicycle facilities in the community and in surrounding neighborhoods, including sidewalk connections to all building entrances from all public streets. The development shall provide secure bicycle parking and pedestrian furniture in appropriate quantities and location. a central pedestrian gather area shall be provided. | | | | | | | | | |
| Response | Site fully meets this standard as is | | | | | | | | | |

| | |
|----------|--|
| (n) | Where such developments are proposed to provide a new location for a business already located within the community, a required condition of approval for the new development shall be a prohibition on conditions of sale, lease or use of the previously occupied building or site which provide limits beyond the range of applicable local, state or federal regulations. If such limits are required, the applicant may seek City approval to demolish the previously occupied structure and prepare the site for some future development. |
| Response | Waiver, YMCA working with Board and community leaders to identify highest and best use of existing site |
| (o) | The applicant shall provide adequate evidence that the proposed development and uses cannot be adequately sited with or on existing develop site or building within the community |
| Response | All adequate sites were fully vetted with this site being the most beneficial |
| (p) | The Plan Commission may waive any of the above standards by a three-fourths vote of members in attendance, but only if supplemental design elements or improvements are incorporated into the project that compensate for the waiver of the particular standard. |



LEGEND:

| UTILITY | GRADING | SITE |
|--|---|---|
| EXISTING: 10" WATERMAIN 6" BURIED ELECTRIC OVERHEAD WIRE 4" GAS LINE 4" SANITARY SEWER 8" STORM SEWER UTILITY POLE LIGHT POLE SANITARY MANHOLE FIRE HYDRANT WATER VALVE STORM SEWER STRUCTURE | EXISTING: 150' MAJOR CONTOUR 150' MINOR CONTOUR EXIST 100.00' EXISTING SPOT ELEVATION PROPOSED: 150' MAJOR CONTOUR 150' MINOR CONTOUR 100.00' SPOT ELEVATION (FINISHED GRADE, TOP OF PAVEMENT, FLANGE OF CURB) 100.00' DOOR ELEVATION 100.00' GR 100.00' 100.50'IC 100.00'EP 100.50'1W 100.00'1W 12" FES 100.00'1W FLARED END SECTION (PIPE SIZE, INVERT ELEVATION) DRAINAGE FLOW DIRECTION EMERGENCY OVERFLOW ROUTE | EXISTING: EXISTING PARKING COUNT EXISTING SIGN EXISTING ADA PARKING SPACE PROPOSED: PARKING COUNT ADA PARKING SPACE SIGN TRUNCATED DOMES PAVEMENT MARKING DIRECTIONAL ARROWS |

GENERAL NOTES AND SPECIFICATIONS:


- THE EXISTING SITE INFORMATION ON THIS PLAN WAS TAKEN FROM A SITE SURVEY PROVIDED BY CAPITOL SURVEY ENTERPRISES. THE ENGINEER MAKES NO WARRANTY OR REPRESENTATION WITH REFERENCE TO THE ACCURACY AND COMPLETENESS OF THE EXISTING CONDITIONS INDICATED OR NOT INDICATED ON THE ENGINEERING PLANS PROVIDED. VERIFY THE LOCATION OF ALL EXISTING SITE CONDITIONS INCLUDING UNDERGROUND UTILITIES, UNDERGROUND UTILITY ELEVATIONS, BUILDING SETBACKS AND EXISTING BUILDING LOCATIONS. THE CONTRACTOR SHALL INFORM THE OWNER AND ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WITH WORK. QUESTIONS REGARDING THE EXISTING SURVEY SHALL BE DIRECTED TO THE PARTIES LISTED ABOVE.
- BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, EXCAVATE EACH EXISTING LATERAL TO BE CONNECTED TO VERIFYING ELEVATION, LOCATION AND SIZE. SHOULD THE EXISTING UTILITY NOT BE AS INDICATED ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR EVALUATION.
- ALL UTILITY CONSTRUCTION SHALL ADHERE TO THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (2003), AS WELL AS, THE MUNICIPAL CONSTRUCTION STANDARDS AND THE DEPT. OF SAFETY AND PROFESSIONAL SERVICES SEC. 382-387.
- ALL PERMITS MUST BE RECEIVED FROM THE MUNICIPALITY AND WDNR (IF REQUIRED) PRIOR TO THE START OF CONSTRUCTION. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE ALL APPLICABLE PERMITS ARE RECEIVED PRIOR TO STARTING CONSTRUCTION.
- NOTIFY THE PUBLIC WORKS INSPECTION DEPT. AT LEAST 48 HOURS BEFORE STARTING CONSTRUCTION.
- BACKFILL REQUIREMENTS AND ROADWAY/SIDEWALK RESTORATION SHALL ADHERE TO LOCAL STANDARDS (GRANULAR BACKFILL UNDER OR WITHIN 5' OF CURBS, SIDEWALK, OR PAVEMENT. SPOIL MAY BE USED ELSEWHERE. SLURRY BACKFILL WILL BE REQUIRED IN PUBLIC ROADWAYS.)
- ALL BUILDING UTILITIES SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
- ALL PROPOSED WATERMAIN SHALL BE PVC SDR 18, CLASS 150, AWWA C900 WITH ELASTOMERIC JOINTS (UNLESS OTHERWISE NOTED).
- PROPOSED SANITARY SEWER PIPE SHALL BE PVC, ASTM D-3034, SDR 35 WITH RUBBER GASKETED JOINTS CONFORMING TO ASTM D-3212 (UNLESS OTHERWISE NOTED).
- PROPOSED STORM SEWER SHALL BE PVC, ASTM D-3034, SDR 35 WITH RUBBER ELASTOMERIC JOINTS CONFORMING TO ASTM D-3212 (UNLESS OTHERWISE NOTED).
- A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NONMETALLIC UTILITIES MUST BE PROVIDED. PROVIDE TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED IN ACCORD WITH THE PROVISIONS SECTIONS 182.0715(2R) OF THE STATE STATUTES.
- UTILITY TRENCHES SHALL BE MECHANICALLY COMPACTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
- ALL MANHOLES, CATCH BASINS, INLETS, VALVES BOXES, ETC WITHIN THE PROJECT AREA SHALL BE RESET AND ADJUSTED TO MATCH FINISH GRADE.
- ALL EXCAVATED OR STRIPPED MATERIALS NOT BEING REPLACED IN UTILITY TRENCHES OR BEING USED FOR FILL SHALL BE REMOVED FROM THE SITE, UNLESS OTHERWISE DIRECTED BY THE OWNER.
- SEE ARCHITECTURAL PLANS FOR EXACT BUILDING & FOUNDATION DETAILS AND ORIENTATION.
- ALL ON-SITE CONCRETE CURB AND GUTTER TO BE 18" WIDE VERTICAL FACE, UNLESS OTHERWISE NOTED. REVERSE OR REGULAR STYLE CURB DENOTED ON PLANS.
- ALL CURB ELEVATIONS ARE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. SEE CURB DETAIL FOR TOP OF CURB ELEVATIONS.
- ALL CURB RADII ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL MATCH PROPOSED CONCRETE CURB AND GUTTER, SIDEWALK AND PAVEMENT TO EXISTING IN ELEVATION AND ALIGNMENT.
- REMOVAL OF CURB AND GUTTER, SIDEWALK AND PAVEMENT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE WISCONSIN D.O.T.
- ALL CONCRETE FOR CURB AND GUTTER, ROADWAY AND SIDEWALKS MUST CONFORM TO THE STANDARD SPECIFICATIONS FOR READY MIXED CONCRETE. MINIMUM 28 DAY COMPRESSIVE STRENGTH TEST MUST EQUAL 4000 PSI.
- PROTECT ALL PROPERTY CORNERS.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING UTILITIES OR SITE IMPROVEMENTS. DOCUMENT ALL EXISTING DAMAGE PRIOR TO START OF CONSTRUCTION AND NOTIFY CONSTRUCTION MANAGER OF ANY FINDINGS.
- PROJECT SAFETY ON-SITE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- AS-BUILTS ARE TO BE PROVIDED TO THE CLIENT TRACKING ANY CHANGES THAT OCCURRED DURING CONSTRUCTION.

CIVIL SHEET INDEX:

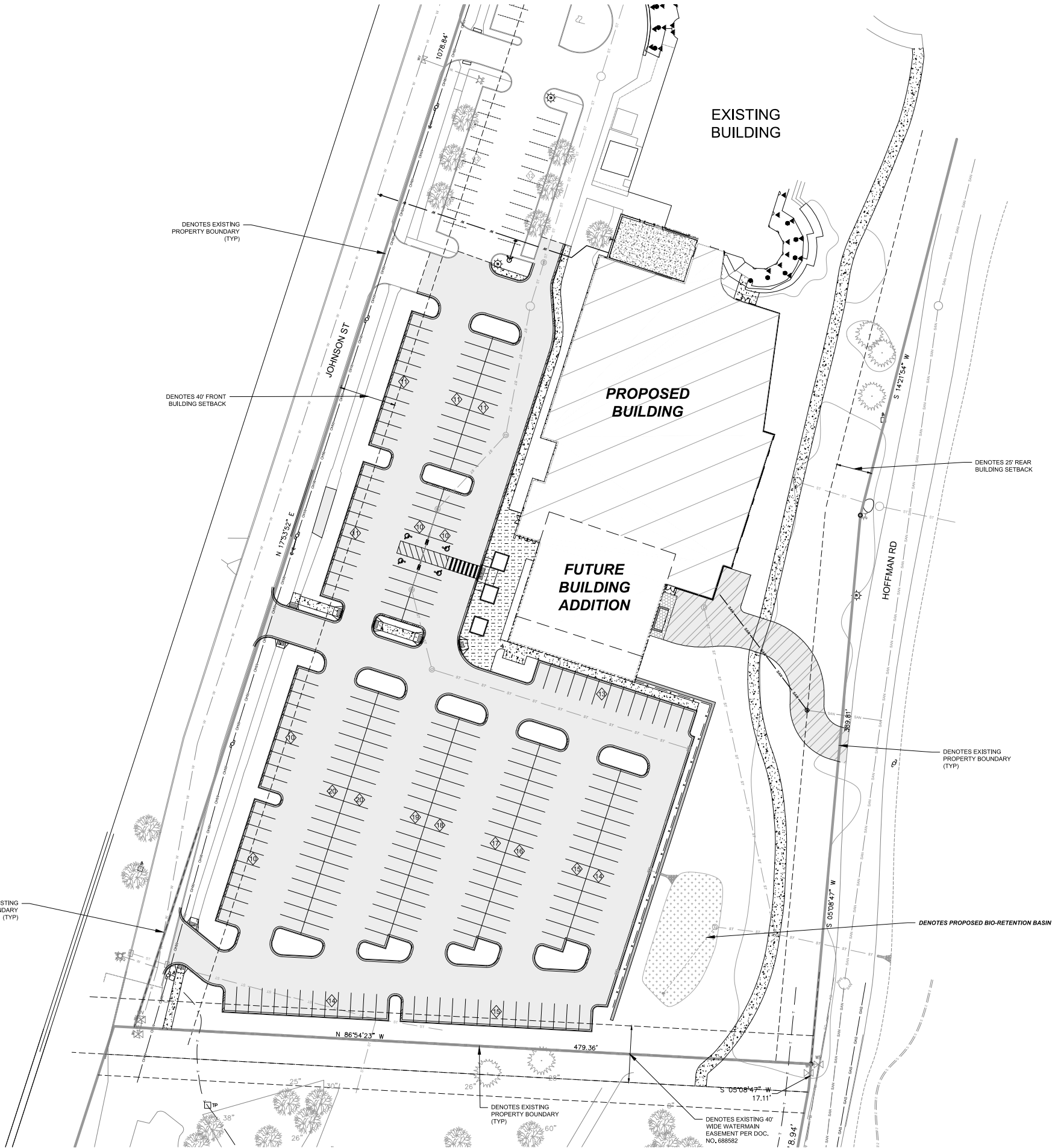
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|-------|------------------------------------|
| C1.10 | PROJECT LOCATION AND GENERAL NOTES |
| C1.11 | SITE PLAN - OVERALL |
| C1.12 | SITE PLAN - NORTH |
| C1.13 | SITE PLAN - SOUTH |
| C1.20 | GRADING PLAN - OVERALL |
| C1.21 | GRADING PLAN - NORTH |
| C1.22 | GRADING PLAN - SOUTH |
| C1.30 | EROSION CONTROL PLAN |
| C1.40 | DEMOLITION PLAN |
| C1.50 | EXISTING SURVEY |
| C5.00 | CONSTRUCTION DETAILS |

SITE PLAN REVIEW

Sheet:
PROJECT LOCATION & GENERAL NOTES

| | | |
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| Scale: | <div>North</div> <div></div> | |
| SCALE: 1" = 30' | | |
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| Date: | 02-23-2024 |
| Project No.: | 230049.00 |
| (Owner) Project No.: | |
| Sheet No.: | |



| SITE ZONING AND LOCATION TABLE | |
|--|---|
| LEGAL DESCRIPTION: | |
| OUT LOT 27/12TH WARD, EXCEPT THAT PART SOLD TO CITY OF WATERTOWN. EXEMPT. (HOUSE) | |
| PROPERTY LOCATION: | - 672 JOHNSON ST - WATERTOWN, WI 53094 |
| EXISTING ZONING: | - PLANNED OFFICE & INSTITUTIONAL (PO) |
| PROPOSED ZONING: | - PLANNED OFFICE & INSTITUTIONAL (PO) |
| BUILDING HEIGHT: | - 37'-10" |
| ZONING SETBACKS: | |
| BUILDING SETBACK: - 40' FEET (FRONT) - 25' FEET (REAR YARD) - 8' FEET (SIDE YARD) | |
| PARKING SETBACK: - 10' FEET (FRONT YARD) | |

| SITE CALCULATION TABLE | |
|---------------------------------|-----------|
| TOTAL SITE AREA | 8.90 AC |
| TOTAL DISTURBED AREA | 4.97 AC |
| FLOOR AREA | 52,578 SF |
| FLOOR AREA RATIO | 0.1356 |
| EXISTING IMPERVIOUS AREA | 3.24 AC |
| PROPOSED IMPERVIOUS AREA | 5.60 AC |
| IMPERVIOUS SURFACE RATIO | 0.629 |
| PROPOSED GREENSPACE | 3.30 AC |
| PROPOSED REGULAR PARKING SPACES | 323 |
| PROPOSED HANDICAP PARKING | 10 |
| PROPOSED TOTAL PARKING | 333 |
| REQUIRED PARKING | 266 |

SITE PLAN REVIEW

SITE PLAN - OVERALL

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IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

SITE PLAN REVIEW

Sheet:

SITE PLAN -
NORTH

Scale: 1" = 20'
North

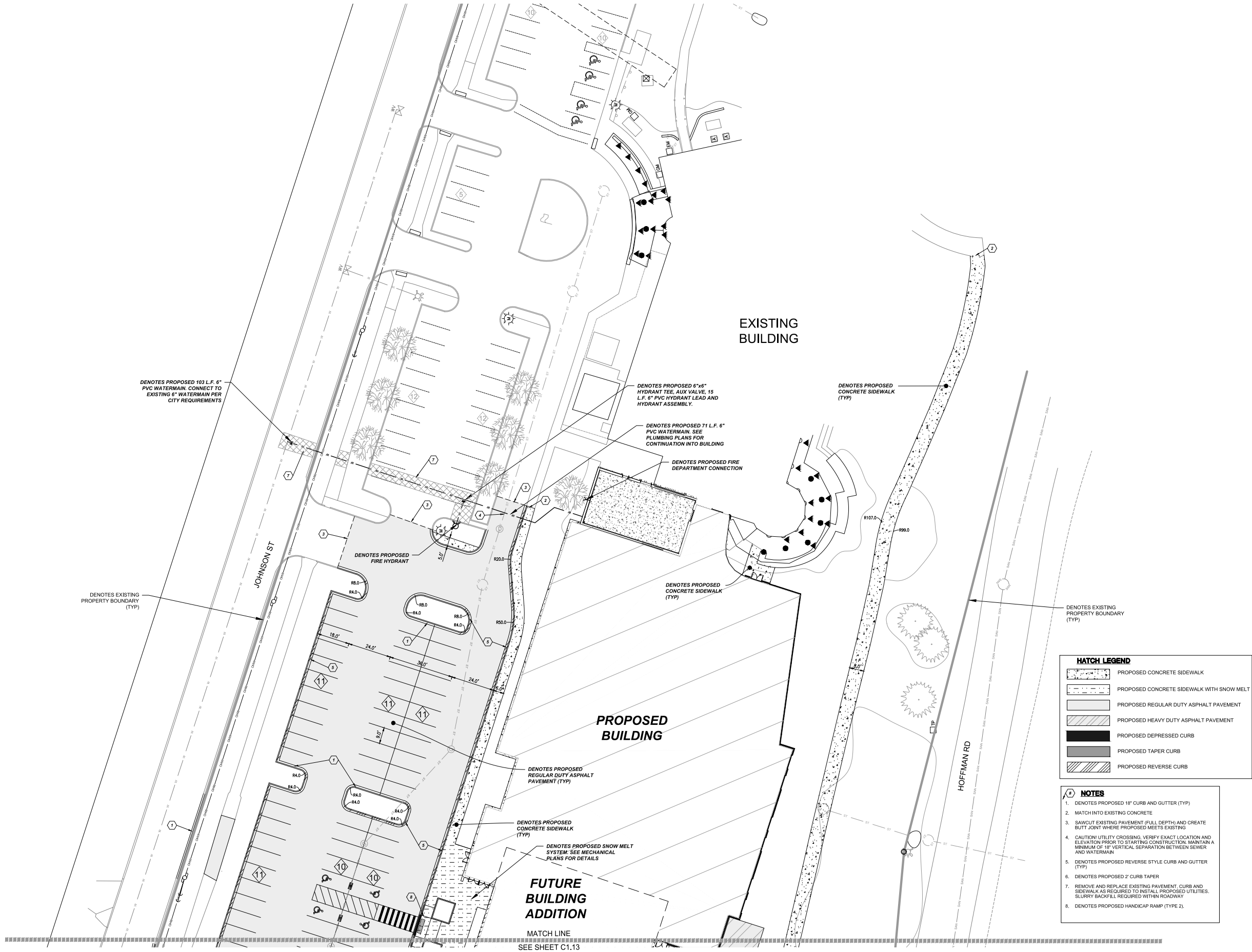
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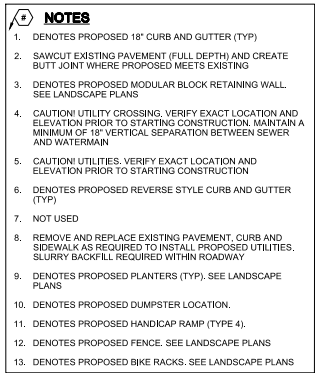


| HATCH LEGEND | |
|--------------|---|
| | PROPOSED CONCRETE SIDEWALK |
| | PROPOSED CONCRETE SIDEWALK WITH SNOW MELT |
| | PROPOSED REGULAR DUTY ASPHALT PAVEMENT |
| | PROPOSED HEAVY DUTY ASPHALT PAVEMENT |
| | PROPOSED DEPRESSED CURB |
| | PROPOSED TAPER CURB |
| | PROPOSED REVERSE CURB |









- NOTES**
- DENOTES PROPOSED 18" CURB AND GUTTER (TYP)
 - MATCH INTO EXISTING CONCRETE
 - SAWCUT EXISTING PAVEMENT (FULL DEPTH) AND CREATE BUTT JOINT WHERE PROPOSED MEETS EXISTING
 - CAUTION! UTILITY CROSSINGS. VERIFY EXACT LOCATION AND ELEVATION PRIOR TO STARTING CONSTRUCTION. MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN SEWER AND WATERMAIN
 - DENOTES PROPOSED REVERSE STYLE CURB AND GUTTER (TYP)
 - DENOTES PROPOSED 2" CURB TAPER
 - REMOVE AND REPLACE EXISTING PAVEMENT, CURB AND SIDEWALK AS REQUIRED TO INSTALL PROPOSED UTILITIES. SLURRY BACKFILL REQUIRED WITHIN ROADWAY
 - DENOTES PROPOSED HANDICAP RAMP (TYPE 2).



IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.



HATCH LEGEND

| | |
|---|---|
|  | PROPOSED CONCRETE SIDEWALK |
|  | PROPOSED CONCRETE SIDEWALK WITH SNOW MELT |
|  | PROPOSED REGULAR DUTY ASPHALT PAVEMENT |
|  | PROPOSED HEAVY DUTY ASPHALT PAVEMENT |
|  | PROPOSED CONCRETE PAVEMENT |
|  | PROPOSED DEPRESSED CURB |
|  | PROPOSED TAPER CURB |
|  | PROPOSED REVERSE CURB |



IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

Consultant:

 **HARWOOD**

255 N 2nd Street, Milwaukee, WI 53233 | 414-475-5500

Project:

Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:

**SITE PLAN -
SOUTH**

Scale: North
SCALE: 1" = 20'

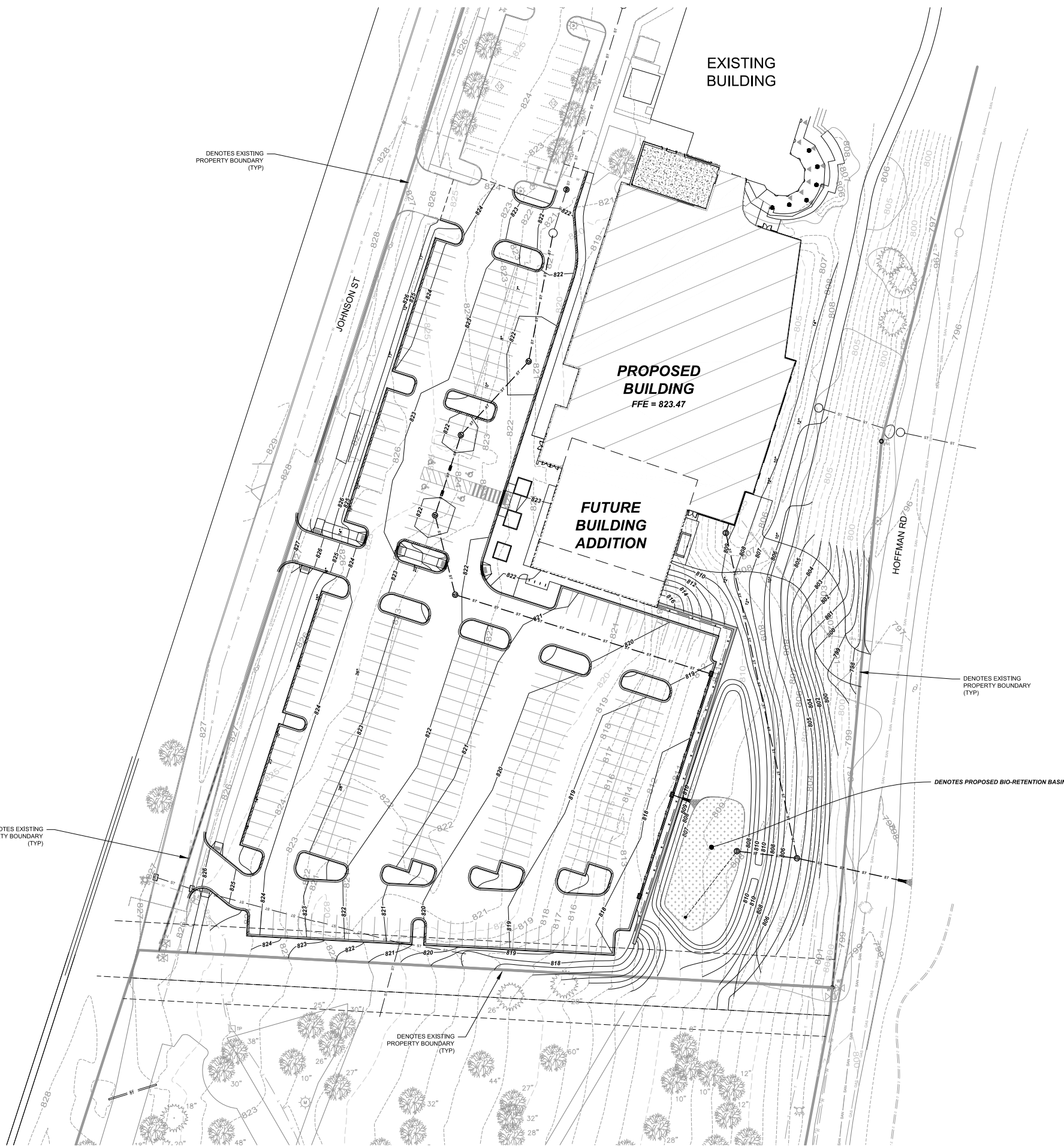
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IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

SITE PLAN REVIEW

Sheet:
GRADING PLAN
- OVERALL

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SITE PLAN REVIEW

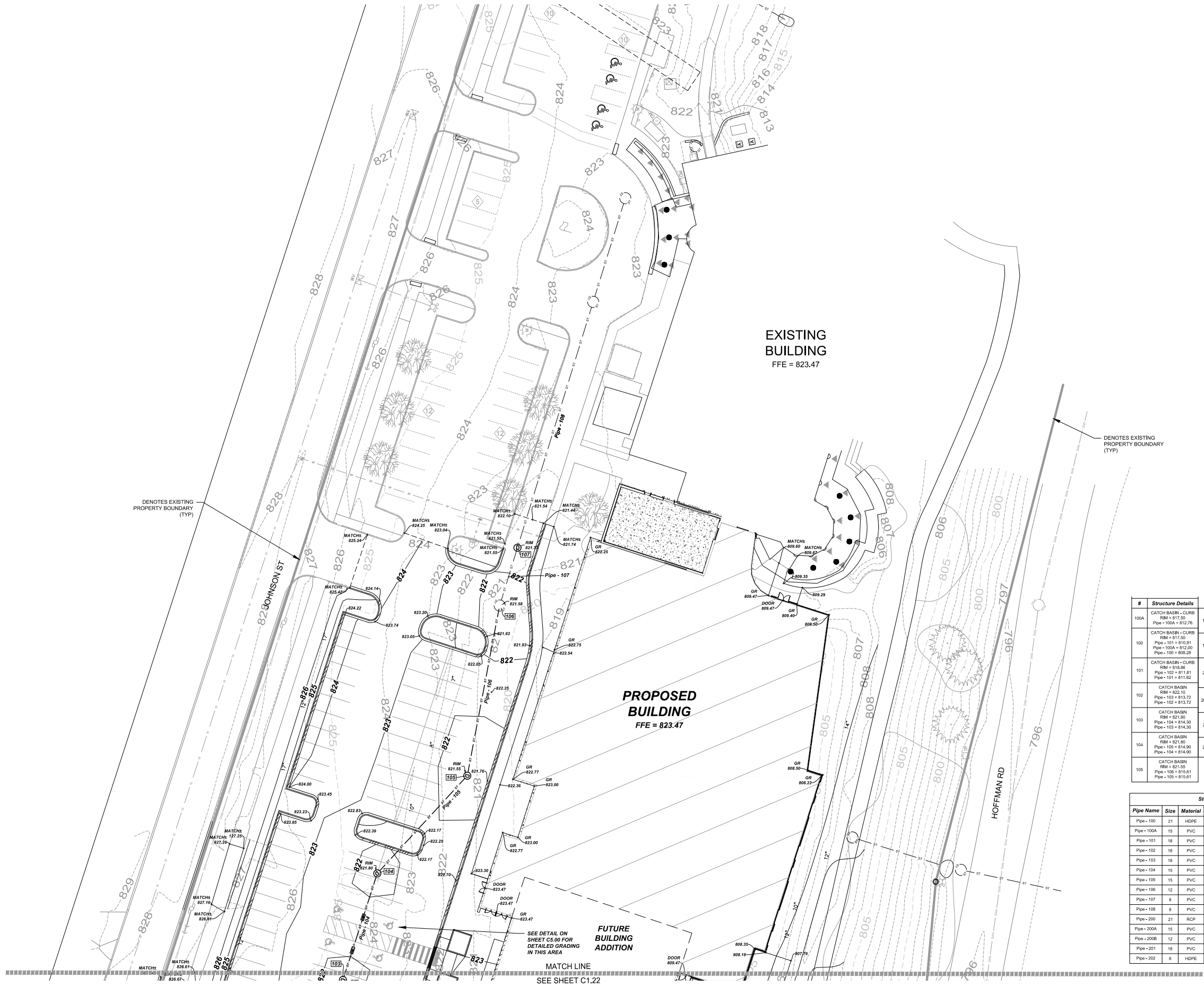
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GRADING PLAN
- NORTH

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IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

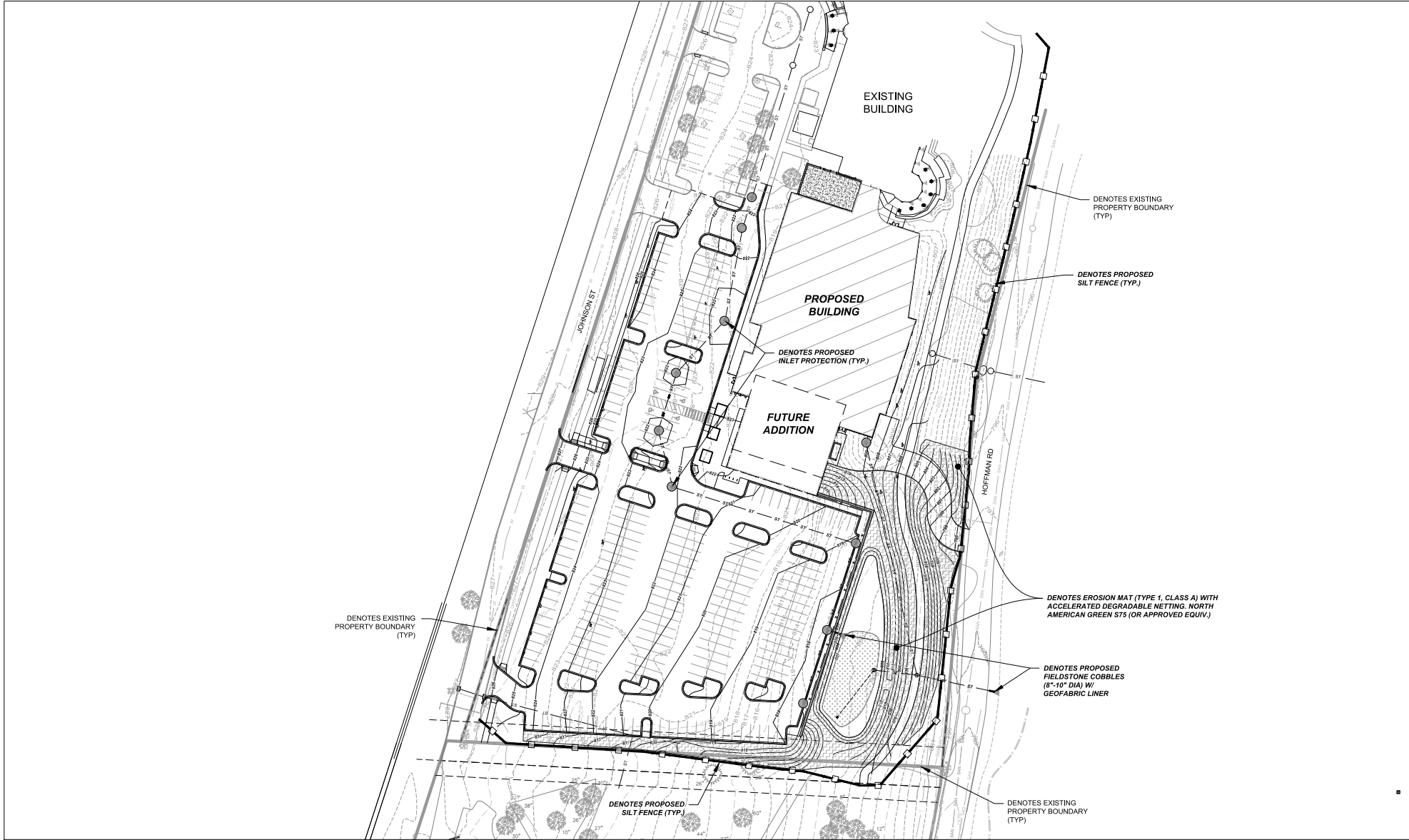


| # | Structure Details | |
|------|--|---|
| 100A | CATCH BASIN - CURB RIM = 817.50 Pipe - 100A = 812.76 | 106 EXISTING CATCH BASIN RIM = 821.58 Pipe - 107 = 816.54 Pipe - 108 = 816.54 |
| 100 | CATCH BASIN - CURB RIM = 817.50 Pipe - 101 = 810.91 Pipe - 100A = 812.00 Pipe - 100 = 808.28 | 107 CATCH BASIN RIM = 821.33 Pipe - 106 = 817.04 Pipe - 107 = 817.04 |
| 101 | CATCH BASIN - CURB RIM = 818.86 Pipe - 102 = 811.81 Pipe - 101 = 811.82 | 200 CATCH BASIN RIM = 805.36 Pipe - 201 = 802.63 Pipe - 200A = 802.63 Pipe - 200 = 801.00 |
| 102 | CATCH BASIN RIM = 822.10 Pipe - 103 = 813.72 Pipe - 102 = 813.72 | 200A CATCH BASIN RIM = 808.06 Pipe - 200B = 805.00 Pipe - 200A = 805.00 |
| 103 | CATCH BASIN RIM = 821.80 Pipe - 104 = 814.30 Pipe - 103 = 814.30 | 201 OUTLET CONTROL STRUCTURE RIM = 807.50 Pipe - 202 = 805.00 Pipe - 201 = 805.00 |
| 104 | CATCH BASIN RIM = 821.80 Pipe - 105 = 814.90 Pipe - 104 = 814.90 | 202 CLEANOUT RIM = 808.00 Pipe - 202 = 805.00 |
| 105 | CATCH BASIN RIM = 821.55 Pipe - 106 = 815.61 Pipe - 105 = 815.61 | |

| Storm Pipe Table | | | | | |
|------------------|------|----------|--------|-------|-----------------------|
| Pipe Name | Size | Material | Length | Slope | Description |
| Pipe - 100 | 21 | HDPE | 14 | 1.98% | |
| Pipe - 100A | 15 | PVC | 76 | 1.00% | |
| Pipe - 101 | 18 | PVC | 90 | 1.00% | |
| Pipe - 102 | 18 | PVC | 190 | 1.00% | |
| Pipe - 103 | 18 | PVC | 58 | 1.00% | |
| Pipe - 104 | 15 | PVC | 60 | 1.00% | |
| Pipe - 105 | 15 | PVC | 71 | 1.00% | |
| Pipe - 106 | 12 | PVC | 93 | 1.00% | |
| Pipe - 107 | 8 | PVC | 32 | 1.55% | EXISTING PIPE |
| Pipe - 108 | 8 | PVC | 138 | 1.55% | EXISTING PIPE |
| Pipe - 200 | 21 | RCP | 80 | 8.14% | |
| Pipe - 200A | 15 | PVC | 237 | 1.00% | |
| Pipe - 200B | 12 | PVC | 7 | 1.00% | PLUMBING PIPE |
| Pipe - 201 | 18 | PVC | 43 | 5.51% | |
| Pipe - 202 | 6 | HDPE | 60 | 0.00% | PERFORATED UNDERDRAIN |



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EROSION CONTROL NOTES AND PHASING

1. WDNR PERMIT COVERAGE IS REQUIRED. POST WDNR CERTIFICATE OF PERMIT COVERAGE ON SITE AND MAINTAIN UNTIL CONSTRUCTION ACTIVITIES HAVE CEASED. THE SITE IS STABILIZED, AND A NOTICE OF TERMINATION IS FILED WITH WDNR.
2. KEEP A COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
3. SUBMIT PLAN REVISIONS OR AMENDMENTS TO THE ENGINEER AT LEAST 5 DAYS PRIOR TO FIELD IMPLEMENTATION.
4. CONTRACTOR IS RESPONSIBLE FOR ROUTINE SITE INSPECTIONS AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER. KEEP INSPECTION REPORTS ON-SITE AND MAKE THEM AVAILABLE UPON REQUEST.
5. INSPECT AND MAINTAIN ALL INSTALLED EROSION CONTROL PRACTICES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
6. WHEN POSSIBLE: PRESERVE EXISTING VEGETATION (ESPECIALLY ADJACENT TO SURFACE WATERS), MINIMIZE LAND-DISTURBING CONSTRUCTION ACTIVITY ON SLOPES OF 20% OR MORE, MINIMIZE SOIL COMPACTION, AND PRESERVE TOPSOIL.
7. REFER TO THE WDNR STORMWATER CONSTRUCTION TECHNICAL STANDARDS AT http://dnr.wi.gov/topic/stormwater/standards/consr_tstandards.html
8. INSTALL PERIMETER EROSION CONTROLS, (IF REQUIRED), AND TRACKOUT CONTROL PRACTICES PRIOR TO ANY LAND-DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRUBBING. USE WDNR TECHNICAL STANDARD 1057 FOR TRACKOUT CONTROL AT CONSTRUCTION ENTRANCE(S) (IF REQUIRED).
9. INSTALL INLET PROTECTION PRIOR TO LAND-DISTURBING ACTIVITIES IN THE CONTRIBUTING DRAINAGE AREA AND/OR IMMEDIATELY UPON INLET INSTALLATION. COMPLY WITH WDNR TECHNICAL STANDARD STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES #1060.
10. STAGE CONSTRUCTION GRADING ACTIVITIES TO MINIMIZE THE CUMULATIVE EXPOSED AREA. CONDUCT TEMPORARY GRADING FOR EROSION CONTROL PER WDNR TECHNICAL STANDARD TEMPORARY GRADING PRACTICES FOR EROSION CONTROL #1067.
11. PERMITTING OF GROUNDWATER DEWATERING IS THE RESPONSIBILITY OF THE CONTRACTOR. GROUNDWATER DEWATERING IS SUBJECT TO A DNR WASTEWATER DISCHARGE PERMIT AND A DNR HIGH CAPACITY WELL APPROVAL IF CUMULATIVE PUMP CAPACITY IS 75 GPM OR MORE.
12. PROVIDE ANTI-SCOUR PROTECTION AND MAINTAIN NON-EROSIVE FLOW DURING DEWATERING. PERFORM DEWATERING OF ACCUMULATED SURFACE RUNOFF IN ACCORDANCE WITH WDNR TECHNICAL STANDARD DEWATERING #1061.
13. BIORETENTION BASIN WILL SERVE AS SEDIMENT BASIN DURING CONSTRUCTION. INSTALL OUTLET CONTROL STRUCTURE, STORM PIPING, AND GRADE BASIN AS SHOWN ON THE PLAN BUT DO NOT INSTALL ENGINEERED SOIL AND STONE STORAGE LAYER UNTIL SITE IS FINISH GRADED AND STABILIZED. CONTACT THE ENGINEER PRIOR TO INSTALLING STONE STORAGE LAYER AND ENGINEERED SOIL. UPON APPROVAL FROM THE ENGINEER, REMOVE ACCUMULATED SEDIMENT AND EXCAVATE BASIN TO BOTTOM ELEVATION SHOWN ON THE DETAILS. INSTALL UNDERDRAIN, STONE STORAGE LAYER, AND ENGINEERED SOIL. IMMEDIATELY PROTECT THE BIORETENTION BASIN AND VEGETATION FROM RUNOFF AND SEDIMENT DURING CONSTRUCTION. REFERENCE THE WDNR TECHNICAL STANDARD BIORETENTION FOR INFILTRATION #1064.
14. INSTALL AND MAINTAIN SILT FENCING PER WDNR TECHNICAL STANDARD SILT FENCE #1056. REMOVE SEDIMENT FROM BEHIND SILT FENCES AND SEDIMENT BARRIERS BEFORE SEDIMENT REACHES A DEPTH THAT IS EQUAL TO ONE-HALF OF THE FENCE AND/OR BARRIER HEIGHT.
15. REPAIR BREAKS AND GAPS IN SILT FENCES AND BARRIERS IMMEDIATELY. REPLACE DECOMPOSING STRAW BALES (TYPICAL BALE LIFE IS 3 MONTHS). LOCATE, INSTALL, AND MAINTAIN STRAW BALES PER WDNR TECHNICAL STANDARD DITCH CHECKS #1062.
16. INSTALL AND MAINTAIN FILTER SOCKS IN ACCORDANCE WITH WDNR TECHNICAL STANDARD INTERM MANUFACTURED PERIMETER CONTROL AND SLOPE INTERRUPTION PRODUCTS # 1071.
17. IMMEDIATELY STABILIZE STOCKPILES AND SURROUND STOCKPILES AS NEEDED WITH SILT FENCE OR OTHER PERIMETER CONTROL. IF STOCKPILES WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER.
18. IMMEDIATELY STABILIZE ALL DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR 14 DAYS OR LONGER.
 - BETWEEN SEPTEMBER 15 AND OCTOBER 15: STABILIZE WITH MULCH, TACKIFIER, AND A PERENNIAL SEED MIXED WITH WINTER WHEAT, ANNUAL OATS, OR ANNUAL RYE, AS APPROPRIATE FOR REGION AND SOIL TYPE.
 - OCTOBER 15 THROUGH COLD WEATHER: STABILIZE WITH A POLYMER AND DORMANT SEED MIX, AS APPROPRIATE FOR REGION AND SOIL TYPE.
19. STABILIZE AREAS OF FINAL GRADING WITHIN 7 DAYS OF REACHING FINAL GRADE.
20. SWEEPCLEAN UP ALL SEDIMENT/TRASH THAT MOVES OFF-SITE DUE TO CONSTRUCTION ACTIVITY OR STORM EVENTS BEFORE THE END OF THE SAME WORKDAY OR AS DIRECTED BY THE WDNRMUNICIPALITY. SEPARATE SWEEP MATERIALS (SOILS AND TRASH) AND DISPOSE OF APPROPRIATELY.
21. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST PER WDNR TECHNICAL STANDARD DUST CONTROL ON CONSTRUCTION SITES # 1068.
22. PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, OR OTHER CONSTRUCTION MATERIALS) AND DO NOT ALLOW THESE MATERIALS TO BE CARRIED BY RUNOFF INTO THE RECEIVING CHANNEL.
23. FOR NON-CANNELLEED FLOW ON DISTURBED OR CONSTRUCTED SLOPES 4:1 OR GREATER (OR AS SHOWN ON THE PLAN), PROVIDE CLASS I TYPE TYPE A (WITH ACCELERATED DEGRADABLE NETTING) EROSION CONTROL MATTING. SELECT EROSION MATTING FROM WOOD'S' PRODUCT ACCEPTABILITY LIST (PAL); INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD NON-CHANNEL EROSION MAT #1052.
24. FOR CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED AREAS (OR AS SHOWN ON THE PLANS), PROVIDE NORTH AMERICAN GREEN SC150 (OR APPROVED EQUAL) EROSION CONTROL MATTING. INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD CHANNEL EROSION MAT #1053.
25. MAKE PROVISIONS FOR WATERING DURING THE FIRST 8 WEEKS FOLLOWING SEEDING OR PLANTING OF DISTURBED AREAS WHENEVER MORE THAN 7 CONSECUTIVE DAYS OF DRY WEATHER OCCUR.
26. INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES (SUCH AS TEMPORARY SEDIMENT BASINS, DITCH CHECKS, EROSION CONTROL MATTING, SILT FENCING, FILTER SOCKS, WATTLES, SWALES, ETC.) OR AS DIRECTED BY WDNRMUNICIPALITY
26. NOTICE OF TERMINATION: WHEN THE SITE HAS BEEN FULLY STABILIZED AND ALL STORMWATER DISCHARGES FROM THE SITE AUTHORIZED UNDER THE NO PERMIT HAVE BEEN ELIMINATED, A NOTICE OF TERMINATION SHALL BE FILED WITH THE DNR. CONTRACTOR SHALL SUBMIT A COMPLETED NOTICE OF TERMINATION APPLICATION IN ACCORDANCE WITH THE PERMIT REQUIREMENTS PRIOR TO FINAL PAYMENT.

GENERAL NOTES:

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

WHEN POSSIBLE THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR SEMICIRCLE SHAPE WITH THE RADIUS POINTING UPWIND TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.

1. CROSS BRACE WITH 2" x 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.

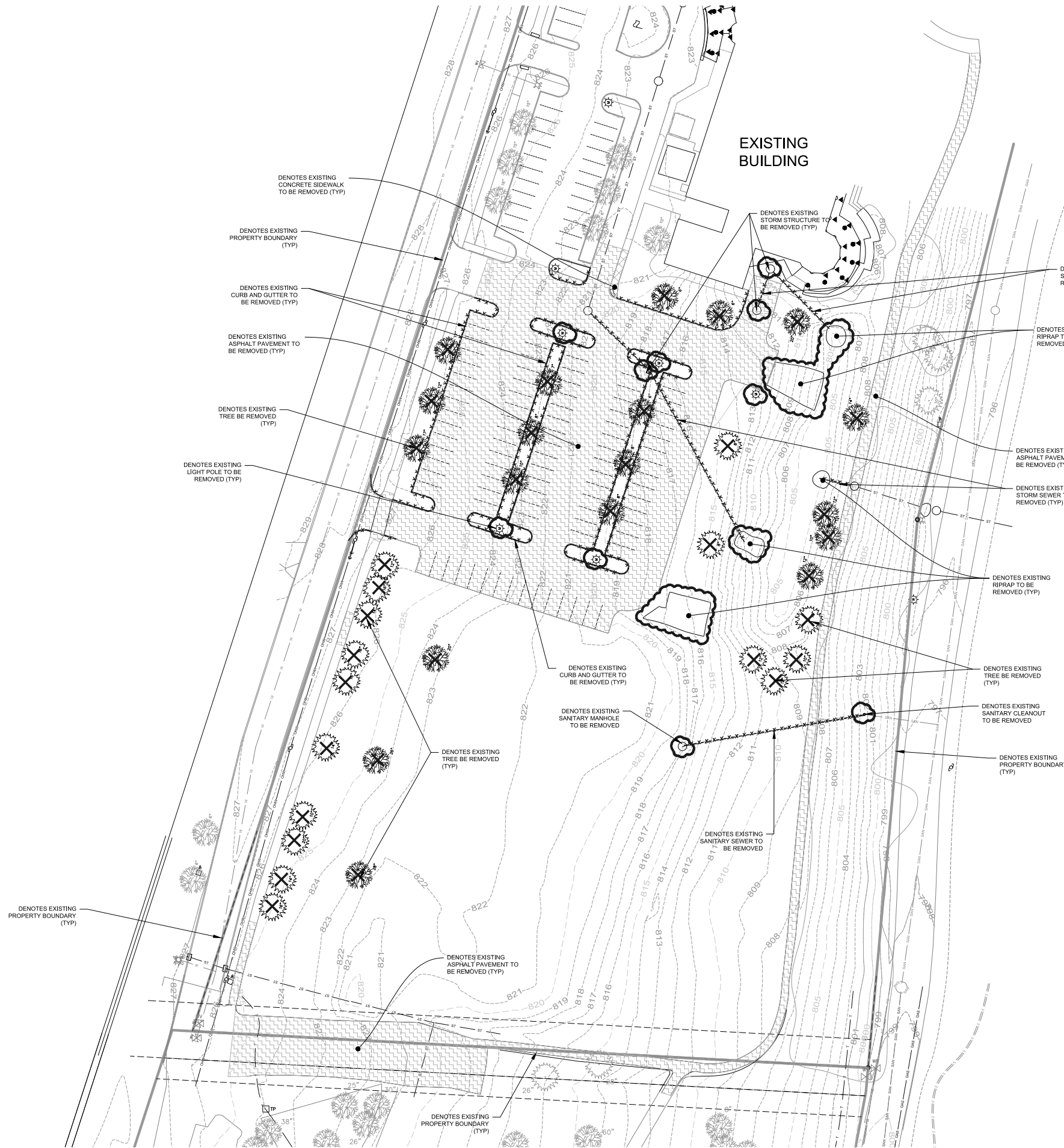
2. MINIMUM 14 GAGE WIRE REQUIRED. FOLD FABRIC 3" OVER THE WIRE AND STAPLE OR PLACE WIRE RINGS ON 12" O.C.

3. EXCAVATE A TRENCH A MINIMUM OF 4" WIDE AND 4" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.

4. WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MINIMUM TENSILE STRENGTH OF 40,000 LBS. SECURE TOP OF GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" O.C.

5. GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLY-PROPYLENE NETTING WITH A MINIMUM TENSILE STRENGTH OF 500 LBS. OR EQUIVALENT. A HEAVY DUTY NYLON TYP. TIE SUPPORT CORD OR EQUIVALENT IS REQUIRED.

6. STEEL POSTS SHALL BE STUDDED "T" OR "U" TYPE WITH A MINIMUM WEIGHT OF 18 LBS. IF, (WITHOUT ANCHOR), PIN AND/OR SUPPORT TO RESIST POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 4" DIA. OR 1.5" x 3" IF 3" DIA. WOOD POSTS FOR GEOTEXTILE FABRIC REINFORCED WITH NETTING SHALL BE A MINIMUM SIZE OF 1.5" x 1.5" OR 1.5" x 3" OR 1.5" x 4" OR 1.5" x 6" OR 1.5" x 8" OR 1.5" x 10" OR 1.5" x 12" OR 1.5" x 14" OR 1.5" x 16" OR 1.5" x 18" OR 1.5" x 20" OR 1.5" x 22" OR 1.5" x 24" OR 1.5" x 26" OR 1.5" x 28" OR 1.5" x 30" OR 1.5" x 32" OR 1.5" x 34" OR 1.5" x 36" OR 1.5" x 38" OR 1.5" x 40" OR 1.5" x 42" OR 1.5" x 44" OR 1.5" x 46" OR 1.5" x 48" OR 1.5" x 50" OR 1.5" x 52" OR 1.5" x 54" OR 1.5" x 56" OR 1.5" x 58" OR 1.5" x 60" OR 1.5" x 62" OR 1.5" x 64" OR 1.5" x 66" OR 1.5" x 68" OR 1.5" x 70" OR 1.5" x 72" OR 1.5" x 74" OR 1.5" x 76" OR 1.5" x 78" OR 1.5" x 80" OR 1.5" x 82" OR 1.5" x 84" OR 1.5" x 86" OR 1.5" x 88" OR 1.5" x 90" OR 1.5" x 92" OR 1.5" x 94" OR 1.5" x 96" OR 1.5" x 98" OR 1.5" x 100" OR 1.5" x 102" OR 1.5" x 104" OR 1.5" x 106" OR 1.5" x 108" OR 1.5" x 110" OR 1.5" x 112" OR 1.5" x 114" OR 1.5" x 116" OR 1.5" x 118" OR 1.5" x 120" OR 1.5" x 122" OR 1.5" x 124" OR 1.5" x 126" OR 1.5" x 128" OR 1.5" x 130" OR 1.5" x 132" OR 1.5" x 134" OR 1.5" x 136" OR 1.5" x 138" OR 1.5" x 140" OR 1.5" x 142" OR 1.5" x 144" OR 1.5" x 146" OR 1.5" x 148" OR 1.5" x 150" OR 1.5" x 152" OR 1.5" x 154" OR 1.5" x 156" OR 1.5" x 158" OR 1.5" x 160" OR 1.5" x 162" OR 1.5" x 164" OR 1.5" x 166" OR 1.5" x 168" OR 1.5" x 170" OR 1.5" x 172" OR 1.5" x 174" OR 1.5" x 176" OR 1.5" x 178" OR 1.5" x 180" OR 1.5" x 182" OR 1.5" x 184" OR 1.5" x 186" OR 1.5" x 188" OR 1.5" x 190" OR 1.5" x 192" OR 1.5" x 194" OR 1.5" x 196" OR 1.5" x 198" OR 1.5" x 200" OR 1.5" x 202" OR 1.5" x 204" OR 1.5" x 206" OR 1.5" x 208" OR 1.5" x 210" OR 1.5" x 212" OR 1.5" x 214" OR 1.5" x 216" OR 1.5" x 218" OR 1.5" x 220" OR 1.5" x 222" OR 1.5" x 224" OR 1.5" x 226" OR 1.5" x 228" OR 1.5" x 230" OR 1.5" x 232" OR 1.5" x 234" OR 1.5" x 236" OR 1.5" x 238" OR 1.5" x 240" OR 1.5" x 242" OR 1.5" x 244" OR 1.5" x 246" OR 1.5" x 248" OR 1.5" x 250" OR 1.5" x 252" OR 1.5" x 254" OR 1.5" x 256" OR 1.5" x 258" OR 1.5" x 260" OR 1.5" x 262" OR 1.5" x 264" OR 1.5" x 266" OR 1.5" x 268" OR 1.5" x 270" OR 1.5" x 272" OR 1.5" x 274" OR 1.5" x 276" OR 1.5" x 278" OR 1.5" x 280" OR 1.5" x 282" OR 1.5" x 284" OR 1.5" x 286" OR 1.5" x 288" OR 1.5" x 290" OR 1.5" x 292" OR 1.5" x 294" OR 1.5" x 296" OR 1.5" x 298" OR 1.5" x 300" OR 1.5" x 302" OR 1.5" x 304" OR 1.5" x 306" OR 1.5" x 308" OR 1.5" x 310" OR 1.5" x 312" OR 1.5" x 314" OR 1.5" x 316" OR 1.5" x 318" OR 1.5" x 320" OR 1.5" x 322" OR 1.5" x 324" OR 1.5" x 326" OR 1.5" x 328" OR 1.5" x 330" OR 1.5" x 332" OR 1.5" x 334" OR 1.5" x 336" OR 1.5" x 338" OR 1.5" x 340" OR 1.5" x 342" OR 1.5" x 344" OR 1.5" x 346" OR 1.5" x 348" OR 1.5" x 350" OR 1.5" x 352" OR 1.5" x 354" OR 1.5" x 356" OR 1.5" x 358" OR 1.5" x 360" OR 1.5" x 362" OR 1.5" x 364" OR 1.5" x 366" OR 1.5" x 368" OR 1.5" x 370" OR 1.5" x 372" OR 1.5" x 374" OR 1.5" x 376" OR 1.5" x 378" OR 1.5" x 380" OR 1.5" x 382" OR 1.5" x 384" OR 1.5" x 386" OR 1.5" x 388" OR 1.5" x 390" OR 1.5" x 392" OR 1.5" x 394" OR 1.5" x 396" OR 1.5" x 398" OR 1.5" x 400" OR 1.5" x 402" OR 1.5" x 404" OR 1.5" x 406" OR 1.5" x 408" OR 1.5" x 410" OR 1.5" x 412" OR 1.5" x 414" OR 1.5" x 416" OR 1.5" x 418" OR 1.5" x 420" OR 1.5" x 422" OR 1.5" x 424" OR 1.5" x 426" OR 1.5" x 428" OR 1.5" x 430" OR 1.5" x 432" OR 1.5" x 434" OR 1.5" x 436" OR 1.5" x 438" OR 1.5" x 440" OR 1.5" x 442" OR 1.5" x 444" OR 1.5" x 446" OR 1.5" x 448" OR 1.5" x 450" OR 1.5" x 452" OR 1.5" x 454" OR 1.5" x 456" OR 1.5" x 458" OR 1.5" x 460" OR 1.5" x 462" OR 1.5" x 464" OR 1.5" x 466" OR 1.5" x 468" OR 1.5" x 470" OR 1.5" x 472" OR 1.5" x 474" OR 1.5" x 476" OR 1.5" x 478" OR 1.5" x 480" OR 1.5" x 482" OR 1.5" x 484" OR 1.5" x 486" OR 1.5" x 488" OR 1.5" x 490" OR 1.5" x 492" OR 1.5" x 494" OR 1.5" x 496" OR 1.5" x 498" OR 1.5" x 500" OR 1.5" x 502" OR 1.5" x 504" OR 1.5" x 506" OR 1.5" x 508" OR 1.5" x 510" OR 1.5" x 512" OR 1.5" x 514" OR 1.5" x 516" OR 1.5" x 518" OR 1.5" x 520" OR 1.5" x 522" OR 1.5" x 524" OR 1.5" x 526" OR 1.5" x 528" OR 1.5" x 530" OR 1.5" x 532" OR 1.5" x 534" OR 1.5" x 536" OR 1.5" x 538" OR 1.5" x 540" OR 1.5" x 542" OR 1.5" x 544" OR 1.5" x 546" OR 1.5" x 548" OR 1.5" x 550" OR 1.5" x 552" OR 1.5" x 554" OR 1.5" x 556" OR 1.5" x 558" OR 1.5" x 560" OR 1.5" x 562" OR 1.5" x 564" OR 1.5" x 566" OR 1.5" x 568" OR 1.5" x 570" OR 1.5" x 572" OR 1.5" x 574" OR 1.5" x 576" OR 1.5" x 578" OR 1.5" x 580" OR 1.5" x 582" OR 1.5" x 584" OR 1.5" x 586" OR 1.5" x 588" OR 1.5" x 590" OR 1.5" x 592" OR 1.5" x 594" OR 1.5" x 596" OR 1.5" x 598" OR 1.5" x 600" OR 1.5" x 602" OR 1.5" x 604" OR 1.5" x 606" OR 1.5" x 608" OR 1.5" x 610" OR 1.5" x 612" OR 1.5" x 614" OR 1.5" x 616" OR 1.5" x 618" OR 1.5" x 620" OR 1.5" x 622" OR 1.5" x 624" OR 1.5" x 626" OR 1.5" x 628" OR 1.5" x 630" OR 1.5" x 632" OR 1.5" x 634" OR 1.5" x 636" OR 1.5" x 638" OR 1.5" x 640" OR 1.5" x 642" OR 1.5" x 644" OR 1.5" x 646" OR 1.5" x 648" OR 1.5" x 650" OR 1.5" x 652" OR 1.5" x 654" OR 1.5" x 656" OR 1.5" x 658" OR 1.5" x 660" OR 1.5" x 662" OR 1.5" x 664" OR 1.5" x 666" OR 1.5" x 668" OR 1.5" x 670" OR 1.5" x 672" OR 1.5" x 674" OR 1.5" x 676" OR 1.5" x 678" OR 1.5" x 680" OR 1.5" x 682" OR 1.5" x 684" OR 1.5" x 686" OR 1.5" x 688" OR 1.5" x 690" OR 1.5" x 692" OR 1.5" x 694" OR 1.5" x 696" OR 1.5" x 698" OR 1.5" x 700" OR 1.5" x 702" OR 1.5" x 704" OR 1.5" x 706" OR 1.5" x 708" OR 1.5" x 710" OR 1.5" x 712" OR 1.5" x 714" OR 1.5" x 716" OR 1.5" x 718" OR 1.5" x 720" OR 1.5" x 722" OR 1.5" x 724" OR 1.5" x 726" OR 1.5" x 728" OR 1.5" x 730" OR 1.5" x 732" OR 1.5" x 734" OR 1.5" x 736" OR 1.5" x 738" OR 1.5" x 740" OR 1.5" x 742" OR 1.5" x 744" OR 1.5" x 746" OR 1.5" x 748" OR 1.5" x 750" OR 1.5" x 752" OR 1.5" x 754" OR 1.5" x 756" OR 1.5" x 758" OR 1.5" x 760" OR 1.5" x 762" OR 1.5" x 764" OR 1.5" x 766" OR 1.5" x 768" OR 1.5" x 770" OR 1.5" x 772" OR 1.5" x 774" OR 1.5" x 776" OR 1.5" x 778" OR 1.5" x 780" OR 1.5" x 782" OR 1.5" x 784" OR 1.5" x 786" OR 1.5" x 788" OR 1.5" x 790" OR 1.5" x 792" OR 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x 1056" OR 1.5" x 1058" OR 1.5" x 1060" OR 1.5" x 1062" OR 1.5" x 1064" OR 1.5" x 1066" OR 1.5" x 1068" OR 1.5" x 1070" OR 1.5" x 1072" OR 1.5" x 1074" OR 1.5" x 1076" OR 1.5" x 1078" OR 1.5" x 1080" OR 1.5" x 1082" OR 1.5" x 1084" OR 1.5" x 1086" OR 1.5" x 1088" OR 1.5" x 1090" OR 1.5" x 1092" OR 1.5" x 1094" OR 1.5" x 1096" OR 1.5" x 1098" OR 1.5" x 1100" OR 1.5" x 1102" OR 1.5" x 1104" OR 1.5" x 1106" OR 1.5" x 1108" OR 1.5" x 1110" OR 1.5" x 1112" OR 1.5" x 1114" OR 1.5" x 1116" OR 1.5" x 1118" OR 1.5" x 1120" OR 1.5" x 1122" OR 1.5" x 1124" OR 1.5" x 1126" OR 1.5" x 1128" OR 1.5" x 1130" OR 1.5" x 1132" OR 1.5" x 1134" OR 1.5" x 1136" OR 1.5" x 1138" OR 1.5" x 1140" OR 1.5" x 1142" OR 1.5" x 1144" OR 1.5" x 1146" OR 1.5" x 1148" OR 1.5" x 1150" OR 1.5" x 1152" OR 1.5" x 1154" OR 1.5" x 1156" OR 1.5" x 1158" OR 1.5" x 1160" OR 1.5" x 1162" OR 1.5" x 1164" OR 1.5" x 1166" OR 1.5" x 1168" OR 1.5" x 1170" OR 1.5" x 1172" OR 1.5" x 1174" OR 1.5" x 1176" OR 1.5" x 1178" OR 1.5" x 1180" 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x 1306" OR 1.5" x 1308" OR 1.5" x 1310" OR 1.5" x 1312" OR 1.5" x 1314" OR 1.5" x 1316" OR 1.5" x 1318" OR 1.5" x 1320" OR 1.5" x 1322" OR 1.5" x 1324" OR 1.5" x 1326" OR 1.5" x 1328" OR 1.5" x 1330" OR 1.5" x 1332" OR 1.5" x 1334" OR 1.5" x 1336" OR 1.5" x 1338" OR 1.5" x 1340" OR 1.5" x 1342" OR 1.5" x 1344" OR 1.5" x 1346" OR 1.5" x 1348" OR 1.5" x 1350" OR 1.5" x 1352" OR 1.5" x 1354" OR 1.5" x 1356" OR 1.5" x 1358" OR 1.5" x 1360" OR 1.5" x 1362" OR 1.5" x 1364" OR 1.5" x 1366" OR 1.5" x 1368" OR 1.5" x 1370" OR 1.5" x 1372" OR 1.5" x 1374" OR 1.5" x 1376" OR 1.5" x 1378" OR 1.5" x 1380" OR 1.5" x 1382" OR 1.5" x 1384" OR 1.5" x 1386" OR 1.5" x 1388" OR 1.5" x 1390" OR 1.5" x 1392" OR 1.5" x 1394" OR 1.5" x 1396" OR 1.5" x 1398" OR 1.5" x 1400" OR 1.5" x 1402" OR 1.5" x 1404" OR 1.5" x 1406" OR 1.5" x 1408" OR 1.5" x 1410" OR 1.5" x 1412" OR 1.5" x 1414" OR 1.5" x 1416" OR 1.5" x 1418" OR 1.5" x 1420" OR 1.5" x 1422" OR 1.5" x 1424" OR 1.5" x 1426" OR 1.5" x 1428" OR 1.5" x 1430" OR 1.5" x 1432" OR 1.5" x 1434" OR 1.5" x 1436" OR 1.5" x 1438" OR 1.5" x 1440" OR 1.5" x 1442" OR 1.5" x 1444" OR 1.5" x 1446" OR 1.5" x 1448" OR 1.5" x 1450" OR 1.5" x 1452" OR 1.5" x 1454" OR 1.5" x 1456" OR 1.5" x 1458" OR 1.5" x 1460" OR 1.5" x 1462" OR 1.5" x 1464" OR 1.5" x 1466" OR 1.5" x 1468" OR 1.5" x 1470" OR 1.5" x 1472" OR 1.5" x 1474" OR 1.5" x 1476" OR 1.5" x 1478" OR 1.5" x 1480" OR 1.5" x 1482" OR 1.5" x 1484" OR 1.5" x 1486" OR 1.5" x 1488" OR 1.5" x 1490" OR 1.5" x 1492" OR 1.5" x 1494" OR 1.5" x 1496" OR 1.5" x 1498" OR 1.5" x 1500" OR 1.5" x 1502" OR 1.5" x 1504" OR 1.5" x 1506" OR 1.5" x 1508" OR 1.5" x 1510" OR 1.5" x 1512" OR 1.5" x 1514" OR 1.5" x 1516" OR 1.5" x 1518" OR 1.5" x 1520" OR 1.5" x 1522" OR 1.5" x 1524" OR 1.5" x 1526" OR 1.5" x 152



DEMOLITION LEGEND


- DENOTES ITEM TO BE REMOVED OR DEMOLISHED
- DENOTES ASPHALT PAVEMENT REMOVAL AREA
- DENOTES CONCRETE REMOVAL AREA
- DENOTES ITEM TO BE ABANDONED OR REMOVED
- DENOTES TREE TO BE REMOVED (MARK ALL TREE REMOVALS IN THE FIELD AND VERIFY WITH OWNER PRIOR TO REMOVAL)



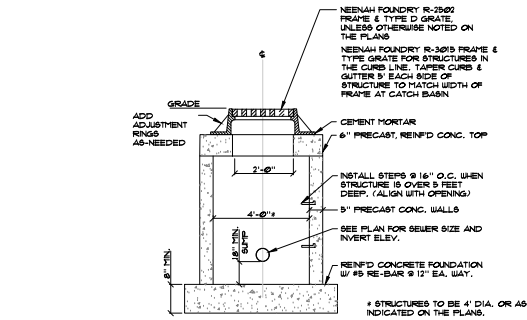
IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

SITE PLAN REVIEW

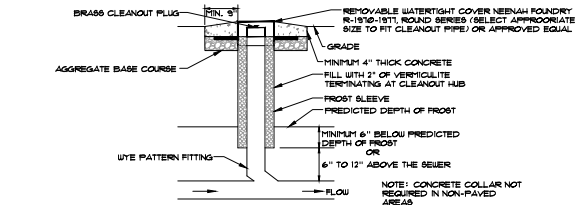
Sheet:
DEMOLITION PLAN

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| Revisions: | | |
| No: | Date: | Description: |
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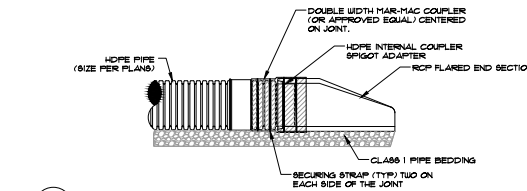
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| Project No.: 230049.00 | (Owner) Project No.: |
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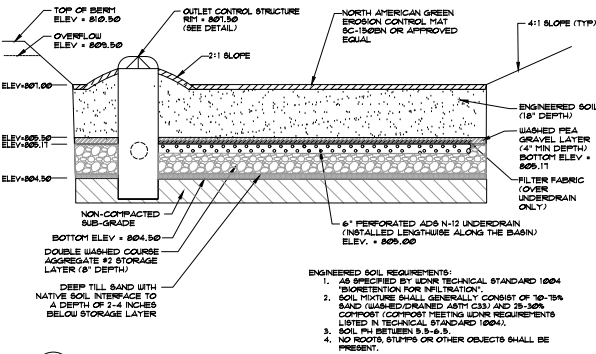
01 CATCH BASIN DETAIL
NTS



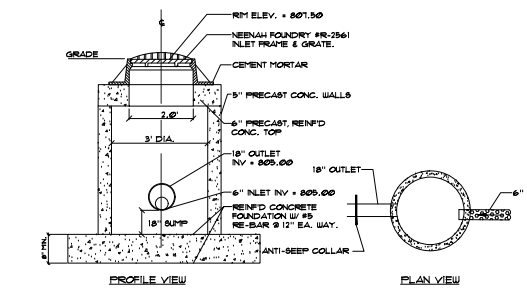
02 STORM CLEANOUT
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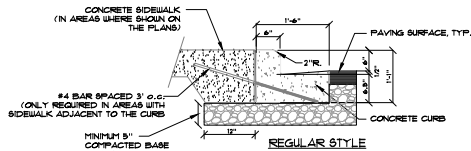
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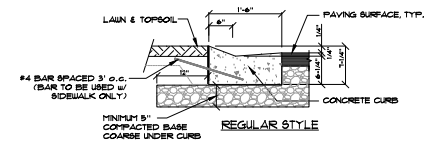
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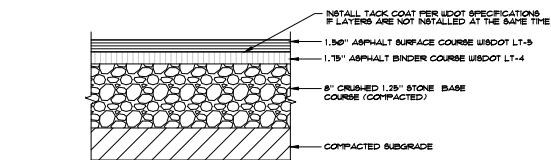
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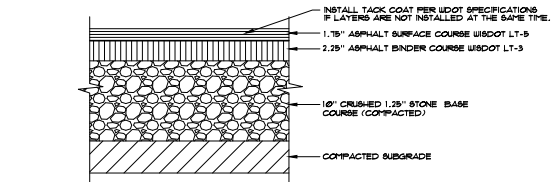
06 18 INCH VERTICAL CURB
NTS



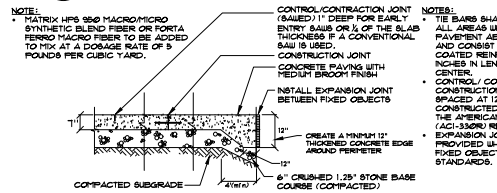
07 DEPRESSED CURB
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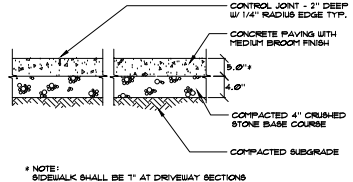
08 REGULAR DUTY ASPHALT PAVEMENT
NTS



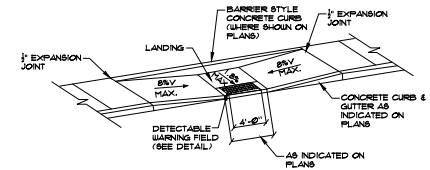
09 HEAVY DUTY ASPHALT PAVEMENT
NTS



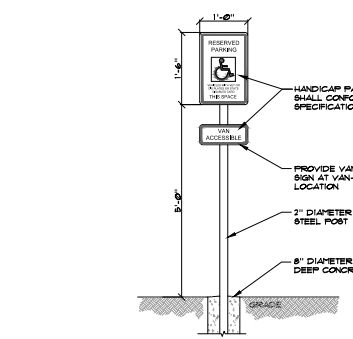
10 CONCRETE PAVEMENT
NTS



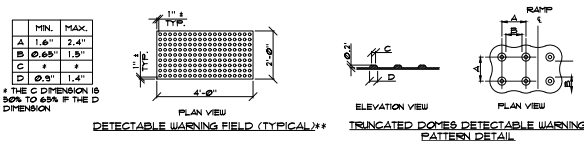
11 CONCRETE SIDEWALK
NTS



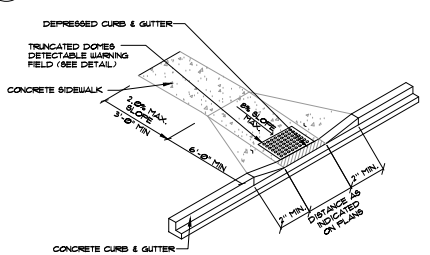
12 HANDICAP RAMP - TYPE 2
NTS



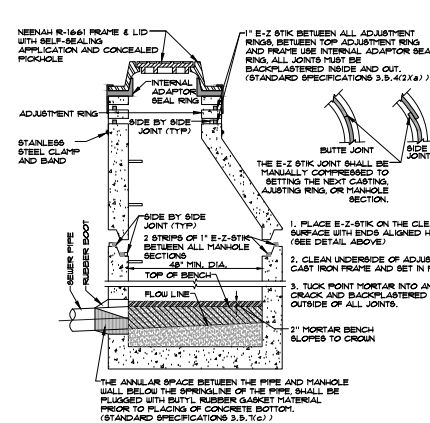
13 HANDICAP PARKING SIGN
NTS



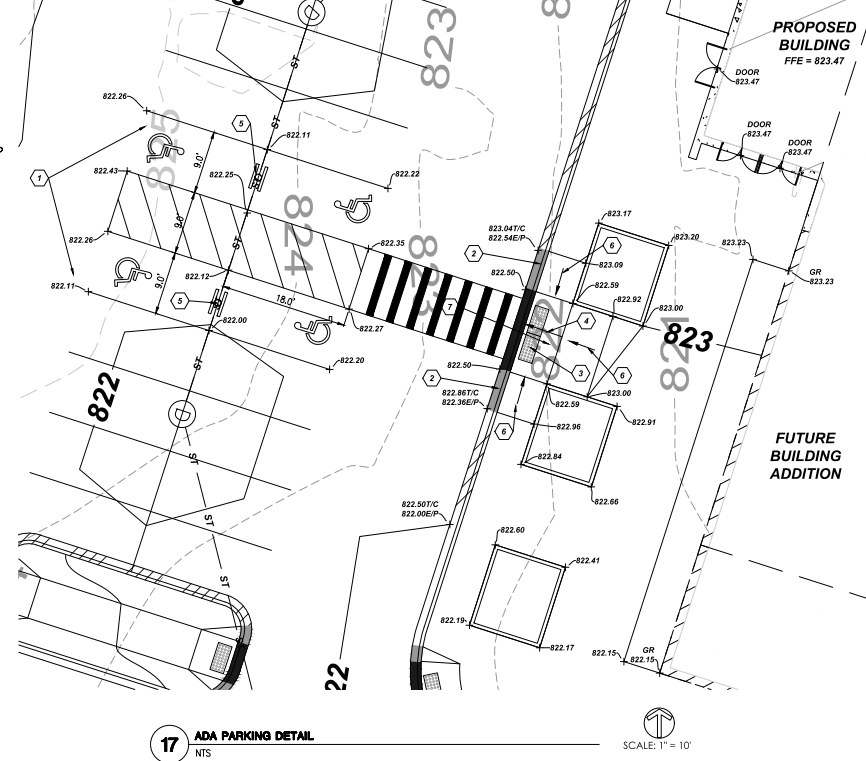
14 TRUNCATED DOMES
NTS



15 HANDICAP RAMP - TYPE 4
NTS



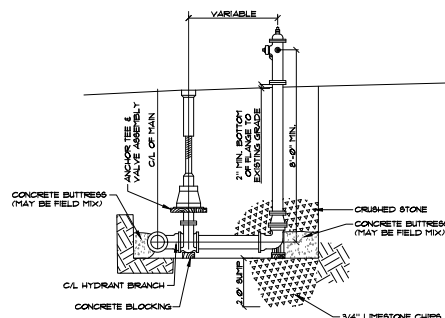
16 SANITARY MANHOLE
NTS



17 ADA PARKING DETAIL
NTS

NOTES

1. DENOTES PROPOSED ADA PARKING 1.8% MAX SLOPE IN ANY DIRECTION (TYP)
2. DENOTES PROPOSED 6" CURB TAPER
3. DENOTES PROPOSED TRUNCATED DOMES (TYP)
4. DENOTES PROPOSED 1.8% MAX SLOPE
5. DENOTES PROPOSED HANDICAP SIGN (TYP)
6. DENOTES PROPOSED RAMP 6% MAX SLOPE
7. DENOTES PROPOSED HANDICAP RAMP - TYPE 2



18 TYPICAL HYDRANT DETAIL
NTS

SITE PLAN REVIEW

Sheet:

CONSTRUCTION DETAILS

Scale:

| No. | Date: | Description: |
|-----|-------|--------------|
| | | |
| | | |
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| | | |
| | | |

Date:
02-23-2024

Project No.: 230049.00 (Owner) Project No.:

Sheet No.:

C5.00

Location Map



Parcels

City Limits

Town Roads - Local/County

Town Roads - State Hwy

Standardized ROW Widths

1 inch = 200 feet

SCALE BAR = 1"

THE CITY OF WATERTOWN

Opportunity runs through it.

City of Watertown Geographic Information System

Printed on: February 21, 2024

Author: Private User

DISCLAIMER: This map is not a substitute for an actual field survey or onsite investigation. The accuracy of this map is limited to the quality of the records from which it was assembled. Other inherent inaccuracies occur during the compilation process. City of Watertown makes no warranty whatsoever concerning this information.

STORMWATER MANAGEMENT REPORT

FOR



Watertown YMCA

Date: February 23, 2024

Prepared By: Harwood Engineering Consultants, Ltd.



HARWOOD

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414-475-5554

Nathan Schmit P.E.

255 North 21st Street

Milwaukee, WI 53233

Ph: 414-475-5554

Fx: 414-773-9240

Project Number: 23-0049.00

Reviewed by: Brad Seubert

Introduction

The Watertown YMCA project is located south of the existing The Collective building located on Johnson Street in the City of Watertown, Wisconsin. This stormwater management report describes the practices that were used to meet the City of Watertown and the Wisconsin Department of Natural Resources (WDNR) stormwater management requirements.

An existing stormwater management report was approved by the City in 2022 for a small project on the north side of the property for The Collective building totaling roughly 1.1 acres. This current project will include those disturbed areas as well as the current disturbed areas to meet/match the same requirements as the 2022 stormwater management report.

Method of Analysis and Requirements

- Stormwater quantity management analysis was completed using HydroCAD-10.0 modeling software. Runoff curve numbers were determined from the NRCS tables within the TR-55 handbook. The rainfall events used in this analysis were based on the NRCS values for Jefferson County for 2-YR, 10-YR and 100-YR, 24-hour events (2.79 inches, 3.93 inches and 6.19 inches, respectively).
- Stormwater quality analysis was completed utilizing WinSLAMM V.10.5.0. The on-site water quality design was completed using the Madison rainfall files provided by WinSLAMM modeling software as well as the date ranges required by WDNR NR151.
- On-site storm sewer calculations were completed utilizing the Rational Method and Manning's equation, as well as, the design storm rainfall values per Atlas 14.
- The stormwater quantity requirements for this site are dictated by the City of Watertown and WDNR. This project is a re-development project which is exempt from quantity requirements.
- Stormwater quality requirements are dictated by the City of Watertown and require that this project achieve a reduction of 60% total suspended solids (TSS) from new parking and road areas as well as a 30% Phosphorus reduction for the whole site. The **Water Quality Summary** section summarizes the water quality methods and results on-site.

Soils Information

Soils on-site are mainly comprised of silty clay covered by a varying amount of topsoil. Refer to the **Soils Section** for Web soil survey information.

Pre-development Watershed Conditions (See Pre-development Conditions Exhibit)

The existing site is currently home to The Collective building and associated utilities and parking lots. An existing stormwater report has been approved by the City of Watertown in 2022 for redevelopment of this parcel. This included additions of sidewalks, repaving portions of the parking lots and adding a playground area. The south portion of the site drains to an existing dry pond and the north drains to existing storm sewer.

This report will analyze 6.691 acres of the site that was disturbed as part of the 2022 redevelopment as well as the current project. The existing site was analyzed as 3 drainage basins.

EX-1 includes the west and south portion of the site that was disturbed as part of the 2022 project as well as the current project. This includes greenspace and paved areas.

North Area – NT Disturbed includes a portion of the north side that was disturbed as part of the 2022 project. This includes greenspace and paved areas.

East Area – NT Disturbed includes a portion of the east side that was disturbed as part of the 2022 project. This includes paved and greenspace areas.

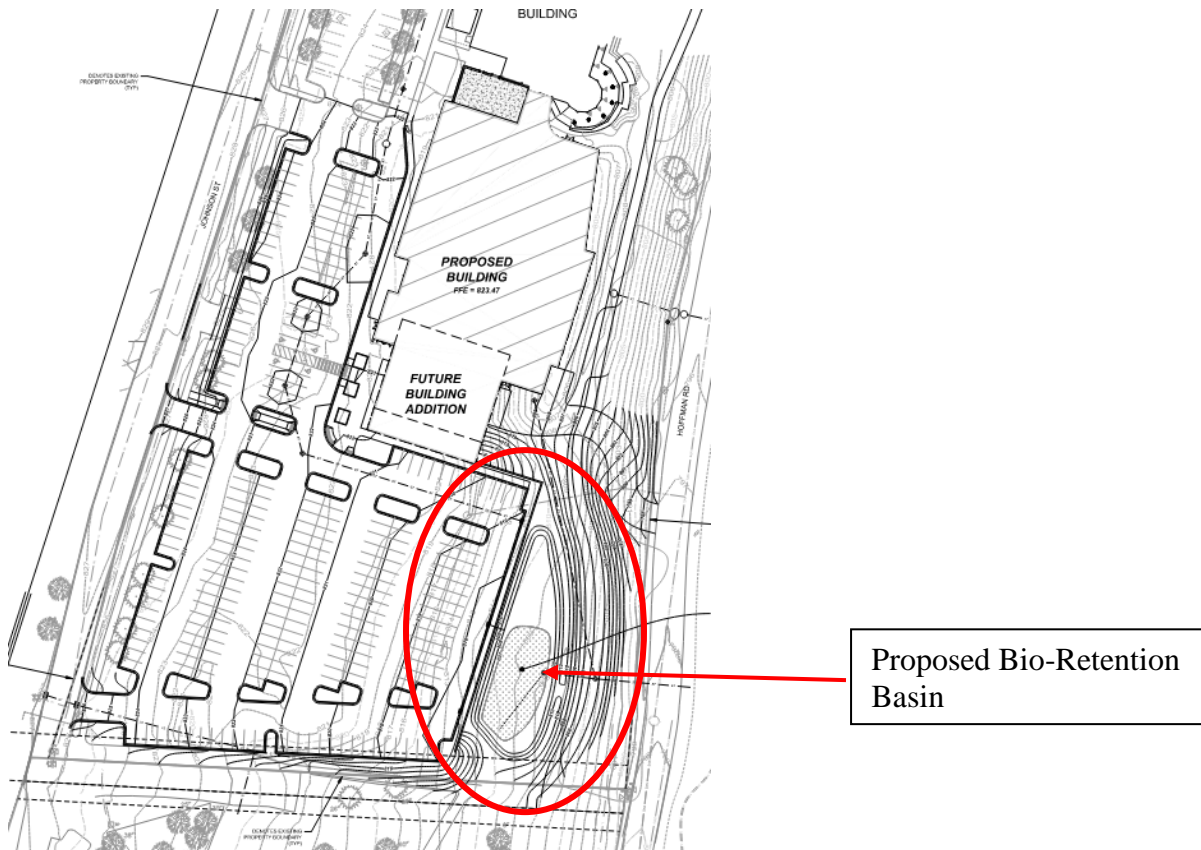
Pre-development Conditions Summary:

| Sub-Area Name | Area (acres) | Curve Number | Time of Concentration (min) |
|---------------|--------------|--------------|-----------------------------|
| EX-1 | 5.876 | 72 | 12.8 |
| North Area | 0.572 | 80 | 6.0 |
| East Area | 0.243 | 86 | 6.0 |
| Total | 6.691 | | |

Proposed Watershed Conditions

The proposed site improvements include a building addition on the south side of the existing Collective building, totaling roughly 38,000 SF. Along with the building addition, the parking lots, access drive aisles and site utilities will be re-designed and constructed.

The proposed condition analyzes the same approximate 6.691 acres as the Pre-development conditions. One (1) Bio-retention basin will be constructed to manage a portion of the stormwater from the site. This will be located on the southeast portion of the site to provide the required water quality controls.



The site was split into 4 drainage areas as described below:

PR-1 includes the north, west and south portions of the site that are tributary to the bio-retention basin. This includes greenspace and paved areas.

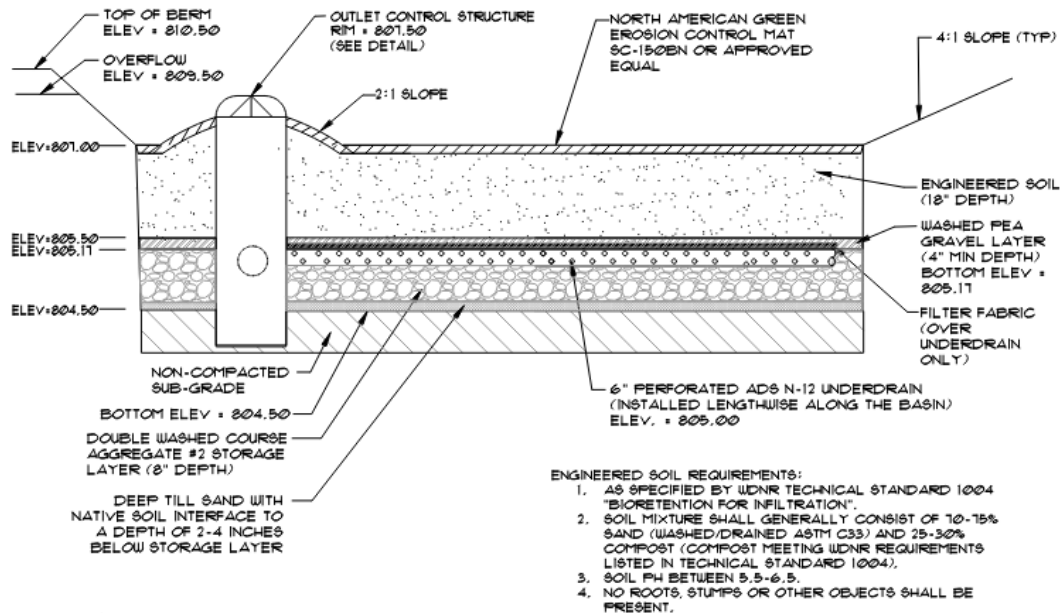
UD-1 includes the east portion of the site that has been disturbed and leaves the site undetained. This includes greenspace, paved and roof areas

North Area NT Disturbed includes the north portion of the site that was disturbed as part of the 2022 project and leaves the site undetained. This includes paved and greenspace areas.

East Area NT Disturbed includes the east portion of the site that was disturbed as part of the 2022 project and leaves the site undetained. This includes paved and greenspace areas.

Proposed Conditions Summary:

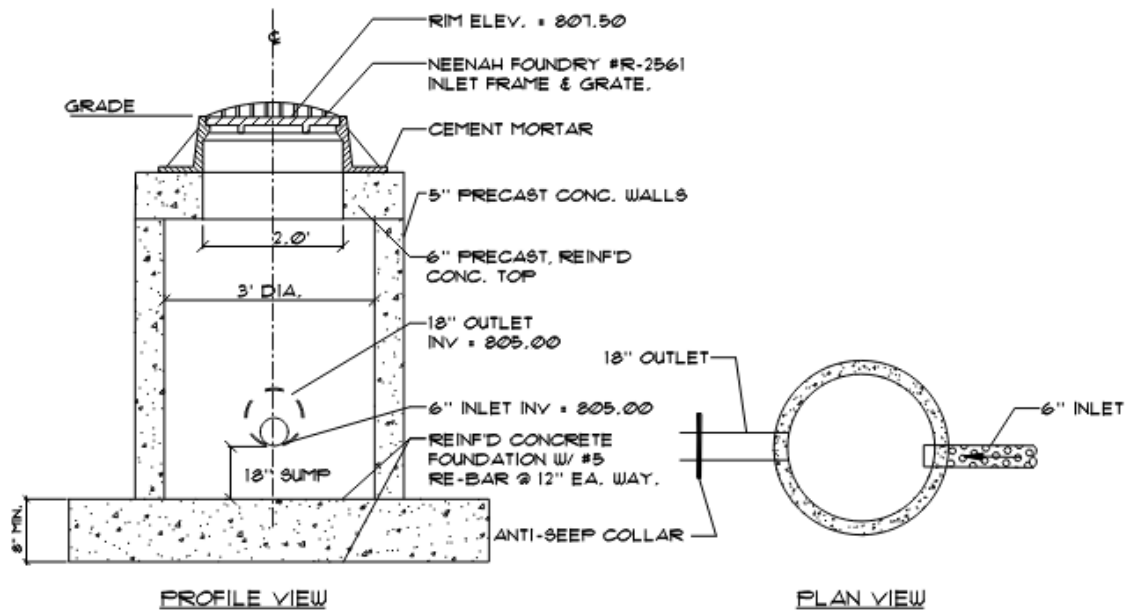
| Sub-Area Name | Area (acres) | Curve Number | Time of Concentration (min) |
|---------------|--------------|--------------|-----------------------------|
| PR-1 | 4.053 | 89 | 6.0 |
| UD-1 | 1.824 | 83 | 6.0 |
| North Area | 0.572 | 80 | 6.0 |
| East Area | 0.243 | 86 | 6.0 |
| Total | 6.691 | | |



04

BIO RETENTION BASIN DETAIL

NTS



05 OUTLET CONTROL STRUCTURE

NTS

Proposed Basin 1 – Bio-Retention Basin:

| Storm Event | Elevation | Release Rate (cfs) |
|-------------|-----------|--------------------|
| 2-yr | 808.00 | 8.79 |
| 10-yr | 808.40 | 13.86 |
| 100-yr | 809.35 | 16.15 |

Water Quality and Analysis

The proposed redevelopment was modeled using the water quality software WinSLAMM (Ver. 10.5.0). The City of Watertown requires this redevelopment site to provide a 60% TSS reduction for new parking and roadway areas as well as a 30% Phosphorus reduction for the whole site.

The new pavement and roadway areas produce 1841 lbs of TSS. With 60% required to be removed, the total amount for the BMPs to be removed is 1104.6 lbs of TSS.

The proposed stormwater management feature for the site provides 1376 lbs of TSS removal which is greater than the 60% required.

The proposed stormwater management feature for the site removes approximately 46% phosphorus from the site which is greater than the 30% required.

See the **Water Quality** section for calculations that demonstrate that the site meets the 60% and 30% reduction goal.

Erosion Control Plan

Approximately 4.97 acres of the existing site will be disturbed for this project. The Erosion Control Plan shows the methods and locations proposed to stabilize the site during and after the development project.

Prior to initiating construction onsite, the silt filter fence and the construction entrance tracking pad shall be installed in an effort to minimize sediment travelling offsite.

Construction activities shall be staged, as much as possible, to limit the combined disturbed area.

Upon completing the grading and swales, the erosion control matting shall be installed. Silt fencing shall be maintained throughout the construction process and repaired and replaced as needed.

Sediment tracking shall be minimized to the maximum extent practicable. Roadways are to be swept of debris at the end of each work day, as needed.

Disturbed areas shall be stabilized as soon as grading is completed. Restoration and seeding methods shall follow the landscaping plans and municipal standards.

Dust control shall be maintained onsite with the use of a water truck if substantial dust becomes airborne.

During construction, the site shall be inspected by the contractor weekly and after every 0.5" or greater rainfall to evaluate the conditions of the erosion control practices and resolve any issues. The inspections shall be documented and maintained onsite and follow Wisconsin Department of Natural Resources Requirements

After the site work has been substantially completed and the areas have become stabilized, the stormwater management structure, catch basins, and inlets and outlets shall be inspected and cleaned if necessary to remove all sediment deposits transported during construction. After all areas have been stabilized, the temporary erosion control methods should be removed permanently.

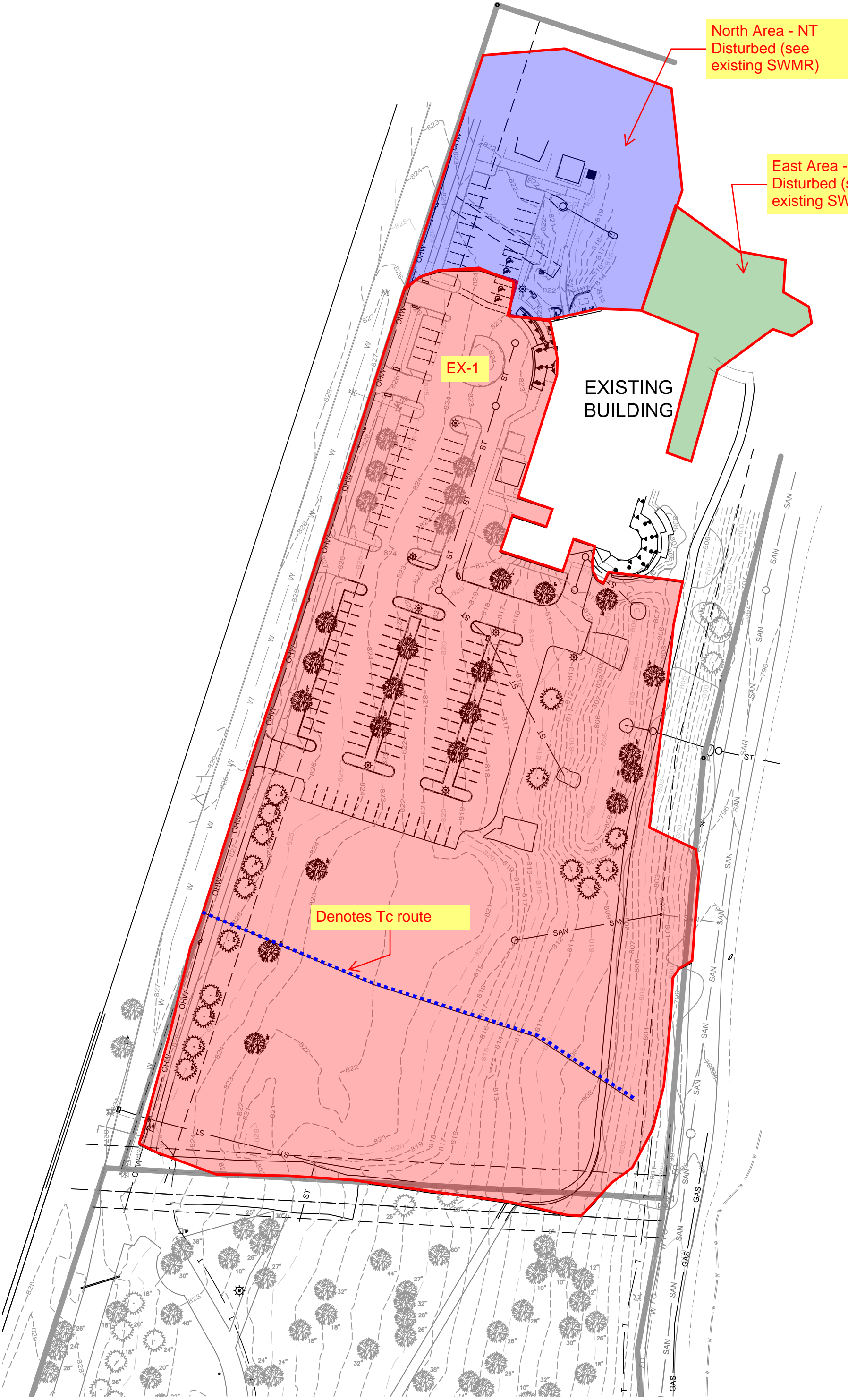
Operation and Maintenance

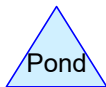
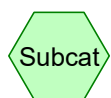
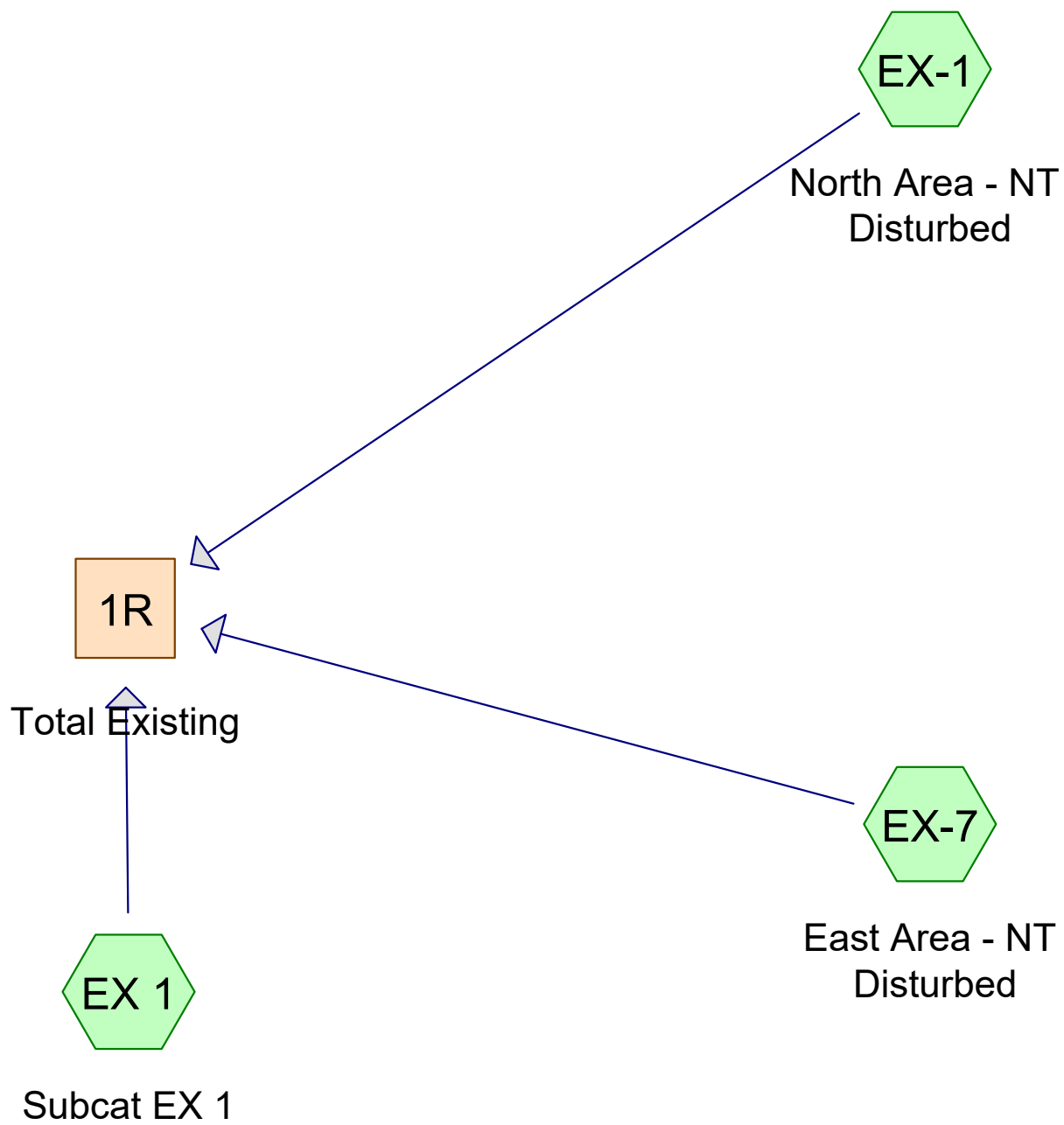
Culverts and inlets/outlets should be visually inspected after any large event and at a minimum of once per year. The outlet control structure should also be inspected after any large event, as well as, a minimum of twice per year (remove any debris that might create a blockage, including the grate on flared end section).

A copy of inspections performed, as well as, any preventative and/or required maintenance shall be logged and kept on site or with the property owner.

Conclusion

The proposed stormwater management features for the Watertown YMCA have been designed to meet the requirements of the Wisconsin Department of Natural Resources and the City of Watertown with respect to stormwater quantity, quality, and erosion control.





Existing

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 Page 2

Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|-----------------|-----------|--|
| 4.077 | 61 | >75% Grass cover, Good, HSG B (EX 1) |
| 0.543 | 74 | >75% Grass cover, Good, HSG C (EX-1, EX-7) |
| 1.432 | 98 | Paved parking, HSG B (EX 1) |
| 0.141 | 98 | Paved parking, HSG C (EX-1, EX-7) |
| 0.367 | 98 | Sidewalks, Good, HSG B (EX 1) |
| 0.131 | 98 | Sidewalks, Good, HSG C (EX-1, EX-7) |
| 6.691 | 74 | TOTAL AREA |

Existing

MSE 24-hr 3 2-Year Rainfall=2.67"

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Page 3

Time span=11.75-23.75 hrs, dt=0.01 hrs, 1201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

SubcatchmentEX 1: Subcat EX 1

Runoff Area=5.876 ac 30.62% Impervious Runoff Depth>0.62"
Flow Length=418' Tc=12.8 min CN=72 Runoff=4.54 cfs 0.302 af

SubcatchmentEX-1: North Area - NT

Runoff Area=0.572 ac 26.40% Impervious Runoff Depth>0.98"
Flow Length=139' Tc=6.0 min CN=80 Runoff=1.07 cfs 0.047 af

SubcatchmentEX-7: East Area - NT

Runoff Area=0.243 ac 49.79% Impervious Runoff Depth>1.29"
Tc=6.0 min CN=86 Runoff=0.63 cfs 0.026 af

Reach 1R: Total Existing

Inflow=5.45 cfs 0.375 af
Outflow=5.45 cfs 0.375 af

Total Runoff Area = 6.691 ac Runoff Volume = 0.375 af Average Runoff Depth = 0.67"
69.04% Pervious = 4.620 ac 30.96% Impervious = 2.071 ac

Existing

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MSE 24-hr 3 2-Year Rainfall=2.67"

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Summary for Subcatchment EX 1: Subcat EX 1

[73] Warning: Peak may fall outside time span

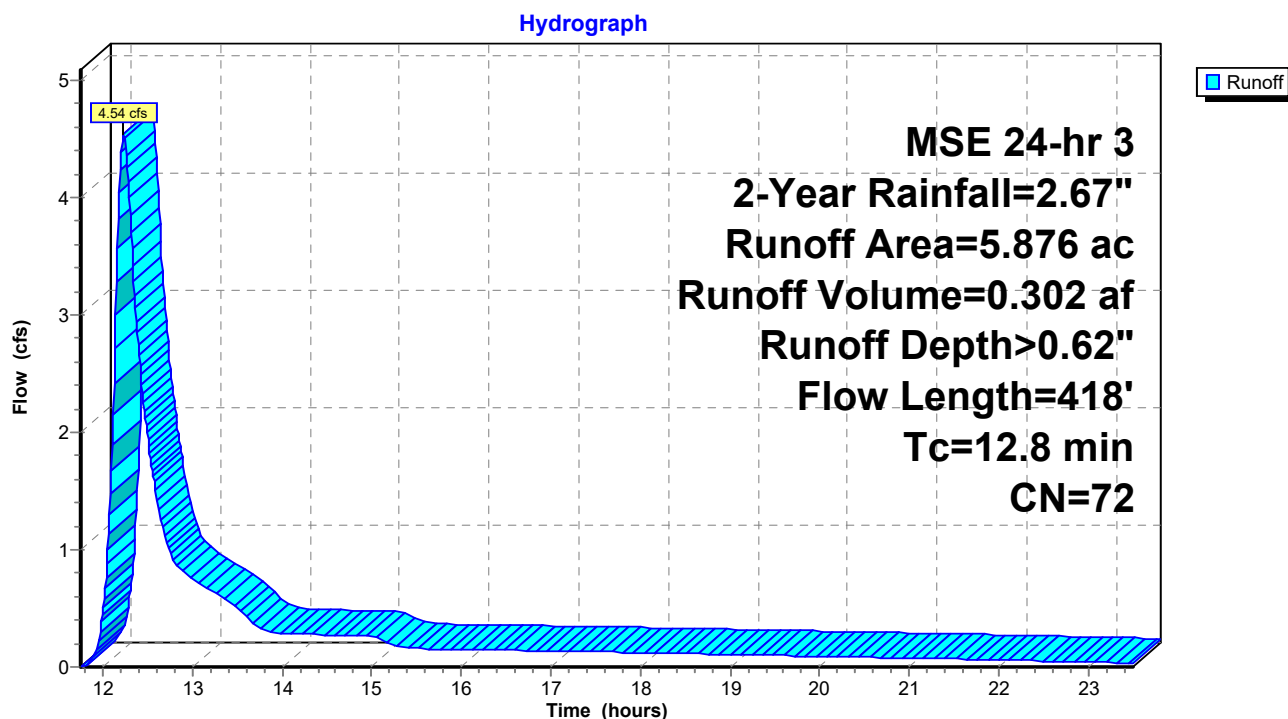
Runoff = 4.54 cfs @ 12.23 hrs, Volume= 0.302 af, Depth> 0.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-23.75 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.67"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 4.077 | 61 | >75% Grass cover, Good, HSG B |
| 1.432 | 98 | Paved parking, HSG B |
| 0.367 | 98 | Sidewalks, Good, HSG B |
| 5.876 | 72 | Weighted Average |
| 4.077 | | 69.38% Pervious Area |
| 1.799 | | 30.62% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---|
| 11.4 | 100 | 0.0435 | 0.15 | | Sheet Flow, Grass: Dense n= 0.240 P2= 2.70" |
| 1.4 | 318 | 0.0578 | 3.87 | | Shallow Concentrated Flow, Unpaved Kv= 16.1 fps |
| 12.8 | 418 | Total | | | |

Subcatchment EX 1: Subcat EX 1



Existing

Prepared by Harwood Engineering Consultants, Ltd.

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MSE 24-hr 3 2-Year Rainfall=2.67"

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Summary for Subcatchment EX-1: North Area - NT Disturbed

[73] Warning: Peak may fall outside time span

Runoff = 1.07 cfs @ 12.14 hrs, Volume= 0.047 af, Depth> 0.98"

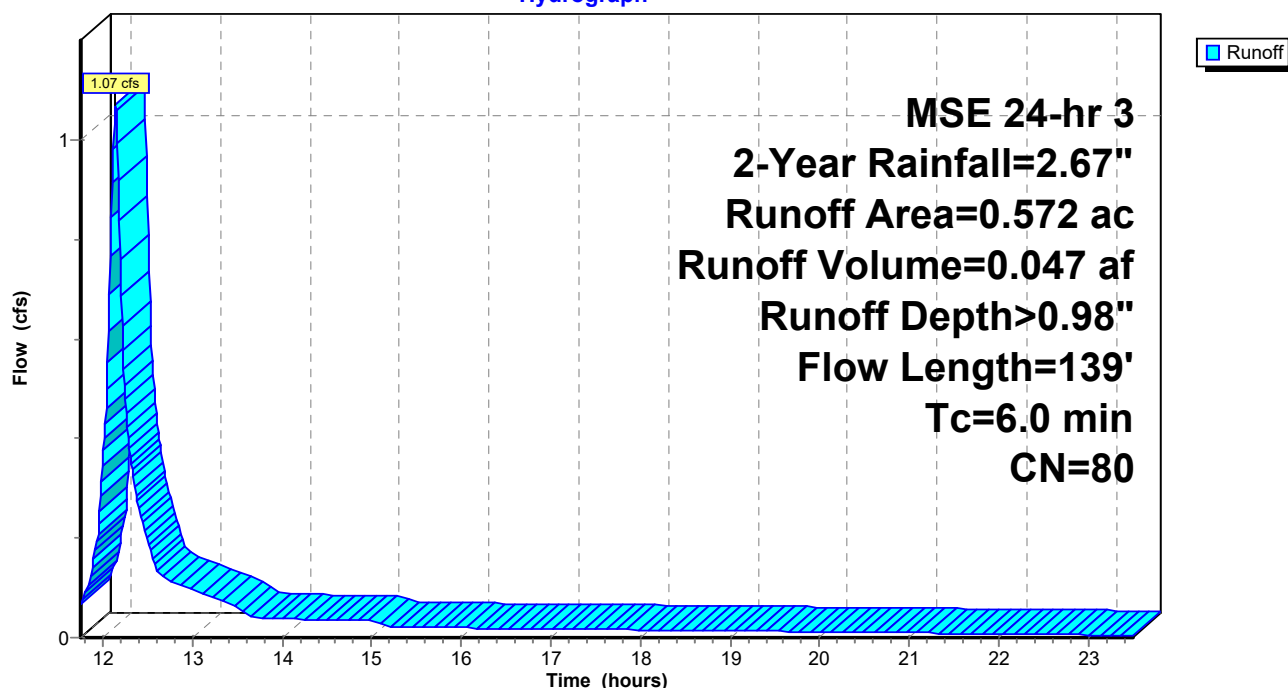
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-23.75 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.67"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.421 | 74 | >75% Grass cover, Good, HSG C |
| 0.094 | 98 | Paved parking, HSG C |
| 0.030 | 98 | Sidewalks, Good, HSG C |
| 0.027 | 98 | Sidewalks, Good, HSG C |
| 0.572 | 80 | Weighted Average |
| 0.421 | | 73.60% Pervious Area |
| 0.151 | | 26.40% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|--|-------------------|----------------|--|
| 1.3 | 100 | 0.0196 | 1.25 | | Sheet Flow, Smooth surfaces n= 0.011 P2= 2.70" |
| 0.4 | 39 | 0.0061 | 1.59 | | Shallow Concentrated Flow, Paved Kv= 20.3 fps |
| 1.7 | 139 | Total, Increased to minimum Tc = 6.0 min | | | |

Subcatchment EX-1: North Area - NT Disturbed

Hydrograph



Existing

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MSE 24-hr 3 2-Year Rainfall=2.67"

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Summary for Subcatchment EX-7: East Area - NT Disturbed

[73] Warning: Peak may fall outside time span

Runoff = 0.63 cfs @ 12.13 hrs, Volume= 0.026 af, Depth> 1.29"

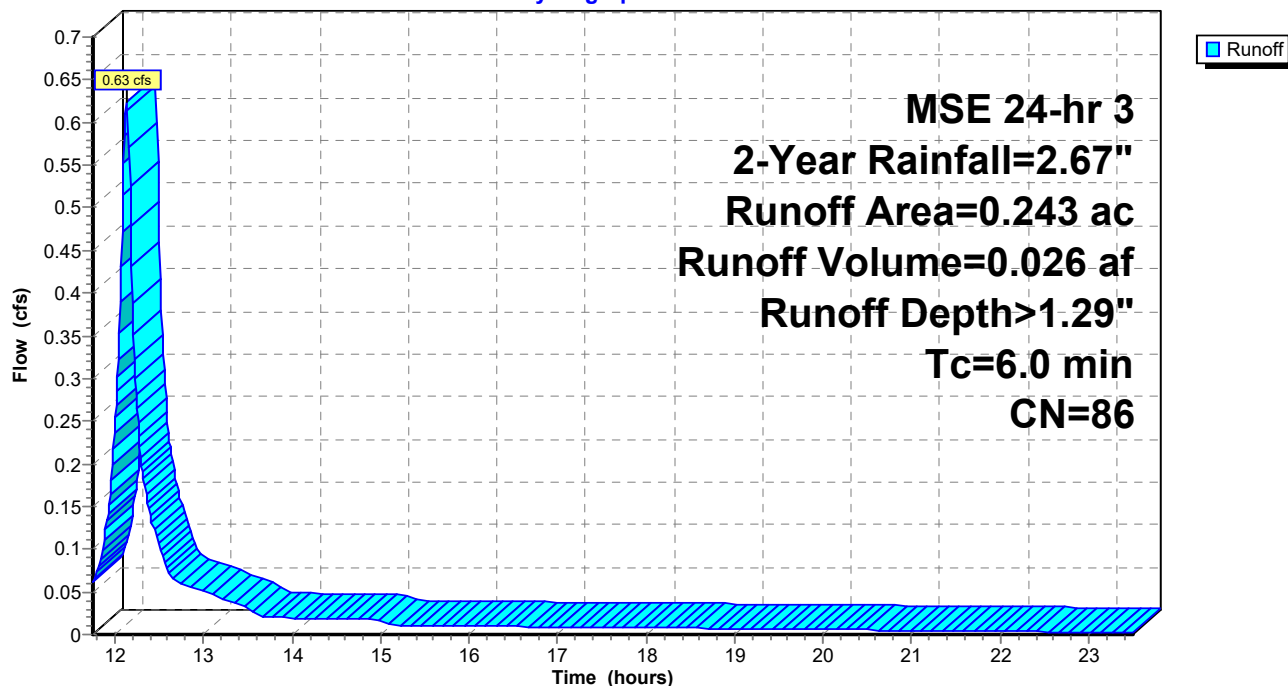
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-23.75 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.67"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.122 | 74 | >75% Grass cover, Good, HSG C |
| 0.047 | 98 | Paved parking, HSG C |
| 0.060 | 98 | Sidewalks, Good, HSG C |
| 0.014 | 98 | Sidewalks, Good, HSG C |
| 0.243 | 86 | Weighted Average |
| 0.122 | | 50.21% Pervious Area |
| 0.121 | | 49.79% Impervious Area |

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

Subcatchment EX-7: East Area - NT Disturbed

Hydrograph



Existing

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MSE 24-hr 3 2-Year Rainfall=2.67"

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Summary for Reach 1R: Total Existing

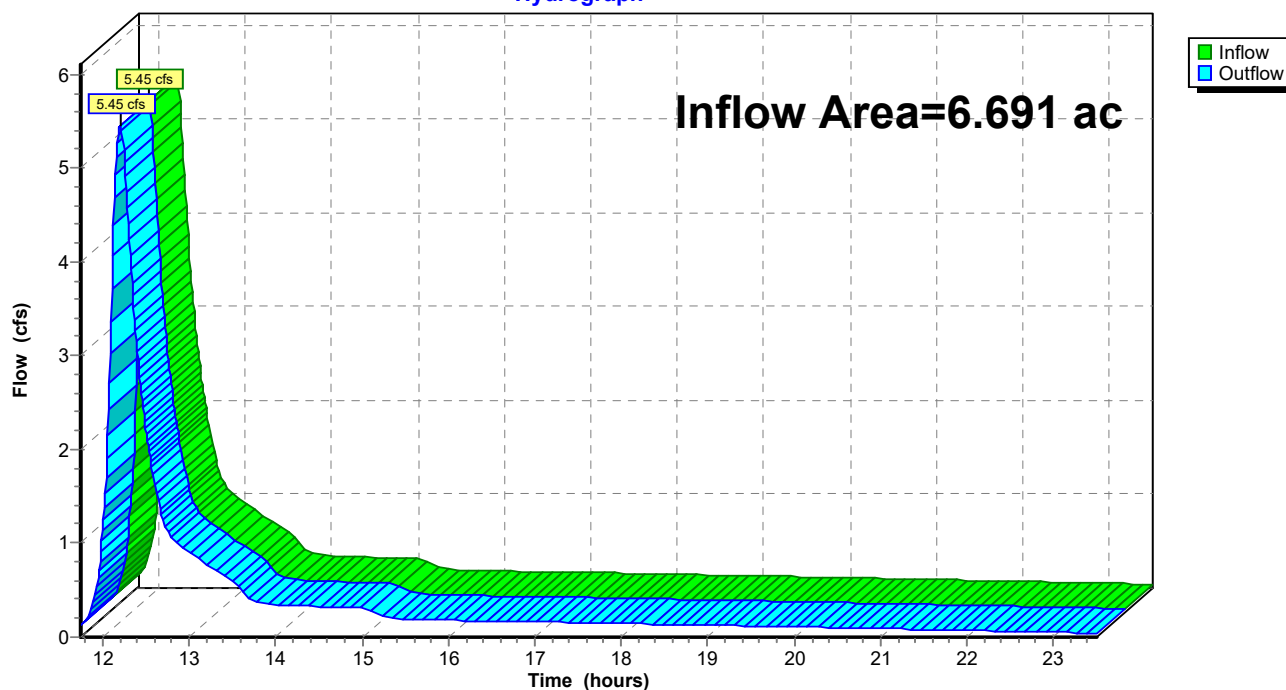
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 6.691 ac, 30.96% Impervious, Inflow Depth > 0.67" for 2-Year event
 Inflow = 5.45 cfs @ 12.21 hrs, Volume= 0.375 af
 Outflow = 5.45 cfs @ 12.21 hrs, Volume= 0.375 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 11.75-23.75 hrs, dt= 0.01 hrs

Reach 1R: Total Existing

Hydrograph



Existing

MSE 24-hr 3 10-Year Rainfall=3.77"

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Page 8

Time span=11.75-23.75 hrs, dt=0.01 hrs, 1201 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

SubcatchmentEX 1: Subcat EX 1

Runoff Area=5.876 ac 30.62% Impervious Runoff Depth>1.29"
 Flow Length=418' Tc=12.8 min CN=72 Runoff=10.39 cfs 0.630 af

SubcatchmentEX-1: North Area - NT

Runoff Area=0.572 ac 26.40% Impervious Runoff Depth>1.75"
 Flow Length=139' Tc=6.0 min CN=80 Runoff=1.98 cfs 0.083 af

SubcatchmentEX-7: East Area - NT

Runoff Area=0.243 ac 49.79% Impervious Runoff Depth>2.11"
 Tc=6.0 min CN=86 Runoff=1.04 cfs 0.043 af

Reach 1R: Total Existing

Inflow=12.11 cfs 0.757 af
 Outflow=12.11 cfs 0.757 af

Total Runoff Area = 6.691 ac Runoff Volume = 0.757 af Average Runoff Depth = 1.36"
69.04% Pervious = 4.620 ac 30.96% Impervious = 2.071 ac

Existing

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MSE 24-hr 3 10-Year Rainfall=3.77"

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Summary for Subcatchment EX 1: Subcat EX 1

[73] Warning: Peak may fall outside time span

Runoff = 10.39 cfs @ 12.22 hrs, Volume= 0.630 af, Depth> 1.29"

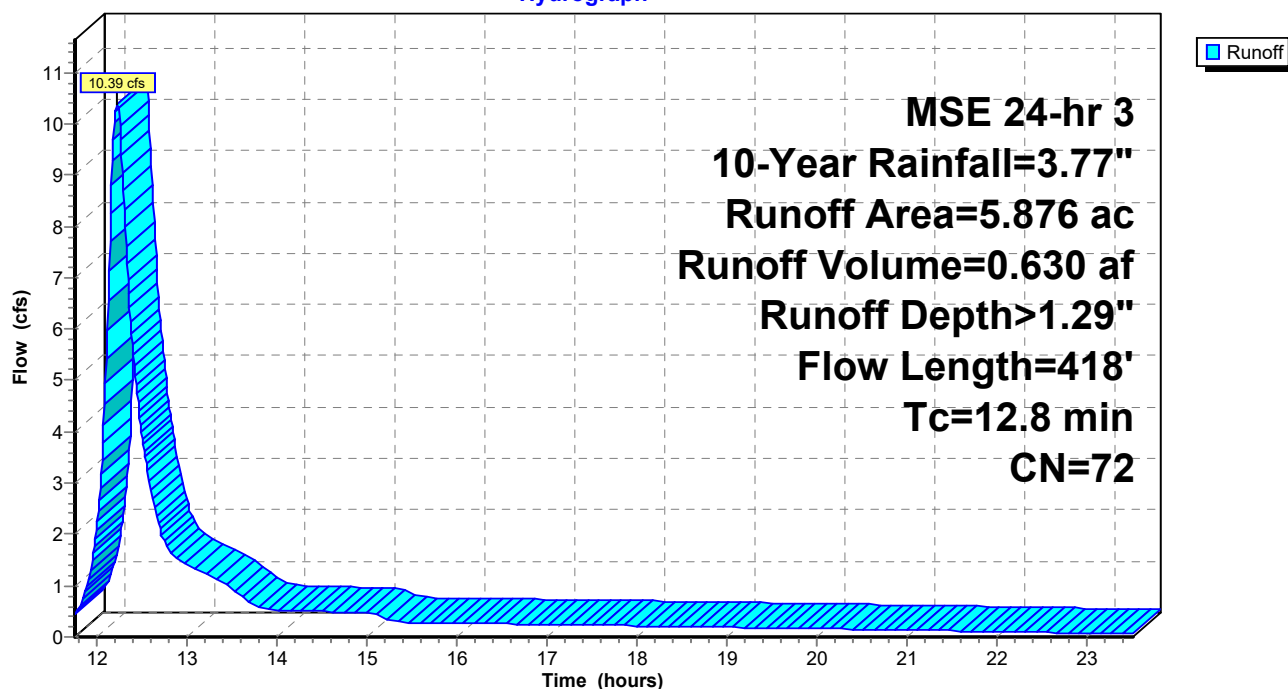
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-23.75 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.77"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 4.077 | 61 | >75% Grass cover, Good, HSG B |
| 1.432 | 98 | Paved parking, HSG B |
| 0.367 | 98 | Sidewalks, Good, HSG B |
| 5.876 | 72 | Weighted Average |
| 4.077 | | 69.38% Pervious Area |
| 1.799 | | 30.62% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 11.4 | 100 | 0.0435 | 0.15 | | Sheet Flow, Grass: Dense n= 0.240 P2= 2.70" |
| 1.4 | 318 | 0.0578 | 3.87 | | Shallow Concentrated Flow, Unpaved Kv= 16.1 fps |
| 12.8 | 418 | Total | | | |

Subcatchment EX 1: Subcat EX 1

Hydrograph



Existing

Prepared by Harwood Engineering Consultants, Ltd.

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MSE 24-hr 3 10-Year Rainfall=3.77"

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Summary for Subcatchment EX-1: North Area - NT Disturbed

[73] Warning: Peak may fall outside time span

Runoff = 1.98 cfs @ 12.13 hrs, Volume= 0.083 af, Depth> 1.75"

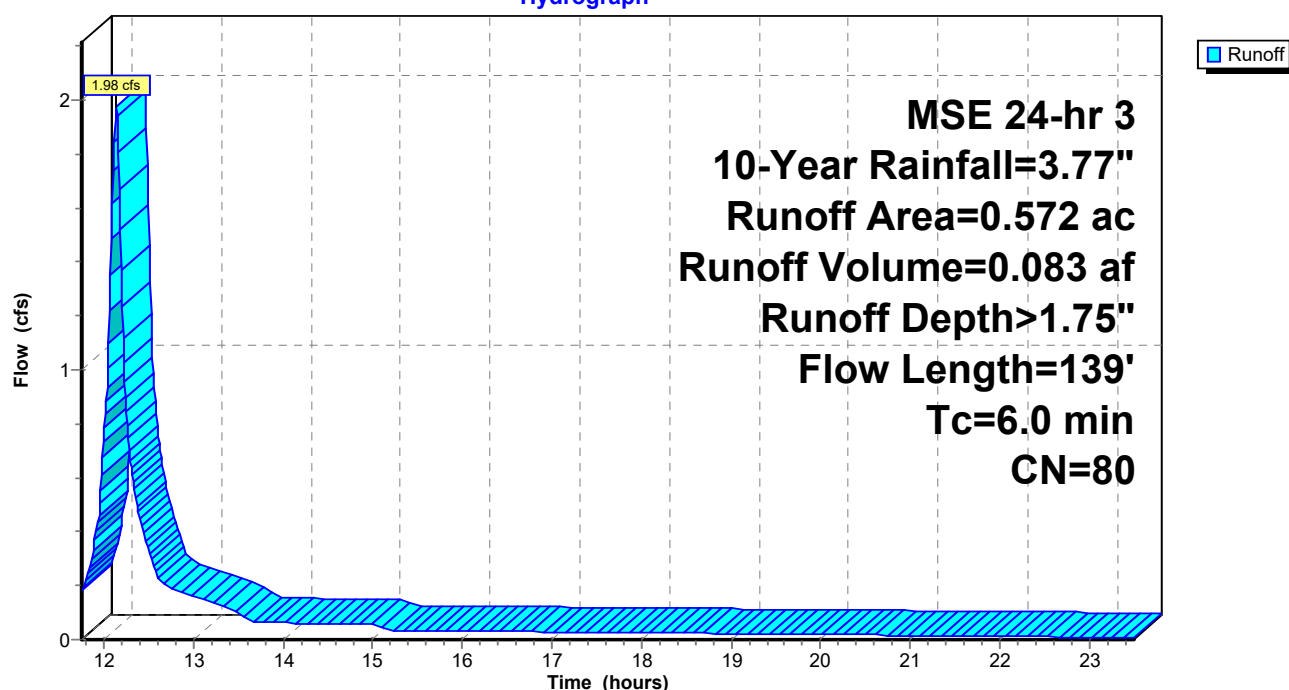
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-23.75 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.77"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.421 | 74 | >75% Grass cover, Good, HSG C |
| 0.094 | 98 | Paved parking, HSG C |
| 0.030 | 98 | Sidewalks, Good, HSG C |
| 0.027 | 98 | Sidewalks, Good, HSG C |
| 0.572 | 80 | Weighted Average |
| 0.421 | | 73.60% Pervious Area |
| 0.151 | | 26.40% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|--|-------------------|----------------|--|
| 1.3 | 100 | 0.0196 | 1.25 | | Sheet Flow, Smooth surfaces n= 0.011 P2= 2.70" |
| 0.4 | 39 | 0.0061 | 1.59 | | Shallow Concentrated Flow, Paved Kv= 20.3 fps |
| 1.7 | 139 | Total, Increased to minimum Tc = 6.0 min | | | |

Subcatchment EX-1: North Area - NT Disturbed

Hydrograph



Existing

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MSE 24-hr 3 10-Year Rainfall=3.77"

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Summary for Subcatchment EX-7: East Area - NT Disturbed

[73] Warning: Peak may fall outside time span

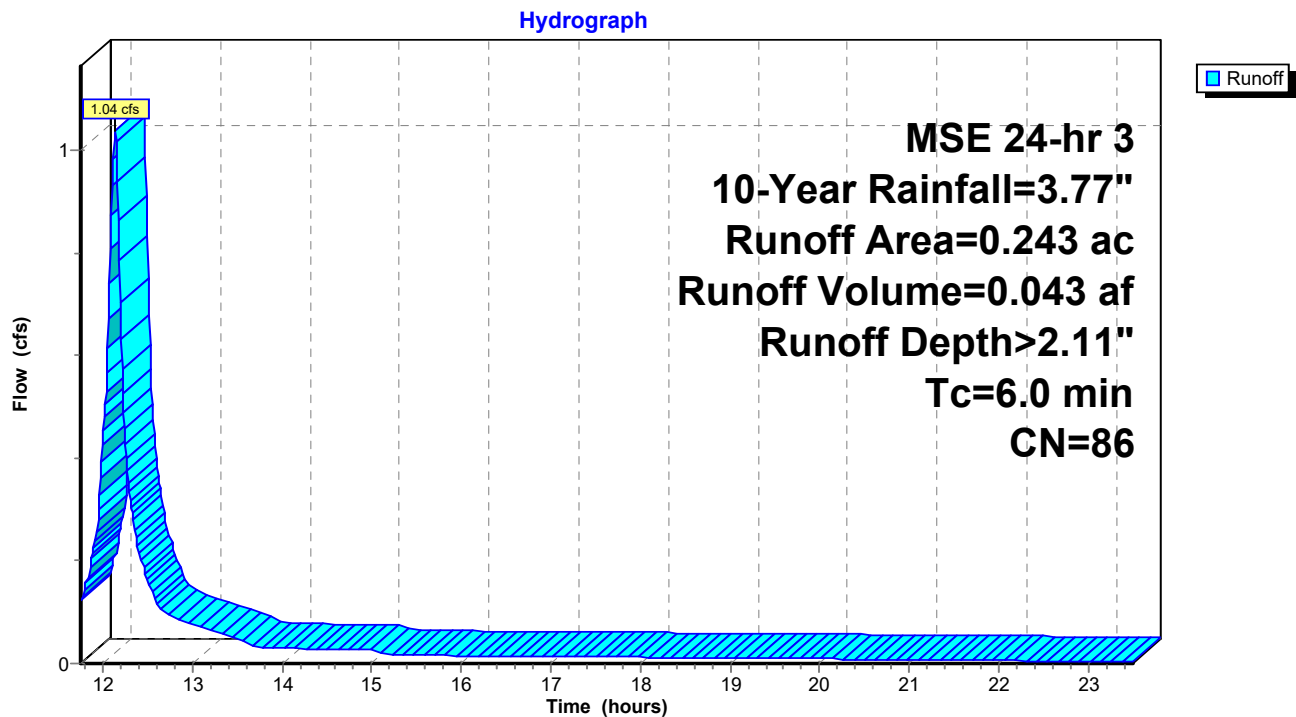
Runoff = 1.04 cfs @ 12.13 hrs, Volume= 0.043 af, Depth> 2.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-23.75 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.77"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.122 | 74 | >75% Grass cover, Good, HSG C |
| 0.047 | 98 | Paved parking, HSG C |
| 0.060 | 98 | Sidewalks, Good, HSG C |
| 0.014 | 98 | Sidewalks, Good, HSG C |
| 0.243 | 86 | Weighted Average |
| 0.122 | | 50.21% Pervious Area |
| 0.121 | | 49.79% Impervious Area |

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

Subcatchment EX-7: East Area - NT Disturbed



Existing

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MSE 24-hr 3 10-Year Rainfall=3.77"

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Summary for Reach 1R: Total Existing

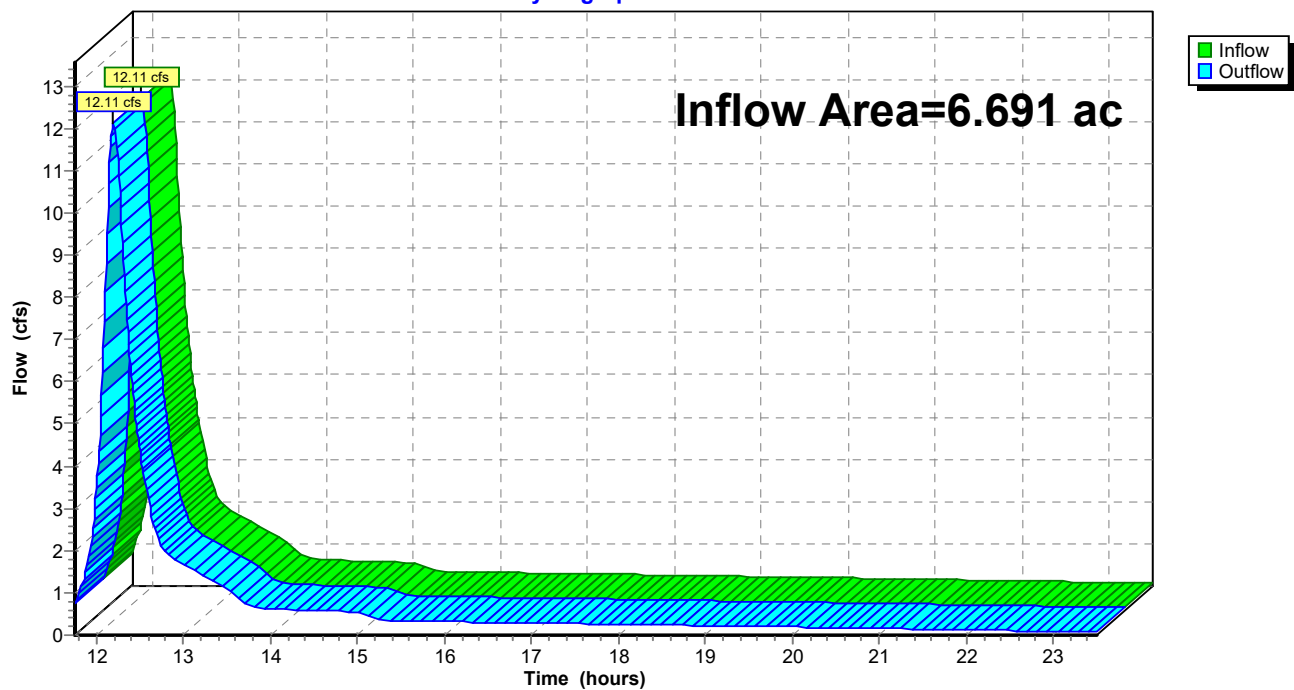
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 6.691 ac, 30.96% Impervious, Inflow Depth > 1.36" for 10-Year event
 Inflow = 12.11 cfs @ 12.19 hrs, Volume= 0.757 af
 Outflow = 12.11 cfs @ 12.19 hrs, Volume= 0.757 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 11.75-23.75 hrs, dt= 0.01 hrs

Reach 1R: Total Existing

Hydrograph



Existing

MSE 24-hr 3 100-Year Rainfall=5.92"

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Time span=11.75-23.75 hrs, dt=0.01 hrs, 1201 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

SubcatchmentEX 1: Subcat EX 1

Runoff Area=5.876 ac 30.62% Impervious Runoff Depth>2.80"
 Flow Length=418' Tc=12.8 min CN=72 Runoff=23.99 cfs 1.370 af

SubcatchmentEX-1: North Area - NT

Runoff Area=0.572 ac 26.40% Impervious Runoff Depth>3.34"
 Flow Length=139' Tc=6.0 min CN=80 Runoff=3.87 cfs 0.159 af

SubcatchmentEX-7: East Area - NT

Runoff Area=0.243 ac 49.79% Impervious Runoff Depth>3.73"
 Tc=6.0 min CN=86 Runoff=1.86 cfs 0.076 af

Reach 1R: Total Existing

Inflow=27.42 cfs 1.605 af
 Outflow=27.42 cfs 1.605 af

Total Runoff Area = 6.691 ac Runoff Volume = 1.605 af Average Runoff Depth = 2.88"
69.04% Pervious = 4.620 ac 30.96% Impervious = 2.071 ac

Existing

MSE 24-hr 3 100-Year Rainfall=5.92"

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Summary for Subcatchment EX 1: Subcat EX 1

[73] Warning: Peak may fall outside time span

Runoff = 23.99 cfs @ 12.21 hrs, Volume= 1.370 af, Depth> 2.80"

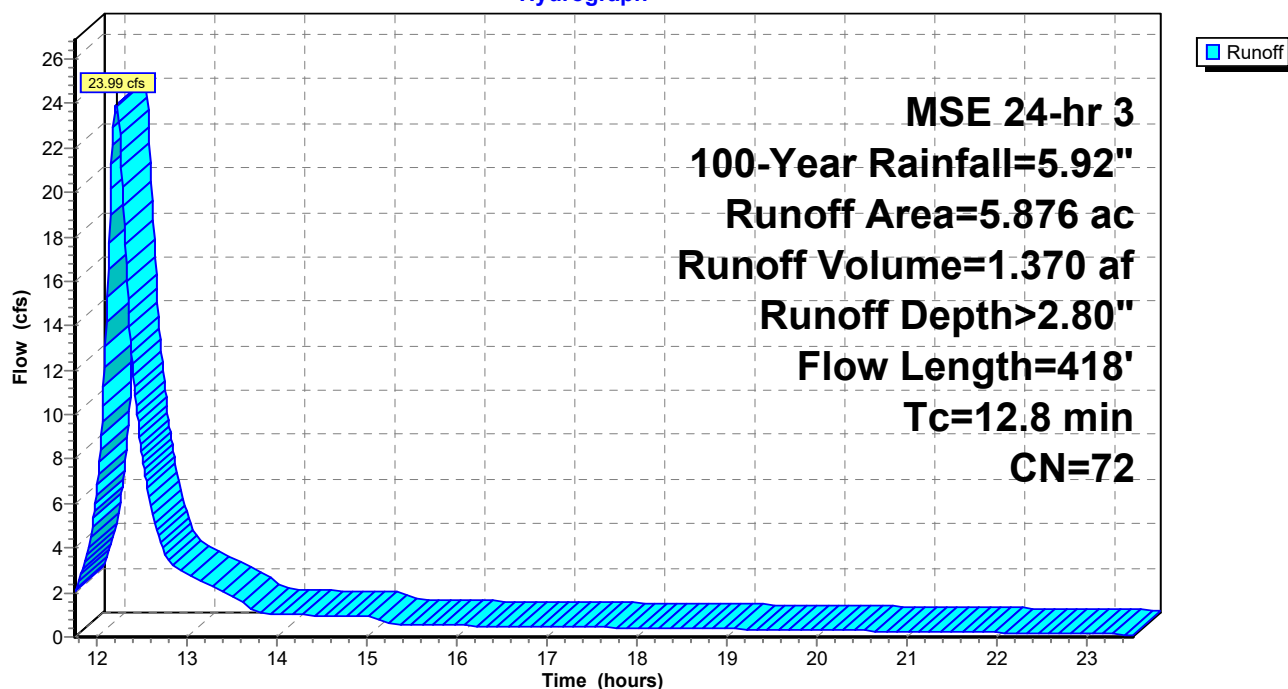
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-23.75 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=5.92"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 4.077 | 61 | >75% Grass cover, Good, HSG B |
| 1.432 | 98 | Paved parking, HSG B |
| 0.367 | 98 | Sidewalks, Good, HSG B |
| 5.876 | 72 | Weighted Average |
| 4.077 | | 69.38% Pervious Area |
| 1.799 | | 30.62% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---|
| 11.4 | 100 | 0.0435 | 0.15 | | Sheet Flow, Grass: Dense n= 0.240 P2= 2.70" |
| 1.4 | 318 | 0.0578 | 3.87 | | Shallow Concentrated Flow, Unpaved Kv= 16.1 fps |
| 12.8 | 418 | Total | | | |

Subcatchment EX 1: Subcat EX 1

Hydrograph



Existing

MSE 24-hr 3 100-Year Rainfall=5.92"

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Summary for Subcatchment EX-1: North Area - NT Disturbed

[73] Warning: Peak may fall outside time span

Runoff = 3.87 cfs @ 12.13 hrs, Volume= 0.159 af, Depth> 3.34"

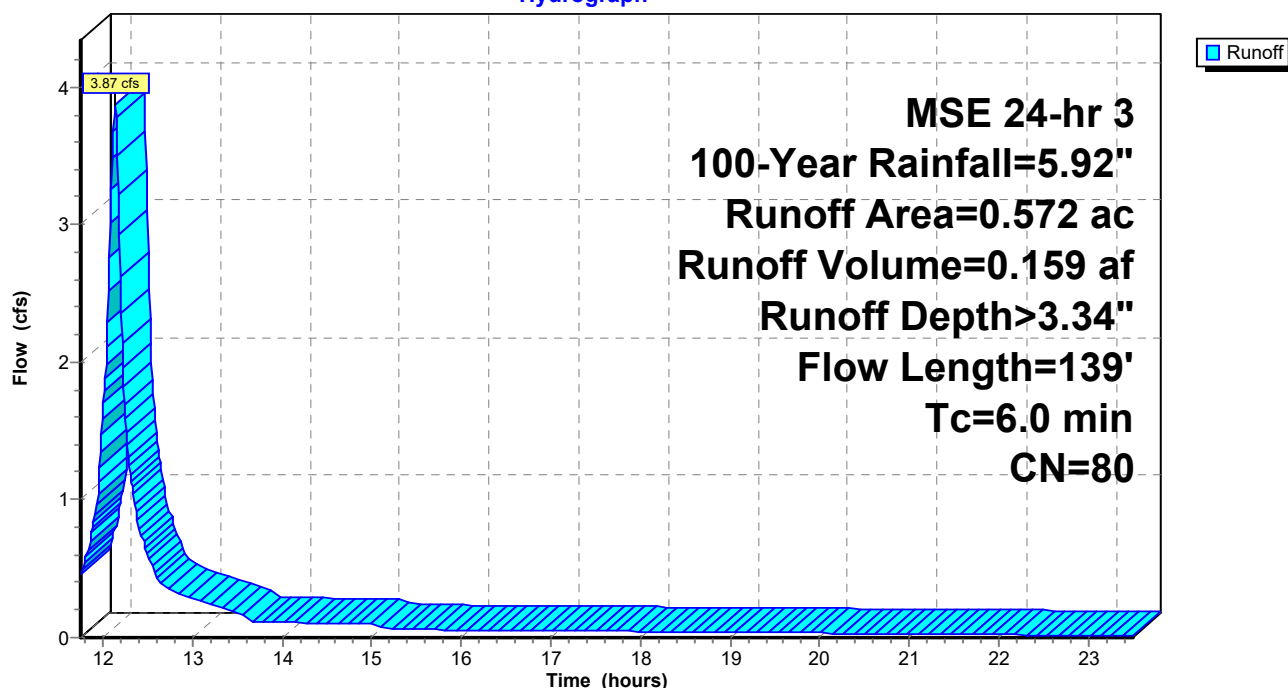
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-23.75 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=5.92"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.421 | 74 | >75% Grass cover, Good, HSG C |
| 0.094 | 98 | Paved parking, HSG C |
| 0.030 | 98 | Sidewalks, Good, HSG C |
| 0.027 | 98 | Sidewalks, Good, HSG C |
| 0.572 | 80 | Weighted Average |
| 0.421 | | 73.60% Pervious Area |
| 0.151 | | 26.40% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|--|-------------------|----------------|---|
| 1.3 | 100 | 0.0196 | 1.25 | | Sheet Flow, Smooth surfaces n= 0.011 P2= 2.70" |
| 0.4 | 39 | 0.0061 | 1.59 | | Shallow Concentrated Flow, Paved Kv= 20.3 fps |
| 1.7 | 139 | Total, Increased to minimum Tc = 6.0 min | | | |

Subcatchment EX-1: North Area - NT Disturbed

Hydrograph



Existing

MSE 24-hr 3 100-Year Rainfall=5.92"

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Summary for Subcatchment EX-7: East Area - NT Disturbed

[73] Warning: Peak may fall outside time span

Runoff = 1.86 cfs @ 12.13 hrs, Volume= 0.076 af, Depth> 3.73"

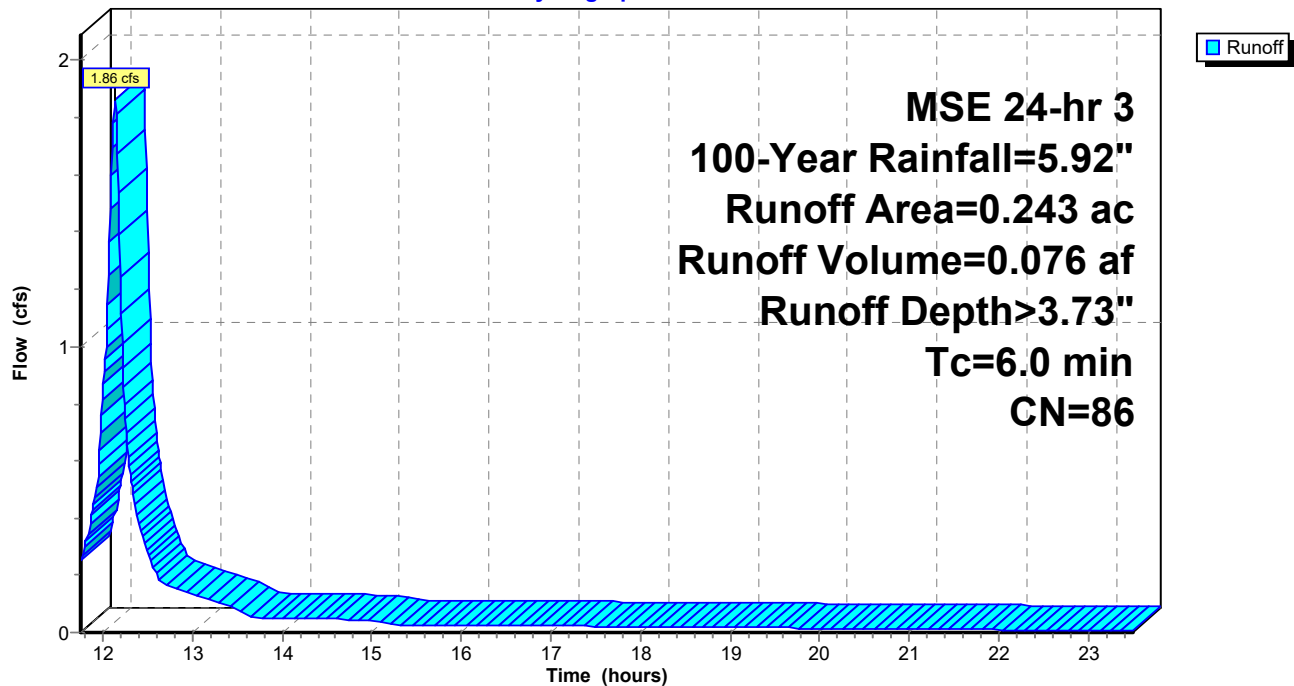
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-23.75 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=5.92"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.122 | 74 | >75% Grass cover, Good, HSG C |
| 0.047 | 98 | Paved parking, HSG C |
| 0.060 | 98 | Sidewalks, Good, HSG C |
| 0.014 | 98 | Sidewalks, Good, HSG C |
| 0.243 | 86 | Weighted Average |
| 0.122 | | 50.21% Pervious Area |
| 0.121 | | 49.79% Impervious Area |

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

Subcatchment EX-7: East Area - NT Disturbed

Hydrograph



Existing

MSE 24-hr 3 100-Year Rainfall=5.92"

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Summary for Reach 1R: Total Existing

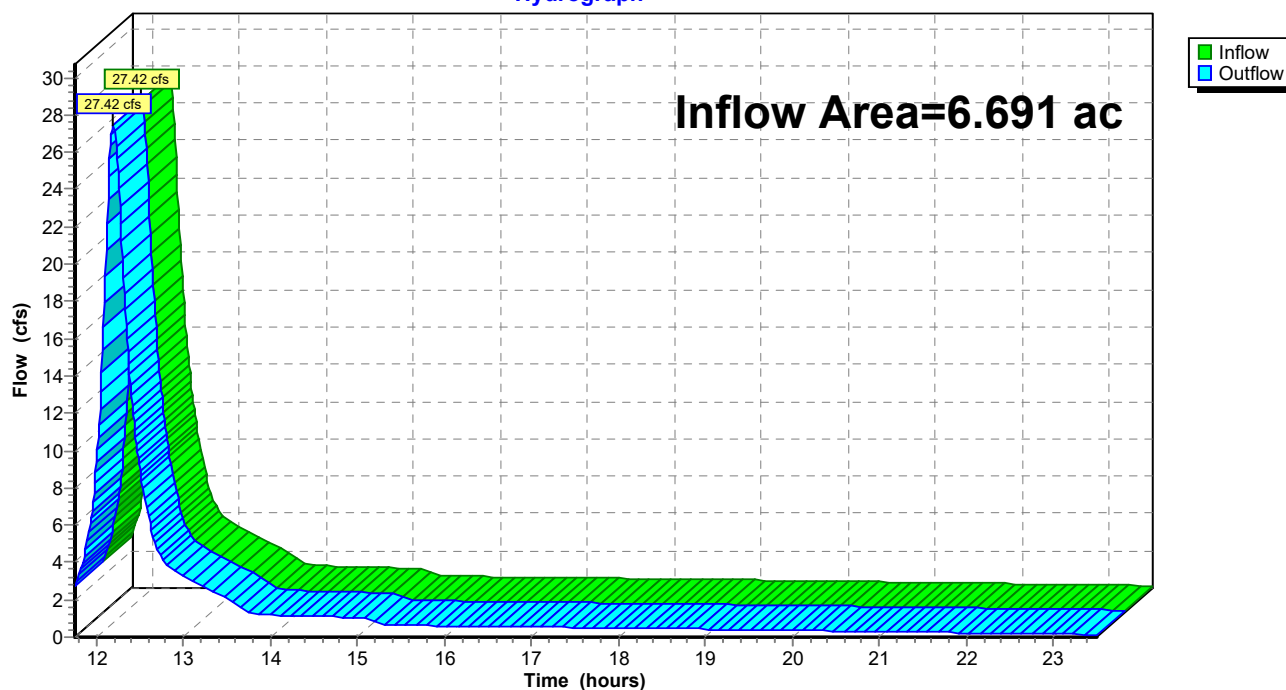
[40] Hint: Not Described (Outflow=Inflow)

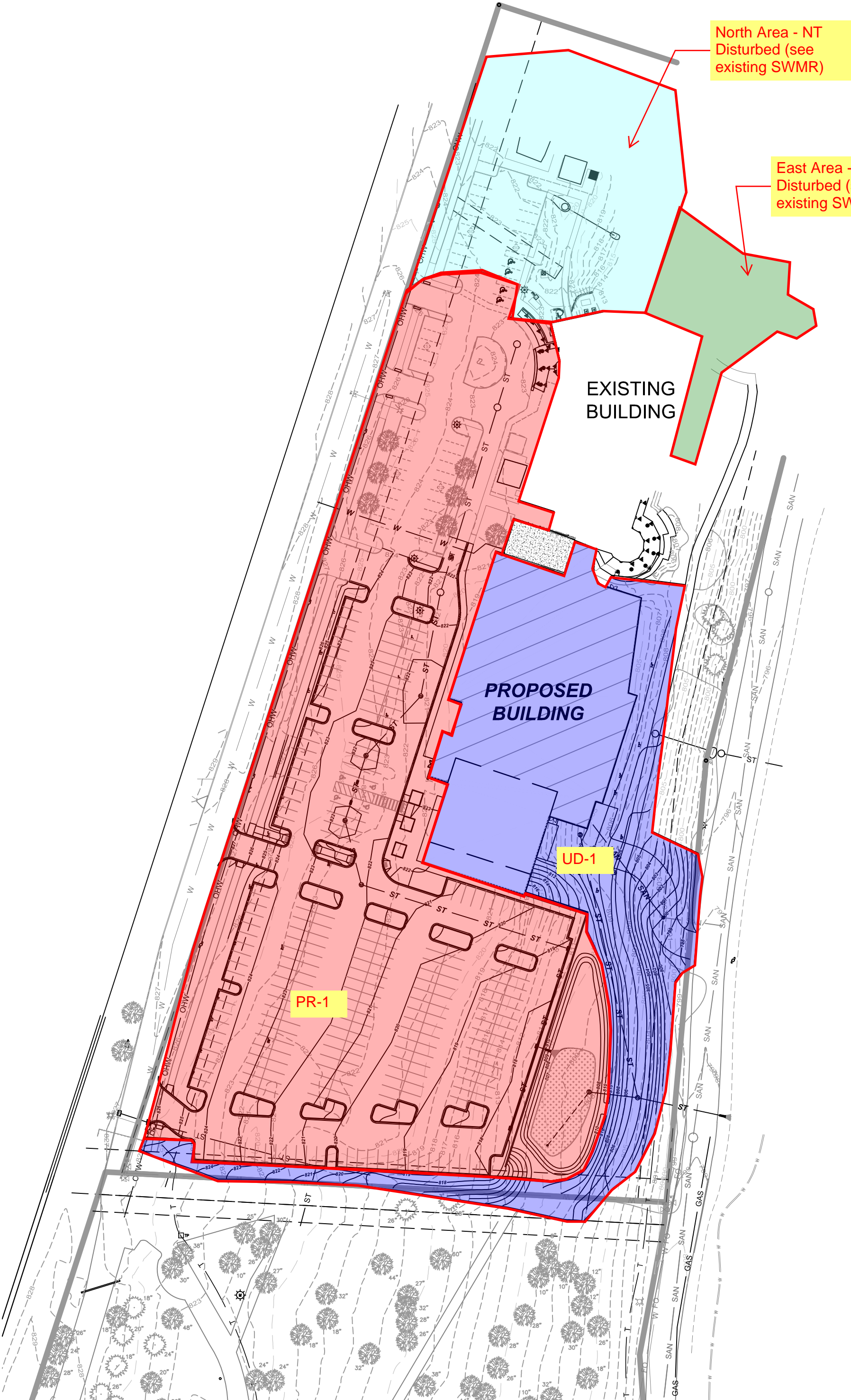
Inflow Area = 6.691 ac, 30.96% Impervious, Inflow Depth > 2.88" for 100-Year event
 Inflow = 27.42 cfs @ 12.19 hrs, Volume= 1.605 af
 Outflow = 27.42 cfs @ 12.19 hrs, Volume= 1.605 af, Atten= 0%, Lag= 0.0 min

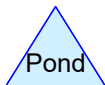
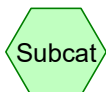
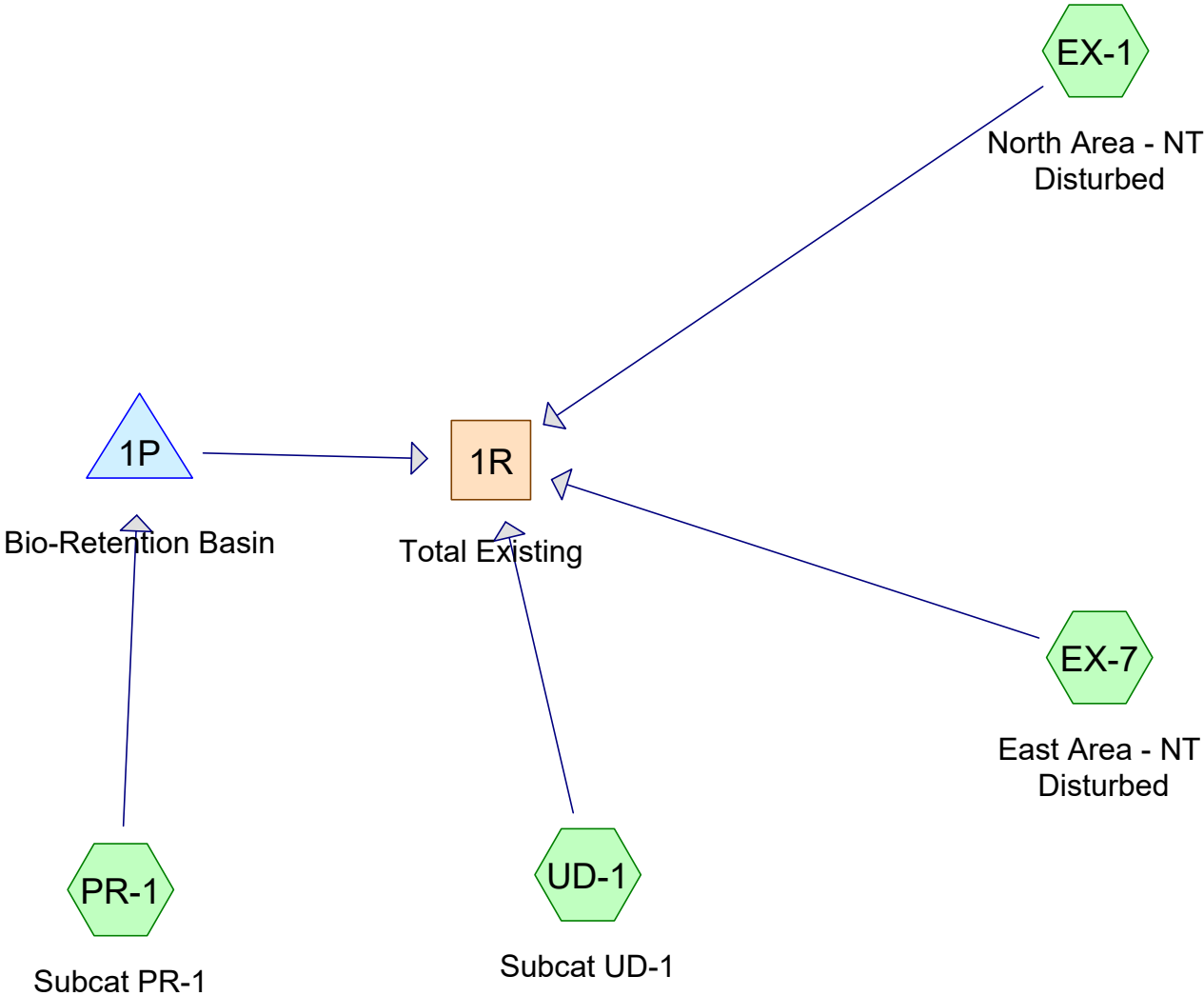
Routing by Stor-Ind method, Time Span= 11.75-23.75 hrs, dt= 0.01 hrs

Reach 1R: Total Existing

Hydrograph







Routing Diagram for Proposed
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Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|-----------------|-----------|--|
| 1.731 | 61 | >75% Grass cover, Good, HSG B (PR-1, UD-1) |
| 0.543 | 74 | >75% Grass cover, Good, HSG C (EX-1, EX-7) |
| 2.840 | 98 | Paved parking, HSG B (PR-1, UD-1) |
| 0.141 | 98 | Paved parking, HSG C (EX-1, EX-7) |
| 0.887 | 98 | Roofs, HSG B (PR-1, UD-1) |
| 0.418 | 98 | Sidewalks, Good, HSG B (PR-1, UD-1) |
| 0.131 | 98 | Sidewalks, Good, HSG C (EX-1, EX-7) |
| 6.691 | 86 | TOTAL AREA |

Proposed

MSE 24-hr 3 2-Year Rainfall=2.79"

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Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

SubcatchmentEX-1: North Area - NT Runoff Area=0.572 ac 26.40% Impervious Runoff Depth>1.09"
Flow Length=139' Tc=6.0 min CN=80 Runoff=1.17 cfs 0.052 af

SubcatchmentEX-7: East Area - NT Runoff Area=0.243 ac 49.79% Impervious Runoff Depth>1.48"
Tc=6.0 min CN=86 Runoff=0.67 cfs 0.030 af

SubcatchmentPR-1: Subcat PR-1 Runoff Area=4.052 ac 75.23% Impervious Runoff Depth>1.71"
Tc=0.0 min CN=89 Runoff=14.82 cfs 0.578 af

SubcatchmentUD-1: Subcat UD-1 Runoff Area=1.824 ac 60.10% Impervious Runoff Depth>1.28"
Tc=0.0 min CN=83 Runoff=5.28 cfs 0.195 af

Reach 1R: Total Existing Inflow=15.14 cfs 0.838 af
Outflow=15.14 cfs 0.838 af

Pond 1P: Bio-RetentionBasin Peak Elev=808.00' Storage=7,993 cf Inflow=14.82 cfs 0.578 af
Outflow=8.79 cfs 0.561 af

Total Runoff Area = 6.691 ac Runoff Volume = 0.854 af Average Runoff Depth = 1.53"
33.99% Pervious = 2.274 ac 66.01% Impervious = 4.417 ac

Proposed

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MSE 24-hr 3 2-Year Rainfall=2.79"

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Summary for Subcatchment EX-1: North Area - NT Disturbed

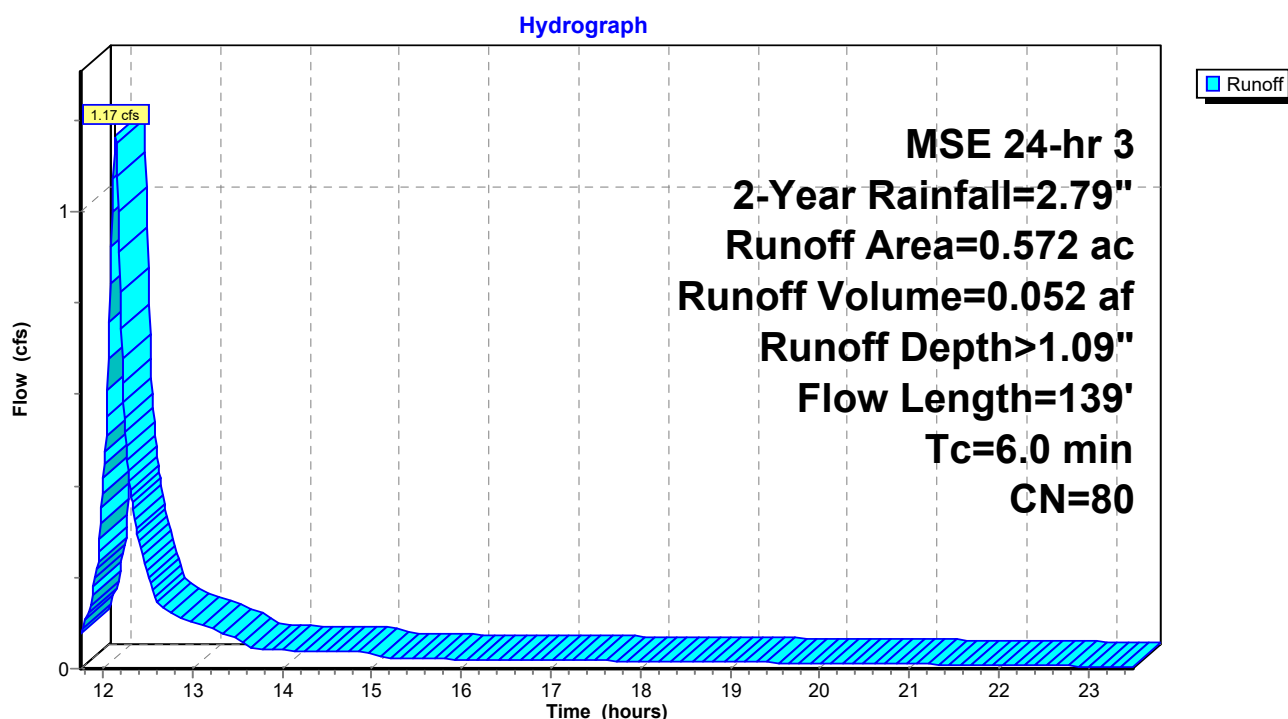
Runoff = 1.17 cfs @ 12.14 hrs, Volume= 0.052 af, Depth> 1.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.79"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.421 | 74 | >75% Grass cover, Good, HSG C |
| 0.094 | 98 | Paved parking, HSG C |
| 0.030 | 98 | Sidewalks, Good, HSG C |
| 0.027 | 98 | Sidewalks, Good, HSG C |
| 0.572 | 80 | Weighted Average |
| 0.421 | | 73.60% Pervious Area |
| 0.151 | | 26.40% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|--|-------------------|----------------|--|
| 1.3 | 100 | 0.0196 | 1.25 | | Sheet Flow, Smooth surfaces n= 0.011 P2= 2.70" |
| 0.4 | 39 | 0.0061 | 1.59 | | Shallow Concentrated Flow, Paved Kv= 20.3 fps |
| 1.7 | 139 | Total, Increased to minimum Tc = 6.0 min | | | |

Subcatchment EX-1: North Area - NT Disturbed



Proposed

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MSE 24-hr 3 2-Year Rainfall=2.79"

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Summary for Subcatchment EX-7: East Area - NT Disturbed

Runoff = 0.67 cfs @ 12.13 hrs, Volume= 0.030 af, Depth> 1.48"

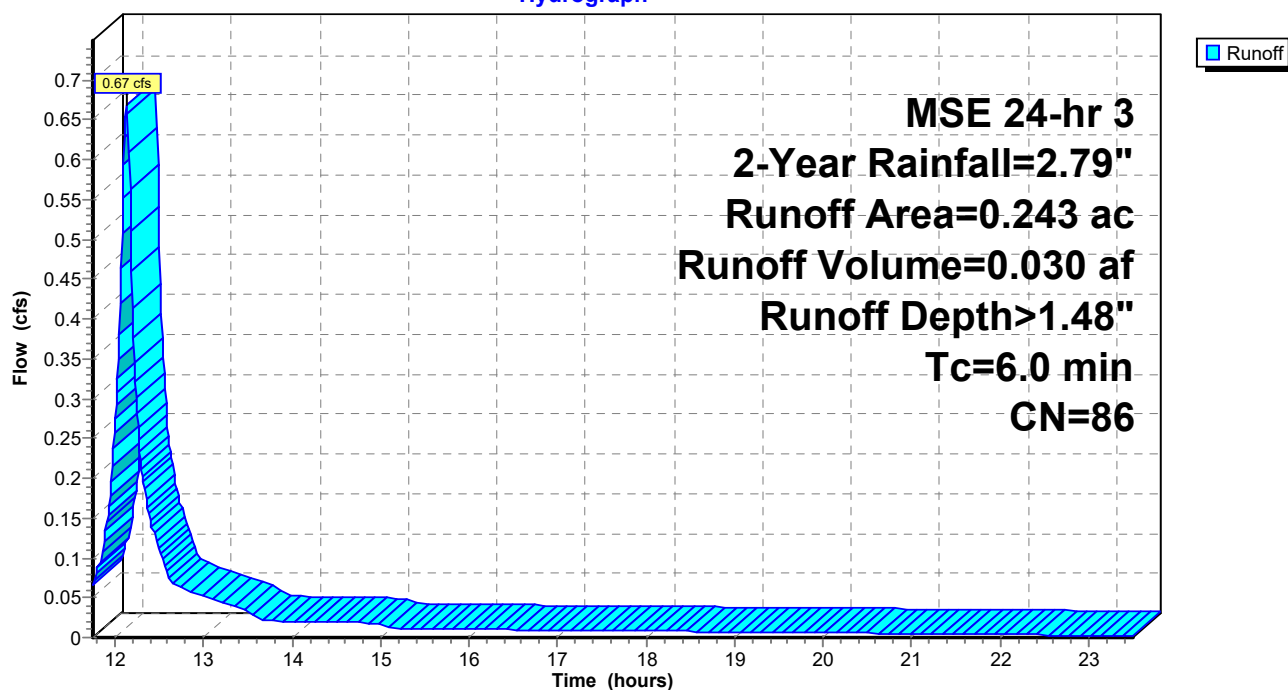
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.79"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.122 | 74 | >75% Grass cover, Good, HSG C |
| 0.047 | 98 | Paved parking, HSG C |
| 0.060 | 98 | Sidewalks, Good, HSG C |
| 0.014 | 98 | Sidewalks, Good, HSG C |
| 0.243 | 86 | Weighted Average |
| 0.122 | | 50.21% Pervious Area |
| 0.121 | | 49.79% Impervious Area |

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

Subcatchment EX-7: East Area - NT Disturbed

Hydrograph



Proposed

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MSE 24-hr 3 2-Year Rainfall=2.79"

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Summary for Subcatchment PR-1: Subcat PR-1

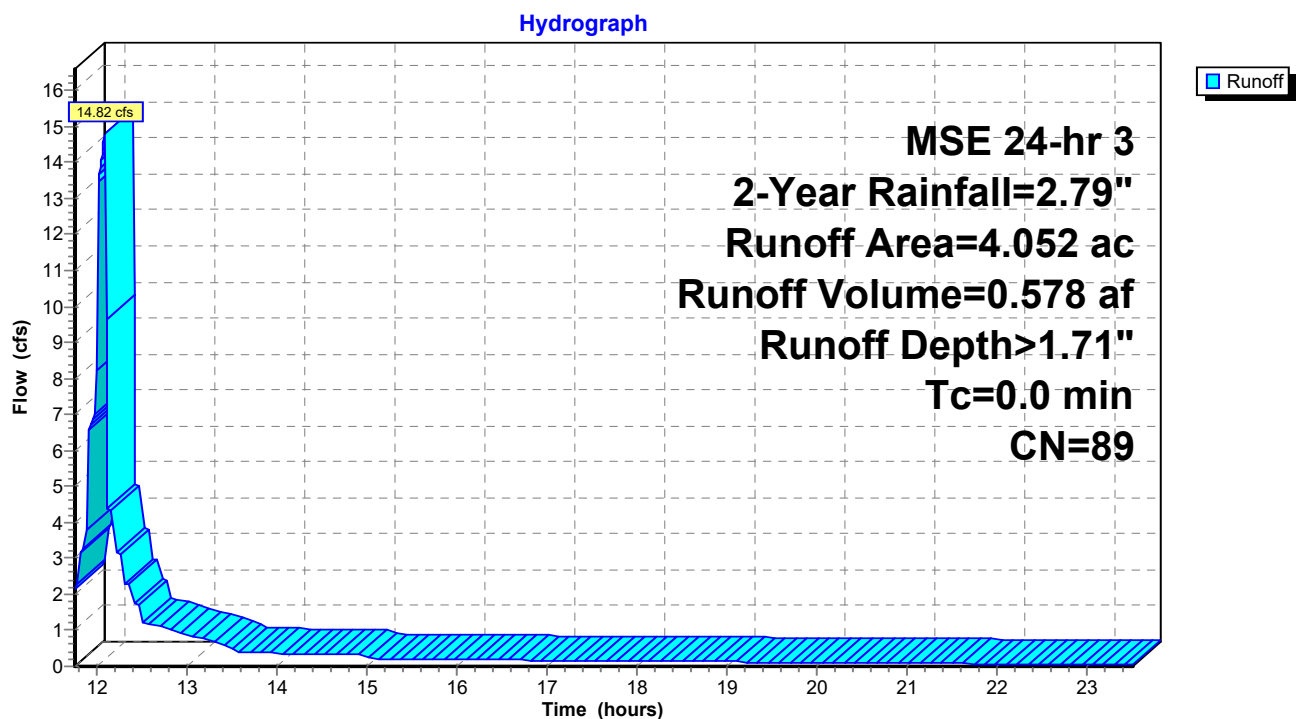
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 14.82 cfs @ 12.09 hrs, Volume= 0.578 af, Depth> 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.79"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 1.004 | 61 | >75% Grass cover, Good, HSG B |
| 2.713 | 98 | Paved parking, HSG B |
| 0.010 | 98 | Roofs, HSG B |
| 0.326 | 98 | Sidewalks, Good, HSG B |
| 4.052 | 89 | Weighted Average |
| 1.004 | | 24.77% Pervious Area |
| 3.048 | | 75.23% Impervious Area |

Subcatchment PR-1: Subcat PR-1



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MSE 24-hr 3 2-Year Rainfall=2.79"

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Summary for Subcatchment UD-1: Subcat UD-1

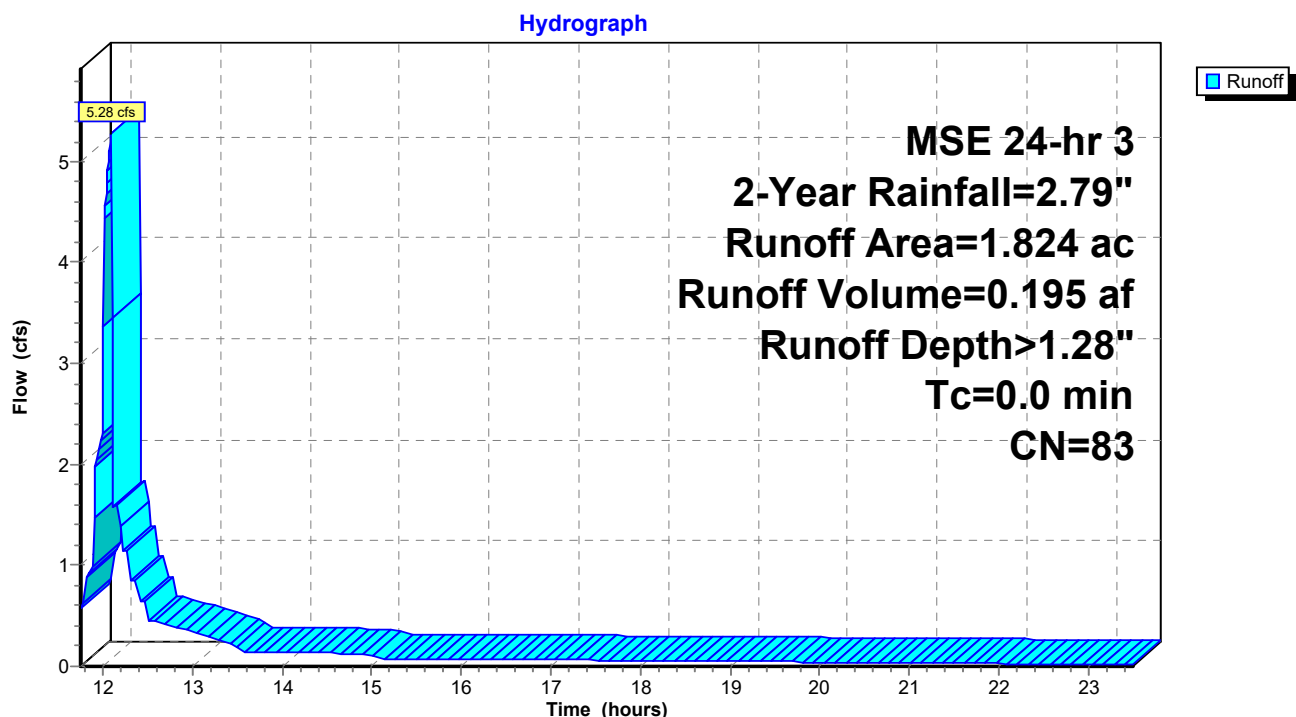
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 5.28 cfs @ 12.09 hrs, Volume= 0.195 af, Depth> 1.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.79"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.728 | 61 | >75% Grass cover, Good, HSG B |
| 0.127 | 98 | Paved parking, HSG B |
| 0.877 | 98 | Roofs, HSG B |
| 0.092 | 98 | Sidewalks, Good, HSG B |
| 1.824 | 83 | Weighted Average |
| 0.728 | | 39.90% Pervious Area |
| 1.096 | | 60.10% Impervious Area |

Subcatchment UD-1: Subcat UD-1



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MSE 24-hr 3 2-Year Rainfall=2.79"

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Summary for Reach 1R: Total Existing

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 6.691 ac, 66.01% Impervious, Inflow Depth > 1.50" for 2-Year event

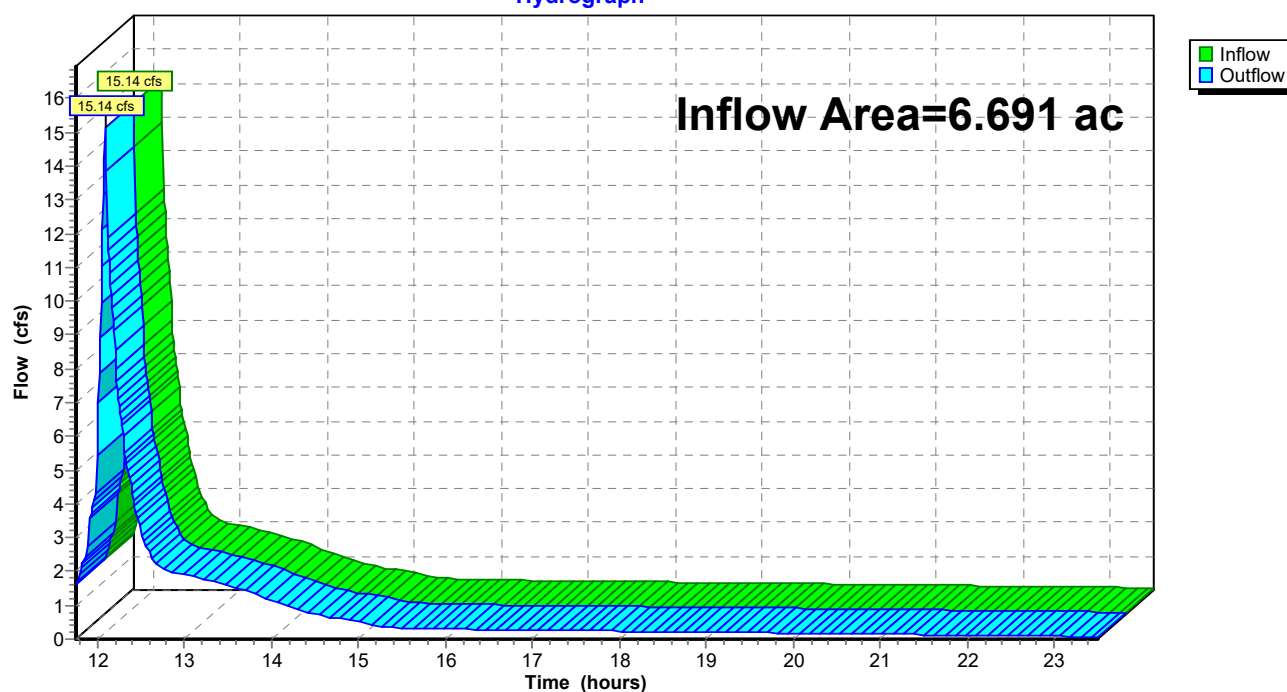
Inflow = 15.14 cfs @ 12.09 hrs, Volume= 0.838 af

Outflow = 15.14 cfs @ 12.09 hrs, Volume= 0.838 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Reach 1R: Total Existing

Hydrograph



Proposed

MSE 24-hr 3 2-Year Rainfall=2.79"

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Summary for Pond 1P: Bio-Retention Basin

Inflow Area = 4.052 ac, 75.23% Impervious, Inflow Depth > 1.71" for 2-Year event
 Inflow = 14.82 cfs @ 12.09 hrs, Volume= 0.578 af
 Outflow = 8.79 cfs @ 12.10 hrs, Volume= 0.561 af, Atten= 41%, Lag= 0.7 min
 Primary = 8.79 cfs @ 12.10 hrs, Volume= 0.561 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
 Peak Elev= 808.00' @ 12.10 hrs Surf.Area= 7,156 sf Storage= 7,993 cf

Plug-Flow detention time= 45.9 min calculated for 0.561 af (97% of inflow)
 Center-of-Mass det. time= 30.2 min (820.6 - 790.4)

| Volume | Invert | Avail.Storage | Storage Description | |
|---------------------|----------------------|---------------|--|---------------------------|
| #1 | 804.49' | 30,111 cf | Custom Stage Data (Prismatic) Listed below (Recalc) | |
| Elevation (feet) | Surf.Area (sq-ft) | Voids (%) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
| 804.49 | 3,588 | 0.0 | 0 | 0 |
| 804.50 | 3,588 | 33.0 | 12 | 12 |
| 805.50 | 3,588 | 33.0 | 1,184 | 1,196 |
| 805.51 | 3,588 | 27.0 | 10 | 1,206 |
| 807.00 | 3,588 | 27.0 | 1,443 | 2,649 |
| 807.01 | 3,588 | 100.0 | 36 | 2,685 |
| 808.00 | 7,163 | 100.0 | 5,322 | 8,007 |
| 809.00 | 8,431 | 100.0 | 7,797 | 15,804 |
| 810.00 | 9,756 | 100.0 | 9,094 | 24,897 |
| 810.50 | 11,099 | 100.0 | 5,214 | 30,111 |

| Device | Routing | Invert | Outlet Devices |
|--------|----------|---------|--|
| #1 | Primary | 805.00' | 18.0" Round Culvert L= 123.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 805.00' / 791.00' S= 0.1138 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 1.77 sf |
| #2 | Primary | 809.50' | 5.0' long x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88 |
| #3 | Device 1 | 805.00' | 6.0" Vert. Orifice/Grate C= 0.600 |
| #4 | Device 1 | 807.50' | 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads |

Primary OutFlow Max=8.74 cfs @ 12.10 hrs HW=808.00' (Free Discharge)

- 1=Culvert (Passes 8.74 cfs of 12.75 cfs potential flow)
- 3=Orifice/Grate (Orifice Controls 1.57 cfs @ 7.98 fps)
- 4=Orifice/Grate (Weir Controls 7.18 cfs @ 2.30 fps)
- 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

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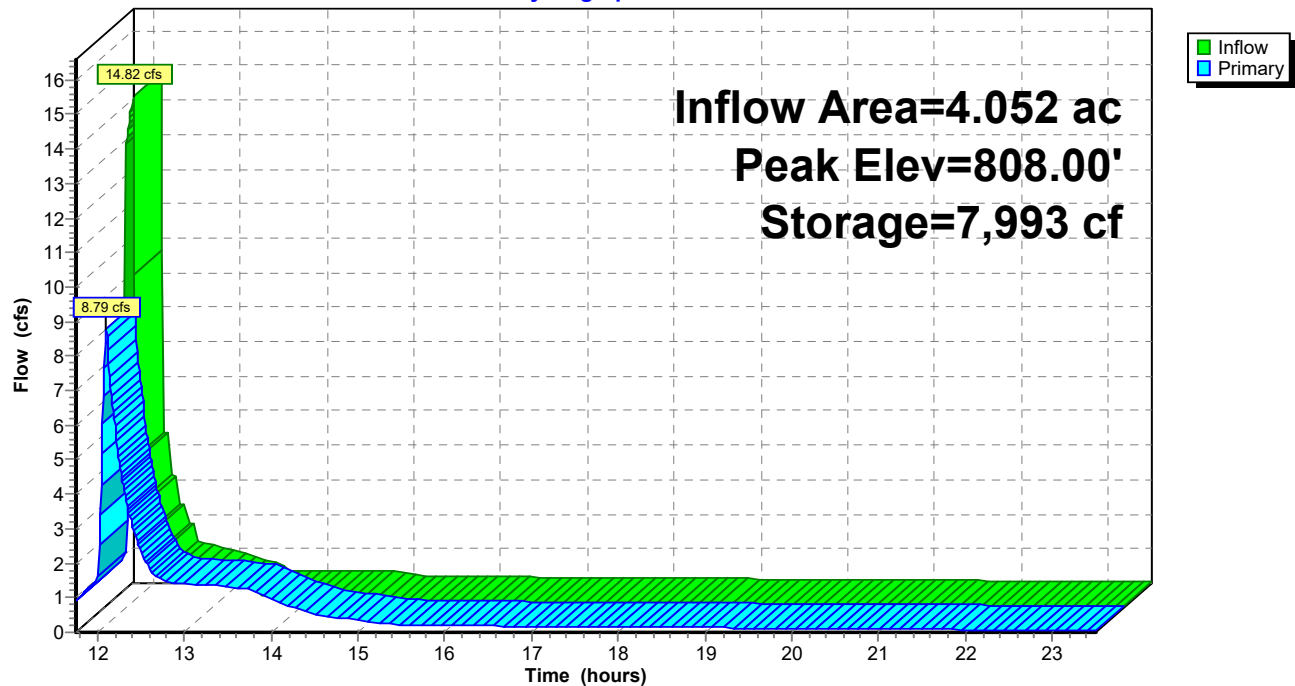
MSE 24-hr 3 2-Year Rainfall=2.79"

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Pond 1P: Bio-Retention Basin

Hydrograph



Proposed

MSE 24-hr 3 10-Year Rainfall=3.93"

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Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

SubcatchmentEX-1: North Area - NT Runoff Area=0.572 ac 26.40% Impervious Runoff Depth>1.98"
Flow Length=139' Tc=6.0 min CN=80 Runoff=2.11 cfs 0.095 af

SubcatchmentEX-7: East Area - NT Runoff Area=0.243 ac 49.79% Impervious Runoff Depth>2.48"
Tc=6.0 min CN=86 Runoff=1.10 cfs 0.050 af

SubcatchmentPR-1: Subcat PR-1 Runoff Area=4.052 ac 75.23% Impervious Runoff Depth>2.76"
Tc=0.0 min CN=89 Runoff=22.92 cfs 0.931 af

SubcatchmentUD-1: Subcat UD-1 Runoff Area=1.824 ac 60.10% Impervious Runoff Depth>2.23"
Tc=0.0 min CN=83 Runoff=8.84 cfs 0.338 af

Reach 1R: Total Existing Inflow=25.52 cfs 1.397 af
Outflow=25.52 cfs 1.397 af

Pond 1P: Bio-RetentionBasin Peak Elev=808.40' Storage=10,988 cf Inflow=22.92 cfs 0.931 af
Outflow=13.86 cfs 0.914 af

Total Runoff Area = 6.691 ac Runoff Volume = 1.414 af Average Runoff Depth = 2.54"
33.99% Pervious = 2.274 ac 66.01% Impervious = 4.417 ac

Proposed

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MSE 24-hr 3 10-Year Rainfall=3.93"

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Summary for Subcatchment EX-1: North Area - NT Disturbed

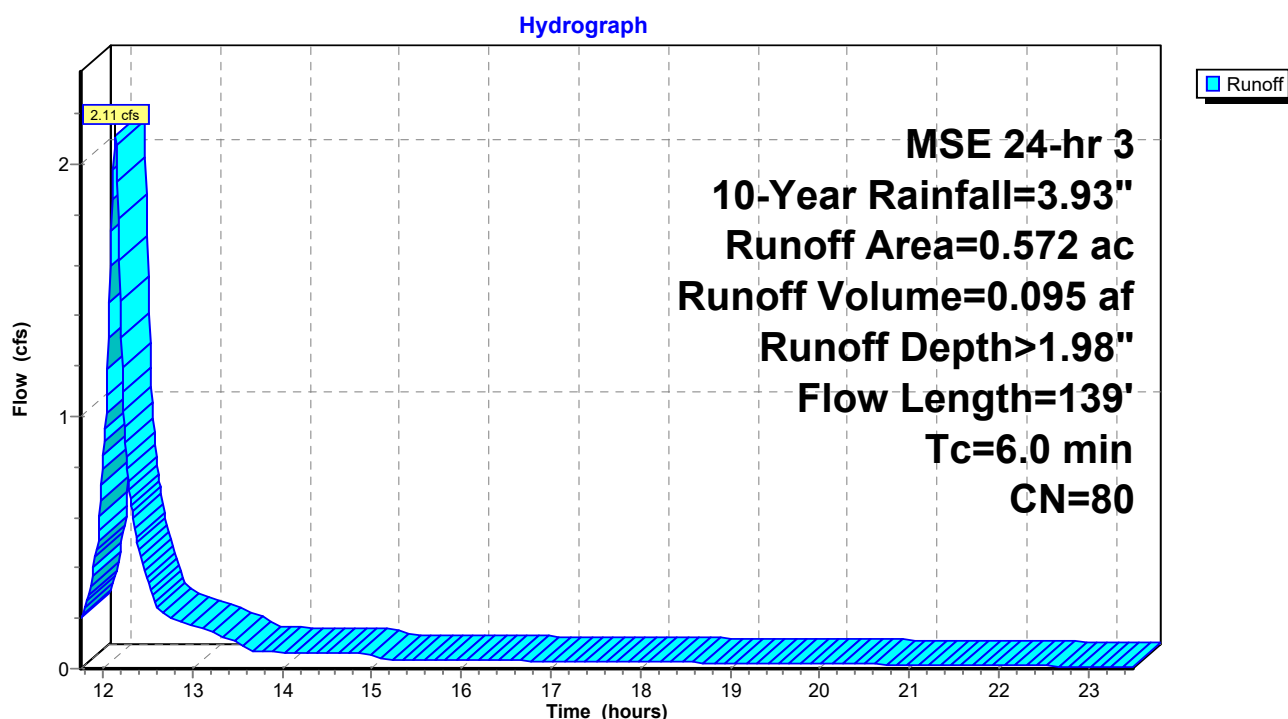
Runoff = 2.11 cfs @ 12.13 hrs, Volume= 0.095 af, Depth> 1.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.93"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.421 | 74 | >75% Grass cover, Good, HSG C |
| 0.094 | 98 | Paved parking, HSG C |
| 0.030 | 98 | Sidewalks, Good, HSG C |
| 0.027 | 98 | Sidewalks, Good, HSG C |
| 0.572 | 80 | Weighted Average |
| 0.421 | | 73.60% Pervious Area |
| 0.151 | | 26.40% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|--|-------------------|----------------|--|
| 1.3 | 100 | 0.0196 | 1.25 | | Sheet Flow, Smooth surfaces n= 0.011 P2= 2.70" |
| 0.4 | 39 | 0.0061 | 1.59 | | Shallow Concentrated Flow, Paved Kv= 20.3 fps |
| 1.7 | 139 | Total, Increased to minimum Tc = 6.0 min | | | |

Subcatchment EX-1: North Area - NT Disturbed



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MSE 24-hr 3 10-Year Rainfall=3.93"

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Summary for Subcatchment EX-7: East Area - NT Disturbed

Runoff = 1.10 cfs @ 12.13 hrs, Volume= 0.050 af, Depth> 2.48"

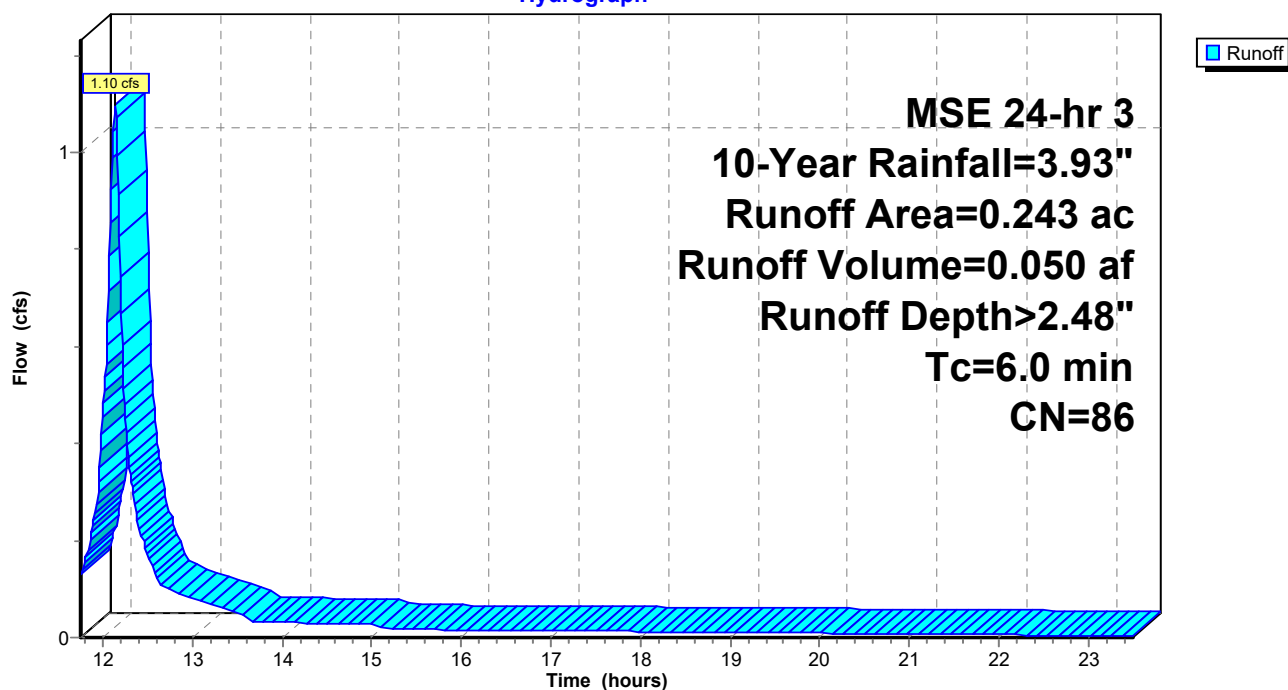
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.93"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.122 | 74 | >75% Grass cover, Good, HSG C |
| 0.047 | 98 | Paved parking, HSG C |
| 0.060 | 98 | Sidewalks, Good, HSG C |
| 0.014 | 98 | Sidewalks, Good, HSG C |
| 0.243 | 86 | Weighted Average |
| 0.122 | | 50.21% Pervious Area |
| 0.121 | | 49.79% Impervious Area |

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

Subcatchment EX-7: East Area - NT Disturbed

Hydrograph



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MSE 24-hr 3 10-Year Rainfall=3.93"

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Summary for Subcatchment PR-1: Subcat PR-1

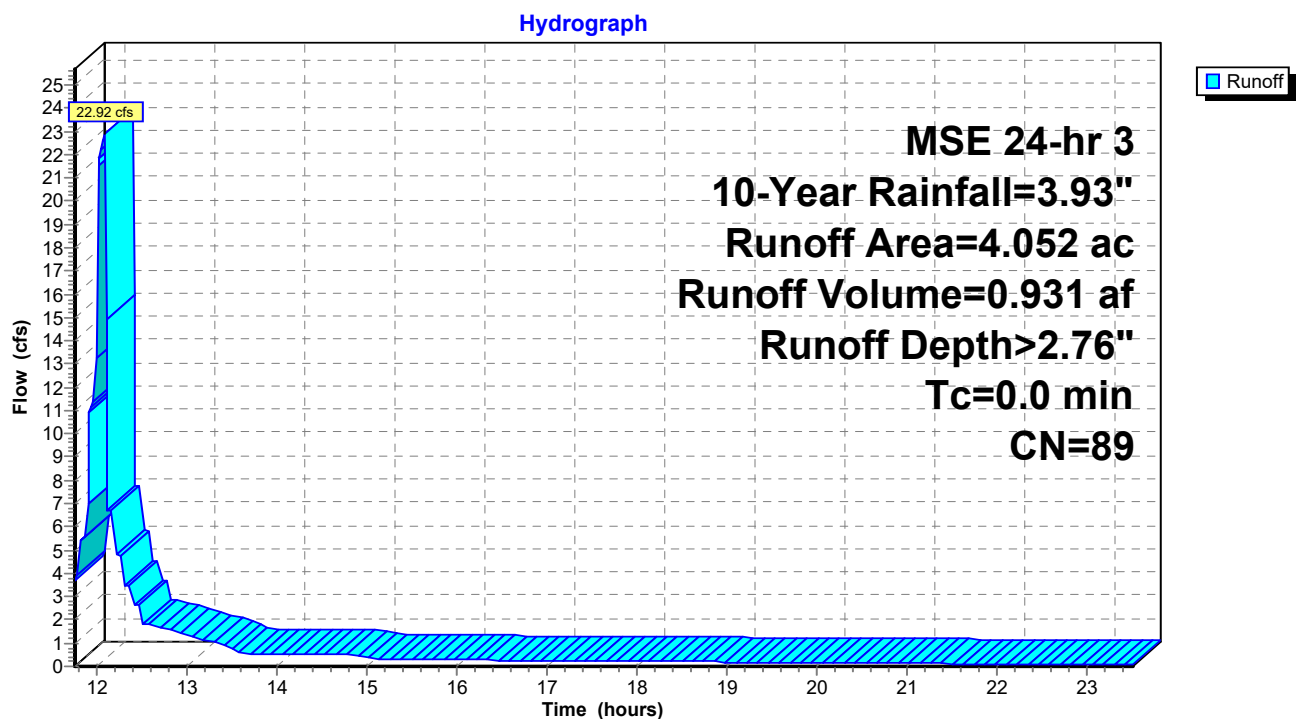
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 22.92 cfs @ 12.09 hrs, Volume= 0.931 af, Depth> 2.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.93"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 1.004 | 61 | >75% Grass cover, Good, HSG B |
| 2.713 | 98 | Paved parking, HSG B |
| 0.010 | 98 | Roofs, HSG B |
| 0.326 | 98 | Sidewalks, Good, HSG B |
| 4.052 | 89 | Weighted Average |
| 1.004 | | 24.77% Pervious Area |
| 3.048 | | 75.23% Impervious Area |

Subcatchment PR-1: Subcat PR-1



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MSE 24-hr 3 10-Year Rainfall=3.93"

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Summary for Subcatchment UD-1: Subcat UD-1

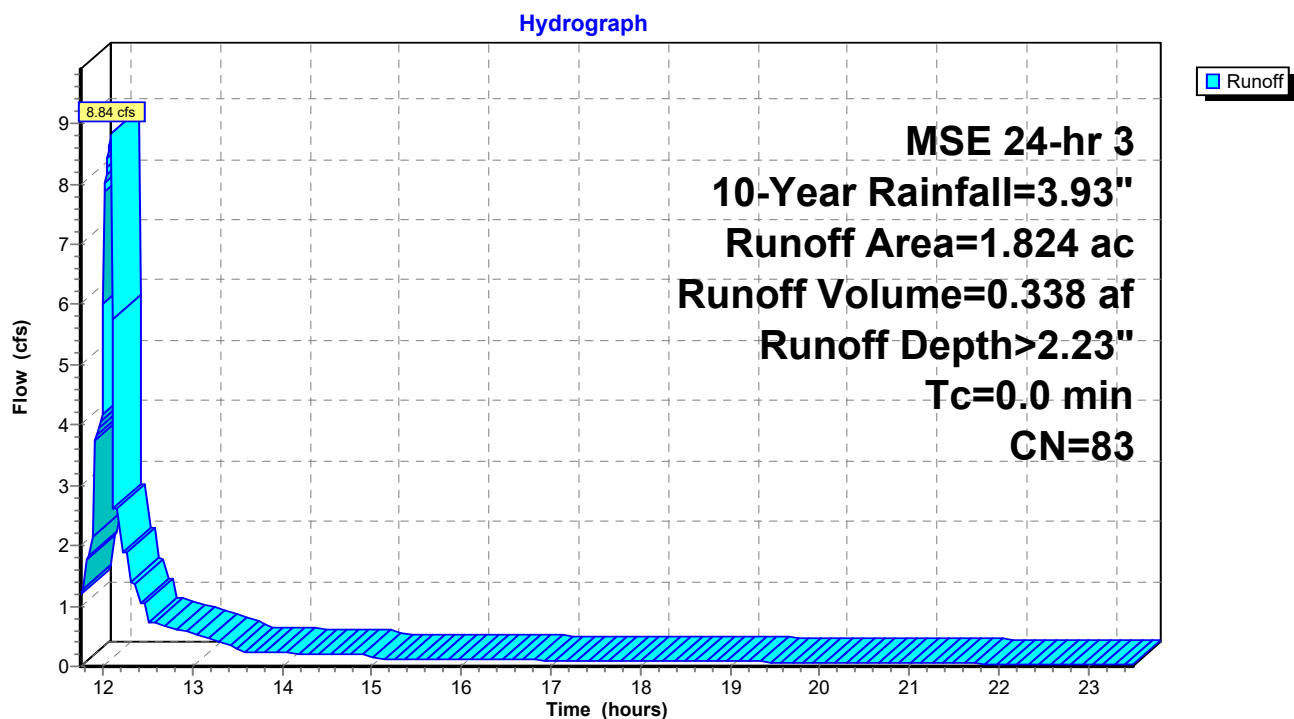
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 8.84 cfs @ 12.09 hrs, Volume= 0.338 af, Depth> 2.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=3.93"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.728 | 61 | >75% Grass cover, Good, HSG B |
| 0.127 | 98 | Paved parking, HSG B |
| 0.877 | 98 | Roofs, HSG B |
| 0.092 | 98 | Sidewalks, Good, HSG B |
| 1.824 | 83 | Weighted Average |
| 0.728 | | 39.90% Pervious Area |
| 1.096 | | 60.10% Impervious Area |

Subcatchment UD-1: Subcat UD-1



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MSE 24-hr 3 10-Year Rainfall=3.93"
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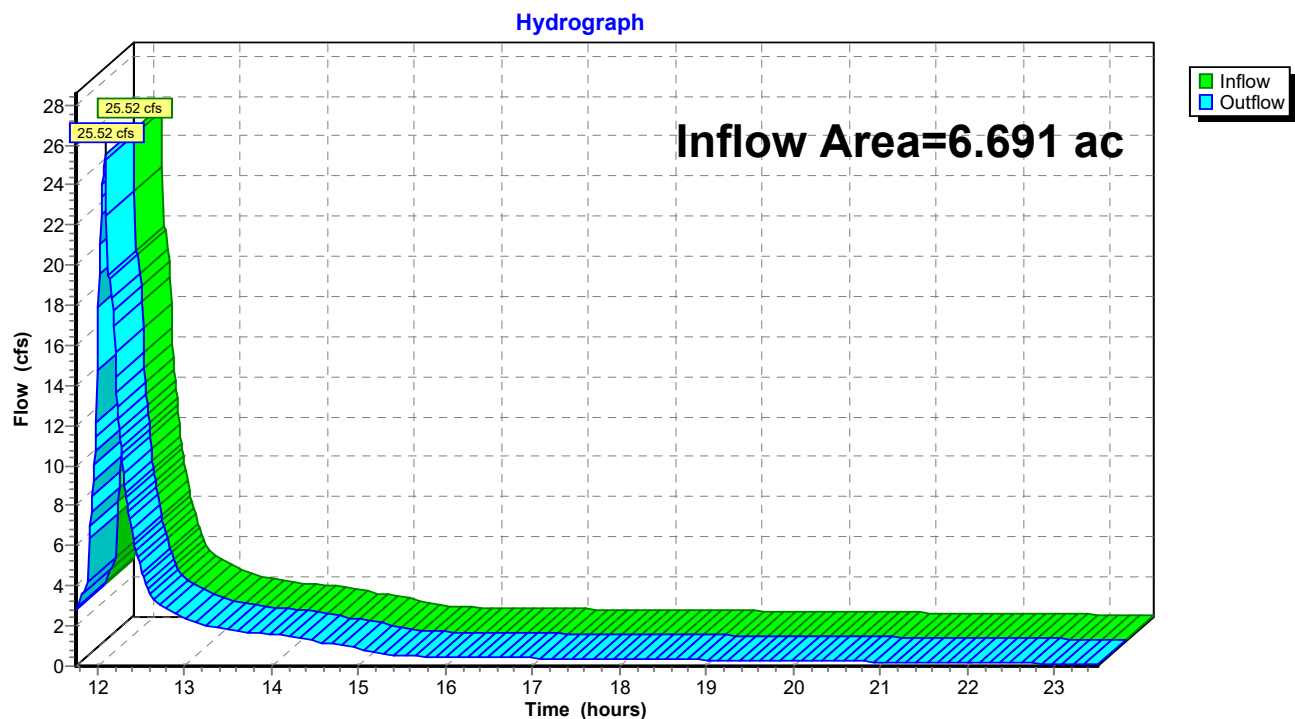
Summary for Reach 1R: Total Existing

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 6.691 ac, 66.01% Impervious, Inflow Depth > 2.51" for 10-Year event
Inflow = 25.52 cfs @ 12.09 hrs, Volume= 1.397 af
Outflow = 25.52 cfs @ 12.09 hrs, Volume= 1.397 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Reach 1R: Total Existing



Proposed

MSE 24-hr 3 10-Year Rainfall=3.93"

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Summary for Pond 1P: Bio-Retention Basin

Inflow Area = 4.052 ac, 75.23% Impervious, Inflow Depth > 2.76" for 10-Year event
 Inflow = 22.92 cfs @ 12.09 hrs, Volume= 0.931 af
 Outflow = 13.86 cfs @ 12.10 hrs, Volume= 0.914 af, Atten= 40%, Lag= 0.7 min
 Primary = 13.86 cfs @ 12.10 hrs, Volume= 0.914 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
 Peak Elev= 808.40' @ 12.10 hrs Surf.Area= 7,673 sf Storage= 10,988 cf

Plug-Flow detention time= 36.6 min calculated for 0.913 af (98% of inflow)
 Center-of-Mass det. time= 25.9 min (806.7 - 780.8)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|---------|---------------|--|
| #1 | 804.49' | 30,111 cf | Custom Stage Data (Prismatic) Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Voids (%) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---------------------|----------------------|--------------|---------------------------|---------------------------|
| 804.49 | 3,588 | 0.0 | 0 | 0 |
| 804.50 | 3,588 | 33.0 | 12 | 12 |
| 805.50 | 3,588 | 33.0 | 1,184 | 1,196 |
| 805.51 | 3,588 | 27.0 | 10 | 1,206 |
| 807.00 | 3,588 | 27.0 | 1,443 | 2,649 |
| 807.01 | 3,588 | 100.0 | 36 | 2,685 |
| 808.00 | 7,163 | 100.0 | 5,322 | 8,007 |
| 809.00 | 8,431 | 100.0 | 7,797 | 15,804 |
| 810.00 | 9,756 | 100.0 | 9,094 | 24,897 |
| 810.50 | 11,099 | 100.0 | 5,214 | 30,111 |

| Device | Routing | Invert | Outlet Devices |
|--------|----------|---------|--|
| #1 | Primary | 805.00' | 18.0" Round Culvert L= 123.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 805.00' / 791.00' S= 0.1138 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 1.77 sf |
| #2 | Primary | 809.50' | 5.0' long x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88 |
| #3 | Device 1 | 805.00' | 6.0" Vert. Orifice/Grate C= 0.600 |
| #4 | Device 1 | 807.50' | 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads |

Primary OutFlow Max=13.85 cfs @ 12.10 hrs HW=808.40' (Free Discharge)

1=Culvert (Inlet Controls 13.85 cfs @ 7.84 fps)
 3=Orifice/Grate (Passes < 1.68 cfs potential flow)
 4=Orifice/Grate (Passes < 14.35 cfs potential flow)
 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

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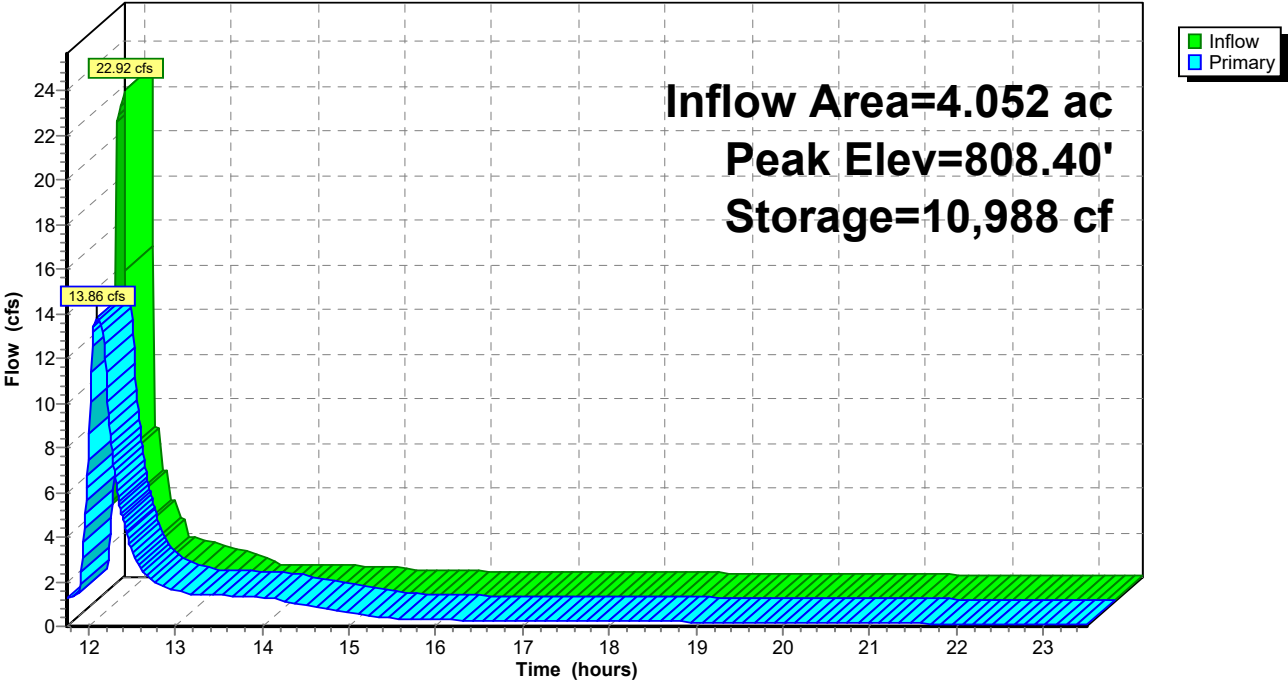
MSE 24-hr 3 10-Year Rainfall=3.93"

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Pond 1P: Bio-Retention Basin

Hydrograph



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MSE 24-hr 3 100-Year Rainfall=6.19"

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Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

| | |
|--|---|
| SubcatchmentEX-1: North Area - NT | Runoff Area=0.572 ac 26.40% Impervious Runoff Depth>3.95" Flow Length=139' Tc=6.0 min CN=80 Runoff=4.12 cfs 0.188 af |
| SubcatchmentEX-7: East Area - NT | Runoff Area=0.243 ac 49.79% Impervious Runoff Depth>4.59" Tc=6.0 min CN=86 Runoff=1.97 cfs 0.093 af |
| SubcatchmentPR-1: Subcat PR-1 | Runoff Area=4.052 ac 75.23% Impervious Runoff Depth>4.92" Tc=0.0 min CN=89 Runoff=38.85 cfs 1.661 af |
| SubcatchmentUD-1: Subcat UD-1 | Runoff Area=1.824 ac 60.10% Impervious Runoff Depth>4.27" Tc=0.0 min CN=83 Runoff=16.07 cfs 0.649 af |
| Reach 1R: Total Existing | Inflow=37.64 cfs 2.573 af Outflow=37.64 cfs 2.573 af |
| Pond 1P: Bio-RetentionBasin | Peak Elev=809.35' Storage=18,866 cf Inflow=38.85 cfs 1.661 af Outflow=16.15 cfs 1.643 af |

Total Runoff Area = 6.691 ac Runoff Volume = 2.591 af Average Runoff Depth = 4.65"
33.99% Pervious = 2.274 ac 66.01% Impervious = 4.417 ac

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MSE 24-hr 3 100-Year Rainfall=6.19"

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Summary for Subcatchment EX-1: North Area - NT Disturbed

Runoff = 4.12 cfs @ 12.13 hrs, Volume= 0.188 af, Depth> 3.95"

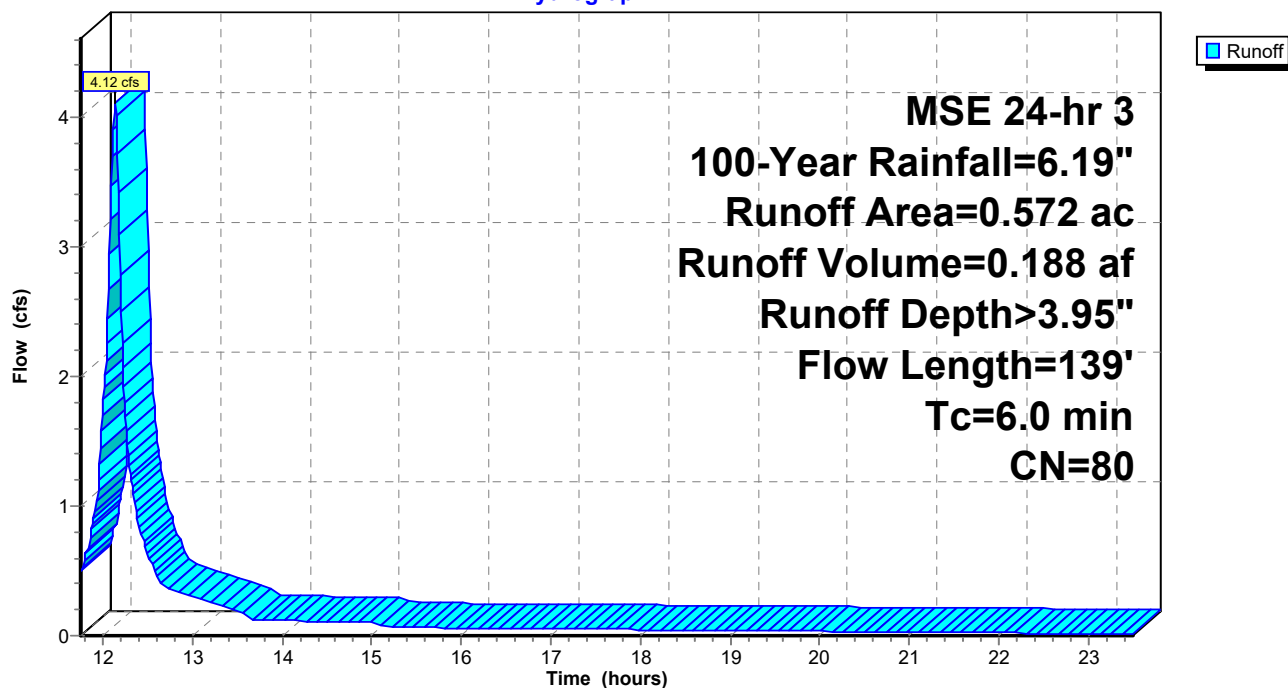
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=6.19"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.421 | 74 | >75% Grass cover, Good, HSG C |
| 0.094 | 98 | Paved parking, HSG C |
| 0.030 | 98 | Sidewalks, Good, HSG C |
| 0.027 | 98 | Sidewalks, Good, HSG C |
| 0.572 | 80 | Weighted Average |
| 0.421 | | 73.60% Pervious Area |
| 0.151 | | 26.40% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|--|-------------------|----------------|--|
| 1.3 | 100 | 0.0196 | 1.25 | | Sheet Flow, Smooth surfaces n= 0.011 P2= 2.70" |
| 0.4 | 39 | 0.0061 | 1.59 | | Shallow Concentrated Flow, Paved Kv= 20.3 fps |
| 1.7 | 139 | Total, Increased to minimum Tc = 6.0 min | | | |

Subcatchment EX-1: North Area - NT Disturbed

Hydrograph



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MSE 24-hr 3 100-Year Rainfall=6.19"

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Summary for Subcatchment EX-7: East Area - NT Disturbed

Runoff = 1.97 cfs @ 12.13 hrs, Volume= 0.093 af, Depth> 4.59"

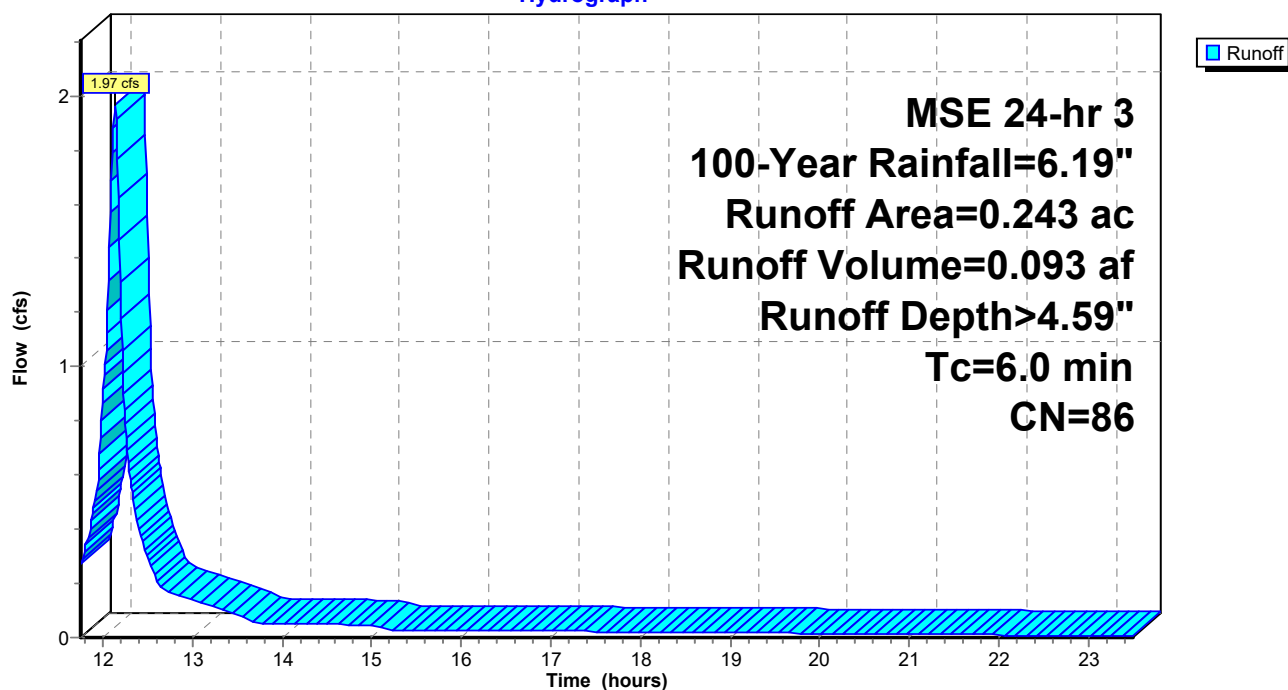
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=6.19"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.122 | 74 | >75% Grass cover, Good, HSG C |
| 0.047 | 98 | Paved parking, HSG C |
| 0.060 | 98 | Sidewalks, Good, HSG C |
| 0.014 | 98 | Sidewalks, Good, HSG C |
| 0.243 | 86 | Weighted Average |
| 0.122 | | 50.21% Pervious Area |
| 0.121 | | 49.79% Impervious Area |

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

Subcatchment EX-7: East Area - NT Disturbed

Hydrograph



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MSE 24-hr 3 100-Year Rainfall=6.19"

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Summary for Subcatchment PR-1: Subcat PR-1

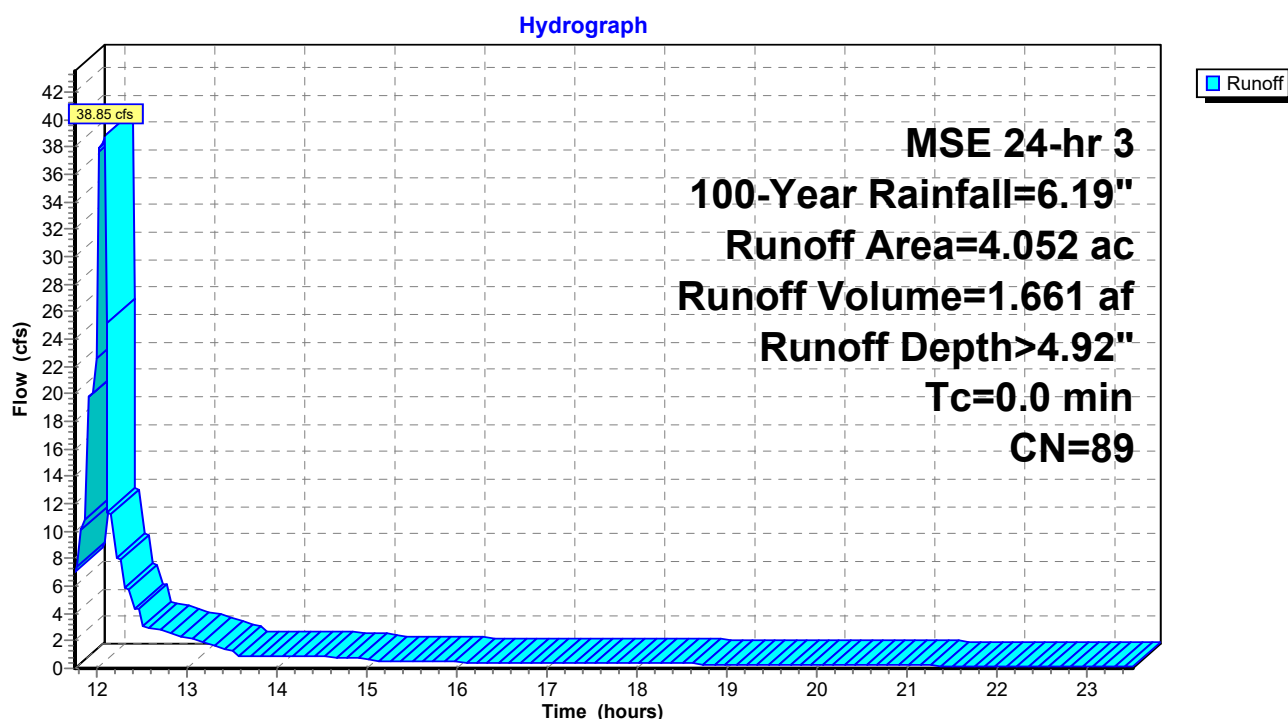
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 38.85 cfs @ 12.09 hrs, Volume= 1.661 af, Depth> 4.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=6.19"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 1.004 | 61 | >75% Grass cover, Good, HSG B |
| 2.713 | 98 | Paved parking, HSG B |
| 0.010 | 98 | Roofs, HSG B |
| 0.326 | 98 | Sidewalks, Good, HSG B |
| 4.052 | 89 | Weighted Average |
| 1.004 | | 24.77% Pervious Area |
| 3.048 | | 75.23% Impervious Area |

Subcatchment PR-1: Subcat PR-1



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MSE 24-hr 3 100-Year Rainfall=6.19"

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Summary for Subcatchment UD-1: Subcat UD-1

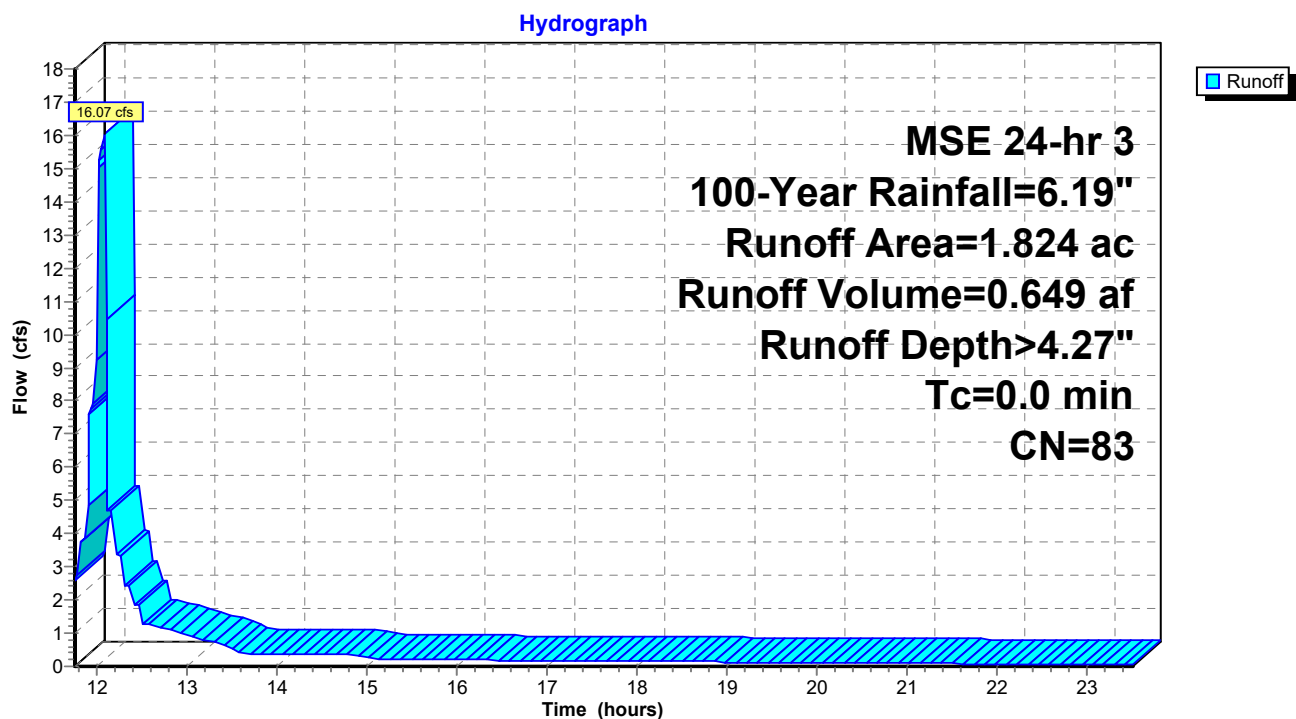
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 16.07 cfs @ 12.09 hrs, Volume= 0.649 af, Depth> 4.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=6.19"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.728 | 61 | >75% Grass cover, Good, HSG B |
| 0.127 | 98 | Paved parking, HSG B |
| 0.877 | 98 | Roofs, HSG B |
| 0.092 | 98 | Sidewalks, Good, HSG B |
| 1.824 | 83 | Weighted Average |
| 0.728 | | 39.90% Pervious Area |
| 1.096 | | 60.10% Impervious Area |

Subcatchment UD-1: Subcat UD-1



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MSE 24-hr 3 100-Year Rainfall=6.19"

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Summary for Reach 1R: Total Existing

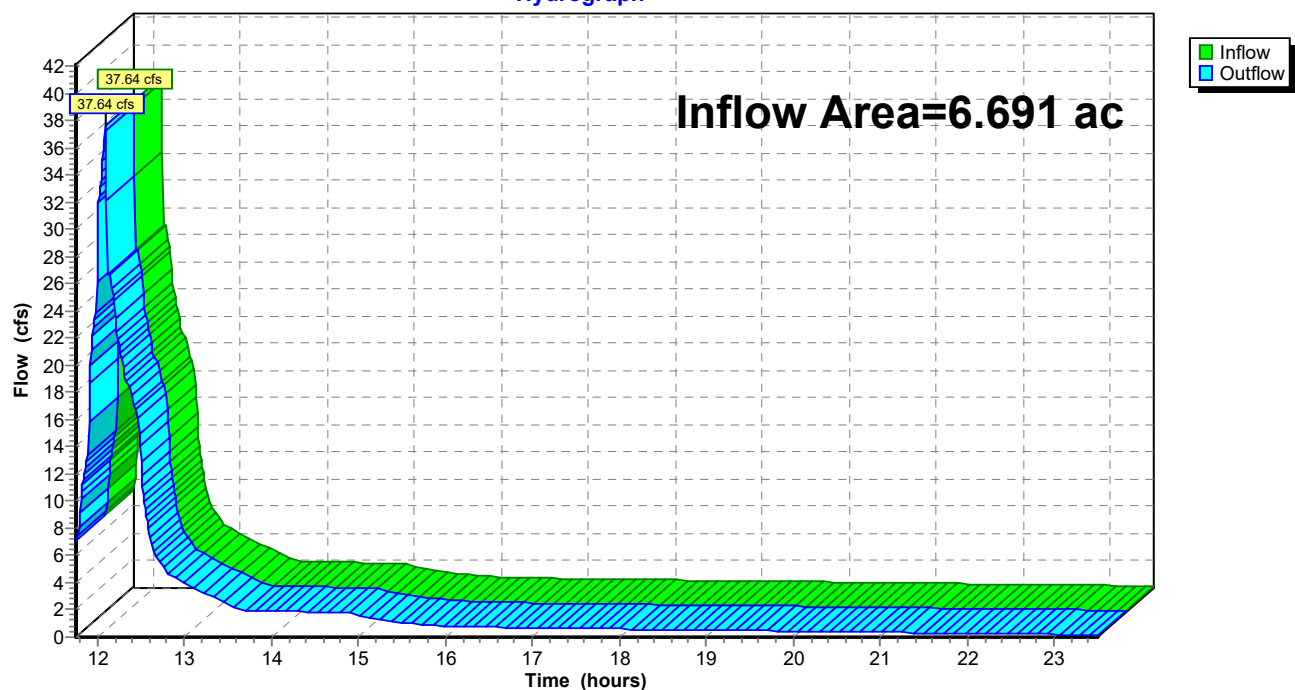
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 6.691 ac, 66.01% Impervious, Inflow Depth > 4.61" for 100-Year event
Inflow = 37.64 cfs @ 12.09 hrs, Volume= 2.573 af
Outflow = 37.64 cfs @ 12.09 hrs, Volume= 2.573 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Reach 1R: Total Existing

Hydrograph



Proposed

MSE 24-hr 3 100-Year Rainfall=6.19"

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Summary for Pond 1P: Bio-Retention Basin

Inflow Area = 4.052 ac, 75.23% Impervious, Inflow Depth > 4.92" for 100-Year event
 Inflow = 38.85 cfs @ 12.09 hrs, Volume= 1.661 af
 Outflow = 16.15 cfs @ 12.11 hrs, Volume= 1.643 af, Atten= 58%, Lag= 1.1 min
 Primary = 16.15 cfs @ 12.11 hrs, Volume= 1.643 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
 Peak Elev= 809.35' @ 12.11 hrs Surf.Area= 8,899 sf Storage= 18,866 cf

Plug-Flow detention time= 30.1 min calculated for 1.642 af (99% of inflow)
 Center-of-Mass det. time= 23.5 min (792.9 - 769.4)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|---------|---------------|--|
| #1 | 804.49' | 30,111 cf | Custom Stage Data (Prismatic) Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Voids (%) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---------------------|----------------------|--------------|---------------------------|---------------------------|
| 804.49 | 3,588 | 0.0 | 0 | 0 |
| 804.50 | 3,588 | 33.0 | 12 | 12 |
| 805.50 | 3,588 | 33.0 | 1,184 | 1,196 |
| 805.51 | 3,588 | 27.0 | 10 | 1,206 |
| 807.00 | 3,588 | 27.0 | 1,443 | 2,649 |
| 807.01 | 3,588 | 100.0 | 36 | 2,685 |
| 808.00 | 7,163 | 100.0 | 5,322 | 8,007 |
| 809.00 | 8,431 | 100.0 | 7,797 | 15,804 |
| 810.00 | 9,756 | 100.0 | 9,094 | 24,897 |
| 810.50 | 11,099 | 100.0 | 5,214 | 30,111 |

| Device | Routing | Invert | Outlet Devices |
|--------|----------|---------|--|
| #1 | Primary | 805.00' | 18.0" Round Culvert L= 123.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 805.00' / 791.00' S= 0.1138 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 1.77 sf |
| #2 | Primary | 809.50' | 5.0' long x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88 |
| #3 | Device 1 | 805.00' | 6.0" Vert. Orifice/Grate C= 0.600 |
| #4 | Device 1 | 807.50' | 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads |

Primary OutFlow Max=16.15 cfs @ 12.11 hrs HW=809.35' (Free Discharge)

1=Culvert (Inlet Controls 16.15 cfs @ 9.14 fps)
 3=Orifice/Grate (Passes < 1.91 cfs potential flow)
 4=Orifice/Grate (Passes < 20.58 cfs potential flow)
 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

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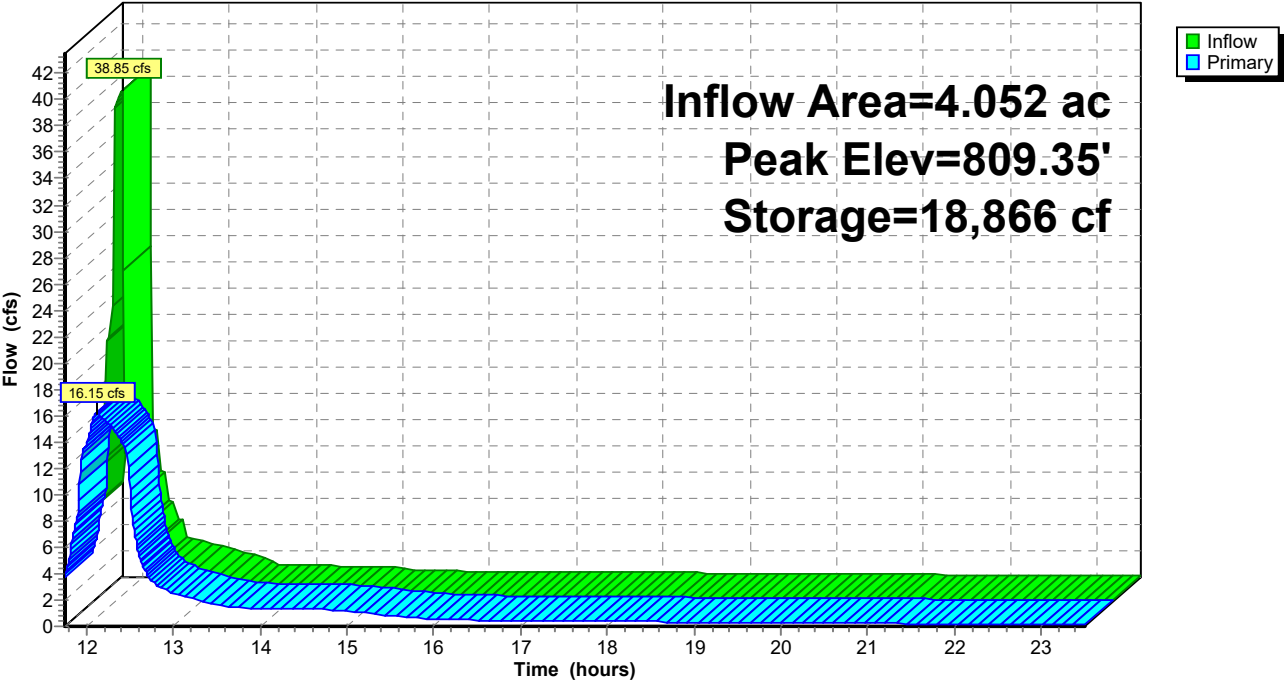
MSE 24-hr 3 100-Year Rainfall=6.19"

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Pond 1P: Bio-Retention Basin

Hydrograph



Data file name: X:\2023\230049.00 Watertown YMCA\Disciplines\Civil\Engineering\Stormwater\SLAMM\Proposed Pavement Only.mdb

WinSLAMM Version 10.5.0

Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Madison WI 1981.RAN

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

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

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

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

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

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

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

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

Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False

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

Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv

Cost Data file name:

Seed for random number generator: -42

Study period starting date: 01/01/81

Study period ending date: 12/31/81

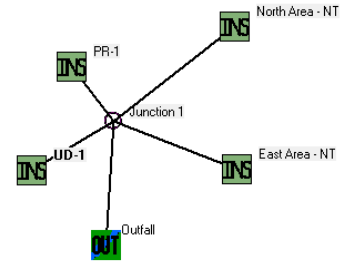
Start of Winter Season: 12/06

End of Winter Season: 03/28

Date: 02-22-2024

Time: 15:46:40

Site information:



LU# 1 - Institutional: PR-1 Total area (ac): 2.713

13 - Paved Parking 1: 2.713 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Institutional: North Area - NT Total area (ac): 0.094

13 - Paved Parking 1: 0.094 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 3 - Institutional: East Area - NT Total area (ac): 0.047

13 - Paved Parking 1: 0.047 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 4 - Institutional: UD-1 Total area (ac): 0.127

13 - Paved Parking 1: 0.127 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

File Name: X:\2023\230049.00 Watertown YMCA\Disciplines\Civil\Engineering\Stormwater\SLAMM\Proposed Pavement Only.mdb

Outfall Output Summary

| | Runoff Volume (cu. ft.) | Percent Runoff Reduction | Runoff Coefficient (Rv) | Particulate Solids Conc. (mg/L) | Particulate Solids Yield (lbs) | Percent Particulate Solids Reduction |
|---|----------------------------|-----------------------------|-------------------------------|------------------------------------|-----------------------------------|---|
| Total of All Land Uses without Controls | 226869 | | 0.65 | 130.0 | 1841 | |
| Outfall Total with Controls | 226870 | 0.00 % | 0.65 | 130.0 | 1841 | 0.00 % |
| Current File Output: Annualized Total After Outfall Controls | 227493 | | | | 1846 | |
| | | Years in Model Run: | 1.00 | | | |

| Pollutant | Concen- tration - No Controls | Concen- tration - With Controls | Concen- tration Units | Pollutant Yield - No Controls | Pollutant Yield - With Controls | Pollutant Yield Units | Percent Yield Reduction |
|------------------------|-------------------------------------|---------------------------------------|-----------------------------|----------------------------------|------------------------------------|-----------------------------|----------------------------|
| Particulate Solids | 130.0 | 130.0 | mg/L | 1841 | 1841 | lbs | 0.00 % |
| Particulate Phosphorus | 0.1850 | 0.1850 | mg/L | 2.620 | 2.620 | lbs | 0.00 % |

Print Output Summary to .csv File
Print Output Summary to Text File
Print Output Summary to Printer

Total Area Modeled (ac): 2.981

Total Control Practice Costs

| | |
|-------------------------------|-----|
| Capital Cost | N/A |
| Land Cost | N/A |
| Annual Maintenance Cost | N/A |
| Present Value of All Costs | N/A |
| Annualized Value of All Costs | N/A |

Perform Outfall Flow Duration Curve Calculations

Receiving Water Impacts Due To Stormwater Runoff (CWP Impervious Cover Model)

| | Calculated Rv | Approximate Urban Stream Classification |
|------------------|------------------|---|
| Without Controls | 0.65 | Poor |
| With Controls | 0.65 | Poor |

The new pavement produces 1841 lbs of TSS. The stormwater basin must remove at least 60% of the 1841 lbs which is 1104.6 lbs

Data file name: X:\2023\230049.00 Watertown YMCA\Disciplines\Civil\Engineering\Stormwater\SLAMM\Proposed.mdb

WinSLAMM Version 10.5.0

Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Madison WI 1981.RAN

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

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

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

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

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

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

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

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

Apply Street Delivery File 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: 01/01/81

Study period ending date: 12/31/81

Start of Winter Season: 12/06

End of Winter Season: 03/28

Date: 02-22-2024

Time: 15:50:50

Site information:

LU# 1 - Institutional: PR-1 Total area (ac): 4.053

1 - Roofs 1: 0.010 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

13 - Paved Parking 1: 2.713 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

31 - Sidewalks 1: 0.326 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

45 - Large Landscaped Areas 1: 1.004 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Institutional: North Area - NT Total area (ac): 0.572

13 - Paved Parking 1: 0.094 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

31 - Sidewalks 1: 0.030 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

32 - Sidewalks 2: 0.027 ac. Disconnected Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

51 - Small Landscaped Areas 1: 0.421 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 3 - Institutional: East Area - NT Total area (ac): 0.243

13 - Paved Parking 1: 0.047 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

31 - Sidewalks 1: 0.074 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

51 - Small Landscaped Areas 1: 0.122 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 4 - Institutional: UD-1 Total area (ac): 1.824

1 - Roofs 1: 0.877 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

13 - Paved Parking 1: 0.127 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

31 - Sidewalks 1: 0.092 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

45 - Large Landscaped Areas 1: 0.728 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

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

1. Top area (square feet) = 11099

2. Bottom area (square feet) = 3588

3. Depth (ft): 6

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): 5

2. Weir crest width (ft): 5

3. Height of datum to bottom of weir opening: 5

Outlet type: Vertical Stand Pipe

1. Stand pipe diameter (ft): 2

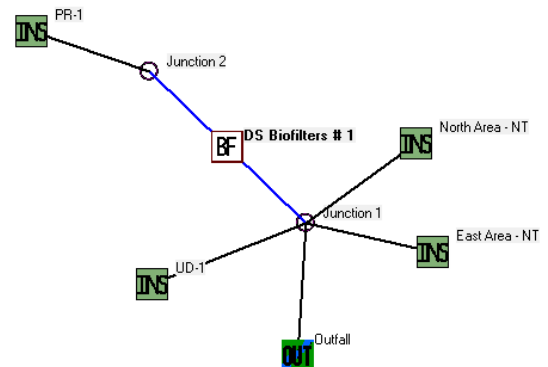
2. Stand pipe height above datum (ft): 3

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



Biofiltration Control Device

Drainage System Control Practice

Device Properties Biofilter Number 1

| | |
|--|------------|
| Top Area (sf) | 11093 |
| Bottom Area (sf) | 3588 |
| Total Depth (ft) | 6.00 |
| Typical Width (ft) [Cost est. only] | 10.00 |
| Native Soil Infiltration Rate (in/hr) | 0.500 |
| Native Soil Infiltration Rate COV | N/A |
| Infil. Rate Fraction-Bottom (0.001-1) | 1.000 |
| Infil. Rate Fraction-Sides (0.001-1) | 1.000 |
| Rock Filled Depth (ft) | 1.00 |
| Rock Fill Porosity (0-1) | 0.33 |
| Engineered Media Type | Media Data |
| Engineered Media Infiltration Rate | 3.60 |
| Engineered Media Infiltration Rate COV | N/A |
| Engineered Media Depth (ft) | 1.50 |
| Engineered Media Porosity (0-1) | 0.27 |
| Percent solids reduction due to Engineered Media (0-100) | 80.00 |
| Inflow Hydrograph Peak to Average Flow Ratio | 3.80 |
| Number of Devices in Source Area or Upstream Drainage System | 1 |

☐ Activate Pipe or Box Storage ☐ Pipe ☐ Box

| | |
|-----------------------------------|--------------------------|
| Diameter (ft) | |
| Length (ft) | |
| Within Biofilter (check if Yes) | <input type="checkbox"/> |
| Perforated (check if Yes) | <input type="checkbox"/> |
| Bottom Elevation (ft above datum) | |
| Discharge Orifice Diameter (ft) | |

Select Native Soil Infiltration Rate

- ☐ Sand - 8 in/hr ☐ Clay loam - 0.1 in/hr
☐ Loamy sand - 2.5 in/hr ☐ Silty clay loam - 0.05 in/hr
☐ Sandy loam - 1.0 in/hr ☐ Sandy clay - 0.05 in/hr
☐ Loam - 0.5 in/hr ☐ Silty clay - 0.04 in/hr
☐ Silt loam - 0.3 in/hr ☐ Clay - 0.02 in/hr
☐ Sandy silt loam - 0.2 in/hr ☐ Rain Barrel/Cistern - 0.00 in/hr

☐ Use Random Number Generation to Account for Infiltration Rate Uncertainty

Copy Biofilter Data

Paste Biofilter Data

Estimated Surface Drain Time = 1.67 hrs.

Save or Delete Biofilter Data to Database File

Get Biofilter Data from Database File

Control Practice #: 1

CP Index #: 1

Add Sharp Crested Weir

| | |
|--|------|
| Weir Length (ft) | |
| Height from datum to bottom of weir opening (ft) | |
| Remove Broad Crested Weir-Reqd | |
| Weir crest length (ft) | 5.00 |
| Weir crest width (ft) | 5.00 |
| Height from datum to bottom of weir opening (ft) | 5.00 |

Remove Vertical Stand Pipe

| | |
|-------------------------|------|
| Pipe diameter (ft) | 2.00 |
| Height above datum (ft) | 3.00 |

Add Surface Discharge Pipe

| | |
|-----------------------------------|--|
| Pipe Diameter (ft) | |
| Invert elevation above datum (ft) | |
| Number of pipes at invert elev. | |

Remove Drain Tile/Underdrain

| | |
|-----------------------------------|------|
| Pipe Diameter (ft) | 0.50 |
| Invert elevation above datum (ft) | 0.50 |
| Number of pipes at invert elev. | 1 |

Add Other Outlet

| Stage Number | Stage (ft) | Other Outflow Rate (cfs) |
|--------------|------------|--------------------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |

Add Evapotranspiration

| | |
|---|--------------------------|
| Soil porosity (saturation moisture content, 0-1) | |
| Soil field moisture capacity (0-1) | |
| Permanent wilting point (0-1) | |
| Supplemental irrigation used? | <input type="checkbox"/> |
| Fraction of available capacity when irrigation starts (0-1) | |
| Fraction of available capacity when irrigation stops (0-1) | |
| Fraction of biofilter that is vegetated | |
| Plant type | |
| Root depth (ft) | |
| ET Crop Adjustment Factor | |

Evaporation

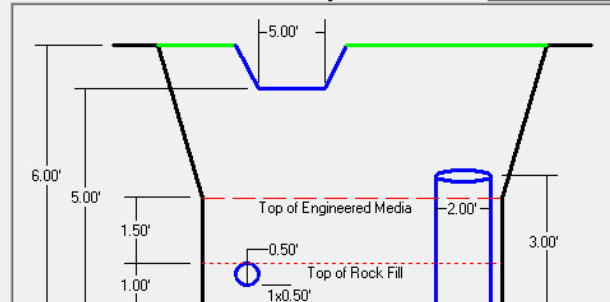
| Month | Evapotranspiration (in/day) | Evapo (in/day) |
|-------|-----------------------------|----------------|
| Jan | | |
| Feb | | |
| Mar | | |
| Apr | | |
| May | | |
| Jun | | |
| Jul | | |
| Aug | | |
| Sep | | |
| Oct | | |
| Nov | | |
| Dec | | |

Plant Types

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Biofilter Geometry Schematic

Refresh Schematic



Press 'F1' for Help

To Delete This Practice, Right Mouse Click on Icon and Select Delete

Cancel

Continue

File Name:

X:\2023\230049.00 Watertown YMCA\Disciplines\Civil\Engineering\Stormwater\SLAMM\Proposed.mdb

Outfall Output Summary

| | Runoff Volume (cu. ft.) | Percent Runoff Reduction | Runoff Coefficient (Rv) | Particulate Solids Conc. (mg/L) | Particulate Solids Yield (lbs) | Percent Particulate Solids Reduction |
|--|-------------------------|--------------------------|-------------------------|---------------------------------|--------------------------------|--------------------------------------|
| Total of All Land Uses without Controls | 352459 | | 0.45 | 108.1 | 2377 | |
| Outfall Total with Controls | 260236 | 26.17 % | 0.33 | 61.60 | 1001 | 57.89 % |
| Current File Output: Annualized Total After Outfall Controls | 260951 | | | | 1003 | |
| Years in Model Run: | | | 1.00 | | | |

| Pollutant | Concentration - No Controls | Concentration - With Controls | Concentration Units | Pollutant Yield - No Controls | Pollutant Yield - With Controls | Pollutant Yield Units | Percent Yield Reduction |
|------------------------|-----------------------------|-------------------------------|---------------------|-------------------------------|---------------------------------|-----------------------|-------------------------|
| Particulate Solids | 108.1 | 61.60 | mg/L | 2377 | 1001 | lbs | 57.89 % |
| Particulate Phosphorus | 0.2185 | 0.1593 | mg/L | 4.807 | 2.588 | lbs | 46.16 % |

Print Output Summary to .csv File

Print Output Summary to Text File

Print Output Summary to Printer

Total Area Modeled (ac)

6.692

A biofilter will clog. Review biofilter control practice summary tab to determine which biofilter it is.

Total Control Practice Costs

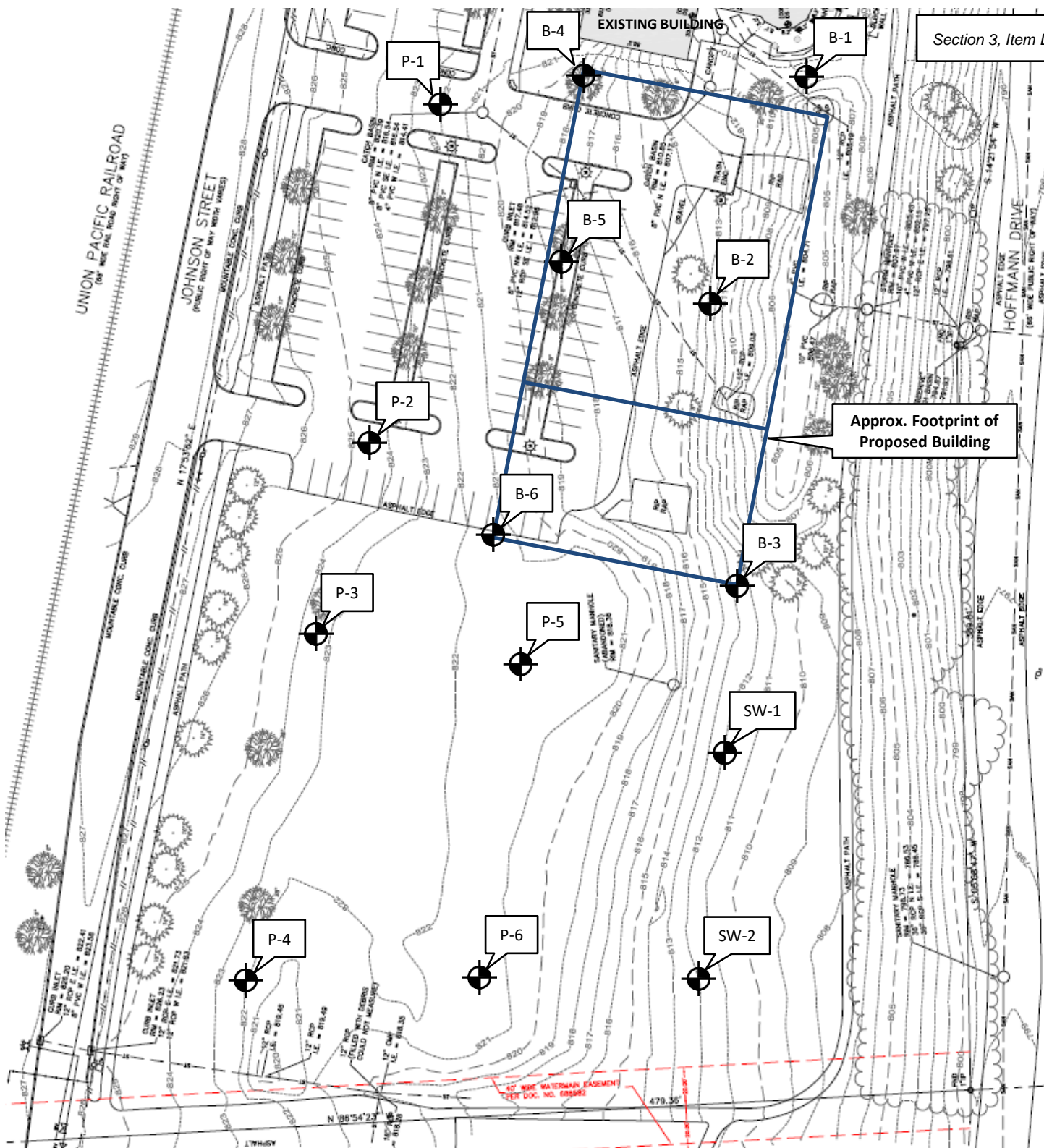
| | |
|-------------------------------|-----|
| Capital Cost | N/A |
| Land Cost | N/A |
| Annual Maintenance Cost | N/A |
| Present Value of All Costs | N/A |
| Annualized Value of All Costs | N/A |

Perform Outfall Flow Duration Curve Calculations

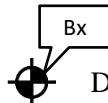
Receiving Water Impacts Due To Stormwater Runoff (CWP Impervious Cover Model)

| | Calculated Rv | Approximate Urban Stream Classification |
|------------------|---------------|---|
| Without Controls | 0.45 | Poor |
| With Controls | 0.33 | Poor |

The stormwater basin removes a total of 1376 lbs of TSS which is greater than the 1104.6 lbs required. It also removes a total of 46.16% phosphorus which is greater than the 30% required.



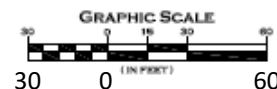
Legend



Denotes Approximate Boring Location and Number

Notes

1. Soil borings performed by J&J Soil Testing, Ltd. between 9-15 and 9-20-23.
2. Base map provided by Harwood.
3. Boring locations are approximate. Offsets from locations shown (if any) are described on the individual boring logs.



Job No.
CM23167

Date:
11-6-23

CGC, Inc.

SOIL BORING LOCATION EXHIBIT
Proposed Watertown Building Dev.
Johnson Street
Watertown, Wisconsin



LOG OF TEST BORING

Project **Proposed Watertown Building Development**
Johnson Street
 Location **Watertown, Wisconsin**

Boring No. **B-1**
 Surface Elevation (ft) **809±**
 Job No. **CM23167**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | | | | | | | SOIL PROPERTIES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| No. | Type | Rec (in.) | Moist | N | | | | | | | | Depth (ft) | qu (qa) (tsf) | w | LL | PL | LOI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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WATER LEVEL OBSERVATIONS

GENERAL NOTES

| While Drilling | ∇ | 6.0'± | Upon Completion of Drilling | 12.0' |
|---------------------|----------|--------------|-----------------------------|--------------|
| Time After Drilling | | | | |
| Depth to Water | | | | |
| Depth to Cave in | | | | |

| | | | | |
|--------------|-----------|--------|---------|------------|
| Start | 9/20/23 | End | 9/20/23 | |
| Driller | J&J | Chief | JP | Rig CME-45 |
| Logger | JP | Editor | TAC | |
| Drill Method | 2.25" HSA | | | |

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Proposed Watertown Building Development**
Johnson Street
 Location **Watertown, Wisconsin**

Boring No. **B-2**
 Surface Elevation (ft) **813±**
 Job No. **CM23167**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | | |
|---|---------------------|--------------|-------|--------|--------------------------------------|---|---------------------|-----|----|----|-----|
| No. | Excavation (in.) | Rec (in.) | Moist | N | | Depth (ft) | qu (qa) (tsf) | W | LL | PL | LOI |
| | | | | | | FILL: 12" Black Clayey Topsoil | | | | | |
| 1A/B | | 18 | M | 17 | | Medium Dense, Brown SAND; Little Silt, Trace Clay and Gravel (SP-SM) | | 6.4 | | | |
| 2 | | 18 | VM | 16 | | Medium Dense, Light Brown and Gray Mottled SILT; Little Sand and Gravel (ML) | | | | | |
| 3 | | 18 | M | 37 | | Dense to Very Dense, Light Brown SILT; Little Sand and Gravel, Few Sand Seams/Layers (ML) | | | | | |
| 4 | | 18 | M | 63 | | | | | | | |
| 5A/B | | 18 | W | 43 | | Dense to Very Dense, Gray SILT; Little Sand and Gravel, Few Sand Seams/Layers (ML) | | | | | |
| 6 | | 12 | W/M | 61 | | | | | | | |
| 7 | | 6 | M | 100/6" | | | | | | | |
| End of Boring at 25 ft Backfilled with Bentonite Chips | | | | | | | | | | | |
| WATER LEVEL OBSERVATIONS | | | | | | GENERAL NOTES | | | | | |
| While Drilling ∇ 12.0'± Upon Completion of Drilling 19.0' | | | | | | Start 9/20/23 End 9/20/23 | | | | | |
| Time After Drilling | | | | | | Driller J&J Chief JP Rig CME-45 | | | | | |
| Depth to Water | | | | | | Logger JP Editor TAC | | | | | |
| Depth to Cave in | | | | | | Drill Method 2.25" HSA | | | | | |
| The stratification lines represent the approximate boundary between soil types and the transition may be gradual. | | | | | | | | | | | |



LOG OF TEST BORING

Project **Proposed Watertown Building Development**
Johnson Street
 Location **Watertown, Wisconsin**

Boring No. **B-3**
 Surface Elevation (ft) **813±**
 Job No. **CM23167**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|--------------|-------|-------------|---------------|--|---------------------|-----|----|----|-----|
| No. | Rec (in.) | Moist | N | Depth (ft) | | qu (qa) (tsf) | W | LL | PL | LOI |
| | | | | | FILL: 18" Black Clayey Topsoil | | | | | |
| 1 | 18 | M | 25 | | FILL: Brown Silty Sand, Trace Gravel | | 6.8 | | | |
| 2A/B | 18 | M | 20 | | Medium Dense, Brown SAND; Little Silt, Trace Clay and Gravel (SP-SM) | | | | | |
| | | | | 5 | Medium Dense to Dense, Light Brown and Gray Mottled SILT; Trace Sand and Gravel (ML) | | | | | |
| 3 | 18 | W/M | 18 | | | | | | | |
| 4 | 18 | M | 67 | | | | | | | |
| | | | | 10 | | | | | | |
| | | | | | Dense to Very Dense, Gray SILT; Little Sand and Gravel (ML) | | | | | |
| 5 | 18 | M/W | 39 | | | | | | | |
| | | | | 15 | | | | | | |
| 6 | 14 | W | 42 | | | | | | | |
| | | | | 20 | | | | | | |
| 7 | 14 | M | 100/ 14" | | | | | | | |
| | | | | 25 | End of Boring at 25 ft Backfilled with Bentonite Chips | | | | | |
| | | | | 30 | | | | | | |

| WATER LEVEL OBSERVATIONS | | | | GENERAL NOTES | |
|---|---------|-----------------------------|-------|---------------|-----------|
| While Drilling | ▽ 6.0'± | Upon Completion of Drilling | 12.0' | Start | 9/20/23 |
| Time After Drilling | | | | End | 9/20/23 |
| Depth to Water | | | | Driller | J&J |
| Depth to Cave in | | | | Chief | JP |
| | | | | Logger | JP |
| | | | | Editor | TAC |
| | | | | Drill Method | 2.25" HSA |
| The stratification lines represent the approximate boundary between soil types and the transition may be gradual. | | | | Rig CME-45 | |



LOG OF TEST BORING

Project **Proposed Watertown Building Development**
Johnson Street
 Location **Watertown, Wisconsin**

Boring No. **B-4**
 Surface Elevation (ft) **819±**
 Job No. **CM23167**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|---|---------------------|--------------|-------|---------|--------------------------------------|--|---|-----|----|-----|
| No. | Excavation (in.) | Rec (in.) | Moist | N | Depth (ft) | qu (qa) (tsf) | W | LL | PL | LOI |
| | | | | | | FILL: 11" Black Clayey Topsoil | | | | |
| 1A/B | | 18 | M | 18 | | FILL: Light Brown Silt, Trace Sand and Gravel | | | | |
| | | | | | | Medium Dense, Brown SAND; Little Silt, Trace Clay and Gravel (SP-SM) | | | | |
| 2 | | 12 | M | 30 | | Medium Dense, Light Brown SILT; Trace to Little Sand and Gravel, Trace Clay (ML) | | | | |
| 3 | | 18 | M | 22 | | | | | | |
| 4 | | 16 | W/M | 100/16" | | Very Dense, Light Brown SILT; Little Sand and Gravel (ML) | | 8.2 | | |
| 5 | | 14 | M | 100/14" | | Very Dense, Gray SILT; Little Sand and Gravel (ML) | | | | |
| 6 | | 15 | W | 100/15" | | Very Dense, Light Brown SILT; Little Sand and Gravel (ML) | | | | |
| 7 | | 4 | M | 100/4" | | Very Dense, Gray SILT; Little Sand and Gravel (ML) | | | | |
| End of Boring at 25 ft Backfilled with Bentonite Chips | | | | | | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ **8.0'±** Upon Completion of Drilling **17.0'**
 Time After Drilling **(perched)**
 Depth to Water _____
 Depth to Cave in _____

Start **9/20/23** End **9/20/23**
 Driller **J&J** Chief **JP** Rig **CME-45**
 Logger **JP** Editor **TAC**
 Drill Method **2.25" HSA**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Proposed Watertown Building Development**
Johnson Street
 Location **Watertown, Wisconsin**

Boring No. **B-5**
Surface Elevation (ft) **819±**
Job No. **CM23167**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | | SOIL PROPERTIES | | | | | |
|--------|------|--------------|-------|---------|--------------------------------------|--|---|---------------------|-----|----|----|-----|
| No. | TYPE | Rec (in.) | Moist | N | | | Depth (ft) | qu (qa) (tsf) | W | LL | PL | LOI |
| | | | | | | | FILL: 9" Black Clayey Topsoil | | | | | |
| 1 | | 18 | M | 19 | | | Medium Dense, Brown Clayey SAND; Trace Gravel (SC) | | | | | |
| 2 | | 18 | M | 21 | | | Medium Dense, Light Brown and Gray Mottled SILT; Trace Sand and Gravel (ML) | | | | | |
| 3 | | 18 | M | 25 | | | Medium Dense to Very Dense, Light Brown SILT; Little Sand and Gravel (ML) | | 8.2 | | | |
| 4 | | 18 | M | 27 | | | | | | | | |
| 5 | | 15 | M | 100/15" | | | | | | | | |
| 6 | | 12 | W | 100/12" | | | Very Dense, Light Brown SAND; Trace Silt and Gravel (SP) | | | | | |
| | | | | | | | Very Dense, Light Brown SILT; Little Sand and Gravel (ML) | | | | | |
| 7 | | 6 | M | 100/6" | | | | | | | | |
| | | | | | | | Very Dense, Gray SILT; Little Sand and Gravel (ML) | | | | | |
| 8 | | 7 | VM | 100/7" | | | | | | | | |
| | | | | | | | End of Boring at 25 ft Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

| While Drilling | <u>13.5'±</u> | Upon Completion of Drilling | | | <u>10.0'</u> |
|---------------------|---------------|-----------------------------|--|--|--------------|
| Time After Drilling | | | | | |
| Depth to Water | | | | | |
| Depth to Cave in | | | | | |

| | | | | |
|--------------|-----------|--------|---------|------------|
| Start | 9/18/23 | End | 9/20/23 | |
| Driller | J&J | Chief | JP | Rig CME-45 |
| Logger | JP | Editor | TAC | |
| Drill Method | 2.25" HSA | | | 106 |

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Proposed Watertown Building Development**
Johnson Street
 Location **Watertown, Wisconsin**

Boring No. **B-6**
 Surface Elevation (ft) **821±**
 Job No. **CM23167**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|---------------------|--------------|-------|---------|---|---------------------|------|----|----|-----|
| No. | Excavation (in.) | Rec (in.) | Moist | N | | qu (qa) (tsf) | W | LL | PL | LOI |
| | | | | | FILL: 4" Dark Brown Clayey Topsoil | | | | | |
| 1 | | 2 | M | 100/5" | FILL: Brown Sandy SILT; Trace Gravel | | | | | |
| | | | | | FILL: Brown Silty CLAY; Little Sand, Trace Gravel | | | | | |
| 2A/B | | 12 | M | 19 | | | | | | |
| | | | | | Medium Dense, Light Brown and Gray Mottled Sandy SILT; Trace Gravel (ML) | | | | | |
| 3 | | 18 | VM | 8 | Loose to Medium Dense, Light Brown SILT; Trace to Little Sand and Gravel, Few Clay Seams, Few Cobbles/Boulders (ML) | (0.75-1.25) | | | | |
| 4 | | 13 | W | 22 | | | 11.8 | | | |
| | | | | | | | | | | |
| 5 | | 18 | M | 70 | Dense to Medium Dense, Light Brown SILT; Little Sand and Gravel (ML) | | | | | |
| 6 | | 16 | M/W/M | 100/16" | | | | | | |
| 7 | | 12 | W | 14 | | | | | | |
| | | | | | End of Boring at 25 ft Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ **8.0'±** Upon Completion of Drilling **11.0'**
 Time After Drilling **(perched)**
 Depth to Water _____
 Depth to Cave in _____

Start **9/18/23** End **9/18/23**
 Driller **J&J** Chief **JP** Rig **CME-45**
 Logger **JP** Editor **TAC**
 Drill Method **2.25" HSA**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.




LOG OF TEST BORING

Project **Proposed Watertown Building Development**
Johnson Street
 Location **Watertown, Wisconsin**

Boring No. **P-1**
Surface Elevation (ft) **822±**
Job No. **CM23167**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | | SOIL PROPERTIES | | | | |
|--------|---------------|--------------|-------|----|--------------------------------------|---|---------------------|------|----|----|-----|
| No. | Depth (ft) | Rec (in.) | Moist | N | | | qu (qa) (tsf) | W | LL | PL | LOI |
| | | | | | |  <p>4.5" ASPHALT over 8" CRUSHED STONE BASE COURSE</p> <p>FILL: Dark Brown Sandy Clay, Trace to Little Gravel</p> <p>Medium Dense, Brown Silty SAND; Trace Gravel (SM)</p> <p>Stiff, Brown Mottled Silty CLAY; Little Sand, Trace Gravel (CL-ML)</p> <p>Medium Dense to Very Dense, Light Brown SILT; Trace to Little Sand and Gravel, Trace Clay (ML)</p> | | | | | |
| 1 | | 18 | M | 14 | | | (4.5+) | 10.5 | | | |
| | | | | | | | | | | | |
| 2A/B | | 18 | M | 27 | | | | | | | |
| | | | | | | | | | | | |
| 3 | | 18 | M | 27 | | | | | | | |
| | | | | | | | | | | | |
| 4 | | 10 | M | 58 | | | | | | | |
| | | | | | 10 | End of Boring at 10 ft Backfilled with Soil Cuttings | | | | | |
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WATER LEVEL OBSERVATIONS

GENERAL NOTES

| While Drilling | ∇ 9.0\pm | Upon Completion of Drilling | | | NW |
|---------------------|-------------------------------------|-----------------------------|--|--|-----------|
| Time After Drilling | | | | | |
| Depth to Water | | | | | |
| Depth to Cave in | | | | | |

| | | | | |
|--------------|-----------|--------|---------|------------|
| Start | 9/18/23 | End | 9/18/23 | |
| Driller | J&J | Chief | JP | Rig CME-45 |
| Logger | JP | Editor | TAC | |
| Drill Method | 2.25" HSA | | | 108 |

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.













LOG OF TEST BORING

| | |
|----------|---|
| Project | Proposed Watertown Building Development Johnson Street |
| Location | Watertown, Wisconsin |

Boring No. **P-2**
 Surface Elevation (ft) **824.5±**
 Job No. **CM23167**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | | SOIL PROPERTIES | | | | | |
|--------|------|--------------|-------|----|--------------------------------------|---|---|---------------------|------|----|----|-----|
| No. | TYPE | Rec (in.) | Moist | N | | | Depth (ft) | qu (qa) (tsf) | W | LL | PL | LOI |
| | | | | | |  | 3.5" ASPHALT over 5.5" CRUSHED STONE | | | | | |
| 1A/B | | 16 | M | 13 | |  | BASE COURSE | | 10.6 | | | |
| | | | | | |  | FILL: Brown Sandy Silt, Trace Gravel | | | | | |
| | | | | | |  | Black to Dark Gray Sandy CLAY; with Organics (OL) (BURIED TOPSOIL) | | | | | |
| 2A/B | | 18 | M | 11 | |  | Stiff, Brown Sandy CLAY; Trace to Little Gravel (CL) | (2.0) | | | | |
| | | | | | 5 |  | | | | | | |
| 3 | | 18 | W | 39 | |  | Medium Dense to Dense, Brown to Light Brown Sandy SILT; Trace Gravel (ML) | | | | | |
| | | | | | |  | | | | | | |
| 4 | | 18 | M | 24 | |  | | | | | | |
| | | | | | 10 |  | | | | | | |
| | | | | | | | End of Boring at 10 ft Backfilled with Soil Cuttings | | | | | |
| | | | | | 15 | | | | | | | |
| | | | | | 20 | | | | | | | |
| | | | | | 25 | | | | | | | |
| | | | | | 30 | | | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

| While Drilling | ∇ 6.0'± | Upon Completion of Drilling | | NW |
|---------------------|-----------------------|-----------------------------|--|-----------|
| Time After Drilling | (perched) | | | |
| Depth to Water | | | | |
| Depth to Cave in | | | | |

Start **9/18/23** End **9/18/23**
 Driller **J&J** Chief **JP** Rig **CME-45**
 Logger **JP** Editor **TAC**
 Drill Method **2.25" HSA**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Proposed Watertown Building Development**
Johnson Street
 Location **Watertown, Wisconsin**

Boring No. **P-3**
 Surface Elevation (ft) **823.5±**
 Job No. **CM23167**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|--------------|-------|-------------|---------------|---|---------------------|------|----|----|-----|
| No. | Rec (in.) | Moist | N | Depth (ft) | | qu (qa) (tsf) | W | LL | PL | LOI |
| | | | | | 11" Black Clayey TOPSOIL | | | | | |
| 1A/B | 13 | M | 34 | | Hard, Brown Sandy CLAY; Trace to Little Gravel (CL) | (4.5+) | 13.6 | | | |
| 2 | 12 | M | 27 | | Medium Dense to Very Dense, Light Brown SILT; Little Sand and Gravel (ML) | | | | | |
| 3 | 15 | M | 64 | | | | | | | |
| 4 | 12 | M | 100/ 13" | | | | | | | |
| | | | | | End of Boring at 10 ft Backfilled with Soil Cuttings | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ **NW** Upon Completion of Drilling **NW**
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start **9/18/23** End **9/18/23**
 Driller **J&J** Chief **JP** Rig **CME-45**
 Logger **JP** Editor **TAC**
 Drill Method **2.25" HSA**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Proposed Watertown Building Development**
Johnson Street
 Location **Watertown, Wisconsin**

Boring No. **P-4**
 Surface Elevation (ft) **822±**
 Job No. **CM23167**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|---------------------|--------------|-------|---------|--|---------------------|------|----|----|-----|
| No. | Excavation (in.) | Rec (in.) | Moist | N | | qu (qa) (tsf) | W | LL | PL | LOI |
| | | | | | 9" Black Clayey TOPSOIL | | | | | |
| 1A/B | | 14 | M | 13 | Very Stiff, Brown Mottled Lean CLAY; Trace Sand and Gravel (CL) | | 18.4 | | | |
| 2 | | 18 | M | 22 | Medium Dense, Light Brown and Gray Mottled Sandy SILT; Trace Gravel (ML) | | | | | |
| 3 | | 18 | M | 17 | Medium Dense to Very Dense, Light Brown Sandy SILT; Trace Gravel (ML) | | | | | |
| 4 | | 12 | M/W | 100/15" | End of Boring at 10 ft Backfilled with Soil Cuttings | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ **9.0'±** Upon Completion of Drilling **NW**
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start **9/18/23** End **9/18/23**
 Driller **J&J** Chief **JP** Rig **CME-45**
 Logger **JP** Editor **TAC**
 Drill Method **2.25" HSA**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Proposed Watertown Building Development**
Johnson Street
 Location **Watertown, Wisconsin**

Boring No. **P-5**
 Surface Elevation (ft) **821.5±**
 Job No. **CM23167**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | | SOIL PROPERTIES | | | | | |
|--------|-------------|-----------|-------|----|--------------------------------------|--|--|---------------|-----|----|----|-----|
| No. | Field Notes | Rec (in.) | Moist | N | | | Depth (ft) | qu (qa) (tsf) | W | LL | PL | LOI |
| | | | | | | | FILL: 3" Black Clayey Topsoil | | | | | |
| 1 | | 16 | M | 24 | | | FILL: Light Brown Sand, Trace to Little Silt and Gravel | | 2.8 | | | |
| | | | | | | | | | | | | |
| 2 | | 18 | M | 9 | | | | | | | | |
| | | | | | 5 | | | | | | | |
| 3A/B | | 18 | M | 11 | | | FILL: Mix of Dark Brown Sandy Clay and Topsoil, Trace Gravel | (2.0) | | | | |
| | | | | | | | Dark Brown to Black Sandy CLAY; with Organics (OL) (BURIED TOPSOIL) | | | | | |
| 4 | | 3 | M | 15 | | | Medium Dense, Light Brown and Gray Mottled Sandy SILT; Trace Gravel (ML) | | | | | |
| | | | | | 10 | | End of Boring at 10 ft Backfilled with Soil Cuttings | | | | | |
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WATER LEVEL OBSERVATIONS

GENERAL NOTES

| While Drilling | ∇ | Upon Completion of Drilling | | |
|---------------------|----------|-----------------------------|--|----|
| Time After Drilling | NW | | | NW |
| Depth to Water | | | | |
| Depth to Cave in | | | | |

| | | | | |
|--------------|-----------|--------|---------|------------|
| Start | 9/18/23 | End | 9/18/23 | |
| Driller | J&J | Chief | JP | Rig CME-45 |
| Logger | JP | Editor | TAC | |
| Drill Method | 2.25" HSA | | | 112 |

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Proposed Watertown Building Development**
Johnson Street
 Location **Watertown, Wisconsin**

Boring No. **P-6**
 Surface Elevation (ft) **821.5±**
 Job No. **CM23167**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|--------------------|-------|----|---------------|--|---------------------|-----|----|----|-----|
| No. | Field Rec (in.) | Moist | N | Depth (ft) | | qu (qa) (tsf) | W | LL | PL | LOI |
| | | | | | FILL: 3" Black Clayey Topsoil | | | | | |
| 1A/B | 18 | M | 20 | | FILL: Brown Sandy Silt, Trace Gravel, Little Intermixed Topsoil | | 5.1 | | | |
| | | | | | FILL: Brown Lean Clay, Trace Sand and Gravel | | | | | |
| 2A/B | 18 | M | 10 | | Black Sandy CLAY; with Organics (OL) (BURIED TOPSOIL) | | | | | |
| 3 | 18 | M | 38 | | Medium Dense, Brown Silty SAND; Trace Gravel and Clay (SM) | (3.5) | | | | |
| | | | | | Dense, Light Brown and Gray Mottled SILT; Trace to Little Sand and Gravel, Few Clay Seams (ML) | | | | | |
| 4 | 18 | M | 21 | | Medium Dense, Light Brown Sandy SILT; Trace Gravel (ML) | | | | | |
| | | | | 10 | End of Boring at 10 ft Backfilled with Soil Cuttings | | | | | |
| | | | | 15 | | | | | | |
| | | | | 20 | | | | | | |
| | | | | 25 | | | | | | |
| | | | | 30 | | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling ☒ NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start **9/18/23** End **9/18/23**
 Driller **J&J** Chief **JP** Rig **CME-45**
 Logger **JP** Editor **TAC**
 Drill Method **2.25" HSA**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Proposed Watertown Building Development**
Johnson Street
 Location **Watertown, Wisconsin**

Boring No. **SW-1**
 Surface Elevation (ft) **812±**
 Job No. **CM23167**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|---------------------|--------------|-------|---|--|---------------------|-----|----|----|-----|
| No. | Excavation (in.) | Rec (in.) | Moist | N | | qu (qa) (tsf) | W | LL | PL | LOI |
| 1A/B | 14 | M | 20 | | FILL: 18" Black Clayey Topsoil | | | | | |
| | | | | | FILL: Brown Silty Sand and Sandy Silt, Trace Gravel | | 8.0 | | | |
| 2A/B | 18 | M | 9 | | Hard, Brown Lean CLAY; Trace Sand and Gravel (CL) | (4.5+) | | | | |
| | | | | | Loose, Brown SAND; Little Silt, Trace Clay and Gravel (SP-SM) | | | | | |
| 3 | 18 | M | 14 | | Very Stiff to Hard, Light Brown and Gray Mottled Silty CLAY; Trace Fine Sand (CL-ML) | (3.0) | | | | |
| 4 | 18 | M | 26 | | | (4.5+) | | | | |
| 5 | 18 | M | 25 | | Medium Dense, Gray SILT; Little Fine Sand (ML) | | | | | |
| 6 | 18 | W | 34 | | | | | | | |
| | | | | | End of Boring at 15 ft Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ **13.0'±** Upon Completion of Drilling **NW**
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start **9/15/23** End **9/15/23**
 Driller **J&J** Chief **JP** Rig **CME-45**
 Logger **JP** Editor **TAC**
 Drill Method **2.25" HSA**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Proposed Watertown Building Development**
Johnson Street
 Location **Watertown, Wisconsin**

Boring No. **SW-2**
 Surface Elevation (ft) **812±**
 Job No. **CM23167**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|---------------------|--------------|-------|----|---|---------------------|------|----|----|-----|
| No. | Excavation (in.) | Rec (in.) | Moist | N | | qu (qa) (tsf) | W | LL | PL | LOI |
| | | | | | 17" Black Clayey TOPSOIL | | | | | |
| 1A/B | | 16 | M | 11 | Hard, Dark Brown to Brown Lean CLAY; Trace Sand and Gravel (CL) | | 13.6 | | | |
| 2A/B | | 15 | M/W | 25 | Medium Dense to Dense, Light Brown and Gray Mottled SILT; Little Fine Sand, Trace Gravel (ML) | | | | | |
| 3 | | 18 | M | 16 | | | | | | |
| 4 | | 18 | M | 33 | | | | | | |
| 5 | | 10 | M | 54 | Dense, Gray SILT; Little Fine Sand (ML) | | | | | |
| 6 | | 18 | M | 44 | | | | | | |
| | | | | | End of Boring at 15 ft Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ **4.0'±** Upon Completion of Drilling **NW**
 Time After Drilling **(perched)**
 Depth to Water _____
 Depth to Cave in _____

Start **9/15/23** End **9/15/23**
 Driller **J&J** Chief **JP** Rig **CME-45**
 Logger **JP** Editor **TAC**
 Drill Method **2.25" HSA**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

Wisconsin Department of Commerce
Division of Safety and Buildings

SOIL AND SITE EVALUATION - STORM

In accordance with SPS 382.365, 385, Wis. Adm. Code, and WDNR Standard 1002

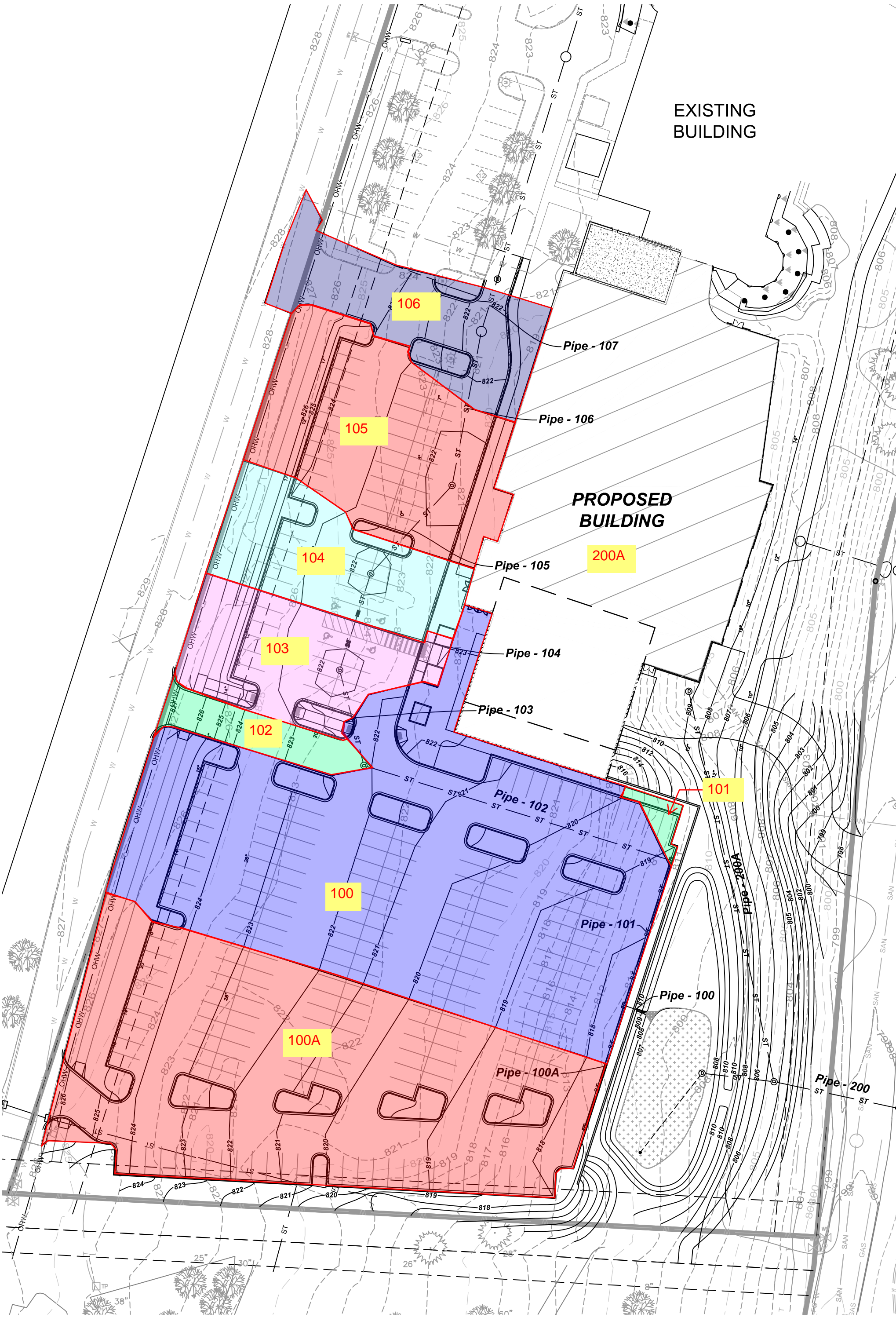
Page 1 of 1

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

Please print all information.

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

| | | | | | | | |
|--|--|--|--|---|--|--------------------------|--|
| Property Owner Watertown Collective, LLC | | | | Property Location 600 Hoffman Road / 672 Johnson Street | | | |
| Property Owner's Mailing Address 600 E. Main Street, Suite 200 | | | | Govt. Lot SE 1/4, SE 1/4, S5 T8N R 15 E | | | |
| City Watertown | | | | State WI | | Zip Code 53094 | |
| Phone Number | | | | Lot # -- | | Block # -- | |
| | | | | Subd. Name or CSM# -- | | | |
| City Watertown | | | | State WI | | Zip Code 53094 | |
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| | | | | Subd. Name or CSM# -- | | | |



Storm Sewer Calculations

Project: Watertown YMCA

Date: 2/16/2024

Design Storm: 10 Year

Section 3, Item D.

| Pipe | Drainage Area (AC) | Runoff Coefficient | Tc (min) | i (in/hr) | Incremental Q (cfs) | Pipe Slope (%) | Pipe Size (in) | Capacity Full (cfs) | Capacity Full (GPM) | Total Q (csf) | Flow Rate (GPM) | Pipe n Value | Comments |
|------|-----------------------|-----------------------|-------------|--------------|---------------------------|----------------------|-------------------|---------------------------|---------------------------|------------------|--------------------|-----------------|----------------------------|
| 107 | | | | | 1.96 | 1.55 | 8 | 1.96 | 880 | 1.96 | 880 | 0.010 | Existing Pipe flowing full |
| 106 | 0.203 | 0.80 | 6.00 | 6.88 | 1.11 | 1.00 | 12 | 3.56 | 1598 | 3.07 | 1379 | 0.013 | |
| 105 | 0.338 | 0.74 | 6.00 | 6.88 | 1.72 | 1.00 | 15 | 6.46 | 2899 | 4.79 | 2151 | 0.013 | |
| 104 | 0.201 | 0.74 | 6.00 | 6.88 | 1.03 | 1.00 | 15 | 6.46 | 2899 | 5.82 | 2612 | 0.013 | |
| 103 | 0.204 | 0.75 | 6.00 | 6.88 | 1.06 | 1.00 | 18 | 10.50 | 4712 | 6.88 | 3086 | 0.013 | |
| 102 | 0.06 | 0.90 | 6.00 | 6.88 | 0.37 | 1.00 | 18 | 10.50 | 4712 | 7.25 | 3253 | 0.013 | |
| 101 | 0.014 | 0.90 | 6.00 | 6.88 | 0.09 | 1.00 | 18 | 10.50 | 4712 | 7.33 | 3292 | 0.013 | |
| 100A | 0.858 | 0.82 | 6.00 | 6.88 | 4.83 | 1.00 | 15 | 6.46 | 2899 | 4.83 | 2169 | 0.013 | |
| 100 | 1.051 | 0.82 | 6.00 | 6.88 | 5.94 | 2.00 | 21 | 22.40 | 10053 | 18.11 | 8128 | 0.013 | |
| | | | | | | | | | | | | | |
| 201 | | #DIV/0! | 6.00 | 6.88 | 14.15 | 5.51 | 18 | 24.65 | 11063 | 14.15 | 6351 | 2.013 | 10 year flow from basin |
| 200A | | #DIV/0! | 6.00 | 6.88 | 3.69 | 1.00 | 15 | 6.46 | 2899 | 3.69 | 1656 | 3.013 | GPM from Plumber |
| 200 | | | | | 0.00 | 8.77 | 21 | 46.91 | 21053 | 17.84 | 8007 | 4.013 | |
| | | | | | | | | | | | | | |

Watertown Community Health Foundation

Watertown YMCA

Johnson Street Watertown, WI
53094

Site Plan Review
02-23-2024

ARCHITECT:



CIVIL/LANDSCAPING/SCTRUCTURAL/PLUMBING/MECHANICAL/ELECTRICAL/FIRE PROTECTION :

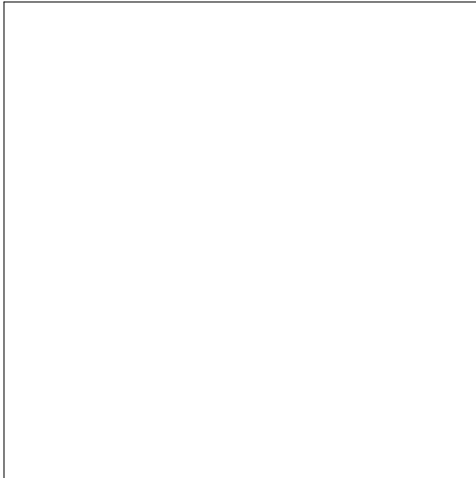


CONSTRUCTION MANAGER :



SHEET INDEX:

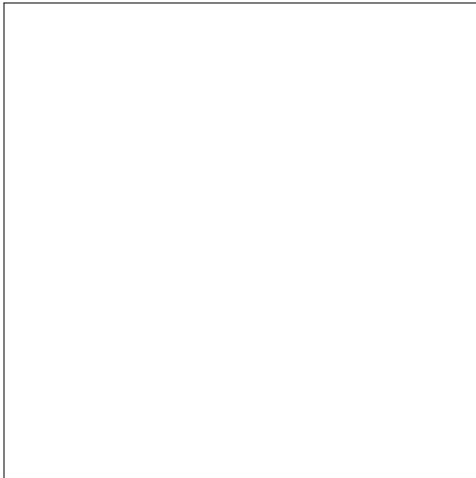
- CIVIL
 - C1.10 PROJECT LOCATION & GENERAL NOTES
 - C1.11 SITE PLAN - OVERALL
 - C1.12 SITE PLAN - NORTH
 - C1.13 SITE PLAN - SOUTH
 - C1.20 GRADING PLAN - OVERALL
 - C1.21 GRADING PLAN - NORTH
 - C1.22 GRADING PLAN - SOUTH
 - C1.30 EROSION CONTROL PLAN
 - C1.40 DEMOLITION PLAN
 - C1.50 EXISTING SURVEY
 - C5.00 CONSTRUCTION DETAILS
- LANDSCAPING
 - L1.00 LANDSCAPE PLAN - OVERALL
 - L1.01 LANDSCAPE PLAN - NORTH
 - L1.02 LANDSCAPE PLAN - SOUTH
 - L2.00 LANDSCAPE DETAILS & NOTES
- ARCHITECTURAL
 - A0.0 COVER SHEET
 - A2.1 FIRST FLOOR PLAN - OVERALL
 - A2.2 SECOND FLOOR PLAN - OVERALL
 - A4.0 EXTERIOR ELEVATIONS - OVERALL



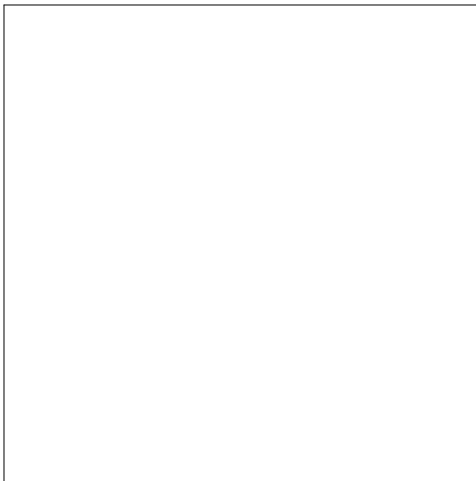
ARCHITECTURAL "A" SERIES



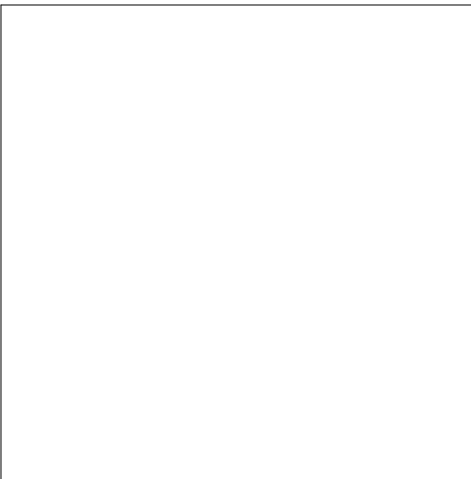
STRUCTURAL "S" SERIES



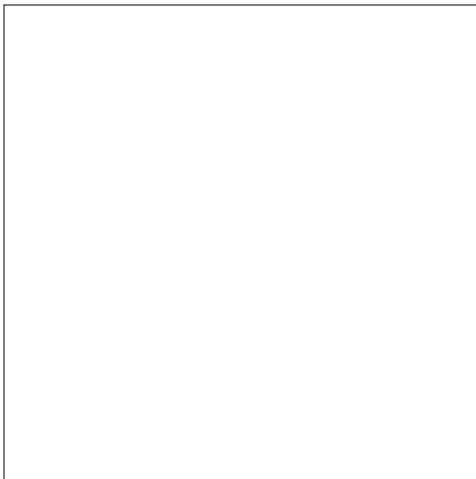
PLUMBING "P" SERIES



MECHANICAL "M" SERIES



ELECTRICAL "E" SERIES



ELECTRICAL "E" SERIES

Project:
Watertown YMCA

| Revisions: | | |
|------------|------|-------------|
| No. | Date | Description |
| | | |
| | | |
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| | | |

| | | |
|---------------------------|---------------------------|--|
| Date: 02-23-2024 | | |
| Project No.: 230049.00 | (Owner) Project No.: - | |

Sheet No.:

A0.0

SITE PLAN REVIEW

Sheet:
FIRST FLOOR PLAN -
OVERALL

Scale:
As indicated

| Revisions: | | |
|------------|-------|--------------|
| No. | Date: | Description: |
| | | |
| | | |
| | | |
| | | |
| | | |

Date:
02-23-2024

Project No.:
230049.00

(Owner) Project No.:
-

Sheet No.:

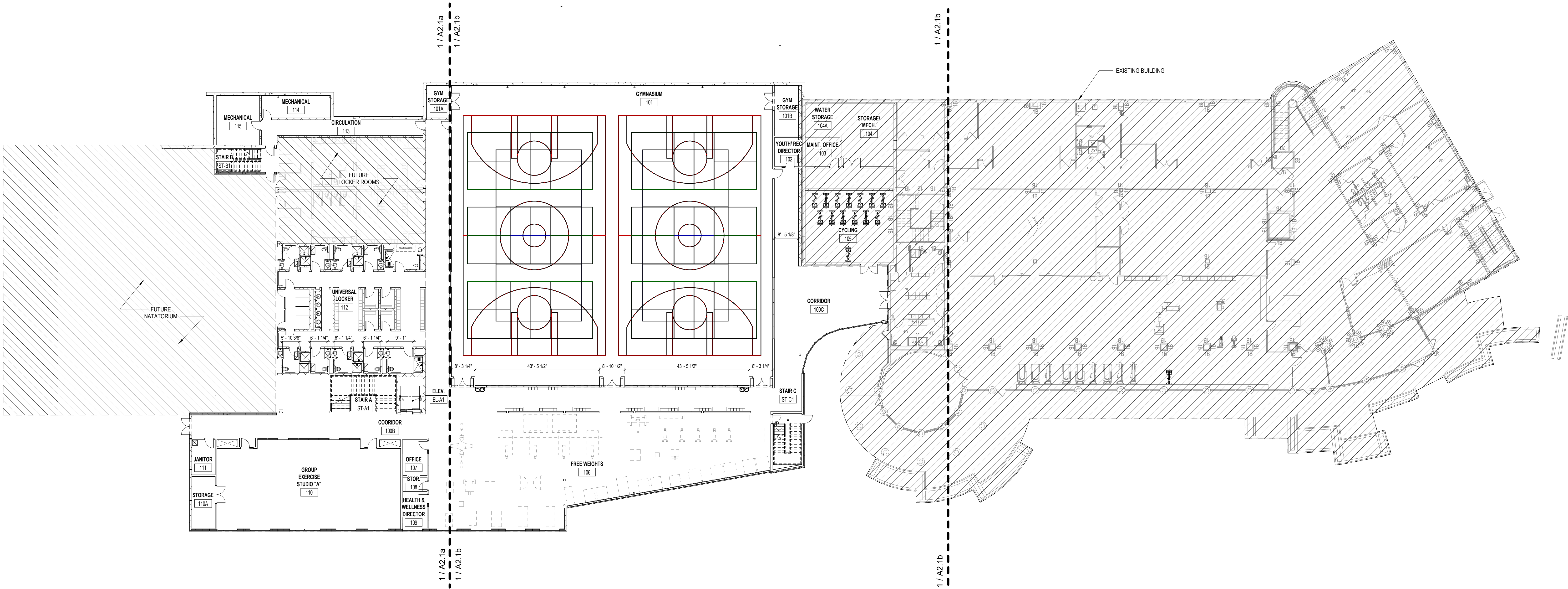
A2.1

| FLOOR PLAN LEGEND | | |
|-------------------|--------------------------------------|---|
| # | WALL TAG. SEE WALL TYPES SHEET A10.0 | DOOR PER TAG. SEE DOOR SCHEDULE SHEET A10.1 |
| # | KEYNOTE. SEE KEYNOTES, THIS SHEET. | CMU WALL |
| # | WINDOW TAG. SEE SHEET A10.2 | PRECAST CONCRETE WALL |
| # | STRUCTURAL GRID | INTERIOR METAL STUD PARTITION WALL |
| WC | WATER CLOSET | URINAL |
| CS | CHILD SIZED SINK | CHILD SIZED WATER CLOSET |
| DF | DRINKING FOUNTAIN | KITCHEN SINK |
| S | SHOWER | FOLDING PARTITION |
| VC | VANITY COUNTER & SINK | |

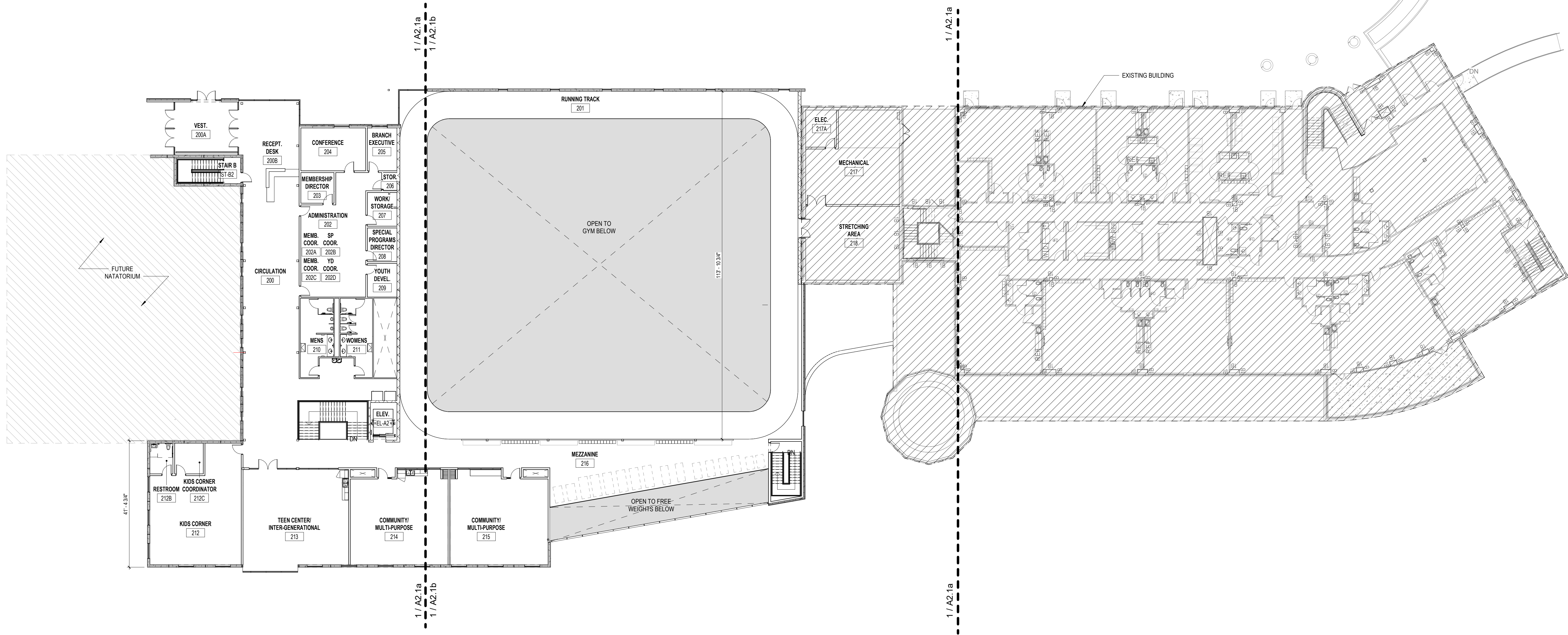
GENERAL CONSTRUCTION NOTES:

- EXISTING WALLS TO REMAIN
- NEW WALL CONSTRUCTION

- SEE SHEET 10.0 FOR ABBREVIATIONS AND SYMBOL LEGEND.
2. SEE SHEETS 10.0 FOR CODE REVIEW.
3. ALIGNMENT OF NEW CONSTRUCTION TO EXISTING WALLS & COLUMNS SHALL BE ONE IN A MANNER AS TO VISIBLY ELIMINATE THE POINT OF CONTACT OR JOINT OF NEW AND EXISTING MATERIALS TO PROVIDE SMOOTH AND CONTINUOUS SURFACE. MAINTAIN APPROPRIATE FIRE-RATED CONSTRUCTION AT DISTURBED AREAS.
4. WALLS ARE TO BE PARALLEL & PERPENDICULAR TO ADJACENT WALLS UNLESS OTHERWISE NOTED. ALIGN WALLS WHERE APPARENT.
5. ALL NEW INTERIOR WALLS ARE TO BE TYPE "SS" WALLS UNLESS OTHERWISE NOTED. WALL TYPES ARE LOCATED ON SHEET A10.1. SEE WALL TYPES FOR CONDITIONS AT CERAMIC TILED WALLS.
6. PROVIDE BLOCKING AT ALL WALL HUNG EQUIPMENT AND FURNITURE AS REQUIRED.
7. ALL WALLS WITHIN PROJECT SCOPE TO BE PATCHED AS NECESSARY TO COMPLETE "AS-NEW" ENVIRONMENT. THIS INCLUDES AREAS WHERE EQUIPMENT HAS BEEN REMOVED.
8. ALL FLOORS ARE TO BE LEVEL AND CLEAN PRIOR TO INSTALLATION OF NEW FLOOR COVERINGS. ALL FLOOR SURFACES AND TRANSITIONS BETWEEN SURFACE TYPES SHALL COMPLY WITH ADA GUIDELINES.
9. WALL TYPES INDICATED BY SEE SHEET A10.1 FOR WALL TYPES.
10. ALL FLOOR ELEVATIONS ARE BASED OFF OF FIRST FLOOR ELEVATION OF 100'-0". ARCHITECTURAL ELEVATION 100'-0" CORRESPONDS TO CIVIL ELEVATION OF 100'-87" +/-.
11. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.
12. ALL FIRE EXTINGUISHER CABINETS (FEC) SHALL BE SEMI RECESSED ("SR FEC"), U.N.O. (SURFACE MOUNTED) = "SM FEC", FULLY RECESSED = "REC FEC", FECS IN RATED ENCLOSURE WALLS SHALL BE SURFACE MOUNTED.
13. ALL ELECTRICAL PANELS LOCATED IN SPACES OTHER THAN DEDICATED ELECTRICAL CLOSETS OR NON-PUBLIC SPACES SHALL BE FULLY RECESSED.
14. HINGE SIDE OF ROUGH OPENINGS FOR DOORS ARE TYPICALLY 4" FROM ADJACENT PERPENDICULAR WALL, UNLESS NOTED OTHERWISE.
15. SEE SPECIFICATION MANUAL FOR COLOR AND MATERIAL SCHEDULE AND ROOM FINISH SCHEDULE.
16. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING CONTINUOUS UTILITY SERVICE TO ALL SPACES ON THE SITE NOT AFFECTED BY THE WORK. ANY DISRUPTION IN SERVICES REQUIRED TO PERFORM THE WORK MUST BE COORDINATED WITH OWNER AND ADJACENT PROPERTY OWNERS IN ADVANCE.
17. CONTRACTOR SHALL REPLACE, AT NO COST TO THE OWNER, ANY AND ALL SITE MATERIALS DAMAGED DUE TO THE CONSTRUCTION PROCESS WHICH WERE NOT SCHEDULED TO BE DEMOLISHED OR REMOVED.
18. COORDINATE FINAL SIZES AND LOCATIONS OF ALL CONCRETE PADS WITH THE HVAC CONTRACTOR. CONCRETE PADS SHALL BE BY DIV 3, UNO.
19. ANY WALL SHOWN ON THE PLANS WITHOUT A WALL TAG IS ASSUMED TO BE TYPE 1 IF GRAPHICALLY INDICATED AS GYP BOARD & METAL STUD, AND TYPE 11 IF GRAPHICALLY INDICATED AS MASONRY. IF MASONRY INFILL WALL IS NOT TAGGED, IT SHALL BE ASSUMED TO MATCH THE WIDTH OF THE EXISTING WALL. SEE SHEET 10.0 FOR GRAPHIC LEGEND.
20. ALL GYPSUM BOARD SHALL BE MOLD RESISTANT. SEE WALL TYPES FOR ADDITIONAL GYP BOARD REQUIREMENTS.
21. CERTAIN PLUMBING, ELECTRICAL AND MECHANICAL ELEMENTS, SUCH AS ROOF CONDUCTORS, STANDPIPES, CABINET UNIT HEATERS AND ELECTRICAL PANELS MAY OR MAY NOT BE SHOWN ON THE ARCHITECTURAL PLANS. THESE ARE SHOWN FOR COORDINATION ONLY. ALL CONTRACTORS MUST REVIEW ALL SHEETS FOR ALL REQUIRED WORK.
22. WHERE MASONRY IS REMOVED AND BACKPATCHED, OR WHERE OPENINGS ARE FILLED, PROVIDE MASONRY AND GROUT TO MATCH. TOOTH IN ALL INFILL SO AS TO CREATE A SEAMLESS END PRODUCT.



1 FIRST FLOOR - OVERALL
1/16" = 1'-0"



1 SECOND FLOOR - OVERALL
1/16" = 1'-0"

| KEYNOTES PER SHEET | |
|--------------------|--------------|
| Key Value | Keynote Text |

| FLOOR PLAN LEGEND | | | |
|-------------------|--------------------------------------|--|---|
| | WALL TAG. SEE WALL TYPES SHEET A10.0 | | DOOR PER TAG. SEE DOOR SCHEDULE SHEET A10.1 |
| | KEYNOTE. SEE KEYNOTES, THIS SHEET. | | CMU WALL |
| | WINDOW TAG. SEE SHEET A10.2 | | PRECAST CONCRETE WALL |
| | STRUCTURAL GRID | | INTERIOR METAL STUD PARTITION WALL |
| | WATER CLOSET | | URINAL |
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| | SHOWER | | FOLDING PARTITION |
| | VANITY COUNTER & SINK | | |

ARCHITECTURAL STUDIOS, INC.

2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com

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Consultant:

255 N 21st Street Milwaukee, WI 53233 414-475-5554

Project:
Watertown YMCA

Location:
Johnson Street Watertown, WI 53094

Key Plan:

True North

Plan North

SITE PLAN REVIEW

Sheet:
SECOND FLOOR PLAN - OVERALL

Scale:
As indicated

Revisions:

| No. | Date: | Description: |
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Date:
02-23-2024

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| Project No.: | (Owner) Project No.: |
| 230049.00 | - |

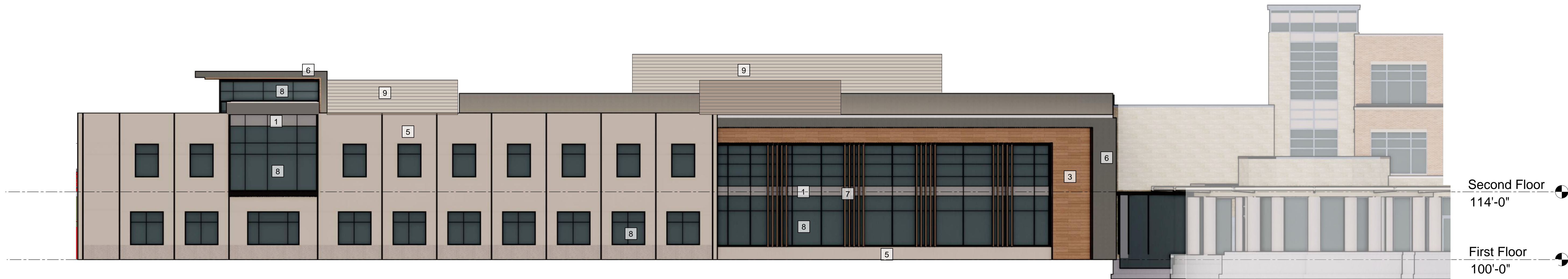
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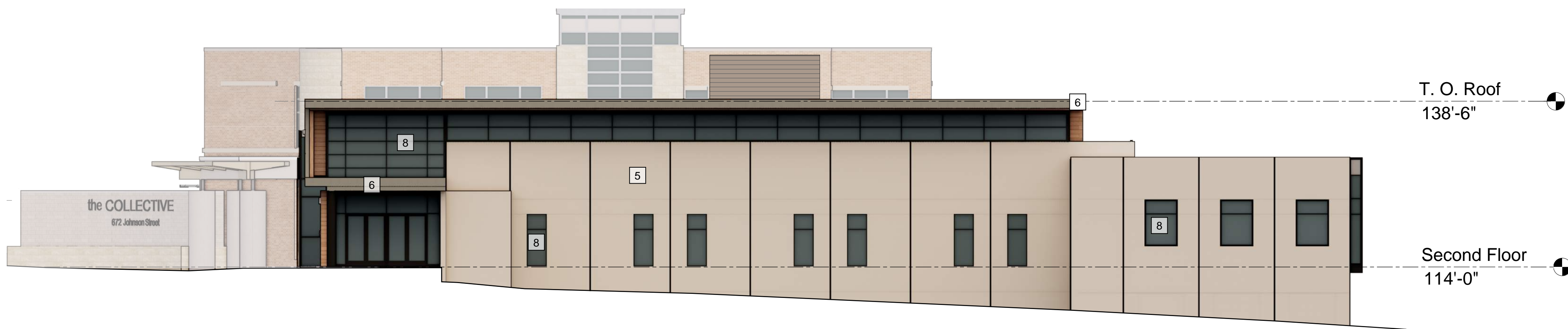
- Materials Key**
- 01 Spandrel Glass
 - 02 Vision Glass
 - 03 Wood Look Plank Metal Siding System
 - 04 Solid Tan Metal Plank Siding System
 - 05 Buff Precast Panel
 - 06 Slate Grey Metal Panel Siding System
 - 07 Wood Look Metal Vertical Louver System
 - 08 Vision Glass
 - 09 Light Grey Metal Mechanical Screen



1 WEST EXTERIOR ELEVATION
3/32" = 1'-0"



2 EAST EXTERIOR ELEVATION
3/32" = 1'-0"



3 WEST EXTERIOR ELEVATION
3/32" = 1'-0"

Watertown Community Health Foundation

Watertown YMCA

Johnson Street Watertown, WI
53094

Site Plan Review
02-23-2024

ARCHITECT:



CIVIL/LANDSCAPING/STRUCTURAL/PLUMBING/MECHANICAL/ELECTRICAL/FIRE PROTECTION :

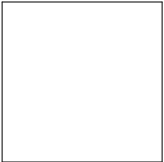


CONSTRUCTION MANAGER :

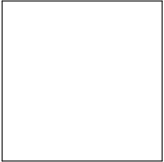


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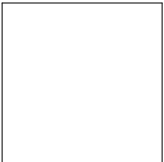
- CIVIL
 - C1.10 PROJECT LOCATION & GENERAL NOTES
 - C1.11 SITE PLAN - OVERALL
 - C1.12 SITE PLAN - NORTH
 - C1.13 SITE PLAN - SOUTH
 - C1.20 GRADING PLAN - OVERALL
 - C1.21 GRADING PLAN - NORTH
 - C1.22 GRADING PLAN - SOUTH
 - C1.30 EROSION CONTROL PLAN
 - C1.40 DEMOLITION PLAN
 - C1.50 EXISTING SURVEY
 - C5.00 CONSTRUCTION DETAILS
- LANDSCAPING
 - L1.00 LANDSCAPE PLAN - OVERALL
 - L1.01 LANDSCAPE PLAN - NORTH
 - L1.02 LANDSCAPE PLAN - SOUTH
 - L2.00 LANDSCAPE DETAILS & NOTES
- ARCHITECTURAL
 - A0.0 COVER SHEET
 - A2.1 FIRST FLOOR PLAN - OVERALL
 - A2.2 SECOND FLOOR PLAN - OVERALL
 - A4.0 EXTERIOR ELEVATIONS - OVERALL



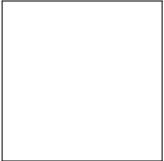
ARCHITECTURAL "A" SERIES



STRUCTURAL "S" SERIES



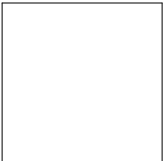
PLUMBING "P" SERIES



MECHANICAL "M" SERIES



ELECTRICAL "E" SERIES



ELECTRICAL "E" SERIES

Project:
Watertown YMCA

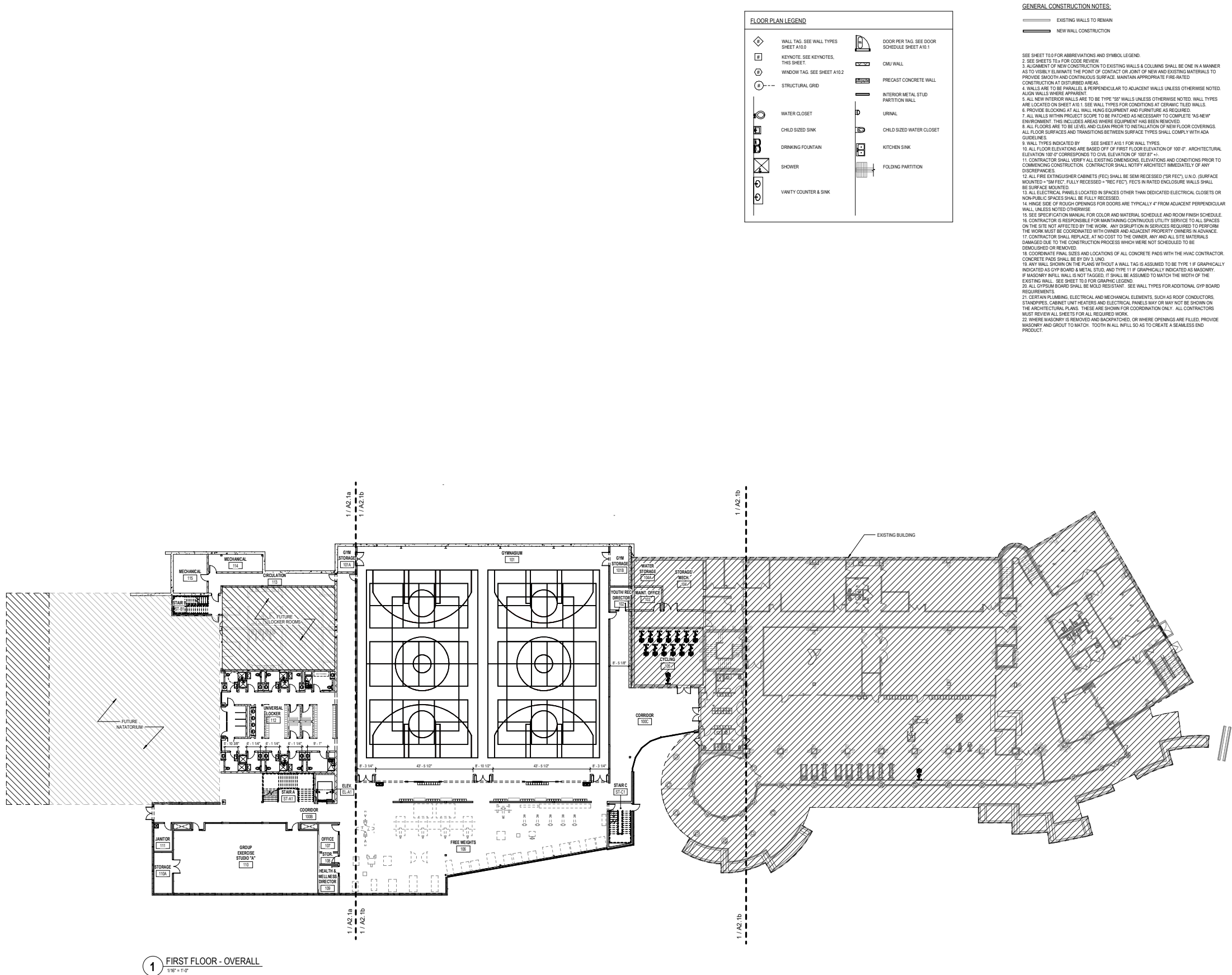
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02-23-2024

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| FLOOR PLAN LEGEND | | | |
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| | WALL TAG. SEE WALL TYPES SHEET A10.1 | | DOOR PER TAG. SEE DOOR SCHEDULE SHEET A10.1 |
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- GENERAL CONSTRUCTION NOTES:
- EXISTING WALLS TO REMAIN
NEW WALL CONSTRUCTION
- SEE SHEET TO 0 FOR ABBREVIATIONS AND SYMBOL LEGEND.
2. SEE SHEETS 10 & 11 FOR CODE REVIEW.
3. ALIGNMENT OF NEW CONSTRUCTION TO EXISTING WALLS & COLUMNS SHALL BE ONE IN A MANNER AS TO VISIBLY ELIMINATE THE POINT OF CONTACT OR JOINT OF NEW AND EXISTING MATERIALS TO PROVIDE SMOOTH AND CONTINUOUS SURFACE. MAINTAIN APPROPRIATE FIRE-RATED CONSTRUCTION AT DISTURBED AREAS.
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zimmerman
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FACSIMILE 814.476.8582

Consultant:
HARWOOD
205 N 21st Street Milwaukee, WI 53233 414-475-0554

Project:
Watertown YMCA

Location:
Johnson Street Watertown, WI 53094

Key Plan:

True North
Plan North

AREA A AREA B AREA C

SITE PLAN REVIEW

Sheet:
FIRST FLOOR PLAN - OVERALL

Scale:
As indicated

Revisions:

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Date:
02-23-2024

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| Project No.: | (Owner) Project No.: |
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zimmerman

ARCHITECTURAL STUDIOS, INC.

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AREA A

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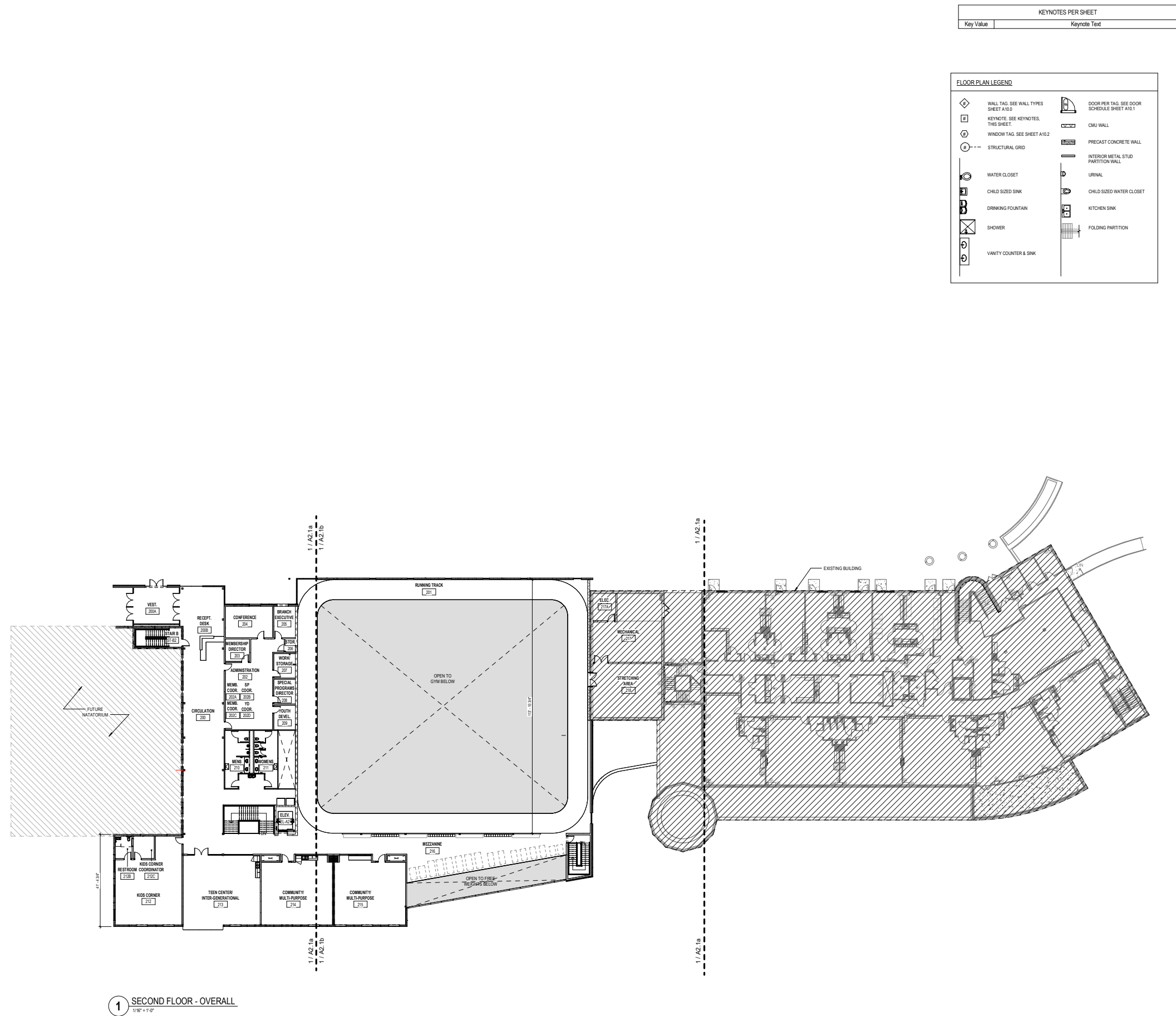
SITE PLAN REVIEW

Sheet:

SECOND FLOOR PLAN - OVERALL

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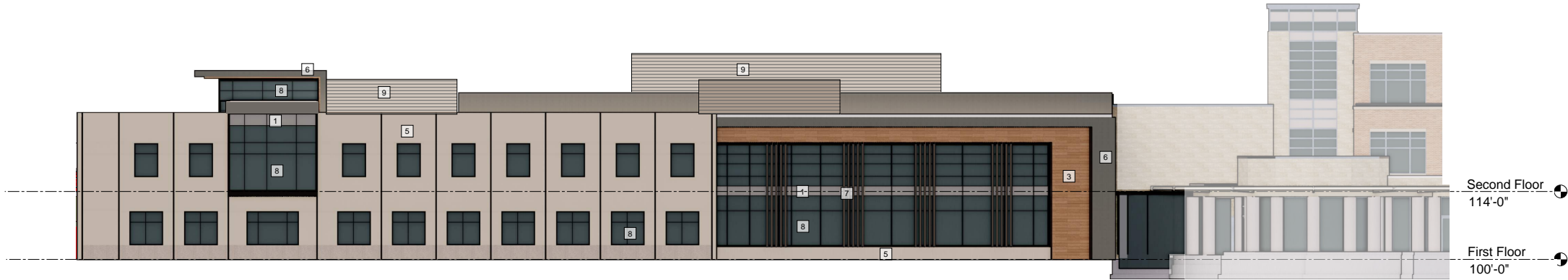
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Materials Key

- 01 Spandrel Glass
- 02 Vision Glass
- 03 Wood Look Plank Metal Siding System
- 04 Solid Tan Metal Plank Siding System
- 05 Buff Precast Panel
- 06 Slate Grey Metal Panel Siding System
- 07 Wood Look Metal Vertical Louver System
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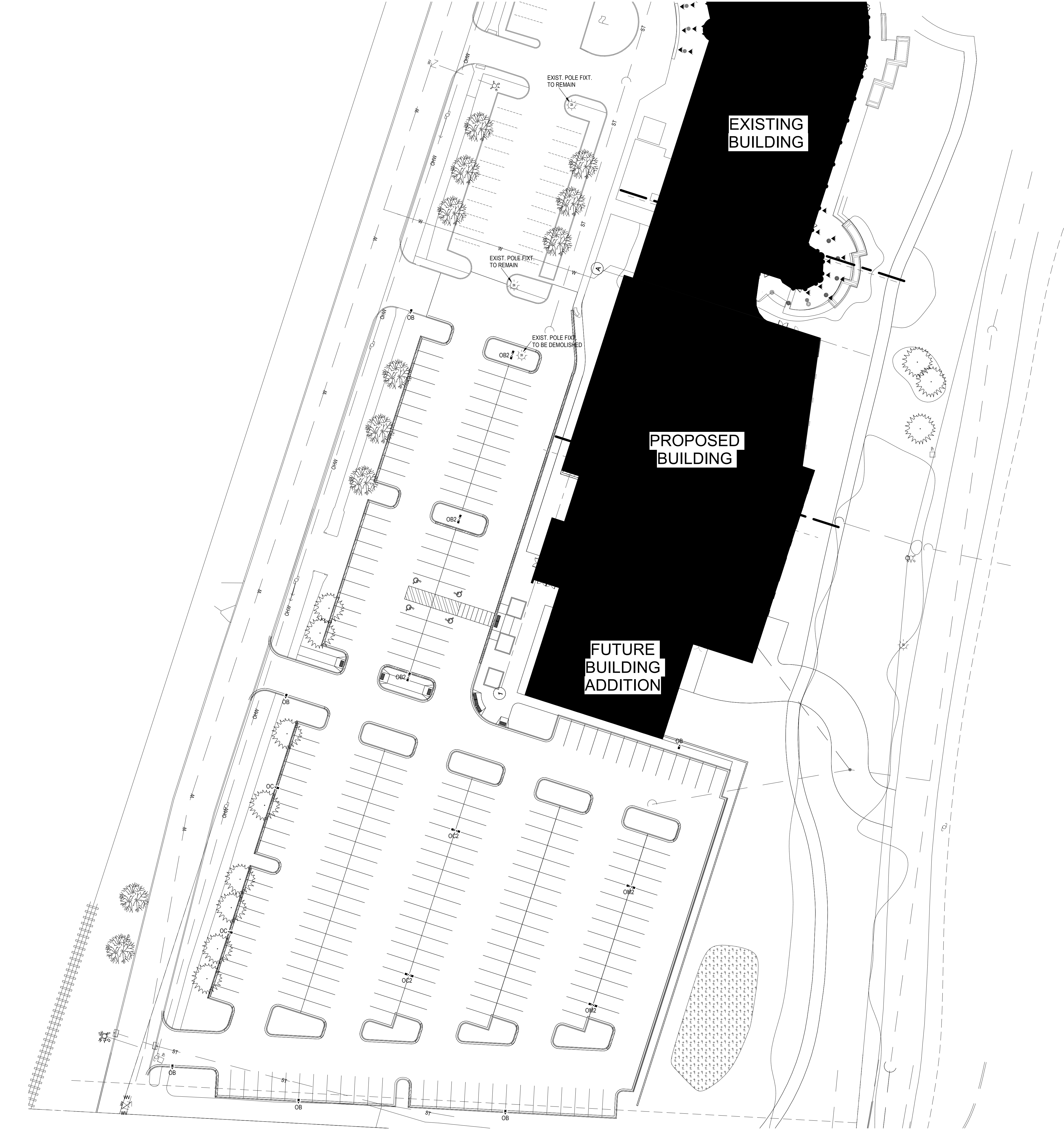
1 WEST EXTERIOR ELEVATION
3/32" = 1'-0"



2 EAST EXTERIOR ELEVATION
3/32" = 1'-0"



3 WEST EXTERIOR ELEVATION
3/32" = 1'-0"



GENERAL NOTES:
1. ADDITIONAL SITE AND FACADE LIGHTING TO BE PROVIDED AS SITE AND FACADES CONTINUE TO BE DEVELOPED.

SHEET NOTES:
1. <Text>

1 SITE PLAN ELECTRICAL - NEW
1" = 30'-0"

Scale:
As indicated

Revisions:

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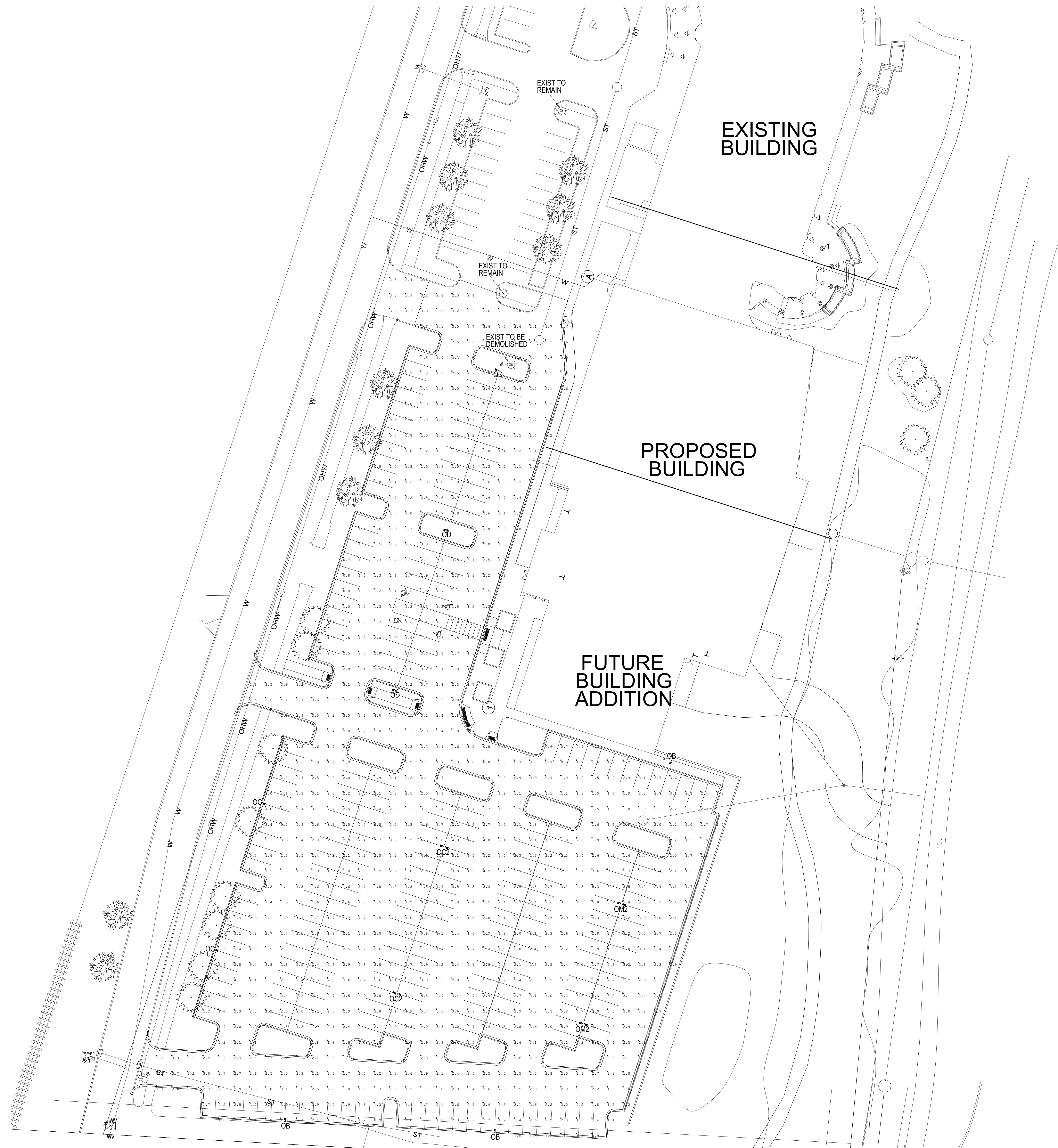
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FOOTCANDLE CALCULATION

STATISTICS:

- AVG: 2.36fc
- MAX: 6.50fc
- MIN: 0.60fc
- MAX:MIN: 10.83:1



ALED4T125K

OB: Single luminaire w/ Type III dist., 25'H pole/3'H AFG conc. base
OB2: Double luminaire w/ Type III dist., 25'H pole/3'H AFG conc. base
OC: Single luminaire w/ Type IV dist., 25'H pole/3'H AFG conc. base
OC2: Double luminaire w/ Type IV dist., 25'H pole/3'H AFG conc. base
OM2: Double luminaire w/ Type III & IV dist., 25'H pole/3'H AFG conc. base

Section 3, Item D.



Color: Black Weight: 32.0 lbs

Project:

Type:

Prepared By:

Date:

| Driver Info | | LED Info | |
|-------------|------------------|----------------|---------------|
| Type | Constant Current | Watts | 125W |
| 120V | 1.12A | Color Temp | 5000K (Cool) |
| 208V | 0.70A | Color Accuracy | 70 CRI |
| 240V | 0.61A | L70 Lifespan | 100,000 Hours |
| 277V | 0.52A | Lumens | 16,328 lm |
| Input Watts | 134.8W | Efficacy | 121.1 lm/W |

Technical Specifications

Compliance

UL Listed:

Suitable for wet locations

IP Rating:

Ingress protection rating of IP66 for dust and water

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Wattage Equivalency:

Equivalent to 350W Metal Halide

Construction

IES Classification:

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semicircular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

Maximum Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

Thermal Management:

Superior thermal management with external "Air-Flow" fins

Lens:

Tempered glass lens

Housing:

Die-cast aluminum housing, lens frame and mounting arm

Mounting:

Universal mounting arm compatible for hole spacing patterns from 1" to 5 1/2" center to center. Round Pole Adaptor plate included as a standard. Easy slide and lock to mount fixture with ease. Round pole diameter must be >4" to mount fixtures at 90° orientation.

Reflector:

Specular vacuum-metallized polycarbonate

Gaskets:

High-temperature silicone gaskets

EPA:

- 1 Fixture: 0.75
- 2 Fixtures at 90°: 1.2
- 2 Fixtures at 180°: 2.4
- 3 Fixtures at 90°: 2.4
- 4 Fixtures at 90°: 1.8

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

LED Characteristics

LEDs:

Multi-chip, high-output, long-life LEDs

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Technical Specifications (continued)

Electrical

Driver:

One Driver, Constant Current, Class 2, 1800mA
100-277V, 50-60Hz, Power Factor 99%

THD:

5.3% at 120V, 15.4% at 277V

Power Factor:

99.4% at 120V, 92.1% at 277V

Surge Protection:

4kV

Other

Compatibility:

Compatible with Round Poles with a diameter of 2.5" to 6"

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

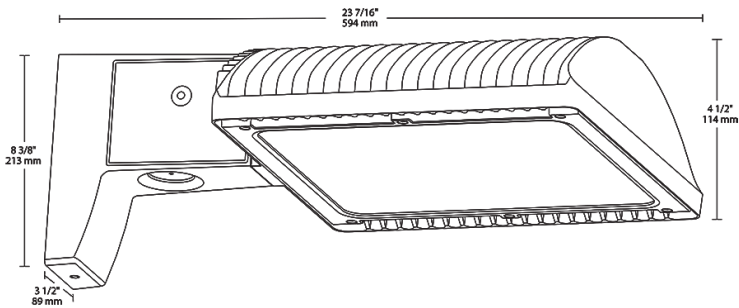
RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Optical

BUG Rating:

B1 U0 G2

Dimensions



Features

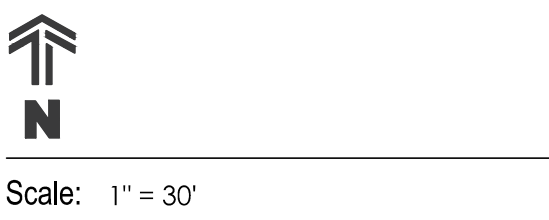
- 66% energy cost savings vs. HID
- 100,000-hour LED lifespan
- 5-Year, No-Compromise Warranty

Ordering Matrix

| Family | Optics | Wattage | Mounting | Color Temp | Finish | Driver Options | Options | Other Options |
|--------|---|--|---------------------------------------|---|---|---|---|---|
| ALED | 3T/4T | 125 | | | K | | | |
| | 4T = Type IV 3T = Type III 2T = Type II | 50 = 50W 78 = 78W 105 = 105W 125 = 125W 150 = 150W | Blank = Pole mount SF = Slipfitter | Blank = 5000K Cool N = 4000K Neutral Y = 3000K Warm | Blank = Bronze RG = Roadway Gray W = White K = Black | Blank = 120-277V /480 = 480V /BL = Bi-Level /D10 = 0-10V Dimming /480/D10 = 480V, 0-10V Dimming | Blank = No Option /LC = Lightcloud Controller /PCS = 120V Swivel Photocell /PCS2 = 277V Swivel Photocell /PCT = 120-277V Twistlock Photocell /PCS4 = 480V Swivel Photocell /PCT4 = 480V Twistlock Photocell /WS2 = Multi-Level Motion Sensor 20 ft /WS4 = Multi-Level Motion Sensor 40 ft | Blank = Standard USA = BAA Compliant |

SITE PLAN REVIEW

Sheet:
**LANDSCAPE
PLAN - OVERALL**

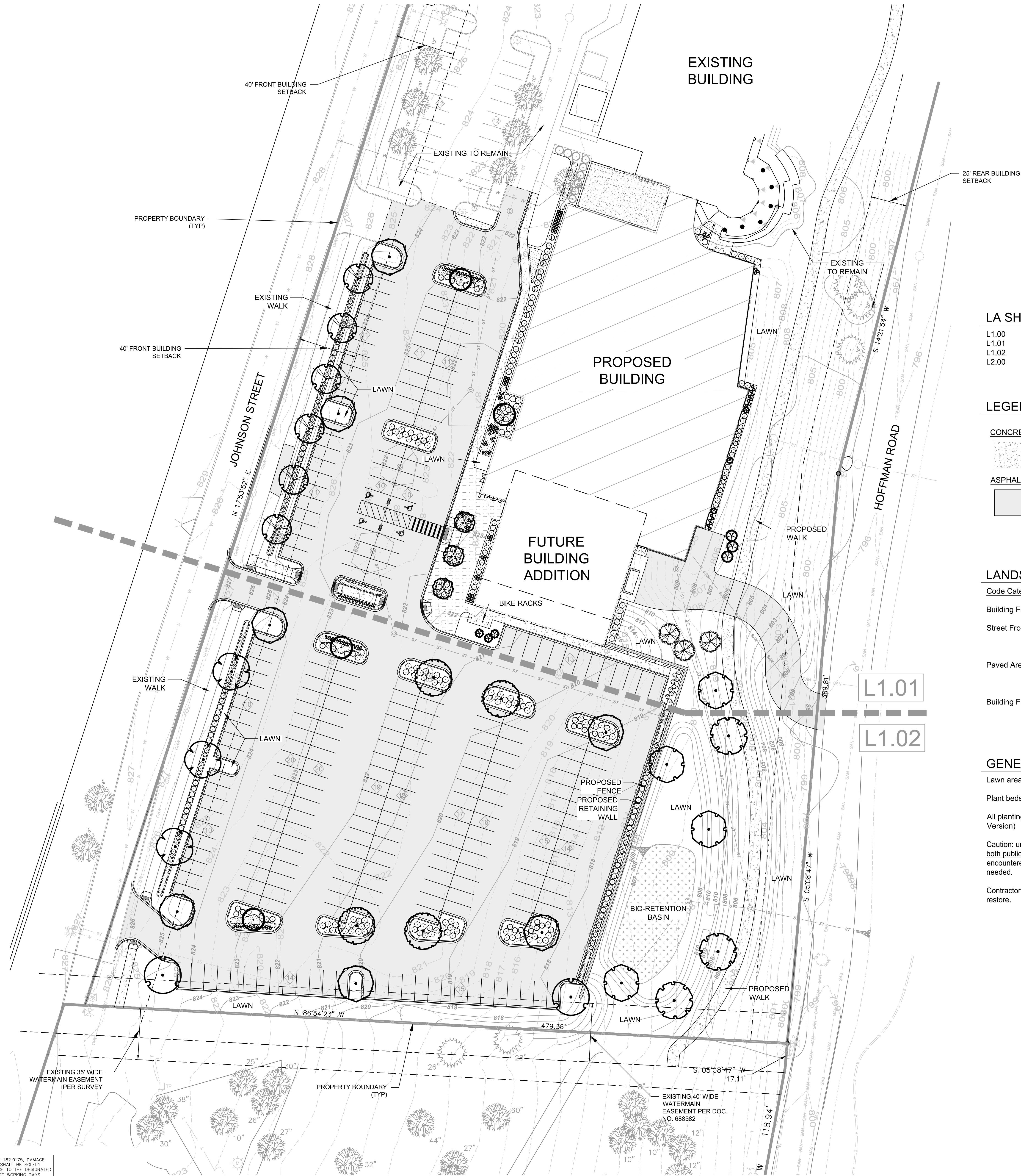


| Revisions: | | |
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| No. | Date: | Description: |
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Date:
02-23-2024

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| Project No.: | (Owner) Project No.: |
| 230049.00 | |

Sheet No.:



LA SHEET INDEX

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| L1.01 | LANDSCAPE PLAN - NORTH |
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| L2.00 | LANDSCAPE DETAILS & NOTES |

LEGEND

| | |
|----------|--------------------------|
| CONCRETE | EXISTING TREES TO REMAIN |
| ASPHALT | BIO-RETENTION BASIN |

LANDSCAPE REQUIREMENTS

| Code Category | Measurement | Ratio | Requirement | Provided |
|---------------------|-------------|--------------------|-------------|---|
| Building Foundation | 840 LF | 40 PTS / 100 LF | 336 PTS | L1.01 = 336 PTS |
| Street Frontage | 653 LF | 40 PTS / 100 LF | 261 PTS | L1.01 = 90 PTS L1.02 = 225 PTS Total = 315 PTS |
| Paved Areas | 333 Stalls | 80 PTS / 20 Stalls | 1,332 PTS | L1.01 = 355 PTS L1.02 = 1,069 PTS Total = 1,424 PTS |
| Building Floor Area | 40,121 SF | 15 PTS / 1,000 SF | 602 PTS | L1.01 = 195 PTS L1.02 = 450 PTS Total = 645 PTS |

GENERAL NOTES

Lawn areas to be seeded with premium commercial grade bluegrass seed mix, see specifications.

Plant beds, parking lot islands and maintenance strips to receive a 3-4" deep layer of shredded hardwood mulch.

All plantings shall comply with standards as described in the American Standard of Nursery Stock - ANSI Z60.1 (Latest Version)

Caution: underground utilities are present on site. The Contractor shall verify location of all above- and below-grade utilities, both public & private, prior to commencement of site construction. If unanticipated above- or below-grade conditions are encountered, notify Client & Landscape Architect prior to proceeding. Coordinate with local public utility locating entity as needed.

Contractor to limit construction traffic to within work areas. All adjacent damage shall be the responsibility of the contractor to restore.



IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

Consultant:



Project:

Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:

LANDSCAPE PLAN - NORTH



Scale: 1" = 20'

Revisions:

| No. | Date: | Description: |
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Date:

02-23-2024

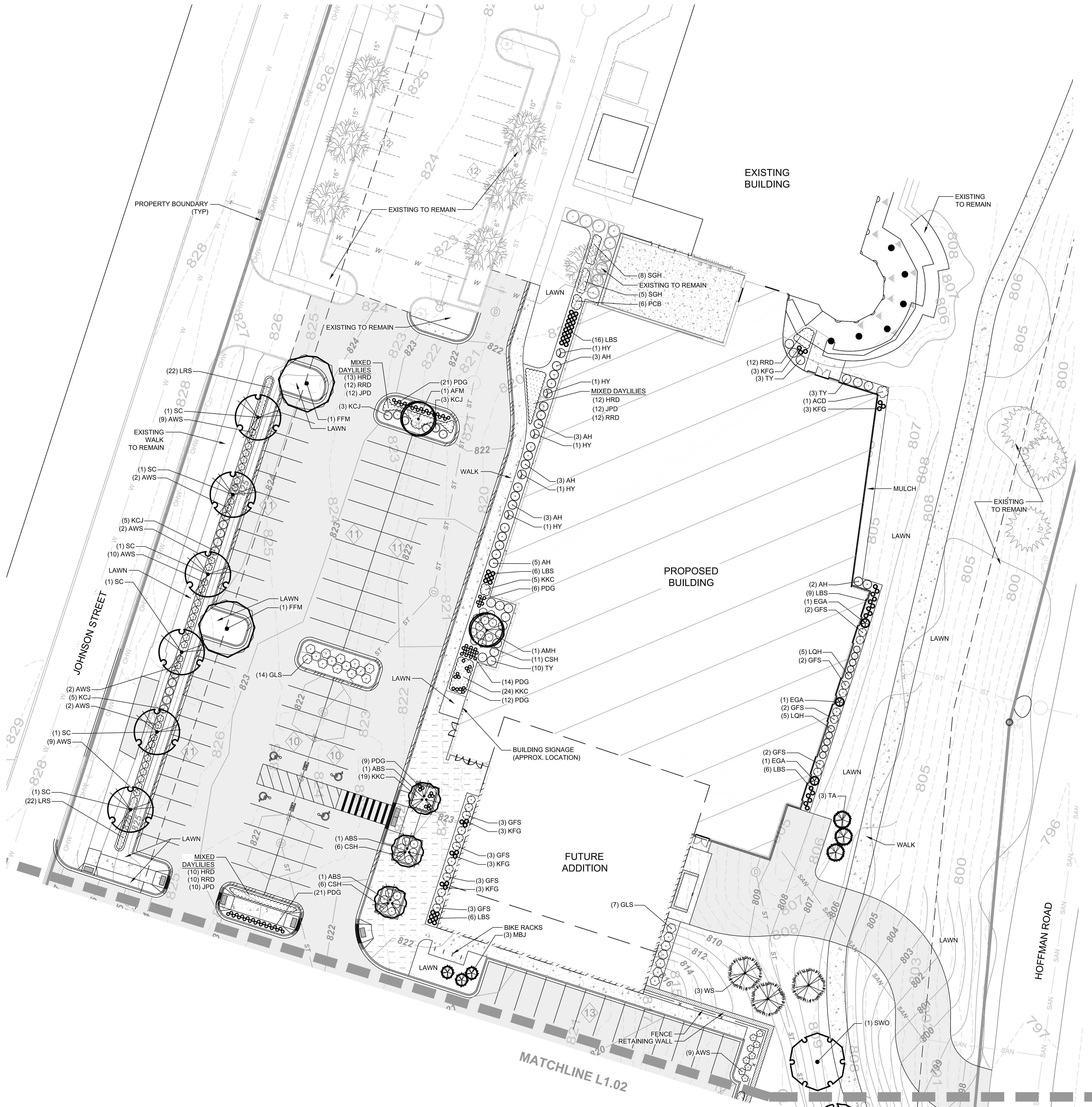
Project No.:

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Sheet No.:

L1.01



PLANT SCHEDULE BUILDING FOUNDATION

| ORNAMENTAL TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
|--------------------|-----|--------------------------------------|---|-----------|-------|----------|------------|--------------|
| ABS | 3 | Autumn Brilliance Apple Serviceberry | Amelanchier x grandiflora 'Autumn Brilliance' | 7' Ht. | B&B | As Shown | 10 | 30 |
| AMH | 1 | American Hornbeam/Musclewood | Carpinus caroliniana | 2" Cal. | B&B | As Shown | 10 | 10 |
| EVERGREEN TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| EGA | 3 | Emerald Green Arborvitae | Thuja occidentalis 'Smaragd' | 5' Ht. | B&B | As Shown | 12 | 36 |
| TA | 3 | Techny Arborvitae | Thuja occidentalis 'Techny' | 5' Ht. | B&B | As Shown | 12 | 36 |
| DECIDUOUS SHRUBS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| ACD | 1 | Dwarf Red Twig Dogwood | Cornus sericea 'Alleman's Compact' | 36" Ht. | B&B | As Shown | 5 | 5 |
| CSH | 23 | Cool Splash False Honeysuckle | Diervilla sessilifolia 'Cool Splash' | 18" Ht. | Cont. | As Shown | 1 | 23 |
| AH | 19 | Annabelle Hydrangea | Hydrangea arborescens 'Annabelle' | 24" Ht. | Cont. | As Shown | 1 | 19 |
| LQH | 10 | Little Quick Fire Hydrangea | Hydrangea paniculata 'SMHPFL' | 24" Ht. | Cont. | As Shown | 1 | 10 |
| GLS | 7 | Gro-Low Fragrant Sumac | Rhus aromatica 'Gro-Low' | 18" Ht. | Cont. | As Shown | 1 | 7 |
| GFS | 20 | Goldflame Spirea | Spiraea x bumalda 'Goldflame' | 24" Ht. | Pot | As Shown | 1 | 20 |
| EVERGREEN SHRUBS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| HY | 5 | Hicks Japanese Yew | Taxus x media 'Hicksii' | 36" Ht. | B&B | As Shown | 12 | 60 |
| TY | 16 | Taunton's Japanese Yew | Taxus x media 'Tauntonii' | 24" Sprd. | Cont. | As Shown | 5 | 80 |
| ORNAMENTAL GRASSES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| KFG | 15 | Karl Foerster Feather Reed Grass | Calamagrostis x acutiflora 'Karl Foerster' | 1 Gal. | Pot | 24" o.c. | - | - |
| LBS | 43 | Little Bluestem | Schizachyrium scoparium | 1 Gal. | Pot | 24" o.c. | - | - |
| PDG | 41 | Prairie Dropseed | Sporobolus heterolepis | 1 Gal. | Pot | 18" o.c. | - | - |
| PERENNIALS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| KKC | 48 | Kim's Knee High Coneflower | Echinacea purpurea 'Kim's Knee High' | 4.5" | Pot | 18" o.c. | - | - |
| HRD | 12 | Happy Returns Daylily | Hemerocallis x 'Happy Returns' | 4.5" | Pot | 18" o.c. | - | - |
| JPD | 12 | Just Plum Happy Daylily | Hemerocallis x 'Just Plum Happy' | 4.5" | Pot | 18" o.c. | - | - |
| RRD | 24 | Rosy Returns Daylily | Hemerocallis x 'Rosy Returns' | 4.5" | Pot | 18" o.c. | - | - |
| PCB | 6 | Palace Purple Coral Bells | Heuchera micrantha 'Palace Purple' | 4.5" | Pot | 18" o.c. | - | - |
| SGH | 13 | Stained Glass Hosta | Hosta x 'Stained Glass' | 4.5" | Pot | 24" o.c. | - | - |
| | | | | | | | | 336 |

PLANT SCHEDULE STREET FRONTAGE - NORTH

| ORNAMENTAL TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | POINTS PER | TOTAL POINTS |
|------------------|-----|----------------|------------------|---------|------|------------|--------------|
| SC | 6 | Sargent Cherry | Prunus sargentii | 2" Cal. | B&B | 15 | 90 |

PLANT SCHEDULE PAVED AREA - NORTH

| DECIDUOUS TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
|--------------------|-----|----------------------------------|--|-----------|-------|----------|------------|--------------|
| FFM | 2 | Fall Fiesta® Sugar Maple | Acer saccharum 'Balista' | 2" Cal. | B&B | As Shown | 75 | 150 |
| AFM | 1 | Armstrong Freeman Maple | Acer x freemanii 'Armstrong' | 2" Cal. | B&B | As Shown | 30 | 30 |
| EVERGREEN TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| MBJ | 3 | Mountbatten Juniper | Juniperus chinensis 'Mountbatten' | 5' Ht. | B&B | As Shown | 12 | 36 |
| DECIDUOUS SHRUBS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| GLS | 14 | Gro-Low Fragrant Sumac | Rhus aromatica 'Gro-Low' | 18" Ht. | Cont. | As Shown | 1 | 14 |
| AWS | 45 | Anthony Waterer Spirea | Spiraea x bumalda 'Anthony Waterer' | 18" Ht. | Cont. | As Shown | 1 | 45 |
| EVERGREEN SHRUBS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| KCJ | 16 | Kallay's Compact Pfitzer Juniper | Juniperus x pfitzeriana 'Kallay's Compact' | 24" Sprd. | Cont. | As Shown | 5 | 80 |
| ORNAMENTAL GRASSES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| PDG | 42 | Prairie Dropseed | Sporobolus heterolepis | 1 Gal. | Pot | 18" o.c. | - | - |
| PERENNIALS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| HRD | 23 | Happy Returns Daylily | Hemerocallis x 'Happy Returns' | 4.5" | Pot | 18" o.c. | - | - |
| JPD | 22 | Just Plum Happy Daylily | Hemerocallis x 'Just Plum Happy' | 4.5" | Pot | 18" o.c. | - | - |
| RRD | 22 | Rosy Returns Daylily | Hemerocallis x 'Rosy Returns' | 4.5" | Pot | 18" o.c. | - | - |
| LRS | 44 | Little Spire Russian Sage | Perovskia atriplicifolia 'Little Spire' | 4.5" | Pot | 18" o.c. | - | - |
| | | | | | | | | 355 |

PLANT SCHEDULE DEVELOPED LOTS - NORTH

| DECIDUOUS TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
|-----------------|-----|-----------------|-----------------|---------|------|----------|------------|--------------|
| SWO | 1 | Swamp White Oak | Quercus bicolor | 2" Cal. | B&B | As Shown | 75 | 75 |
| EVERGREEN TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| WS | 3 | White Spruce | Picea glauca | 7' Ht. | B&B | As Shown | 40 | 120 |
| | | | | | | | | 195 |

PLANT SCHEDULE STREET FRONTAGE - SOUTH

| DECIDUOUS TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
|-----------------|-----|-----------------------------|--------------------------------|---------|------|----------|------------|--------------|
| AGG | 3 | Autumn Gold Maidenhair Tree | Ginkgo biloba 'Autumn Gold' TM | 2" Cal. | B&B | As Shown | 75 | 225 |

PLANT SCHEDULE PAVED AREA - SOUTH

| DECIDUOUS TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
|--------------------|-----|----------------------------------|--|-----------|-------|----------|------------|--------------|
| FFM | 5 | Fall Fiesta® Sugar Maple | Acer saccharum 'Ballsta' | 2" Cal. | B&B | As Shown | 75 | 375 |
| AFM | 2 | Armstrong Freeman Maple | Acer x freemanii 'Armstrong' | 2" Cal. | B&B | As Shown | 30 | 60 |
| CHB | 4 | Common Hackberry | Celtis occidentalis | 2" Cal. | B&B | As Shown | 30 | 120 |
| RL | 2 | Redmond Linden | Tilia x 'Redmond' | 2" Cal. | B&B | As Shown | 30 | 60 |
| DECIDUOUS SHRUBS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| GLS | 85 | Gro-Low Fragrant Sumac | Rhus aromatica 'Gro-Low' | 18" Ht. | Cont. | As Shown | 1 | 85 |
| AWS | 39 | Anthony Waterer Spiraea | Spiraea x bumalda 'Anthony Waterer' | 18" Ht. | Cont. | As Shown | 1 | 39 |
| EVERGREEN SHRUBS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| KCJ | 66 | Kallay's Compact Pfitzer Juniper | Juniperus x pfitzeriana 'Kallay's Compact' | 24" Sprd. | Cont. | As Shown | 5 | 330 |
| ORNAMENTAL GRASSES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| PDG | 42 | Prairie Dropseed | Sporobolus heterolepis | 1 Gal. | Pot | 18" o.c. | - | - |
| PERENNIALS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| HRD | 24 | Happy Returns Daylily | Hemerocallis x 'Happy Returns' | 4.5" | Pot | 18" o.c. | - | - |
| JPD | 24 | Just Plum Happy Daylily | Hemerocallis x 'Just Plum Happy' | 4.5" | Pot | 18" o.c. | - | - |
| RRD | 24 | Rosy Returns Daylily | Hemerocallis x 'Rosy Returns' | 4.5" | Pot | 18" o.c. | - | - |
| LRS | 88 | Little Spire Russian Sage | Perovskia atriplicifolia 'Little Spire' | 4.5" | Pot | 18" o.c. | - | - |
| | | | | | | | | 1,069 |

PLANT SCHEDULE DEVELOPED LOTS - SOUTH

| DECIDUOUS TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
|-----------------|-----|-----------------|-----------------|---------|------|----------|------------|--------------|
| SWO | 3 | Swamp White Oak | Quercus bicolor | 2" Cal. | B&B | As Shown | 75 | 225 |
| RO | 3 | Red Oak | Quercus rubra | 2" Cal. | B&B | As Shown | 75 | 225 |
| | | | | | | | | 450 |



Consultant:



Project:

Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:

LANDSCAPE DETAILS & NOTES



Scale: NTS

Revisions:

| No. | Date: | Description: |
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Date:

02-23-2024

Project No.:

230049.00

(Owner) Project No.:

Sheet No.:

L2.00

General Notes

- 1.01 All landscape installation & maintenance to conform with all applicable local codes & ordinances, including (but not limited to) select portions of City of Watertown Municipal Code.
- 1.02 See Site dwgs. for work limits, scope of construction, hardscape, dimensions &/or construction notes. See Civil dwgs. for all hardscape, grading, stormwater management, site utilities & erosion control. See Landscape dwgs. for landscape plans, site amenities, details, schedules, notes. See Architectural dwgs. for all construction. See Electrical drawings for all power, circuiting, lighting & security. See Mechanical drawings for other site equipment.
- 1.03 Contractor shall provide shop drawings and material submittals of **all** hardscape & landscape construction elements shown in plan set for Landscape Architect review prior to construction.
- 1.04 Contractor to provide samples for Landscape Architect's approval on all colors, finishes & materials prior to construction, including (but not limited to) topsoil, gravels, mulches, seed mixes et al.
- 1.05 Caution: underground utilities are present on site. The Contractor shall verify location of all above- and below-grade utilities, both public & private, prior to commencement of site construction. If unanticipated above- or below-grade conditions are encountered, notify Client & Landscape Architect prior to proceeding. Coordinate with local public utility locating entity as needed.
- 1.06 Contractor to verify hardscape layout prior to construction. Contact Landscape Architect if discrepancies are found.
- 1.07 Contractor to limit construction traffic to within work limit lines. All adjacent damage shall be the responsibility of the contractor to restore. See Civil drawings for limits of disturbance.
- 1.08 All written dimensions supersede scaled dimensions. All dimensions are taken from face of curb, wall or existing building foundations.

Landscape Notes

- 2.01 Rough grading & topsoil import/spreading are to be completed by others. Finish grading, seed area and planting bed preparation shall be the landscape contractor's responsibility. Verify all existing site and grading conditions prior to construction.
- 2.02 All areas disturbed by site construction shall be fine graded and restored with vegetative cover as shown. See plans for cover types & locations, see specifications for materials & installation.
- 2.03 Contractor shall verify plant quantities shown on plan. Symbol quantities take precedence over plant keys, except as noted in the plant schedule. Contractor shall forward a material list to the Landscape Architect prior to construction identifying species, sizes & plant sources to be used on the project.
- 2.04 All plant materials shall conform to the schedule and shall meet quality requirements outlined in the ANLA "American Standard for Nursery Stock", ANSI Z60.1-2004. The Landscape Architect reserves the right to reject any substandard planting material. Such rejected material shall be removed from the project site immediately.
- 2.05 An Owner's representative shall be allowed to inspect and approve trees at the nursery prior to delivery to the site.
- 2.06 All nursery tags/labels shall be left on plant materials until the project punch-list inspection is completed by the Landscape Architect. Untagged materials will be assumed to be deficient.
- 2.07 Topsoil requirements:
 - All planting beds shall contain screened blended topsoil mix to a min. depth of 18". All turf, low-mow & shortgrass prairie areas shall have min. 6".
 - Existing topsoil meeting project specifications may be stripped, stored & re-used if previously approved. Contractor shall remove all excessive clay, gravel & stones detrimental to healthy plant growth. Contractor shall remove all debris greater than 1" diameter.
 - Contaminated soil shall be removed from the project site if discovered.
 - Subgrade shall be tilled and/or scarified prior to placement of topsoil.
 - Contractor shall be responsible for obtaining soil tests for existing or imported topsoil. Soil testing results shall include (but are not limited to) soil pH, % organic matter, % nitrogen / phosphorus / potassium, % calcium, and soil texture (percentages of sand, silt and/or clay.) Soil testing shall include recommendations for soil amendments if required to support growth of standard ornamental landscape materials.
- 2.08 Contractor is responsible for ensuring that all tree pits & planting areas drain properly. Notify Landscape Architect if drainage or moisture problems are encountered while planting.
- 2.09 Contractor shall backfill all trees, shrubs & evergreens with a mix of 1/3 plant starter mix & 2/3 remaining soil. Plant Starter Mix shall be 40% organic black topsoil, 30% sphagnum moss, 20% composted manure & 10% coarse sand by volume. Submit material information for review.
- 2.10 All perennial and groundcover areas shall receive a 3" layer of plant starter mix and perennial starter fertilizer, rototilled into the top 6" of blended topsoil in beds.
- 2.11 Unless otherwise shown, all perennials & shrubs to be planted in triangular arrangements. For plants not shown individually, refer to the spacing shown in the plant schedule.
- 2.12 Mulch: All tree circles, planting beds and maintenance strips to receive a 3" deep layer of high quality shredded hardwood bark mulch.
- 2.13 Plant Bed Edging: Edge all planting beds and maintenance strips with a 4" deep spaded edge (shovel cut or mechanical). Bedlines are to be cut per plan. A clean definition between the lawn and plant bed is required.
- 2.14 Contractor shall provide positive drainage away from all structures for a minimum of 10'.
- 2.15 Contractor shall be responsible for providing base bid comprehensive landscape establishment, maintenance and warranty care for one year after installation. Work shall include all watering (as needed for establishment), weeding (once monthly), pruning (twice per season), fertilizing (twice per season), pest management (as needed, min 3 visits per season) and spring / fall clean-ups. Prior to beginning installation, the contractor shall submit a 12-mo. calendar for review/approval including all anticipated maintenance activities & dates.

Seeding Notes & Mixes

- 3.01 This work shall consist of preparing the seed beds and furnishing, sowing and mulching the required seed on the various seeded areas, as outlined in the site plans and specifications. All turf restoration shall be seeded turf unless otherwise noted.
- 3.02 Rough grading, drainage work, topsoiling and fine grading shall be completed before sowing the seed mixes. The areas to be seeded shall be worked with plow chisels, discs & harrows, soil finishers and/or other appropriate equipment until a reasonably even and loose seedbed is obtained. Seed beds shall be prepared immediately in advance of the seeding. If proposed seed areas are weedy, contractor to apply herbicide or other weed control measures to eliminate weeds. Conform with seed supplier's specifications if required.
- 3.03 Confirm that anticipated project schedule date(s) fall within the respective seed supplier's approved calendar prior to installation. Installations completed outside of acceptable seeding dates shall be the performed at the sole responsibility and expense of the contractor. For dormant seeding, a min. of one over-seed application in the following season will be required.
- 3.04 Seeds shall be PLS and will be mixed in accordance w/ mfr's specifications. Provide invoices, bag-tags or mix analysis results for approval prior to installation.
- 3.05 The seed mixtures shall be sown by means of equipment adapted to the purpose. Mechanical distribution of seed (i.e. Truax seed drill, Brillion seeder, cultipacker, slit-seeder, drop spreader or broadcast spreader) are the only accepted methods. No hand-broadcasting of seed.
- 3.06 No seeding shall occur if the wind exceeds 12 MPH.
- 3.07 Coordinate erosion control and/or mulching with Civil dwgs:

- In sloped areas steeper than 4:1, erosion matting shall be installed by others. Landscape installation shall be coordinated with the erosion control contractor.
- In areas with slopes between 4:1 and 8:1, landscape contractor shall apply clean hay or straw mulch, free of debris and seeds, on all newly seeded areas. Mulch shall be uniformly spread over the designated area at a rate of 55 bales per acre or as indicated in the respective seed supplier's specifications. Mulch material shall be chopped and blown into the seeded area.
- Lightweight E.C. matting and/or hydromulch will be accepted as a no-cost alternate if approved by Landscape Architect prior to application.

- 3.08 See Civil dwgs for erosion control devices. Coordinate with erosion control contractor where required to ensure that topsoil, seeding and/or mat installations are properly coordinated.
- 3.09 Seed mix substitutions will be considered only if submitted for approval 10 days before the close of bidding. All mixes shall be installed & maintained per supplier's specifications.

BLUEGRASS MIX:
"Deluxe 50 Mix" shall be supplied by Reinders or approved equal. Apply @ 6 lbs per 1000 GSF.

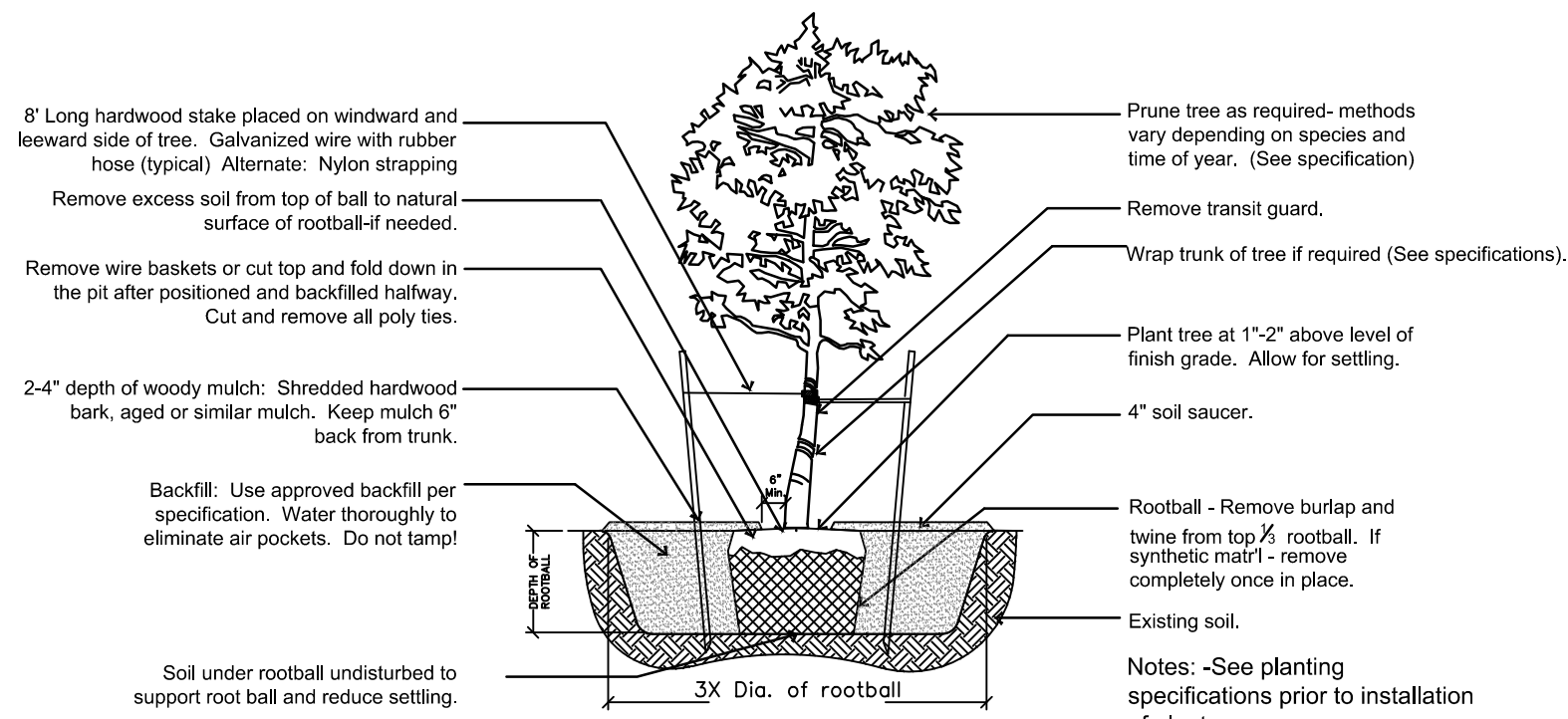
- 3.10 Contractor shall be responsible for providing base bid comprehensive seed area establishment, maintenance and warranty care for all seeded areas:

- Bluegrass areas shall be for 60 days after installation. Work shall include all watering (min. 1" per week, or as needed), weeding & mowing. Assume 2 mowings prior to Owner hand-off.
- All other seed areas (wet-tolerant) shall be for three years after installation. Work shall include all watering (as needed for establishment), weeding (both spot herbicide and/or hand-pulling, depending on necessity, once per month), spring / fall clean-up & mowing. Expect 4-5 mowings in the first year, 3-4 mowings in the second year and 2-3 mowings in the third year. All mowings shall be timed to cut germinating weeds but not desirable forbs / grasses. Overseed each spring any bare areas larger than 1 sq. ft.
- Prior to beginning installation, the contractor shall submit a 36-month calendar for review/approval including all anticipated maintenance activities.

Hardscape / Amenity Notes

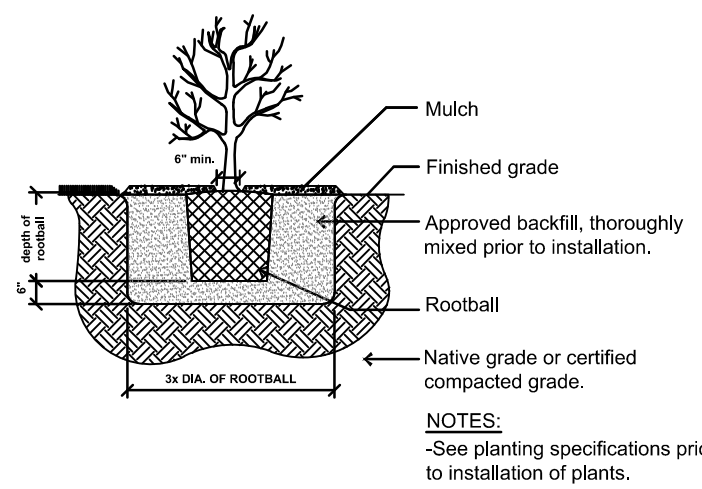
- 4.01 Bike racks: Shall be custom Inverted-U style with City of Watertown logo, powdercoat finish, color TBD to match building (selected from standard range), surface-mounted w/ stainless steel hardware, 'Square U Bike Rack.' Shall be furnished by Madrax, Madison WI, 608-849-1080. Or approved equal.

- Qty. (4)
- 4.02 Retaining Wall: Redi Rock Cobblestone or approved equivalent. Color TBD from standard color palette, contractor to provide samples prior to construction. Final selection By Owner and coordinated with Landscape Architect. Engineered and installed per manufacturers specifications. See civil plans for top and bottom of wall elevations.
- 4.03 Ornamental Fence: Shall be 4' ht. Jerith Premier #202 Flat Top Panel with black finish or approved equal. Install per manufacturer's specifications.



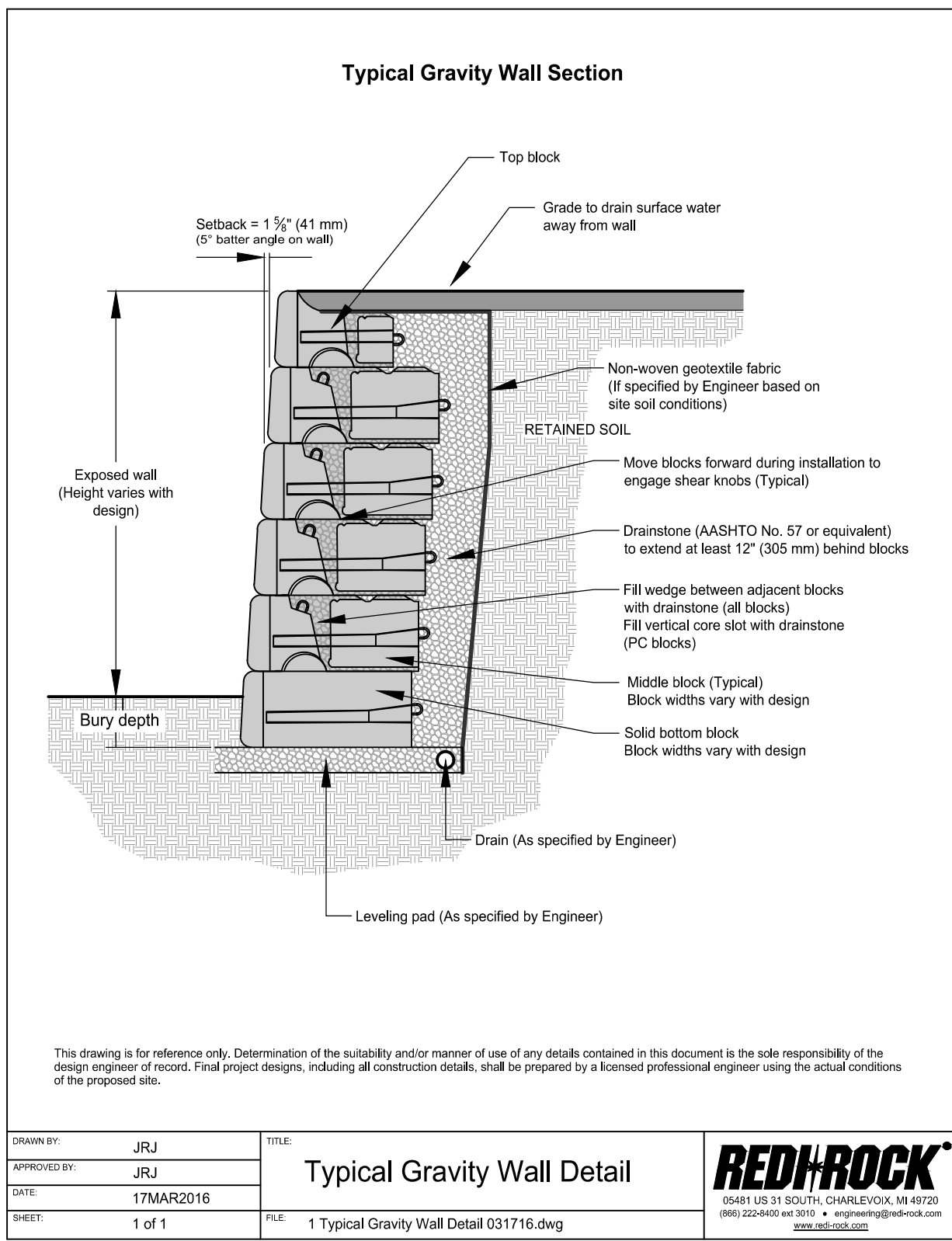
1 Tree Planting Detail

Not To Scale



2 Shrub Planting Detail

Not To Scale

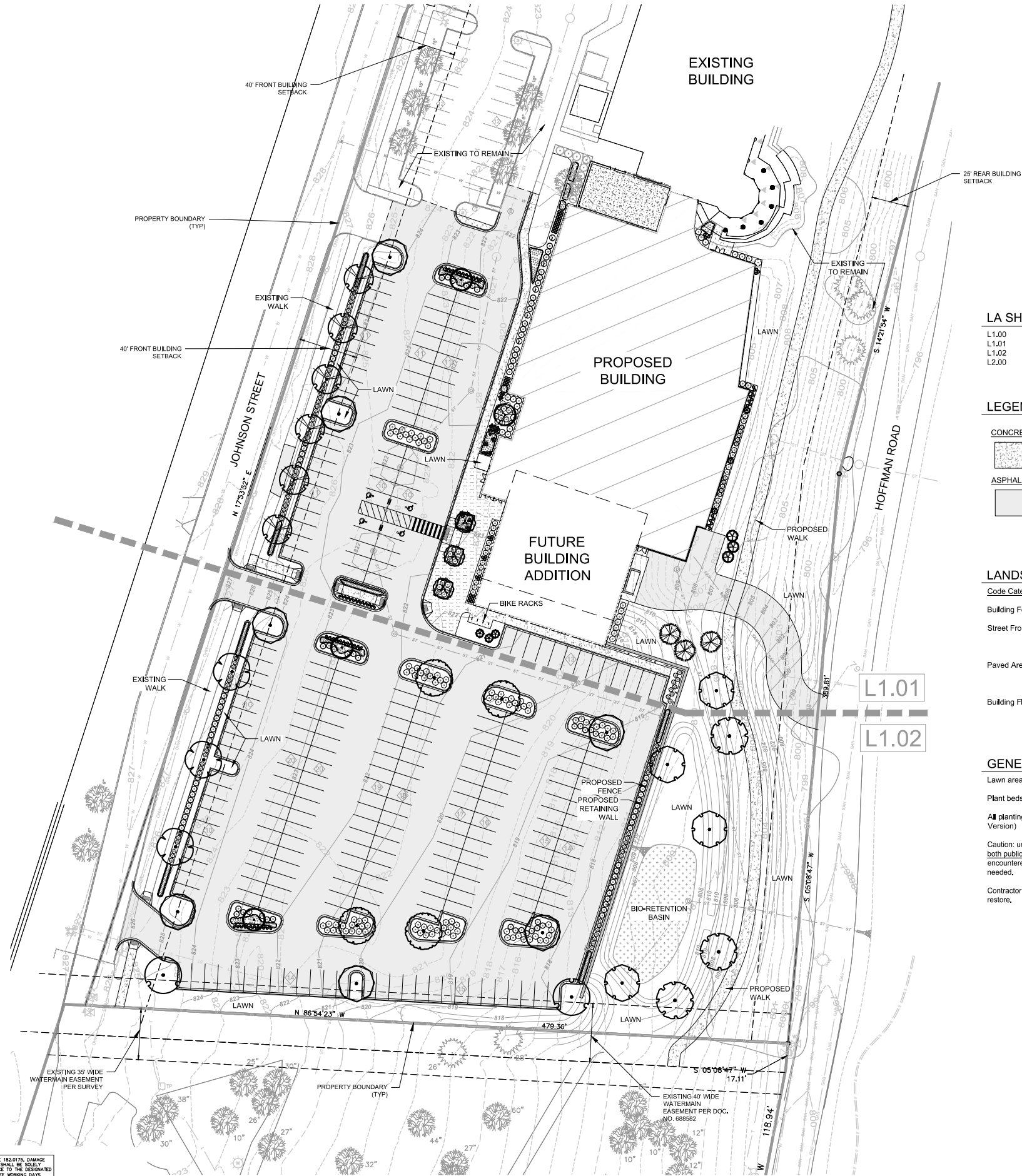


3 Gravity Wall Detail

Not To Scale



IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.



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LANDSCAPE REQUIREMENTS

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Lawn areas to be seeded with premium commercial grade bluegrass seed mix, see specifications.

Plant beds, parking lot islands and maintenance strips to receive a 3-4" deep layer of shredded hardwood mulch.

All plantings shall comply with standards as described in the American Standard of Nursery Stock - ANSI Z60.1 (Latest Version)

Caution: underground utilities are present on site. The Contractor shall verify location of all above- and below-grade utilities, both public & private, prior to commencement of site construction. If unanticipated above- or below-grade conditions are encountered, notify Client & Landscape Architect prior to proceeding. Coordinate with local public utility locating entity as needed.

Contractor to limit construction traffic to within work areas. All adjacent damage shall be the responsibility of the contractor to restore.

Consultant:



Project:

Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:

LANDSCAPE PLAN - OVERALL



Scale: 1" = 30' @ 30x42

Revisions:

| No. | Date: | Description: |
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Date:

02-23-2024

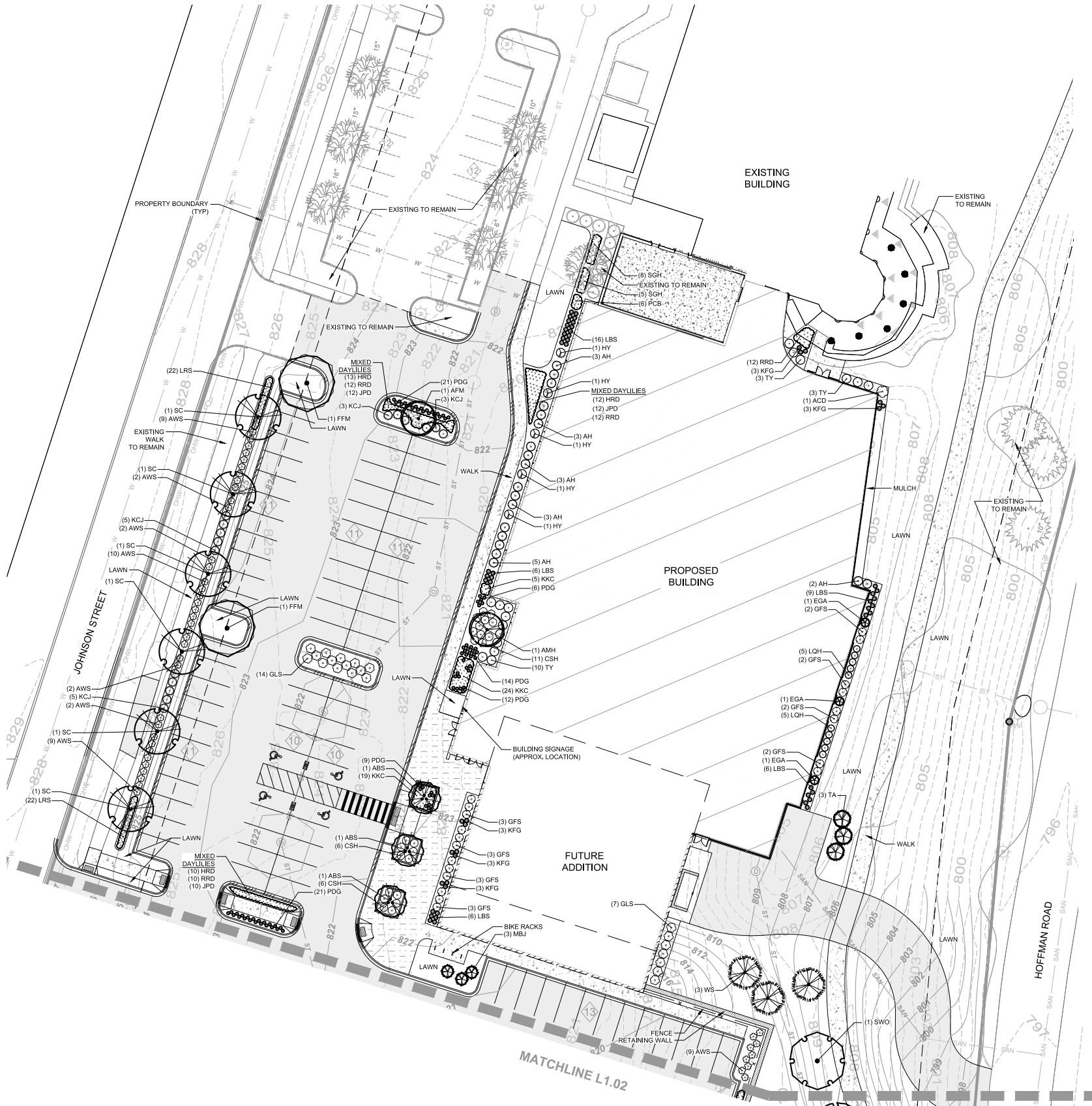
Project No.:

230049.00

(Owner) Project No.:

Sheet No.:

L1.00



PLANT SCHEDULE BUILDING FOUNDATION

| ORNAMENTAL TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
|--------------------|-----|--------------------------------------|---|-----------|-------|----------|------------|--------------|
| ABS | 3 | Autumn Brilliance Apple Serviceberry | Amelanchier x grandiflora 'Autumn Brilliance' | 7' Ht. | B&B | As Shown | 10 | 30 |
| AMH | 1 | American Hornbeam/Musclewood | Carpinus caroliniana | 2" Cal. | B&B | As Shown | 10 | 10 |
| EVERGREEN TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | | |
| EGA | 3 | Emerald Green Arborvitae | Thuja occidentalis 'Smaragd' | 5' Ht. | B&B | As Shown | 12 | 36 |
| TA | 3 | Techny Arborvitae | Thuja occidentalis 'Techny' | 5' Ht. | B&B | As Shown | 12 | 36 |
| DECIDUOUS SHRUBS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | | |
| ACD | 1 | Dwarf Red Twig Dogwood | Cornus sericea 'Alleman's Compact' | 36" Ht. | B&B | As Shown | 5 | 5 |
| CSH | 23 | Cool Splash False Honeysuckle | Diervilla sessilifolia 'Cool Splash' | 18" Ht. | Cont. | As Shown | 1 | 23 |
| AH | 19 | Annabelle Hydrangea | Hydrangea arborescens 'Annabelle' | 24" Ht. | Cont. | As Shown | 1 | 19 |
| LQH | 10 | Little Quick Fire Hydrangea | Hydrangea paniculata 'SMHPFL' | 24" Ht. | Cont. | As Shown | 1 | 10 |
| GLS | 7 | Gro-Low Fragrant Sumac | Rhus aromatica 'Gro-Low' | 18" Ht. | Cont. | As Shown | 1 | 7 |
| GFS | 20 | Goldflame Spirea | Spiraea x bumalda 'Goldflame' | 24" Ht. | Pot | As Shown | 1 | 20 |
| EVERGREEN SHRUBS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | | |
| HY | 5 | Hicks Japanese Yew | Taxus x media 'Hicksii' | 36" Ht. | B&B | As Shown | 12 | 60 |
| TY | 16 | Taunton's Japanese Yew | Taxus x media 'Tauntonii' | 24" Sprd. | Cont. | As Shown | 5 | 80 |
| ORNAMENTAL GRASSES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | | |
| KFG | 15 | Karl Foerster Feather Reed Grass | Calamagrostis x acutiflora 'Karl Foerster' | 1 Gal. | Pot | 24" o.c. | - | - |
| LBS | 43 | Little Bluestem | Schizachyrium scoparium | 1 Gal. | Pot | 24" o.c. | - | - |
| PDG | 41 | Prairie Dropseed | Sporobolus heterolepis | 1 Gal. | Pot | 18" o.c. | - | - |
| PERENNIALS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | | |
| KKC | 48 | Kim's Knee High Coneflower | Echinacea purpurea 'Kim's Knee High' | 4.5" | Pot | 18" o.c. | - | - |
| HRD | 12 | Happy Returns Daylily | Hemerocallis x 'Happy Returns' | 4.5" | Pot | 18" o.c. | - | - |
| JPD | 12 | Just Plum Happy Daylily | Hemerocallis x 'Just Plum Happy' | 4.5" | Pot | 18" o.c. | - | - |
| RRD | 24 | Rosy Returns Daylily | Hemerocallis x 'Rosy Returns' | 4.5" | Pot | 18" o.c. | - | - |
| PCB | 6 | Palace Purple Coral Bells | Heuchera micrantha 'Palace Purple' | 4.5" | Pot | 18" o.c. | - | - |
| SGH | 13 | Stained Glass Hosta | Hosta x 'Stained Glass' | 4.5" | Pot | 24" o.c. | - | - |
| | | | | | | | | 336 |

PLANT SCHEDULE STREET FRONTAGE - NORTH

| ORNAMENTAL TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | POINTS PER | TOTAL POINTS |
|------------------|-----|----------------|------------------|---------|------|------------|--------------|
| SC | 6 | Sargent Cherry | Prunus sargentii | 2" Cal. | B&B | 15 | 90 |

PLANT SCHEDULE PAVED AREA - NORTH

| DECIDUOUS TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
|--------------------|-----|----------------------------------|--|-----------|-------|----------|------------|--------------|
| FFM | 2 | Fall Fiesta® Sugar Maple | Acer saccharum 'Balista' | 2" Cal. | B&B | As Shown | 75 | 150 |
| AFM | 1 | Armstrong Freeman Maple | Acer x freemanii 'Armstrong' | 2" Cal. | B&B | As Shown | 30 | 30 |
| EVERGREEN TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | | |
| MBJ | 3 | Mountbatten Juniper | Juniperus chinensis 'Mountbatten' | 5' Ht. | B&B | As Shown | 12 | 36 |
| DECIDUOUS SHRUBS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | | |
| GLS | 14 | Gro-Low Fragrant Sumac | Rhus aromatica 'Gro-Low' | 18" Ht. | Cont. | As Shown | 1 | 14 |
| AWS | 45 | Anthony Waterer Spiraea | Spiraea x bumalda 'Anthony Waterer' | 18" Ht. | Cont. | As Shown | 1 | 45 |
| EVERGREEN SHRUBS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | | |
| KCJ | 16 | Kalloy's Compact Pfitzer Juniper | Juniperus x pfitzeriana 'Kalloy's Compact' | 24" Sprd. | Cont. | As Shown | 5 | 80 |
| ORNAMENTAL GRASSES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | | |
| PDG | 42 | Prairie Dropseed | Sporobolus heterolepis | 1 Gal. | Pot | 18" o.c. | - | - |
| PERENNIALS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | | |
| HRD | 23 | Happy Returns Daylily | Hemerocallis x 'Happy Returns' | 4.5" | Pot | 18" o.c. | - | - |
| JPD | 22 | Just Plum Happy Daylily | Hemerocallis x 'Just Plum Happy' | 4.5" | Pot | 18" o.c. | - | - |
| RRD | 22 | Rosy Returns Daylily | Hemerocallis x 'Rosy Returns' | 4.5" | Pot | 18" o.c. | - | - |
| LRS | 44 | Little Spire Russian Sage | Perovskia atriplicifolia 'Little Spire' | 4.5" | Pot | 18" o.c. | - | - |
| | | | | | | | | 355 |

PLANT SCHEDULE DEVELOPED LOTS - NORTH

| DECIDUOUS TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
|-----------------|-----|-----------------|-----------------|---------|------|----------|------------|--------------|
| SWO | 1 | Swamp White Oak | Quercus bicolor | 2" Cal. | B&B | As Shown | 75 | 75 |
| EVERGREEN TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| WS | 3 | White Spruce | Picea glauca | 7' Ht. | B&B | As Shown | 40 | 120 |
| | | | | | | | | 195 |

SITE PLAN REVIEW

LANDSCAPE
PLAN - NORTH



| Revisions: | | |
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| No. | Date: | Description: |
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PLANT SCHEDULE STREET FRONTAGE - SOUTH

| DECIDUOUS TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
|-----------------|-----|-----------------------------|--------------------------------|---------|------|----------|------------|--------------|
| AGG | 3 | Autumn Gold Maidenhair Tree | Ginkgo biloba 'Autumn Gold' TM | 2" Cal. | B&B | As Shown | 75 | 225 |

PLANT SCHEDULE PAVED AREA - SOUTH

| DECIDUOUS TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
|--------------------|-----|---------------------------------|---|-----------|-------|----------|------------|--------------|
| FFM | 5 | Fall Fiesta® Sugar Maple | Acer saccharum 'Bailista' | 2" Cal. | B&B | As Shown | 75 | 375 |
| AFM | 2 | Armstrong Freeman Maple | Acer x freemanii 'Armstrong' | 2" Cal. | B&B | As Shown | 30 | 60 |
| CHB | 4 | Common Hackberry | Celtis occidentalis | 2" Cal. | B&B | As Shown | 30 | 120 |
| RL | 2 | Redmond Linden | Tilia x 'Redmond' | 2" Cal. | B&B | As Shown | 30 | 60 |
| DECIDUOUS SHRUBS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| GLS | 85 | Gro-Low Fragrant Sumac | Rhus aromatica 'Gro-Low' | 18" HL | Cont. | As Shown | 1 | 85 |
| AWS | 39 | Anthony Waterer Spiraea | Spiraea x bumalda 'Anthony Waterer' | 18" HL | Cont. | As Shown | 1 | 39 |
| EVERGREEN SHRUBS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| KCJ | 66 | Kalloy's Compact Pfizer Juniper | Juniperus x pfizeriana 'Kalloy's Compact' | 24" Sprd. | Cont. | As Shown | 5 | 330 |
| ORNAMENTAL GRASSES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| PDG | 42 | Prairie Dropseed | Sporobolus heterolepis | 1 Gal. | Pot | 18" o.c. | - | - |
| PERENNIALS | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
| HRD | 24 | Happy Returns Daylily | Hemerocallis x 'Happy Returns' | 4.5" | Pot | 18" o.c. | - | - |
| JPD | 24 | Just Plum Happy Daylily | Hemerocallis x 'Just Plum Happy' | 4.5" | Pot | 18" o.c. | - | - |
| RRD | 24 | Rosy Returns Daylily | Hemerocallis x 'Rosy Returns' | 4.5" | Pot | 18" o.c. | - | - |
| LRS | 88 | Little Spire Russian Sage | Perovskia atriplicifolia 'Little Spire' | 4.5" | Pot | 18" o.c. | - | - |
| | | | | | | | | 1,069 |

PLANT SCHEDULE DEVELOPED LOTS - SOUTH

| DECIDUOUS TREES | QTY | COMMON NAME | BOTANICAL NAME | SIZE | ROOT | SPACING | POINTS PER | TOTAL POINTS |
|-----------------|-----|-----------------|-----------------|---------|------|----------|------------|--------------|
| SWO | 3 | Swamp White Oak | Quercus bicolor | 2" Cal. | B&B | As Shown | 75 | 225 |
| RO | 3 | Red Oak | Quercus rubra | 2" Cal. | B&B | As Shown | 75 | 225 |
| | | | | | | | | 450 |



IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

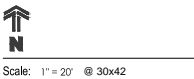


Project:
Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094
Key Plan:

SITE PLAN REVIEW

Sheet:
**LANDSCAPE
PLAN - SOUTH**



| Revisions: | | |
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| No. | Date: | Description: |
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Date:
02-23-2024
Project No.: 230049.00 (Owner) Project No.:
Sheet No.:

General Notes

- 1.01 All landscape installation & maintenance to conform with all applicable local codes & ordinances, including (but not limited to) select portions of City of Watertown Municipal Code.
- 1.02 See Site dwgs. for work limits, scope of construction, hardscape, dimensions &/or construction notes. See Civil dwgs. for all hardscape, grading, stormwater management, site utilities & erosion control. See Landscape dwgs. for landscape plans, site amenities, details, schedules, notes. See Architectural dwgs. for all construction. See Electrical drawings for all power, circuiting, lighting & security. See Mechanical drawings for other site equipment.
- 1.03 Contractor shall provide shop drawings and material submittals of all hardscape & landscape construction elements shown in plan set for Landscape Architect review prior to construction.
- 1.04 Contractor to provide samples for Landscape Architect's approval on all colors, finishes & materials prior to construction, including (but not limited to) topsoil, gravels, mulches, seed mixes et al.
- 1.05 Caution: underground utilities are present on site. The Contractor shall verify location of all above- and below-grade utilities, both public & private, prior to commencement of site construction. If unanticipated above- or below-grade conditions are encountered, notify Client & Landscape Architect prior to proceeding. Coordinate with local public utility locating entity as needed.
- 1.06 Contractor to verify hardscape layout prior to construction. Contact Landscape Architect if discrepancies are found.
- 1.07 Contractor to limit construction traffic to within work limit lines. All adjacent damage shall be the responsibility of the contractor to restore. See Civil drawings for limits of disturbance.
- 1.08 All written dimensions supersede scaled dimensions. All dimensions are taken from face of curb, wall or existing building foundations.

Landscape Notes

- 2.01 Rough grading & topsoil import/spreading are to be completed by others. Finish grading, seed area and planting bed preparation shall be the landscape contractor's responsibility. Verify all existing site and grading conditions prior to construction.
- 2.02 All areas disturbed by site construction shall be fine graded and restored with vegetative cover as shown. See plans for cover types & locations, see specifications for materials & installation.
- 2.03 Contractor shall verify plant quantities shown on plan. Symbol quantities take precedence over plant keys, except as noted in the plant schedule. Contractor shall forward a material list to the Landscape Architect prior to construction identifying species, sizes & plant sources to be used on the project.
- 2.04 All plant materials shall conform to the schedule and shall meet quality requirements outlined in the ANLA "American Standard for Nursery Stock", ANSI Z60.1-2004. The Landscape Architect reserves the right to reject any substandard planting material. Such rejected material shall be removed from the project site immediately.
- 2.05 An Owner's representative shall be allowed to inspect and approve trees at the nursery prior to delivery to the site.
- 2.06 All nursery tags/labels shall be left on plant materials until the project punch-list inspection is completed by the Landscape Architect. Untagged materials will be assumed to be deficient.
- 2.07 Topsoil requirements:
- All planting beds shall contain screened blended topsoil mix to a min. depth of 18". All turf, low-mow & shortgrass prairie areas shall have min. 6".
 - Existing topsoil meeting project specifications may be stripped, stored & re-used if previously approved. Contractor shall remove all excessive clay, gravel & stones detrimental to healthy plant growth. Contractor shall remove all debris greater than 1" diameter.
 - Contaminated soil shall be removed from the project site if discovered.
 - Subgrade shall be tilled and/or scarified prior to placement of topsoil.
 - Contractor shall be responsible for obtaining soil tests for existing or imported topsoil. Soil testing results shall include (but are not limited to) soil pH, % organic matter, % nitrogen / phosphorus / potassium, % calcium, and soil texture (percentages of sand, silt and/or clay.) Soil testing shall include recommendations for soil amendments if required to support growth of standard ornamental landscape materials.
- 2.08 Contractor is responsible for ensuring that all tree pits & planting areas drain properly. Notify Landscape Architect if drainage or moisture problems are encountered while planting.
- 2.09 Contractor shall backfill all trees, shrubs & evergreens with a mix of 1/3 plant starter mix & 2/3 remaining soil. Plant Starter Mix shall be 40% organic black topsoil, 30% sphagnum moss, 20% composted manure & 10% coarse sand by volume. Submit material information for review.
- 2.10 All perennial and groundcover areas shall receive a 3" layer of plant starter mix and perennial starter fertilizer, rototilled into the top 6" of blended topsoil in beds.
- 2.11 Unless otherwise shown, all perennials & shrubs to be planted in triangular arrangements. For plants not shown individually, refer to the spacing shown in the plant schedule.
- 2.12 Mulch: All tree circles, planting beds and maintenance strips to receive a 3" deep layer of high quality shredded hardwood bark mulch.
- 2.13 Plant Bed Edging: Edge all planting beds and maintenance strips with a 4" deep spaded edge (shovel cut or mechanical). Bedlines are to be cut per plan. A clean definition between the lawn and plant bed is required.
- 2.14 Contractor shall provide positive drainage away from all structures for a minimum of 10'.
- 2.15 Contractor shall be responsible for providing base bid comprehensive landscape establishment, maintenance and warranty care for one year after installation. Work shall include all watering (as needed for establishment), weeding (once monthly), pruning (twice per season), fertilizing (twice per season), pest management (as needed, min 3 visits per season) and spring / fall clean-ups. Prior to beginning installation, the contractor shall submit a 12-mo. calendar for review/approval including all anticipated maintenance activities & dates.

Seeding Notes & Mixes

- 3.01 This work shall consist of preparing the seed beds and furnishing, sowing and mulching the required seed on the various seeded areas, as outlined in the site plans and specifications. All turf restoration shall be seeded turf unless otherwise noted.
- 3.02 Rough grading, drainage work, topsoiling and fine grading shall be completed before sowing the seed mixes. The areas to be seeded shall be worked with plow chisels, discs & harrows, soil finishers and/or other appropriate equipment until a reasonably even and loose seedbed is obtained. Seed beds shall be prepared immediately in advance of the seeding. If proposed seed areas are weedy, contractor to apply herbicide or other weed control measures to eliminate weeds. Conform with seed supplier's specifications if required.
- 3.03 Confirm that anticipated project schedule date(s) fall within the respective seed supplier's approved calendar prior to installation. Installations completed outside of acceptable seeding dates shall be the performed at the sole responsibility and expense of the contractor. For dormant seeding, a min. of one over-seed application in the following season will be required.
- 3.04 Seeds shall be PLS and will be mixed in accordance w/ mfr's specifications. Provide invoices, bag-tags or mix analysis results for approval prior to installation.
- 3.05 The seed mixtures shall be sown by means of equipment adapted to the purpose. Mechanical distribution of seed (i.e. Truax seed drill, Brillion seeder, cultipacker, slit-seeder, drop spreader or broadcast spreader) are the only accepted methods. No hand-broadcasting of seed.
- 3.06 No seeding shall occur if the wind exceeds 12 MPH.
- 3.07 Coordinate erosion control and/or mulching with Civil dwgs:

- In sloped areas steeper than 4:1, erosion matting shall be installed by others. Landscape installation shall be coordinated with the erosion control contractor.

- In areas with slopes between 4:1 and 8:1, landscape contractor shall apply clean hay or straw mulch, free of debris and seeds, on all newly seeded areas. Mulch shall be uniformly spread over the designated area at a rate of 55 bales per acre or as indicated in the respective seed supplier's specifications. Mulch material shall be chopped and blown into the seeded area.

- Lightweight E.C. matting and/or hydromulch will be accepted as a no-cost alternate if approved by Landscape Architect prior to application.

- 3.08 See Civil dwgs for erosion control devices. Coordinate with erosion control contractor where required to ensure that topsoil, seeding and/or mat installations are properly coordinated.
- 3.09 Seed mix substitutions will be considered only if submitted for approval 10 days before the close of bidding. All mixes shall be installed & maintained per supplier's specifications.
- BLUEGRASS MIX:
"Deluxe 50 Mix" shall be supplied by Reinders or approved equal. Apply @ 6 lbs per 1000 GSF.
- 3.10 Contractor shall be responsible for providing base bid comprehensive seed area establishment, maintenance and warranty care for all seeded areas:

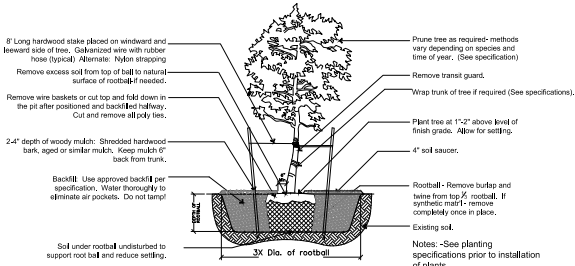
- Bluegrass areas shall be for 60 days after installation. Work shall include all watering (min. 1" per week, or as needed), weeding & mowing. Assume 2 mowings prior to Owner hand-off.

- All other seed areas (wet-tolerant) shall be for three years after installation. Work shall include all watering (as needed for establishment), weeding (both spot herbicide and/or hand-pulling, depending on necessity, once per month), spring / fall clean-up & mowings. Expect 4-5 mowings in the first year, 3-4 mowings in the second year and 2-3 mowings in the third year. All mowings shall be timed to cut germinating weeds but not desirable forbs / grasses. Overseed each spring any bare areas larger than 1 sq. ft.

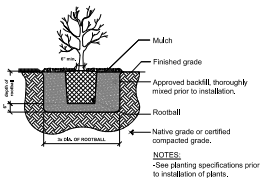
- Prior to beginning installation, the contractor shall submit a 36-month calendar for review/approval including all anticipated maintenance activities.

Hardscape / Amenity Notes

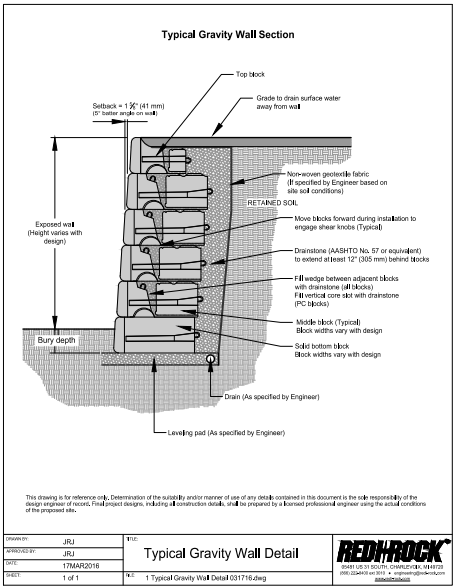
- 4.01 Bike racks: Shall be custom Inverted-U style with City of Watertown logo, powdercoat finish, color TBD to match building (selected from standard range), surface-mounted w/ stainless steel hardware. 'Square U Bike Rack,' Shall be furnished by Madrax, Madison WI, 608-849-1080, Or approved equal.
- Qty. (4)
- 4.02 Retaining Wall: Redi Rock Cobblestone or approved equivalent. Color TBD from standard color palette, contractor to provide samples prior to construction. Final selection By Owner and coordinated with Landscape Architect. Engineered and installed per manufacturers specifications. See civil plans for top and bottom of wall elevations.
- 4.03 Ornamental Fence: Shall be 4' ht, Jerith Premier #202 Flat Top Panel with black finish or approved equal. Install per manufacturer's specifications.



1 Tree Planting Detail
Not To Scale



2 Shrub Planting Detail
Not To Scale



Typical Gravity Wall Detail
1 Typical Gravity Wall Detail 031719.dwg
REDI ROCK
REDI ROCK is a registered trademark of the Redi Rock Corporation.

3 Gravity Wall Detail
Not To Scale

SITE PLAN REVIEW

Sheet:
**LANDSCAPE
DETAILS
& NOTES**

| Revisions: | | |
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| No: | Date: | Description: |
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Parcels



Subject Parcel



THE CITY OF
WATERTOWN
Opportunity runs through it.

City of Watertown Geographic Information System

Scale: 1 inch = 220 feet

SCALE BAR = 1"

Printed on: March
Author:

140

DISCLAIMER: This map is not a substitute for an actual field survey or on-site investigation. The accuracy of this map is limited to the quality of the records from which it was assembled. Other inherent inaccuracies occur during the compilation process. City of Watertown makes no warranty whatsoever concerning this information.

| | | |
|---------------------------------|------------------------------|---------------------------|
| Main Office 920-262-4060 | Brian Zirbes 920-262-4041 | Mark Hady 920-342-0986 |
| Nikki Zimmerman 920-262-4045 | Dell Zwieg 920-262-4042 | |
| Doug Zwieg 920-262-4062 | Dennis Quest 920-262-4061 | |

TO: Plan Commission
 DATE: March 25th, 2024
 SUBJECT: Public Hearing Comment Review and Recommend to Council – Text Amendments to Chapter 550 Zoning

A request for text amendments to the City of Watertown Zoning Code - Chapter 550.

BACKGROUND DESCRIPTION:

Amendment #1:

Current zoning code requires a minimum of 50 feet for both lot width and street frontage when developing Twin Homes. This text amendment reduces the minimum lot width and street frontage for Twin Homes to 42.5 ft. This text amendment also changes the Maximum Gross Density (MGD) to 8 dwelling units per acre for Twin Homes. This change will allow an existing duplex on an 85 ft wide lot (minimum lot with is 85 ft) to be divided into Twin Homes on separate lots and for new Twin Home developments to be developed with these standards. This change applies only to Twin Home development.

Amendment #2:

Current zoning code does not allow for 'Outdoor Commercial Entertainment Incidental to Indoor Commercial Entertainment' as an accessory use in the General Business (GB) Zoning District or the Planned Business (PB) Zoning District. 'Outdoor Commercial Entertainment Incidental to Indoor Commercial Entertainment' includes uses such as outdoor dining spaces. This text amendment allows 'Outdoor Commercial Entertainment Incidental to Indoor Commercial Entertainment' in both the General Business (GB) Zoning District and the Planned Business (PB) Zoning District. This change would only allow 'Outdoor Commercial Entertainment' as an accessory use in locations where 'Indoor Commercial Entertainment' is a principle use.

Amendment #3:

Current zoning code does not define a 'Street Side Yard'. A 'Street Side Yard' applies to corner lots with two sides having frontage on a street. On a corner lot a 'Street Side Yard' is the yard with street frontage not designated as the front yard. This designation has importance for maintaining proper vision clearance at intersections. Current zoning code language is often confusing for property owners regarding the storage of items such as firewood in these areas. This text amendment adds a definition for 'Street Side Yard' and adds a reference to 'Street Side Yard' within the firewood storage standards to clarify that firewood storage is not permitted in these areas.

Amendment #4:

Current zoning code allows 'Commercial Apartments' above the ground floor of a commercial building but not below the ground floor. This text change would allow the potential to establish 'Commercial Apartments' in lower levels (basement) of commercial buildings where appropriate. Establishment of 'Commercial Apartments' in a lower level would need to meet all relevant building and fire codes.

Amendment #1 - § 550-25F(1)(a)[2], § 550-25F(2)(b), and § 550-25F(2)(c)

§ 550-25F(1)(a)[2] Two-Family Residential-6 (TR-6) District

[2] Maximum gross density (MGD): 6.00 du/acre. Except Twin Homes: Maximum gross density (MGD): 8.00 du/acre.

§ 550-25F(2)(b) Two-Family Residential-6 (TR-6) District

(b) Minimum lot width: 85 feet ~~unless Principal Land Use is a Twin Home. Twin Home Minimum Lot width: 50 feet.~~
Except Twin Homes - Minimum lot width: 42.5ft.

§ 550-25F(2)(c) Two-Family Residential-6 (TR-6) District

(c) Minimum street frontage: 50 feet. Except Twin Homes - Minimum Street frontage: 42.5ft.

Amendment #2 - § 550-32C(2) and § 550-33C(2)

§ 550-32C(2) Planned Business (PB) District

(2) Accessory land uses permitted by right:

- (a) Commercial apartment.
- (b) Company-provided on-site recreation.
- (c) Outdoor display incidental.
- (d) In-vehicle sales and service.
- (e) Light industrial incidental to indoor sales.
- (f) Outdoor commercial entertainment incidental to indoor commercial entertainment.

§ 550-33C(2) General Business (GB) District

(2) Accessory land uses permitted by right:

- (a) Commercial apartment.
- (b) Company-provided on-site recreation.
- (c) Outdoor display incidental.
- (d) In-vehicle sales and service.
- (e) Light industrial incidental to indoor sales.
- (f) Outdoor commercial entertainment incidental to indoor commercial entertainment.

Amendment #3 - § 550-15 and § 550-126A

§ 550-15 YARD, STREET SIDE

A yard extending along the full width of the street side lot line between the front yard and the rear lot line having a width as specified in the yard regulations for the district in which such lot is located.

§ 550-126A Outdoor storage of firewood standards.

- A. No person shall store firewood in the front yard or street side yard on residentially zoned property, except that firewood may be temporarily stored in the front yard or street side yard for a period of 30 days from the date of its delivery.

Amendment #4 - § 550-56A

§ 550-56A

- A. Commercial apartment. Description: Commercial apartments are dwelling units which are generally located above or below the ground floor of a building used for a commercial land use (as designated in § 550-52

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Opportunity Runs Through It

above), most typically an office or retail establishment. The primary advantage of commercial a that they are able to share required parking spaces with nonresidential uses.

(1) Regulations.

(a) All commercial apartments shall be located above [or below](#) the first floor.

PUBLIC HEARING COMMENTS:

No comments at the public hearing on March 19th, 2024.

PLAN COMMISSION OPTIONS:

The following are possible options for the Plan Commission:

1. Negative recommendation of the Chapter 550 Text Amendments to Common Council.
2. Positive recommendation of the Chapter 550 Text Amendments to Common Council.
3. Positive recommendation of the Chapter 550 Text Amendments to Common Council, with conditions identified by the Plan Commission.

**AN ORDINANCE
TO AMEND CHAPTER 550: ZONING CODE, THROUGH THE REMOVAL &
ADDITION OF LANGUAGE TO SECTIONS § 550-25F(1)(a)[2], § 550-25F(2)(b), §
550-25F(2)(c), § 550-32C(2), § 550-33C(2), § 550-15, and § 550-126A**

**SPONSOR: MAYOR MCFARLAND, CHAIR
FROM: PLAN COMMISSION WITH POSITIVE RECOMMENDATION**

THE COMMON COUNCIL OF THE CITY OF WATERTOWN DOES ORDAIN AS
FOLLOWS:

SECTION 1. § 550-25F(1)(a)[2] is amended to read:

* * *

[2] Maximum gross density (MGD): 6.00 du/acre. Except Twin Homes: Maximum gross density (MGD): 8.00 du/acre.

* * *

SECTION 2. § 550-25F(2)(b) is amended to read:

* * *

(b) Minimum lot width: 85 feet ~~unless Principal Land Use is a Twin Home. Twin Home Minimum Lot width: 50 feet.~~ Except Twin Homes - Minimum lot width: 42.5ft.

* * *

SECTION 3. § 550-25F(2)(c) is amended to read:

* * *

(c) Minimum street frontage: 50 feet. Except Twin Homes - Minimum Street frontage: 42.5ft.

* * *

SECTION 4. § 550-32C(2)(f) is created to read:

* * *

(f) Outdoor commercial entertainment incidental to indoor commercial entertainment.

* * *

SECTION 5. § 550-33C(2)(f) is created to read:

* * *

(f) Outdoor commercial entertainment incidental to indoor commercial entertainment.

* * *

SECTION 6. The definition of “Yard, Street Side” is added to § 550-15 to read:

* * *

YARD, STREET SIDE

A yard extending along the full width of the street side lot line between the front yard and the rear lot line having a width as specified in the yard regulations for the district in which such lot is located.

* * *

SECTION 6. § 550-126A is amended to read:

* * *

A. No person shall store firewood in the front yard or street side yard on residentially zoned property, except that firewood may be temporarily stored in the front yard or street side yard for a period of 30 days from the date of its delivery.

* * *

SECTION 7. All ordinances or parts of ordinances inconsistent with the provisions of this ordinance are hereby repealed.

SECTION 8. This ordinance shall take effect and be in force the day after its passage and publication.

| | | | | |
|--------------------|-----|----|-----|----|
| DATE: | | | | |
| READING: | 1ST | | 2ND | |
| | YES | NO | YES | NO |
| DAVIS | | | | |
| LAMPE | | | | |
| BOARD | | | | |
| BARTZ | | | | |
| BLANKE | | | | |
| SMITH | | | | |
| SCHMID | | | | |
| WETZEL | | | | |
| MOLDENHAUER | | | | |
| MAYOR MCFARLAND | | | | |
| TOTAL | | | | |

ADOPTED _____

CITY CLERK/TREASURER

APPROVED _____

MAYOR



Section 3, Item F.

MARCH 25, 2024

City of Watertown

Plan Commission 4:30pm

Greater Watertown Community Health Foundation
Neighborhood Plan Update

Table of Contents

Section 3, Item F.

- 1 Development Plan & Site Layout
 - GWCHF's Vision
 - Previous Development Option
 - Previous Layout
 - Updated Development Plan
 - Updated Layout
 - Housing Types
- 2 Infrastructure
 - Phased Installation
 - Phased Costs
- 3 Construction Phasing
- 4 Next Steps

Section 1

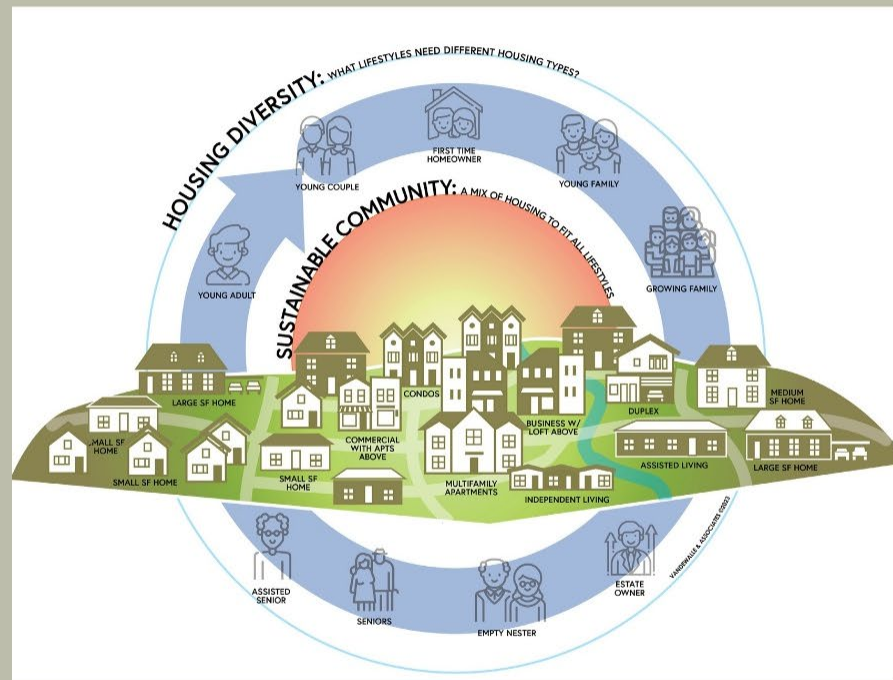
Development Plan & Site Layout



Development Plan

Great Watertown Community Health Foundation's Vision.

- Deliver diverse housing types to accommodate a variety of lifestyles, age groups, formats, and price points.
- Integrate public health and community character.
- Build a model for sustainable and positive environmental impacts by providing housing, parks, and community uses within walking distance.
- Blend multi-modal transportation options into design.
- Preserve environmental systems.



Previous Development Option

As presented to City
Staff in Dec 2023.

Option (1)

ADOPTED PLAN

Housing Choices 100 rental apts, 20 for-sale townhomes, 24 for-sale twins, 39 for-sale singles

Total New Roofs 183

Estimated Taxes **\$783,000**

Need from City PayGo Blighted TID, Mixed Use TID for infrastructure installation

Previous Layout

December 2023.

- Multiple east/west streets,
- Includes townhomes.
- No higher-value lots.



Current Development Plan

March 2024.

This plan:

- creates highest tax increment.
- is Developers' preference, ie., no town homes.
- meets GWCHF's vision and goals.
- creates greatly needed housing options for citizens of Watertown.

APARTMENTS, TWIN HOMES & SINGLE FAMILY HOMES

Housing Options

- 96 rental apartments
- 18 for-sale twins
- 80 for-sale singles

Total New Roofs 194

Estimated Taxes **\$914,000 upon construction
completion**

UPDATED

Site Layout

March 2024.

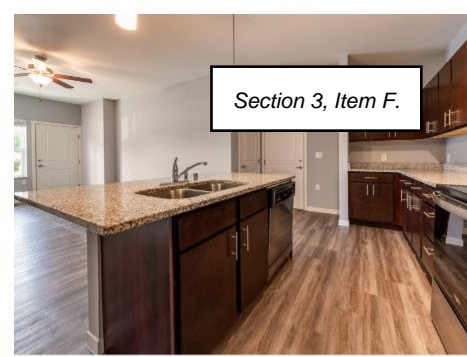
Section 3, Item F.



- Multiple higher-value lots.
- One east/west street.
- No townhomes.

Multi-Family Development

- 96 units.
- Infrastructure thru developer financed TIF.
- 2025 anticipated construction start.



Twin Homes Development

- 18 units.
- Infrastructure thru GWCHF and municipal funding.
- 2025 anticipated construction start.



Single Family Homes Development

- 80 units.
- Infrastructure thru GWCHF and municipal funding.
- 2025 anticipated construction start.



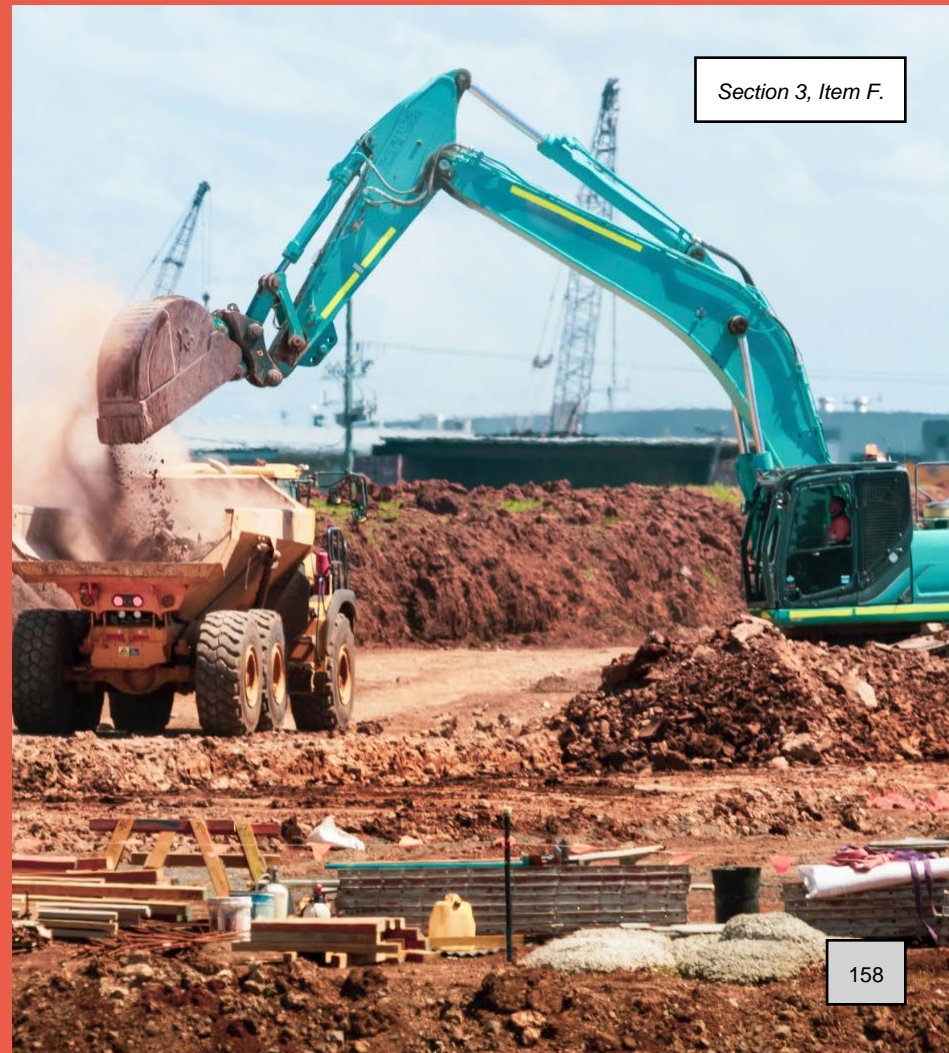
Section 3, Item F.



Section 2

Infrastructure

Phased Installation



Section 3, Item F.

Infrastructure Phasing

Phased installation affords City
time for budgeting.

Section 3, Item F.



Infrastructure Costs

Projected.

| | Phase 1 | Phase 2 | Phase 3 | Total Project |
|---|-----------------|-----------------|---------------|-----------------|
| Linear Feet | 2316 | 1449 | 435 | 4200 |
| Mass Grading and Water Management | \$ 1,348,230.00 | \$ - | \$ - | \$ 1,348,230.00 |
| Water and Sewer | \$ 1,200,685.20 | \$ 726,772.80 | \$ 250,582.00 | \$ 2,178,040.00 |
| Curb, Gutter, Road | \$ 511,325.00 | \$ 320,425.00 | \$ 87,050.00 | \$ 918,800.00 |
| Gas and Electric | \$ 137,800.00 | \$ 85,800.00 | \$ 31,200.00 | \$ 254,800.00 |
| Landscape, Professional Fee's and Contingency | \$ 828,298.04 | \$ 209,439.56 | \$ 67,526.40 | \$ 1,105,264.00 |
| | | | | |
| Total | \$ 4,026,338.24 | \$ 1,342,437.36 | \$ 436,358.40 | \$ 5,805,134.00 |

Section 3

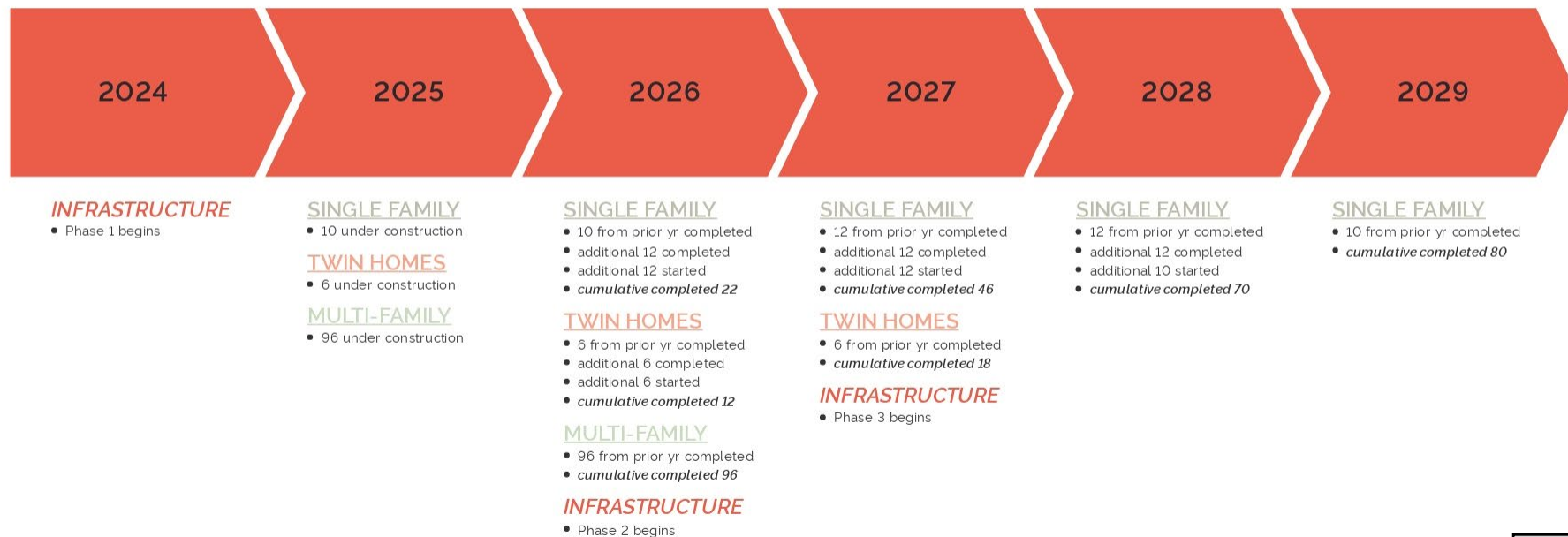
Construction Phasing



Construction Phasing

with Infrastructure Phasing

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Section 4

Next Steps



Section 3, Item F.

Next Steps

Key project milestones Mar - July 2024

Section 3, Item F.



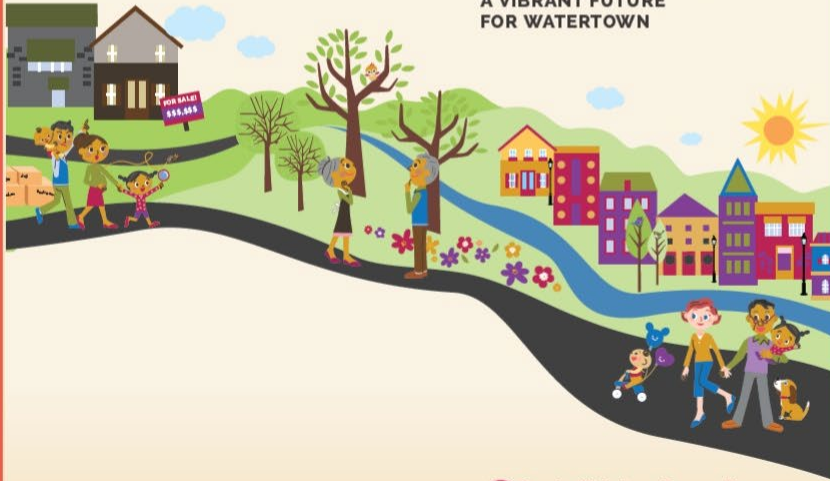


600 East Main Street Suite 200
Watertown WI 53094

920.390.4000
watertownhealthfoundation.com

Building Strong Families and Thriving Communities

TOGETHER, WE HAVE A
ONCE-IN-A-GENERATION
OPPORTUNITY TO ENSURE
A VIBRANT FUTURE
FOR WATERTOWN



City of Watertown -

Thank you for your partnership and guidance as we collectively work to transform a vacant parcel and make a truly positive impact on housing for the future of Watertown.

Greater Watertown Community Health Foundation

Tina Crave - President & CEO

Nate Peters - Chief Financial Officer