THE CITY OF WATERTOWN

SITE PLAN REVIEW COMMITTEE MEETING AGENDA

MONDAY, MARCH 11, 2024 AT 1:30 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: (Toll Free): 1 866 899 4679 **Access Code** 499-061-117 or https://meet.goto.com/499061117 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 February 12, 2024
3. **BUSINESS**
   - A. Review and take action: 672 Johnson Street – Group Development
   - B. Review and take action: 1207 Boomer Street – proposed 1,086 sf building addition
   - C. Review and take action: 916 Labaree Street – Architectural and location review of Riverside Park restrooms
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
February 12, 2024

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; 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; Jeff Meloy of the Police Department, and Anthony Rauterberg of the Fire Department. Also in attendance were Nikki Zimmerman, Ruth Mack, Bruce Loeb, Margaret and Brad Hayes, Pete Weston, and Chris McGuire of McCon Building Corporation. Fred Runde joined virtually.

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 January 22, 2204**
   Motion was made by Stacy Winkelman and seconded by Anthony Rauterberg to approve the January 22, 2024 Site Plan Review minutes as submitted. Unanimously approved.

3. **Business**

   A. **Review and take action: 1110 S. Tenth Street & 1111 S. Tenth Street – proposed salvage yard/recycling center**
   Applicants Ruth Mack and Bruce Loeb were present to answer any questions.

   The following was presented by staff:

Building:	Building Inspector Doug Zwieg was not present in person but provided notes that stated if there is any building, electrical, plumbing, or HVAC work done, be sure to pull the proper permits. A building permit will require architectural plans. There is nothing currently planned at this point.
Fire:	An exterior Knox Box will need to be installed.
Engineering:	Would like copies of permits of the site, a plan to prevent tracking in the street, details for stormwater best management practices features on site, and maintenance plans for the stormwater best management practices.
Stormwater:	No comments.
Streets and Solid Waste:	No comments.
Water/Wastewater:	No comments.
Police:	No comments.
Zoning:	No comments.
Parks:	No comments.

   Motion was made by Emily McFarland and seconded by Andrew Beyer to recommend approval of this proposal to Plan Commission with contingent upon submittal of stormwater best management practices, maintenance plans for stormwater best management practices, and an exterior Knox Box.

   Unanimously approved.

   B. **Review and take action: 1722 S. Church Street – Culver's addition**
   Chris McGuire was present to describe the proposed project. The proposal is for a dining room addition on site. The HVAC would be updated, as well as the hoods in the kitchen. The store would be closed to the public for about 10 days during the construction.

   The following was presented by staff:

Building:	Building Inspector Doug Zwieg was not present in person but provided notes that stated the plans can be reviewed in-house.
Fire:	No comments.
Engineering:	No comments.
Stormwater:	If 3,000 sf of land disturbance or concrete work, a Stormwater Erosion Control Permit will be required.
Police:	No comments.

Streets and Solid Waste:	No comments.
Water/Wastewater:	No comments.
Zoning:	The landscaping points will have to be calculated. Mr. McGuire stated there will be a deficiency in trees. Asked about shrubs. The outdoor seating will not be allowed at this point. The ordinance will be updated in the near future (hopefully within a 4-month period) which will then allow for this use by right.
Parks:	No comments.
Mayor:	Excited to see these adjustments which should alleviate some of the issues when the restaurant is busy.

Motion was made by Emily McFarland and seconded by Stacy Winkelman to recommend approval of this proposal to Plan Commission contingent upon an approved landscape plan, outdoor seating, and Stormwater Erosion Control Permit.

Unanimously approved.

C. Review and take action: 717 W. Main Street – site plan for two proposed buildings

Brad Hayes described the proposed project. The proposal is for commercial condos on site. Construction is proposed for Spring 2024.

The following was presented by staff:

Building:	Building Inspector Doug Zwieg was not present in person but provided notes that stated the plans can be reviewed in-house.
Fire:	Individual Knox Boxes will be required.
Engineering:	No comments.
Stormwater:	An erosion control permit would be required because over 3,000 sf of land will be disturbed.
Police:	No comments.
Mayor:	This will be an excellent reuse of the current space.
Streets and Solid Waste:	No comments.
Water/Wastewater:	No comments.
Zoning:	No comments.
Parks:	No comments.

Motion was made by Emily McFarland and seconded by Kristine Butteris to recommend approval of this proposal to Plan Commission with inclusion of the above items.

Unanimously approved.

4. **Adjournment**

Motion was made by Andrew Beyer and seconded by Emily McFarland 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.

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,

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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.

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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.

(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

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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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	The Following standards shall apply to group developments:
(a)	Building exterior materials shall be high quality on all ides 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
Response	Building meets exterior standards required
(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 carrying 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. Roof with particular slopes may be required by the City to complement existing building or otherwise establish a particular aesthetic objective.
Response	Building meets standards presented, east side of Collective tier' d design accomplishes the 8' eave height change requirements
(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.
Response	Standard will be fully met.
(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.
Response	Standard is acceptable and will be fully met

(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-stie 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.

(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. It such limits are required, the applicant may seek City approval to demolish the preciously 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.

Location Map

Parcels

City Limits

Standardized ROW Widths

Town Roads - Local/County

Town Roads - State Hwy

N

THE CITY OF WATERTOWN
Opportunity runs through it.

City of Watertown Geographic Information System

Scale: 1 inch = 200 feet

SCALE BAR = 1"

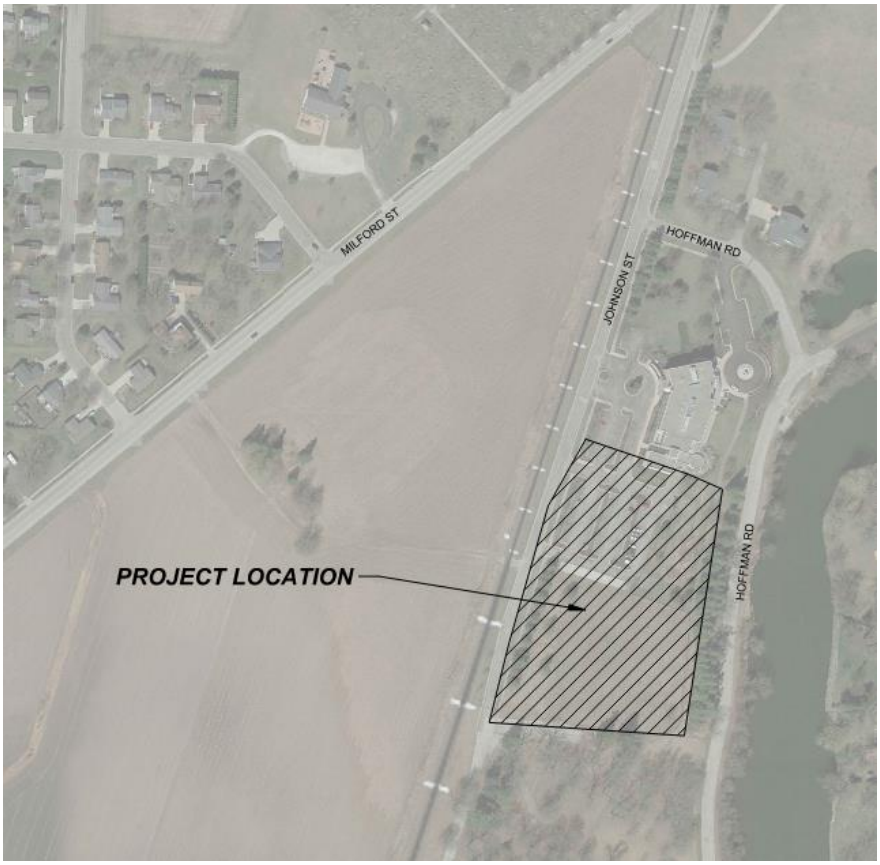
Printed on: February 21, 2024

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
255 N 21st Street Milwaukee, WI 53233
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.

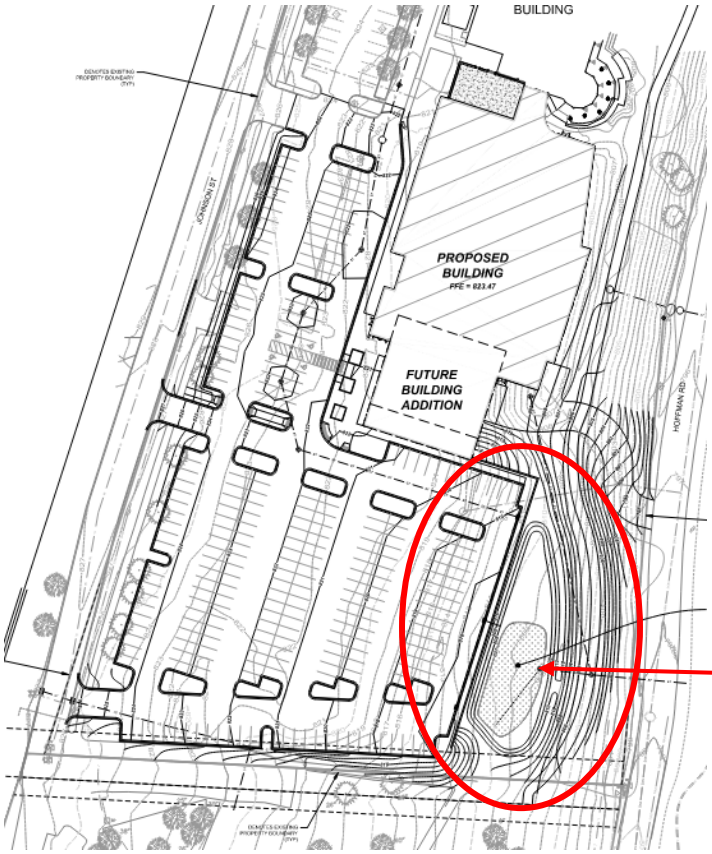
Pre-development Conditions Summary:

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.



Proposed Bio-Retention Basin

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.

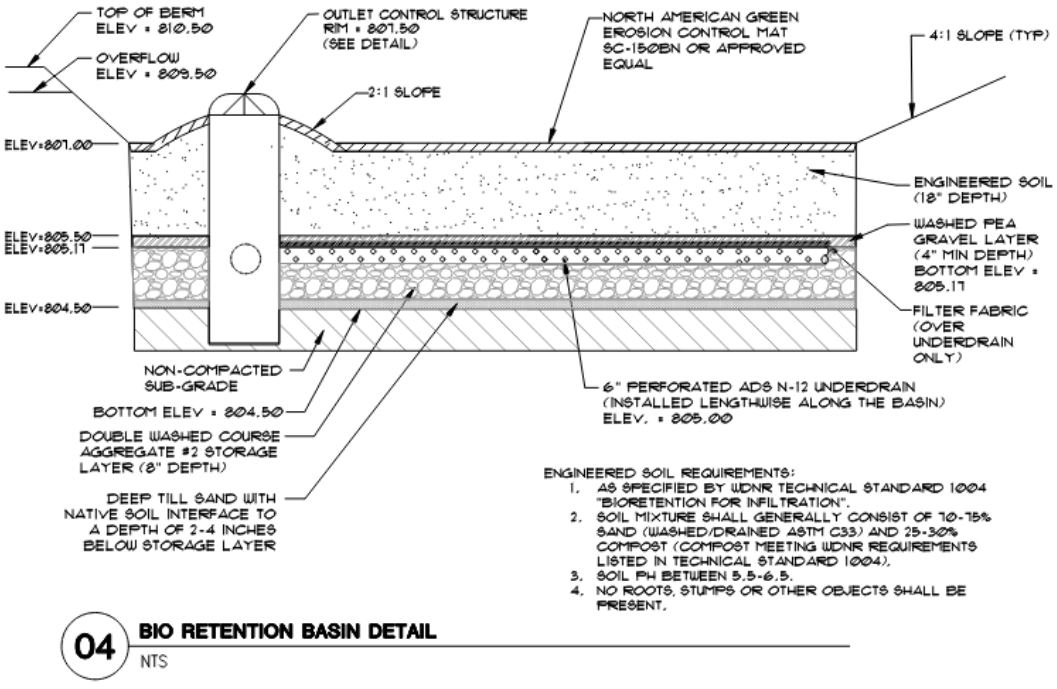
UD-1 includes the east portion of the site that has been disturbed and leaves the site undetained. This includes greenspace, paved and roof areas

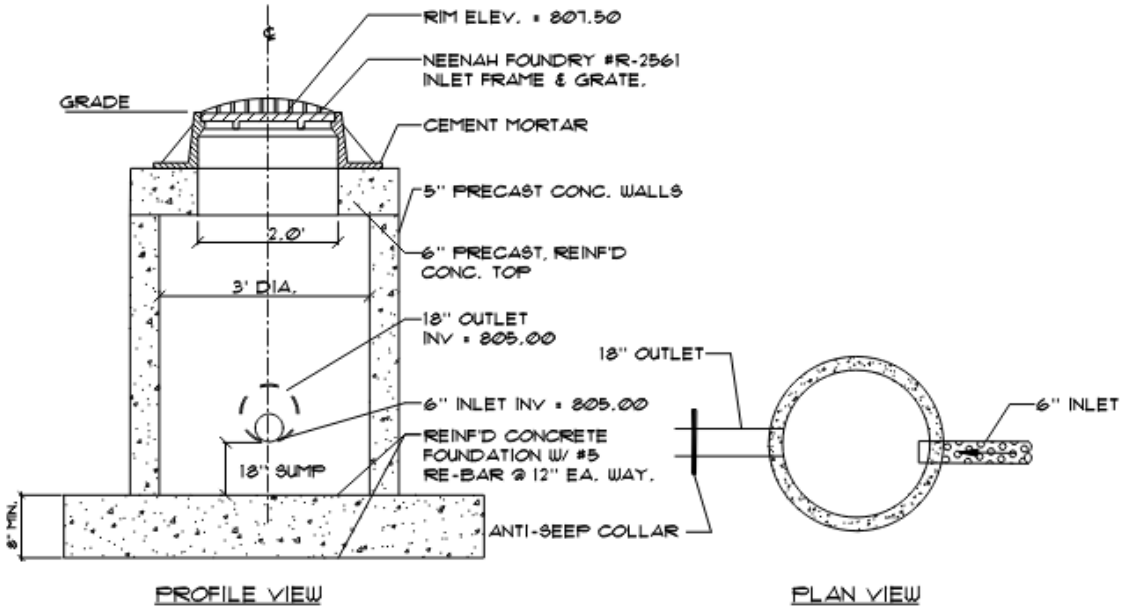
North Area NT Disturbed includes the north portion of the site that was disturbed as part of the 2022 project and leaves the site undetained. This includes paved and greenspace areas.

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		





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.

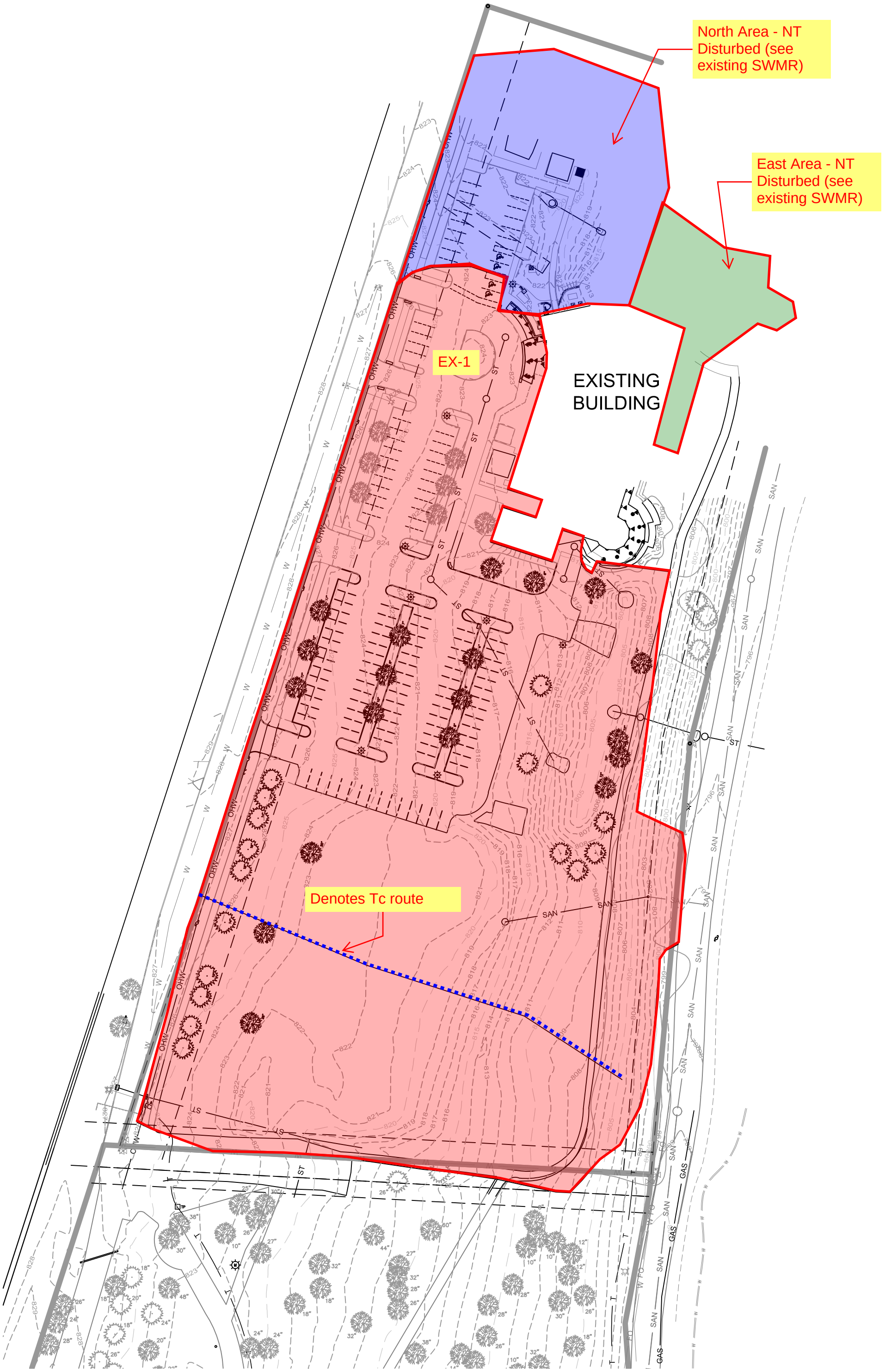
Operation and Maintenance

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.



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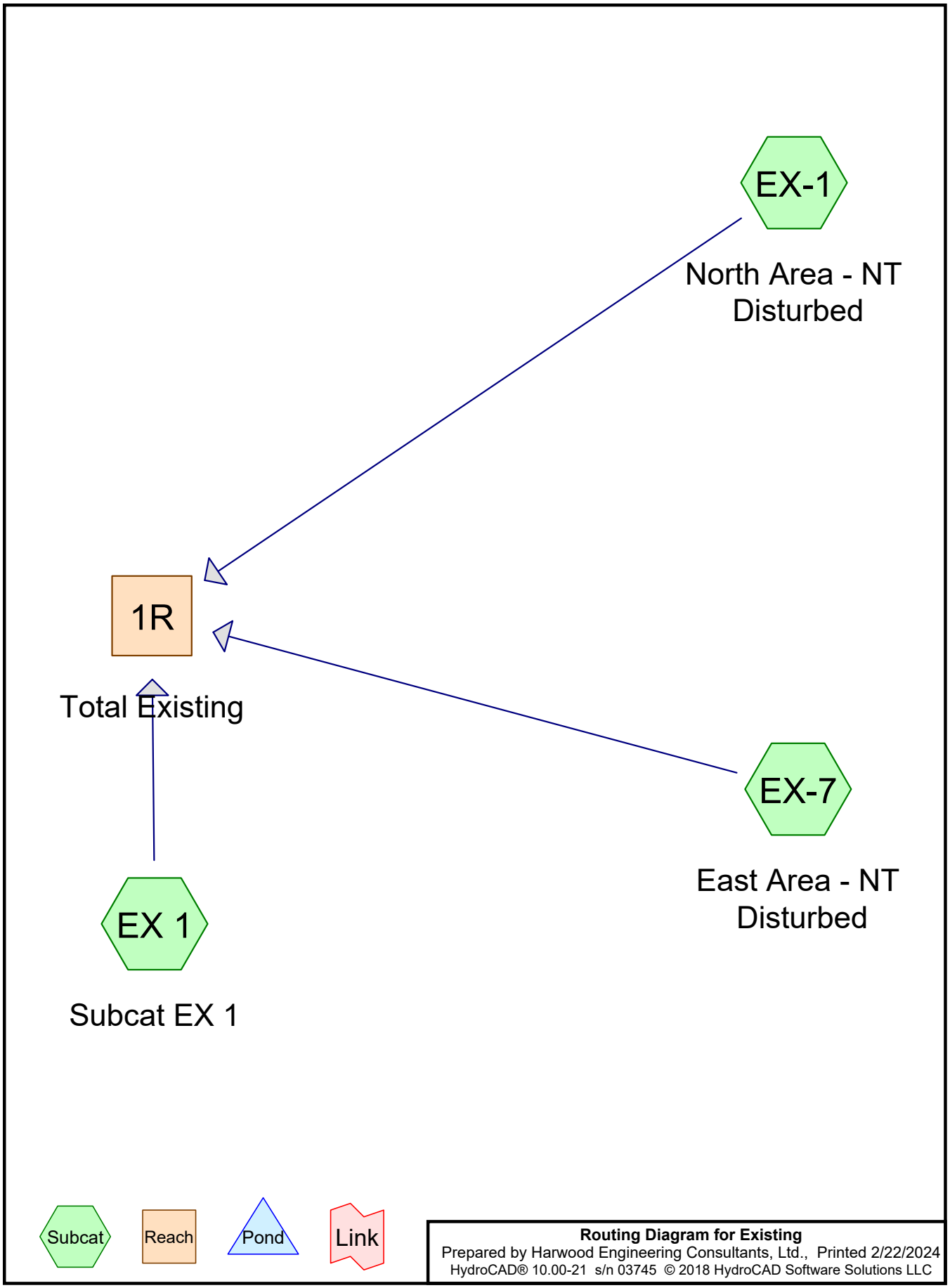
Watertown YMCA

Existing HydroCAD Map

North

Scale: 1" = 80'



Routing Diagram for Existing
Prepared by Harwood Engineering Consultants, Ltd., Printed 2/22/2024
HydroCAD® 10.00-21 s/n 03745 © 2018 HydroCAD Software Solutions LLC

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**

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

Subcatchment EX 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

Subcatchment EX-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

Subcatchment EX-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

Summary for Subcatchment EX 1: Subcat EX 1

[73] Warning: Peak may fall outside time span

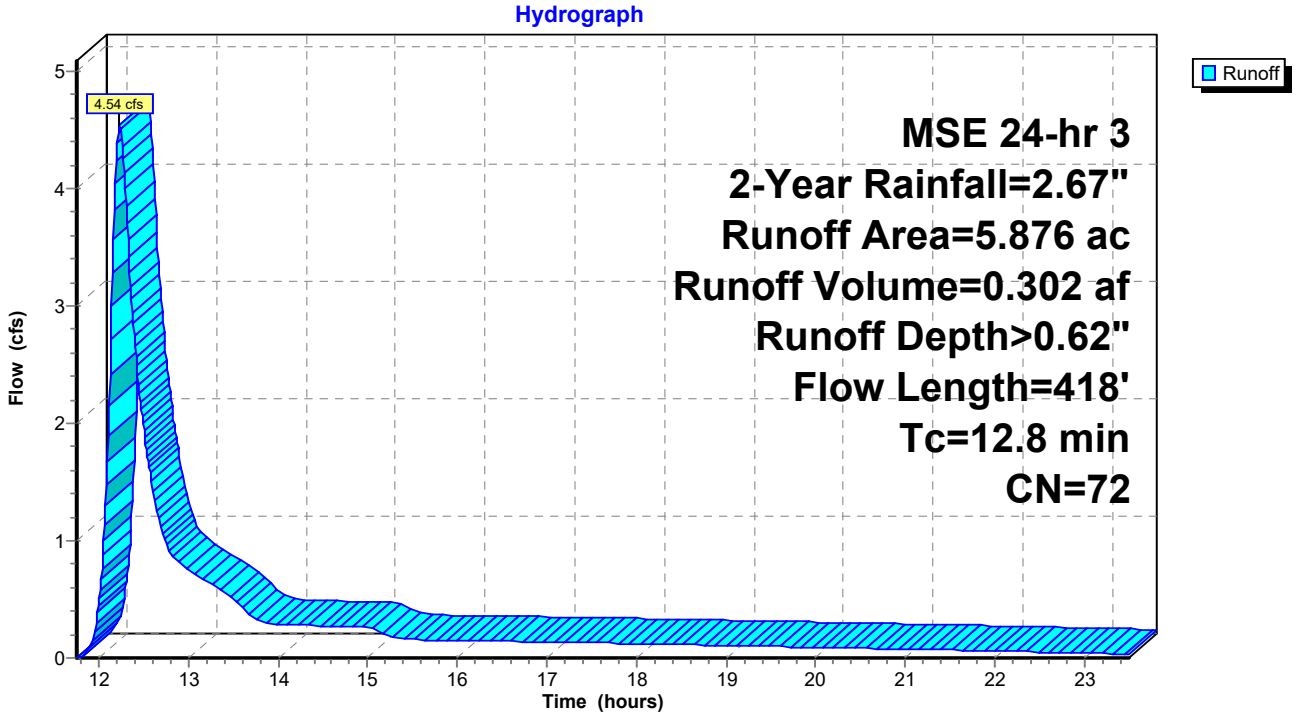
Runoff = 4.54 cfs @ 12.23 hrs, Volume= 0.302 af, Depth> 0.62"

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



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

[73] Warning: Peak may fall outside time span

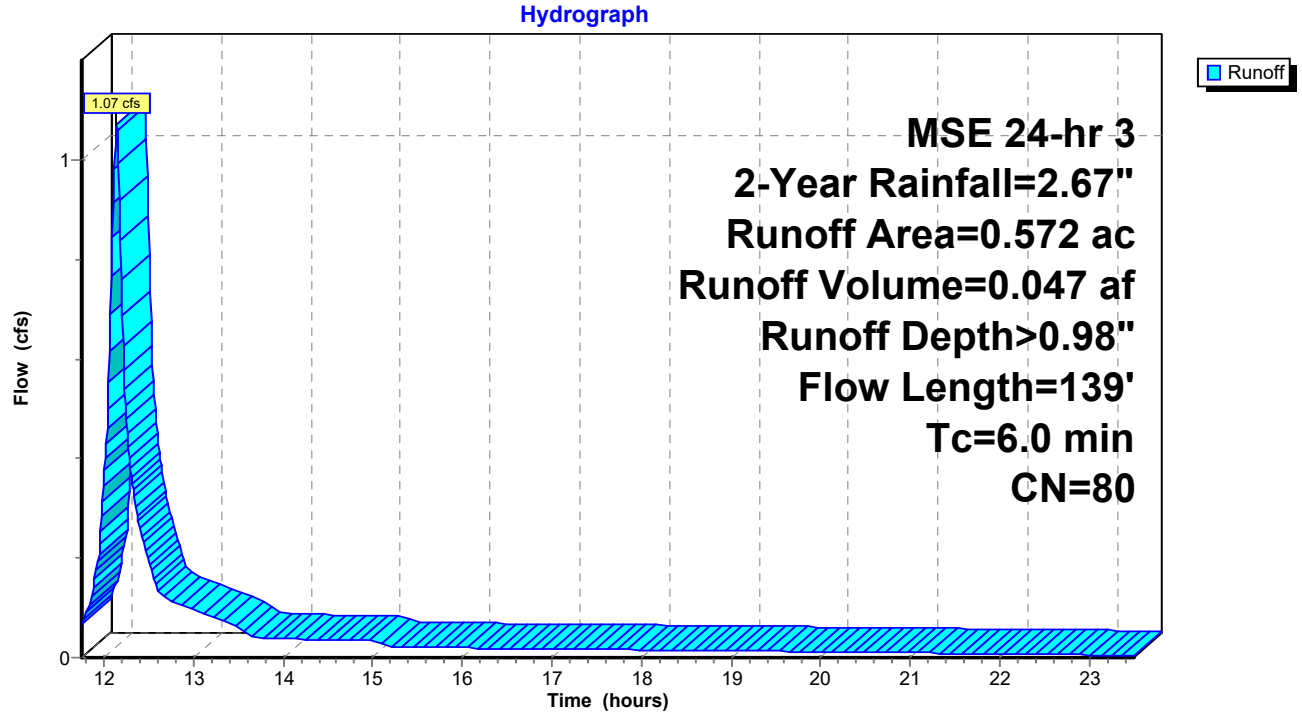
Runoff = 1.07 cfs @ 12.14 hrs, Volume= 0.047 af, Depth> 0.98"

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



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

[73] Warning: Peak may fall outside time span

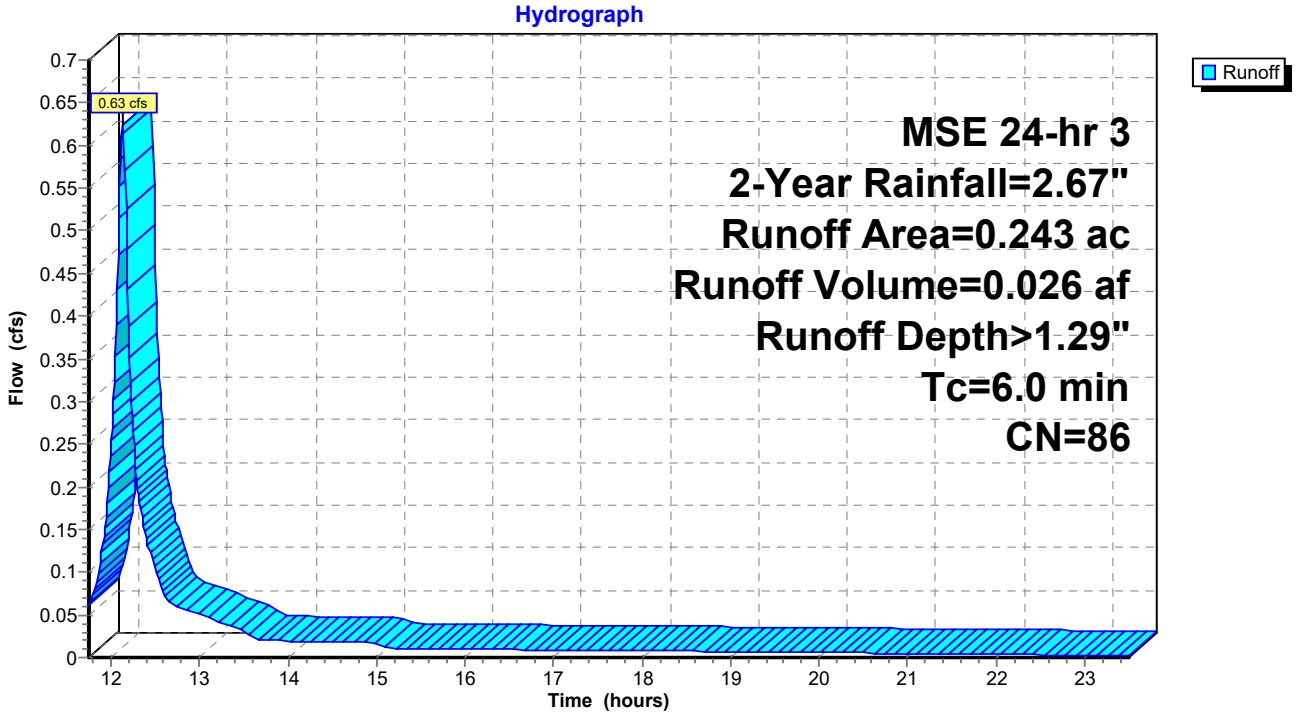
Runoff = 0.63 cfs @ 12.13 hrs, Volume= 0.026 af, Depth> 1.29"

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



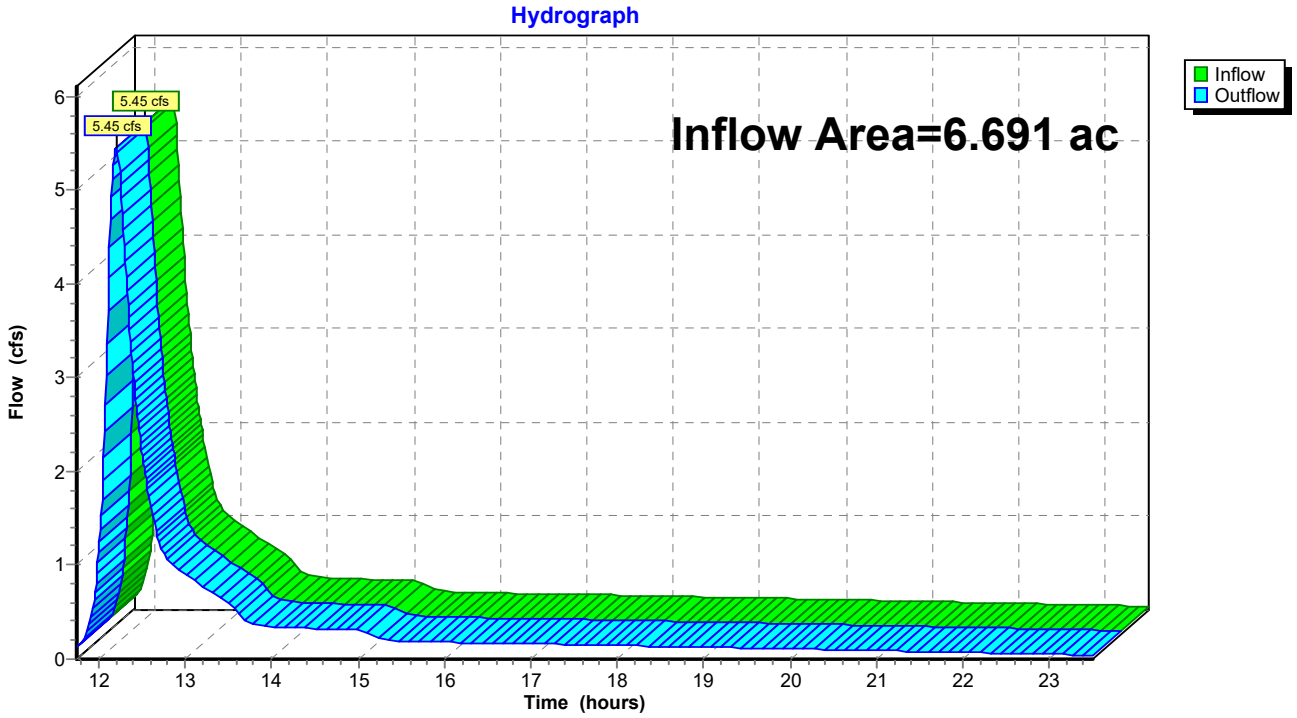
Summary for Reach 1R: Total Existing

[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



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

Subcatchment EX 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

Subcatchment EX-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

Subcatchment EX-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

Summary for Subcatchment EX 1: Subcat EX 1

[73] Warning: Peak may fall outside time span

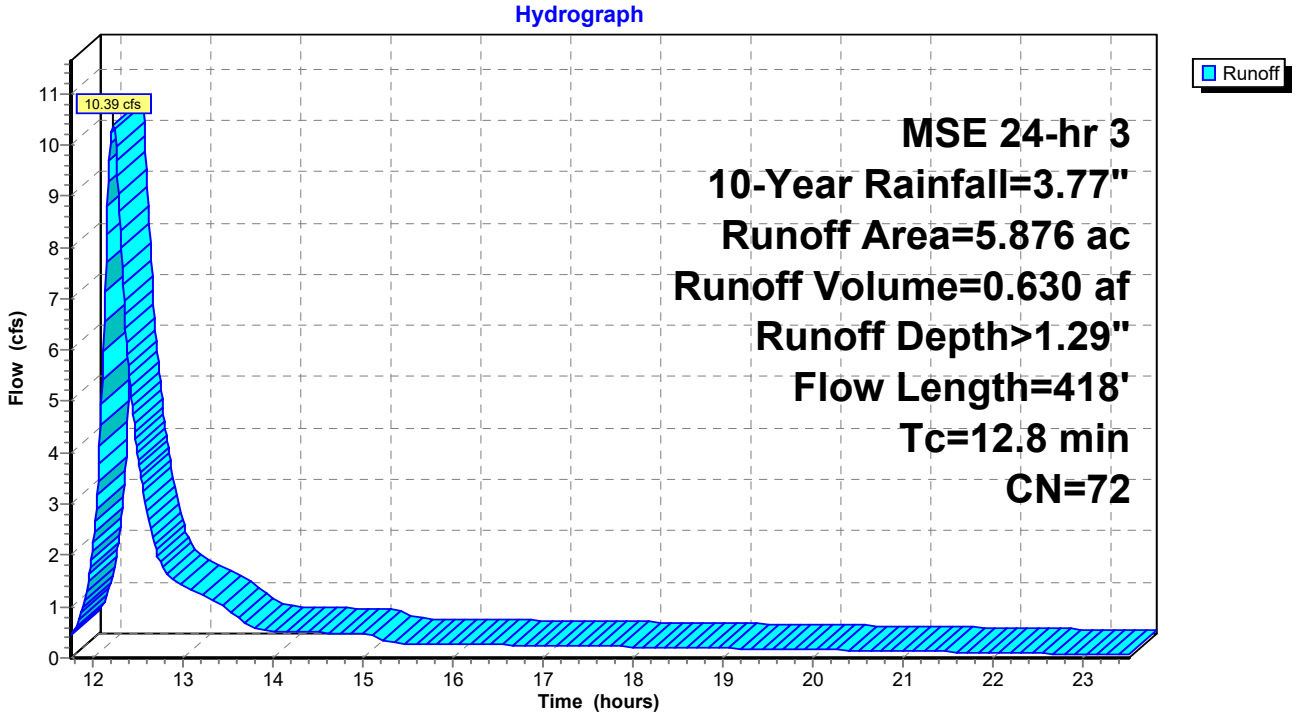
Runoff = 10.39 cfs @ 12.22 hrs, Volume= 0.630 af, Depth> 1.29"

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



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

[73] Warning: Peak may fall outside time span

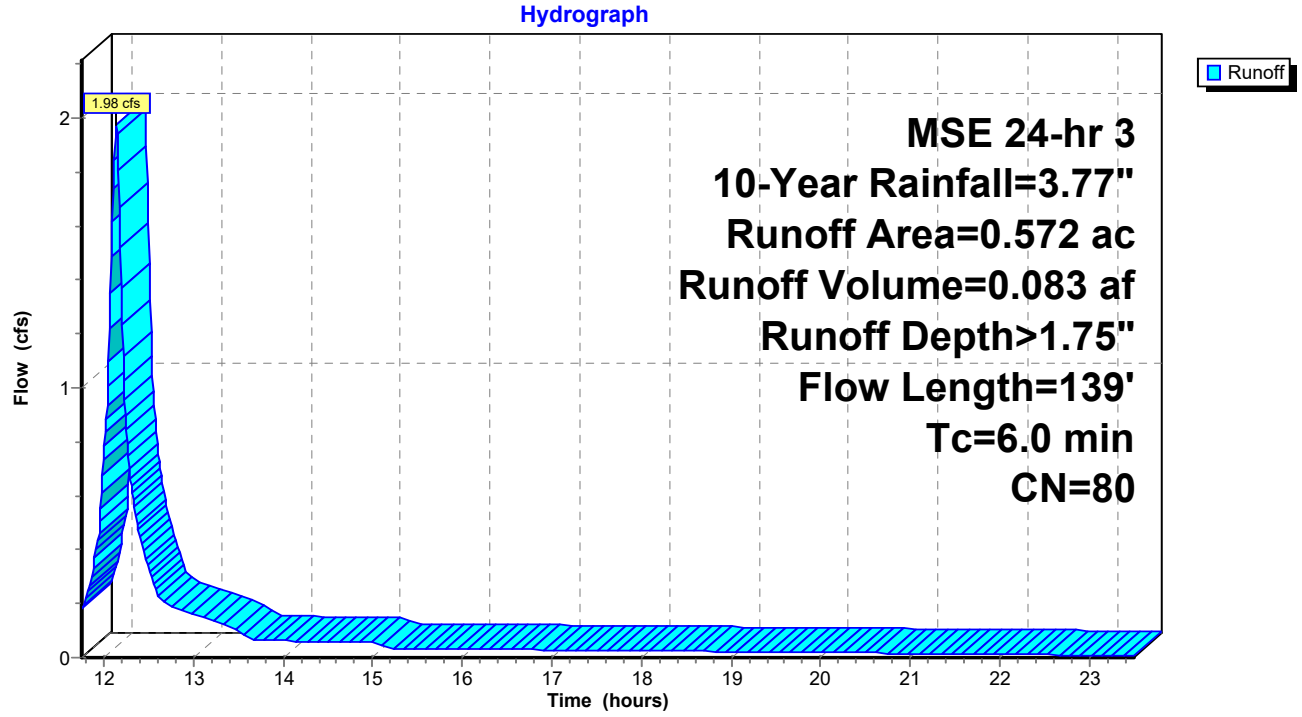
Runoff = 1.98 cfs @ 12.13 hrs, Volume= 0.083 af, Depth> 1.75"

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



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

[73] Warning: Peak may fall outside time span

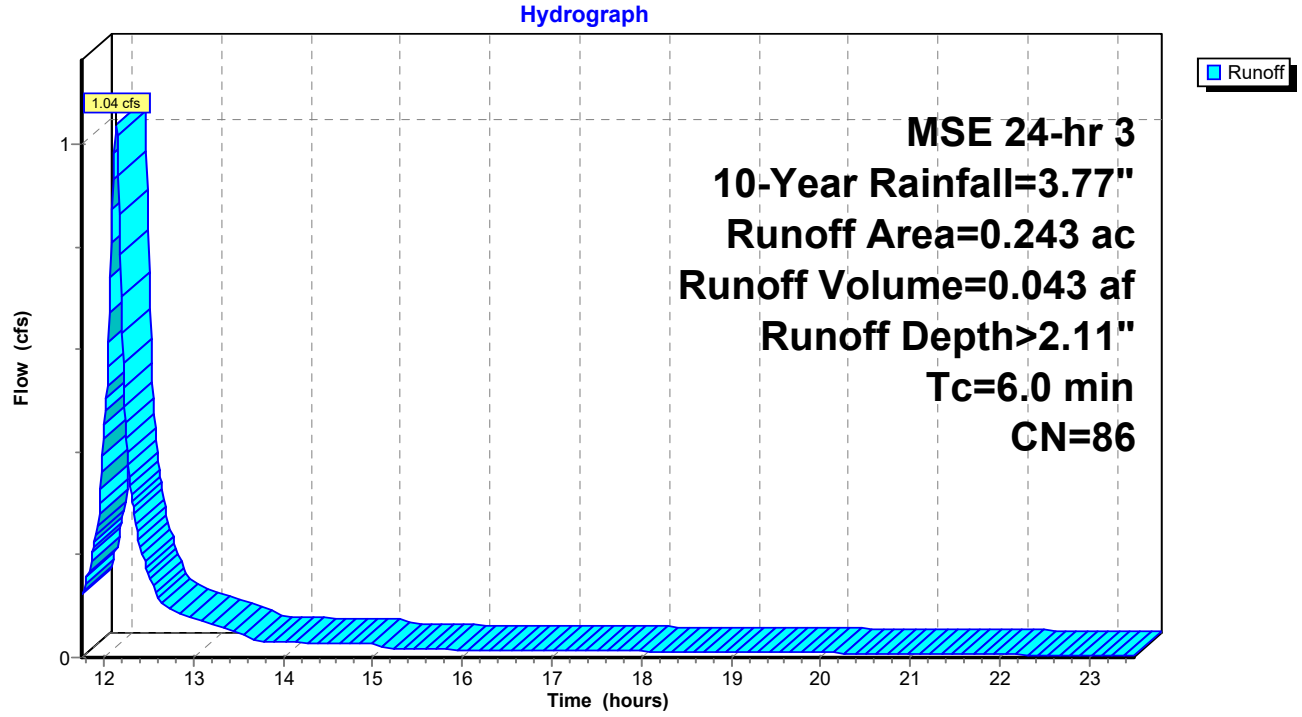
Runoff = 1.04 cfs @ 12.13 hrs, Volume= 0.043 af, Depth> 2.11"

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



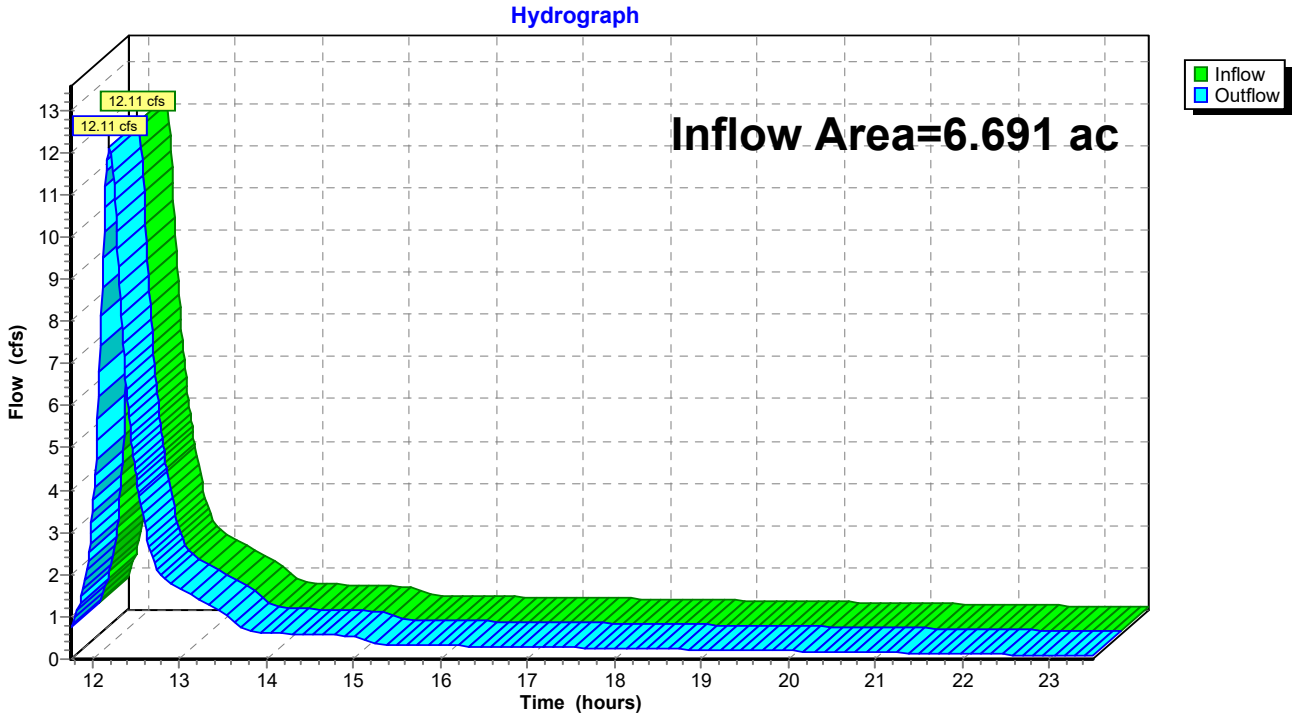
Summary for Reach 1R: Total Existing

[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



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

Subcatchment EX 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

Subcatchment EX-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

Subcatchment EX-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

Summary for Subcatchment EX 1: Subcat EX 1

[73] Warning: Peak may fall outside time span

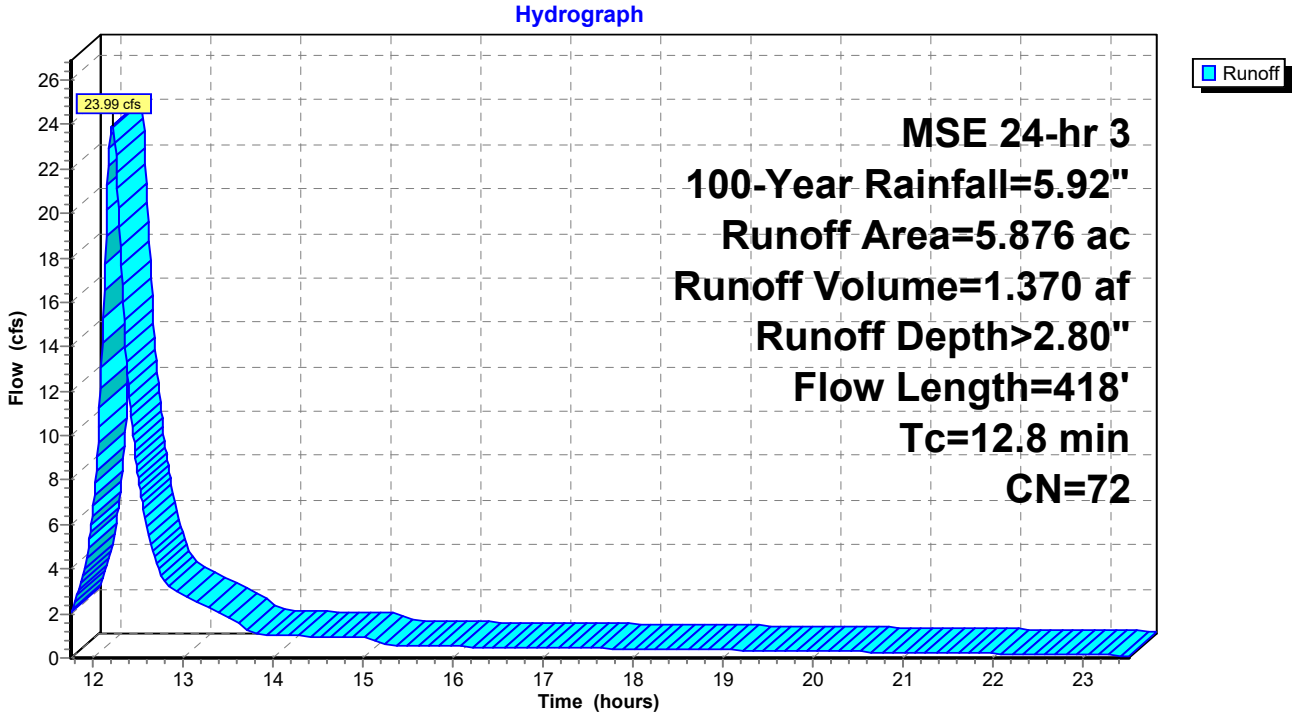
Runoff = 23.99 cfs @ 12.21 hrs, Volume= 1.370 af, Depth> 2.80"

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



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

[73] Warning: Peak may fall outside time span

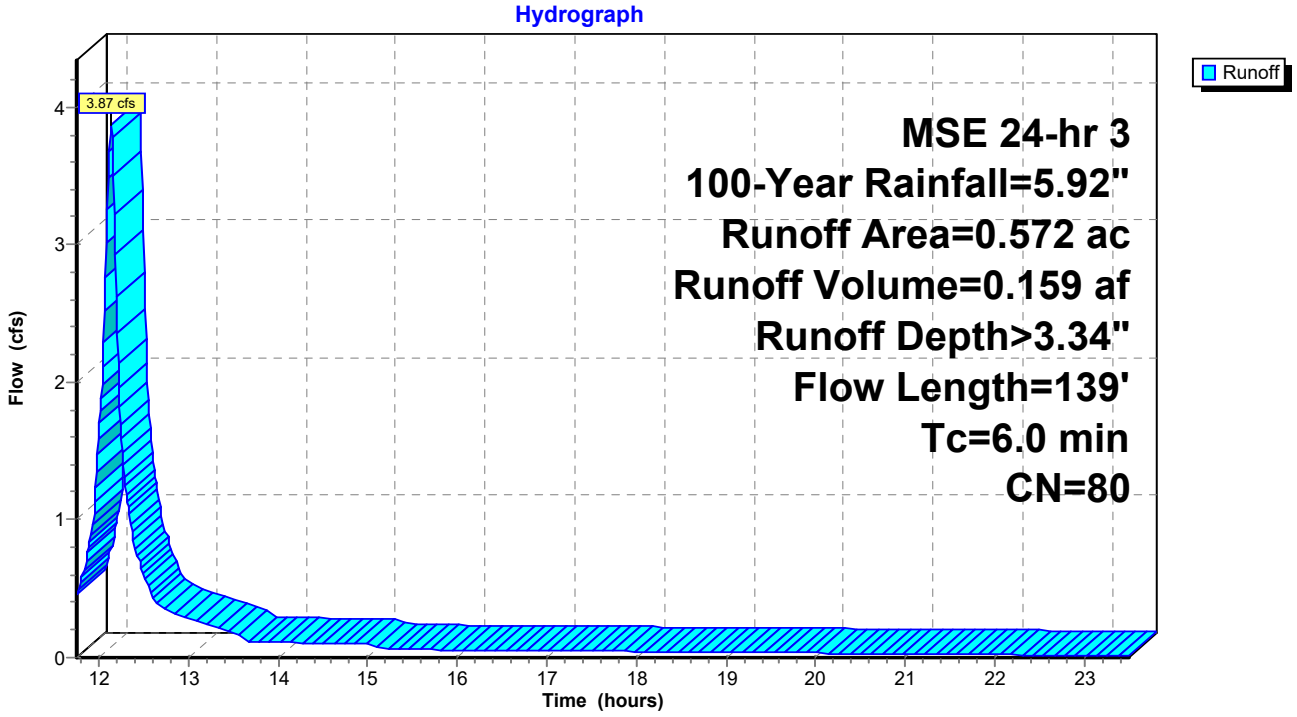
Runoff = 3.87 cfs @ 12.13 hrs, Volume= 0.159 af, Depth> 3.34"

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



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

[73] Warning: Peak may fall outside time span

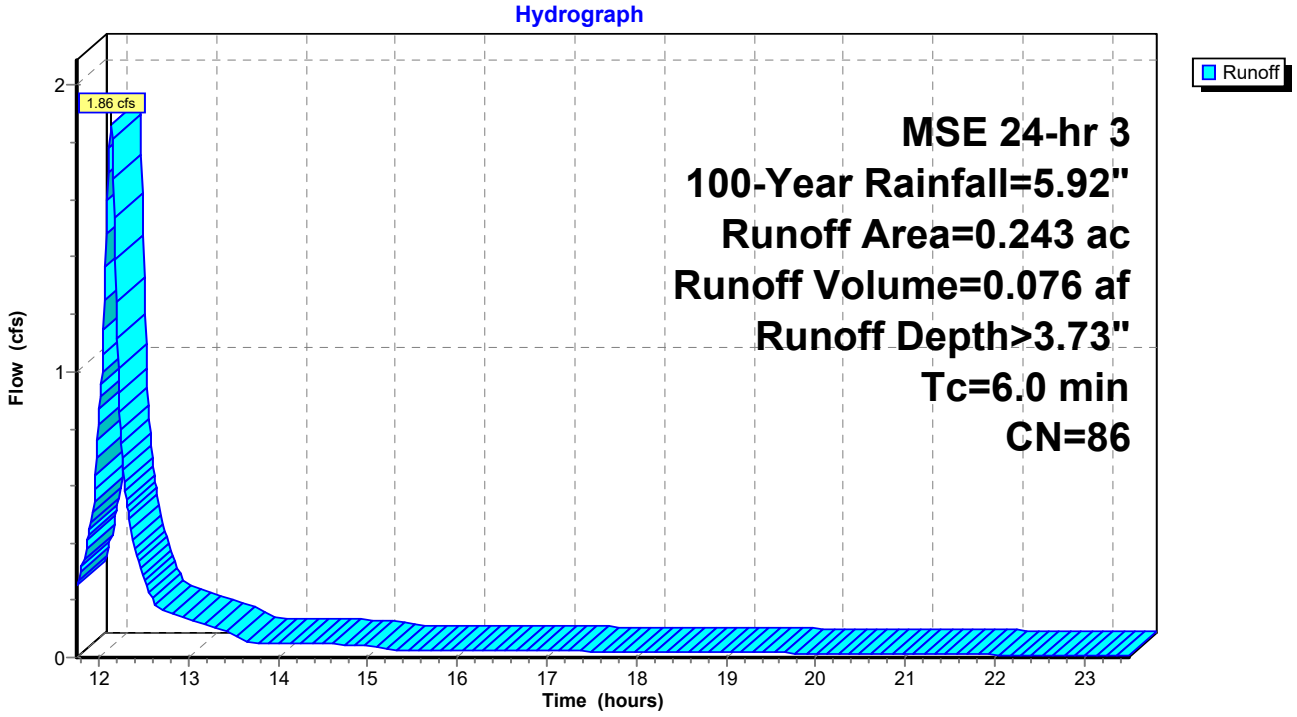
Runoff = 1.86 cfs @ 12.13 hrs, Volume= 0.076 af, Depth> 3.73"

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



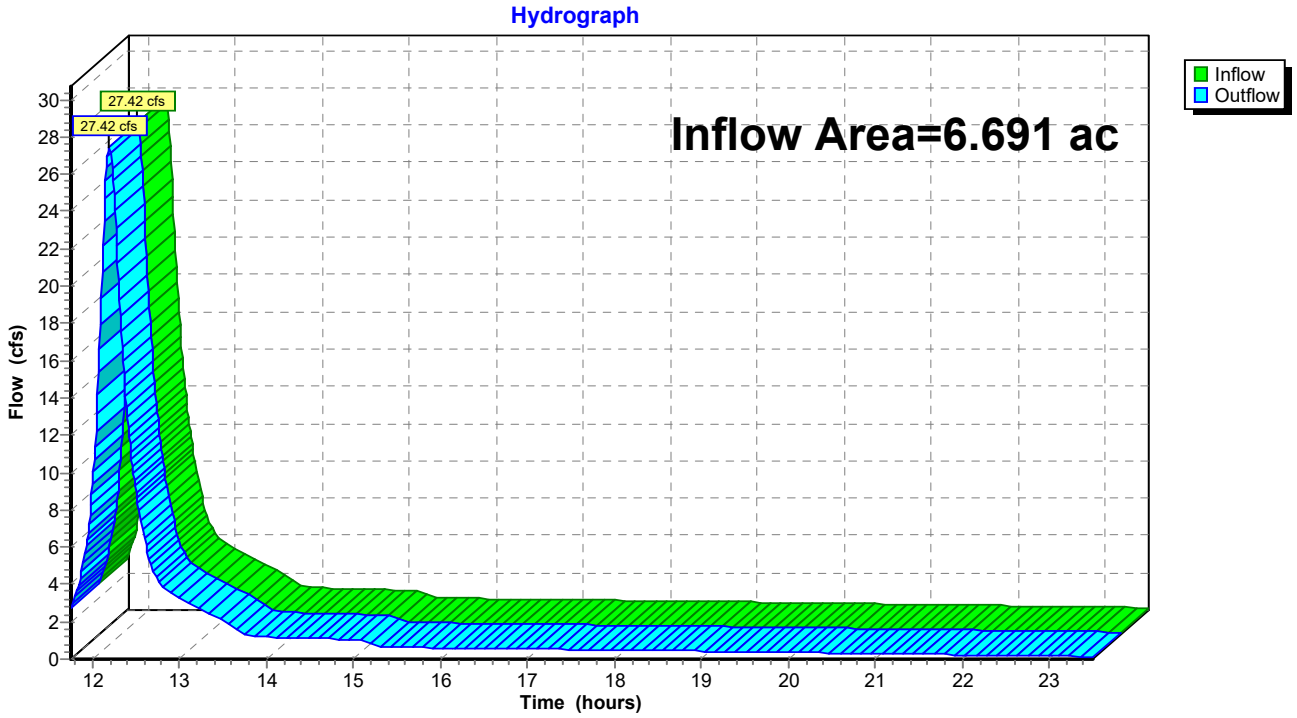
Summary for Reach 1R: Total Existing

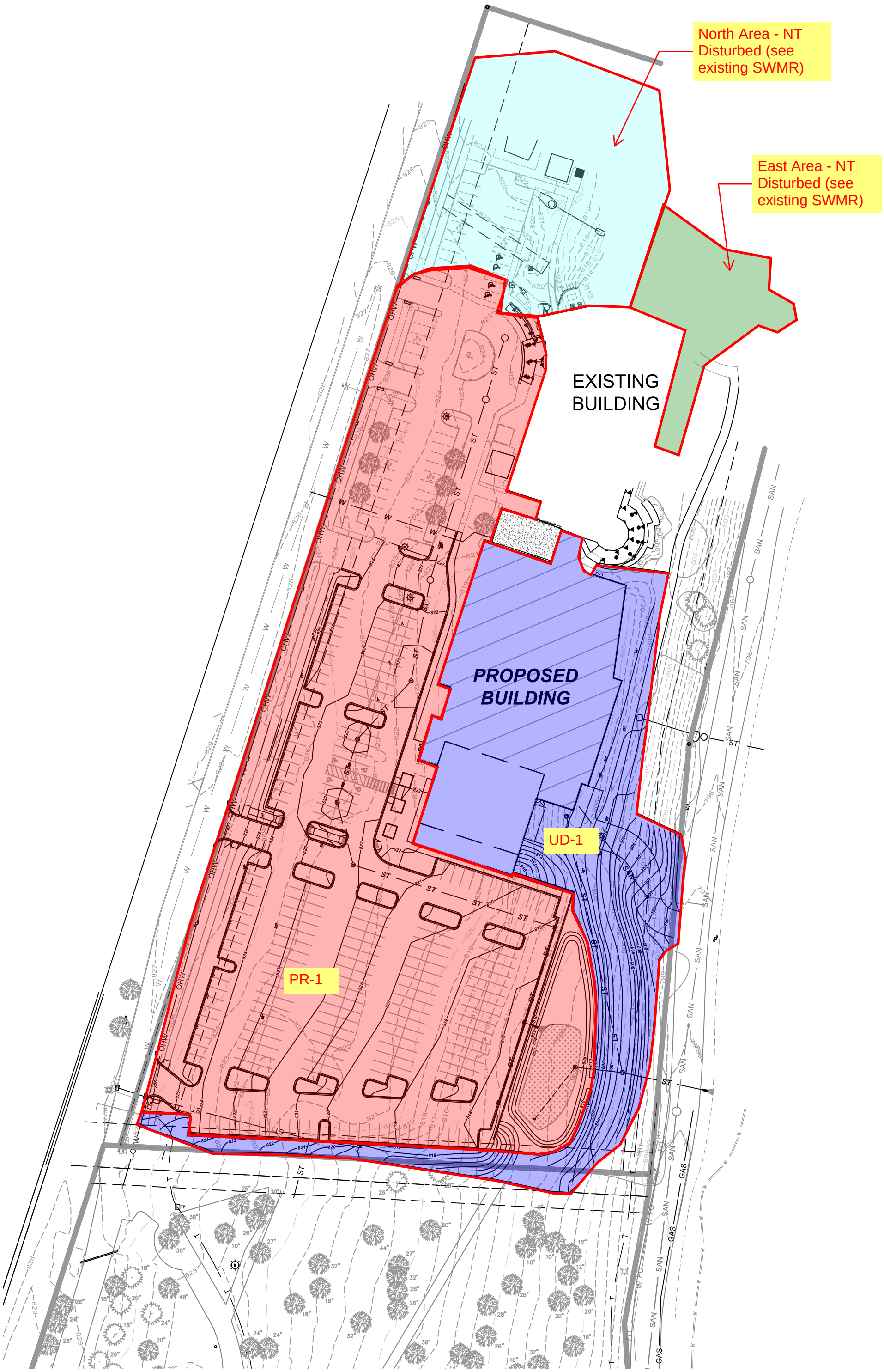
[40] Hint: Not Described (Outflow=Inflow)

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





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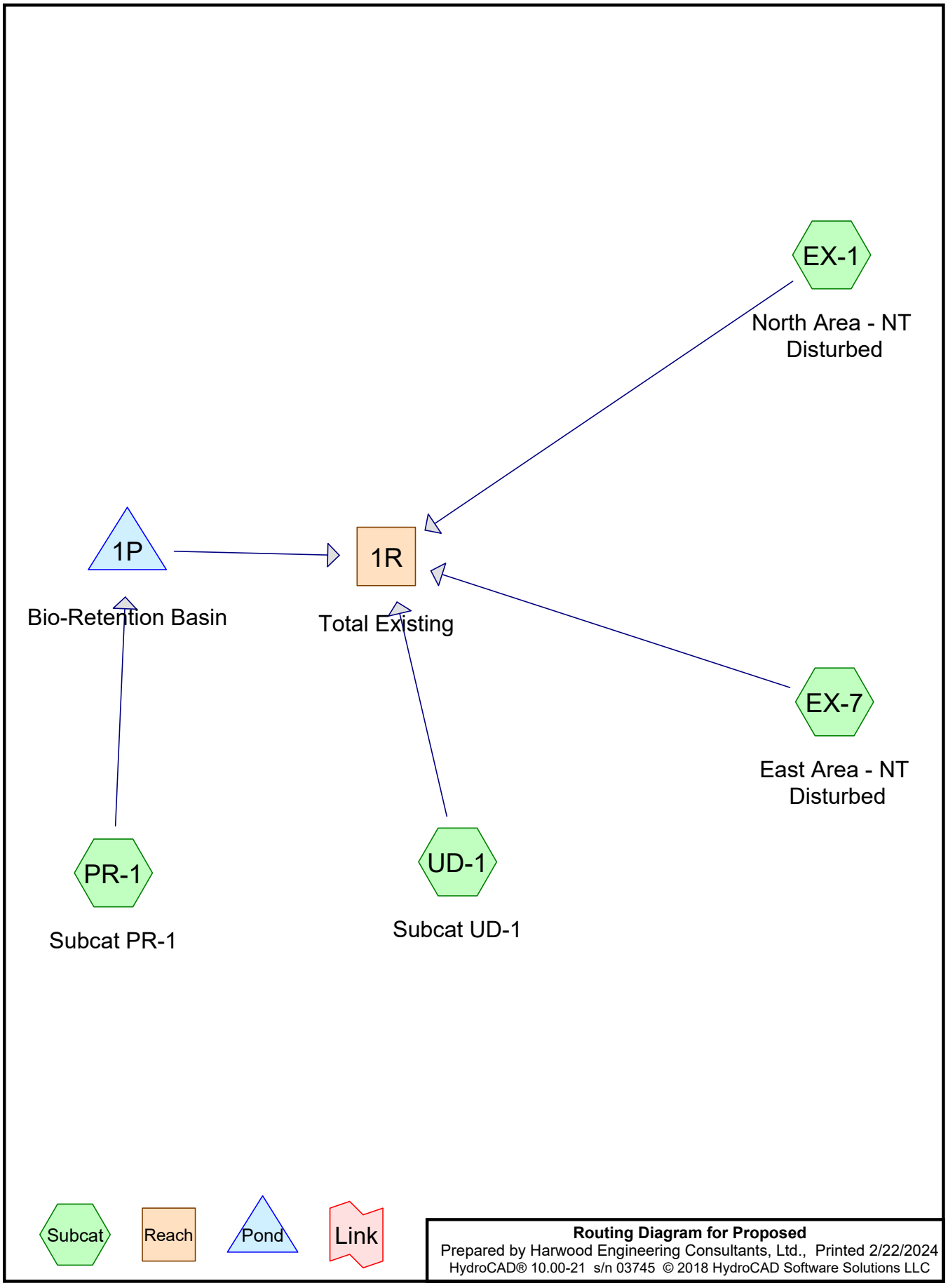
Watertown YMCA

Proposed HydroCAD Map

North

Scale: 1" = 80'



Routing Diagram for Proposed
Prepared by Harwood Engineering Consultants, Ltd., Printed 2/22/2024
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Proposed
Prepared by Harwood Engineering Consultants, Ltd. Printed 2/22/2024
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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**

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

Subcatchment EX-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

Subcatchment EX-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

Subcatchment PR-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

Subcatchment UD-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-Retention Basin 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

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

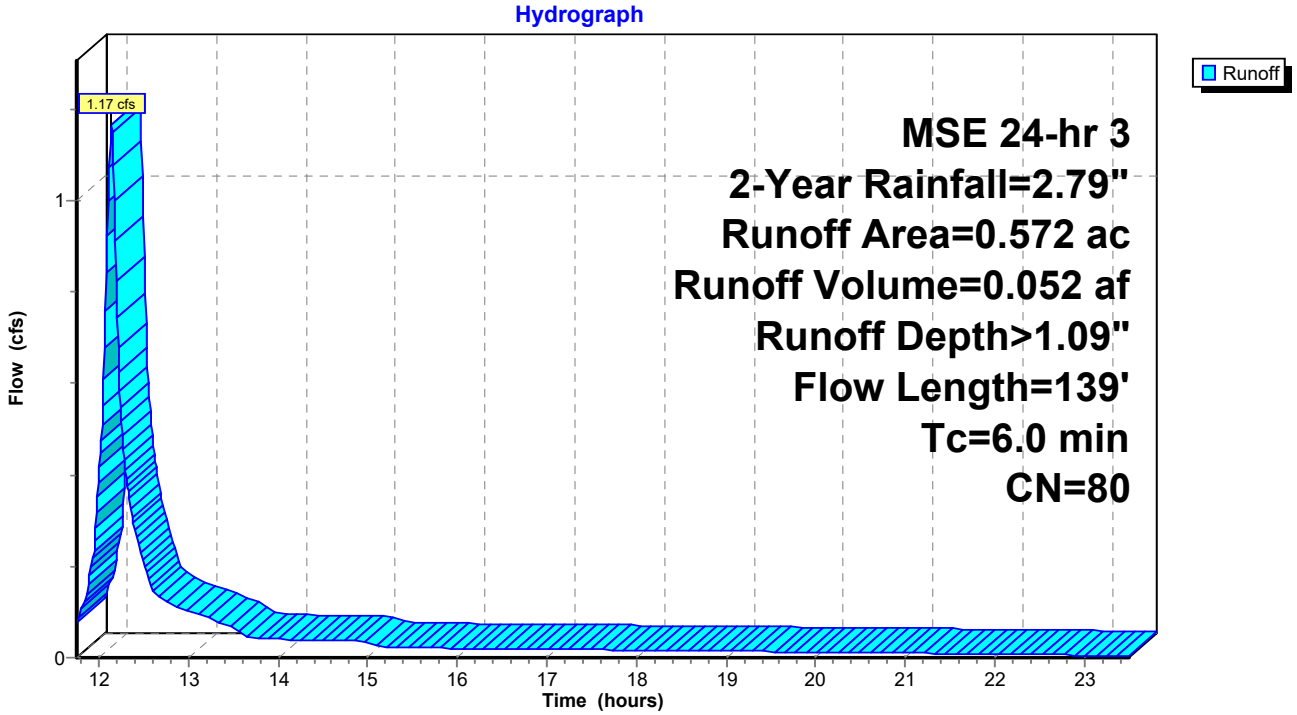
Runoff = 1.17 cfs @ 12.14 hrs, Volume= 0.052 af, Depth> 1.09"

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



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

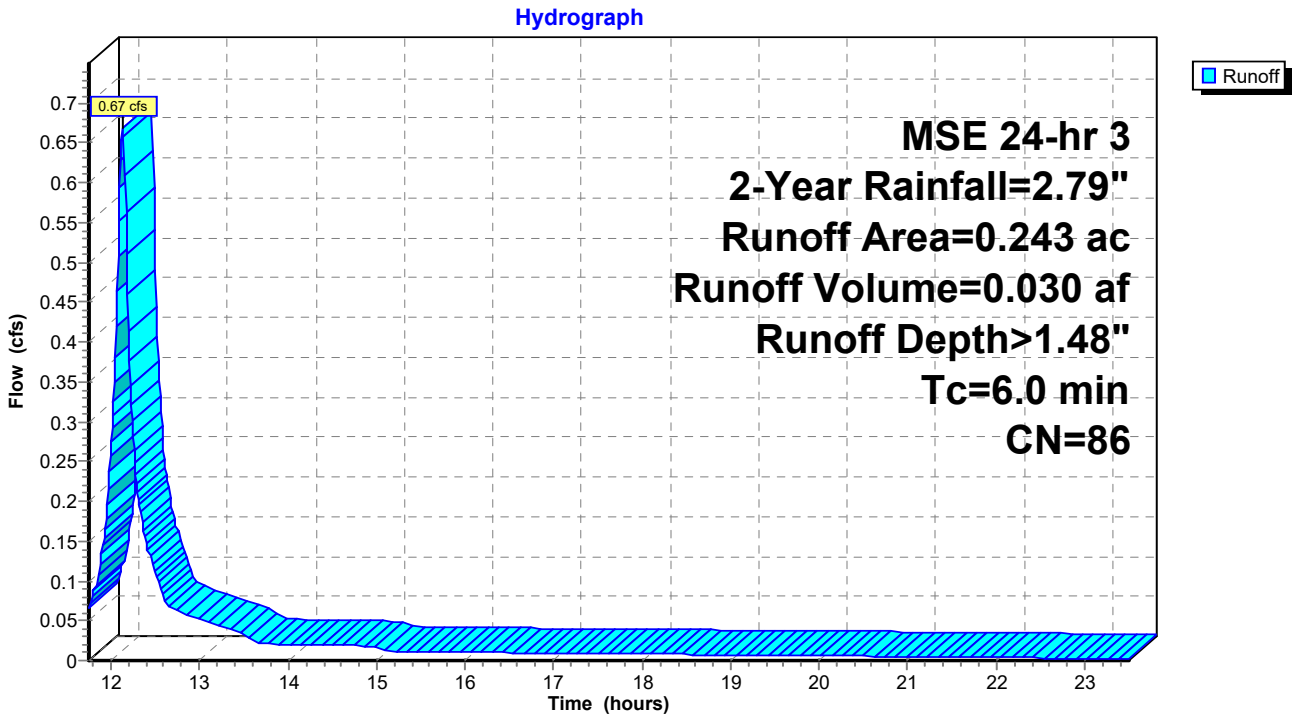
Runoff = 0.67 cfs @ 12.13 hrs, Volume= 0.030 af, Depth> 1.48"

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



Summary for Subcatchment PR-1: Subcat PR-1

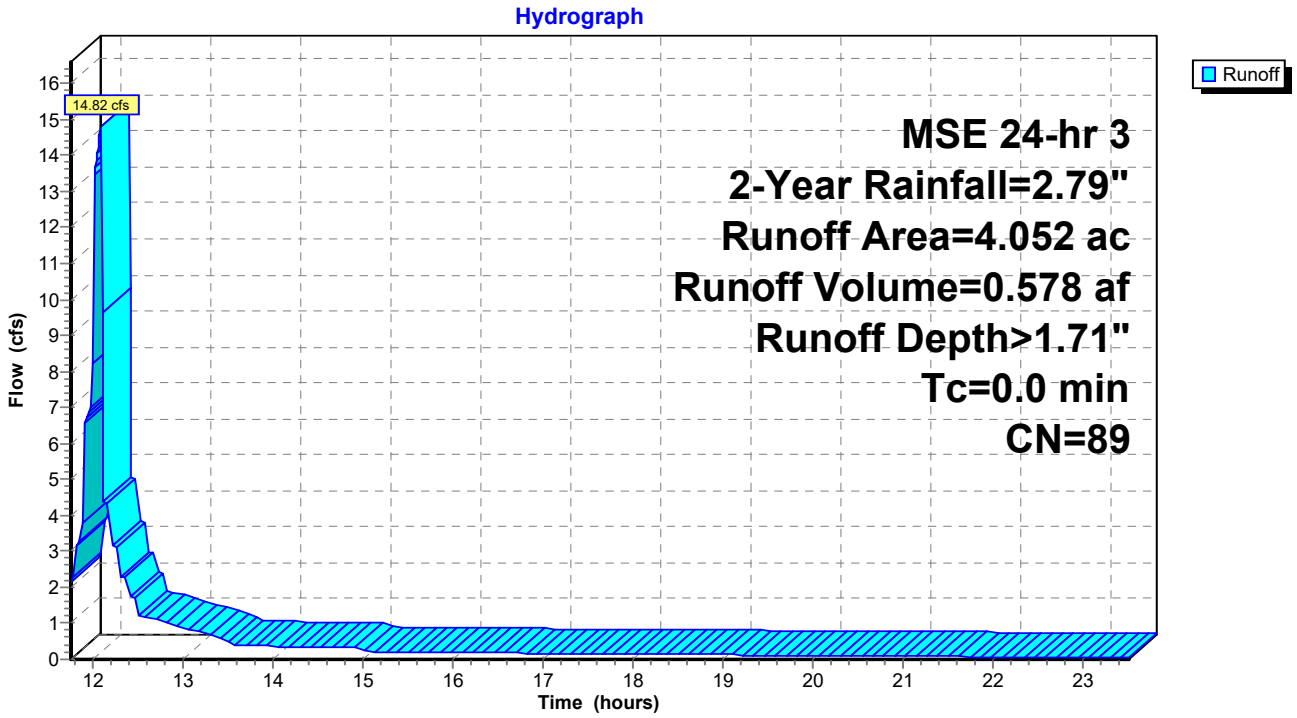
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

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



Summary for Subcatchment UD-1: Subcat UD-1

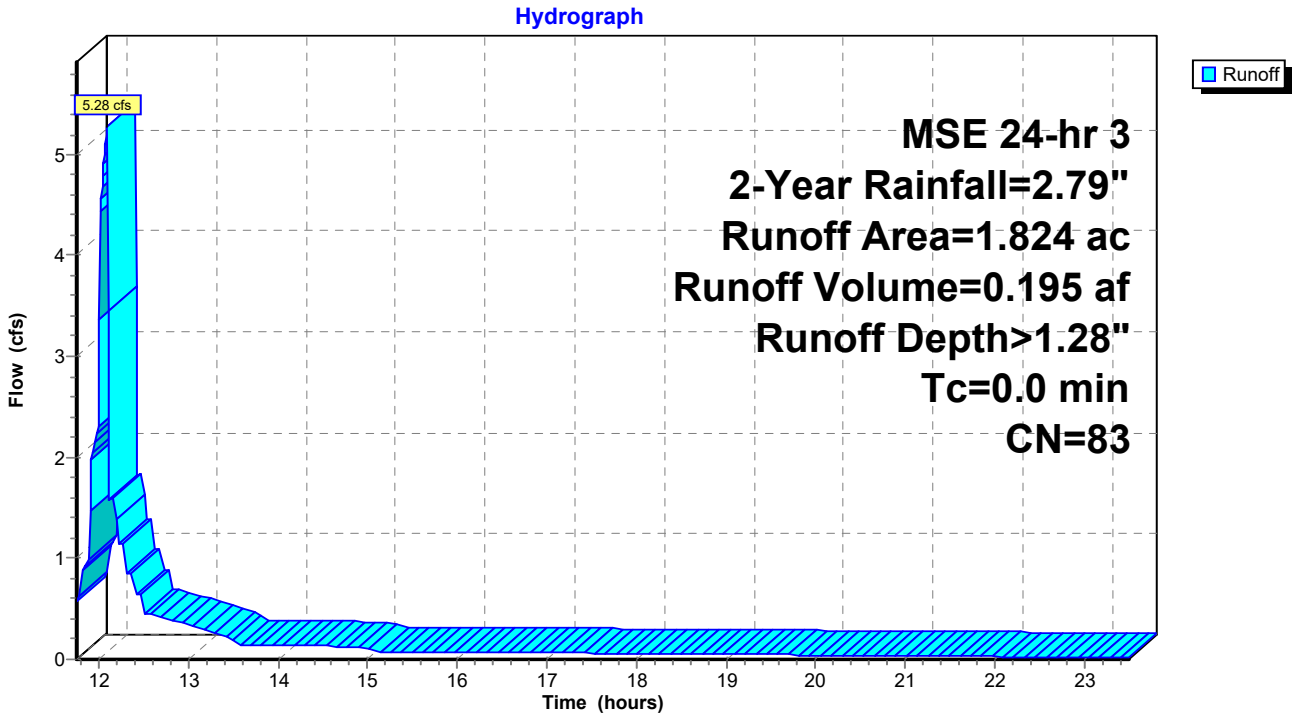
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

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



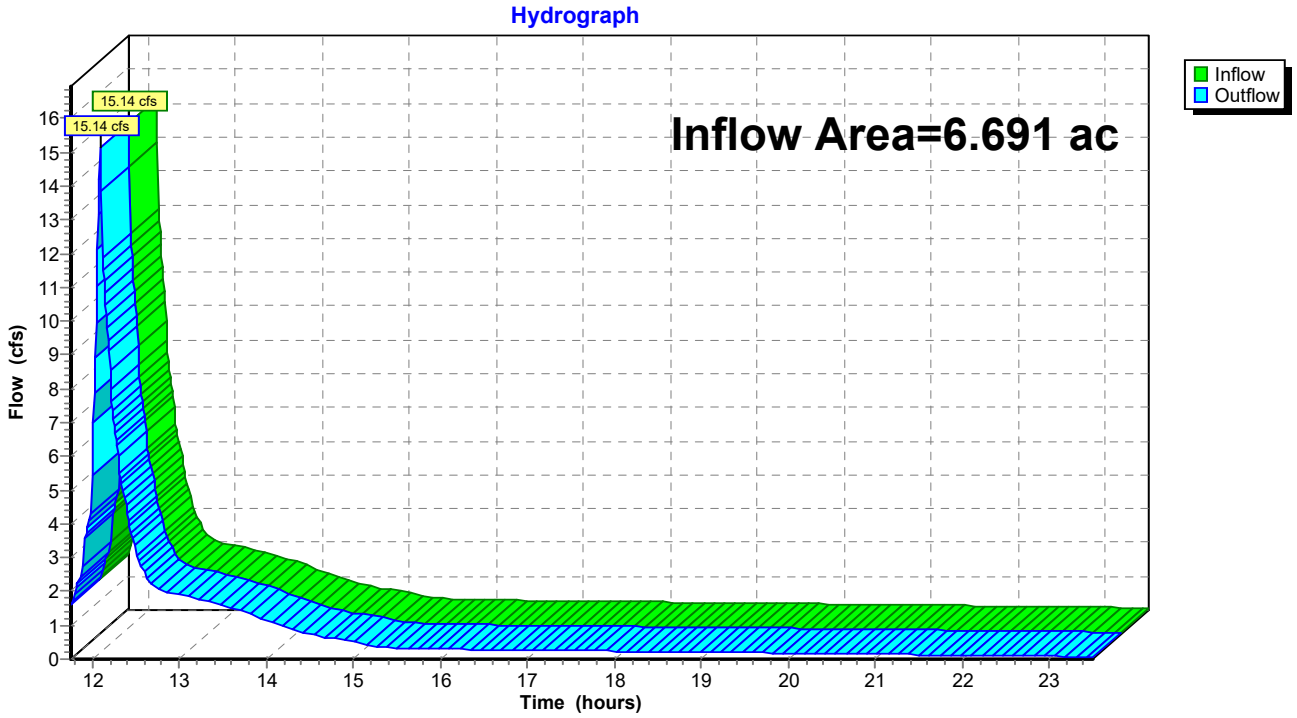
Summary for Reach 1R: Total Existing

[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



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)

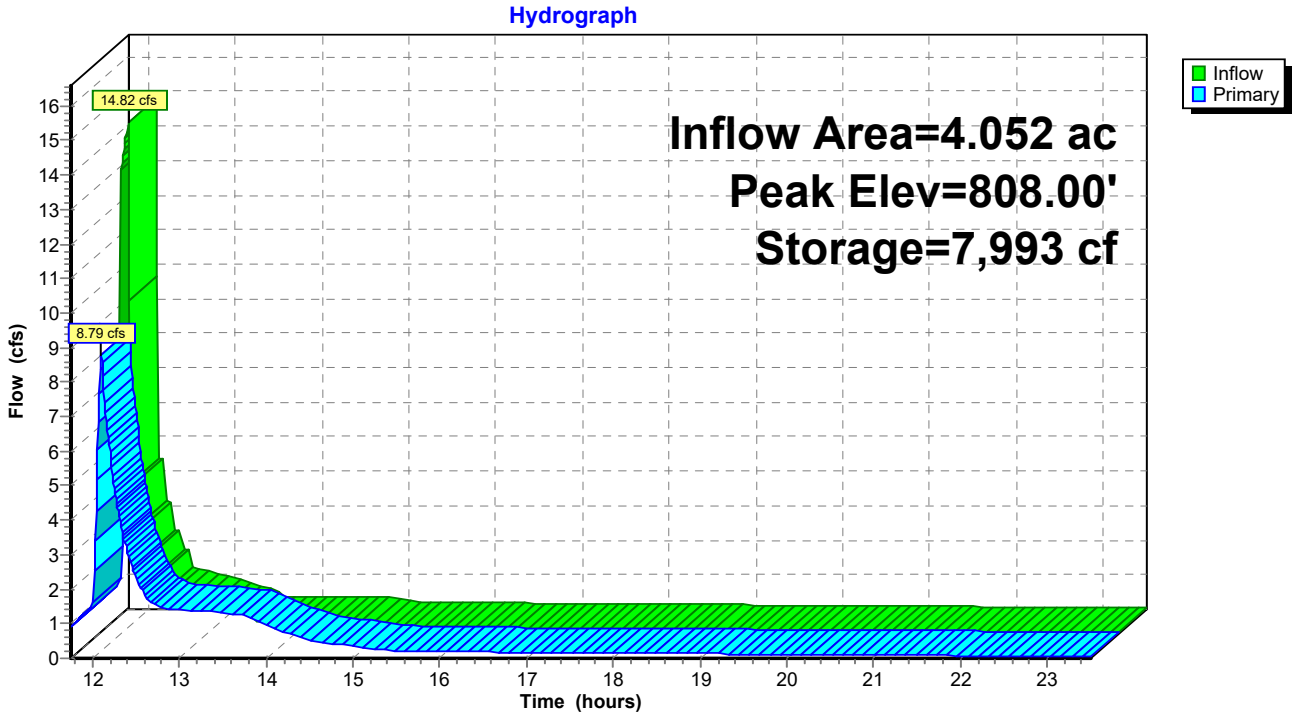
Volume	Invert	Avail.Storage	Storage Description
#1	804.49'	30,111 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

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)

Pond 1P: Bio-Retention Basin



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

Subcatchment EX-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

Subcatchment EX-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

Subcatchment PR-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

Subcatchment UD-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-Retention Basin 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

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

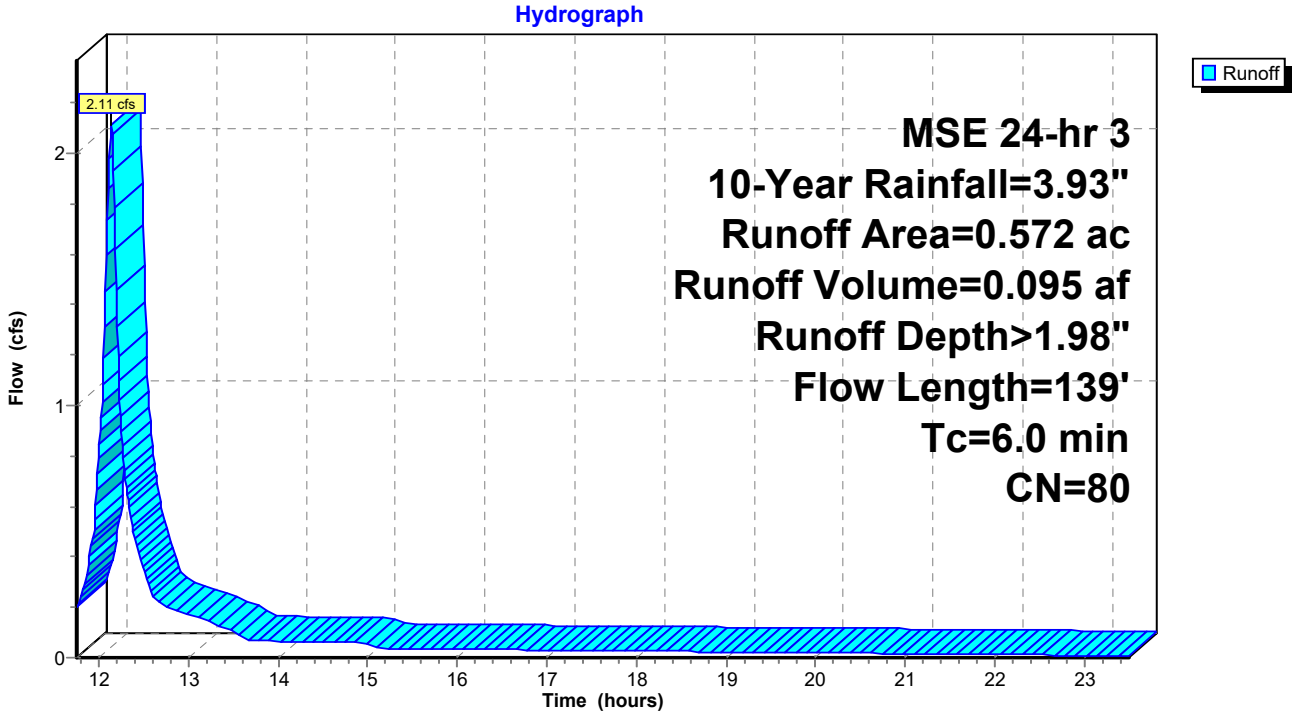
Runoff = 2.11 cfs @ 12.13 hrs, Volume= 0.095 af, Depth> 1.98"

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



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

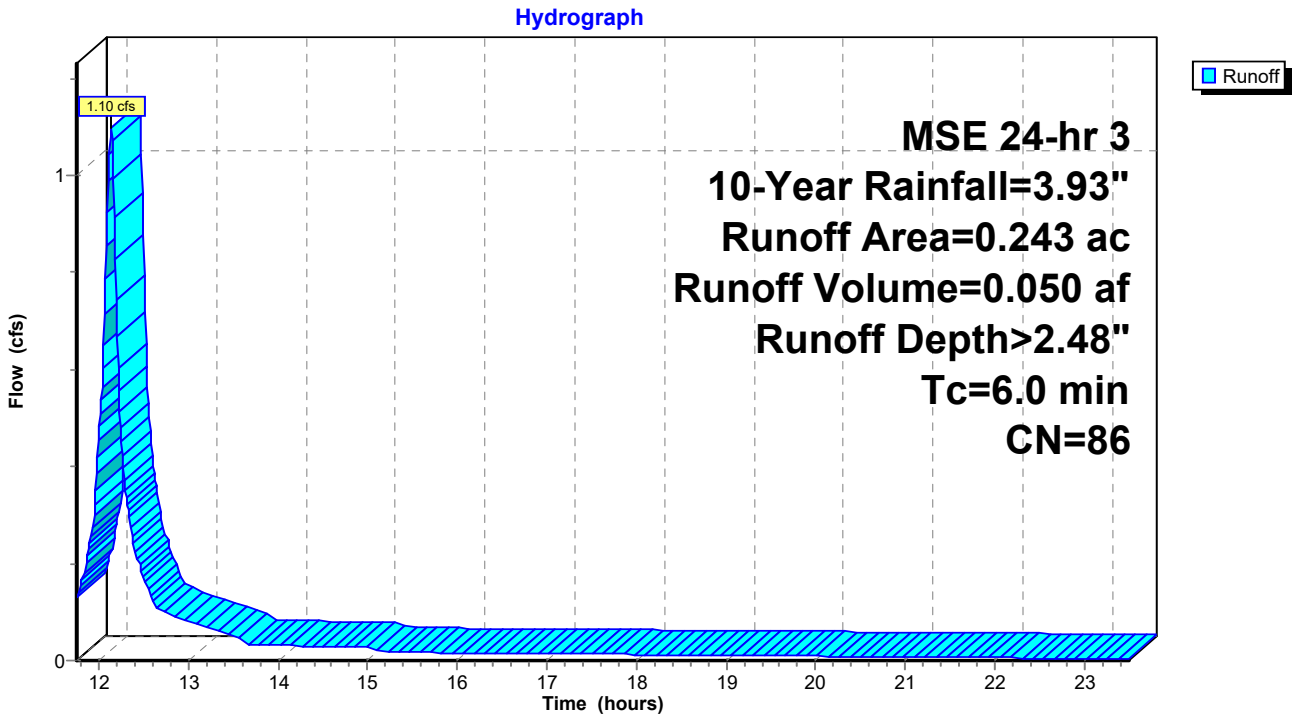
Runoff = 1.10 cfs @ 12.13 hrs, Volume= 0.050 af, Depth> 2.48"

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



Summary for Subcatchment PR-1: Subcat PR-1

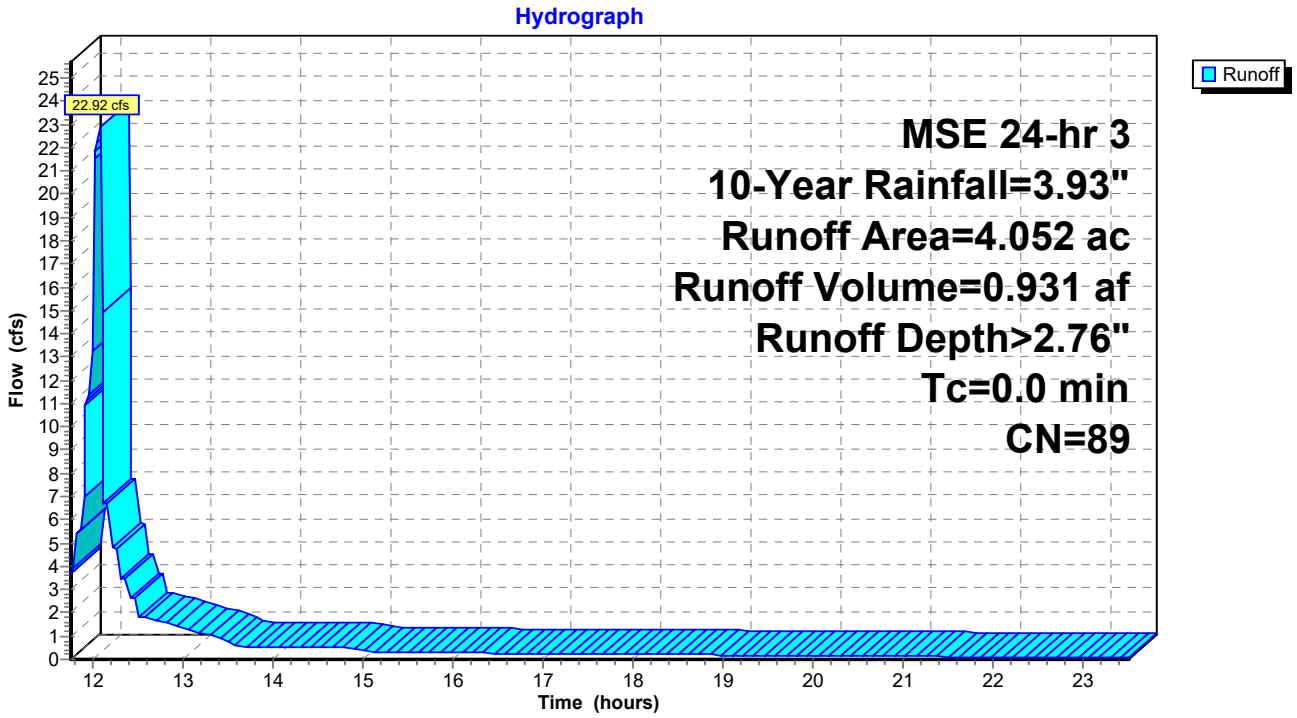
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

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



Summary for Subcatchment UD-1: Subcat UD-1

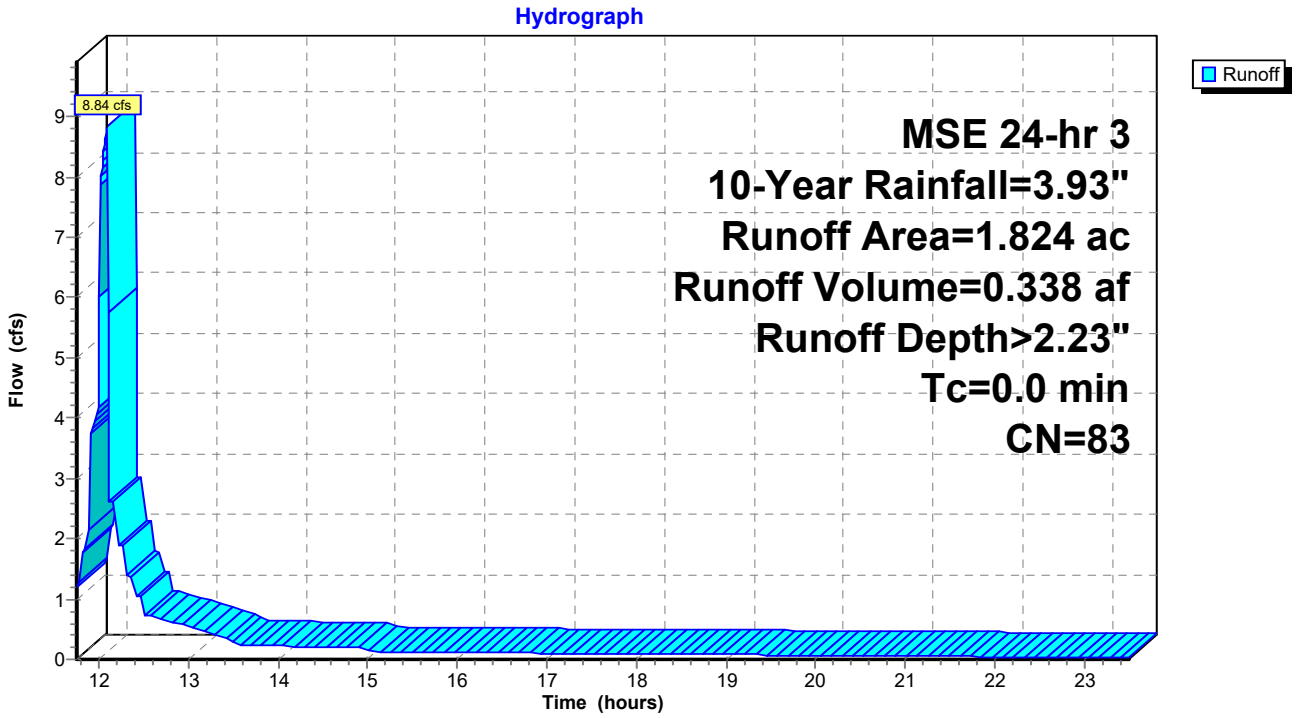
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

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



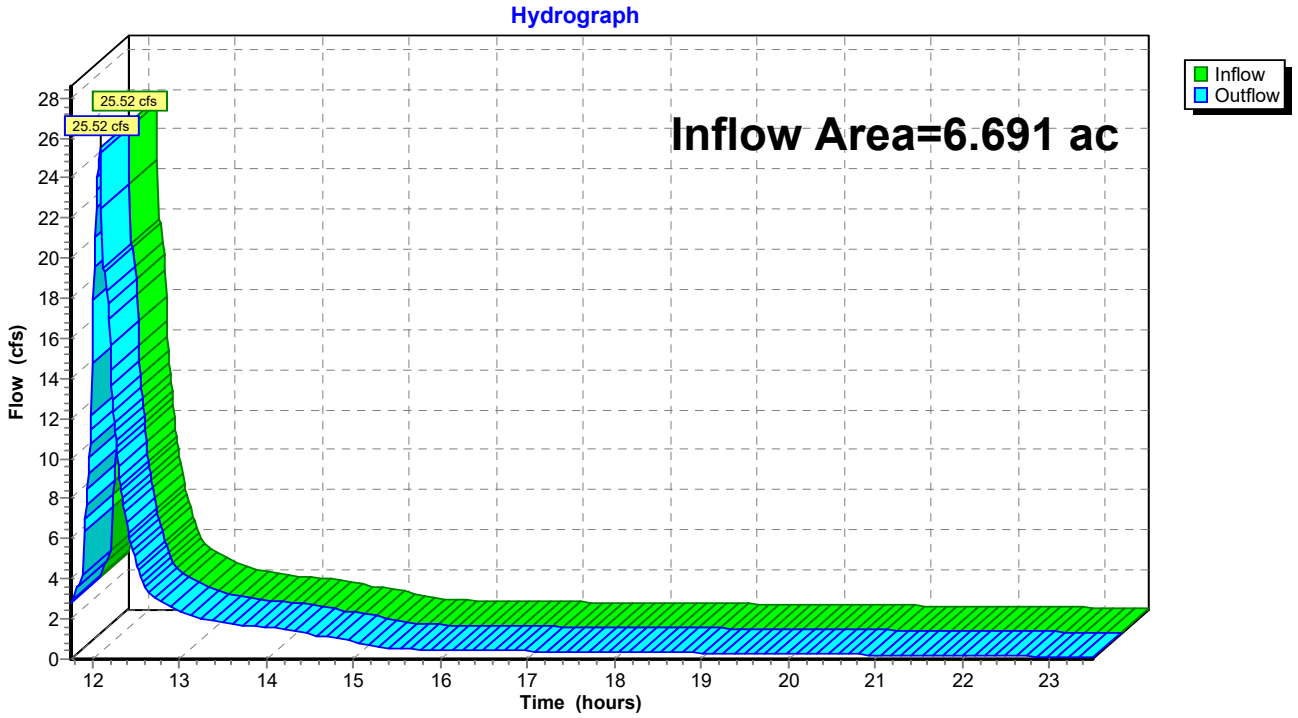
Summary for Reach 1R: Total Existing

[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



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)

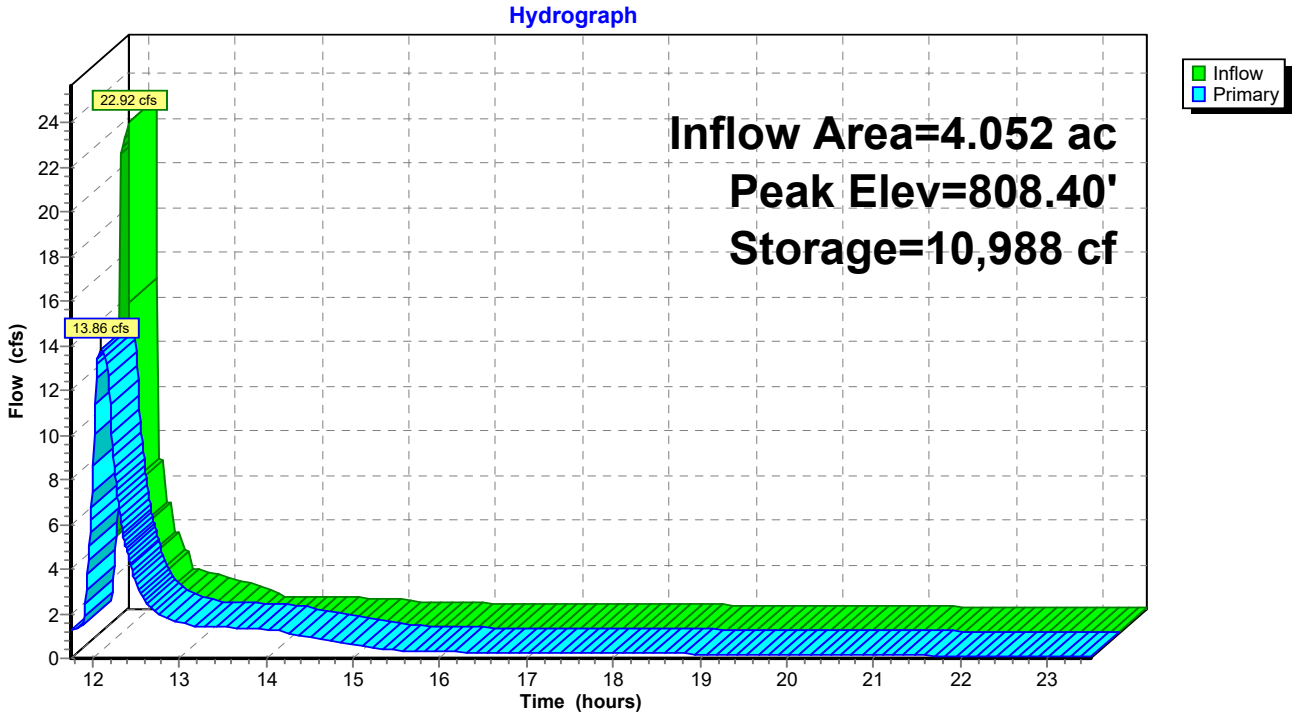
Volume	Invert	Avail.Storage	Storage Description
#1	804.49'	30,111 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

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)

Pond 1P: Bio-Retention Basin



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

Subcatchment EX-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

Subcatchment EX-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

Subcatchment PR-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

Subcatchment UD-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-Retention Basin 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

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

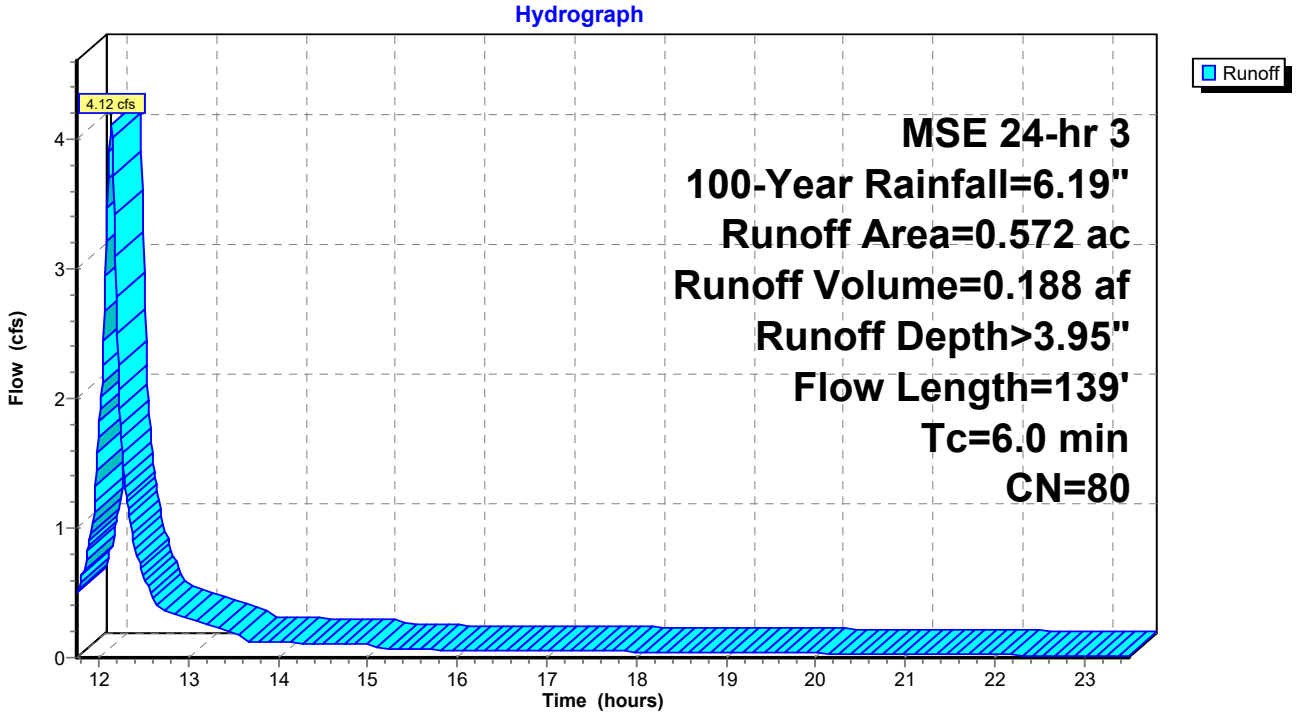
Runoff = 4.12 cfs @ 12.13 hrs, Volume= 0.188 af, Depth> 3.95"

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



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

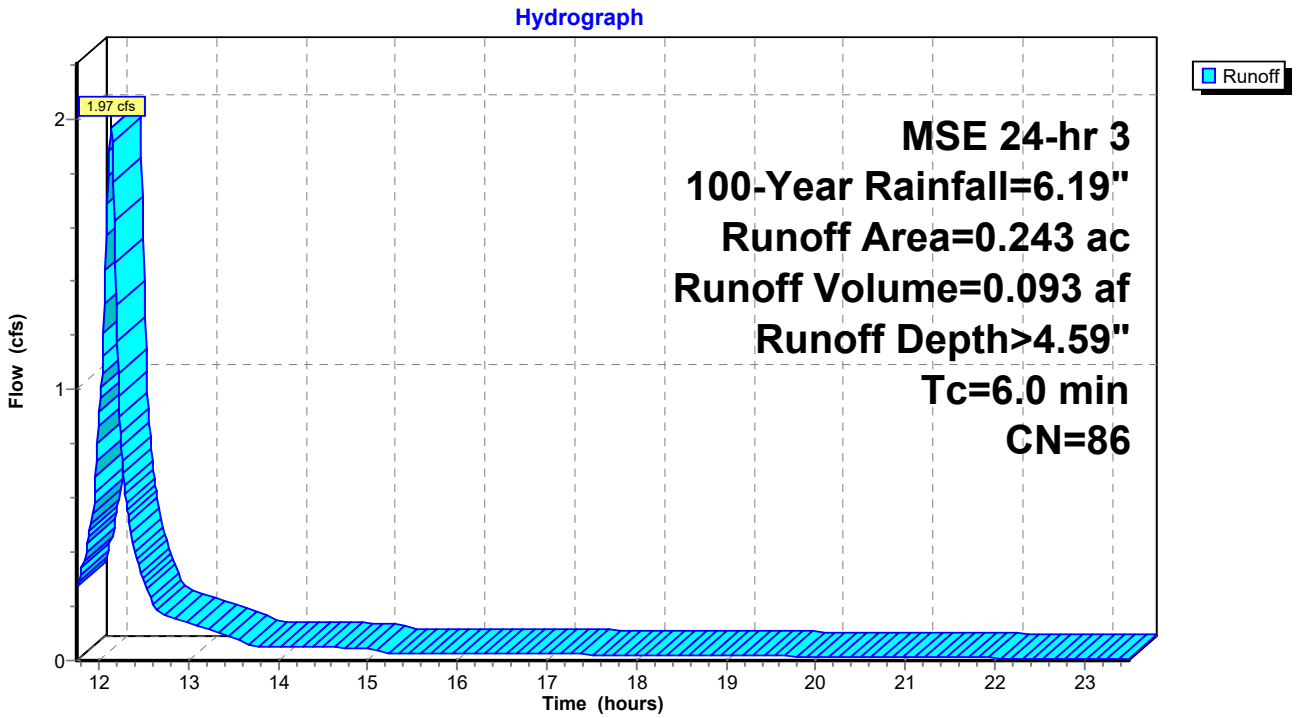
Runoff = 1.97 cfs @ 12.13 hrs, Volume= 0.093 af, Depth> 4.59"

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



Summary for Subcatchment PR-1: Subcat PR-1

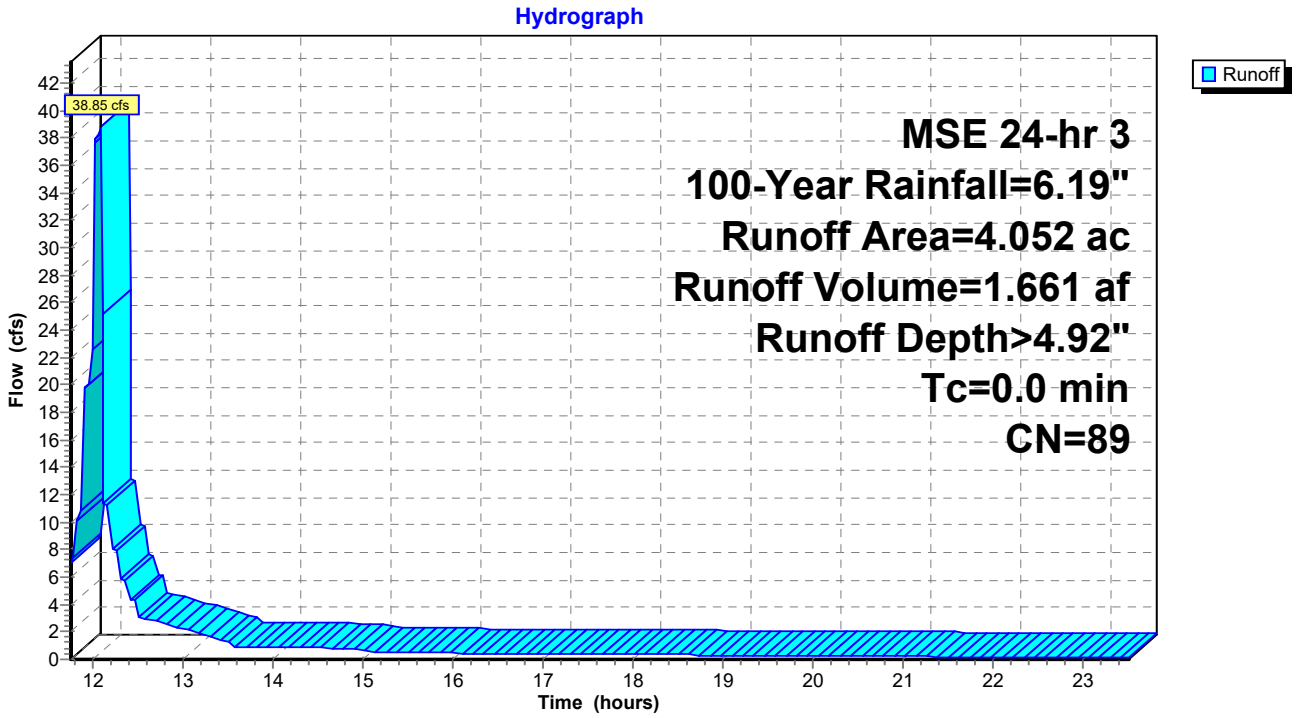
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

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



Summary for Subcatchment UD-1: Subcat UD-1

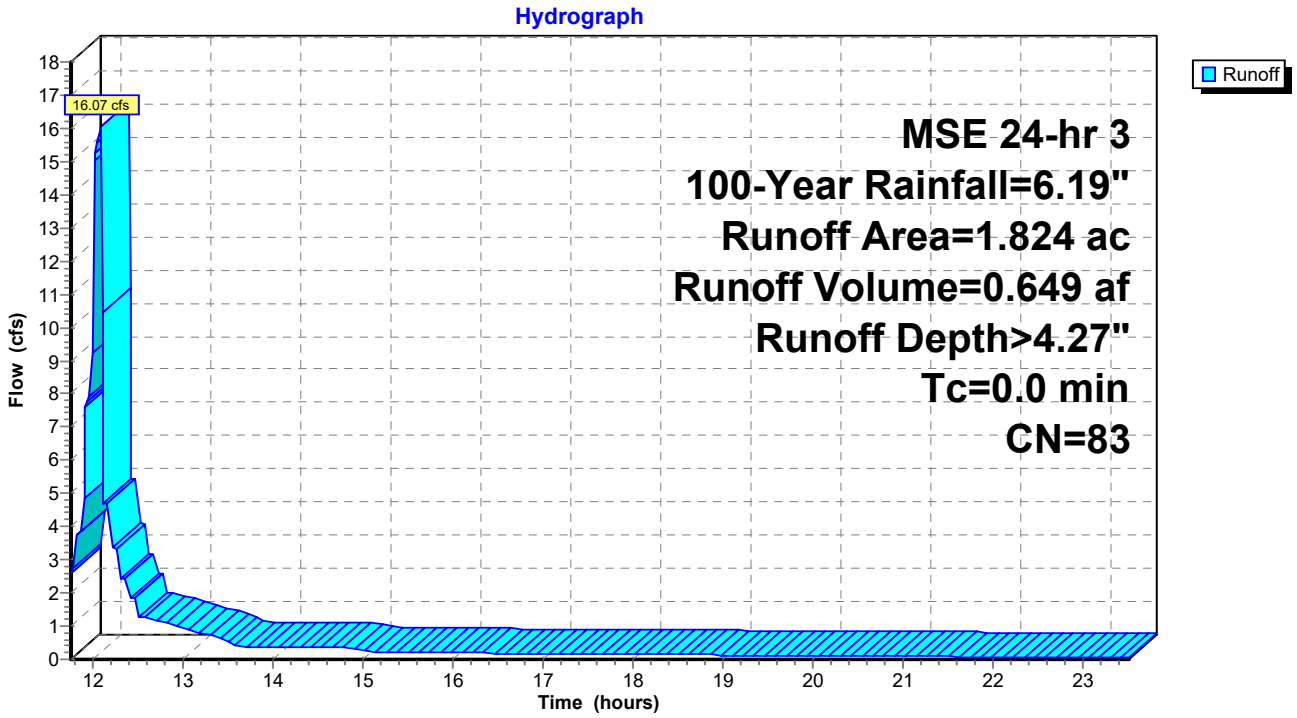
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

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



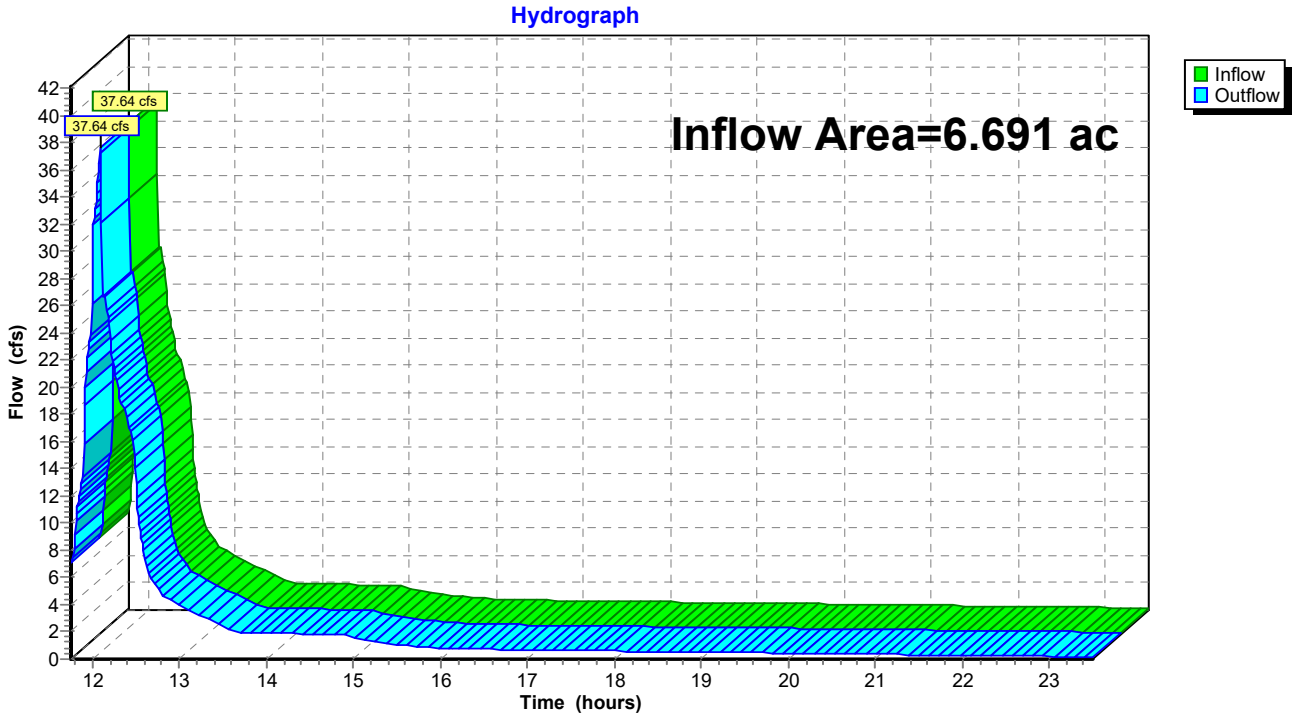
Summary for Reach 1R: Total Existing

[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



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)

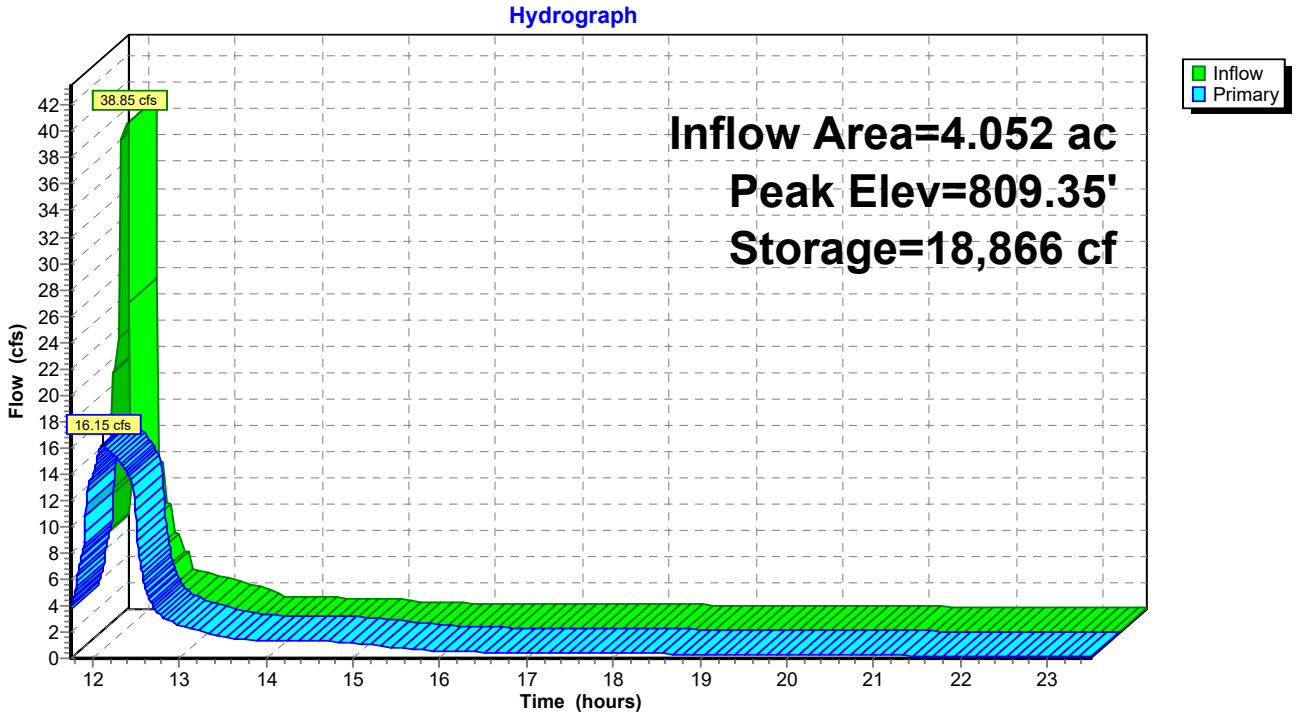
Volume	Invert	Avail.Storage	Storage Description
#1	804.49'	30,111 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

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

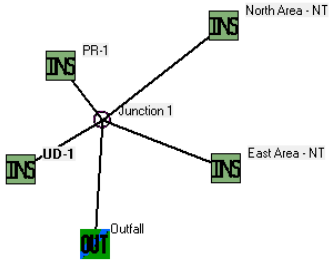
Device	Routing	Invert	Outlet Devices
#1	Primary	805.00'	**18.0" Round Culvert** L= 123.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 805.00' / 791.00' S= 0.1138 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 1.77 sf
#2	Primary	809.50'	**5.0' long x 5.0' breadth Broad-Crested 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)

Pond 1P: Bio-Retention Basin



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.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: 15:46:40
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	Years in Model Run:	1.00		1846	

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	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 Files to Adjust the After Event Load Street Dirt Mass Balance: False
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
Seed for random number generator: -42
Study period starting date: 01/01/81 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:

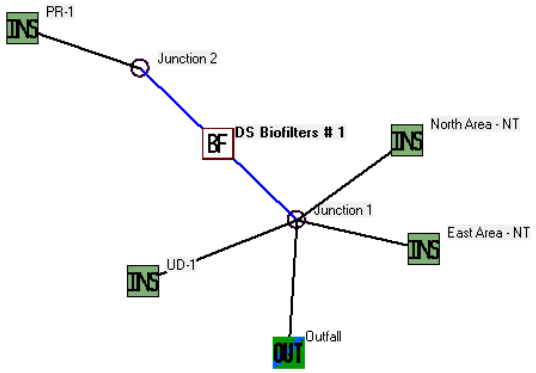
LU# 1 - Institutional: PR-1 Total area (ac): 4.053
1 - Roofs 1: 0.010 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 2.713 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
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 aea (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)	11099
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)	
Perforated (check if Yes)	
Bottom Elevation (ft above datum)	
Discharge Orifice Diameter (ft)	

Select Native Soil Infiltration Rate

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

Add **Sharp Crested Weir**

Weir Length (ft)	
Height from datum to bottom of weir opening (ft)	

Remove **Broad Crested Weir-Reqrd**

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?	☐
Fraction of available capacity when irrigation starts (0-1)	
Fraction of available capacity when irrigation stops (0-1)	

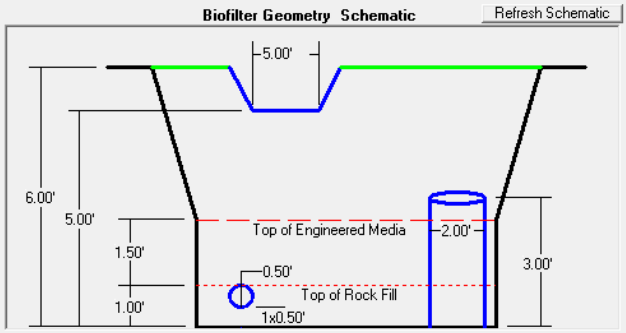
Evaporation

Month	Evapotrans-piration (in/day)	Evapor (in/d
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		

Plant Types

	1	2	3	4
Fraction of biofilter that is vegetated				
Plant type				
Root depth (ft)				
ET Crop Adjustment Factor				

Biofilter Geometry Schematic — Refresh Schematic



Estimated Surface Drain Time = 1.67 hrs.

Save or Delete Biofilter Data to Database File

Get Biofilter Data From Database File

Press 'F1' for Help

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

Cancel

Continue

Control Practice # : 1

CP Index # : 1

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	Years in Model Run:	1.00		1003	

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	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

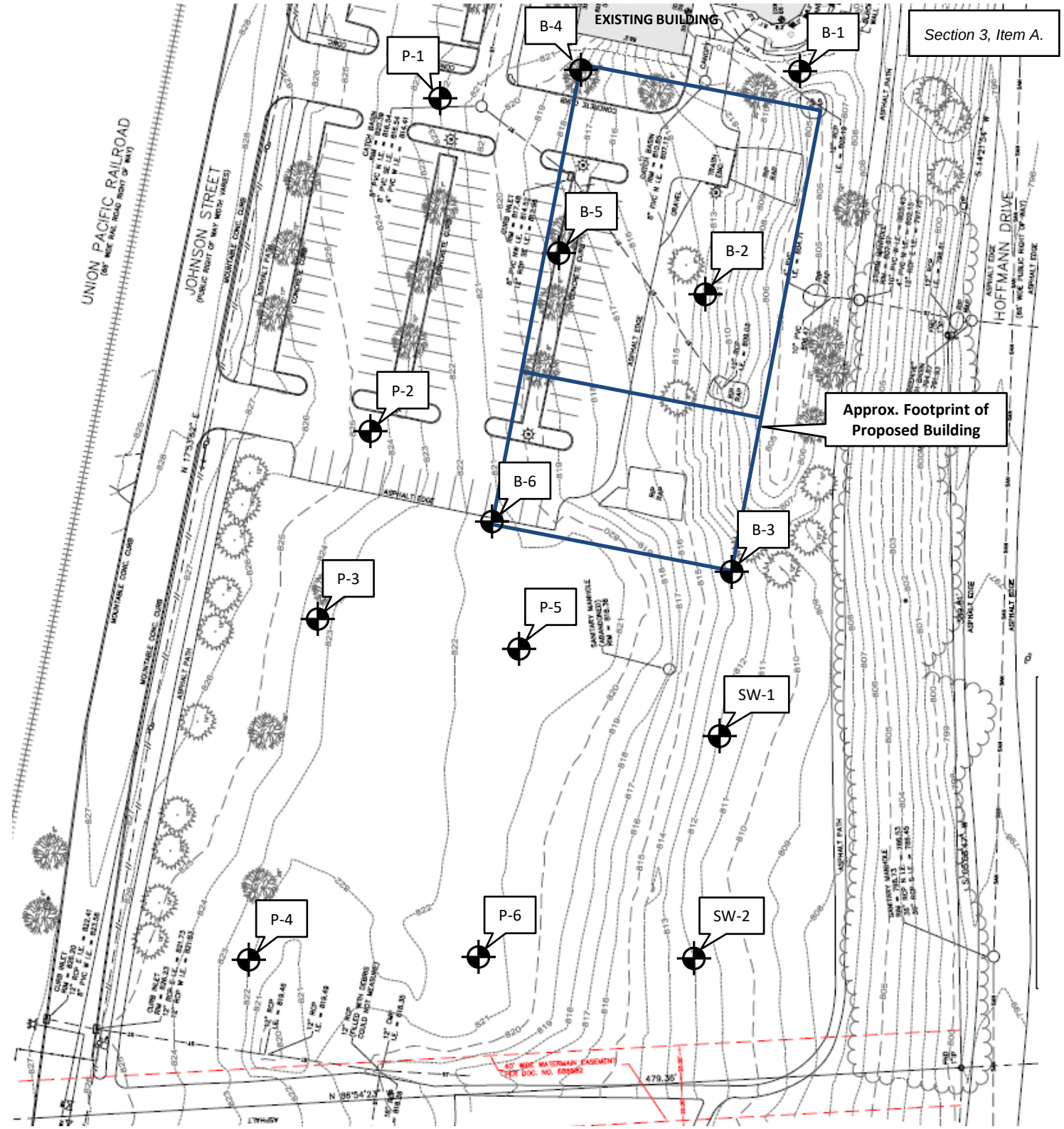
Perform Outfall Flow Duration Curve Calculations

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

Bx — 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.

GRAPHIC SCALE
30 0 60 (IN FEET)

N

Job No. CM23167	**CGC, Inc.**	**SOIL BORING LOCATION EXHIBIT** **Proposed Watertown Building Dev.** **Johnson Street** **Watertown, Wisconsin**
Date: 11-6-23		69

CGC Inc.

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 No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	qu (qa) (tsf)	W	LL	PL	LOI
						FILL: 5" Black Clayey Topsoil					
1		3	M	100/ 6"		FILL: Dark Brown Sandy, Gravelly Silt		3.0			
						Very Dense, Light Brown SILT; Little Sand and Gravel (ML)					
2		8	M	100/ 12"	5						
						Very Dense, Light Brown SILT; Little Fine Sand (ML)					
3		10	W	100/ 11"							
						Very Dense, Gray SILT; Little Fine Sand (ML)					
4		13	M	100/ 15"	10						
						Very Dense, Gray SILT; Little Sand and Gravel, Few Cobbles/Boulders (ML)					
5		8	VM	100/ 11"	15						
6		0	-	30/ 0"	20	End of Boring & Auger Refusal at 21 ft Backfilled with Bentonite Chips					
					25						
					30						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **6.0'±** Upon Completion of Drilling **12.0'**
Time After Drilling
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

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

CGC Inc.

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 No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES 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			
						Medium Dense, Light Brown and Gray Mottled SILT; Little Sand and Gravel (ML)					
2		18	VM	16							
					5						
3		18	M	37		Dense to Very Dense, Light Brown SILT; Little Sand and Gravel, Few Sand Seams/Layers (ML)					
4		18	M	63							
					10						
5A/B		18	W	43							
					15	Dense to Very Dense, Gray SILT; Little Sand and Gravel, Few Sand Seams/Layers (ML)					
6		12	W/M	61							
					20						
7		6	M	100/ 6"							
					25	End of Boring at 25 ft Backfilled with Bentonite Chips					
					30						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **12.0'±** Upon Completion of Drilling **19.0'**
Time After Drilling
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

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

CGC Inc.

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 No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	LOI
						FILL: 18" Black Clayey Topsoil					
1	■	18	M	25		FILL: Brown Silty Sand, Trace Gravel		6.8			
						Medium Dense, Brown SAND; Little Silt, Trace Clay and Gravel (SP-SM)					
2A/B	■	18	M	20	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

While Drilling ▽ **6.0'±** Upon Completion of Drilling **12.0'**
Time After Drilling
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

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

CGC Inc.

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 No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	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)					
					5						
3		18	M	22							
					▽						
4		16	W/M	100/ 16"		Very Dense, Light Brown SILT; Little Sand and Gravel (ML)		8.2			
					10						
						Very Dense, Gray SILT; Little Sand and Gravel (ML)					
5		14	M	100/ 14"							
					15						
					▼	Very Dense, Light Brown SILT; Little Sand and Gravel (ML)					
6		15	W	100/ 15"							
					20						
						Very Dense, Gray SILT; Little Sand and Gravel (ML)					
7		4	M	100/ 4"							
					25						
						End of Boring at 25 ft Backfilled with Bentonite Chips					
					30						

WATER LEVEL OBSERVATIONS

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

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

GENERAL NOTES

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

CGC Inc.

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 No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	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	5	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							
					10						
5		15	M	100/ 15"							
6		12	W	100/ 12"		Very Dense, Light Brown SAND; Trace Silt and Gravel (SP)					
					15	Very Dense, Light Brown SILT; Little Sand and Gravel (ML)					
7		6	M	100/ 6"							
					20						
						Very Dense, Gray SILT; Little Sand and Gravel (ML)					
8		7	VM	100/ 7"							
					25	End of Boring at 25 ft Backfilled with Bentonite Chips					
					30						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **13.5'±** Upon Completion of Drilling **10.0'**
Time After Drilling
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

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

CGC Inc.

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 No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	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)					
					5						
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			
					10	▼					
						Dense to Medium Dense, Light Brown SILT; Little Sand and Gravel (ML)					
5		18	M	70							
					15						
6		16	M/W/M	100/16"							
					20						
7		12	W	14							
					25	End of Boring at 25 ft Backfilled with Bentonite Chips					
					30						

WATER LEVEL OBSERVATIONS

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

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

GENERAL NOTES

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

CGC Inc.

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 No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	LOI
						4.5" ASPHALT over 8" CRUSHED STONE BASE COURSE					
1	■	18	M	14		FILL: Dark Brown Sandy Clay, Trace to Little Gravel	(4.5+)	10.5			
2A/B	■	18	M	27		Medium Dense, Brown Silty SAND; Trace Gravel (SM)					
					5	Stiff, Brown Mottled Silty CLAY; Little Sand, Trace Gravel (CL-ML)					
3	■	18	M	27		Medium Dense to Very Dense, Light Brown SILT; Trace to Little Sand and Gravel, Trace Clay (ML)					
4	■	10	M	58	▽						
					10	End of Boring at 10 ft Backfilled with Soil Cuttings					
					15						
					20						
					25						
					30						

WATER LEVEL OBSERVATIONS

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

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

GENERAL NOTES

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

CGC Inc.

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 No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	LOI
						3.5" ASPHALT over 5.5" CRUSHED STONE BASE COURSE					
1A/B	■	16	M	13		FILL: Brown Sandy Silt, Trace Gravel		10.6			
						Black to Dark Gray Sandy CLAY; with Organics (OL) (BURIED TOPSOIL)					
2A/B	■	18	M	11			(2.0)				
					5	Stiff, Brown Sandy CLAY; Trace to Little Gravel (CL)					
					▽						
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

While Drilling ▽ **6.0'±** Upon Completion of Drilling **NW**
Time After Drilling **(perched)**
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

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

CGC Inc.

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 No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES 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			
						Medium Dense to Very Dense, Light Brown SILT; Little Sand and Gravel (ML)					
2	■	12	M	27							
					5						
3	■	15	M	64							
4	■	12	M	100/ 13"							
					10	End of Boring at 10 ft Backfilled with Soil Cuttings					
					15						
					20						
					25						
					30						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

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

CGC Inc.

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 No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES 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			
						Medium Dense, Light Brown and Gray Mottled Sandy SILT; Trace Gravel (ML)					
2		18	M	22							
					5						
3		18	M	17		Medium Dense to Very Dense, Light Brown Sandy SILT; Trace Gravel (ML)					
4		12	M/W	100/ 15" ▽							
					10	End of Boring at 10 ft Backfilled with Soil Cuttings					
					15						
					20						
					25						
					30						

WATER LEVEL OBSERVATIONS

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

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

GENERAL NOTES

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

CGC Inc.

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 No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES 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						
						FILL: Mix of Dark Brown Sandy Clay and Topsoil, Trace Gravel					
3A/B	■	18	M	11			(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					
					15						
					20						
					25						
					30						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

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

CGC Inc.

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 No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES 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)					
					5	Medium Dense, Brown Silty SAND; Trace Gravel and Clay (SM)					
3	■	18	M	38		Dense, Light Brown and Gray Mottled SILT; Trace to Little Sand and Gravel, Few Clay Seams (ML)	(3.5)				
						Medium Dense, Light Brown Sandy SILT; Trace Gravel (ML)					
4	■	18	M	21	10	End of Boring at 10 ft Backfilled with Soil Cuttings					
					15						
					20						
					25						
					30						

WATER LEVEL OBSERVATIONS

While Drilling ▽ **NW** Upon Completion of Drilling **NW**
Time After Drilling
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

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

CGC Inc.

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 No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	LOI
						FILL: 18" Black Clayey Topsoil					
1A/B	■	14	M	20		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+)				
					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+)				
					10						
5	■	18	M	25		Medium Dense, Gray SILT; Little Fine Sand (ML)					
					▽						
6	■	18	W	34							
					15	End of Boring at 15 ft Backfilled with Bentonite Chips					
					20						
					25						
					30						

WATER LEVEL OBSERVATIONS

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

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

GENERAL NOTES

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

CGC Inc.

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 No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	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	5						
4		18	M	33							
5		10	M	54	10	Dense, Gray SILT; Little Fine Sand (ML)					
6		18	M	44							
					15	End of Boring at 15 ft Backfilled with Bentonite Chips					
					20						
					25						
					30						

WATER LEVEL OBSERVATIONS

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

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

GENERAL NOTES

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

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

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

Please print all information.

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

County	Jefferson
Parcel I.D.	291-0815-0544-004
Review by	**Date**

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

Drainage area: _____ [ ] **sq. ft.** [ ] **acres**

Test Site Suitable for (check all that apply) [ ] **Site not suitable**

[ ] **Bioretention** [ ] **Subsurface Dispersal System**

[ ] **Reuse** [ ] **Irrigation** [ ] **Other** _____

Hydraulic Application Test Method

[X] **Morphological Evaluation**

[ ] **Double-Ring Infiltrometer**

[ ] **Other (Specify)**_____

Soil Moisture
Date of soil borings: 9/15/23
USDA-NRCS WETS Value:

[ ] **Dry = 1**

[X] **Normal = 2**

[ ] **Wet = 3**

SW-1 **Obs. #** [X] **Boring** [ ] **Pit** **Ground Surface Elev.** 812± **ft** **Elevation of limiting factor** 806.5± **ft**

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-18	10YR3/2	--	SIL*	0,m	mfi	a	<5	80	0.13
2	18-36	10YR4/4	--	LS*	0,sg	mfr	a	<5	20	1.63
3	36-48	10YR4/4	--	C	0,m	mvfi	g	<5	90	0.07
4	48-66	10YR3/3	--	SL	0,sg	mfr	g	<5	20	0.50
5	66-126	10YR6/4	c,2,f 10YR7/2	CL	0,m	mfi	g	<5	70	0.03
6	126-180	10YR6/1	--	L	0,m	mvfi	g	<5	60	0.24

Comments: * FILL Groundwater at 13 ft

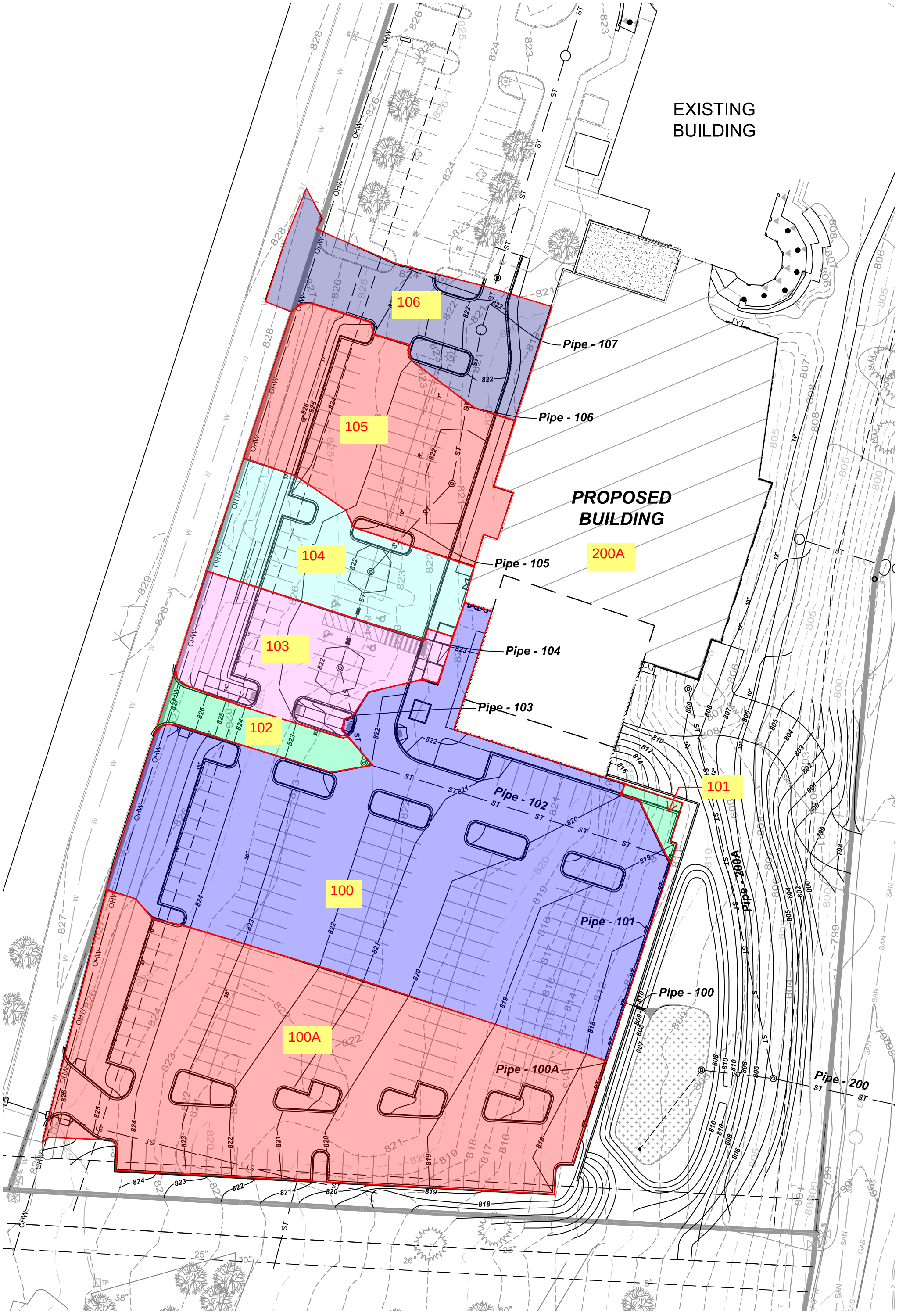
SW-2 **Obs. #** [X] **Boring** [ ] **Pit** **Ground Surface Elev.** 812± **ft** **Elevation of limiting factor** 809± **ft**

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr
1	0-17	10YR2/2	--	SIL	0,m	mfi	g	<5	80	0.13
2	17-36	10YR4/3 & 10YR3/2	--	SIC	0,m	mvfi	g	<5	90	0.07
3	36-126	10YR6/4	c,2,f 10YR7/2	L	0,m	mfi	g	<5	60	0.24
4	126-180	10YR6/2	--	SIL	0,m	mfi	g	<5	80	0.13

Comments: Wet soil at 4 ft

CST/PSS Name (Please Print)	Signature	CST Number
Paul J. Giese, CST	Paul J. Giese	SP-030800004
Address	**Date Evaluation Conducted**	**Telephone Number**
336 S. Curtis Road, West Allis, WI 53214	10/17/23	(414) 443-2000

SBD-10793 (R.01/17)



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Watertown YMCA

Storm Areas

North

Scale: 1" = 50'

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Storm Sewer Calculations

Project: Watertown YMCA
Date: 2/16/2024
Design Storm: 10 Year

Pipe	Drainage Area (AC)	Runoff Coeffcient	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	

LEGEND:

UTILITY

EXISTING:

- WATERMAIN
- BURIED ELECTRIC
- OVERHEAD WIRE
- GAS LINE
- SANITARY SEWER
- STORM SEWER
- UTILITY POLE
- LIGHT POLE
- SANITARY MANHOLE
- FIRE HYDRANT
- WATER VALVE
- STORM SEWER STRUCTURE

PROPOSED:

- WATERMAIN
- ELECTRICAL LINE
- GAS LINE
- SANITARY SEWER
- STORM SEWER
- WATER VALVE
- STORM SEWER STRUCTURE
- FLARED END SECTION

GRADING

EXISTING:

- MAJOR CONTOUR
- MINOR CONTOUR
- EXIST 100.00 — EXISTING SPOT ELEVATION

PROPOSED:

- 160 — MAJOR CONTOUR
- 160 — MINOR CONTOUR
- 100.00 — SPOT ELEVATION (FINISHED GRADE, TOP OF PAVEMENT, FLANGE OF CURB)
- DOOR 100.00 — DOOR ELEVATION
- GR 100.00 — GROUND GRADE AT BUILDING
- 100.50T/C 100.00E/P — SPOT ELEVATION (T/C - TOP OF CURB, E/P - EDGE OF PAVEMENT)
- 100.50T/W 100.00B/W — RETAINING WALL SPOT ELEVATION (T/W - GROUND GRADE AT TOP OF WALL, B/W - GROUND GRADE AT BOTTOM)
- 12" FES 100.00B/W — FLARED END SECTION (PIPE SIZE, INVERT ELEVATION)
- DRAINAGE FLOW DIRECTION
- EMERGENCY OVERFLOW ROUTE

SITE

EXISTING:

- EXISTING PARKING COUNT
- EXISTING SIGN
- EXISTING ADA PARKING SPACE

PROPOSED:

- PARKING COUNT
- ADA PARKING SPACE
- SIGN
- TRUNCATED DOMES
- PAVEMENT MARKING DIRECTIONAL ARROWS

DIGGER'S HOTLINE — CALL BEFORE YOU DIG — 1-800-242-8511

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.

GENERAL NOTES AND SPECIFICATIONS:

1. 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.
2. 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.
3. 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.
4. 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.
5. NOTIFY THE PUBLIC WORKS INSPECTION DEPT. AT LEAST 48 HOURS BEFORE STARTING CONSTRUCTION.
6. 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.)
7. ALL BUILDING UTILITIES SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
8. ALL PROPOSED WATERMAIN SHALL BE PVC SDR 18, CLASS 150, AWWA C900 WITH ELASTOMERIC JOINTS (UNLESS OTHERWISE NOTED).
9. PROPOSED SANITARY SEWER PIPE SHALL BE PVC, ASTM D-3034, SDR 35 WITH RUBBER GASKETED JOINTS CONFORMING TO ASTM D-3212 (UNLESS OTHERWISE NOTED).
10. PROPOSED STORM SEWER SHALL BE PVC, ASTM D-3034, SDR 35 WITH RUBBER ELASTOMERIC JOINTS CONFORMING TO ASTM D-3212 (UNLESS OTHERWISE NOTED).
11. 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.
12. UTILITY TRENCHES SHALL BE MECHANICALLY COMPACTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
13. ALL MANHOLES, CATCH BASINS, INLETS, VALVES BOXES, ETC WITHIN THE PROJECT AREA SHALL BE RESET AND ADJUSTED TO MATCH FINISH GRADE.
14. 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.
15. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING & FOUNDATION DETAILS AND ORIENTATION.
16. ALL ON-SITE CONCRETE CURB AND GUTTER TO BE 18" WIDE VERTICAL FACE, UNLESS OTHERWISE NOTED. REVERSE OR REGULAR STYLE CURB DENOTED ON PLANS.
17. ALL CURB ELEVATIONS ARE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. SEE CURB DETAIL FOR TOP OF CURB ELEVATIONS.
18. ALL CURB RADII ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
19. CONTRACTOR SHALL MATCH PROPOSED CONCRETE CURB AND GUTTER, SIDEWALK AND PAVEMENT TO EXISTING IN ELEVATION AND ALIGNMENT.
20. REMOVAL OF CURB AND GUTTER, SIDEWALK AND PAVEMENT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE WISCONSIN D.O.T.
21. 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.
22. PROTECT ALL PROPERTY CORNERS.
23. 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.
24. PROJECT SAFETY ON-SITE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
25. AS-BUILTS ARE TO BE PROVIDED TO THE CLIENT TRACKING ANY CHANGES THAT OCCURRED DURING CONSTRUCTION.

CIVIL SHEET INDEX:

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

Zimmerman ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zasstudios.com
TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

Consultant:
HARWOOD
255 N 21st Street, Milwaukee, WI 53233 | 414-475-5554

Project:

Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:

PROJECT LOCATION & GENERAL NOTES

Scale:
SCALE: 1" = 30'

North

Revisions:

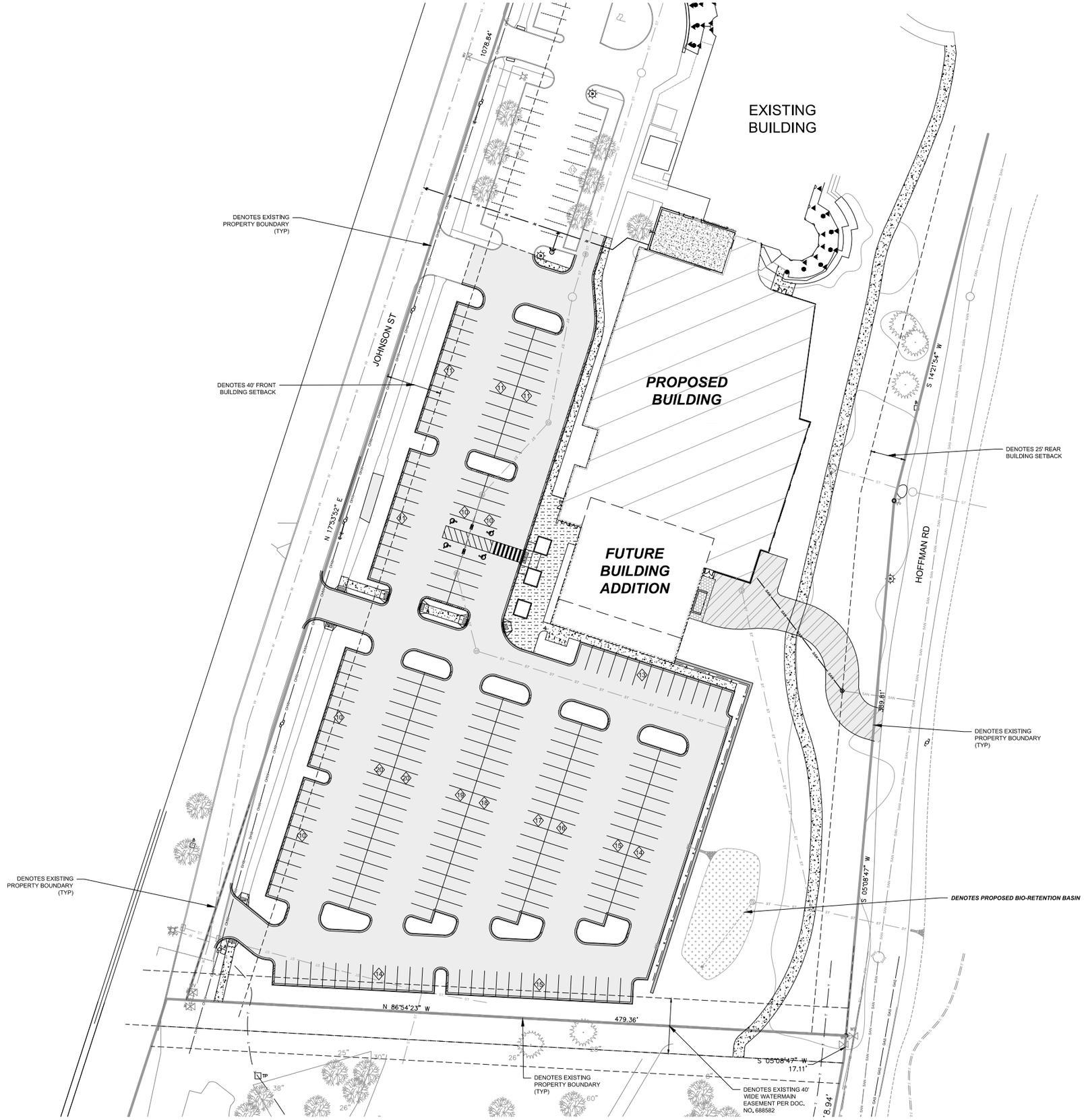
No:	Date:	Description:

Date:
02-23-2024

Project No.: 230049.00

(Owner) Project No.:

Sheet No.:
C1.10



SITE ZONING AND LOCATION TABLE

LEGAL DESCRIPTION:

OUT LOT 27/12TH WARD, EXCEPTTHAT 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

DIGGER'S HOTLINE CALL BEFORE YOU DIG 1-800-242-8511

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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Project:
Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:
SITE PLAN - OVERALL

Scale:
SCALE: 1" = 30'

North

Revisions:

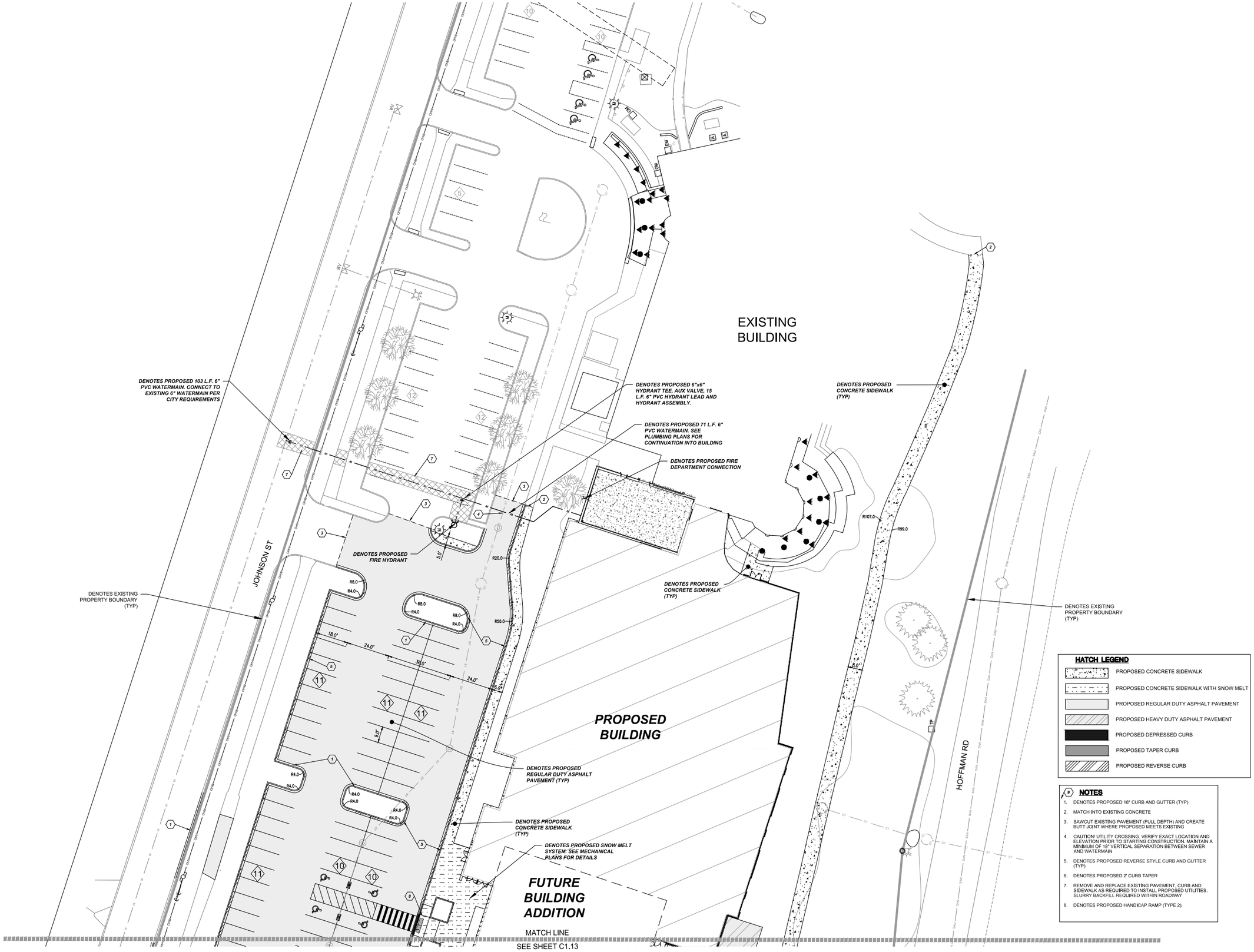
No:	Date:	Description:

Date:
02-23-2024

Project No.: 230049.00

(Owner) Project No.:

Sheet No.:
C1.11



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Project:
Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:
SITE PLAN - NORTH

Scale:
SCALE: 1" = 20'

North

Revisions:

No:	Date:	Description:

Date:
02-23-2024

Project No.: 230049.00

(Owner) Project No.:

Sheet No.:
C1.12

NOTES

1. DENOTES PROPOSED 18" CURB AND GUTTER (TYP)
2. SAWCUT EXISTING PAVEMENT (FULL DEPTH) AND CREATE BUTT JOINT WHERE PROPOSED MEETS EXISTING
3. DENOTES PROPOSED MODULAR BLOCK RETAINING WALL. SEE LANDSCAPE PLANS
4. CAUTION! UTILITY CROSSING. VERIFY EXACT LOCATION AND ELEVATION PRIOR TO STARTING CONSTRUCTION. MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN SEWER AND WATERMAIN
5. CAUTION! UTILITIES. VERIFY EXACT LOCATION AND ELEVATION PRIOR TO STARTING CONSTRUCTION
6. DENOTES PROPOSED REVERSE STYLE CURB AND GUTTER (TYP)
7. NOT USED
8. REMOVE AND REPLACE EXISTING PAVEMENT, CURB AND SIDEWALK AS REQUIRED TO INSTALL PROPOSED UTILITIES. SLURRY BACKFILL REQUIRED WITHIN ROADWAY
9. DENOTES PROPOSED PLANTERS (TYP). SEE LANDSCAPE PLANS
10. DENOTES PROPOSED DUMPSTER LOCATION.
11. DENOTES PROPOSED HANDICAP RAMP (TYPE 4).
12. DENOTES PROPOSED FENCE. SEE LANDSCAPE PLANS
13. DENOTES PROPOSED BIKE RACKS. SEE LANDSCAPE PLANS

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

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Project:

Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:

SITE PLAN - SOUTH

Scale:
SCALE: 1" = 20'

North

Revisions:

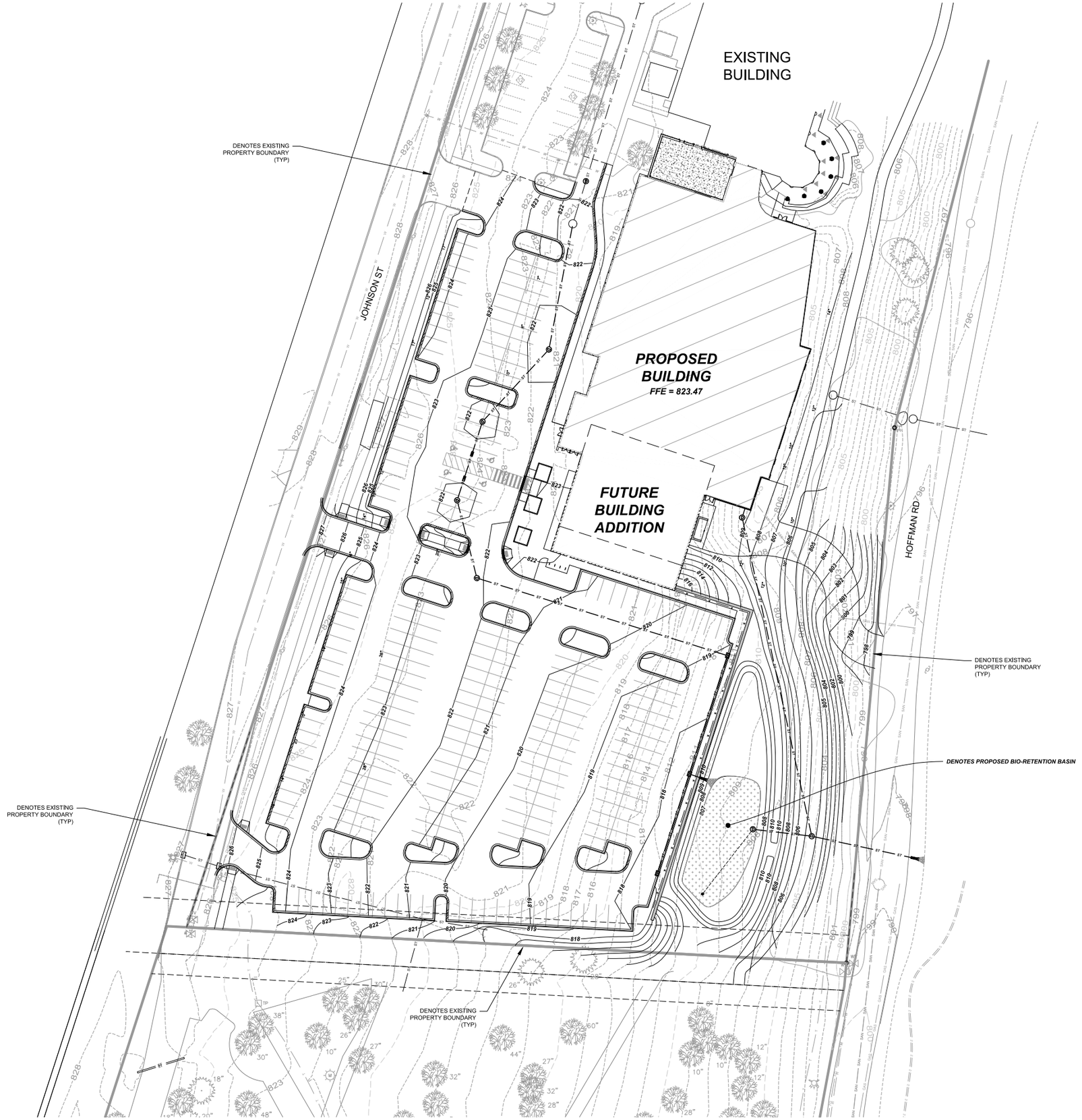
No:	Date:	Description:

Date:
02-23-2024

Project No.: 230049.00

(Owner) Project No.:

Sheet No.:
C1.13



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Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:

GRADING PLAN - OVERALL

Scale:
SCALE: 1" = 30'

North

Revisions:

No:	Date:	Description:

Date:
02-23-2024

Project No.: 230049.00

(Owner) Project No.:

Sheet No.:

C1.20

#	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 - 106 = 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 - 108 = 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 = 809.06 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 = 809.00 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

DIGGER'S HOTLINE
CALL BEFORE YOU DIG
1-800-242-8511

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.

zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zasstudios.com
TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

Consultant:
HARWOOD
255 N 21st Street, Milwaukee, WI 53233 | 414-476-5554

Project:

Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:

GRADING PLAN - NORTH

Scale:
SCALE: 1" = 20'

North

Revisions:

No:	Date:	Description:

Date:
02-23-2024

Project No.: 230049.00

(Owner) Project No.:

Sheet No.:

C1.21

#	Structure Details	#	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 – 106 = 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 – 108 = 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 = 809.06 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 = 809.00 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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GRADING PLAN - SOUTH

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North

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02-23-2024

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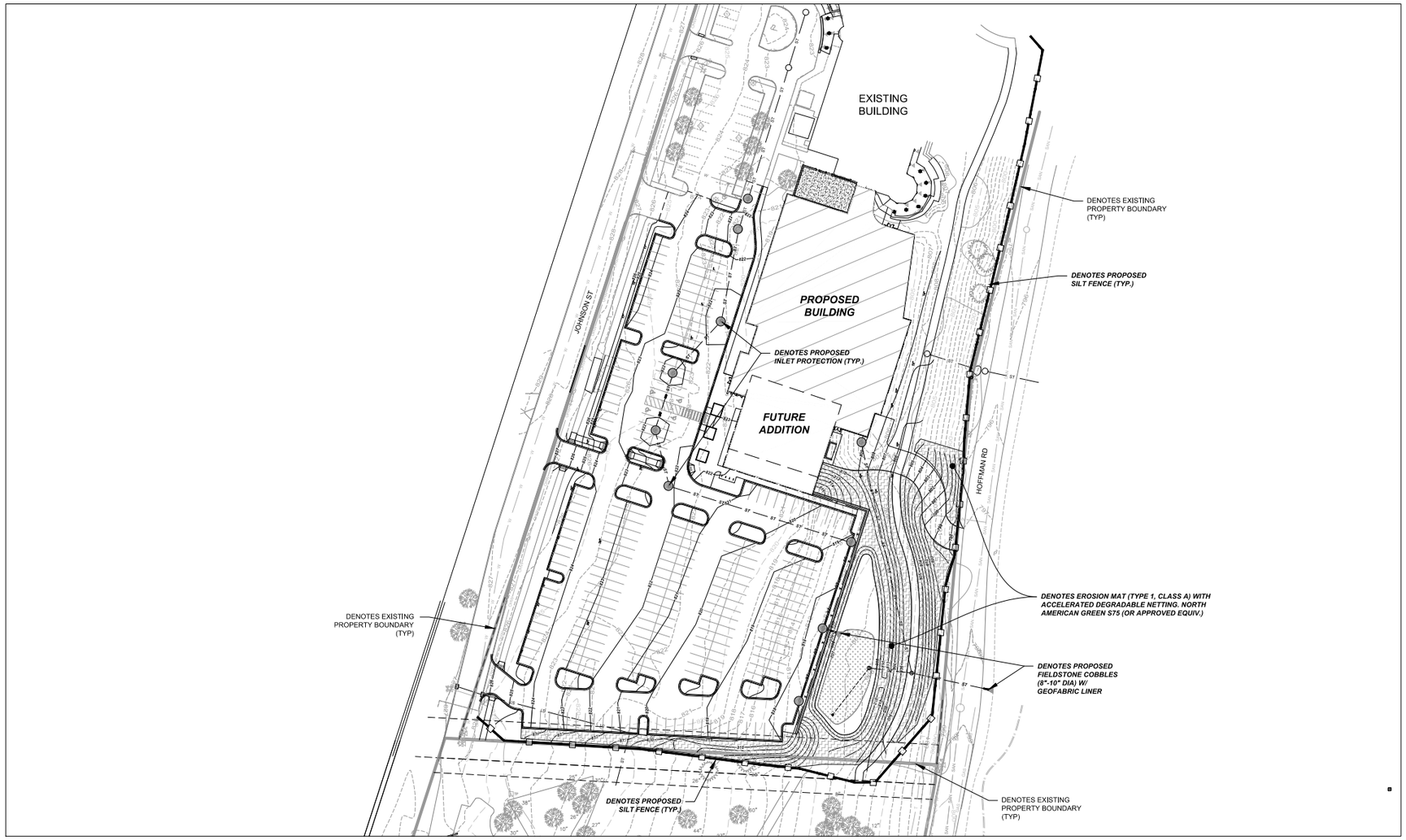
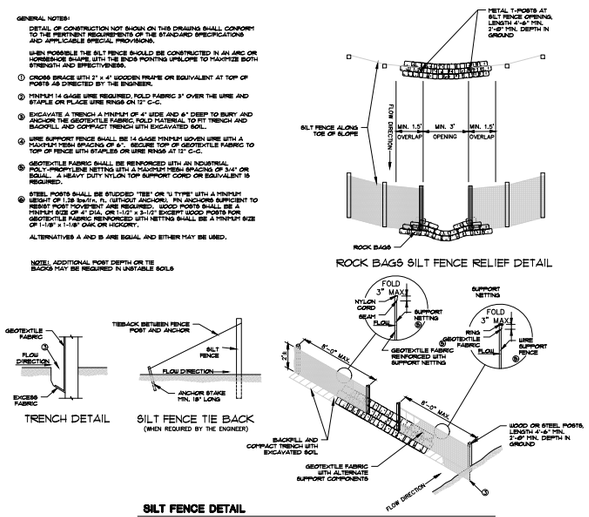


EROSION CONTROL NOTES AND PHASING

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/const_standards.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 70 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 DE-WATERING #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 # 1004.
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 INTERIM 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. SWEEP/CLEAN UP ALL SEDIMENT/TRASH THAT MOVES OFF-SITE DUE TO CONSTRUCTION ACTIVITY OR STORM EVENTS BEFORE THE END OF THE SAME WORKDAY OR AS DIRECTED BY THE WDNR/MUNICIPALITY. SEPARATE SWEPT 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.
25. FOR NON-CHANNELIZED 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 WDOT'S PRODUCT ACCEPTABILITY LIST (PAL); INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD NON-CHANNEL EROSION MAT #1052.
23. 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.
24. 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.
25. 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 WDNR/MUNICIPALITY
26. NOTICE OF TERMINATION: WHEN THE SITE HAS BEEN FULLY STABILIZED AND ALL STORMWATER DISCHARGES FROM THE SITE AUTHORIZED UNDER THE NOI 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.

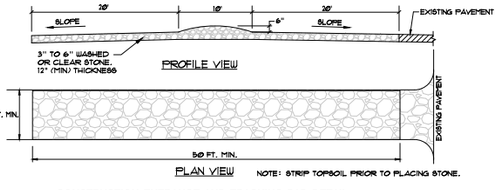


ROCK BAGS SILT FENCE RELIEF DETAIL

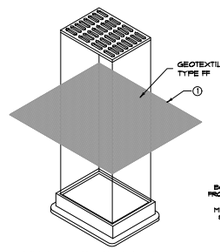
TRENCH DETAIL

SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

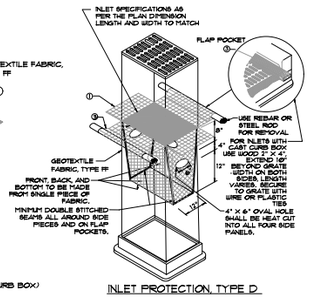
SILT FENCE DETAIL
NTS



CONSTRUCTION ENTRANCE AND TRACKING PAD DETAIL
NTS

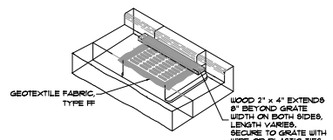


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)
(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE) ③



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES:
INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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

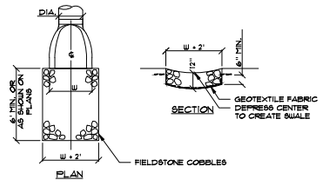
FOR INLET PROTECTION, TYPE C WITH CURB BOX, AND ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES:
TYPES B & C:
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A DEWATERING FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D:
DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 36", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE BETWEEN THE INLET WALLS AND THE BAG MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG USING PLASTIC ZIP TIES TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM IF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
NTS



FIELDSTONE COBBLES AT PIPE ENDWALL 105
NTS 11/19/10

EROSION CONTROL LEGEND

SILT FILTER FENCE	
CONSTRUCTION ENTRANCE	
EROSION MAT	
INLET SEDIMENT GUARD	

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EROSION CONTROL PLAN

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North

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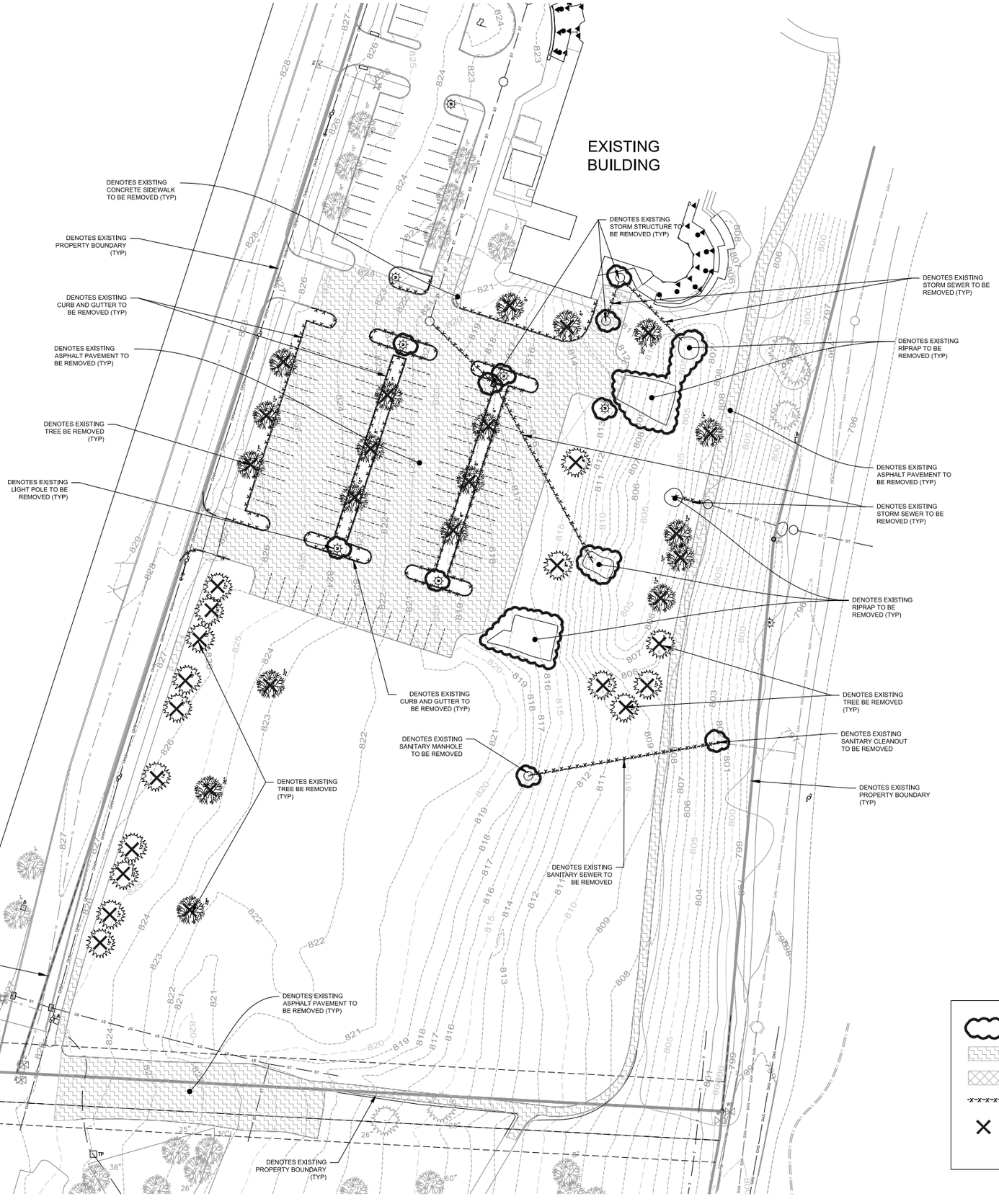

DEMOLITION LEGEND

- 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)

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DEMOLITION PLAN

Scale:
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North

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02-23-2024

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(Owner) Project No.:

Sheet No.:

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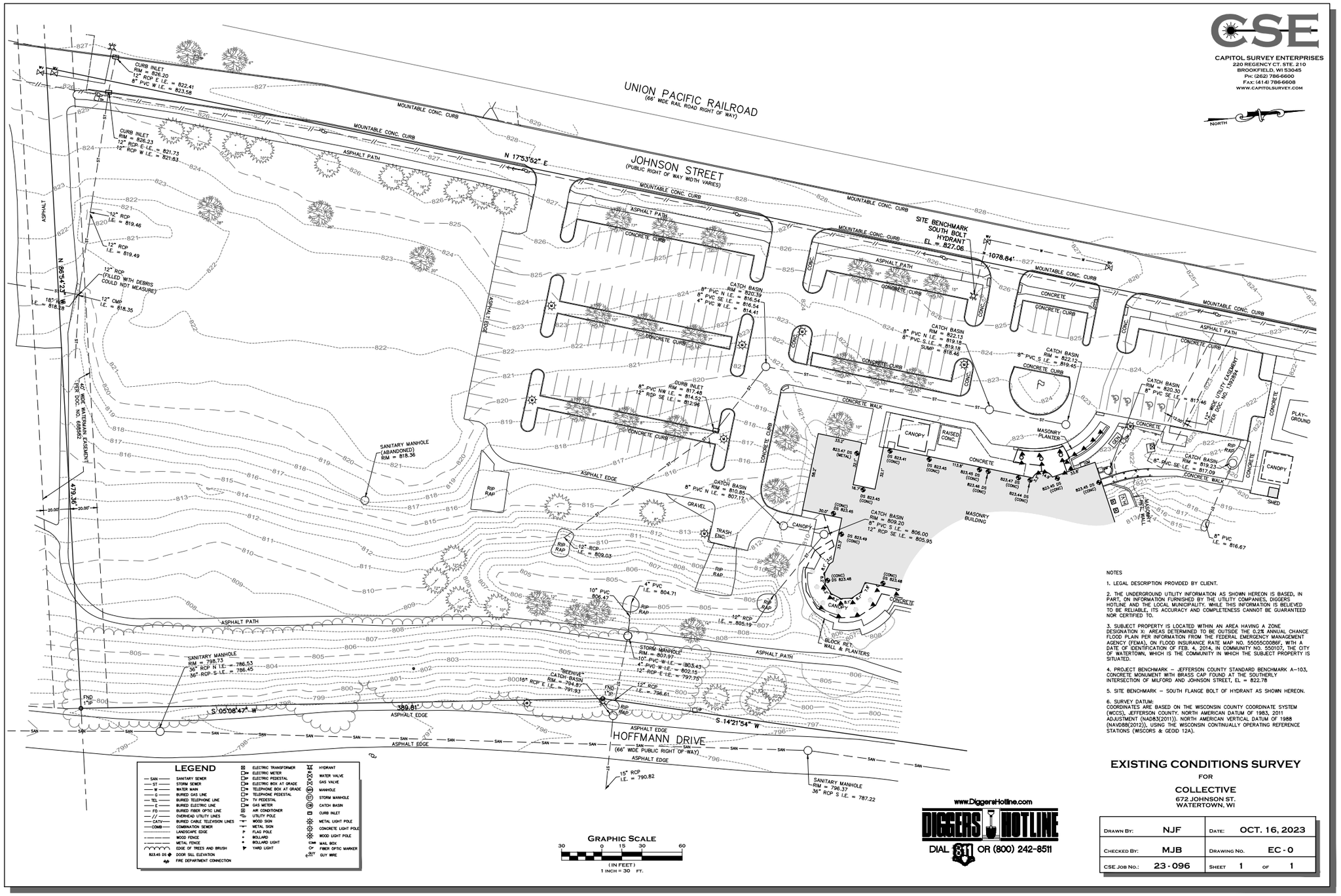

NOTES

1. LEGAL DESCRIPTION PROVIDED BY CLIENT.

2. THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, ON INFORMATION FURNISHED BY THE UTILITY COMPANIES, DIGGERS HOTLINE AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.

3. SUBJECT PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION X: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN PER INFORMATION FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 55055C0086F, WITH A DATE OF IDENTIFICATION OF FEB. 4, 2014, IN COMMUNITY NO. 550107, THE CITY OF WATERTOWN, WHICH IS THE COMMUNITY IN WHICH THE SUBJECT PROPERTY IS SITUATED.

4. PROJECT BENCHMARK – JEFFERSON COUNTY STANDARD BENCHMARK A-103, CONCRETE MONUMENT WITH BRASS CAP FOUND AT THE SOUTHERLY INTERSECTION OF MILFORD AND JOHNSON STREET, EL = 822.78

5. SITE BENCHMARK – SOUTH FLANGE BOLT OF HYDRANT AS SHOWN HEREON.

6. SURVEY DATUM:
COORDINATES ARE BASED ON THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), JEFFERSON COUNTY. NORTH AMERICAN DATUM OF 1983, 2011 ADJUSTMENT (NAD83(2011)). NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88(2012)), USING THE WISCONSIN CONTINUALLY OPERATING REFERENCE STATIONS (WISCORS & GEOID 12A).

EXISTING CONDITIONS SURVEY

FOR

COLLECTIVE
672 JOHNSON ST.
WATERTOWN, WI

DRAWN BY:	NJF	DATE:	OCT. 16, 2023
CHECKED BY:	MJB	DRAWING NO.	EC - 0
CSE JOB NO.:	23 - 096	SHEET	1 OF 1

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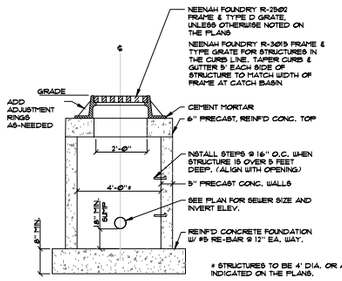
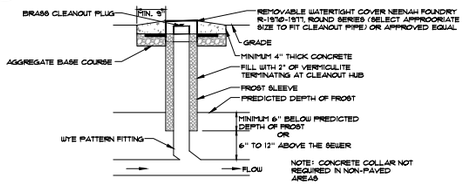
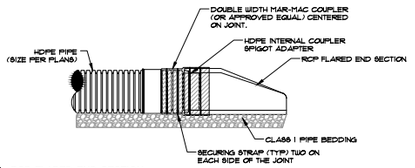


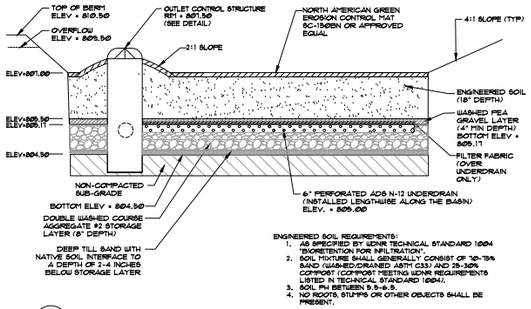
01 CATCH BASIN DETAIL
NTS



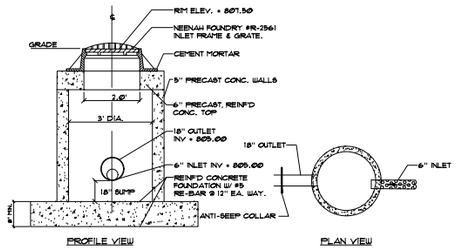
02 STORM CLEANOUT
NTS



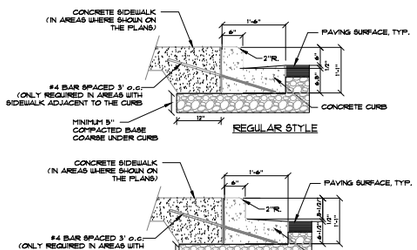
03 RCP FLARED END SECTION
NTS



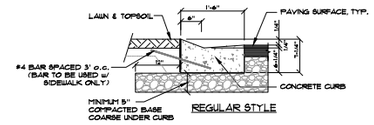
04 BIO RETENTION BASIN DETAIL
NTS



05 OUTLET CONTROL STRUCTURE
NTS

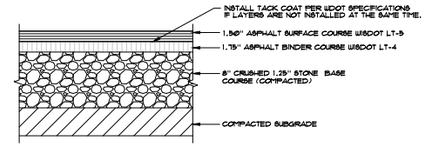


06 18 INCH VERTICAL CURB
NTS

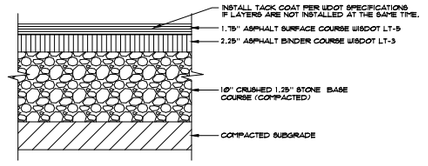


NOTE:
- REVERSE STYLE CURB LOCATIONS ARE NOTED ON THE PLANS.

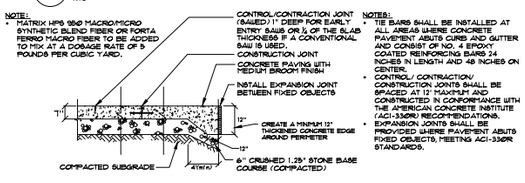
07 DEPRESSED CURB
NTS



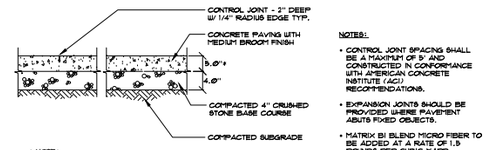
08 REGULAR DUTY ASPHALT PAVEMENT
NTS



09 HEAVY DUTY ASPHALT PAVEMENT
NTS



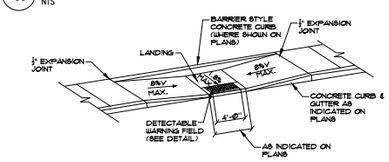
10 CONCRETE PAVEMENT
NTS



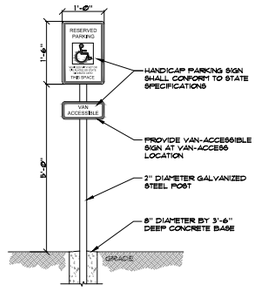
* NOTE:
SIDEWALK SHALL BE 7" AT DRIVEWAY SECTIONS

NOTES:
- CONTROL JOINT SPACING SHALL BE A MAXIMUM OF 5' AND CONSTRUCTED IN CONFORMANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) RECOMMENDATIONS.
- EXPANSION JOINTS SHOULD BE PROVIDED WHERE PAVEMENT ABUTS FIXED OBJECTS.
- MATRIX BI BLEND MICRO FIBER TO BE ADDED AT A RATE OF 1.5 POUNDS PER CUBIC YARD.

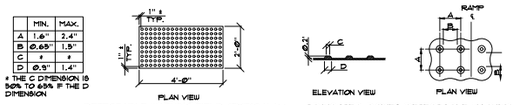
11 CONCRETE SIDEWALK
NTS



12 HANDICAP RAMP - TYPE 2
NTS

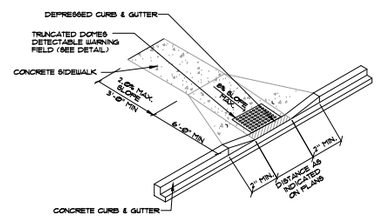


13 HANDICAP PARKING SIGN
NTS

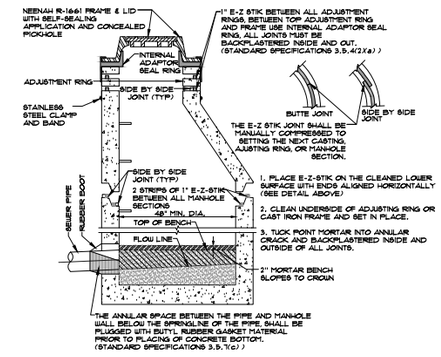


DETECTABLE WARNING FIELDS TO BE NEENAH FOUNDRY DETECTABLE WARNING FIELDS (OR APPROVED EQUAL); UNPAINTED NATURAL COLOR AND FIELD WEATHERED PRIOR TO INSTALLATION (VERIFY COLOR W/ OWNER PRIOR TO INSTALLATION)

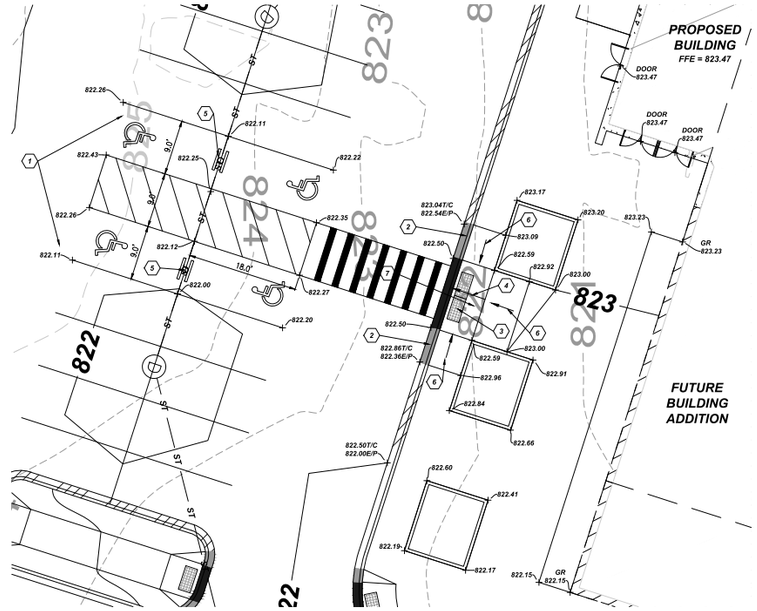
14 TRUNCATED DOMES
NTS



15 HANDICAP RAMP - TYPE 4
NTS



16 SANITARY MANHOLE
NTS


PROPOSED BUILDING FFE = 823.47
DOOR 823.47
DOOR 823.47
DOOR 823.47
FUTURE BUILDING ADDITION
822.26
822.43
822.26
822.11
822.11
822.25
822.22
822.35
822.12
822.27
822.00
822.20
822.50
822.86T/C 822.36E/P
822.50T/C 822.06E/P
822.07T/C 822.54E/P
822.50
822.59
822.96
822.84
822.92
822.91
822.00
822.66
822.60
822.41
822.19
822.17
822.15
GR 822.15
GR 823.23
823.17
823.20
823.23
823.09
822.59
822.92
823.00
822.91
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823
822
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9'
9'
9'
5'
5'
5'
5'
18.0'
ST
ST
ST

Watertown Community Health Foundation

Watertown YMCA

Johnson Street Watertown, WI
53094

Site Plan Review
02-23-2024

ARCHITECT:
ZIMMERMAN ARCHITECTURAL STUDIOS, INC.

CIVIL/LANDSCAPING/SCTRUCTURAL/PLUMBING/MECHANICAL/ELECTRICAL/FIRE PROTECTION :
HARWOOD
255 N 21st Street Milwaukee, WI 53233 414-475-5554

CONSTRUCTION MANAGER :
MAASBROTHERS CONSTRUCTION

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A2.1 FIRST FLOOR PLAN - OVERALL
A2.2 SECOND FLOOR PLAN - OVERALL
A4.0 EXTERIOR ELEVATIONS - OVERALL

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com
TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

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ARCHITECTURAL "A" SERIES

STRUCTURAL "S" SERIES

PLUMBING "P" SERIES

MECHANICAL "M" SERIES

ELECTRICAL "E" SERIES

ELECTRICAL "E" SERIES

Project:

Watertown YMCA

Revisions:

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Date:
02-23-2024

Project No.: 230049.00

(Owner) Project No.: -

Sheet No.:

A0.0

FLOOR PLAN LEGEND

- WALL TAG. SEE WALL TYPES SHEET A10.0
- KEYNOTE. SEE KEYNOTES, THIS SHEET.
- WINDOW TAG. SEE SHEET A10.2
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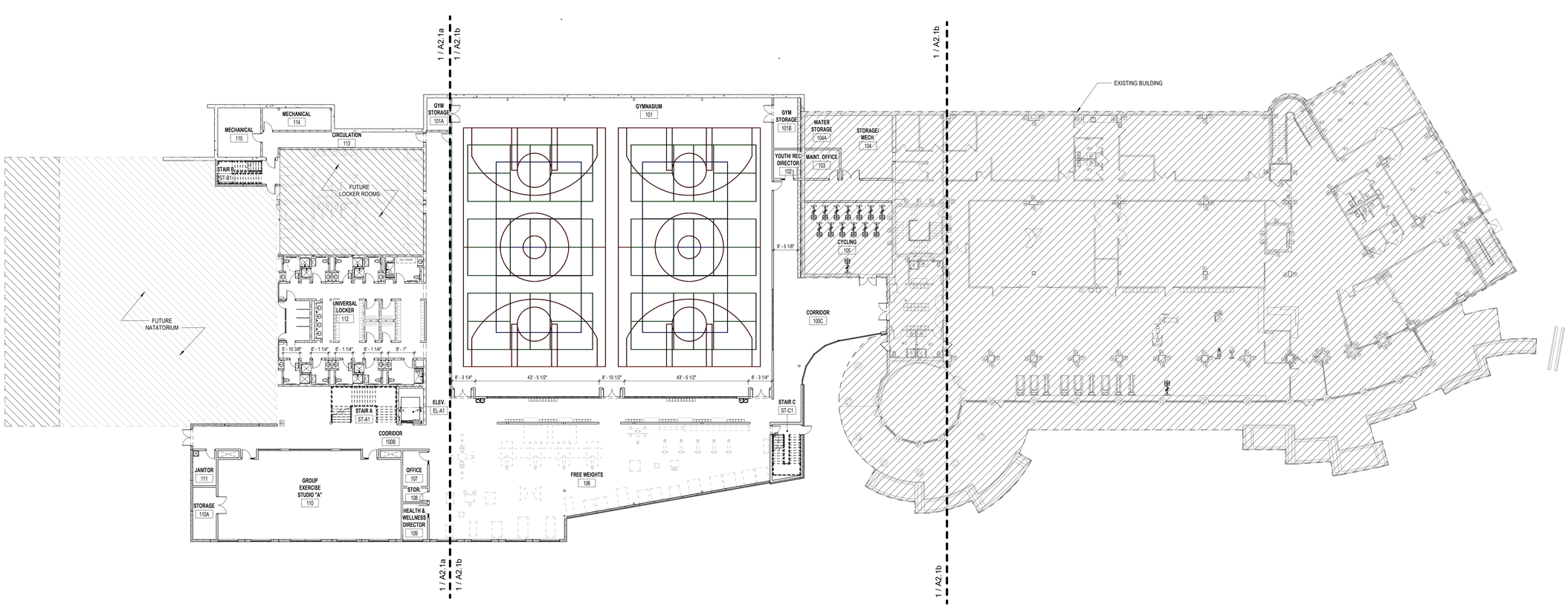
- FOLDING PARTITION

GENERAL CONSTRUCTION NOTES:

EXISTING WALLS TO REMAIN

NEW WALL CONSTRUCTION

SEE SHEET T0.0 FOR ABBREVIATIONS AND SYMBOL LEGEND.
2. SEE SHEETS T0.x 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 1007.87' +/-.
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"). FEC'S 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 T0.0 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"

Zimmerman ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zasstudios.com
TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

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

Project:
Watertown YMCA

Location:
Johnson Street Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:
FIRST FLOOR PLAN - OVERALL

Scale:
As indicated

Revisions:

No:	Date:	Description:

Date:
02-23-2024

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A2.1

KEYNOTES PER SHEET	
Key Value	Keynote Text

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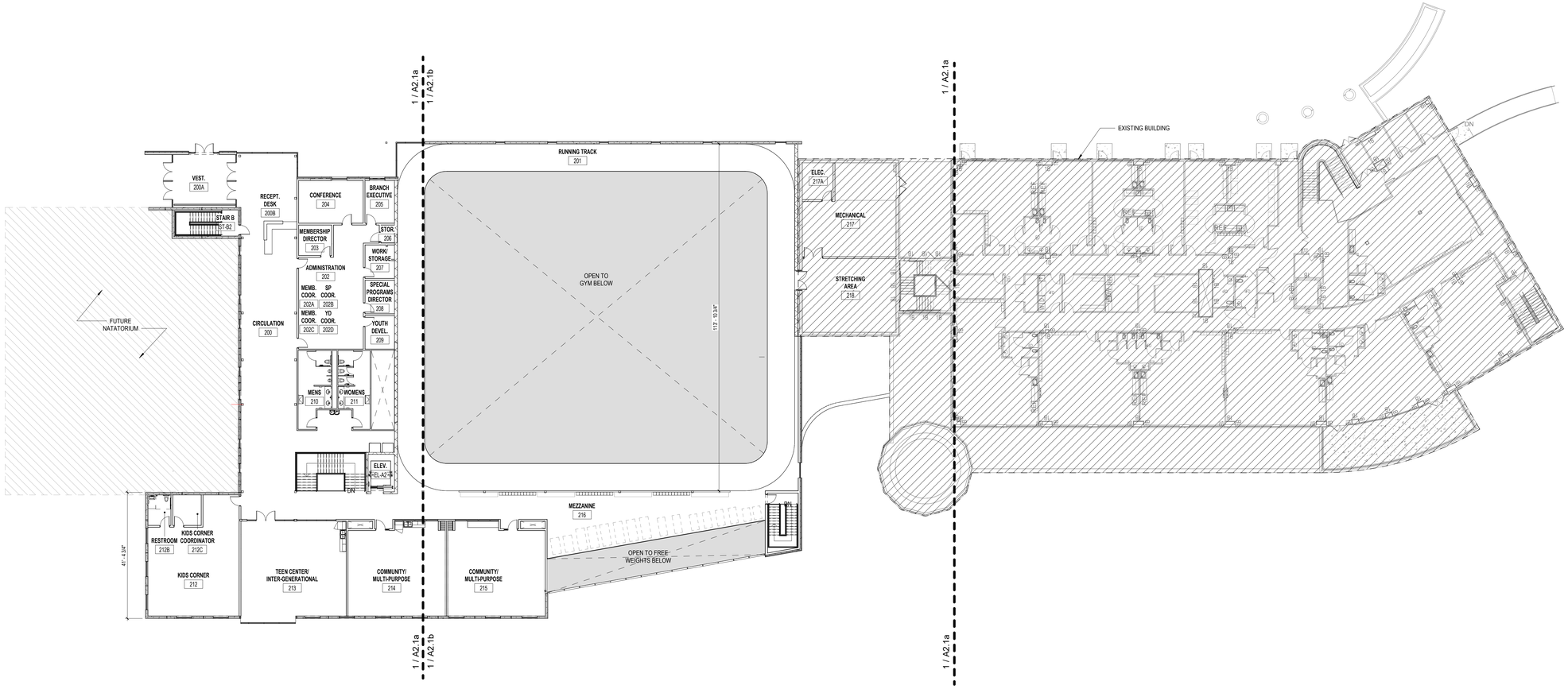

1 SECOND FLOOR - OVERALL
1/16" = 1'-0"

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2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com
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255 N 21st Street Milwaukee, WI 53233 414-475-5554

Project:
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Key Plan:
True North
Plan North

SITE PLAN REVIEW

Sheet:
SECOND FLOOR PLAN - OVERALL

Scale:
As indicated

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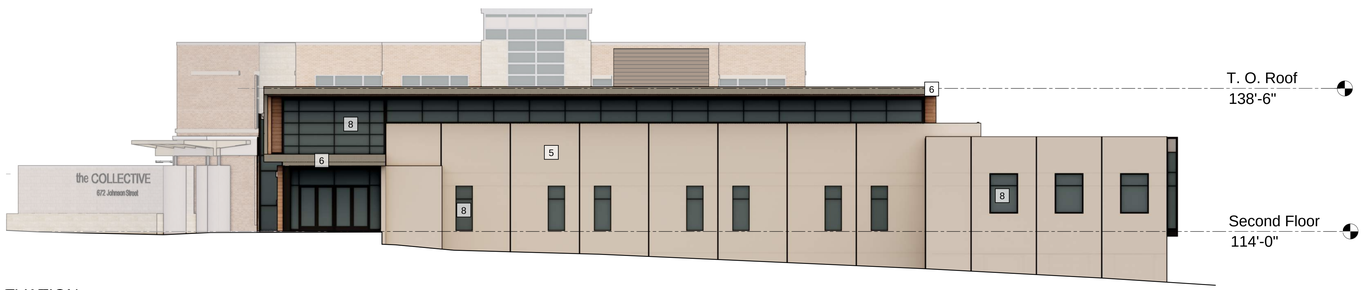
Materials Key

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
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Sheet:
EXTERIOR ELEVATIONS - OVERALL

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3/32" = 1'-0"

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A4.0

Watertown Community Health Foundation

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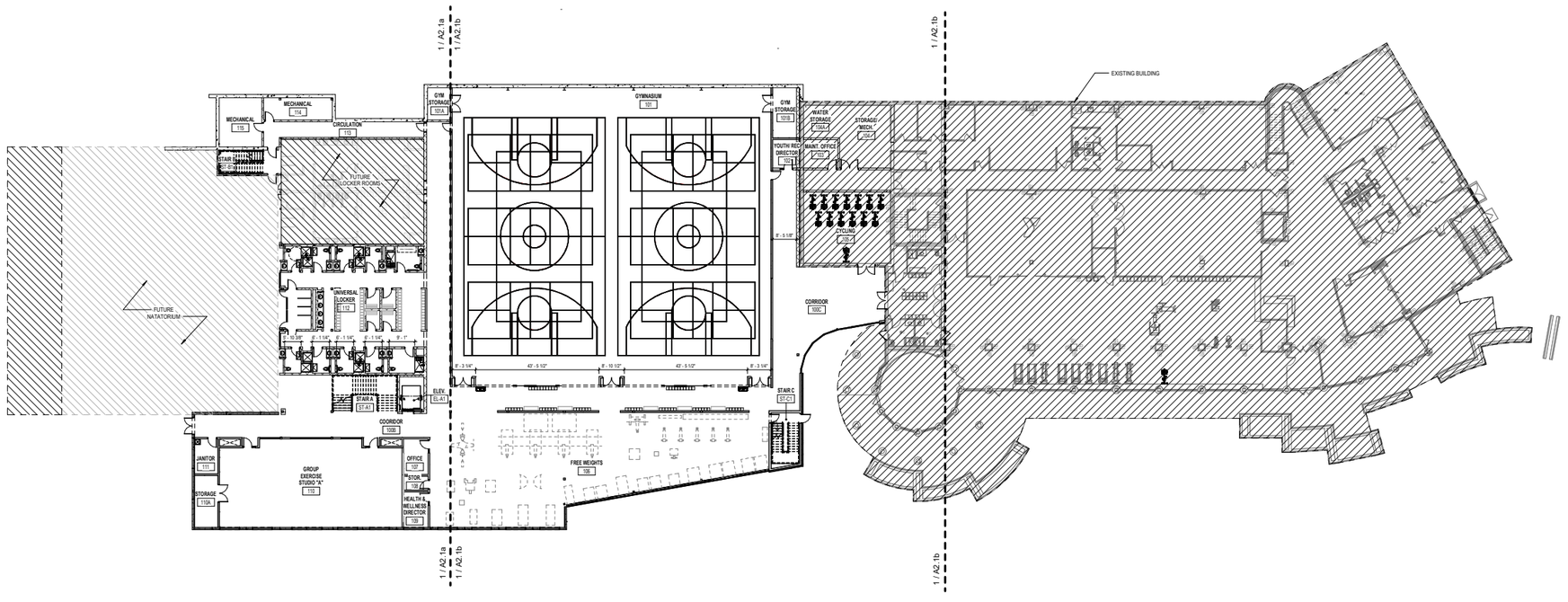
14. HINGE SIDE OF ROUGH OPENINGS FOR DOORS ARE TYPICALLY 4" FROM ADJACENT PERPENDICULAR WALL, UNLESS NOTED OTHERWISE.
15. SEE SPECIFICATION MANUAL FOR COLOR AND MATERIAL SCHEDULE AND ROOM FINISH SCHEDULE.
16. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING CONTINUOUS UTILITY SERVICE TO ALL SPACES ON THE SITE 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 T0.0 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"

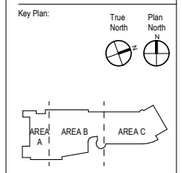
Zimmerman ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com
TELEPHONE (414) 476 9500
FACSIMILE (414) 476 8582

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

Project:
Watertown YMCA

Location:
Johnson Street Watertown, WI 53094

Key Plan:



SITE PLAN REVIEW

Sheet:
FIRST FLOOR PLAN - OVERALL

Scale:
As indicated

Revisions:

No:	Date:	Description:

Date:
02-23-2024

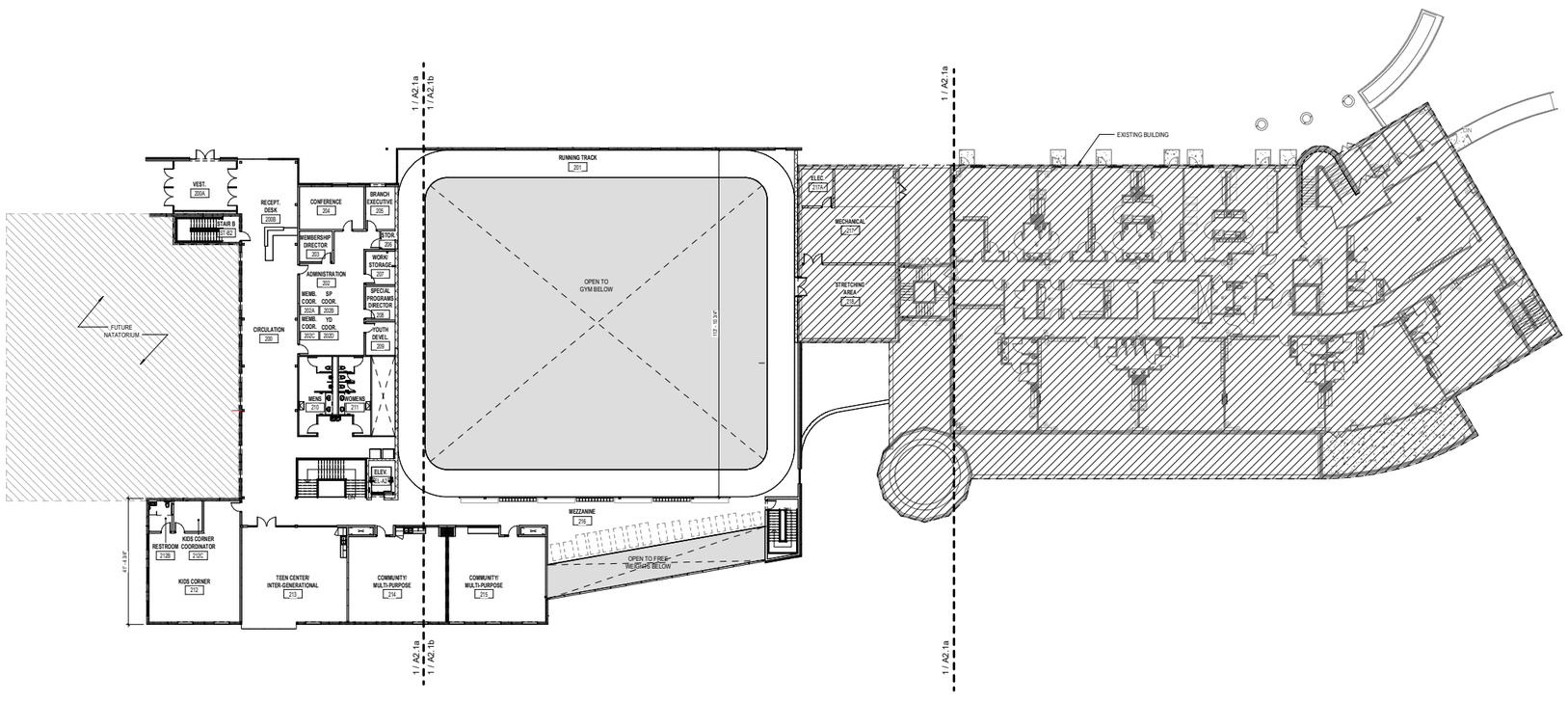
Project No.:	(Owner) Project No.:
230049.00	-

Sheet No.:
A2.1

KEYNOTES PER SHEET	
Key Value	Keynote Text

FLOOR PLAN LEGEND

- WALL TAG. SEE WALL TYPES SHEET A10.0
- KEYNOTE. SEE KEYNOTES. THIS SHEET.
- WINDOW TAG. SEE SHEET A10.2
- STRUCTURAL GRID
- WATER CLOSET
- CHILD SIZED SINK
- DRINKING FOUNTAIN
- SHOWER
- VANITY COUNTER & SINK
- DOOR PER TAG. SEE DOOR SCHEDULE SHEET A10.1
- CMU WALL
- PRECAST CONCRETE WALL
- INTERIOR METAL STUD PARTITION WALL
- URINAL
- CHILD SIZED WATER CLOSET
- KITCHEN SINK
- FOLDING PARTITION



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

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ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com
TELEPHONE [414] 476 9500
FACSIMILE [414] 476 8582

Consultant:
HARWOOD
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SITE PLAN REVIEW

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SECOND FLOOR PLAN - OVERALL

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Date:
02-23-2024

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230049.00	-

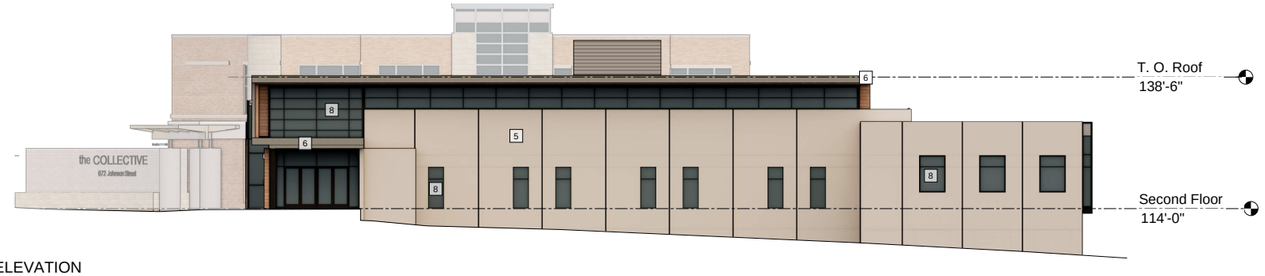
Sheet No.:
A2.2

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"

Zimmerman Architectural Studio, Inc.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233
TELEPHONE [414] 476.8500
FACSIMILE [414] 476.8502

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

Project:
Watertown YMCA

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Johnson Street Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:
EXTERIOR ELEVATIONS - OVERALL

Scale:
3/32" = 1'-0"

Revisions:

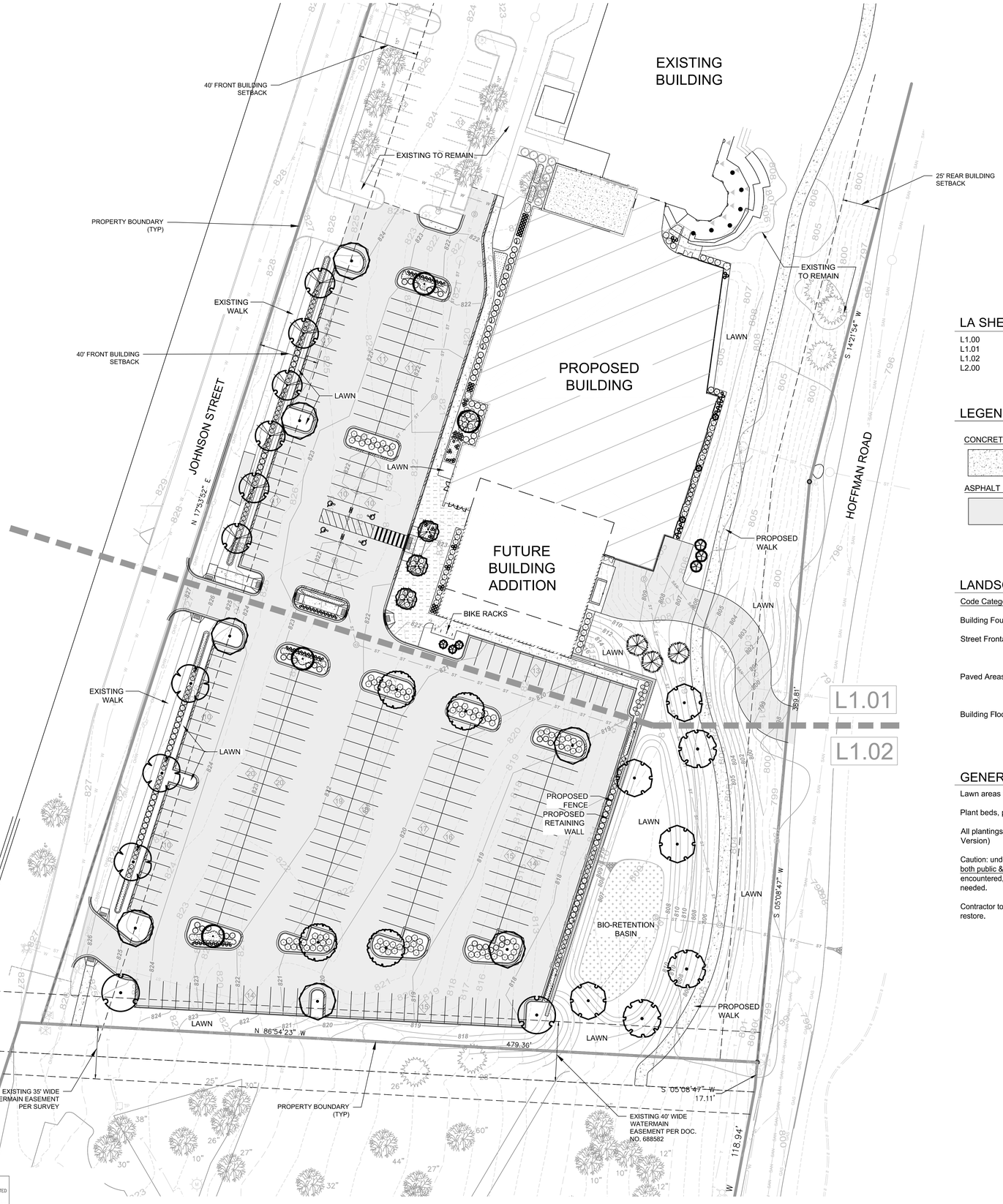
No:	Date:	Description:

Date:
02-23-2024

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

Sheet No.: 105

A4.0



LA SHEET INDEX

L1.00	LANDSCAPE PLAN - OVERALL
L1.01	LANDSCAPE PLAN - NORTH
L1.02	LANDSCAPE PLAN - SOUTH
L2.00	LANDSCAPE DETAILS & NOTES

LEGEND

CONCRETE

ASPHALT

EXISTING TREES TO REMAIN (DECIDUOUS / EVERGREEN)

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.

DIGGER'S HOTLINE TICKET NO. 1-800-242-8511

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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TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

Consultant:
HARWOOD
255 N 21st Street, Milwaukee, WI 53233 | 414-475-5554

Project:

Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:

LANDSCAPE PLAN - OVERALL

N

Scale: 1" = 30'

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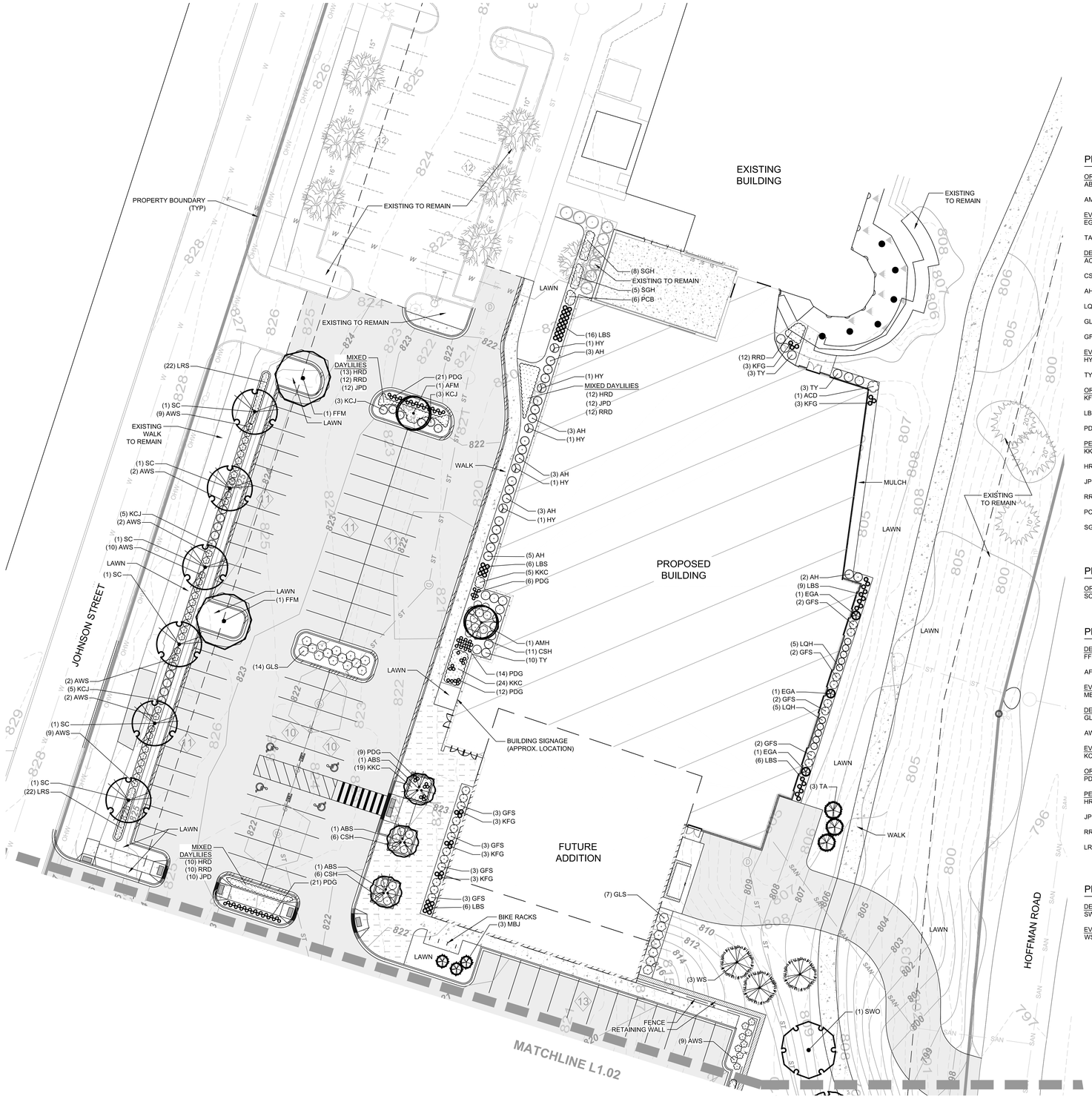
Sheet No.: L1.00



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 'Bailsta'	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	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**		
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**		
WS	3	White Spruce	Picea glauca	7` Ht.	B&B	As Shown	40	120
								195

DIGGER'S HOTLINE
TICKET NUMBER
TWO DAYS
811
1-800-242-8511

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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ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zasstudios.com
TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

Consultant:
HARWOOD
255 N 21st Street, Milwaukee, WI 53233 | 414-475-5554

Project:

Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:

LANDSCAPE PLAN - NORTH

N

Scale: 1" = 20'

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02-23-2024

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(Owner) Project No.:

Sheet No.:

L1.01

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 'Bailsta'	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**		
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**		
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**		
PDG	42	Prairie Dropseed	Sporobolus heterolepis	1 Gal.	Pot	18" o.c.	-	-
PERENNIALS	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**SPACING**		
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

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LANDSCAPE PLAN - SOUTH

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Project No.: 230049.00

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Sheet No.:

L1.02

DIGGER'S HOTLINE
TICKET NO. 20072
TWO WORK DAYS
1-800-242-8511

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.

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.

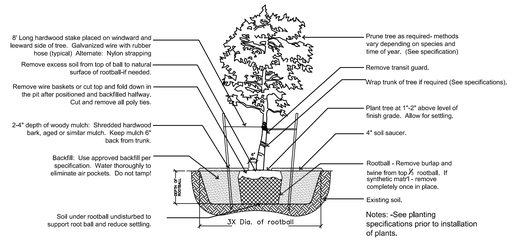
Hardscape / Amenity Notes

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.

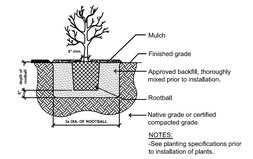
- Qty. (4)

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.

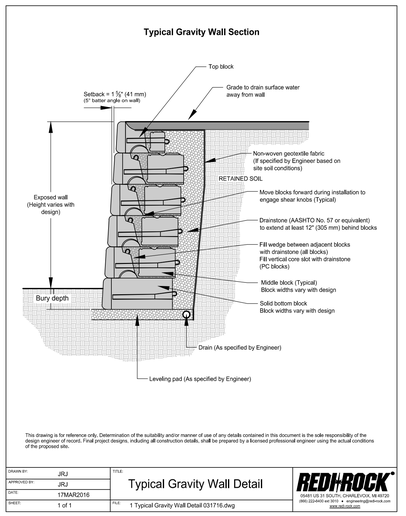
4.03 Ornamental Fence: Shall be 4' ht. Jerith Premier #202 Flat Top Panel with black finish or approved equal. Install per manufacturer's specifications.



1 Tree Planting Detail
Not To Scale



2 Shrub Planting Detail
Not To Scale



3 Gravity Wall Detail
Not To Scale

DIGGER'S HOTLINE
ONE CALL BEFORE YOU DIG
1-800-242-8511

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.

Zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zasstudios.com
TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

Consultant:
HARWOOD
255 N 21st Street, Milwaukee, WI 53233 | 414-475-5554

Project:
Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:
LANDSCAPE DETAILS & NOTES

N

Scale: NTS

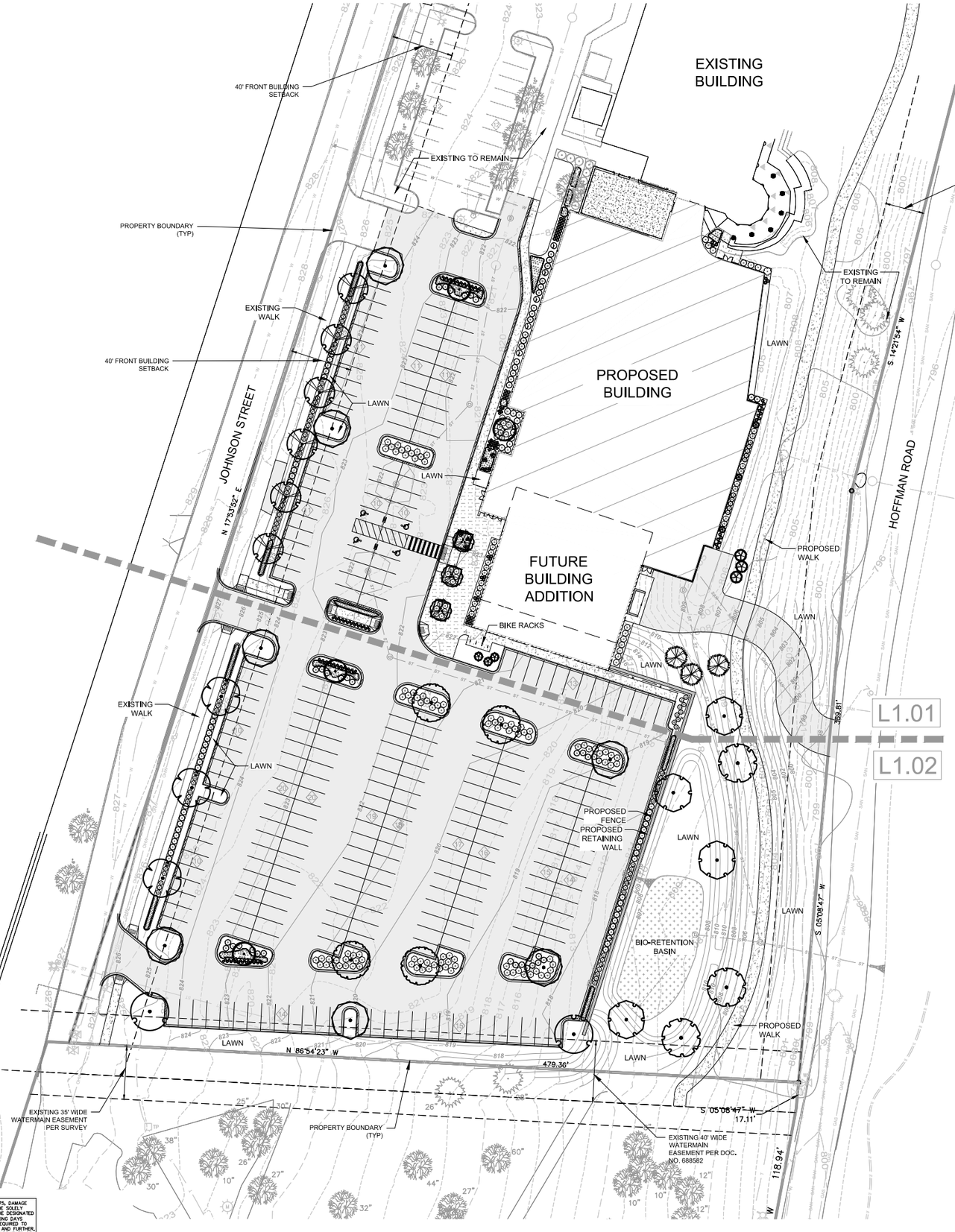
Revisions:

No:	Date:	Description:

Date:
02-23-2024

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

Sheet No.:
L2.00



LA SHEET INDEX

L1.00	LANDSCAPE PLAN - OVERALL
L1.01	LANDSCAPE PLAN - NORTH
L1.02	LANDSCAPE PLAN - SOUTH
L2.00	LANDSCAPE DETAILS & NOTES

LEGEND

CONCRETE

ASPHALT

EXISTING TREES TO REMAIN (DECIDUOUS / EVERGREEN)

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.

DIGGER'S HOTLINE TICKET NO. 1-800-242-8511

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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2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zasstudios.com
TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

Consultant:
HARWOOD

Project:
Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:
LANDSCAPE PLAN - OVERALL

N

Scale: 1" = 30' @ 30x42

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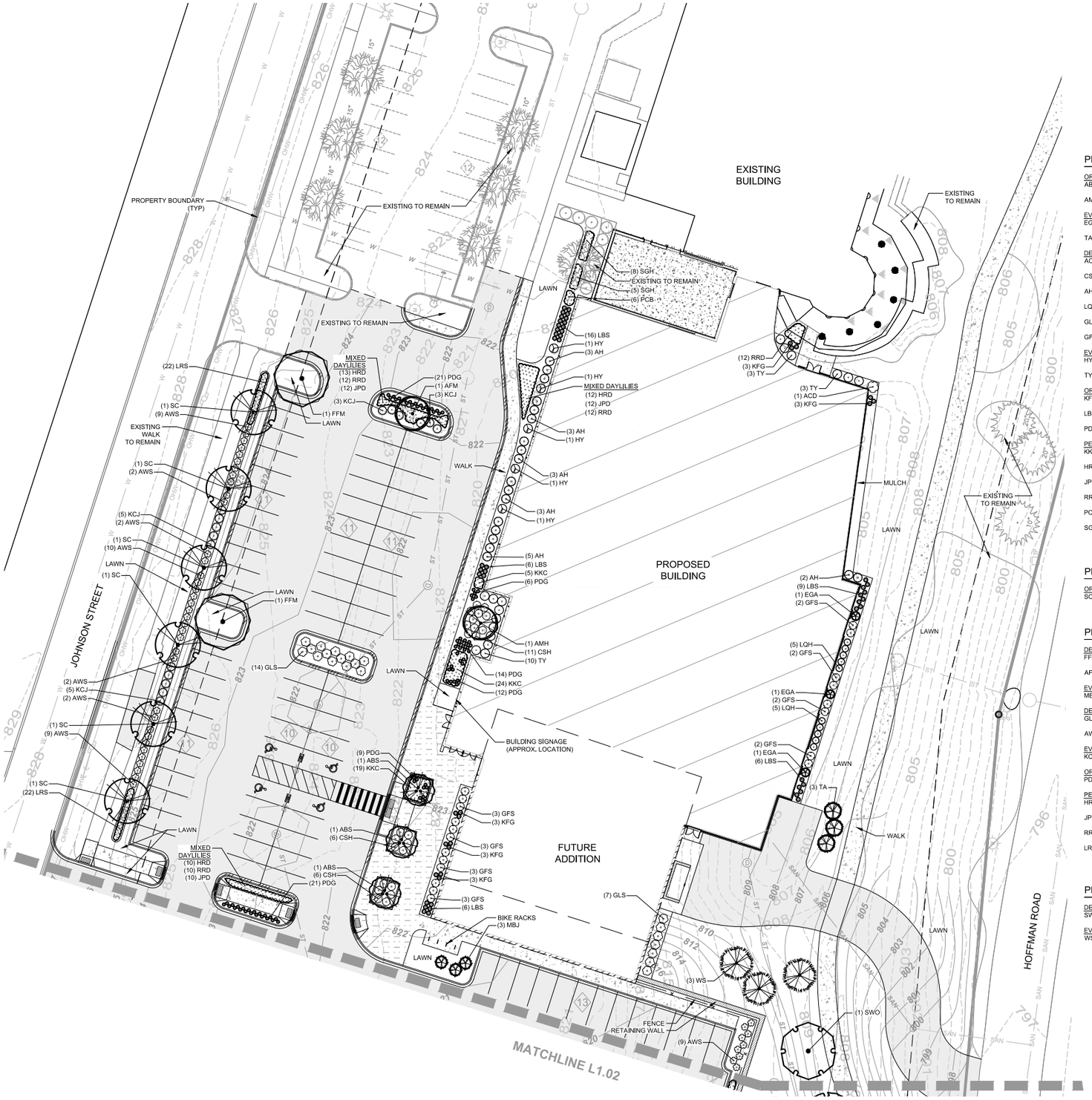

PLANT SCHEDULE BUILDING FOUNDATION

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 'Bailsta'	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	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**		
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**		
WS	3	White Spruce	Picea glauca	7` Ht.	B&B	As Shown	40	120
								195

DIGGER'S HOTLINE DIAL 811 OR 800 242 8511 1-800-242-8511

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TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

Consultant:
HARWOOD

Project:
Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:
LANDSCAPE PLAN - NORTH

N

Scale: 1" = 20' @ 30x42

Revisions:

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Project No.: 230049.00

(Owner) Project No.:

Sheet No.:
L1.01

PLANT SCHEDULE STREET FRONTAGE - SOUTH

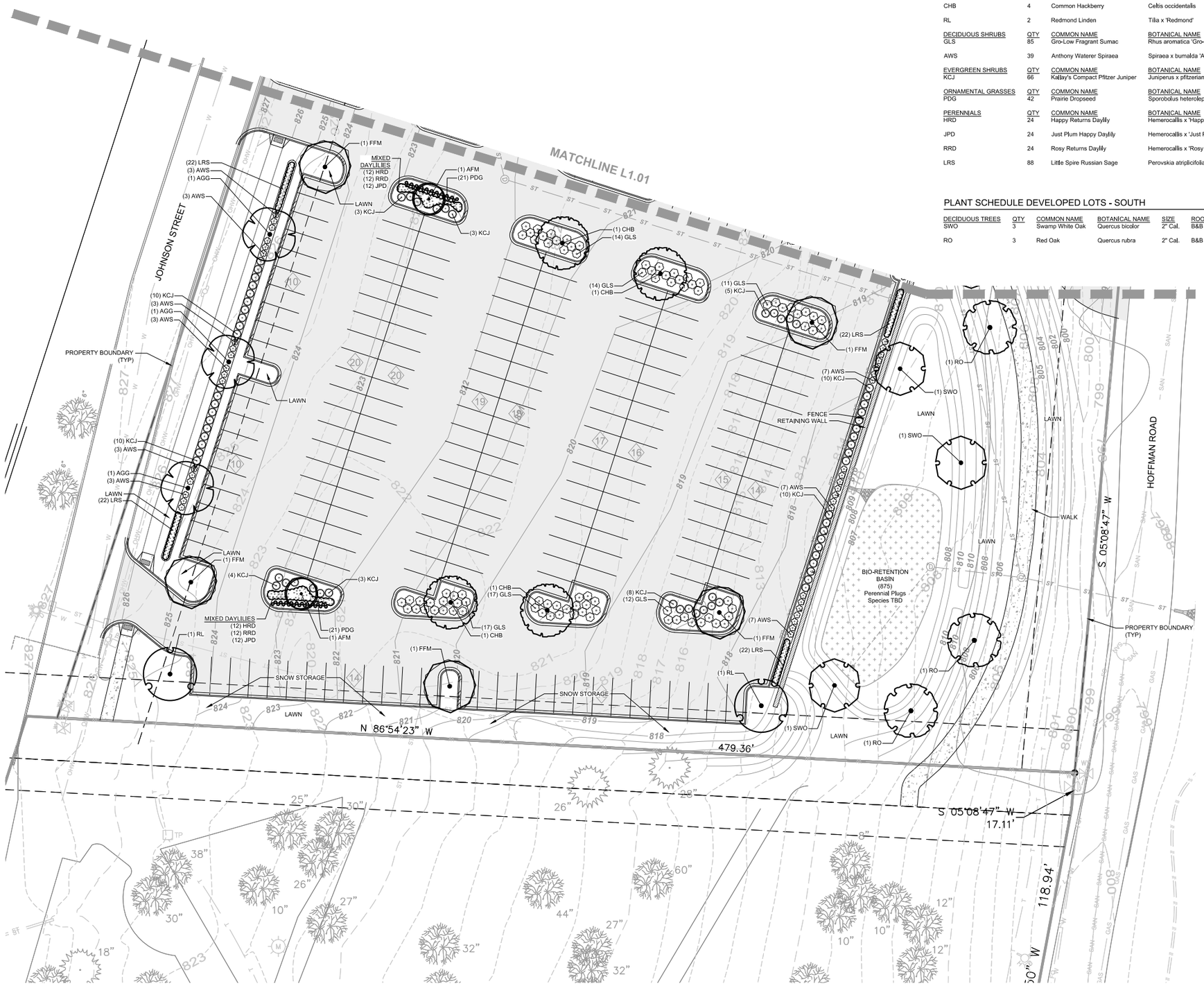
DECIDUOUS TREES	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	SPACING	POINTS PER	TOTAL POINTS
AGG	3	Autumn Gold Maidenhair Tree	Ginkgo biloba 'Autumn Gold' TM	2" Cal.	B&B	As Shown	75	225

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 'Bailsta'	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**		
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**		
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**		
PDG	42	Prairie Dropseed	Sporobolus heterolepis	1 Gal.	Pot	18" o.c.	-	-
PERENNIALS	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**SPACING**		
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



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TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

Consultant:

HARWOOD
256 N 21st Street, Milwaukee, WI 53233 | 414-476-9593

Project:

Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

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Sheet:

LANDSCAPE PLAN - SOUTH

N

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L1.02

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.

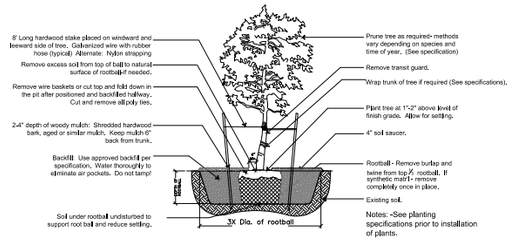
Hardscape / Amenity Notes

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.

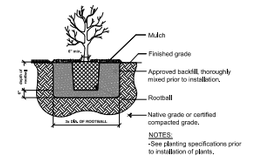
- Qty. (4)

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.

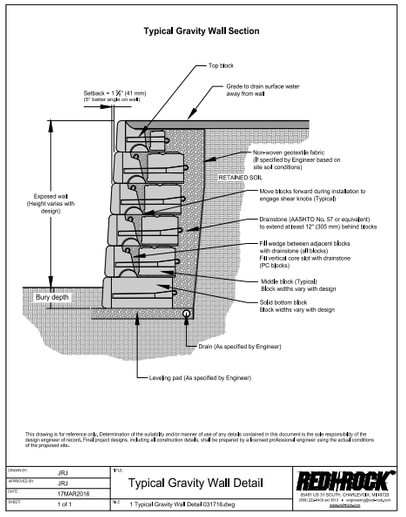
4.03 Ornamental Fence: Shall be 4' ht. Jerith Premier #202 Flat Top Panel with black finish or approved equal. Install per manufacturer's specifications.



1 Tree Planting Detail
Not To Scale



2 Shrub Planting Detail
Not To Scale



3 Gravity Wall Detail
Not To Scale

DIGGER'S HOTLINE TICKET NO. 1-800-242-8511

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.

Zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zasstudios.com
TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

Consultant:
HARWOOD

356 N 21st Street, Milwaukee, WI 53233 | 414-476-5544

Project:
Watertown YMCA

Location:
672 Johnson Street
Watertown, WI 53094

Key Plan:

SITE PLAN REVIEW

Sheet:
LANDSCAPE DETAILS & NOTES

N

Scale: NTS

Revisions:

No:	Date:	Description:

Date:
02-23-2024

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

Sheet No.:
L2.00

Project Name

Consolidated Industries

Media Blasting Addition

Project Address

1207 Boomer Street

Watertown, WI 53094

Architects Seal

Engineers Seal

OVER 65 YEARS OF DESIGN EXCELLENCE

SHEET INDEX

		REVISIONS
G-001	COVER SHEET	
C-102	ARCHITECTURAL SITE PLAN	
C-1	EXISTING CONDITIONS & DEMOLITION PLAN	
C-2	SITE PLAN	
C-3	GRADING & EROSION CONTROL PLAN	
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1	--

PROJECT ADDRESS:

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

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

Architect:	Engineer:	Reviewed By:
BJZ	--	--

Sheet Title:
COVER SHEET

Sheet Number:
G-001

Project Number: --
P13592

LEADERS . ENGINEERS . CONTRACTORS . ARCHITECTS

BENCHMARK:
TOP FRONT
HYD. NOZZLE
ELE: 846.94

BENCHMARK:
TOP FRONT
HYD. NOZZLE
ELE: 854.83

BENCHMARK:
TOP NW HYD
FLNG. BOLT
ELE: 858.07

15' STORM SEWER ESMT. PER DOC. #1006158 (17)

15' STORM SEWER ESMT. PER DOC. #1006158 (17)

272.41'

16.03'

16.51'

16.95'

28.76'

17.99'

64.75'

100.00'

100.00'

79.55'

80.00'

87.36'

25.35'

25.35'

34.50'

38.58'

160.00'

280.00'

EXISTING BUILDING
58,734 S.F.

79.40'

19.87'

19.75'

62.68'

119.00'

65.34'

73.00'

N01°15'29"E (CSM 2578)

WEPCO ESMT. (WIDTH VARIES) PER DOC. #875768 (15)

305.00' (Deed)

COMPACTED GRAVEL

16.18'

115.75'

EXISTING OUT BUILDINGS 2301 S.F.

36.75'

31.37'

31.37'

PROPOSED ADDITION 1086 S.F.

WEPCO ESMT. (WIDTH VARIES) PER DOC. #882018 (16)

267.18'

26.80'

WEPCO ESMT. (WIDTH VARIES) PER DOC. #762946 (13)

12' WEPCO ESMT. PER DOC. #875768 (15)

12' WEPCO ESMT. PER DOC. #758753 (12)

N88°09'14"W (CSM 5163)

BENCHMARK:
TOP FRONT
HYD. NOZZLE
ELE: 853.57

16.18'

27.00'

EXISTING OUT BUILDINGS 2301 S.F.

36.75'

31.37'

31.37'

PROPOSED ADDITION 1086 S.F.

26.80'

27.64'

28.07'

12' WEPCO ESMT. PER DOC. #875768 (15)

WEPCO ESMT. (WIDTH VARIES) PER DOC.

12' WEPCO ESMT. PER DOC. #

ENLARGED SITE PLAN II 1" = 10'-0"

ARCHITECTURAL SITE PLAN II 1" = 30'-0"

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Architect:	Engineer:	Reviewed By:
BJZ	--	--

Sheet Title:
ARCHITECTURAL SITE PLAN II
Sheet Number:
C-102
Project Number: --
P13592

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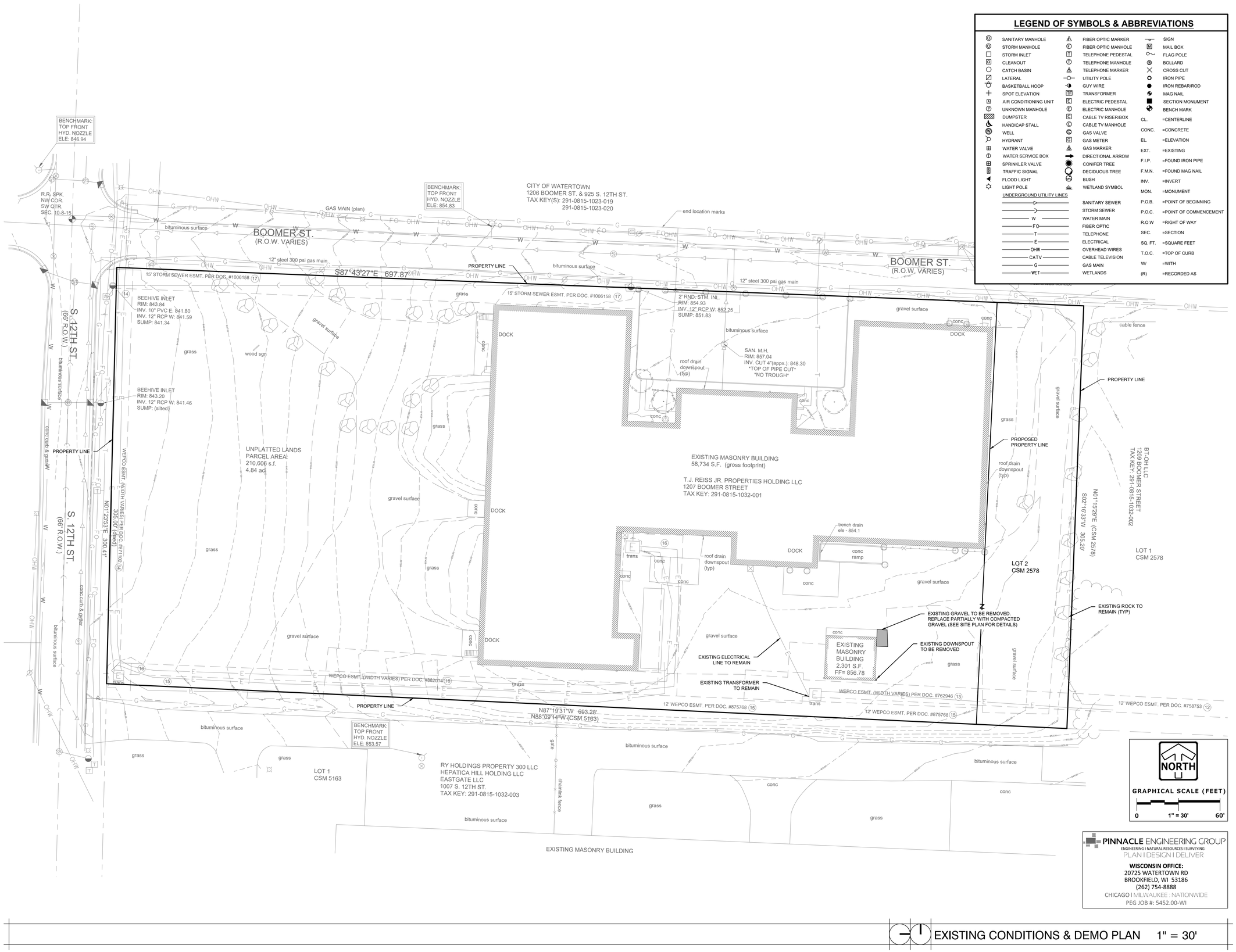

LEGEND OF SYMBOLS & ABBREVIATIONS

SANITARY MANHOLE	FIBER OPTIC MARKER	SIGN
STORM MANHOLE	FIBER OPTIC MANHOLE	MAIL BOX
STORM INLET	TELEPHONE PEDESTAL	FLAG POLE
CLEANOUT	TELEPHONE MANHOLE	BOLLARD
CATCH BASIN	TELEPHONE MARKER	CROSS CUT
LATERAL	UTILITY POLE	IRON PIPE
BASKETBALL HOOP	GUY WIRE	IRON REBAR/ROD
SPOT ELEVATION	TRANSFORMER	MAG NAIL
AIR CONDITIONING UNIT	ELECTRIC PEDESTAL	SECTION MONUMENT
UNKNOWN MANHOLE	ELECTRIC MANHOLE	BENCH MARK
DUMPSTER	CABLE TV RISER/BOX	CL. =CENTERLINE
HANDICAP STALL	CABLE TV MANHOLE	CONC. =CONCRETE
WELL	GAS VALVE	EL. =ELEVATION
HYDRANT	GAS METER	EXT. =EXISTING
WATER VALVE	GAS MARKER	F.I.P. =FOUND IRON PIPE
WATER SERVICE BOX	DIRECTIONAL ARROW	F.M.N. =FOUND MAG NAIL
SPRINKLER VALVE	CONIFER TREE	INV. =INVERT
TRAFFIC SIGNAL	DECIDUOUS TREE	MON. =MONUMENT
FLOOD LIGHT	BUSH	P.O.B. =POINT OF BEGINNING
LIGHT POLE	WETLAND SYMBOL	P.O.C. =POINT OF COMMENCEMENT
UNDERGROUND UTILITY LINES		R.O.W =RIGHT OF WAY
SANITARY SEWER		SEC. =SECTION
STORM SEWER		SQ. FT. =SQUARE FEET
W WATER MAIN		T.O.C. =TOP OF CURB
FO FIBER OPTIC		W/ =WITH
T TELEPHONE		(R) =RECORDED AS
E ELECTRICAL		
OHW OVERHEAD WIRES		
CATV CABLE TELEVISION		
G GAS MAIN		
WET WETLANDS		

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 30' 60'

PINNACLE ENGINEERING GROUP
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PLAN | DESIGN | DELIVER
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BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE
PEG JOB #: 5452.00-WI

EXISTING CONDITIONS & DEMO PLAN 1" = 30'

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

Sheet Title:
EXISTING CONDITIONS & DEMO PLAN
Sheet Number:
C-1
Project Number:
P13592

LEADERS . ENGINEERS . CONTRACTORS . ARCHITECTS

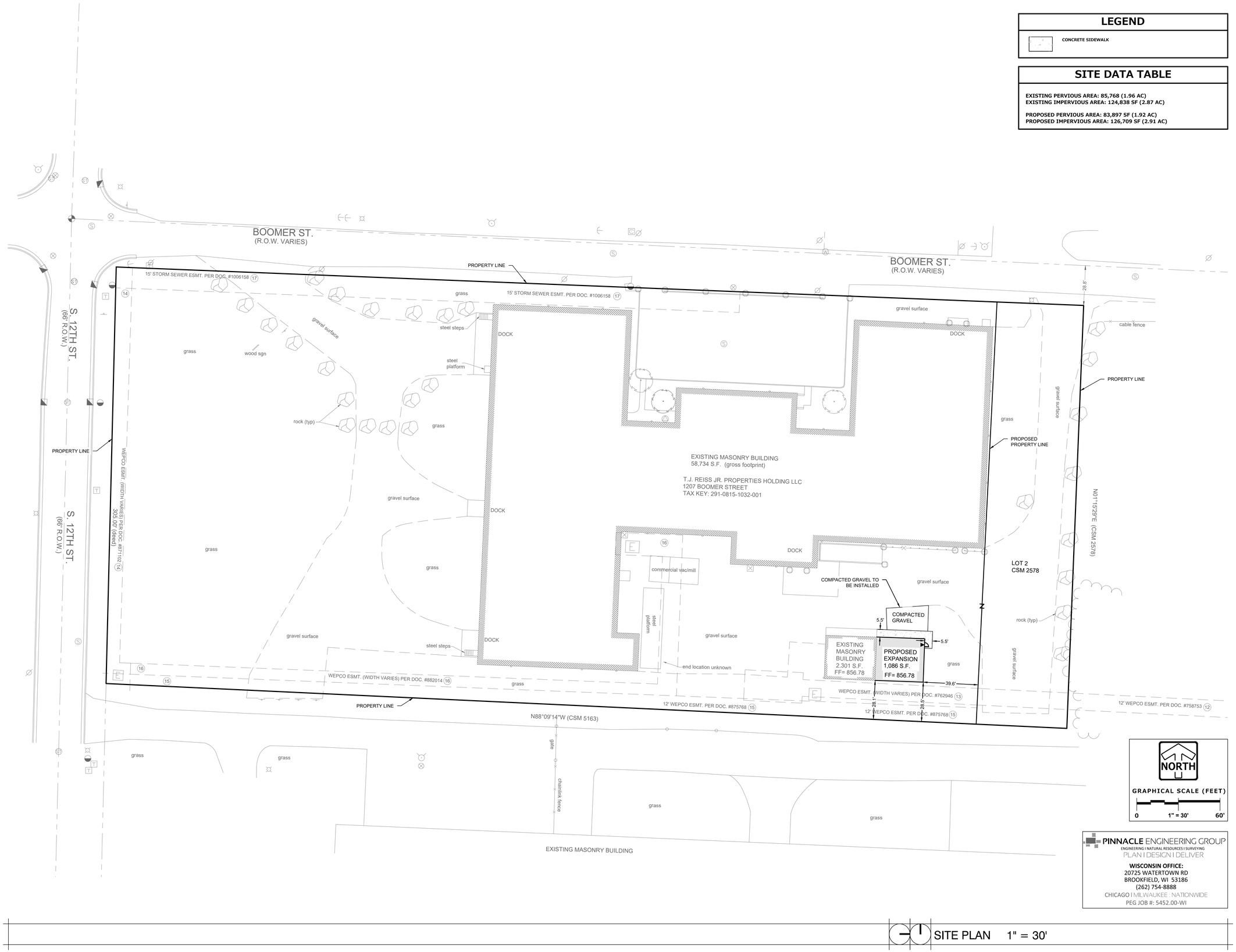
LEGEND

CONCRETE SIDEWALK

SITE DATA TABLE

EXISTING PERVIOUS AREA: 85,768 (1.96 AC)
EXISTING IMPERVIOUS AREA: 124,838 SF (2.87 AC)

PROPOSED PERVIOUS AREA: 83,897 SF (1.92 AC)
PROPOSED IMPERVIOUS AREA: 126,709 SF (2.91 AC)



NORTH

GRAPHICAL SCALE (FEET)

0 1" = 30' 60'

SITE PLAN 1" = 30'

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

Sheet Title:
SITE PLAN

Sheet Number:
C-2

Project Number:
P13592

LEADERS . ENGINEERS . CONTRACTORS . ARCHITECTS

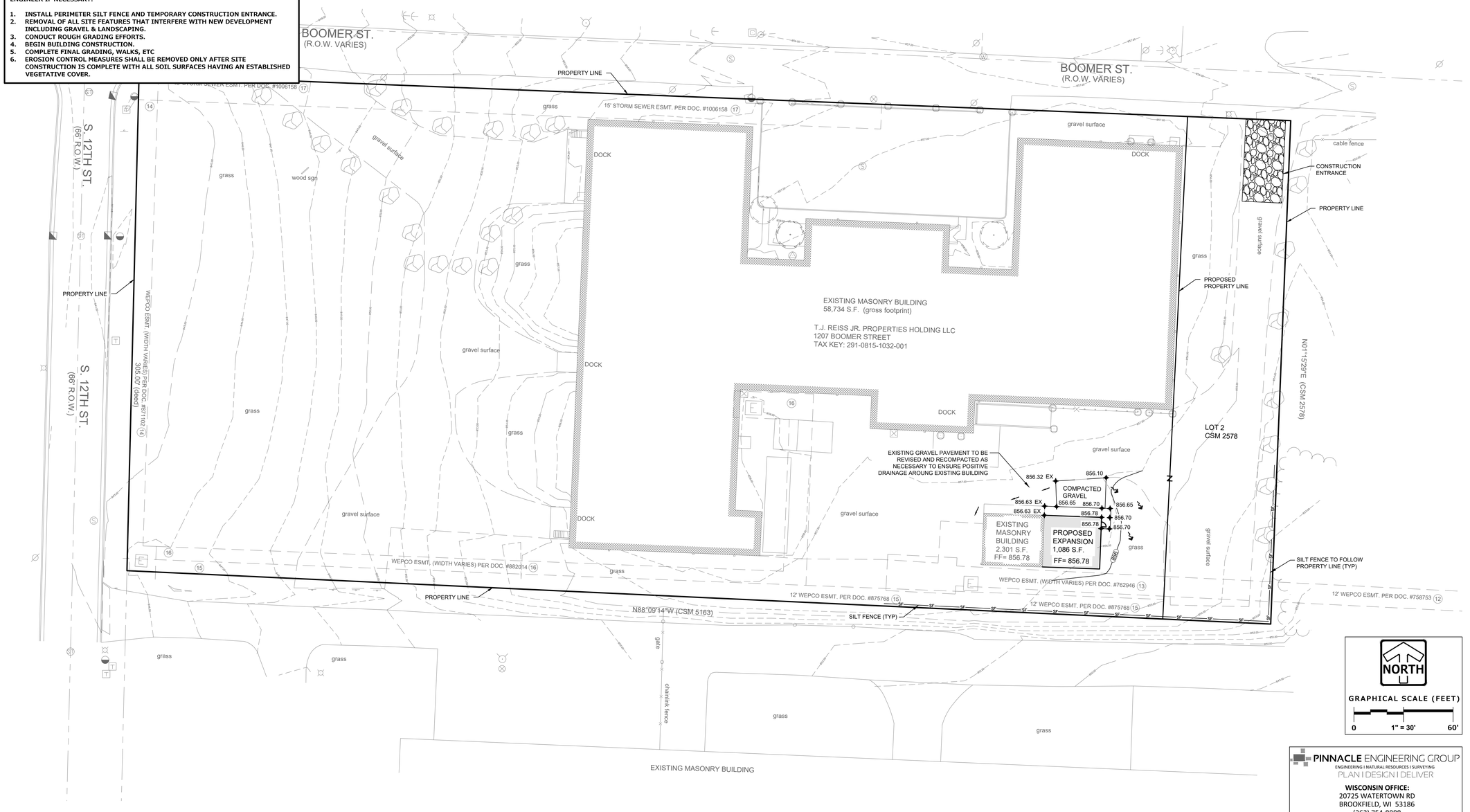
LEGEND

- PROPOSED CONTOUR
- EXISTING CONTOUR
- DIRECTION OF SURFACE FLOW
- SILT FENCE
- CONSTRUCTION ENTRANCE
- HYDROSEED
  - APPLY TO ALL DISTURBED AREAS WHICH ARE NOT SHOWN TO BE MATTED

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.**



NORTH

GRAPHICAL SCALE (FEET)

0 1" = 30' 60'

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GRADING & EROSION CONTROL PLAN 1" = 30'

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STREET ADDRESS
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WATERTOWN, WI 53094

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

Sheet Title:
GRADING & EROSION CONTROL PLAN
Sheet Number:
C-3
Project Number:
P13592

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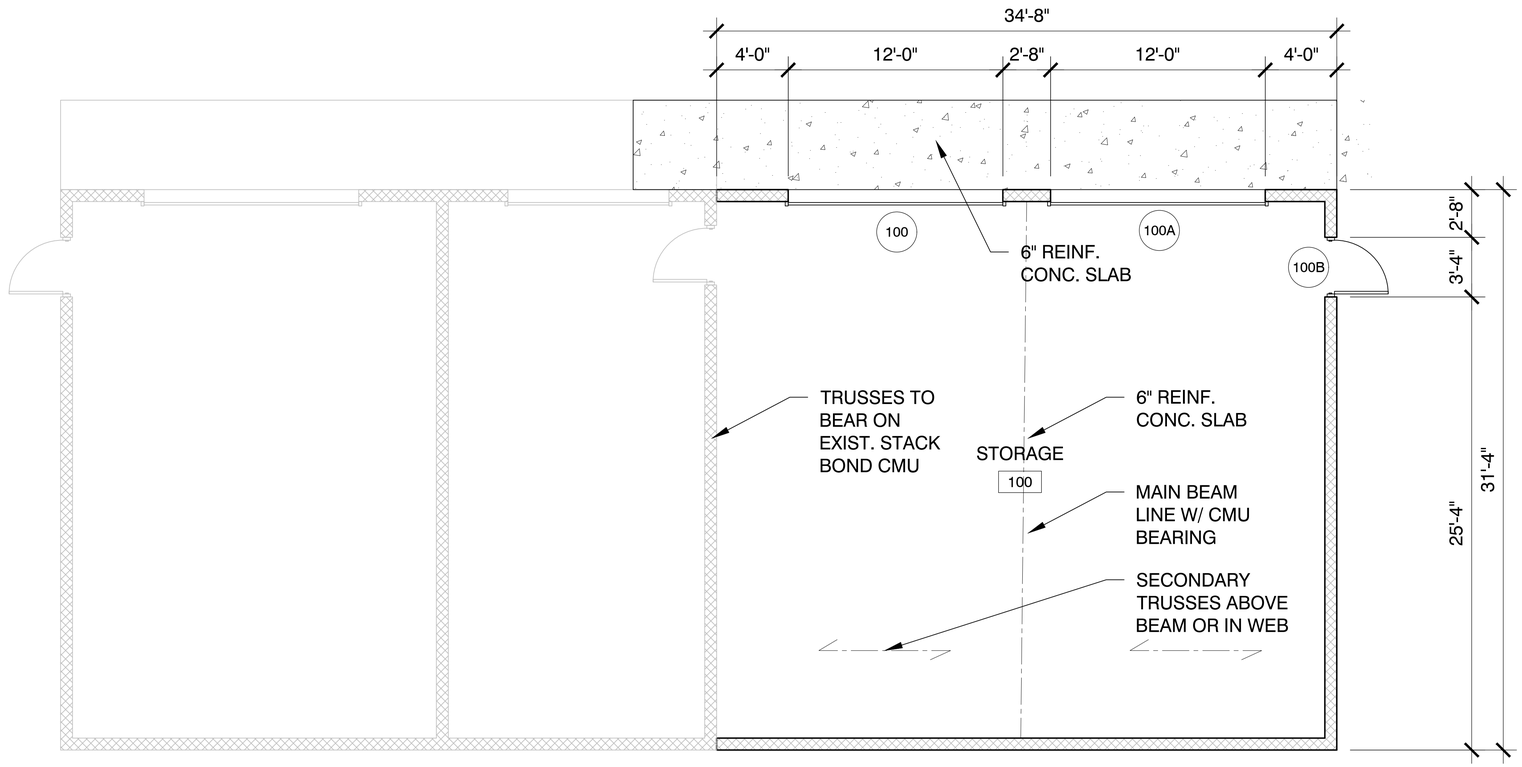

HM1A
H.M. DOOR
H.M. FRAME
SOLID DOOR
2" JAMB
4" HEAD

M3
OVERHEAD
MASONRY FRAME
SOLID DOOR
STND JAMB
STND HEAD

DOOR AND FRAME SCHEDULE

	DOOR								FRAME									
		SIZE								DETAIL								
DOOR #	TYPE	PR WxH	MATERIAL	SWING	GLASS SIZE	FINISH	Color	MATERIAL	JAMB	HEAD	FINISH	Color	LABEL	REMARKS	Door Keying	Door Hardware	DOOR #
100	M 3	12'-0" x 12'-8"	STND	NA		--	--	MASONRY	STND	STND	--	--	--	--	--	--	100
100A	M 3	12'-0" x 12'-0"	STND	NA		--	--	MASONRY	STND	STND	--	--	--	--	--	--	100A
100B	HM 1A	3'-0" x 7'-0"	H.M.	Right		--	--	H.M.	2"	4"	--	--	--	--	--	--	100B

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

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Architect:	Engineer:	Reviewed By:
BJZ	--	--

Sheet Title:
FLOOR PLAN

Sheet Number:
A-100

Project Number: --
P13592

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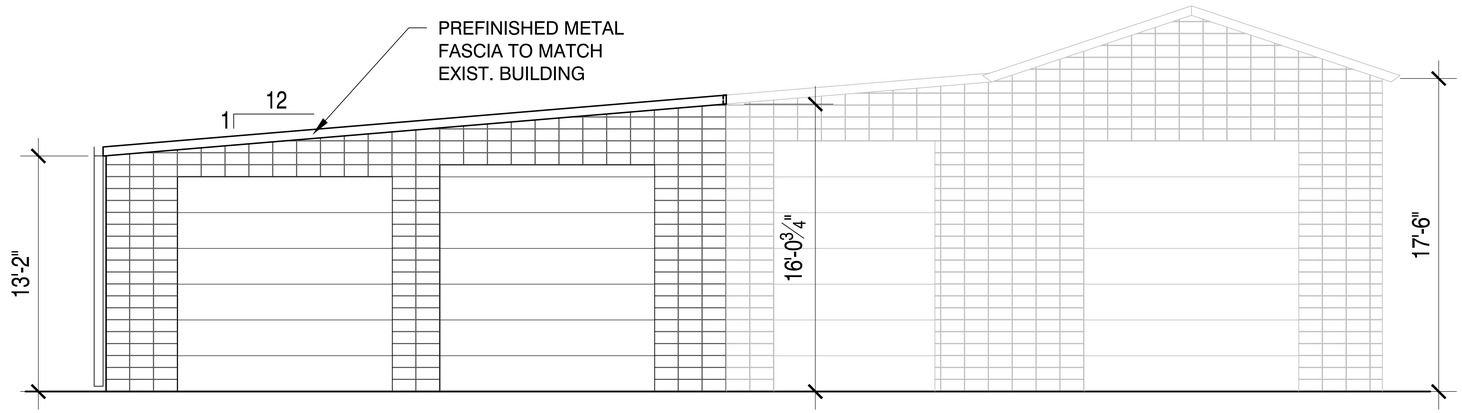
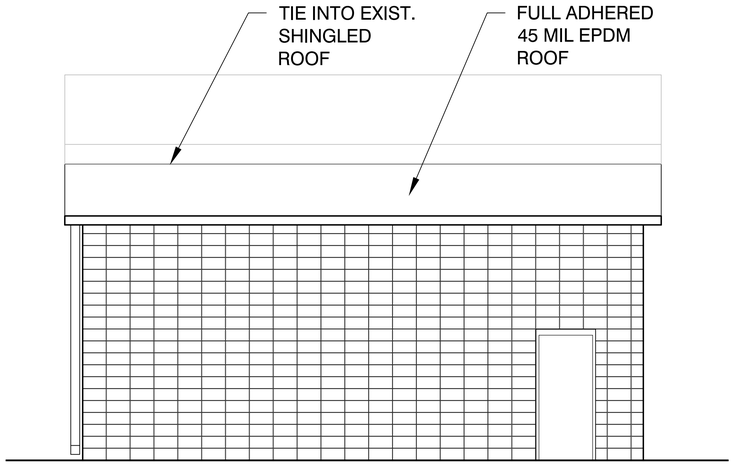
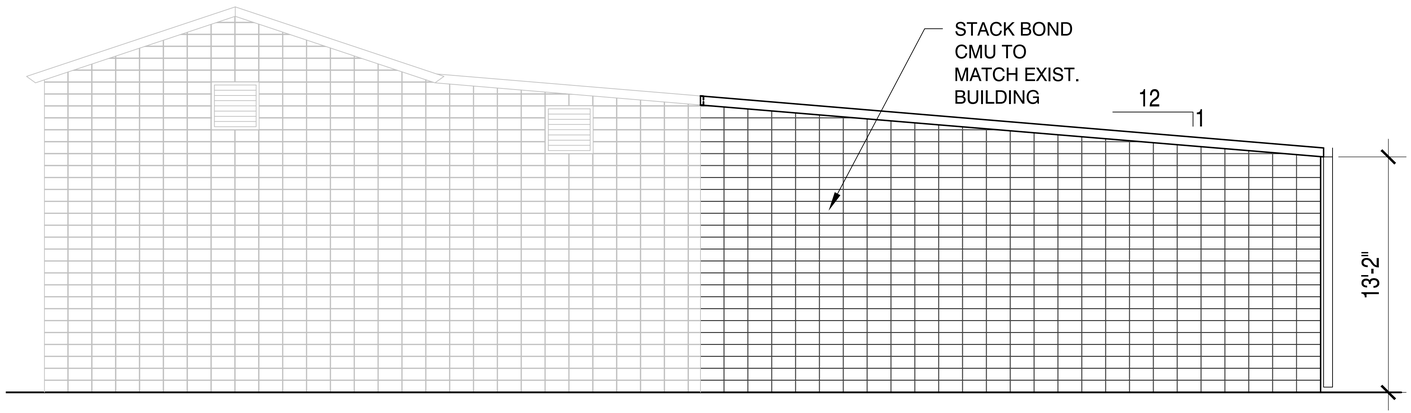


NORTH ELEVATION



WEST ELEVATION



SOUTH ELEVATION

EXTERIOR MATERIAL KEY NOTES

1 --

ELEVATIONS 1/4" = 1'-0"

MSI GENERAL

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

WWW.MSIGENERAL.COM
SINGLE SOURCE RESPONSIBILITY™

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:

1	--

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:	Engineer:	Reviewed By:
BJZ	--	--

Sheet Title:
EXTERIOR ELEVATIONS

Sheet Number:
A-201

Project Number: --
P13592

LEADERS . ENGINEERS . CONTRACTORS . ARCHITECTS

THE CITY OF WATERTOWN

ENGINEERING DIVISION

Andrew Beyer, P.E.
920.262.4050

Maureen McBroom, ENV SP
920.206-4264

Ritchie
920.262.4034

Christopher Newberry
920-390-3164

Administrative Assistant
Wanda Fredrick 920.262.4060

MEMO

TO: Mayor McFarland and Committee Members

FROM: Andrew Beyer, P.E.

DATE: March 6, 2024

RE: Site Plan Review Committee Meeting of March 11, 2024

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

Background:

The City of Watertown is looking to develop a new restroom facility at Riverside Park. The restroom project was awarded in late February to the lowest responsible and responsive bidder, Ray Stadler Construction Co., Inc. with construction anticipated to begin in April. The proposed structure has a footprint of roughly 1,600 square feet. The plan set is attached for review.

RIVERSIDE PARK RESTROOM - NEW CONSTRUCTION

600 LABAREE ST. | WATERTOWN, WI 53098

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S1.1	ROOF FRAMING PLAN
S1.2	HIGH ROOF FRAMING PLAN
S3.0	CONCRETE SECTIONS & DETAILS
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S4.0	MASONRY SECTIONS & DETAILS
S6.0	WOOD SECTIONS & DETAILS
S6.1	WOOD SECTIONS & DETAILS

BUILDING CODE SUMMARY

BASED ON THE	WISCONSIN COMMERCIAL BUILDING CODE (2015 INTERNATIONAL BUILDING CODE w/ WI AMENDMENTS) 2015 INTERNATIONAL EXISTING BUILDING CODE 2009 ANSI A117.1 ACCESSIBILITY CODE ALL OTHER CODES AND ORDINANCES AS REFERENCED BY THE ABOVE CODES
BUILDING AREA	TOTAL AREA FIRST FLOOR: 1,602 GROSS SF
FIRE ALARM:	NOT REQUIRED
OCCUPANCY	U - UTILITY
OCCUPANCY SEPARATION	NONE
CONSTRUCTION TYPE	V-B
SPRINKLER SYSTEM	NOT REQUIRED
FLAME SPREAD & SMOKE INDEX	NO RESTRICTIONS
CODE EXCEPTION	NONE

GENERAL NOTES

1. CONSTRUCTION IS TO BE IN COMPLIANCE WITH ALL GOVERNING CODES, ORDINANCES & STANDARDS. THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, & SUPERVISING ALL SAFETY PRECAUTIONS & PROGRAMS IN CONNECTION WITH THE PERFORMANCE OF THIS PROJECT.
2. ARCHITECT/DESIGNER SHALL NOT BE RESPONSIBLE FOR ANY COST, SCHEDULE OR CONSTRUCTION ISSUES ARISING DUE GC/OWNERS FAILURE TO DISTRIBUTE ALL DOCS. SUBCONTRACTORS & SUPPLIERS SHOULD ENDEAVOR TO REVIEW A COMPLETE SET OF DOCS BEFORE BIDDING, FABRICATING & INSTALL.
3. GC, SUBCONTRACTORS, MATERIAL SUPPLIERS, OWNER, ETC. MUST NOTIFY ARCHITECT OF ANY ERRORS, OMISSIONS, OR DEFECTS IN THE CONSTRUCTION DOCUMENTS PRIOR TO BIDDING, FABRICATING OR INSTALLING WORK.
4. SITE DIMENSIONS ARE TO BE FIELD VERIFIED AND ADJUSTED ACCORDINGLY. THE ARCHITECT/DESIGNER SHALL BE NOTIFIED OF ANY VARIANCES BEFORE CONTRACTOR BEGINS OR PROCEEDS WORK.
5. MECH, ELEC, PLUMB & FIRE PROTECTION ARE TO BE DESIGN BUILT, COMPLYING WITH ALL GOVERNING CODES, ORDINANCES & STANDARDS, WHICH WILL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR; THE ARCHITECT ASSUMES NO LIABILITY.
6. ALL MECH, ELEC, PLUMB & FIRE PROTECTION SYSTEMS/EQUIP. SHALL BE MAINTAINED ACCORDING TO MANUFACTURER'S STANDARDS. BLDG. OWNER SHALL ASSUME FULL RESPONSIBILITY FOR MAINTANANCE/OPPERATION UPON OCCUPANCY.
7. THE INSTALLATION AND EXECUTION OF ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S STANDARDS AND SPECIFICATIONS. ALL MEANS & METHODS OF CONSTRUCTION TO BE THE SOLE RESPONSIBILITY OF THE GC.
8. PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED IN OCCUPANCIES AND LOCATIONS AS REQUIRED BY THE INTERNATIONAL FIRE CODE. INSTALLATION LOCATIONS SHALL HAVE A MAXIMUM TRAVEL DISTANCE OF 75' TO ANY EXTINGUISHER. EXTINGUISHERS SHALL BE LOCATED IN CONSPICUOUS LOCATIONS WERE THEY WILL BE READILY ACCESSIBLE AND IMMEDIATELY AVAILABLE FOR USE, TYPICALLY ALONG PATHS OF TRAVEL. EXTINGUISHERS SHALL NOT BE OBSTRUCTED FROM VIEW. IF VISUAL OBSTRUCTION CAN NOT BE AVOIDED ANOTHER MEANS SHALL BE PROVIDED TO INDICATE THE EXTINGUISHER LOCATIONS. EXTINGUISHERS NOT EXCEEDING 40" SHALL BE INSTALLED SO THAT ITS TOP IS NOT MORE THAT 5'-0" ABOVE THE FLOOR, EXTINGUISHERS EXCEEDING 40" SHALL BE INSTALLED SO THAT ITS TOP IS NOT MORE THAN 3'-6" ABOVE THE FLOOR. THE CLEARANCE BETWEEN THE FLOOR AND BOTTOM OF HAND HELD UNITS SHALL NOT BE LESS THAN 4". VERIFY EXTINGUISHER LOCATIONS W/ LOCAL FIRE DEPT. & OWNER PRIOR TO INSTALLATION.
9. ALL CONCRETE FLAT WORK MUST BE WET CURED PER ACI REQUIREMENTS AND/OR CURED USING A CURING COMPOUND. REFER TO STRUCTURAL NOTES FOR CURING COMPOUND SPECS. CONTRACTOR IS RESPONSIBLE FOR APPLYING CURING COMPOUNDS PER THE MANUFACTURER'S REQUIREMENTS.

TYPICAL ABBREVIATIONS

ABV: Above
ACOUS: Acoustical
ADDL: Additional
ADH: Adhesive
ADJ: Adjustable
AFF: Above Finish Floor
AGG: Aggregate
AHJ: Authority Having Jurisdiction
A/C: Air Conditioning
ALT: Alternate
ALUM: Aluminum
ANC: Anchor, Anchorage
AB: Anchor Bolt
ANOD: Anodized
APX: Approximate
APT: Apartment
ARCH: Architect (architectural)
ASPH: Asphalt
AUTO: Automatic
AVE: Avenue
AVR: Average
AWN: Awning

BSMT: Basement
BM: Beam
BVL: Beveled
BITUM: Bituminous
BLK: Block
BLKG: Blocking
BLW: Below
BLDV: Boulevard
BTW: Between
BD: Board
BOT: Bottom
BLDG: Building
BUR: Built Up Roofing

B/O: By Others
BO: Bottom Of
BR: Bedroom

CAB: Cabinet
CALC: Calculation
CD: Cabinet Door
CG: Corner Guard
CIP: Cast-In-Place (Concrete)
CL: Centerline
CO: Clean Out
CONTR: Contract (or)
COORD: Coordinate
CRPT: Carpet
CIP: cast-in-place
CLK: Caulking
CAS: Casement
CB: Catch Basin
CLG: Ceiling
CT: Ceramic Tile
CIR: Circle
CLR: Clear
COL: Column
CONC: Concrete
CMU: Concrete Masonry Unit
CONST: CONSTruction
CONT: Continuous
CJT: Control Joint
CORR: Corrugated
CUFT: Cubic Foot
CUYD: Cubic Yard

DP: Dampproofing
DTL: Detail
DIA: Diameter
DIM: Dimension

DW: Dishwasher
DIV: Division
DR: Door
DH: Double Hung
DS: Downspout
DRWR: Drawer
DT: Drain Tile
DWG: Drawing
D: Nail Size

EW: Each Way
E: East
EL: Elevation
ELEV: Elevation
EQ: Equal
EQP: Equipment
EXCV: Excavate
EXH: Exhaust
EXIST: Existing
EXT: Exterior

FOC: Face of Concrete
FOF: Face of Finish
FOM: Face of Masonry
FOS: Face of Studs
FOW: Face of Wall
FBD: Fiberboard
FCB: Fiber Cement Board
FGL: Fiberglass
FIN: Finish
FFE: Finished Floor Elevation
FA: Fire Alarm
FE: Fire Extinguisher
FPL: Fireplace
FLSH: Flashing
FLR: Floor
FLOR: Fluorescent
FT: Foot, Feet

FTG: Footing
FND: Foundation
FRM: Fram(d), (ing)
FBO: Furnished by Others
FUR: Furred

GA: Gage, Gauge
GAL: Gallon
GL: Glass, Glazing
GI: Galvanized Iron
GLBK: Glass Block
GLB: Glue Laminated Beam
GT: Grout
GRD: Grade, Grading
GWB: Gypsum Wall Board

HWD: Hardware
HDR: Header
HTG: Heating
HVAC: Heating, Ventilation-Air Conditioning
HT: Height
HC: Hollow Core
HOR: Horizontal
HB: Hose Bib

IN: Inch
INCL: Include
ID: Inside Diameter
INS: Insulate
INT: Interior
INV: Invert

JNT: Joint
JST: Joist

KD: Kiln Dried
KIT: Kitchen

LB: Pound
LAM: Laminate(d)
LAV: Lavatory
LH: Left Hand
L: Length
LOA: Length Overall
LT: Light
LF: Lineal Feet
LL: Live Load
LVL: Laminated Veneer Lumber
LVR: Louver

MFR: Manufacturer
MO: Masonry Opening
MAX: Maximum
MAS: Masonry
MECH: Mechanic(al)
MC: Medicine Cabinet
MED: Medium
MDF: Medium Density Fiberboard
MDO: Medium Density Overlay
MBR: Member
MMB: Membrane
MTL: Metal
MWK: Millwork
MIN: Minimum
MIR: Mirror
MISC: Miscellaneous
MOD: Module
MLD: Moulding
MLB: Micro Laminate Beam

NOM: Nominal
N: North
NIC: Not in Contract
NTS: Not To Scale

NO, #: Number

O: Non-Operable Window Section
OBS: Obscure
OC: On Center
OP: Opaque
OPG: Opening
OSB: Orientated Strand Board
OD: Outside Diameter

PNT: Paint(ed)
PBD: Particle Board
PRT: partition
PVMT: Pavement
PERF: Perforate(d)
PLAS: Plaster
PLAM: Plastic Laminate
PLT: Plate
PLYWD: Plywood
PCC: Precast Concrete
PCF: Pounds Per Cubic Foot
PLF: Pounds Per Linear Foot
PSF: Pounds Per Square Foot
PSI: Pounds Per Square Inch
PBF: Prefabricated
PRF: Preformed
PT: Pressure Treated
PL: Property Line
PH: Toilet Paper Hanger

QTY: Quantity
QT: Quarry Tile

RAD: Radius
REF: Reference
RFL: Reflect(ed),(ive),(or)

REFR: Ref
REG: Register
RE: Reinforced
REQ'D: Required
RA: Return Air
REV: Revision
R: Riser
RD: Rod
R&S: Rod and Shelf
RFG: Roofing
RM: Room
RO: Rough Opening

SCH: Schedule
SCN: Screen
SECT: Section
SGD: Sliding Glass Door
SHTH: Sheathing
SHT: Sheet
SH: Shelf, Shelving
SIM: Similar
SKL: Skylight
S: South
SLB: Slab
SLD: Slider(ing)
SPEC: Specification
SQ: Square
STD: Standard
STV: Stove
STL: Steel
STR: Structural
SA: Supply Air
SC: Solid Core
SW: Shear Wall
SS: Stainless Steel
SYS: System

TEL: Telephone

TEMP: Tempered
TK: Tight Knot
T&G: Tongue and Groove
T/O: Top of
TOC: Top of Concrete
TOW: Top of Wall
TB: Towel Bar
T: Tread
TS: Tubular Steel
TYP: Typical

UL: Underwriters Laboratory
UNF: Unfinished
UNO: Unless Noted Otherwise

VB: Vapor Barrier
VAR: Varnish
VIF: Verify in Field
VRN: Veneer
VERT: Vertical
VG: Vertical Grain
VIN: Vinyl Sheet

WL: Wall
WC: Water Closet
WH: Water Heater
WP: Water Proofing
WR: Weather Resistant
WRB: Weather Resistive Barrier
WWF: Welded Wire Fabric
WWM: Welded Wire Mesh
W: West
WIN: Window
W/O: Without
W/: With
WD: Wood

X: Operable Window Section

PROJECT CONTACT INFO

ARCHITECT:
THRIVE ARCHITECTS
259 SOUTH STREET, SUITE A
WAUKESHA, WI 53186
P: 833-380-6180
PROJECT MANAGER: DAVID RASCHKA

WISCONSIN JEREMY D. BARTLETT 10236-005 Muskego WI ARCHITECT
01/17/2024

ATTN: JEREMY BARTLETT,
ARCHITECT OF RECORD

CIVIL ENGINEER:
JSD INC.
W238 N1610 BUSSE RD., SUITE 100
WAUKESHA, WI 53188
P: 262-513-0666
ATTN: KEVIN BYRNE, PLA & LEED AP BD+C

STRUCTURAL ENGINEER:
CORE 4 ENGINEERING, INC.
12308 CORPORATE PKWY., SUITE 450
MEQUON, WI 53092
P: 262-307-9988
ATTN: TOMMY TOLGAHAN UNAL

WISCONSIN MATTHEW A CHRISTIANSEN PE 36579-6 WEATHERFORD WI PROFESSIONAL ENGINEER
1/23/24

MECHANICAL ENGINEER:
IBC ENGINEERING SERVICES, INC.
N8W22195 JOHNSON DR.
WAUKESHA, WI 53186
P: 262-549-1190
ATTN: COLLEEN HOFFMANN, PE

WISCONSIN COLLEEN M. HOFFMANN 40740 NEW BERLIN WIS. PROFESSIONAL ENGINEER
1/19/2024

ELECTRICAL ENGINEER:
IBC ENGINEERING SERVICES, INC.
N8W22195 JOHNSON DR.
WAUKESHA, WI 53186
P: 262-549-1190
ATTN: DENNIS HESS, PE

WISCONSIN DENNIS M. HESS 33662 DOUSMAN, PROFESSIONAL ENGINEER
1/19/2024

PLUMBING ENGINEER:
IBC ENGINEERING SERVICES, INC.
N8W22195 JOHNSON DR.
WAUKESHA, WI 53186
P: 262-549-1190
ATTN: COLLEEN HOFFMANN, PE

WISCONSIN COLLEEN M HOFFMANN 40740 NEW BERLIN WIS. PROFESSIONAL ENGINEER
1/19/2024

OWNER:
CITY OF WATERTOWN
106 JONES ST., P.O. BOX 477
WATERTOWN, WI 53094
P: 920-262-4000

SITE

VICINITY MAP
SCALE: N.T.S.

THRIVE ARCHITECTS
Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

Project Info. — 22005
Riverside Park Restrooms
New Construction
600 Labaree St
Watertown, WI

Sheet Title
TITLE SHEET

Drawn by	Checked by
JAJ	DMR

Revisions

No.	Date	Description
	01.23.24	Bid & Permit Set

2024-01-23 Bid & Permit Set

Sheet No.
T1.0

RIVERSIDE PARK RESTROOM - NEW CONSTRUCTION

812 LABAREE ST. | WATERTOWN, WI 53098

OCCUPANT LOAD PER TABLE 1004.1.2 TOTAL OCCUPANT LOAD = 183 OCCUPANTS				
OCCUPANCY	SF	FLOOR AREA	CALC. OCC.	ASSIGNED OCC.
UTILITY	1,602 SF	500/GROSS	3	45

EGRESS REQUIREMENTS

EGRESS WIDTH PER 1005.3

# OF OCCUPANTS	EGRESS WIDTH FACTOR	EGRESS WIDTH REQUIRED	EGRESS WIDTH PROVIDED
45	.2 INCHES PER OCCUPANT	9"	34"

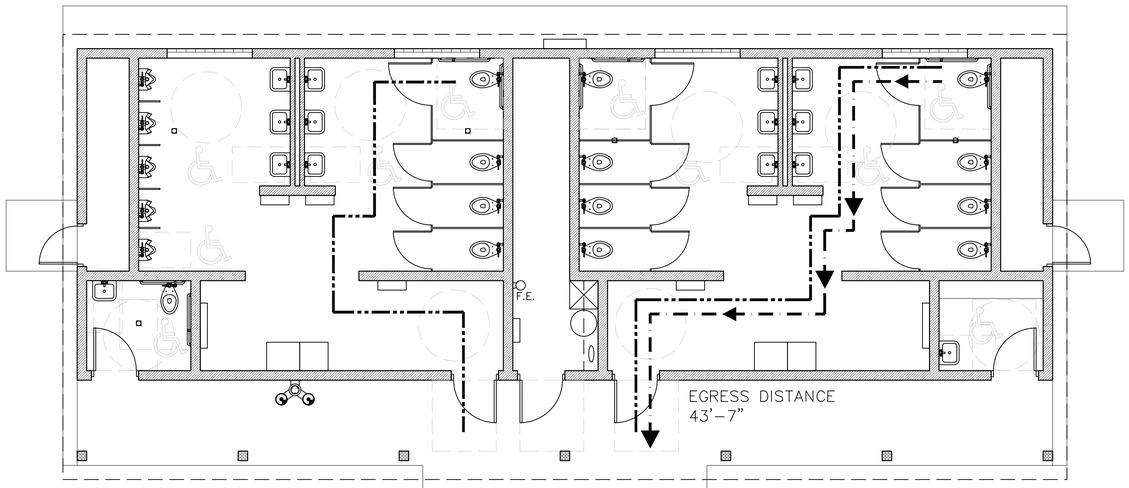
NO. OF EXITS REQUIRED PER SECTION 1006 = 1
NO. OF EXITS PROVIDED = 1
MAXIMUM EXIT TRAVEL DISTANCE PER TABLE 1017.2 = 200' (w/out SPRINKLER)

FIRE-RESISTANCE RATING SUMMARY
REFER TO IBC CHAPTER 6

CONSTRUCTION TYPE V-B	
PRIMARY STRUCTURAL FRAME	0
BEARING WALLS	
EXTERIOR	0
INTERIOR	0
NONBEARING WALLS	0
FLOOR CONSTRUCTION	0
ROOF CONSTRUCTION	0

ACCESSIBLE ROUTE

DELINEATES EXIT EGRESS PATH



FIRST FLOOR CODE PLAN 1
SCALE: N.T.S.

N

THRIVE ARCHITECTS
Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

Project Info. — 22005

Riverside Park Restrooms

New Construction

600 Labaree St
Watertown, WI

Sheet Title

CODE SHEET

Drawn by	Checked by
JAJ	DMR

Revisions

No.	Date	Description
	01.23.24	Bid & Permit Set

2024-01-23 Bid & Permit Set

Sheet No.

T1.1

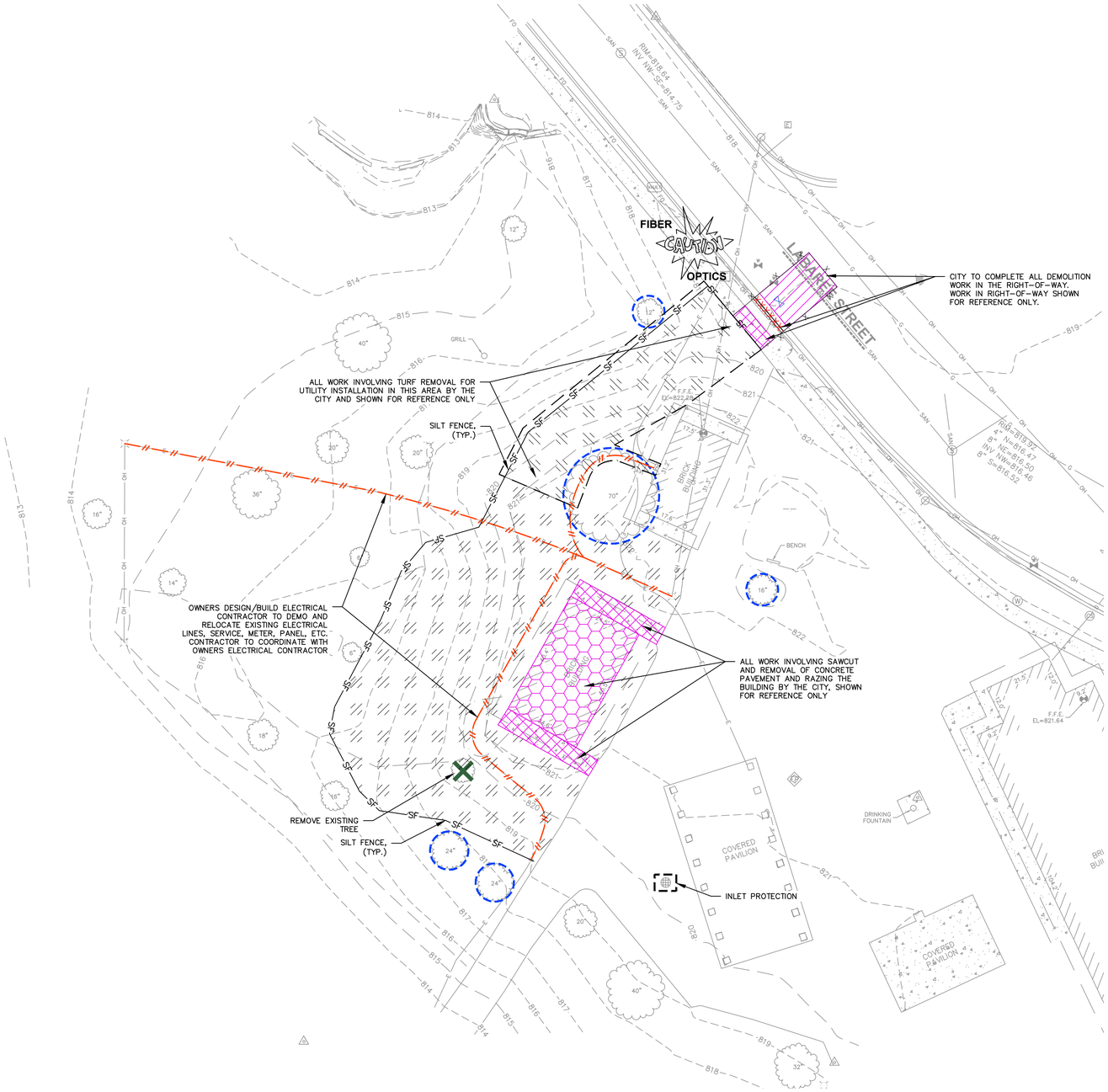
CONSTRUCTION SEQUENCING

1. INSTALL PERIMETER SILT FENCE AND INLET PROTECTION.
2. STRIP AND STOCKPILE TOPSOIL, INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE.
3. CONDUCT ROUGH GRADING EFFORTS AND INSTALL CHECK DAMS WITHIN DRAINAGE DITCHES AS NEEDED.
4. INSTALL UTILITY PIPING AND STRUCTURES, IMMEDIATELY INSTALL INLET PROTECTION.
5. COMPLETE INSTALLATION OF GRAVEL BASE COURSES, PLACEMENT OF CURBS, PAVEMENTS, WALKS, ETC.
6. FINAL GRADING BY CITY.
7. EROSION CONTROLS SHALL NOT BE REMOVED UNTIL SITE IS FULLY STABILIZED OR 70% VEGETATIVE COVER IS ESTABLISHED.

CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM NO. 1 AS NEEDED TO COMPLETE CONSTRUCTION IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS.

DEMOLITION NOTES

1. THIS PLAN INDICATES ITEMS ON THE PROPERTY INTENDED FOR DEMOLITION BASED ON THE CURRENT SITE DESIGN THAT HAVE BEEN IDENTIFIED BY A REASONABLE OBSERVATION OF THE EXISTING CONDITIONS THROUGH FIELD SURVEY RECONNAISSANCE, "DIGGER'S HOTLINE" LOCATION, AND GENERAL "STANDARD OF CARE". THERE MAY BE ADDITIONAL ITEMS THAT CAN NOT BE IDENTIFIED BY A REASONABLE ABOVE GROUND OBSERVATION, OF WHICH THE ENGINEER WOULD HAVE NO KNOWLEDGE OR MAY BE A PART OF ANOTHER DESIGN DISCIPLINE. IT IS THE CONTRACTOR'S/BIDDER'S RESPONSIBILITY TO REVIEW THE PLANS, INSPECT THE SITE AND PROVIDE THEIR OWN DUE DILIGENCE TO INCLUDE IN THEIR BID WHAT ADDITIONAL ITEMS, IN THEIR OPINION, MAY BE NECESSARY FOR DEMOLITION. ANY ADDITIONAL ITEMS IDENTIFIED BY THE CONTRACTOR/BIDDER SHALL BE IDENTIFIED IN THE BID AND REPORTED TO THE ENGINEER OF RECORD. JSD TAKES NO RESPONSIBILITY FOR ITEMS ON THE PROPERTY THAT COULD NOT BE LOCATED BY A REASONABLE OBSERVATION OF THE PROPERTY OR OF WHICH THEY WOULD HAVE NO KNOWLEDGE.
2. CONTRACTOR SHALL KEEP ALL STREETS AND PRIVATE DRIVES FREE AND CLEAR OF ALL CONSTRUCTION RELATED DIRT, DUST AND DEBRIS.
3. ALL TREES WITHIN THE CONSTRUCTION LIMITS SHALL BE PROTECTED UNLESS SPECIFICALLY CALLED OUT FOR REMOVAL. ALL TREES TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY AND STUMPS SHALL BE GROUND TO PROPOSED SUBGRADE.
4. ALL LIGHT POLES TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY, INCLUDING BASE AND ALL APPURTENANCES. SALVAGE FOR RELOCATION. COORDINATE RELOCATION AND/OR ABANDONMENT OF ALL ELECTRIC LINES WITH ELECTRICAL ENGINEER AND OWNER PRIOR TO DEMOLITION.
5. ABANDONED/REMOVED ITEMS SHALL BE DISPOSED OF OFF SITE UNLESS OTHERWISE NOTED.
6. CONTRACTOR TO REPLACE ALL SIDEWALK AND CURB AND GUTTER ABUTTING THE PROPERTIES, WHICH IS DAMAGED BY THE CONSTRUCTION, OR ANY SIDEWALK AND CURB AND GUTTER THAT THE CITY ENGINEER DETERMINES NEEDS TO BE REPLACED BECAUSE IT IS NOT AT A DESIRABLE GRADE REGARDLESS OF WHETHER THE CONDITION EXISTED PRIOR TO BEGINNING CONSTRUCTION.
7. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR:
   - 7.1. EXAMINE ALL SITE CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION.
   - 7.2. VERIFYING UTILITY ELEVATIONS AND NOTIFYING ENGINEER OF ANY DISCREPANCIES. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCIES ARE RESOLVED.
   - 7.3. NOTIFYING ALL UTILITIES PRIOR TO THE REMOVAL OF ANY UNDERGROUND UTILITIES.
   - 7.4. NOTIFYING THE DESIGN ENGINEER AND LOCAL CONTROLLING MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION INSPECTION.
8. ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
9. CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING THE CONSTRUCTION OF THESE IMPROVEMENTS.
10. CONTRACTOR TO COORDINATE PRIVATE UTILITY REMOVAL / ABANDONMENT AND NECESSARY RELOCATION WITH RESPECTIVE UTILITY COMPANY. COORDINATION REQUIRED PRIOR TO CONSTRUCTION.
11. ALL DEMOLITION SHALL BE IN ACCORDANCE WITH THE APPROVED MUNICIPALITY RECYCLING PLAN.
12. ANY CONTAMINATED SOILS SHALL BE REMOVED IN ACCORDANCE WITH FEDERAL AND STATE REGULATIONS TO AN APPROVED LANDFILL.
13. ALL EXISTING UTILITIES TO BE FIELD LOCATED AND FLAGGED BY CONTRACTOR.
14. EXISTING FIBER OPTIC LINE TO BE CLEARLY MARKED PRIOR TO ANY EXCAVATION. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCIES OCCUR IN THE LOCATION SHOWN OR PROPOSED IMPROVEMENTS IMPACTING EXISTING FIBER OPTIC LINE LOCATION.
15. ALL PERIMETER EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF DEMOLITION ACTIVITIES. CONTRACTOR SHALL KEEP ALL STREETS AND PAVEMENT FREE AND CLEAR OF ALL CONSTRUCTION RELATED DIRT, DUST AND DEBRIS.



LEGEND

- PROPERTY LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- EXISTING ASPHALT PAVEMENT AND BASE TO BE REMOVED BY CITY, N.I.C.
- EXISTING CONCRETE PAVEMENT AND BASE TO BE REMOVED BY THE CITY, N.I.C.
- EXISTING BUILDING TO BE REMOVED BY THE CITY, REFER TO BLDG. PLAN, N.I.C.
- SF SILT FENCE
- PAVEMENT SAWCUT BY CITY, N.I.C.
- EXISTING CURB TO BE REMOVED BY CITY, N.I.C.
- REMOVE TREE
- EXISTING ELECTRICAL TO BE REMOVED AND RELOCATED BY OTHERS, N.I.C.
- PROTECT EXISTING TREES
- INLET PROTECTION
- REMOVE AND DISPOSE OF VEGETATION, STRIP AND STOCKPILE TOPSOIL, THICKNESS MAY VARY
- VEGETATION AND TOPSOIL PREVIOUSLY REMOVED BY CITY FOR UTILITY INSTALLATION, N.I.C.

CIVIL SHEET INDEX

C1.0 – SITE DEMOLITION PLANS
C2.0 – SITE LAYOUT PLAN
C3.0 – GRADING AND EROSION CONTROL PLAN
C4.0 – UTILITY PLAN
C5.0 – DETAILS
C5.1 – NOTES AND DETAILS

north

SCALE IN FEET

20' 0 20'

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MILWAUKEE REGIONAL OFFICE
W238 N1610 BUSSE ROAD, SUITE 100
WAUKESHA, WISCONSIN 53188
P. 262.513.0666
JSD #21-11127

THRIVE ARCHITECTS
Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

Project Info. — 22005

Riverside Park Restrooms

New Construction

600 Labaree St
Watertown, WI

Sheet Title

DEMOLITION PLAN

Drawn by	Checked by
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Revisions

No.	Date	Description
1	01.23.24	Bid & Permit Set

2024-01-23 Bid & Permit Set

Sheet No.

C1.0

GENERAL NOTES

1. WATER AND SANITARY SEWER WERE INSTALLED BY THE CITY AND STUBBED TO THE BACK OF THE BUILDING.
2. ROUGH GRADE IN THE CONTRACT.
   FINISH GRADE, SODDING, LANDSCAPING, AND EROSION MATTING NOT IN CONTRACT. CITY TO COMPLETE THE WORK.
3. OLD BUILDING ELECTRICAL IS DISCONNECTED.
4. ELECTRICAL CONTRACTOR TO COORDINATE OUTDOOR PANEL, METER, ETC.
5. BUILDING AND CONCRETE SIDEWALK IN CONTRACT.

PAVING NOTES

1. GENERAL

1.1. ALL PAVING SHALL CONFORM TO "STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION, LATEST EDITION, APPLICABLE CITY OF WATERTOWN ORDINANCES.

1.2. SURFACE PREPARATION – NOTIFY ENGINEER/OWNER OF UNSATISFACTORY CONDITIONS. DO NOT BEGIN PAVING WORK UNTIL DEFICIENT SUBBASE AREAS HAVE BEEN CORRECTED AND ARE READY TO RECEIVE PAVING.

2. CONCRETE PAVING SPECIFICATIONS

2.1. CONCRETE PAVING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 415 AND 416 OF THE STATE HIGHWAY SPECIFICATIONS.

2.2. CONTRACTOR SHALL SAWCUT ASPHALT AND REMOVE AS NECESSARY TO CREATE A CLEAN, STRUCTURALLY SOUND EDGE TO ABUT CONCRETE TO.

2.3. CONCRETE PAVEMENT SHALL BE REINFORCED WITH NOVOMESH 950 (OR EQUAL) FIBER REINFORCEMENT AT A RATE OF 5 LBS/CUBIC YARD.

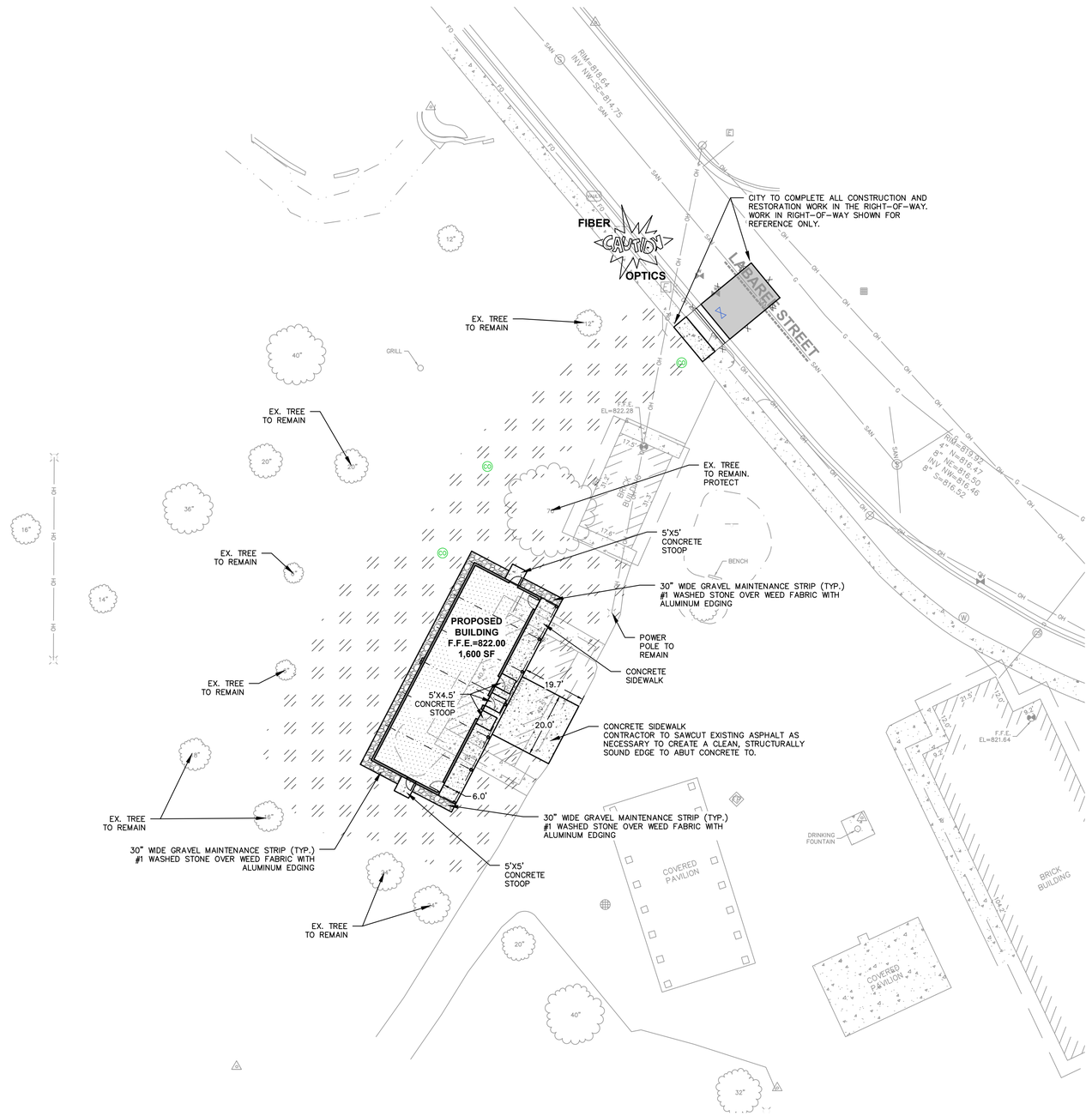
2.4. CURING COMPOUNDS SHALL CONFORM TO SECTION 415 OF THE STATE HIGHWAY SPECIFICATIONS.

2.5. CONTRACTOR SHALL PROVIDE CONTROL JOINTS AND CONSTRUCTION JOINTS OF ONE-QUARTER CONCRETE THICKNESS AT AN EQUAL RATIO OF LENGTH TO WIDTH WHEREVER POSSIBLE WITH A MAXIMUM LENGTH BETWEEN JOINTS OF 8' ON CENTER.

2.6. CONTRACTOR SHALL PROVIDE EXPANSION JOINTS IN SIDEWALKS AT A MAXIMUM 24' ON CENTER.

2.7. EXTERIOR CONCRETE SURFACES SHALL BE BROOM FINISHED.

2.8. ALL CONCRETE SURFACES TO BE SEALED WITH TYPE TK-26UV CONCRETE SEALANT.



SITE INFORMATION BLOCK

SITE ADDRESS	812 LABAREE ST (ZONING SR-4)
PROPERTY ACREAGE	11.38 ACRES
DISTURBANCE AREA	0.23 ACRES
NUMBER OF BUILDING STORIES	
TOTAL BUILDING SQUARE FOOTAGE	1,600 SF

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- STANDARD CURB AND GUTTER BY CITY
- LIGHT DUTY ASPHALT PAVEMENT BY CITY
- CONCRETE SIDEWALK
  5" CONCRETE
  6" CRUSHED AGGREGATE BASE COURSE
- 30" WIDE GRAVEL MAINTENANCE STRIP
- SAWCUT PAVEMENT BY CITY
- SANITARY CLEANOUT
- WATER VALVE
- CONTRACTOR TO ROUGH GRADE AREA. CITY TO COMPLETE FINISH GRADE, SEEDING, AND EROSION MATTING.

north
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20' 0 20'

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THRIVE ARCHITECTS
Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

Project Info. — 22005

Riverside Park Restrooms

New Construction

600 Labaree St
Watertown, WI

Sheet Title

SITE LAYOUT PLAN

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C2.0

GENERAL NOTES

1. ALL WORK IN THE ROW AND/OR PUBLIC EASEMENTS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN AND MUNICIPAL REQUIREMENTS.
2. EXISTING GRADE SPOT ELEVATIONS SHOWN FOR INFORMATIONAL PURPOSES. DURING CONSTRUCTION MATCH EXISTING GRADES AT CONSTRUCTION LIMITS.
3. NO SITE GRADING OUTSIDE OR DOWNSLOPE OF PROPOSED SILT FENCE LOCATION. NO LAND DISTURBANCE BEYOND PROPERTY LINES.
4. JSD SHALL BE HELD HARMLESS AND DOES NOT WARRANT ANY DEVIATIONS BY THE OWNER/CONTRACTOR FROM THE APPROVED CONSTRUCTION PLANS THAT MAY RESULT IN DISCIPLINARY ACTIONS BY ANY OR ALL REGULATORY AGENCIES.

GRADING AND SEEDING NOTES

1. ALL PROPOSED GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL VERIFY ALL GRADES, MAKE SURE ALL AREAS DRAIN PROPERLY AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR COMPUTATIONS OF ALL GRADING QUANTITIES. WHILE JSD PROFESSIONAL SERVICES, INC. ATTEMPTS TO PROVIDE A COST EFFECTIVE APPROACH TO BALANCE EARTHWORK, GRADING DESIGN IS BASED ON MANY FACTORS, INCLUDING SAFETY, AESTHETICS, AND COMMON ENGINEERING STANDARDS OF CARE. THEREFORE, NO GUARANTEE CAN BE MADE FOR A BALANCED SITE.
3. PARKING LOT AND DRIVEWAY ELEVATIONS ARE PAVEMENT GRADES, NOT TOP OF CURB GRADES, UNLESS OTHERWISE NOTED.
4. ANY WORK WITHIN RIGHT-OF-WAY SHALL BE PROPERLY PERMITTED AND COORDINATED WITH THE APPROPRIATE OFFICIALS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. ALL GRADING WITHIN RIGHT-OF-WAY IS SUBJECT TO APPROVAL BY SAID OFFICIALS.
5. CONTRACTOR SHALL PROVIDE NOTICE TO THE MUNICIPALITY IN ADVANCE OF ANY SOIL DISTURBING ACTIVITIES, IN ACCORDANCE WITH MUNICIPAL REQUIREMENTS.

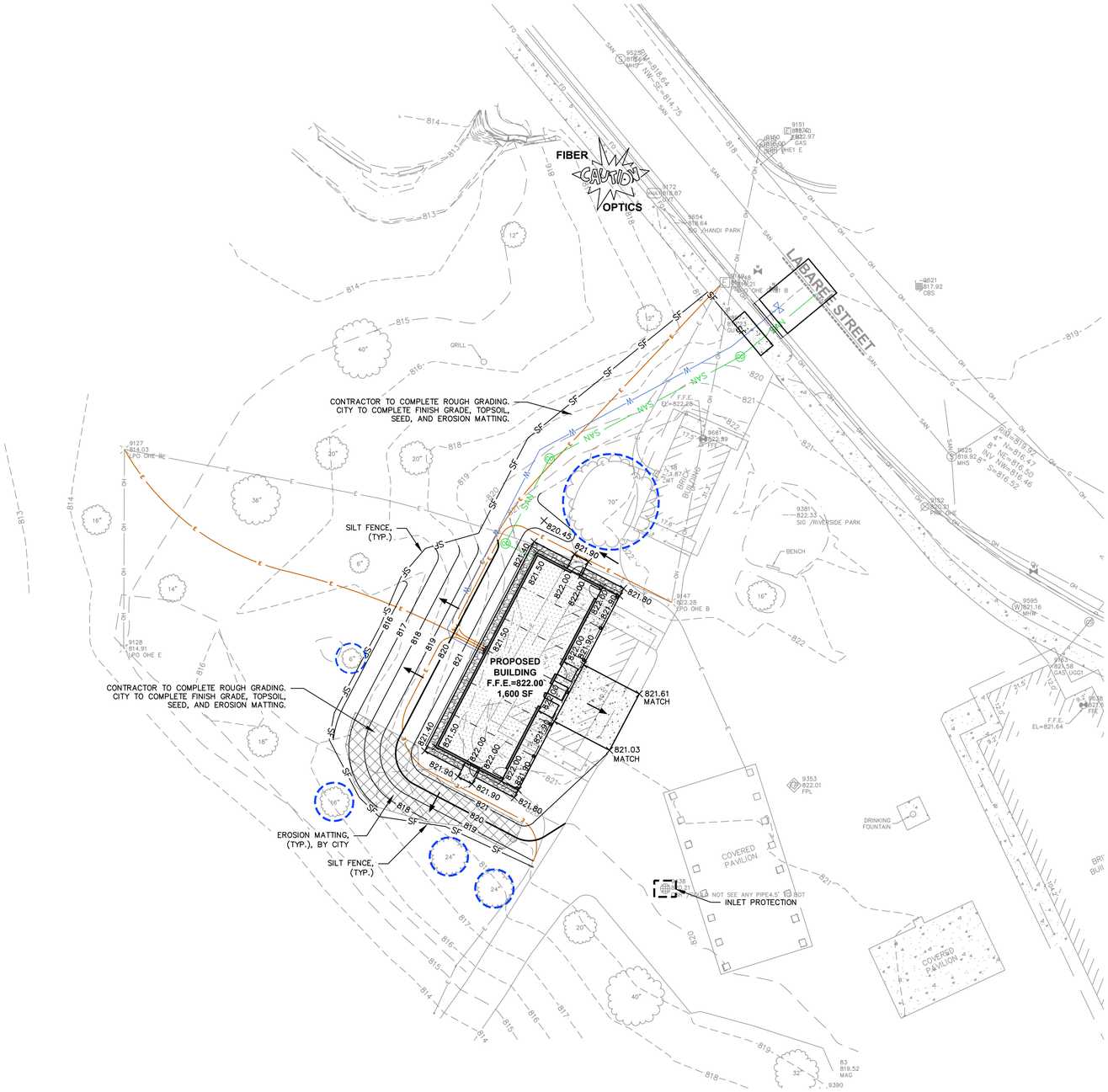
THE FOLLOWING NOTES APPLY TO RESTORATION WORK COMPLETED BY THE CITY, N.I.C.

6. ALL DISTURBED AREAS SHALL BE SODDED AND/OR SEEDED AND MULCHED IMMEDIATELY FOLLOWING GRADING ACTIVITIES. SOD/SEED MIX TO BE IN ACCORDANCE WITH LANDSCAPE PLAN.
7. CITY SHALL WATER ALL NEWLY SODDED/SEEDED AREAS DURING THE SUMMER MONTHS WHENEVER THERE IS A 7 DAY LAPSE WITH NO SIGNIFICANT RAINFALL.
8. CITY TO DEEP TILL ALL COMPACTED PERVIOUS SURFACES PRIOR TO SODDING AND/OR SEEDING AND MULCHING.
9. ALL SLOPES 20% OR GREATER SHALL BE TEMPORARY SEEDED, MULCHED, OR OTHER MEANS OF COVER PLACED ON THEM WITHIN 2 WEEKS OF DISTURBANCE.
10. ALL EXPOSED SOIL AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 30 DAYS AND REQUIRE VEGETATIVE COVER FOR LESS THAN 1 YEAR, REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1059 AND CITY OF WATERTOWN ORDINANCE.

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- STANDARD CURB AND GUTTER
- SF — SF — SILT FENCE
- 959 — PROPOSED 1 FOOT CONTOUR
- 960 — PROPOSED 5 FOOT CONTOUR
- 959 — EXISTING 1 FOOT CONTOUR
- 960 — EXISTING 5 FOOT CONTOUR
- PROTECT EXISTING TREES
- EROSION MATTING, BY CITY
- SAN — SANITARY SERVICE
- SANITARY CLEANOUT
- W — WATER SERVICE
- WATER VALVE
- INLET PROTECTION - SILT LOGS OR STAKED STRAW BALES
- DRAINAGE ARROW

SEE UTILITY SHEET FOR ADDITIONAL INFORMATION



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Riverside Park Restrooms

New Construction

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Sheet Title

GRADING AND EROSION CONTROL PLAN

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C3.0

UTILITY PLAN AND NOTES: FOR REFERENCE ONLY - SCOPE NOT IN CONTRACT. UTILITIES BY CITY, CONTRACTOR TO COORDINATE WITH CITY AND CITY'S CONTRACTORS.

1. ALL EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATIONS OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR/OWNER SHALL CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.

2. PRIOR TO CONSTRUCTION, THE PRIME CONTRACTOR IS RESPONSIBLE FOR:
   EXAMINING ALL SITE CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION.
   - OBTAINING ALL PERMITS INCLUDING PERMIT COSTS, TAP FEES, METER DEPOSITS, BONDS, AND ALL OTHER FEES REQUIRED FOR PROPOSED WORK TO OBTAIN OCCUPANCY.
   - VERIFYING ALL ELEVATIONS, LOCATIONS AND SIZES OF SANITARY, WATER AND STORM LATERALS AND CHECK ALL UTILITY CROSSINGS FOR CONFLICTS. NOTIFY ENGINEER OF ANY DISCREPANCY. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS RESOLVED.
   - NOTIFYING ALL UTILITIES PRIOR TO INSTALLATION OF ANY UNDERGROUND IMPROVEMENTS.
   - NOTIFYING THE DESIGN ENGINEER AND MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION OBSERVATION.
   - COORDINATING ALL CONSTRUCTION WITH OTHER CONTRACTORS INVOLVED WITH CONSTRUCTION OF THE PROPOSED DEVELOPMENT AND FOR REPORTING ANY ERRORS OR DISCREPANCIES BETWEEN THESE PLANS AND PLANS PREPARED BY OTHERS.

3. ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN – AND ALL STATE AND LOCAL CODES AND SPECIFICATIONS. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE WHICH SPECIFICATIONS AND CODES APPLY, AND TO COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE LOCAL AND STATE AUTHORITIES.

4. SPECIFICATIONS SHALL COMPLY WITH THE CITY OF WATERTOWN SPECIAL PROVISIONS.

5. LENGTHS OF ALL UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLAN. LENGTHS SHALL BE VERIFIED IN THE FIELD DURING CONSTRUCTION.

6. CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING THE CONSTRUCTION OF IMPROVEMENTS.

7. CONTRACTOR SHALL INSTALL A PEDESTRIAN FENCE AROUND ALL EXCAVATIONS TO BE LEFT OPEN OVER NIGHT AS REQUIRED IN CONSTRUCTION SITES WHERE THE POTENTIAL FOR PEDESTRIAN INJURY EXISTS.

8. CONTRACTOR SHALL ADJUST AND/OR RECONSTRUCT ALL UTILITY COVERS (SUCH AS MANHOLE COVERS, VALVE BOX COVERS, ETC.) TO MATCH THE FINISHED GRADES OF THE AREAS EFFECTED BY THE CONSTRUCTION.

9. THE PRIME CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CONSTRUCTION WITH OTHER CONTRACTORS INVOLVED WITH CONSTRUCTION OF THE PROPOSED DEVELOPMENT AND FOR REPORTING ANY ERRORS OR DISCREPANCIES BETWEEN THESE PLANS AND PLANS PREPARED BY OTHERS.

10. ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.

11. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE ENGINEER WITH AS–BUILT CONDITIONS OF THE DESIGNATED IMPROVEMENTS IN ORDER THAT THE APPROPRIATE DRAWINGS CAN BE PREPARED, IF REQUIRED. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE ENGINEER AS WORK PROGRESSES.

12. WATER MAIN SPECIFICATIONS –

    PIPE – POLYVINYL CHLORIDE (PVC) PIPE SHALL MEET THE REQUIREMENTS OF AWWA STANDARD C–900, CLASS 150, DR–18, WITH CAST IRON O.D. AND INTEGRAL ELASTOMERIC BELL AND SPIGOT JOINTS. NON–METALLIC WATER MAINS SHALL BE INSTALLED WITH BLUE INSULATION TRACER WIRE AND CONFORM WITH SPS 382.30(11)(h).

    VALVES AND VALVE BOXES – GATE VALVES SHALL BE AWWA GATE VALVES MEETING THE REQUIREMENTS OF AWWA C–500 AND CHAPTER 8.27.0 OF THE "STANDARD SPECIFICATIONS". GATE VALVES AND VALVE BOXES SHALL CONFORM TO LOCAL PLUMBING ORDINANCES.

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

    BACKFILL: PRIVATE SERVICE – BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE WITH CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS". GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS".

    BACKFILL AND BEDDING: PUBLIC R.O.W – ALL EXCAVATION IN THE PUBLIC STREET RIGHT–OF–WAY HALL BE BACKFILLED WITH SLURRY IN ACCORDANCE WITH LOCAL REGULATIONS.

13. SANITARY SEWER SPECIFICATIONS –

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

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

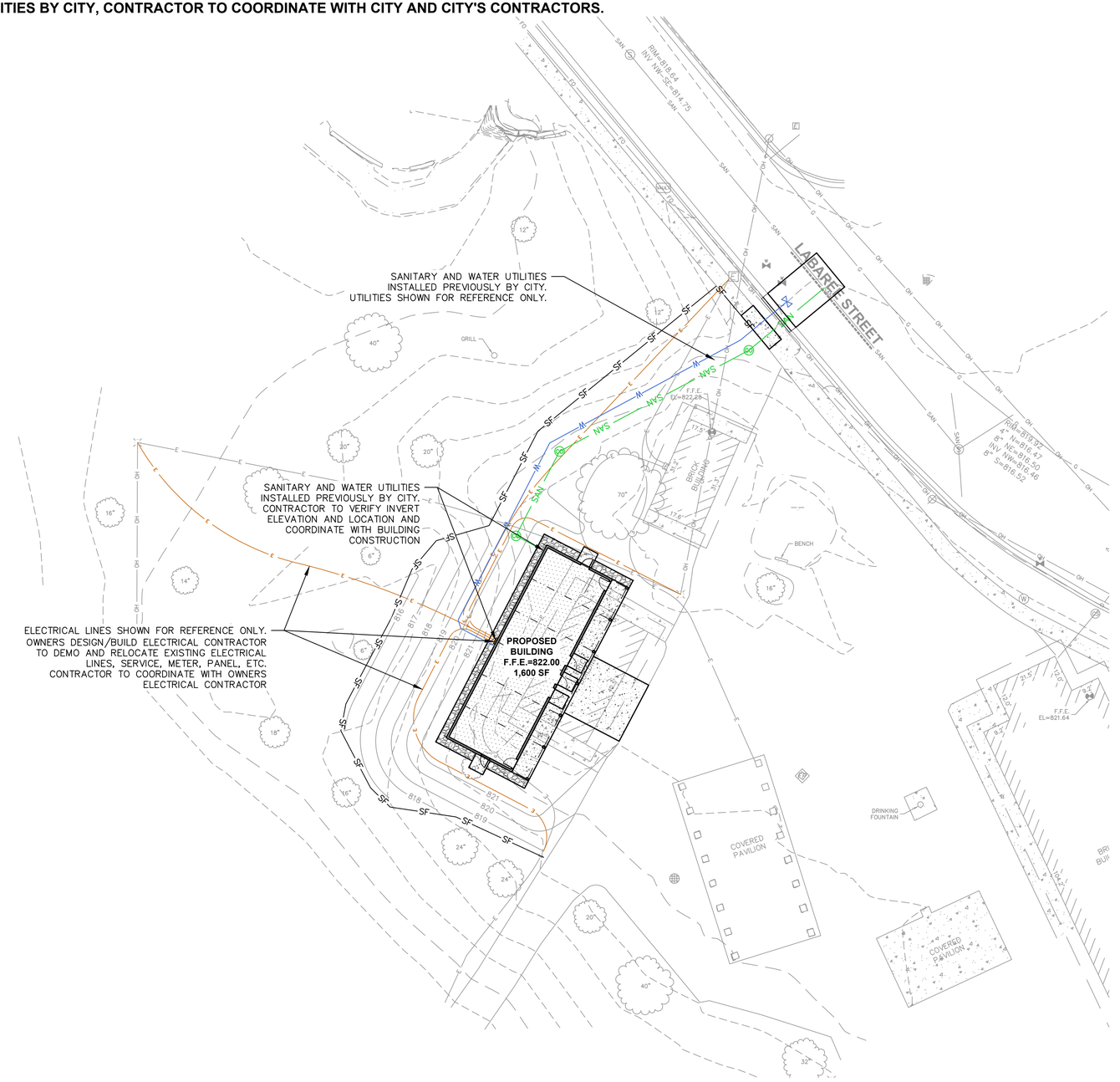
    BACKFILL: PRIVATE SERVICE – BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS." GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS."

    BACKFILL AND BEDDING: PUBLIC R.O.W – ALL EXCAVATION IN THE PUBLIC STREET RIGHT–OF–WAY HALL BE BACKFILLED WITH SLURRY IN ACCORDANCE WITH LOCAL REGULATIONS.

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

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- STANDARD CURB AND GUTTER
- SF SILT FENCE
- SAN SANITARY SERVICE
- SANITARY CLEANOUT
- W WATER SERVICE
- WATER VALVE



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UTILITY PLAN

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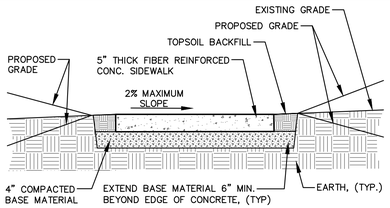
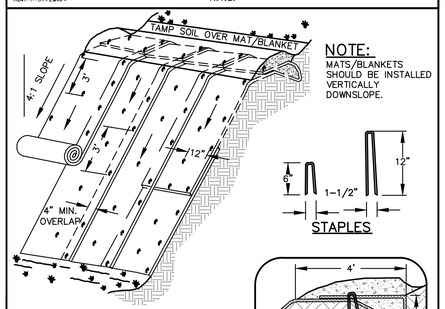


NOTE: CONCRETE PAVEMENT SHALL BE REINFORCED WITH NOVOMESH 950 (OR EQUAL) FIBER REINFORCEMENT AT A RATE OF 5 LBS/CUBIC YARD.

CONCRETE SIDEWALK

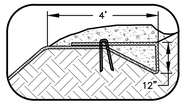
REV. 11-19-2018

N.T.S.



ISOMETRIC VIEW
TYPICAL SLOPE SOIL STABILIZATION

STAPLES



BERM

GENERAL NOTES:

1. EROSION MAT CONSTRUCTION SHALL BE IN ACCORDANCE WITH WISCONSIN DNR TECHNICAL STANDARD 1052 "NON-CHANNEL EROSION MAT".
2. ONLY WisDOT EROSION CONTROL PRODUCT ACCEPTABILITY LIST (PAL) APPROVED MATS SHALL BE ALLOWED. REFER TO EROSION CONTROL PLAN FOR EXACT MAT CLASSIFICATION.
3. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
4. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
5. ONLY WisDOT EROSION CONTROL PRODUCT ACCEPTABILITY LIST (PAL) APPROVED MATS SHALL BE ALLOWED. REFER TO EROSION CONTROL PLAN FOR EXACT MAT CLASSIFICATION.

NOTE:
MATS/BLANKETS SHOULD BE INSTALLED VERTICALLY DOWNSLOPE.

EROSION MATTING

REV. 11-19-2018

N.T.S.

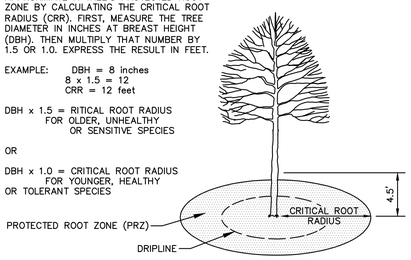
APPROXIMATE A TREE'S PROTECTED ROOT ZONE BY CALCULATING THE CRITICAL ROOT RADIUS (CRR). FIRST, MEASURE THE TREE DIAMETER IN INCHES AT BREAST HEIGHT (DBH). THEN MULTIPLY THAT NUMBER BY 1.5 OR 1.0. EXPRESS THE RESULT IN FEET.

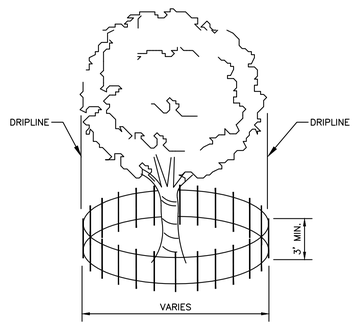
EXAMPLE: DBH = 8 inches
8 x 1.5 = 12
CRR = 12 feet

DBH x 1.5 = RITICAL ROOT RADIUS FOR OLDER, UNHEALTHY OR SENSITIVE SPECIES

OR

DBH x 1.0 = CRITICAL ROOT RADIUS FOR YOUNGER, HEALTHY OR TOLERANT SPECIES



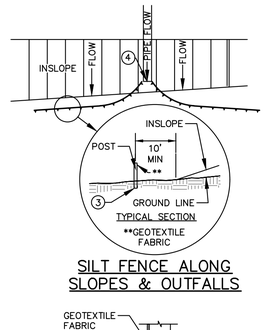


NOTE:
1. CONTRACTOR SHALL INSTALL TREE PROTECTION FENCING IN THE AREA SURROUNDING THE TREE WITHIN THE CRITICAL ROOT RADIUS
2. NO EXCAVATION IS PERMITTED WITHIN THE CRITICAL ROOT RADIUS
3. IF EXCAVATION WITHIN THE CRITICAL ROOT RADIUS OF ANY TREE IS NECESSARY, CONTRACTOR SHALL CONTACT CITY FORESTER PRIOR TO EXCAVATION TO ASSESS THE IMPACT TO THE TREE AND ROOT SYSTEM.

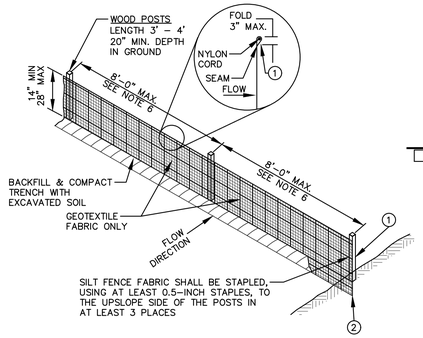
TREE PROTECTION DETAIL

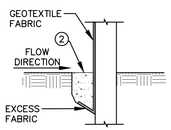
REV. 01-04-2019

N.T.S.



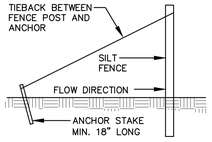
SILT FENCE ALONG SLOPES & OUTFALLS



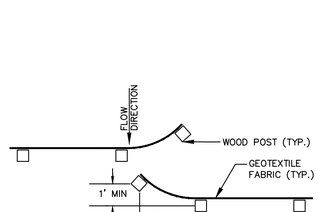


NOTE:
ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS.

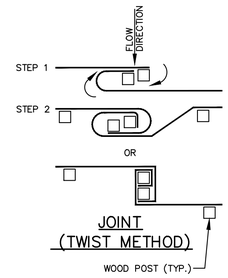
TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN ADDITIONAL SUPPORT REQUIRED)



JOINT (HOOK METHOD)



JOINT (TWIST METHOD)

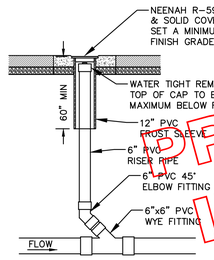
GENERAL NOTES:

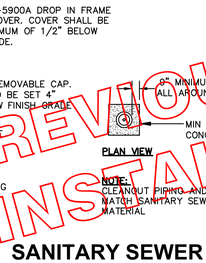
1. SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8-INCHES OF FABRIC IN A 4-INCH WIDE AND 6-INCH DEEP TRENCH OR 6-INCH DEEP V-TRENCH ON THE UPSLOPE SIDE OF THE FENCE. TRENCHES SHALL NOT BE EXCAVATED WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.
2. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1.125-INCHES x 1.125-INCHES OF DRIED OAK OR HICKORY.
4. SILT FENCE TO EXTEND ABOVE THE TOP OF PIPE.
5. SILT FENCE CONSTRUCTION AND GEOTEXTILE FABRIC SHALL CONFORM TO WDNR TECHNICAL STANDARD 1056.
6. POST SPACING SHALL BE SELECTED BASED ON GEOTEXTILE FABRIC (8-FEET FOR WOVEN & 3-FEET FOR NON-WOVEN)

SILT FENCE

REV. 7-01-2019

N.T.S.





NOTE:
CLEANOUT PIPING AND FITTINGS SHALL MATCH SANITARY SEWER LATERAL MATERIAL

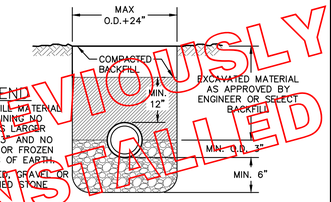
Neenah Grates
R-5900A 12-inch Pipe

Comm Table 82.35		
Dia of Lateral	Min Dia of Cleanout Riser	Min Dia of Riser Cap
1.5	1.5	1.5
2	1.5	1.5
3	3	2.5
4	4	3.5
5	5	4
6	6	5
8+	6	6

SANITARY SEWER CLEANOUT

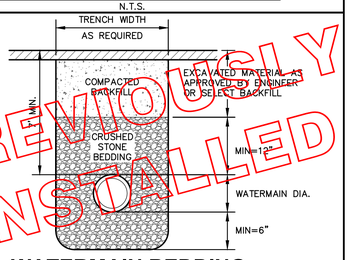
N.T.S.

PREVIOUSLY INSTALLED



SANITARY SEWER BEDDING

N.T.S.

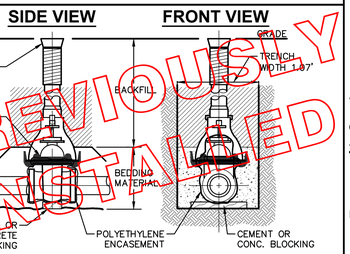


PREVIOUSLY INSTALLED

WATERMAIN BEDDING

REV. 12-05-2018

N.T.S.



PREVIOUSLY INSTALLED

GATE VALVE BOX SETTING

REV. 12-04-2018

N.T.S.

GENERAL NOTES:

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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

(2) FOR INLET PROTECTION, TYPE "C" (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

(3) FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT A WOOD 2X4

INSTALLATION NOTES:

TYPE "B" & "C"

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHODS TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

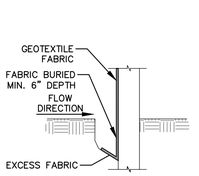
INSTALLATION NOTES:

TYPE "D"

DO NOT INSTALL INLET PROTECTION TYPE "D" IN INLETS SHALLOWER THAN 30 INCHES, MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

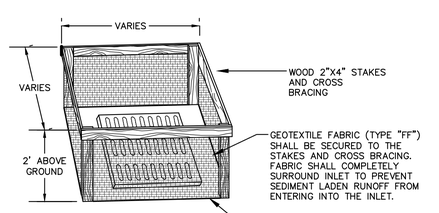
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3 INCHES. WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3 INCHES CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4 INCHES FROM THE BOTTOM OF THE BAG.

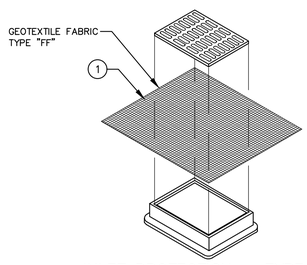


NOTE: 2' MINIMUM POST DEPTH. ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

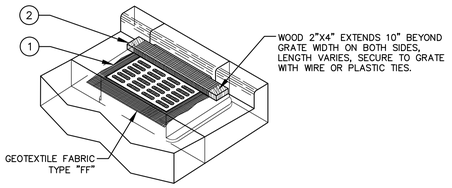
TRENCH DETAIL



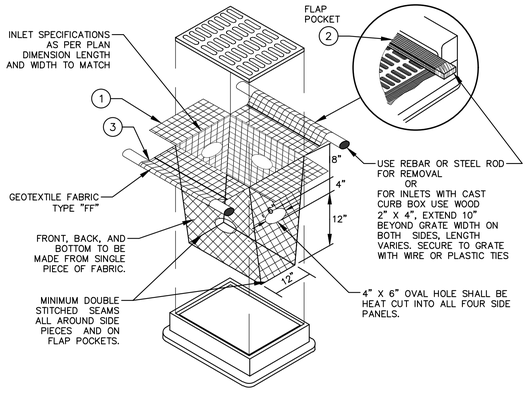
INLET PROTECTION – TYPE "A"



INLET PROTECTION – TYPE "B" WITHOUT CURB BOX



INLET PROTECTION – TYPE "C" WITH CURB BOX



INLET PROTECTION – TYPE "D"

INLET PROTECTION

N.T.S.

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Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

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Watertown, WI

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DETAILS

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YT	KCB

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1	01.23.24	Bid & Permit Set

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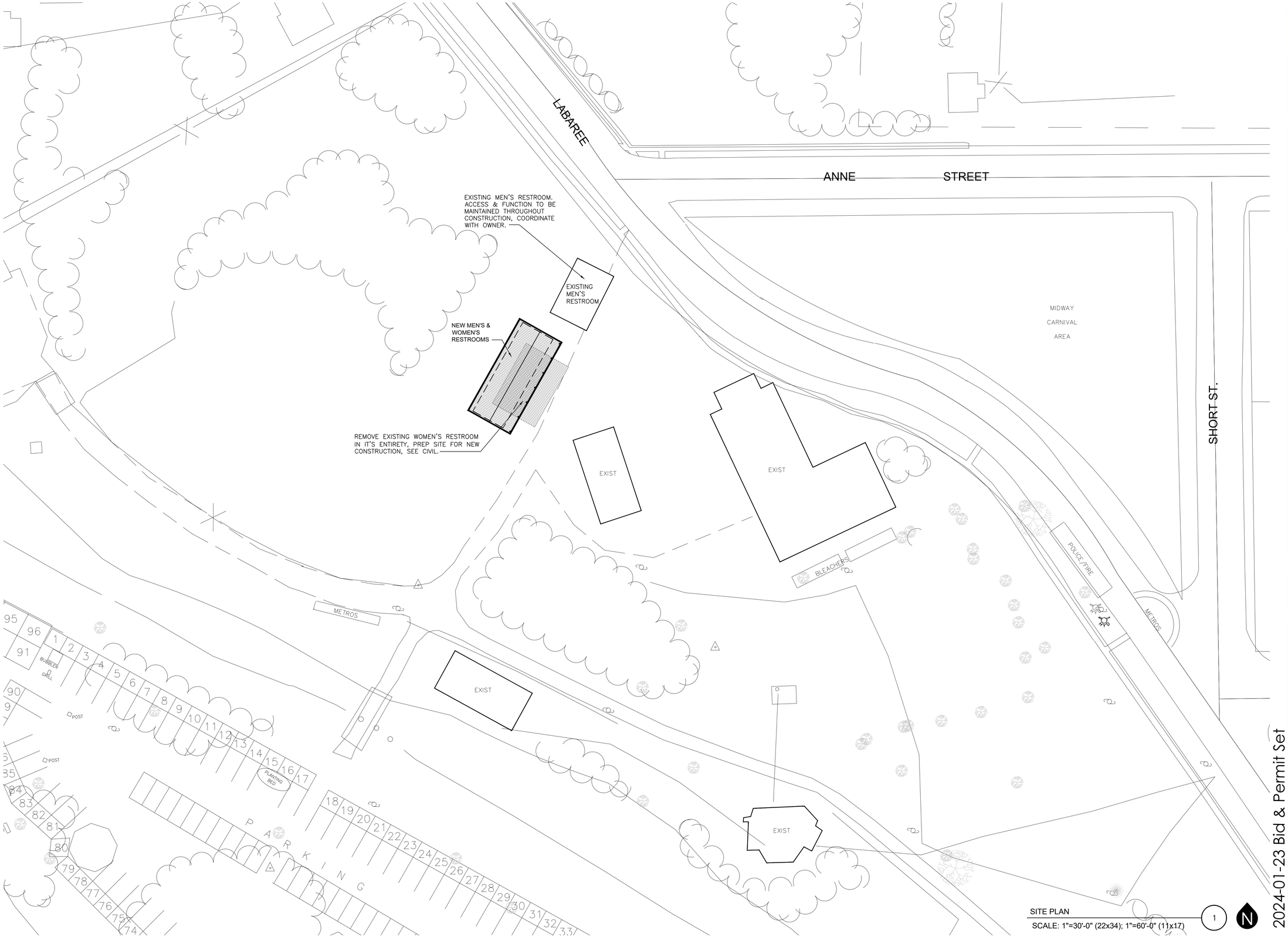
C5.0

JSD
MILWAUKEE REGIONAL OFFICE
W238 N1610 BUSSE ROAD, SUITE 100
WAUKESHA, WISCONSIN 53188
P. 262.513.0666
JSD #21-11127



SITE PLAN

SCALE: 1"=30'-0" (22x34); 1"=60'-0" (11x17)

1

N

THRIVE ARCHITECTS

Architect

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SITE PLAN

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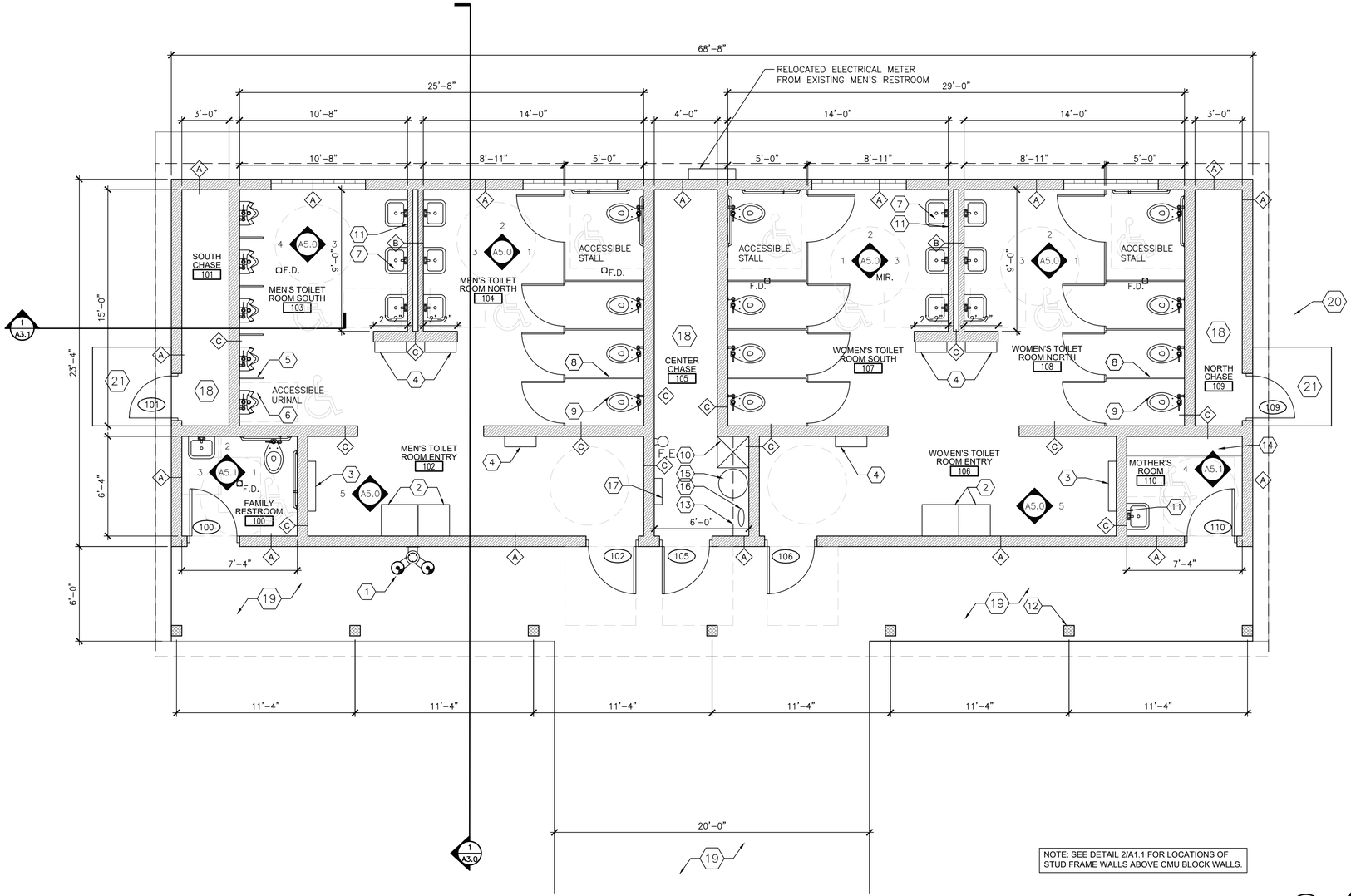
SP1.0

PLAN/EQUIP. KEY

1 DRINKING FOUNTAIN, BOTTLE FILLER	9 TOILET PARTITION	17 ELECTRICAL PANEL
2 TRASH RECEPTACLE	10 JANITOR'S SINK	18 PLUMBING CHASE
3 CHANGING STATION	11 MIRROR	19 CONCRETE SIDEWALK
4 HAND DRYER	12 COLUMN, SEE STRUCTURAL	20 GRAVEL MAINTENANCE STRIP
5 URINAL	13 SHELVING, BY OWNER	21 5X5 STOOP
6 URINAL PARTITION	14 BENCH SEAT	
7 LAVATORY	15 WATER HEATER	
8 TOILET	16 WATER METER	



NOTE: SEE DETAIL 2/A1.1 FOR LOCATIONS OF STUD FRAME WALLS ABOVE CMU BLOCK WALLS.

FLOOR PLAN

SCALE: 1/4"=1'-0" (22x34); 1/8"=1'-0" (11x17)

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Architect
259 South Street, Suite A
WAUKESHA, WI 53186
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FLOOR PLAN

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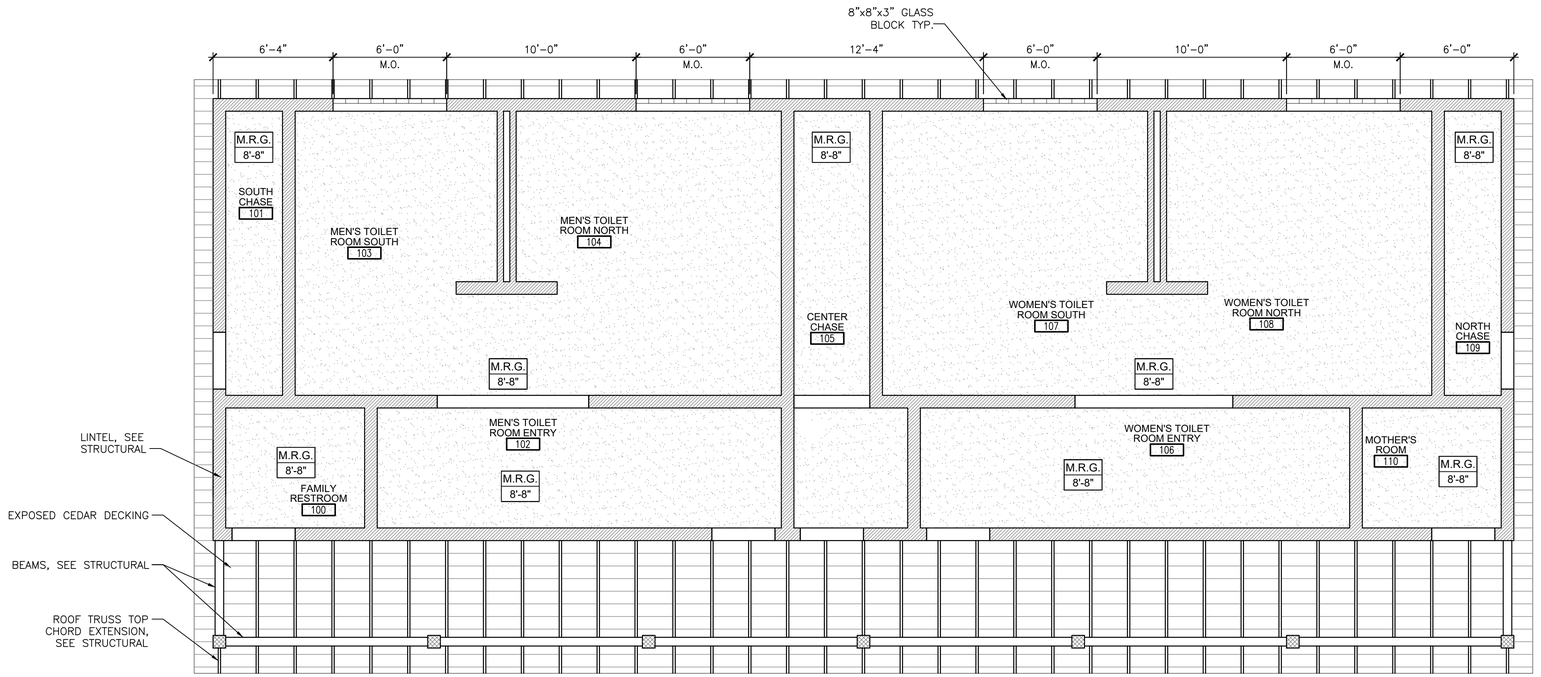

REFLECTED CEILING PLAN

SCALE: 1/4"=1'-0" (22x34); 1/8"=1'-0" (11x17)

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Architect
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REFLECTED CEILING PLAN

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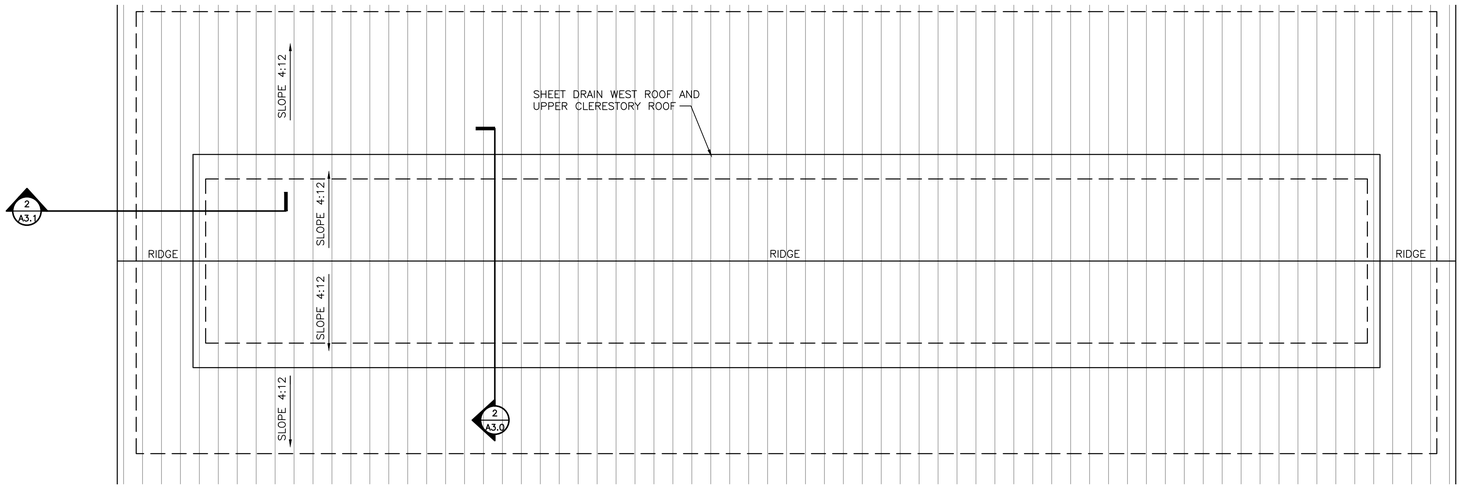
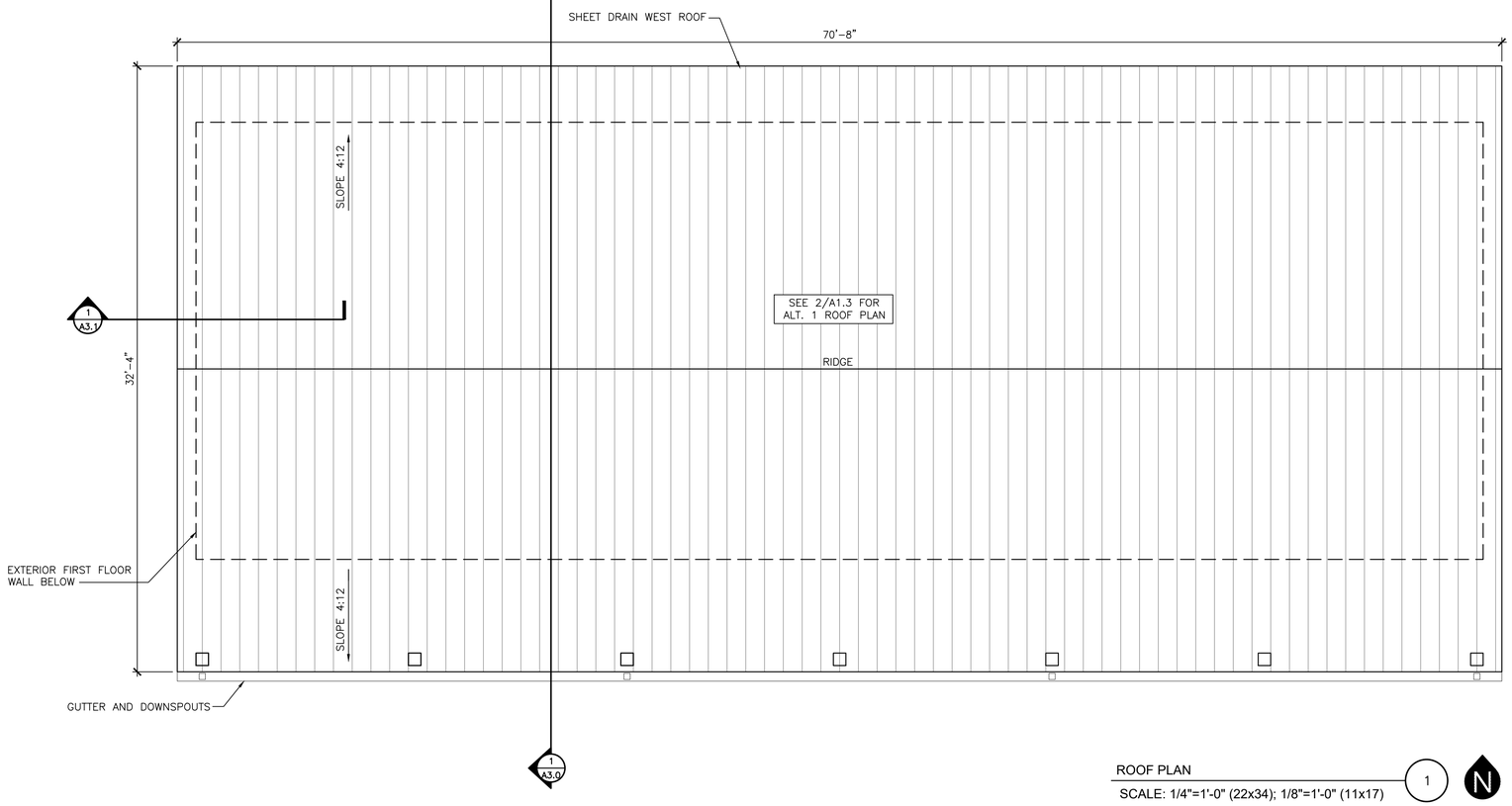
A1.2



ALTERNATE 1 ROOF PLAN — 2

SCALE: 1/4"=1'-0" (22x34); 1/8"=1'-0" (11x17)



ROOF PLAN — 1

SCALE: 1/4"=1'-0" (22x34); 1/8"=1'-0" (11x17)

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Architect

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ROOF PLAN

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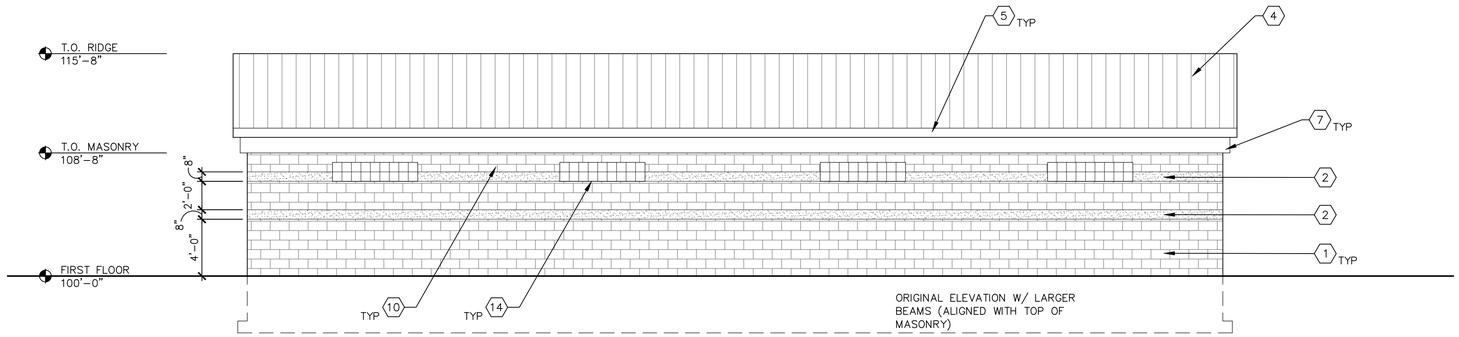
Sheet No.

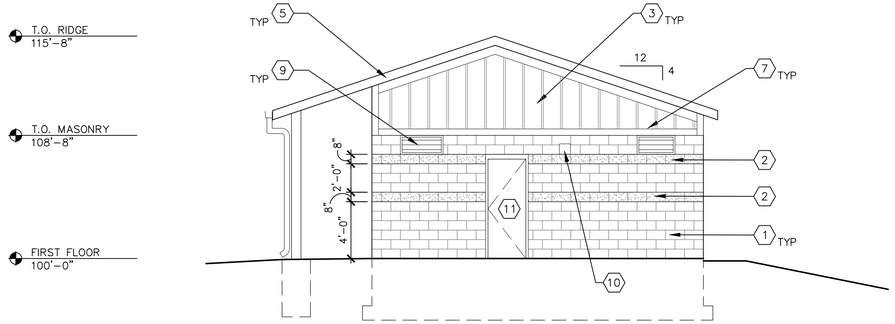
A1.3

KEY NOTES

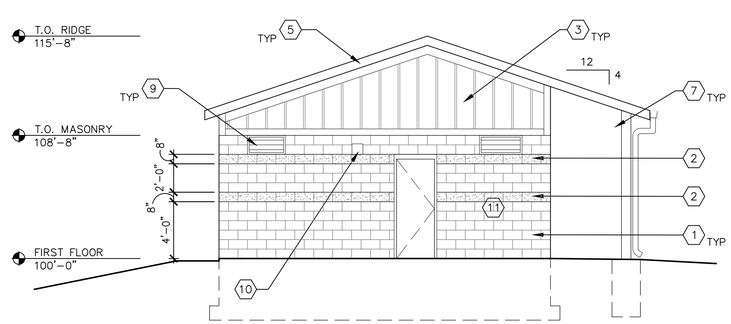
1. CMU SPLIT FACE BLOCK (FIELD) COLOR: NATURAL, MFG: COUNTY MATERIALS OR EQUAL.
2. CMU SMOOTH FACE BLOCK (ACCENT STRIPE) COLOR: STEEL GREY, MFG: COUNTY MATERIALS OR EQUAL.
3. BOARD & BATTEN LP SIDING COLOR: T.B.D.
4. BASE BID: STANDING SEAM ROOF COLOR: CHARCOAL, MFG: ATAS, OR EQUAL.
   ALTERNATE BID: ASPHALT SHINGLES COLOR: ESTATE GREY; MFG: OWENS CORNING DURATION OR EQUAL.
5. PREFINISHED ALUMINUM FASCIA, GUTTERS AND DOWNSPOUTS. COLOR: CHARCOAL GREY, MFG: ATAS, OR EQUAL.
6. WINDOW, FROSTED GLASS, 3M SECURITY FILM APPLIED, COMPOSITE TRIM, TO MATCH BOARD & BATTEN SIDING
7. CEDAR CLAD STRUCTURE
8. 12"x12" PREFINISHED VENT LOUVER, WITH INTERIOR MESH BUG SCREEN
9. EXHAUST / INTAKE LOUVER, COORDINATE WITH MECHANICALS; COLOR TO MATCH FIELD CMU.
10. WALL MOUNTED LIGHT FIXTURE, COORDINATE WITH ELECTRICAL.
11. HOLLOW METAL DOOR AND FRAME, PAINTED TO MATCH CMU FIELD COLOR.
12. HOLLOW METAL DOOR AND FRAME, PAINTED TO MATCH CMU ACCENT COLOR.
13. SIGNAGE.
14. 8"x8" GLASS BLOCK
15. FAUX DECORATIVE VENT



NORTH ELEVATION (4)
SCALE: 3/16"=1'-0" (22x34); 3/32"=1'-0" (11x17)

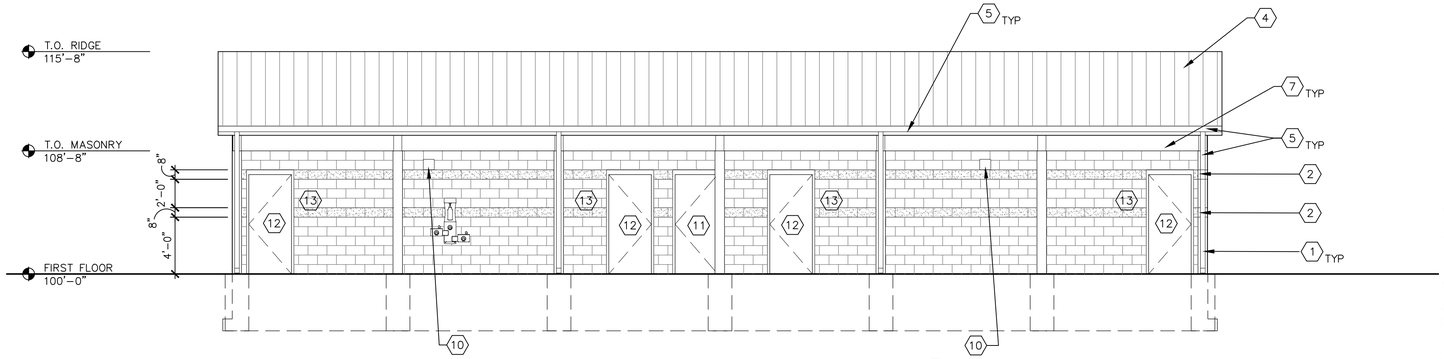


EAST ELEVATION (3)
SCALE: 3/16"=1'-0" (22x34); 3/32"=1'-0" (11x17)



WEST ELEVATION (2)
SCALE: 3/16"=1'-0" (22x34); 3/32"=1'-0" (11x17)

NOTE: SEE A2.1 FOR ALT. 1 ELEVATIONS



SOUTH ELEVATION (1)
SCALE: 3/16"=1'-0" (22x34); 3/32"=1'-0" (11x17)

THRIVE ARCHITECTS
Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

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EXTERIOR ELEVATIONS

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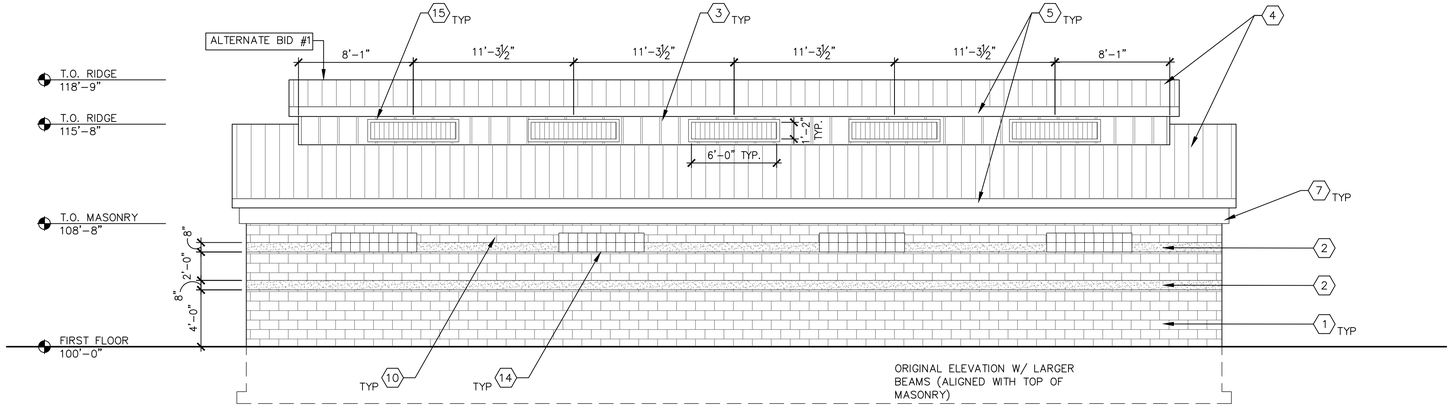
Sheet No.

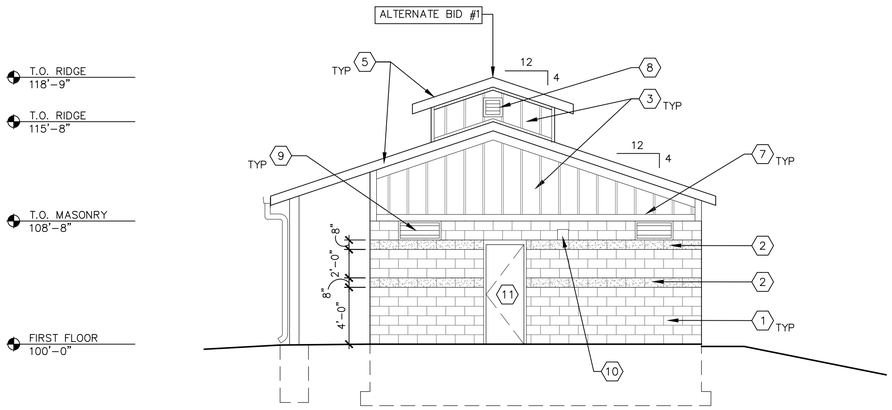
A2.0

KEY NOTES

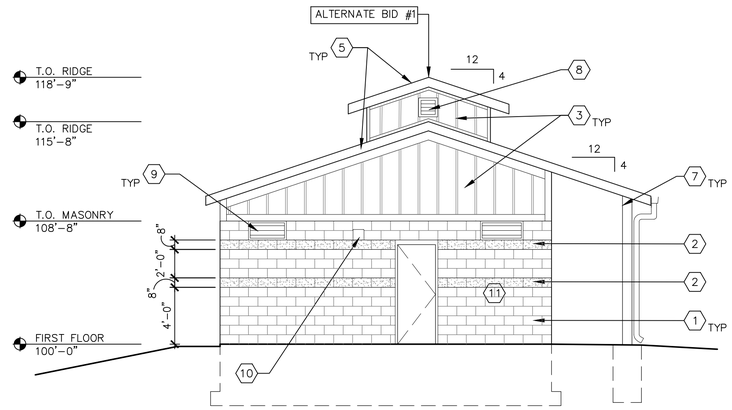
1. CMU SPLIT FACE BLOCK (FIELD)
COLOR: NATURAL, MFG: COUNTY MATERIALS OR EQUAL.
2. CMU SMOOTH FACE BLOCK (ACCENT STRIPE)
COLOR: STEEL GREY, MFG: COUNTY MATERIALS OR EQUAL.
3. BOARD & BATTEN LP SIDING
COLOR: T.B.D.
4. BASE BID: STANDING SEAM ROOF
COLOR: CHARCOAL, MFG: ATAS, OR EQUAL.
ALTERNATE BID: ASPHALT SHINGLES
COLOR: ESTATE GREY; MFG: OWENS CORNING DURATION OR EQUAL.
5. PREFINISHED ALUMINUM FASCIA, GUTTERS AND DOWNSPOUTS.
COLOR: CHARCOAL GREY, MFG: ATAS, OR EQUAL.
6. WINDOW, FROSTED GLASS, 3M SECURITY FILM APPLIED. COMPOSITE TRIM, TO MATCH BOARD & BATTEN SIDING
7. CEDAR CLAD STRUCTURE
8. 12"x12" PREFINISHED VENT LOUVER, WITH INTERIOR MESH BUG SCREEN
9. EXHAUST / INTAKE LOUVER, COORDINATE WITH MECHANICALS; COLOR TO MATCH FIELD CMU.
10. WALL MOUNTED LIGHT FIXTURE, COORDINATE WITH ELECTRICAL.
11. HOLLOW METAL DOOR AND FRAME, PAINTED TO MATCH CMU FIELD COLOR.
12. HOLLOW METAL DOOR AND FRAME, PAINTED TO MATCH CMU ACCENT COLOR.
13. SIGNAGE.
14. 8"x8" GLASS BLOCK
15. FAUX DECORATIVE VENT



NORTH ELEVATION
SCALE: 3/16"=1'-0" (22x34); 3/32"=1'-0" (11x17) 4

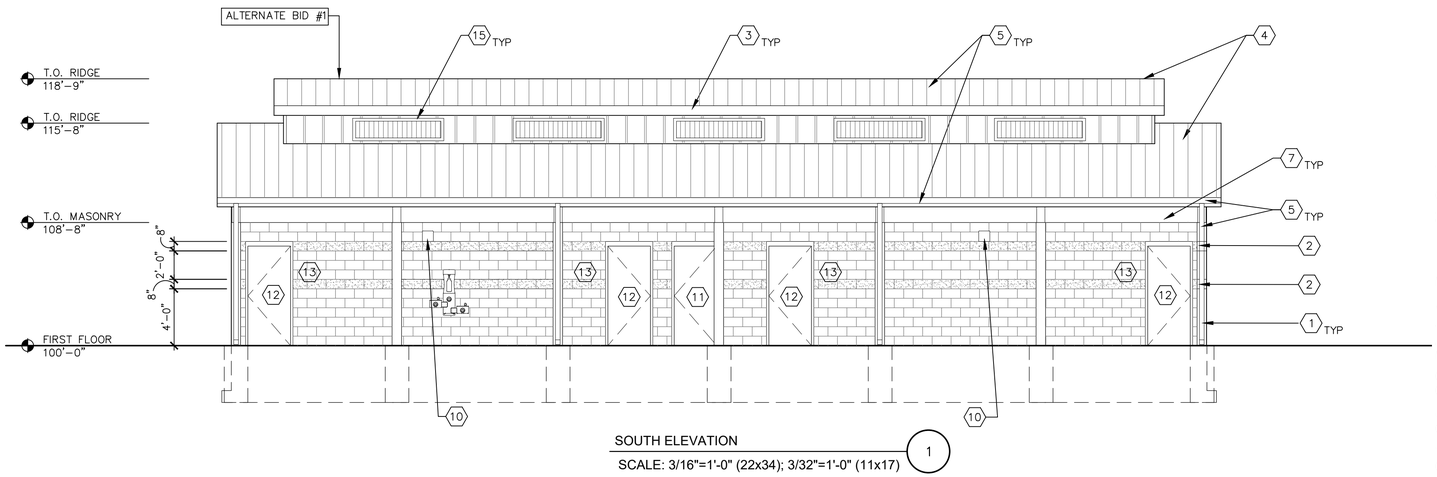


EAST ELEVATION
SCALE: 3/16"=1'-0" (22x34); 3/32"=1'-0" (11x17) 3



WEST ELEVATION
SCALE: 3/16"=1'-0" (22x34); 3/32"=1'-0" (11x17) 2

NOTE: SEE A2.0 FOR BASE BID ELEVATIONS



SOUTH ELEVATION
SCALE: 3/16"=1'-0" (22x34); 3/32"=1'-0" (11x17) 1

THRIVE ARCHITECTS
Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

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Watertown, WI

Sheet Title
ALTERNATE 1 EXTERIOR ELEVATIONS

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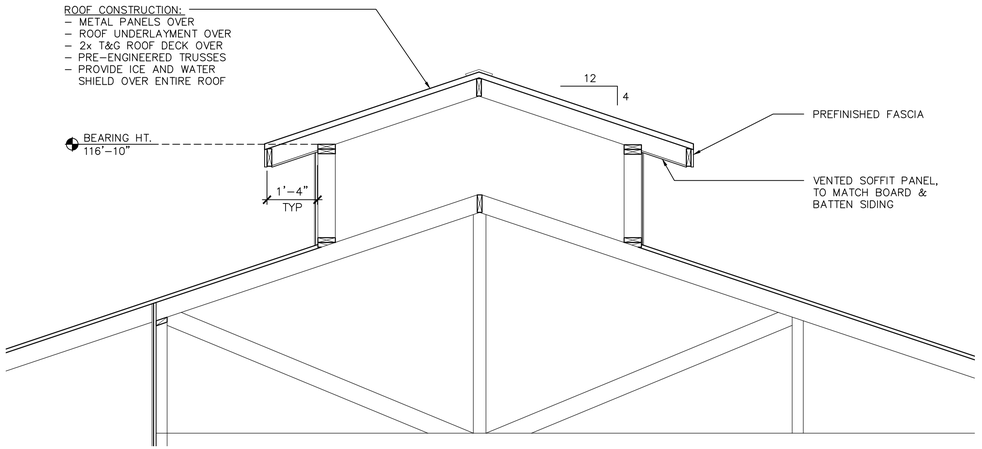
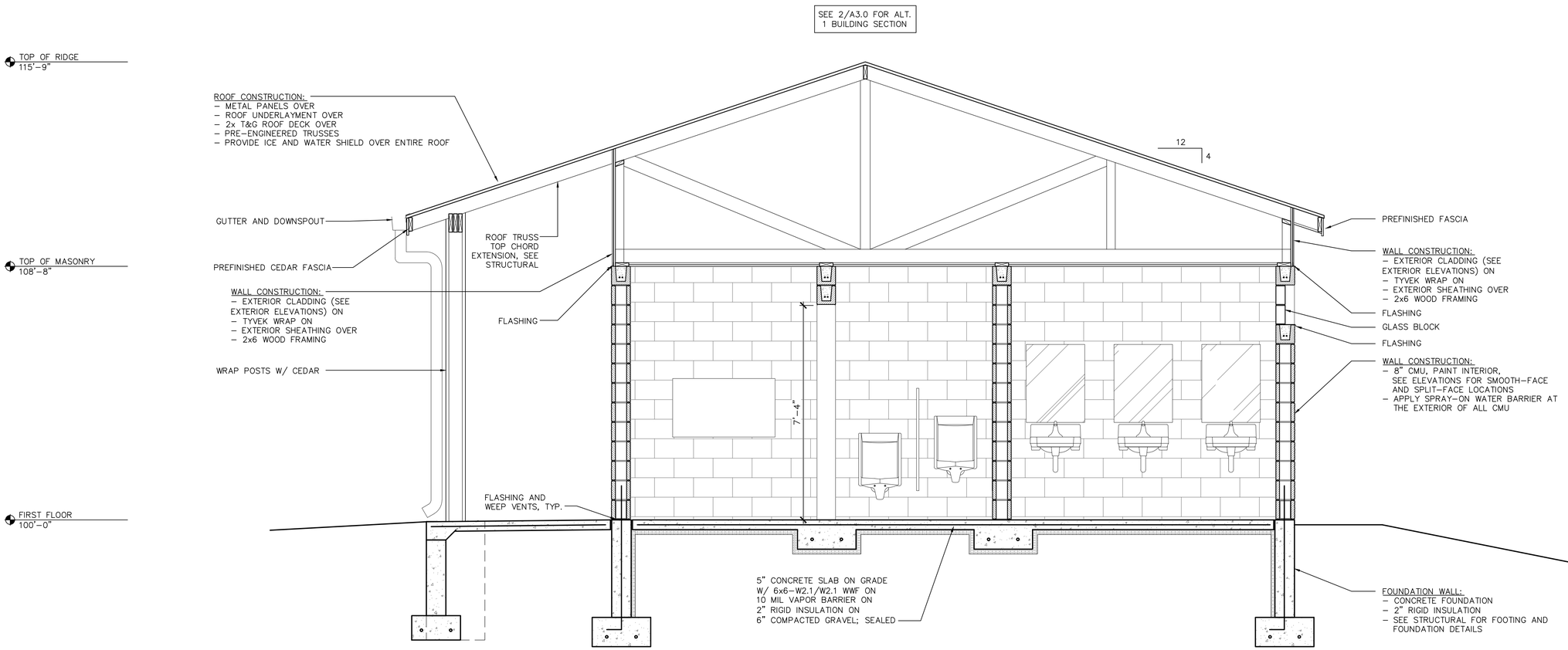
Sheet No.
A2.1



ALTERNATE 1 BUILDING SECTION — 2

SCALE: 1/2"=1'-0" (22x34); 1/4"=1'-0" (11x17)



BUILDING SECTION — 1

SCALE: 1/2"=1'-0" (22x34); 1/4"=1'-0" (11x17)

THRIVE ARCHITECTS
Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

Project Info. — 22005

Riverside Park Restrooms

New Construction

600 Labaree St
Watertown, WI

Sheet Title

BUILDING SECTIONS

Drawn by	Checked by
JAJ	DMR

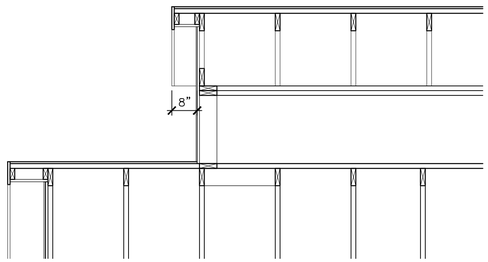
Revisions

No.	Date	Description
	01.23.24	Bid & Permit Set

2024-01-23 Bid & Permit Set

Sheet No.

A3.0



ALTERNATE 1 BUILDING SECTION 2

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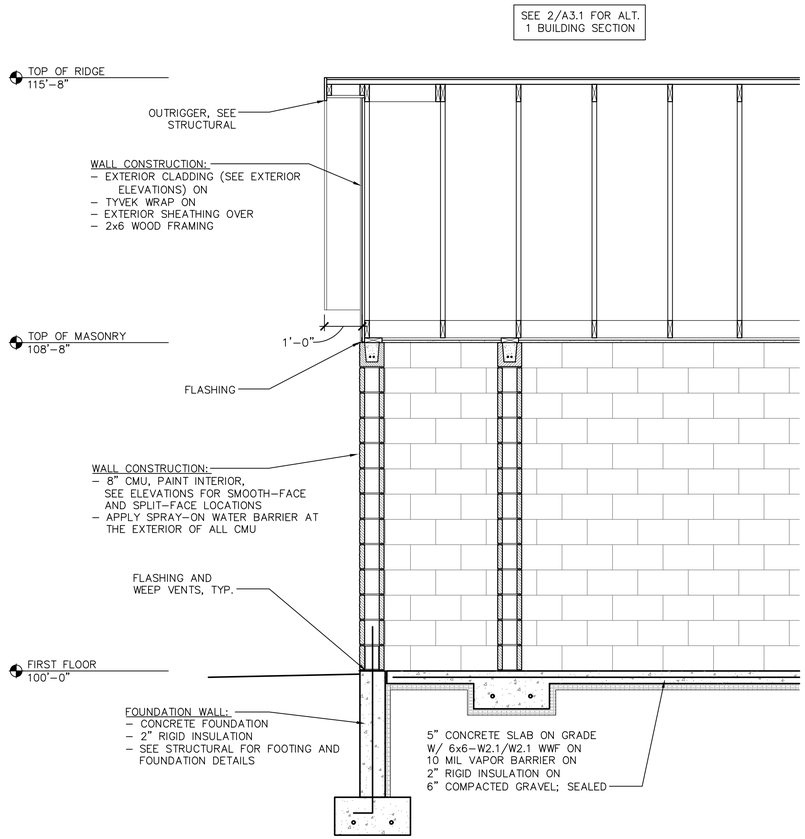

BUILDING SECTION 1

SCALE: 1/2"=1'-0" (22x34); 1/4"=1'-0" (11x17)

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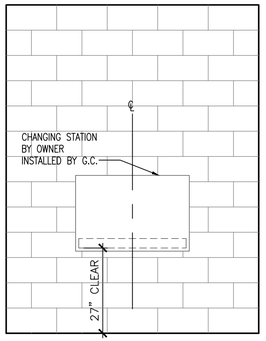
NOTES:
1. SEE THE SPECIFICATIONS FOR ACCESSORIES SELECTIONS.

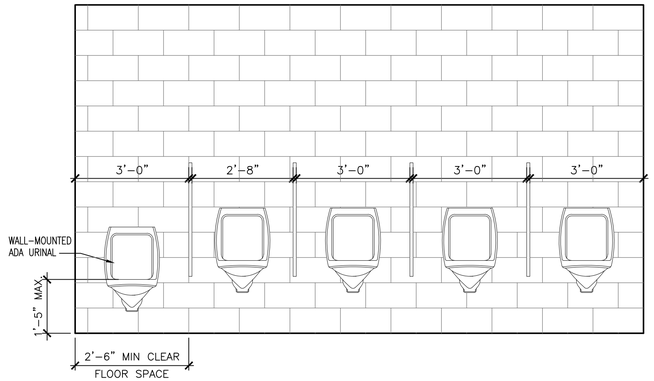
2. SEE THE PLUMBING FIXTURE SCHEDULE FOR TOILET, URINAL, AND LAVATORY SELECTIONS.



CHANGING STATION

SCALE: 1/2"=1'0"

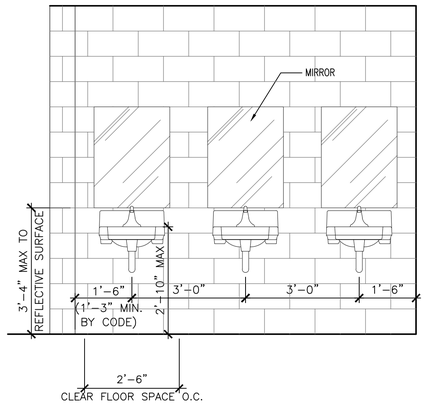
5



WATER CLOSET WALL

SCALE: 1/2"=1'0"

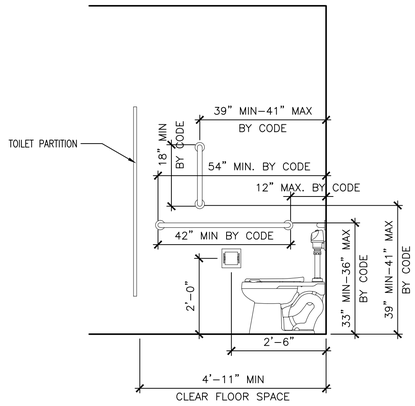
4



LAVATORY WALL

SCALE: 1/2"=1'0"

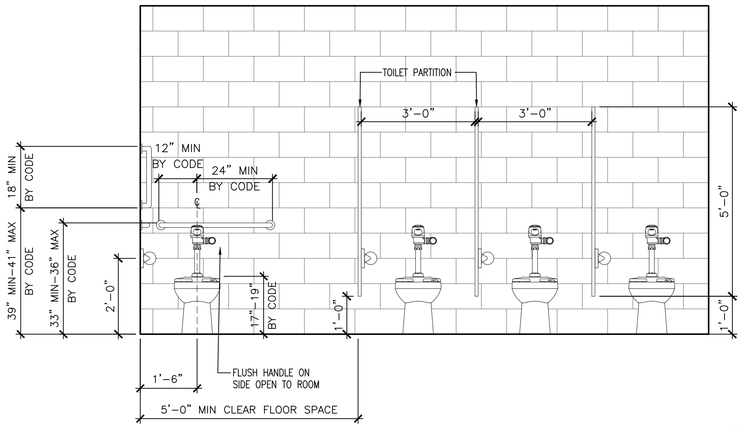
3



ADA TOILET STALL

SCALE: 1/2"=1'0"

2



WATER CLOSET WALL

SCALE: 1/2"=1'0"

1

THRIVE ARCHITECTS
Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

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INTERIOR ELEVATIONS

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A5.0

NOTES:
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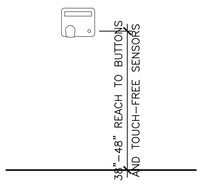
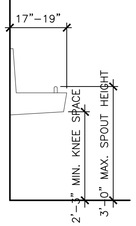
2. SEE THE PLUMBING FIXTURE SCHEDULE FOR TOILET, URINAL, AND LAVATORY SELECTIONS.



ACCESSIBLE HAND DRYER 8
SCALE: 1/2"=1'-0" (22x34); 1/4"=1'-0" (11x17)



ACCESSIBLE DRINKING FOUNTAIN 7
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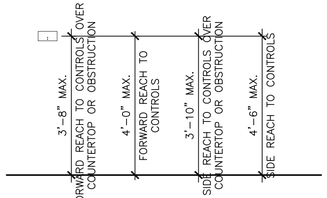

ACCESSIBLE SOAP DISPENSER 6
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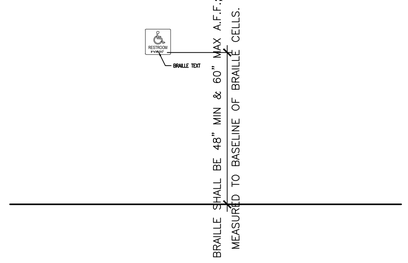
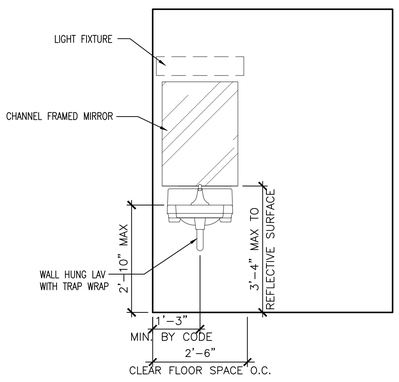
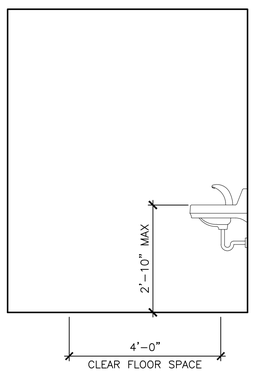


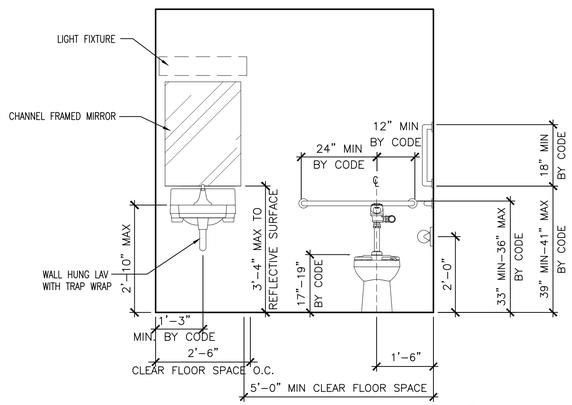
ACCESSIBLE TOILET ROOM SIGN 5
SCALE: 1/2"=1'-0" (22x34); 1/4"=1'-0" (11x17)



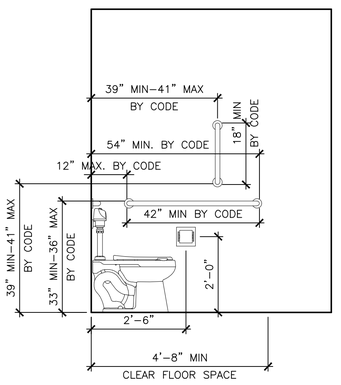
MOTHER'S ROOM 4
SCALE: 1/2"=1'0"



FAMILY RESTROOM 3
SCALE: 1/2"=1'0"



FAMILY RESTROOM 2
SCALE: 1/2"=1'0"



FAMILY RESTROOM 1
SCALE: 1/2"=1'0"

THRIVE ARCHITECTS
Architect
259 South Street, Suite A
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p: 833-380-6180

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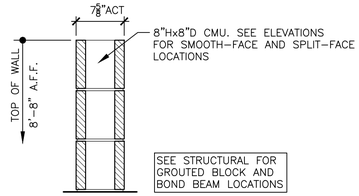
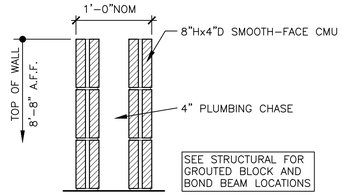
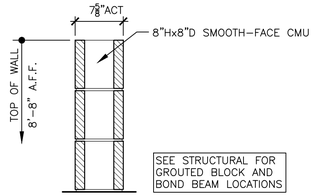


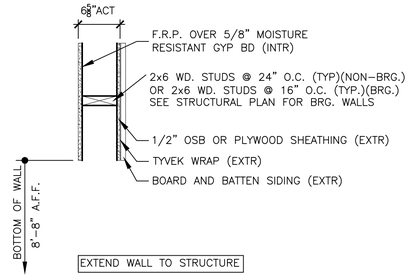
WALL TYPE A



WALL TYPE B

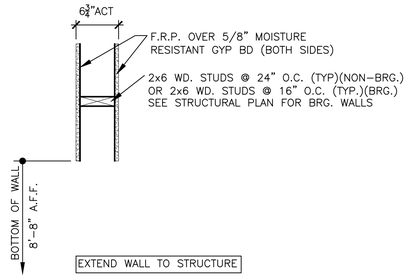


WALL TYPE C



WALL TYPE D

NOTE: SEE DETAIL 2/A1.1 FOR LOCATIONS OF STUD FRAME WALLS ABOVE CMU BLOCK WALLS.

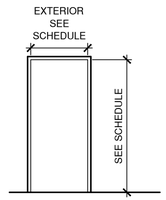


WALL TYPE E

NOTE: SEE DETAIL 2/A1.1 FOR LOCATIONS OF STUD FRAME WALLS ABOVE CMU BLOCK WALLS.

FRAME TYPES

F1

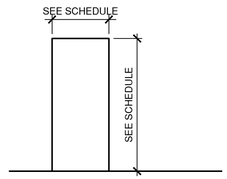


FRAME: HOLLOW METAL
TRIM: NONE
FINISH: PAINTED

DOOR TYPES

D1

EXTERIOR



THICKNESS: 1-3/4"
MATERIAL: HOLLOW METAL
PANEL: FLUSH
FINISH: PAINTED
GLAZING: NONE
HARDWARE: SEE DOOR SCHEDULE NOTES

DOOR SCHEDULE

DOOR NUMBER	ROOM NAME	NO. OF PANELS	SIZE		DOOR TYPE	FRAME TYPE	FIRE RATING	REMARKS
			WIDTH	HEIGHT				
100	FAMILY RESTROOM	1	3'-0"	7'-0"	D1	F1		HG1
101	SOUTH CHASE	1	2'-8"	7'-0"	D1	F1		HG2
102	MEN'S TOILET ROOM ENTRY	1	3'-0"	7'-0"	D1	F1		HG1
105	CENTER CHASE	1	3'-0"	7'-0"	D1	F1		HG2
106	WOMEN'S TOILET ROOM ENTRY	1	3'-0"	7'-0"	D1	F1		HG1
109	NORTH CHASE	1	2'-8"	7'-0"	D1	F1		HG2
110	MOTHER'S ROOM	1	3'-0"	7'-0"	D1	F1		HG1

NOTES:

1. G.C. TO SUPPLY ALL DOOR HARDWARE REQUIRED BY CODE.
2. DOOR HARDWARE SHALL COMPLY WITH ICC/ANSI A117.1 SEC 404.2.6 – HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERABLE PARTS ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE HARDWARE SHALL BE PLACED AT LEAST 34 INCHES, BUT NOT MORE THAN 48 INCHES ABOVE THE FLOOR SURFACE.
3. COORDINATE REQUIREMENTS OF ELECTRONIC STRIKE WITH OWNER FOR REMOTE/TIMED ACCESS TO PUBLIC DOORS.

THRIVE ARCHITECTS
Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

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Watertown, WI

Sheet Title

DOOR, WALL TYPES AND SCHEDULES

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EXHAUST FANS (EF)

TYPE MARK	MARK	MANUFACTURER	MODEL	SERVICE	LOCATION	DRIVE	AIRFLOW (CFM)	ESP (IN WC)	RPM	BACKDRAFT DAMPER	MOTOR		UNIT ELECTRICAL			WEIGHT (LBS)	SONES	REMARKS
											HP	BHP	VOLTS / PH	STARTER	DISCONNECT			
EF	1	GREENHECK	SQ-100-VG	WOMENS RESTROOM	IN JOIST SPACE	DIRECT	600	0.25	985	MOTORIZED	1/4	0.04	120 / 1Ø	MANUAL	BY MANUFACTURER	45	4.3	1
EF	2	GREENHECK	SQ-100-VG	MENS RESTROOM	IN JOIST SPACE	DIRECT	675	0.25	1046	MOTORIZED	1/4	0.05	120 / 1Ø	MANUAL	BY MANUFACTURER	45	5.0	1
EF	3	GREENHECK	SP-80-VG	FAMILY RESTROOM	CEILING SUSPENDED	DIRECT	75	0.25	935	-	-	-	120 / 1Ø	MANUAL	BY MANUFACTURER	12	0.3	1
EF	4	GREENHECK	SP-80-VG	JANITOR'S CLOSET	CEILING SUSPENDED	DIRECT	75	0.25	935	-	-	-	120 / 1Ø	MANUAL	BY MANUFACTURER	12	0.3	1
EF	5	GREENHECK	SP-80-VG	MOTHER'S ROOM	CEILING SUSPENDED	DIRECT	75	0.25	935	-	-	-	120 / 1Ø	MANUAL	BY MANUFACTURER	12	0.3	1

1. FAN TO BE PROVIDED WITH ECM ADJUSTABLE SPEED MOTOR. PROVIDE ADJUSTABLE SPEED DIAL IN AN ACCESSIBLE LOCATION ON FAN.

LOUVER

MARK	MANUFACTURER	MODEL	LOCATION	SERVICE	CONSTRUCTION		CFM	SIZE			MAX FREE AREA VELOCITY - FPM	MAX PRESSURE DROP - IN WC	REMARKS
					TYPE	MATERIAL		LENGTH	WIDTH	DEPTH			
L-1	GREENHECK	ESD-403	SEE PLANS	WOMENS RESTROOM	FASTENED	ALUMINUM	750	26"	16"	6"	649	0.1	1, 2, 3
L-2	GREENHECK	ESD-403	SEE PLANS	MENS RESTROOM	FASTENED	ALUMINUM	750	26"	16"	6"	649	0.1	1, 2, 3
L-3	GREENHECK	ESD-202	SEE PLANS	WOMENS RESTROOM	FASTENED	ALUMINUM	625	26"	16"	6"	700	0.1	1, 2, 3
L-4	GREENHECK	ESD-403	SEE PLANS	MENS RESTROOM	FASTENED	ALUMINUM	700	26"	16"	6"	606	0.1	1, 2, 3

1. COORDINATE COLOR WITH ARCHITECT
2. PROVIDE WITH INSECT SCREEN
3. LOUVERS WILL BE PROVIDED BY THE GENERAL CONTRACTOR UNDER DIVISION 08 90 00. THE SELECTIONS ABOVE ARE FOR MECHANICAL PERFORMANCE CRITERIA ONLY.

DIFFUSERS AND GRILLES

MARK	MANUFACTURER	MODEL	TYPE	SERVICE	MATERIAL	CONFIGURATION			FINISH	REMARKS
						BLADES		MOUNTING / FRAME		
						SPACING (IN)	ANGLE			
S1	TITUS	TMR	ROUND CONICAL	SUPPLY	STEEL	-	-	LAY-IN	WHITE	1
E1	TITUS	350FL	SINGLE DEFLECTION	EXHAUST	STEEL	3/4"	35°	LAY-IN	WHITE	1

NOTE: SEE PLANS FOR NECK SIZES

1. ARCHITECT TO COMFIRM COLOR SELECTION

Sequence of Operation: Exhaust fans and motor operated control dampers

Note: All exhaust fans will take an occupancy input from the lighting system. In all cases the fan shall receive an occupied signal from the associated zone lighting occupancy sensor. The method of delivery of the occupancy status from the lighting system may vary slightly from zone to zone. If there is no occupancy sensor in a specific zone or space then the exhaust fan operation should be indexed to turn on and off in sequence with the manual light switch in that room or zone.

Lighting System Interface:
The lighting occupancy sensor shall send a signal from the auxiliary contact of the occupancy sensor to the HOA controller of inline exhaust fans EF-1 and EF-2. Fans should be programmed to run for 10 minutes after the lighting occupancy sensor has turned off the lights to facilitate adequate removal of odors. If communication is lost with the lighting system, the exhaust fan shall continue to operate until the programmed time out of 10 minutes after the room has switched to unoccupied mode.

The lighting occupancy sensor shall send a direct 0-10V signal from the auxiliary contact of the occupancy sensor directly to the ECM motor of ceiling mounted exhaust fans EF-3 and EF-5. Fans should operate when lighting is on and turn off when lighting occupancy sensors times out, switching the room to an unoccupied set point. This timeout shall be no longer than 30 minutes.

Ceiling mounted EF-4 shall be controlled directly by the manual light switch in the Janitor's Closet.

Occupancy Mode: The occupancy mode shall be communicated to each exhaust fan via a binary input. Valid Occupancy modes for the exhaust fans shall be:

Occupied: Normal operating mode for occupied spaces during normal operation. When the lighting sensor is in the occupied mode the associated exhaust fan shall be energized and shall maintain the scheduled space airflow. When a fan is energized the associated motorized dampers shall open.

Unoccupied Standby: Mode used for unoccupied spaces. The occupancy sensor integral to the lighting system shall be used to indicate that the space is occupied or unoccupied. In the standby mode the exhaust fan airflow setpoint will be reduced to the minimum CFM, scheduled for 0 CFM. When the fan enters unoccupied mode the motor shall shut off and the associated motorized dampers shall close.

Motorized Dampers: Each fan shall be provided with a motorized control damper. Control dampers are intended to prevent backflow of outdoor air into the exhaust system when the system is de-energized.

Exhaust: Each exhaust fan will have an associated motorized control damper. When the fan is energized the associated motorized damper shall open. The damper shall close when the fan shuts off. Actuators shall be selected so that these motorized exhaust dampers fail open.

Intakes: Each outdoor air louver will have an associated motorized control damper. When any one of the associated exhaust fans are energized that the associated motorized damper at the intake louver shall open. The intake damper shall close when all associated exhaust dampers prove closed. Actuators shall be selected so that motorized intake dampers fail closed.

Heating Control:
Heat is not provided by this system. The intent is that the domestic water systems will be shut off and drained in advance of freezing or sub-freezing conditions.

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
CA	COMBUSTION AIR
COND	CONDENSATE DRAIN
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CR	LOW PRESSURE STEAM CONDENSATE RETURN
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
DE	DISHWASHER EXHAUST
DN	DOWN
EA	EXHAUST AIR
GSHXR	GROUND SOURCE HEAT EXCHANGER RETURN
GSHXS	GROUND SOURCE HEAT EXCHANGER SUPPLY
HPS	HIGH PRESSURE STEAM
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
KE	KITCHEN EXHAUST
LPS	LOW PRESSURE STEAM
MPS	MEDIUM PRESSURE STEAM
NC	NORMALLY CLOSED
NG	NATURAL GAS
NO	NORMALLY OPEN
OA	OUTSIDE AIR
RA	RETURN AIR
RCOVR	ENERGY RECOVERY RETURN
RCOVS	ENERGY RECOVERY SUPPLY
RELF	RELIEF AIR
RL	REFRIGERATION LIQUID
RS	REFRIGERATION SUCTION
SA	SUPPLY AIR
SOLR	SOLAR THERMAL RETURN
SOLS	SOLAR THERMAL SUPPLY
TA	TRANSFER AIR
VFD	VARIABLE FREQUENCY DRIVE
X	EXISTING

HVAC LEGEND

- NEW HVAC EQUIPMENT
- NEW DUCTWORK
- EXISTING MECHANICAL COMPONENT
- DEMOLISHED MECHANICAL COMPONENT
- MECHANICAL EQUIPMENT SERVICE AREA
- (M##) KEY NOTE
- SUPPLY AIR DUCT UP
- SUPPLY AIR DUCT DOWN
- RETURN AIR DUCT UP
- RETURN AIR DUCT DOWN
- OUTSIDE AIR DUCT UP
- OUTSIDE AIR DUCT DOWN
- EXHAUST AIR DUCT UP
- EXHAUST AIR DUCT DOWN
- ELBOW WITH TURNING VANES
- FLEX DUCT
- M — MOTORIZED DAMPER
- BD — BACK DRAFT DAMPER
- FD — FIRE DAMPER
- SD — SMOKE DAMPER
- FSD — COMBINATION FIRE/SMOKE DAMPER
- XX-1 — DAMPER WITH SEQUENCING NUMBER
- BALANCING DAMPER
- AIR FLOW INDICATOR
- UC — DOOR UNDER CUT
- TRANSFER/DOOR GRILLE
- S-* — NEW SUPPLY DIFFUSER
- R-*/T-* — NEW RETURN/TRANSFER GRILLE
- E-* — NEW EXHAUST GRILLE
- C — CO2 SENSOR
- PD — PRESSURE DIFFERENTIAL SENSOR
- SP — STATIC PRESSURE CONTROLLER
- T — THERMOSTAT
- T — TEMPERATURE SENSOR
- TC — THERMOSTAT /CO2 SENSOR
- TC — TEMPERATURE /CO2 SENSOR
- $ — WALL SWITCH
- CONTROL WIRE
- POINT OF CONNECTION
- DN — DUCT OFFSET
- EQUIPMENT / RTU X-X / FLOOR / TAG — HVAC EQUIPMENT TAG ELECTRICALLY POWERED
- EQUIPMENT / VAV X-X / FLOOR / TAG — HVAC EQUIPMENT TAG NOT ELECTRICALLY POWERED
- NECK SIZE / A1 XX"xXX" CFM / TAG / TYP. # — DIFFUSER/GRILLE TAG

GENERAL NOTES

1. DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL REQUIRED OFFSETS FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL INSTALL MATERIAL AND EQUIPMENT TO CONFORM TO THE STRUCTURE, EQUIPMENT CONNECTIONS AND SHALL MAINTAIN APPROPRIATE CLEARANCES.
2. ALL WORK SHALL COMPLY WITH APPLICABLE NATIONAL, STATE, LOCAL CODES, FEDERAL AND STATE REGULATIONS, AND ALL REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION.
3. CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
4. THE CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE FULL EXTENT OF WORK AND PROJECT CONDITIONS. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATIONS OF THE CONTRACT.
5. COORDINATE EXACT LOCATION OF CEILING DIFFUSERS AND GRILLES WITH REFLECTED CEILING PLAN.
6. ALL BRANCH DUCTS SHALL MATCH DIFFUSER NECK SIZES UNLESS OTHERWISE NOTED.
7. ALL CONTROL WIRING SHALL BE RUN IN CONDUIT.
8. KEYNOTES PERTAIN ONLY TO THE DRAWING THEY ARE LOCATED ON.
9. DUCT SIZES ARE CLEAR INSIDE DIMENSIONS.
10. ALL HOT WATER BRANCH LINES ARE 3/4" UNLESS NOTED OTHERWISE.
11. MAINTAIN 10' MINIMUM DISTANCE FROM OUTSIDE AIR INTAKE TO ANY EXHAUST OR PLUMBING VENTS.
12. FLEXIBLE DUCTWORK SHALL NOT EXCEED 5'-0" IN LENGTH.
13. ALL SUPPLY AND RETURN DUCTWORK IN UNINSULATED ATTIC SPACE SHALL BE WRAPPED WITH 3" INSULATION.
14. CLEAN ALL EXISTING DUCTWORK, COILS AND DIFFUSERS DESIGNATED TO REMAIN WITHIN THE PROJECT'S SCOPE OF WORK.
15. REMOVAL AND REINSTALLATION OF EXISTING CEILING IS REQUIRED. REPLACE ALL DAMAGED CEILING WITH NEW, EQUAL TO EXISTING.

MECHANICAL SHEET INDEX

NUMBER	SHEET NAME
M0.1	MECHANICAL NOTES, LEGEND, AND ABBREVIATIONS
M1.0	MECHANICAL FLOOR PLAN

Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

Project Info. — 22005

Riverside Park Restrooms

New Construction

600 Labaree St
Watertown, WI

Sheet Title

MECHANICAL NOTES, LEGEND, AND ABBREVIATIONS

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Revisions

No.	Date	Description
	01.23.2024	Bid & Permit Set

2023-06-30 Bid & Permit Set

Sheet No.

M0.1

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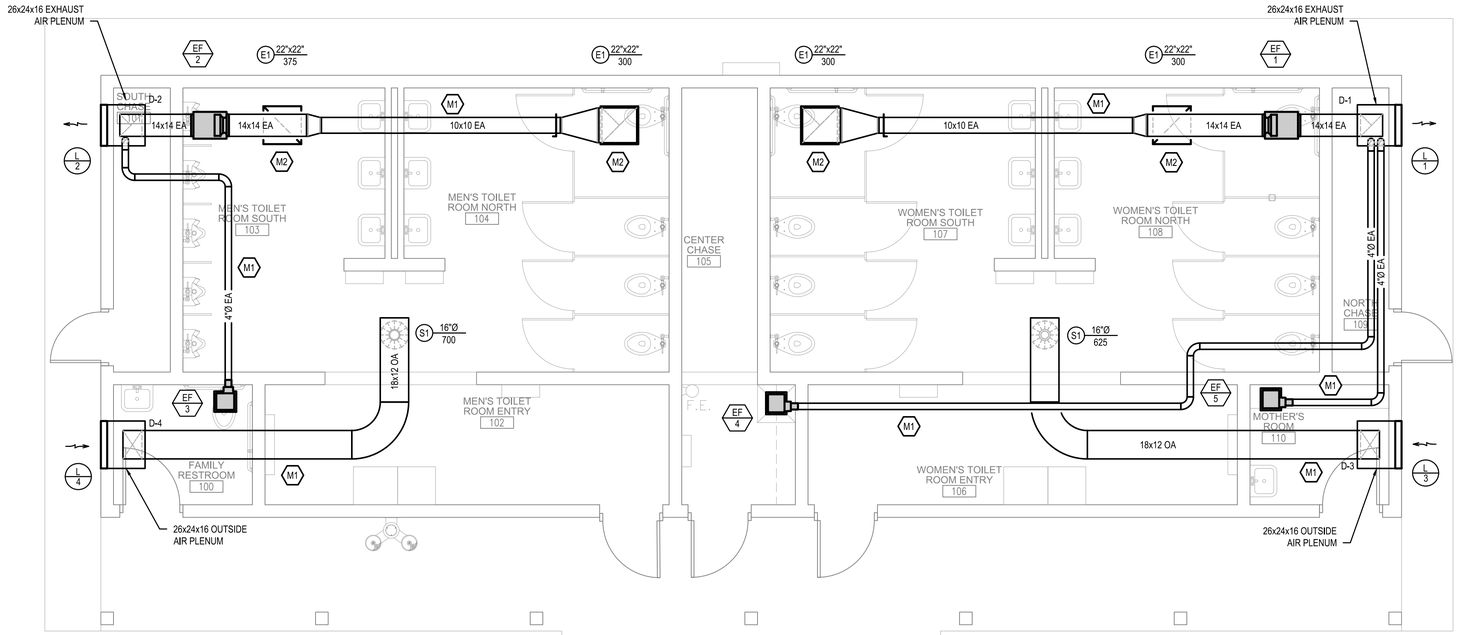
KEY NOTES	
M1	ROUTE DUCT UP AND INTO JOIST SPACE.
M2	CONTRACTOR TO ADD BALANCING DAMPERS FOR EACH GRILLE.



1 MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

N

Architect
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p: 833-380-6180

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MECHANICAL SPECIFICATIONS

A. STATEMENT OF INTENT

1. IT IS THE INTENT OF THESE DOCUMENTS THAT THE MECHANICAL CONTRACTOR (MC) PROVIDE ALL LABOR, MATERIAL, EQUIPMENT AND TOOLS NECESSARY FOR THE INSTALLATION OF ALL WORK SHOWN ON THE PLANS AND/OR DESCRIBED HEREIN, INCLUDING ALL APPURTENANCES REQUIRED TO SET RESPECTIVE SYSTEMS IN OPERATION. THE TERM "FURNISH AND INSTALL" WILL NOT BE USED, BUT IS INTENDED UNLESS SPECIFIC NOTATIONS ARE MADE TO THE CONTRARY.

2. ALL ITEMS OF WORK AND ALL SYSTEMS ARE TO BE COMPLETE IN ALL DETAILS, READY FOR SATISFACTORY OPERATION. PROVIDE ALL NECESSARY DEVICES AND RELATED APPARATUS FOR COMPLETE SYSTEMS EVEN THOUGH SUCH ITEMS MAY NOT BE SPECIFICALLY MENTIONED.

B. CODES: REGULATIONS

1. IF THE MC OBSERVES THAT ANY OF THE CONTRACT DOCUMENTS ARE AT VARIANCE WITH LAWS, ORDINANCES, RULES AND REGULATIONS OF ANY PUBLIC AUTHORITY BEARING ON THE PERFORMANCE OF THE WORK THEY SHALL PROMPTLY NOTIFY THE ARCHITECT IN WRITING AND ANY NECESSARY CHANGES SHALL BE ADJUSTED BY APPROPRIATE MODIFICATIONS. IF THE MC PERFORMS ANY WORK KNOWING IT TO BE CONTRARY TO SUCH LAWS, ORDINANCES, RULES AND REGULATIONS, AND WITHOUT SUCH NOTICE TO THE ARCHITECT, THEY SHALL ASSUME FULL RESPONSIBILITY THEREFORE AND SHALL BEAR ALL COSTS ATTRIBUTABLE THERETO.

2. COMPLY WITH ALL APPLICABLE REGULATIONS OF UTILITY COMPANIES SERVING THE PROJECT.

3. COMPLY WITH ALL APPLICABLE RECOMMENDATIONS OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NATIONAL ELECTRIC CODE, AMERICAN SOCIETY OF MECHANICAL ENGINEERS, FACTORY INSURANCE ASSOCIATION AND FACTORY MUTUAL INSURANCE COMPANIES.

4. WHERE APPLICABLE, MATERIAL OR EQUIPMENT SHALL BEAR THE STAMP OF U.L., ASME, AGA AND NEMA.

5. COMPLY WITH OWNER, ARCHITECT AND LANDLORD'S REQUIREMENTS.

C. DESIGN INTENT

1. THE DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL EQUIPMENT. FOLLOW THE MECHANICAL PLANS AS CLOSELY AS POSSIBLE FOR INSTALLATION OF DUCTWORK AND EQUIPMENT. MECHANICAL DRAWINGS MAY NOT SHOW ALL OFFSETS, AND DETAIL EVERY POINT AT WHICH CONSTRUCTION MAY REQUIRE SPECIAL ATTENTION.

2. SHOULD CONDITIONS NECESSITATE GENERAL REARRANGEMENTS, OR IF DUCTWORK CAN BE RUN TO BETTER ADVANTAGE, PREPARE AND SUBMIT DRAWINGS SHOWING THE CHANGES BEFORE PROCEEDING WITH THE WORK. IF SUCH CHANGES ARE APPROVED, THEY SHALL BECOME A PART OF THE CONTRACT AFTER THEIR APPROVAL.

3. ANY ADDITIONAL FITTINGS, VALVES, DUCTS, CONDUITS OR SPECIALTIES REQUIRED OR OTHER APPURTENANCES NECESSARY DUE TO FIELD CONDITIONS OR CODE REQUIREMENTS SHALL BE FURNISHED AND INSTALLED BY THE MC AT NO EXTRA COST TO THE OWNER.

D. CUTTING AND PATCHING

1. CUTTING OF EXISTING WORK: CUTTING TO BE BY TRADE INSTALLING THE WORK.

2. NO CUTTING OF STRUCTURAL ELEMENTS OR FIREWALLS WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

3. PATCHING: UNLESS NOTED OTHERWISE PATCHING IS TO BE BY TRADE THAT PROVIDED THE PENETRATION OR CUT. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PATCHING RELATED TO THE INSTALLATION OF MECHANICAL EQUIPMENT. SEE GENERAL CONDITIONS REGARDING CUTTING AND PATCHING AT CORRECTIVE WORK. PATCHING MATERIALS SHALL MATCH EXISTING.

E. CLEANING: REMOVAL OF RUBBISH

1. RUBBISH: EACH TRADE TO PROMPTLY REMOVE ALL DEBRIS, SURPLUS AND DISCARDED MATERIAL FROM THE PREMISES. THIS CONTRACTOR SHALL, IN FINISHING STAGES, COOPERATE WITH OTHER CONTRACTORS IN REMOVING RUBBISH. BEFORE COMPLETION OF THE WORK, REPLACE ALL FILTERS.

F. TESTING, BALANCING AND ADJUSTING

1. GENERAL CONTRACTOR SHALL CONTRACT DIRECTLY WITH A THIRD PARTY TO PERFORM THE TEST AND BALANCING OF THE HVAC SYSTEM. BALANCING CONTRACTOR SHALL BE AN INDEPENDENT CERTIFIED TEST AND BALANCING CONTRACTOR WITH NEBB OR AABC CERTIFICATION. THE BALANCING CONTRACTOR SHALL:
   1.1. TEST AND ADJUST ALL MECHANICAL SYSTEMS AND EQUIPMENT TO ASSURE PROPER BALANCE AND OPERATION.
   1.2. PERFORM TESTS IN ACCORDANCE WITH AABC, NEBB OR ASHRAE STANDARDS.
   1.3. ELIMINATE UNNECESSARY NOISE AND VIBRATION.
   1.4. ASSURE PROPER FUNCTION OF CONTROLS.
   1.5. SUBMIT FINAL BALANCING REPORT TO OWNER AND GC AFTER WORK IS COMPLETED AND SYSTEM IS FUNCTIONAL AND OPERATING PER THE CONTRACT DOCUMENTS.

2. BALANCING CONTRACTOR SHALL BALANCE SYSTEMS TO ACHIEVE THE AIR QUANTITIES INDICATED ON THE FLOOR PLAN WITHIN ± 5%. MARK FINAL POSITION OF ALL VOLUME DAMPERS. REPORT ALL DEFICIENCIES TO MC FOR CORRECTION.

G. GUARANTEE

1. MC SHALL BE RESPONSIBLE FOR ALL WORK INSTALLED UNDER THIS CONTRACT. THIS CONTRACTOR SHALL MAKE GOOD, REPAIR OR REPLACE AT THEIR OWN COST AND EXPENSE ANY DEFECTIVE WORK OR MATERIAL WHICH IS DISCOVERED WITHIN ONE YEAR AFTER DATE OF FINAL ACCEPTANCE OF THE WORK.

2. THIS CONTRACTOR SHALL MAKE GOOD, REPAIR OR REPLACE MATERIAL OR WORKMANSHIP THAT IS IDENTIFIED AS A DEFECT IN THE OPINION OF THE ARCHITECT OR ENGINEER.

3. ALL MATERIAL, WORKMANSHIP AND EQUIPMENT SHALL BE GUARANTEED FOR ONE YEAR AFTER SYSTEM ACCEPTANCE.

4. THE MECHANICAL SHALL PROVIDE PRIOR TO THE FINAL PAYMENT BEING RELEASED THE FOLLOWING:
   4.1. OPERATING INSTRUCTIONS FOR ALL SYSTEMS AND EQUIPMENT.
   4.2. CUT SHEETS FOR ALL EQUIPMENT AND SPECIALTIES INCLUDING EXHAUST FANS, UNIT HEATERS AND OCCUPANCY SENSORS AS APPLICABLE.
   4.3. WRITTEN OPERATING INSTRUCTIONS FOR ALL SYSTEMS AND EQUIPMENT INCLUDING FINAL WIRING AND CONTROL DIAGRAMS.
   4.4. EQUIPMENT WARRANTIES FOR ALL EQUIPMENT FOR NO LESS THAN ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE.
5. AS A PART OF THIS CONTRACT, THE MC SHALL PROVIDE A ONE YEAR SERVICE AND MAINTENANCE AGREEMENT WITH ALL PARTS AND LABOR INCLUDED FOR MECHANICAL REPAIRS AS NECESSARY.
6. THIS CONTRACTOR SHALL INSTRUCT THE OWNER AND FACILITY STAFF IN SYSTEM OPERATION PRIOR TO SYSTEM TURNOVER.
7. NOTIFY THE OWNER 48 HOURS PRIOR TO SYSTEM TURNOVER AND DEMOBILIZATION OF THE MC.

G. INSURANCE

1. THIS CONTRACTOR SHALL PURCHASE AND MAINTAIN SUCH INSURANCE AS WILL PROTECT THEM FROM CLAIMS INCLUDING WORKMAN'S COMPENSATION AND PUBLIC LIABILITY WHICH MAY ARISE OUT OF, OR RESULT FROM, THE CONTRACTOR'S OPERATIONS UNDER THE CONTRACT, WHETHER SUCH OPERATIONS BE BY THE MC OR BY ANY SUBCONTRACTOR OR BY ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR BY ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE.

I. COORDINATION AND INSTALLATION

1. THE ENTIRE INSTALLATION SHALL BE PERFORMED IN A FIRST- CLASS WORKMANLIKE MANNER. THE COMPLETE SYSTEM SHALL BE FULLY OPERATIONAL AND ACCEPTANCE BY THE OWNER SHALL BE A CONDITION OF THE CONTRACT.

2. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES IN ORDER TO AVOID INTERFERENCES, PRESERVE HEADROOM, AVOID OMISSIONS AND VERIFY EQUIPMENT LOCATIONS.

3. DUCTWORK AND PIPING SHALL BE CONCEALED WHERE POSSIBLE, RUN IN STRAIGHT LINES PARALLEL AND/OR PERPENDICULAR TO THE BUILDING CONSTRUCTION, AS HIGH AS POSSIBLE.

4. ALL OUTSIDE AIR INTAKES SHALL BE INSTALLED A MINIMUM OF 10'-0" FROM ALL EXHAUST AS PER LOCAL CODES (VERIFY IN FIELD).

6. COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER AND WITH THE CONSTRAINTS OF THE CONDITIONS OF THE PROJECT SITE.

J. DUCTWORK

1. ALL DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL STATE AND LOCAL CODES, ASHRAE STANDARDS AND SMACNA STANDARDS.

2. ALL CONCEALED OUTSIDE, RETURN AND SUPPLY DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL WITH 1-1/2" DUCT FIBERGLASS DUCT WRAP (MIN R-5) WITH FOIL FACED VAPOR BARRIER COMPLYING WITH ASTM 553, TYPE II. EXPOSED DUCTWORK WITHIN CONDITIONED SPACES SHALL NOT BE WRAPPED AND SHALL BE PROVIDED WITH PAINTABLE SURFACE. ALL PLAN DIMENSIONS SHALL BE FREE INSIDE DIMENSIONS.

3. ALL FLEXIBLE DUCTWORK ASSEMBLY SHALL BE CLASS 1 AIR DUCT UL 181 WITH MIN. R-5 FIBERGLASS INSULATION WITH FOIL FACED VAPOR BARRIER COMPLYING WITH ASTM 553, TYPE II. PROVIDE SCREW-OPERATED METAL ADJUSTABLE CLAMPING DEVICES. USE TWIST LOCK TAP COLLARS AT CONNECTIONS TO SHEET METAL DUCTWORK. FLEXIBLE DUCT SHALL NOT EXCEED 5FT.

4. ALL DUCTWORK INSULATING MATERIALS SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25, SMOKE DEVELOPED RATING SHALL NOT EXCEED 50. ALL VALUES SHALL BE IN ACCORDANCE WITH ASTM TEST E84 "SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS".

5. FURNISH AND INSTALL ALL STARTING COLLARS, MANUAL DAMPERS, SPLITTERS AND DEFLECTORS SHOWN ON THE DRAWINGS OR WHEREVER REQUIRED FOR THE PROPER AIR FLOW AND BALANCING OF THE ENTIRE AIR SYSTEM. ALL SQUARE (90 DEGREES) ELBOWS SHALL BE PROVIDED WITH TURNING VANES IN ACCORDANCE WITH SMACNA STANDARDS. ALL BLADES SHALL BE DOUBLE THICKNESS AIRFOIL TYPE.

6. SHEET METAL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS FOR 1" W.G. PRESSURE CLASS, SEAL CLASS "A". DUCTWORK SHALL BE GALVANIZED OF LOCK FORMING QUALITY, ASTM A653 AND A924. SEAL ALL SEAMS TRANSVERSE AND LONGITUDINAL AIR TIGHT.

7. ROUND GALVANIZED SHEET METAL DUCTWORK SHALL SPIRAL SEAM OR SNAP LOCK FOR DUCTS UP TO 10'Ø. DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS. SPIRAL SEAM DUCTWORK SHALL HAVE SMACNA SEAM TYPE RL-1.

8. RECTANGULAR VOLUME DAMPERS SHALL BE MIN. 16 GAUGE GALVANIZED STEEL FRAME AND BLADES, MIN. ⅜" SQUARE STEEL AXLE, MOLDED SYNTHETIC BEARINGS WITH LOCKING POSITION REGULATOR. WHERE POSITION REGULATOR IS NOT ACCESSIBLE PROVIDE COUPLING AND EXTENSION ROD FOR CEILING OR WALL INSTALLATION.

9. ROUND VOLUME DAMPERS SHALL BE MIN. 20 GAUGE GALVANIZED STEEL FRAME AND BLADES, MIN. ⅜" SQUARE STEEL AXLE, MOLDED SYNTHETIC BEARINGS WITH LOCKING POSITION REGULATOR. WHERE POSITION REGULATOR IS NOT ACCESSIBLE PROVIDE COUPLING AND EXTENSION ROD FOR CEILING OR WALL INSTALLATION.

10. FIRE DAMPERS SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH ALL LOCAL CODES. PROVIDE AN ACCESS DOOR FOR FUSIBLE LINK REPLACEMENT. DAMPERS SHALL BE FOLDED BLADE TYPE, ARRANGED OUT OF THE AIRSTREAM.

11. INSTALL AND PROVIDE HANGERS FOR ALL DUCTWORK PER SMACNA STANDARDS AND PER LOCAL CODE.

12. UNLESS NOTED OTHERWISE, DUCT DIMENSIONS ON THE PLANS ARE INSIDE CLEAR DIMENSIONS.

13. TRAPEZE HANGERS SHALL BE MIN. 1"X2"X1"X18 GUAGE CHANNELS WITH MIN. 1"X18 GUAGE STRAPS TO STRUCTURAL SUPPORTS.

14. EXPOSED DUCTWORK SHALL BE CLEANED OF DEBRIS AND OIL, WIPED DOWN WITH VINEGAR OR OTHER SURFACE PREPARATION CHEMICAL TO PREPARE DUCT FOR PAINT.

15. PROVIDE POLYMERIC RUBBER DUCT SEALANT FOR USE ON BOTH INTERIOR LOCATED AND EXPOSED TO OUTDOOR DUCTWORK. SEALER SHALL HAVE HIGH BONDING STRENGTH FOR FIRST TIME SEALING OF JOINTS IN LOW, MEDIUM AND HIGH PRESSURE DUCT SYSTEMS. SEALER SHALL BE HIGH IN SOLID CONTENT. PROVIDE A TWO PART TAPE SEALING SYSTEM CONSISTING OF WOVEN FIBER TAPE IMPREGNATED WITH GYPSUM MINERAL COMPOUND AND A MODIFIED ACRYLIC/SILICONE ACTIVATOR THAT REACTS EXOTHERMICALLY WITH THE TAPE. TWO PART TAPE SEALING SYSTEM MUST BE RATED FOR BOTH INDOOR AND OUTDOOR APPLICATIONS. TAPE SHALL NOT CONTAIN ASBESTOS.

K. ELECTRICAL MOTORS

THIS CONTRACTOR SHALL FURNISH MOTORS, MOTOR STARTERS AND CONTROLS FOR ALL MECHANICAL EQUIPMENT PROVIDED HEREIN; INCLUDING SETTING OF ALL LOOSE MOTORS FURNISHED. MOUNTING OF STARTERS AND ALL POWER WIRING WILL BE BY ELECTRICAL TRADES.

M. TEMPERATURE CONTROL

1. THIS CONTRACTOR SHALL PROVIDE ALL REQUIRED TEMPERATURE CONTROL DEVICES, WIRING, PROGRAMMING, ETC.

2. ALL NEW TEMPERATURE CONTROL WIRING SHALL BE COMPATIBLE WITH NEW SYSTEMS.

Architect
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p: 833-380-6180

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MECHANICAL SPECIFICATIONS

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NJH	CMH

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ABBREVIATIONS

AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AIC	AMPERE INTERRUPTING CAPACITY
ALT	ALTERNATE
AMP	AMPERE
AOR	AREA OF REFUGE
AORM	AREA OF REFUGE MASTER STATION
AORR	AREA OF REFUGE REMOTE STATION
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AV	AUDIO VISUAL
BLDG	BUILDING
BOT	BOTTOM
C	CONDUIT
CAB	CABINET
CATV	COMMUNITY ANTENNA TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CD	CANDELA OR CONSTRUCTION DOCUMENT
CKT	CIRCUIT
CLG	CEILING
COAX	COAXIAL CABLE
CP	CONTROL PANEL
CT	CURRENT TRANSFORMER
CU	COPPER
dB	DECIBEL
DB	DIRECT BURIAL
DEMO	DEMOLITION
DISC	DISCONNECT
DIST	DISTRIBUTION
DM	DIMMING
DN	DOWN
DPDT	DOUBLE POLE, DOUBLE THROW
DPST	DOUBLE POLE, SINGLE THROW
DS	DAYLIGHT SENSOR
DWG	DRAWING
EBU	EMERGENCY BATTERY UNIT
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVATOR
EM	EMERGENCY
ENCL	ENCLOSURE
ER	ELEVATOR RECALL
ERL	EXISTING TO BE RELOCATED
ES	ELECTRIC STRIKE
ETR	EXISTING TO REMAIN
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FC	FOOT-CANDLE
FLA	FULL LOAD AMPERE
FP	FIRE PROTECTION
FSS	FUSED SAFETY SWITCH
FVNR	FULL VOLTAGE NON-REVERSING
FVR	FULL VOLTAGE REVERSING
GEN	GENERATOR
GRD	GROUND
GC	GENERAL CONTRACTOR
GFI / GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTO
HP	HORSE POWER
HZ	HERTZ
IG	INSOLATED GROUND
K	KEY OPERATED
JB	JUNCTION BOX
KV	KILOVOLT
KVA	KILOVOLT AMPERE
KW	KILOWATT
KWH	KILOWATT HOUR
LCP	LIGHTING CONTROL PANEL
LED	LIGHT EMITTING DIODE
LF	LINEAR FOOT (FEET)
LM	LUMEN
LPS	LOW PRESSURE SODIUM
LRA	LOCKED ROTOR AMPERAGE
LTG	LIGHTING
LV	LOW VOLTAGE
MAG	MAGNETIC STARTER
MAN	MANUAL STARTER
MATV	MASTER ANTENNA TELEVISION SYSTEM
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MFG	MANUFACTURER
MH	MANHOLE
MOCP	MAXIMUM OVERCURRENT PROTECTION
MLO	MAIN LUG ONLY
MTD	MOUNTED
MTS	MANUAL TRANSFER SWITCH
MV	MEDIUM VOLTAGE
N	NEUTRAL
NA	NOT APPLICABLE
NAC	NOTIFICATION APPLIANCE CIRCUIT
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NFPA	NATIONAL FIRE PROTECTION AGENCY
NFSS	NON-FUSED SAFETY SWITCH
NIC	NOT INCLUDED IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OL	OVERLOAD
OS	OPTIONAL STANDBY
P	POLE
PA	PUBLIC ADDRESS
PB	PUSHBUTTON
PC	PLUMBING CONTRACTOR
PE	PHOTOELECTRIC CELL, PHOTOEYE
PED	PEDESTAL
PEND	PENDANT
PF	POWER FACTOR
PH	PHASE
PL	PILOT LIGHT
PNL	PANEL
PWR	POWER
RC	REMOTE CONTROL
RCP	REFLECTED CEILING PLAN
REC	RECESSED
RECPT	RECEPTACLE
SCC	SHORT CIRCUIT CAPACITY
SF	SQUARE FOOT (FEET)
SPD	SURGE PROTECTION DEVICE
SPEC	SPECIFICATION
SPST	SINGLE POLE, SINGLE THROW
SS	SWITCH STATION
SW	SWITCH
T	TAMPERPROOF
TC	TIMECLOCK
TV	TELEVISION
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
UNV	UNIVERSAL
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLT
VA	VOLT AMPERE
VAC	VOLT AMPERE CURRENT
VFD	VARIABLE FREQUENCY DRIVE
W	WATT OR WIRE
WAP	WIRELESS ACCESS POINT
WP	WEATHERPROOF
X-	EXISTING
XFER	TRANSFER
XFMR	TRANSFORMER

LIGHTING LEGEND

- $ — SWITCH
- SS — SWITCH STATION
- OS — SWITCH-BOX OCCUPANCY SENSOR
- OS — CEILING MOUNT OCCUPANCY SENSOR
- ODS — COMBINATION CEILING MOUNT OCCUPANCY DAYLIGHT SENSOR
- DS — CEILING MOUNT DAYLIGHT SENSOR
- VS — SWITCH-BOX VACANCY SENSOR
- VS — CEILING MOUNT VACANCY SENSOR
- PC — EXTERIOR PHOTOELECTRIC SWITCH
- SURFACE MOUNT LIGHT FIXTURE
- SURFACE MOUNT LIGHT FIXTURE - EMERGENCY
- STRIP/INDUSTRIAL FIXTURE
- LINEAR WALL BRACKET
- WALL MOUNTED FIXTURE
- RECESSED FIXTURE
- CEILING MOUNTED FIXTURE
- POLE MOUNT LUMINAIRE
- BOLLARD
- FLOOD LIGHT
- CEILING OR WALL MOUNTED EXIT, SINGLE FACE
- EMERGENCY WALL PACK (EBU)
- EMERGENCY WALL PACK REMOTE HEAD

GENERAL LEGEND

- NEW ELECTRICAL COMPONENT
- EXISTING ELECTRICAL COMPONENT
- DEMOLISHED ELECTRICAL COMPONENT
- E## — KEY NOTE
- TYPICAL CIRCUIT
- UNSWITCHED CIRCUIT

POWER LEGEND

- SINGLE RECEPTACLE
- DUPLEX RECEPTACLE
- DUPLEX RECEPTACLE 6" ABOVE COUNTER OR BACKSPLASH OR AT HEIGHT INDICATED
- DOUBLE DUPLEX RECEPTACLE
- SPECIAL PURPOSE OUTLET
- DUPLEX FLOOR OUTLET
- DOUBLE DUPLEX FLOOR OUTLET
- PUSH BUTTON
- J — JUNCTION BOX
- CIRCUIT BREAKER
- GROUND
- M — TRANSOCKET
- SURFACE MOUNT PANEL
- RECESSED PANEL
- M — METER
- NON-FUSED DISCONNECT
- FUSED DISCONNECT
- MAGNETIC STARTER
- COMBINATION STARTER
- MOTOR
- POWER ASSIST OPERATOR PUSH PLATE

GENERAL NOTES

1. DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL REQUIRED COMPONENTS FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL FURNISH AND INSTALL MATERIAL,EQUIPMENT, DEVICES, FIXTURES, SERVICE REQUIREMENTS NECESSARY TO CONFORM TO THE STRUCTURE, EQUIPMENT CONNECTIONS, FOR A COMPLETE AND FUNCTIONAL INSTALLATION AND SHALL MAINTAIN APPROPRIATE CLEARANCES.
2. ALL WORK SHALL COMPLY WITH APPLICABLE NATIONAL, STATE, LOCAL CODES, FEDERAL AND STATE REGULATIONS, AND ALL REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION.
3. CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
4. THE CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE FULL EXTENT OF WORK AND PROJECT CONDITIONS. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATIONS OF THE CONTRACT.
5. THE CONTRACTOR SHALL CHECK ALL DRAWINGS AND SPECIFICATIONS OF OTHER TRADES AND INCLUDE IN THEIR BID ANY ADDITIONAL WORK REQUIRED BY THIS TRADE.
6. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL LIGHT SWITCHES, POWER, AND COMMUNICATIONS OUTLETS. ALL OUTLETS SHALL BE MOUNTED VERTICALLY UNLESS OTHERWISE NOTED. COORDINATE ALL FINAL DEVICE REQUIREMENTS WITH ARCHITECT PRIOR TO INSTALLATION.
7. ALL CONDUITS SHOULD BE SUPPORTED IN COMPLIANCE WITH CODE REQUIREMENTS AND INSTALLED IN A MANNER AS TO AFFORD MINIMUM INTERFERENCE WITH OTHER TRADES. ALL CONDUITS ABOVE CEILING SHALL BE RIGIDLY SUPPORTED BY SUITABLE HANGERS FROM THE STRUCTURAL SLAB DECK OR FRAMING ABOVE INDEPENDENT OF THE CEILING, CEILING SUPPORT SYSTEM AND OTHER TRADE COMPONENTS. ALL CONDUITS SHALL BE CONCEALED UNLESS OTHERWISE NOTED ON DRAWINGS.
8. FIRE RATED SEALS SHALL BE PROVIDED FOR ALL CONDUIT PENETRATIONS THROUGH FIRE RATED FLOORS, WALLS, AND CEILINGS.
9. CONTRACTOR SHALL VERIFY ALL EQUIPMENT CONNECTION CONFIGURATIONS BEFORE PURCHASE. ALL DEVICES SHOWN ARE FOR REFERENCE ONLY. TO COMMUNICATE DESIGN INTENT, FINAL LOCATIONS SHALL BE VERIFIED PRIOR TO INSTALLATION. THIS NOTE SHALL APPLY TO, BUT NOT BE LIMITED TO, RECEPTACLES, SWITCHES, DATA PORTS, AUDIO/VIDEO DEVICES, AND TELEPHONE JACKS.
10. THE CONTRACTOR SHALL COORDINATE AND VERIFY ALL ABOVE CEILING REQUIREMENTS (PLENUM, NON-PLENUM, AIR HANDLING, ETC.) AS REQUIRED BY LOCAL AUTHORITY BEFORE THE INSTALLATION AND PURCHASE OF ELECTRICAL EQUIPMENT, MATERIALS AND DEVICES, WIRING, CABLING, AND THE ORDERING OF LIGHTING FIXTURES.
11. CONDUCTOR SIZES INDICATED ARE MINIMUM SIZES BASED ON 60°C COPPER CONDUCTOR 100 AMPS OR LESS AND 75°C COPPER CONDUCTOR GREATER THAN 100 AMPS. AMPACITIES OF CONDUCTORS DO NOT TAKE VOLTAGE DROP INTO CONSIDERATION. CONTRACTOR SHALL SIZE CONDUCTORS FOR FEEDERS AND BRANCH CIRCUITS TO PREVENT A VOLTAGE DROP EXCEEDING 3 PERCENT AT THE FARTHEST OUTLET OF POWER, HEATING, AND LIGHTING LOADS, OR COMBINATION OF SUCH LOADS, AND WHERE THE MAXIMUM TOTAL VOLTAGE DROP ON BOTH FEEDERS AND BRANCH CIRCUITS TO THE FARTHEST OUTLET DOES NOT EXCEED 5 PERCENT, TO PROVIDE REASONABLE EFFICIENCY OF OPERATION.

ELECTRICAL SHEET INDEX

NUMBER	SHEET NAME
E0.1	ELECTRICAL NOTES, LEGEND, AND ABBREVIATIONS
E1.0	ELECTRICAL SITE PLAN
E2.0	ELECTRICAL LIGHTING PLAN
E3.0	ELECTRICAL POWER & SYSTEMS FLOOR PLAN
E4.0	ELECTRICAL RISER & SCHEDULES

Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

Project Info. — 22005

Riverside Park Restrooms

New Construction

600 Labaree St
Watertown, WI

Sheet Title

ELECTRICAL NOTES, LEGEND, AND ABBREVIATIONS

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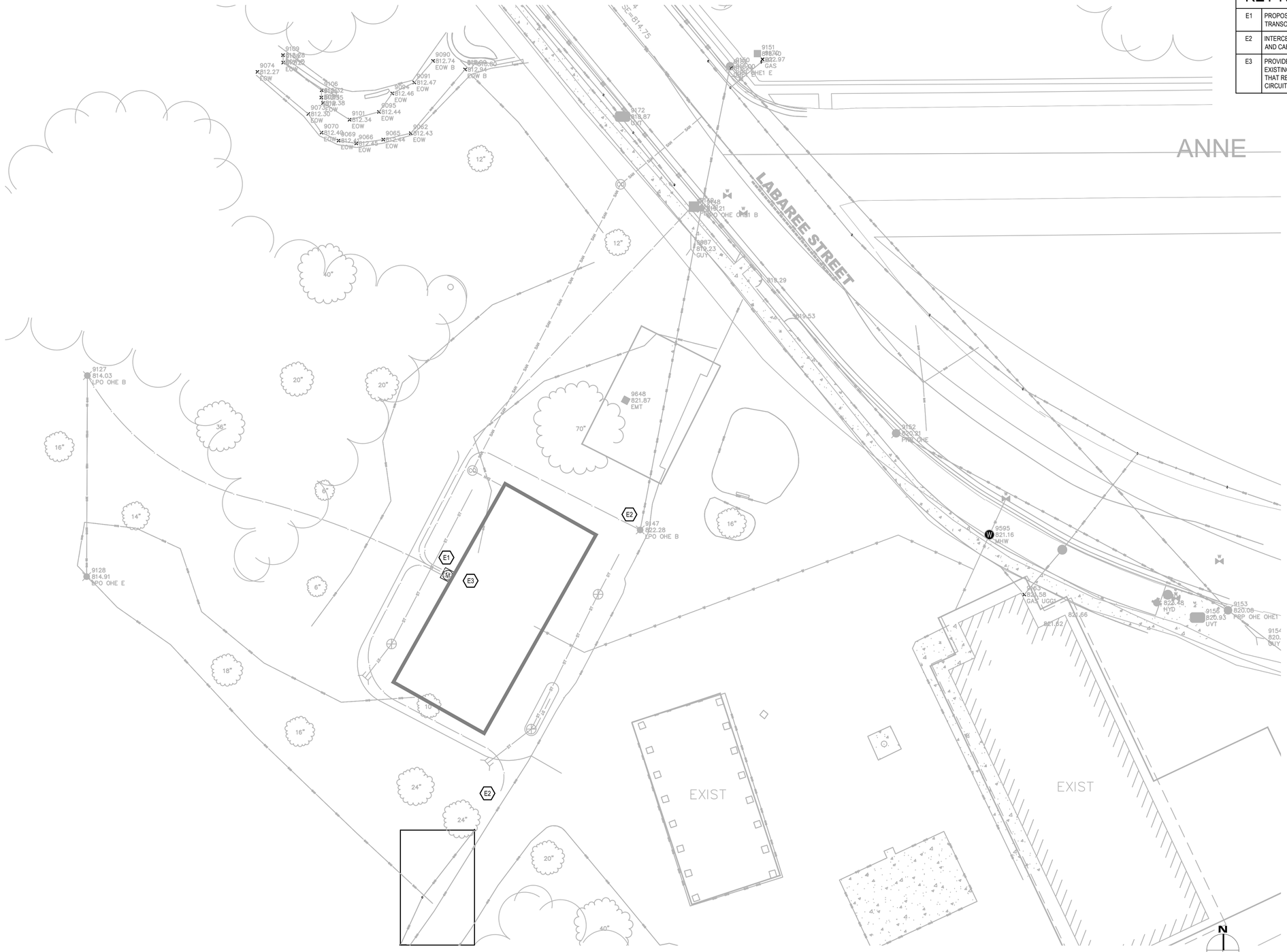
E0.1

KEY NOTES

E1	PROPOSED LOCATION OF NEW 240V/120V, 100A SERVICE TRANSOCKET. COORDINATE WITH UTILITY.
E2	INTERCEPT AND REROUTE EXISTING ELECTRICAL CONDUIT AND CABLE AROUND NEW BUILDING.
E3	PROVIDE NEW 42 CIRCUIT, 240/120V PANELBOARD. EXTEND EXISTING CIRCUITS FROM EXISTING PANEL BEING REMOVED THAT REMAIN TO NEW PANEL. VERIFY IN FIELD WHICH CIRCUITS ARE TO REMAIN.



1 ELECTRICAL SITE PLAN
SCALE: 1/16" = 1'-0"

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ELECTRICAL SITE PLAN

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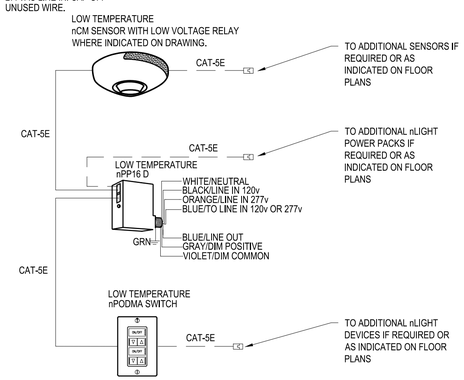
THIS BAR APPEARS 2" LONG ON FULL SIZE SHEETS.

NOTE:
EITHER BLUE WIRE CAN BE CONNECTED TO 120VAC OR 277VAC LINE IN. CAP OFF UNUSED WIRE.



1 TYPICAL nLIGHT 0-10V DIMMING WIRING DIAGRAM

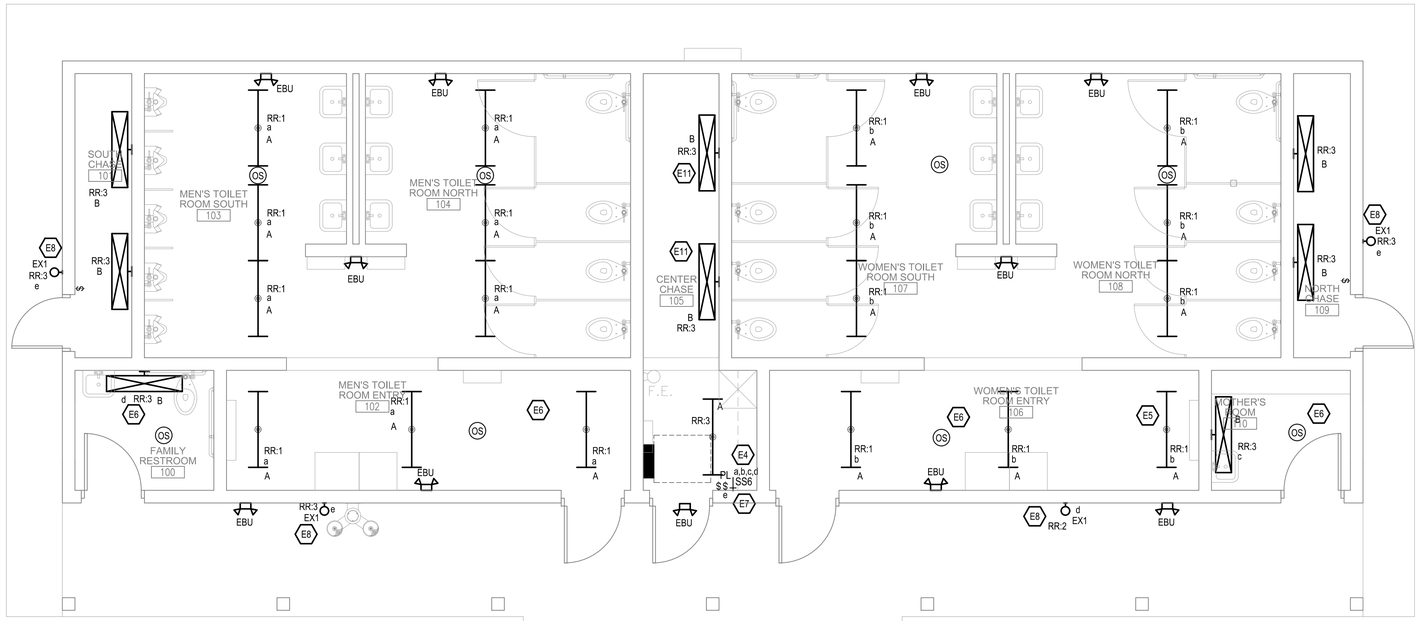
N.T.S.

SHEET NOTES

1. EMERGENCY BATTERY UNITS SHALL BE CIRCUITED TO THE UNSWITCHED PORTION OF THE NEAREST LIGHTING BRANCH CIRCUIT SERVING THE IMMEDIATE AREA.

KEY NOTES

E4	MANUAL SWITCH IS TO SERVE LOCAL ELECTRICAL/MECHANICAL ROOM. SS6 IS TO OVERRIDE INTERIOR TOILET LIGHTS AND THE OTHER MANUAL PILOT SWITCH IS TO OVERRIDE EXTERIOR LIGHTS. SWITCHES SHALL BE LABELED INTERIOR LIGHTING AND EXTERIOR LIGHTING. SS6 SHALL BE 4 ZONE DIMMING SWITCH.
E5	LIGHT FIXTURE TYPE A TO BE MOUNTED TO BOTTOM OF CEILING UNLESS INDICATED OTHERWISE.
E6	PROVIDE AUXILIARY CONTACT FOR FAN CONTROL. SWITCH DOES NOT CONTROL FAN.
E7	ZONE LOW VOLTAGE SWITCH, ONE CONTROL FOR EACH TOILET ROOM.
E8	BOTTOM OF FIXTURE SHALL BE 80" AFF.



1 ELECTRICAL LIGHTING FLOOR PLAN

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

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ELECTRICAL LIGHTING PLAN

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E2.0

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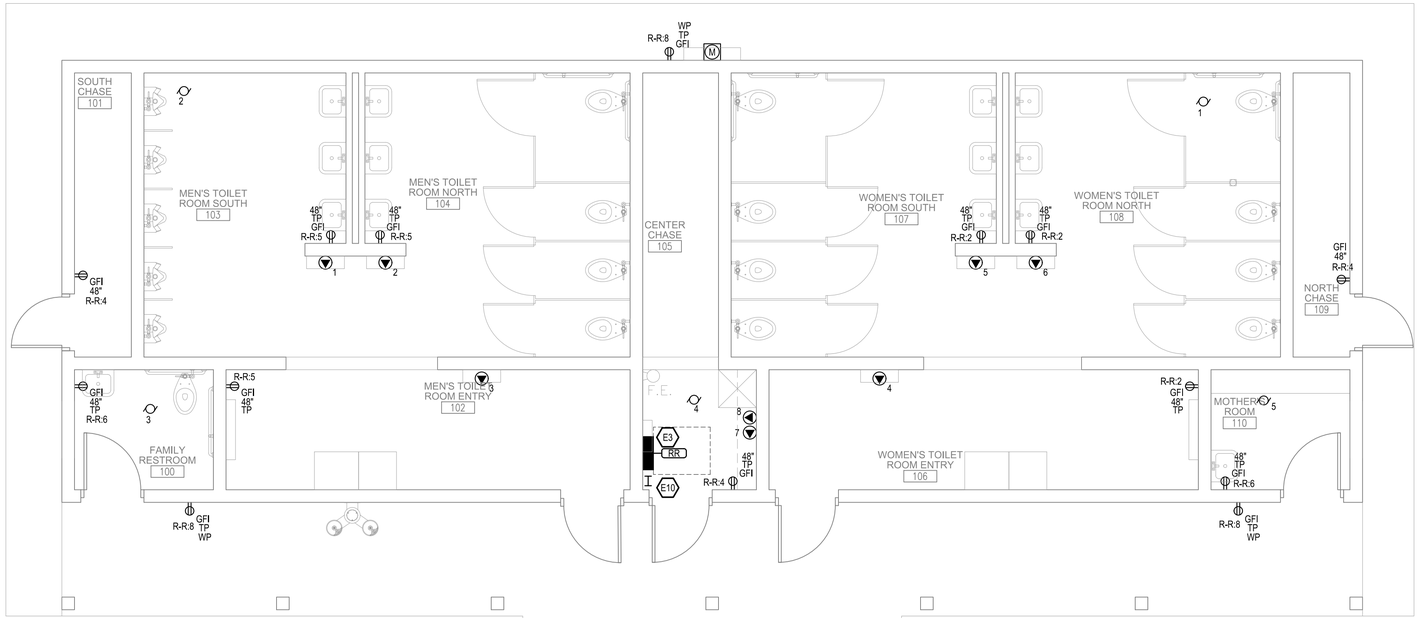
KEY NOTES

E3	PROVIDE NEW 42 CIRCUIT, 240/120V PANELBOARD. EXTEND EXISTING CIRCUITS FROM EXISTING PANEL BEING REMOVED THAT REMAIN TO NEW PANEL. VERIFY IN FIELD WHICH CIRCUITS ARE TO REMAIN.
E10	PROPOSED LOCATION OF GROUND BAR LOCATED ABOVE PANEL.



N

1 ELECTRICAL POWER & SYSTEMS FLOOR PLAN
SCALE: 1/4" = 1'-0"

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ELECTRICAL POWER & SYSTEMS FLOOR PLAN

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PANEL NAME: R-R

LOCATION:	ELECTRICAL	VOLTS:	120/240	AIC RATING:	10,000
SUPPLY FROM:	UTILITY	PHASES:	1	MAINS TYPE:	MCB
MOUNTING:	SURFACE	WIRES:	3	BUS RATING:	200A
ENCLOSURE:	NEMA 250 TYPE 4			MCB RATING:	150A

POLE NO.	POLES	AMP	DESCRIPTION	NOTES	A		B		DESRIPTION	NOTES	AMP	POLES	POLE NO.
1	1	20	LIGHTS		920	540			RECPT - RR		20	1	2
3	1	20	EXHAUST FAN 4 AND LIGHTS				531	540	RECPT - ELECTRICAL ROOM/PLUMBING CHASE		20	1	4
5	1	20	RECPT - RR		410	360			RECPT - FAMILY RR/MOTHERS ROOM		20	1	6
7	1	20	EXHAUST FAN 1,5				700	540	RECPT - OUTSIDE		20	1	8
9	1	20	EXHAUST FAN 2,3		700	2400			HAND DRYER	1	25	1	10
11	1	20	SPARE					2400	HAND DRYER	1	25	1	12
13	1	20	RECIRCULATION PUMP		55	2400			HAND DRYER	1	25	1	14
15	2	50	WATER HEATER				4800	2400	HAND DRYER	1	25	1	16
17	-	-	-		4800	2400			HAND DRYER	1	25	1	18
19	1	20	SPARE					2400	HAND DRYER	1	25	1	20
21	1	20	SPARE						SPARE		20	1	22
23	1	20	SPARE						SPARE		20	1	24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
			PHASE TOTAL:		14985		14311						
			TOTAL LOAD:		29296								

NOTES:
1. GFI BREAKER
2. SHUNT TRIP BREAKER

MOTOR WIRING SCHEDULE

NO.	LOAD DESCRIPTION	LOC.	HP	FLA	VOLT	PH.	FEED FROM		BREAKER		SEE NOTE
							PANEL	CIRCUIT	SIZE	POLE	
1	EF-1	WOMEN	1/4	3.8	120	1	RR	7	20	1	1,3
2	EF-2	MEN	1/4	3.8	120	1	RR	9	20	1	1,3
3	EF-3	FAMILY		0.1	120	1	RR	9	20	1	1.3
4	EF-4	JANITOR		0.1	120	1	RR	3	20	1	2,3
5	EF-5	MOTHER		0.1	120	1	RR	7	20	1	1,3

REMARKS:
A. ELECTRICAL CONTRACTOR TO PROVIDE PROPERLY RATED FUSED DISCONNECT FUSED PER EQUIPMENT NAMEPLATE WITHIN SIGHT OF EQUIPMENT, UNLESS OTHERWISE NOTED IN THE MECHANICAL DRAWINGS.
B. REFER TO MECHANICAL SHEETS FOR TYPE OF CONTROLLERS PROVIDED WITH THE HVAC EQUIPMENT. CONTROLLER TO BE WIRED BY EC UNLESS INDICATED OTHERWISE.

NOTES:
1. EXHAUST FANS ARE CONTROLLED VIA CONTACT IN COMBINATION OCCUPANCY/DAYLIGHT SENSOR.
2. EXHAUST FANS ARE CONTROLLED ON/OFF WITH LIGHT SWITCH
3. PROVIDE NON FUSED DISCONNECT SWITCH

SPECIAL PURPOSE OUTLET SCHEDULE

NO.	LOAD DESCRIPTION	LOCATION	KW	FLA	VOLT	PH	FEED FROM		BREAKER		OUTLET	SEE NOTE
							PANEL	CKT	SIZE	POLE		
1	HAND DRYER	MENS	2.4	20	120	1	RR	10	25	1	DIRECT	
2	HAND DRYER	MENS	2.4	20	120	1	RR	12	25	1	DIRECT	
3	HAND DRYER	MENS	2.4	20	120	1	RR	14	25	1	DIRECT	
4	HAND DRYER	WOMENS	2.4	20	120	1	RR	16	25	1	DIRECT	
5	HAND DRYER	WOMENS	2.4	20	120	1	RR	18	25	1	DIRECT	
6	HAND DRYER	WOMENS	2.4	20	120	1	RR	20	25	1	DIRECT	
7	RECIRCULATION PUMP	ELEC/MECH	0.055	-	120	1	RR	13	20	1	DIRECT	2
8	WATER HEATER	ELEC/MECH	9.5		240	1	RR	15,17	50	2	DIRECT	1

REMARKS:
A. REFER TO EQUIPMENT DATA SHEET FOR ADDITIONAL INFORMATION.
B. COORDINATE WITH EQUIPMENT SUPPLIER FOR INSTALLATION REQUIREMENTS.
C. FOR DIRECT CONNECTED EQUIPMENT, TERMINATE EQUIPMENT WIRING IN A JUNCTION BOX WITH PROPERLY RATED WIRE NUTS.

NOTES:
1. PROVIDE A FUSED DISCONNECT FUSED PER EQUIPMENT NAME PLATE.
2. PROVIDE A PILOT LIGHT DISCONNECT TO ILLUMINATE WHEN PUMP IS ENERGIZED.

LIGHTING FIXTURE SCHEDULE

FIXT.	DESCRIPTION	LAMPING			VOLT	MANUFACTURER	CATALOG NUMBER	MOUNTING	SEE NOTE
		NO.	TYPE	INPUT					
A	SURFACE MOUNT STRIP LIGHT		2923 LUMEN, 4000K LED	44.5	120	COOPER	FVS4-P-4-LD4-1-HI-40-120-OPL-EDD1	SURFACE	
B	WALL MOUNT STRIP LIGHT		2923 LUMEN, 4000K LED	44.5	120	COOPER	FVS4-WP-4-LD4-1-HI-40-120-OPL-EDD1	SURFACE	
EX1	EXTERIOR WALL MOUNT		3500 LUMEN, 4000K LED	25	UNV	HUBBELL	RWL1-48L-25-4K7-3-PC	SURFACE	
EBU	EMERGENCY BATTERY UNIT		LED W/ UNIT	3	UNV	LITHONIA	AFO-W-MVOLT-N-SD-CW	SURFACE	

REMARKS:
A. CONTRACTOR SHALL CONFIRM CEILING TYPE REQUIREMENTS PRIOR TO THE RELEASE OF THE ORDER.
B. CATALOG NUMBERS ARE TO PROVIDE GUIDANCE ONLY AND MAY NOT BE COMPLETE.
C. FIXTURES SPECIFIED TO MEET DESIGN INTENT. EQUALS MAY BE SUBSTITUTED SUBJECT TO DESIGN TEAM'S APPROVAL.
D. PROVIDE ALL PARTS AND PIECES NECESSARY FOR A COMPLETE AND FUNCTIONAL INSTALLATION.
E. ARCHITECT TO DETERMINE ALL FINISHES.
F. VERIFY DIMMING CONTROLS ARE COMPATIBLE WITH DIMMING DRIVER SELECTED FOR FIXTURE.

FEEDER SCHEDULE

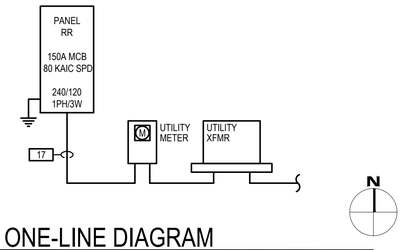
ID #	AMPS	SINGLE PHASE, 2 WIRE		1 OR 3 PHASE, 3 WIRE		THREE PHASE, 4 WIRE		ALL
		CND SIZE	PHASE CONDUCTORS	CND SIZE	PHASE CONDUCTORS	CND SIZE	PHASE CONDUCTORS	EQUIP. GRD. CONDUCTOR
1	10	3/4"	(2) #12	3/4"	(3) #12	3/4"	(4) #12	#12
2	15	3/4"	(2) #12	3/4"	(3) #12	3/4"	(4) #12	#12
3	20	3/4"	(2) #12	3/4"	(3) #12	3/4"	(4) #12	#12
4	25	3/4"	(2) #10	3/4"	(3) #10	3/4"	(4) #10	#10
5	30	3/4"	(2) #10	3/4"	(3) #10	3/4"	(4) #10	#10
6	35	3/4"	(2) #8	3/4"	(3) #8	1"	(4) #8	#10
7	40	3/4"	(2) #8	3/4"	(3) #8	1"	(4) #8	#10
8	45	3/4"	(2) #6	1"	(3) #6	1"	(4) #6	#10
9	50	3/4"	(2) #6	1"	(3) #6	1"	(4) #6	#10
10	60	1"	(2) #4	1"	(3) #4	1-1/4"	(4) #4	#10
11	70	1"	(2) #4	1-1/4"	(3) #4	1-1/4"	(4) #4	#8
12	80	1"	(2) #3	1-1/4"	(3) #3	1-1/4"	(4) #3	#8
13	90	1-1/4"	(2) #2	1-1/4"	(3) #2	1-1/2"	(4) #2	#8
14	100	1-1/4"	(2) #1	1-1/2"	(3) #1	1-1/2"	(4) #1	#8
15	110	1"	(2) #2	1-1/4"	(3) #2	1-1/2"	(4) #2	#6
16	125	1-1/4"	(2) #1	1-1/2"	(3) #1	1-1/2"	(4) #1	#6
17	150	1-1/4"	(2) #1/0	1-1/2"	(3) #1/0	2"	(4) #1/0	#6
18	175	N / A	N / A	2"	(3) #2/0	2"	(4) #2/0	#6
19	200	N / A	N / A	2"	(3) #3/0	2"	(4) #3/0	#6
20	225	N / A	N / A	2"	(3) #4/0	2-1/2"	(4) #4/0	#4
21	250	N / A	N / A	2-1/2"	(3) 250 kcmil	3"	(4) 250 kcmil	#4
22	300	N / A	N / A	3"	(3) 350 kcmil	3"	(4) 350 kcmil	#4
23	350	N / A	N / A	3"	(3) 500 kcmil	3-1/2"	(4) 500 kcmil	#3
24	400	N / A	N / A	(2) 2"	2 SETS OF (3) #3/0	(2) 2"	2 SETS OF (4) #3/0	#3
25	450	N / A	N / A	(2) 2"	2 SETS OF (3) #4/0	(2) 2-1/2"	2 SETS OF (4) #4/0	#2
26	500	N / A	N / A	(2) 2-1/2"	2 SETS OF (3) 250 kcmil	(2) 3"	2 SETS OF (4) 250 kcmil	#2
27	600	N / A	N / A	(2) 3"	2 SETS OF (3) 350 kcmil	(2) 3"	2 SETS OF (4) 350 kcmil	#1
28	700	N / A	N / A	(2) 3"	2 SETS OF (3) 500 kcmil	(2) 3-1/2"	2 SETS OF (4) 500 kcmil	#1/0
29	800	N / A	N / A	(3) 2-1/2"	3 SETS OF (3) 300 kcmil	(3) 3"	3 SETS OF (4) 300 kcmil	#1/0
30	900	N / A	N / A	(3) 3"	3 SETS OF (3) 350 kcmil	(3) 3"	3 SETS OF (4) 350 kcmil	#2/0
31	1000	N / A	N / A	(4) 2-1/2"	4 SETS OF (3) 250 kcmil	(4) 3"	4 SETS OF (4) 250 kcmil	#2/0
32	1200	N / A	N / A	(4) 3"	4 SETS OF (3) 350 kcmil	(4) 3"	4 SETS OF (4) 350 kcmil	#3/0
33	1600	N / A	N / A	(5) 3"	5 SETS OF (3) 400 kcmil	(5) 3"	5 SETS OF (4) 400 kcmil	#4/0
34	1800	N / A	N / A	(6) 3"	6 SETS OF (3) 350 kcmil	(6) 3"	6 SETS OF (4) 350 kcmil	250 kcmil
35	2000	N / A	N / A	(6) 3"	6 SETS OF (3) 500 kcmil	(6) 3-1/2"	6 SETS OF (4) 500 kcmil	250 kcmil
36	2500	N / A	N / A	(8) 3"	8 SETS OF (3) 400 kcmil	(8) 3"	8 SETS OF (4) 400 kcmil	350 kcmil
37	3000	N / A	N / A	(8) 3"	8 SETS OF (3) 500 kcmil	(8) 3-1/2"	8 SETS OF (4) 500 kcmil	400 kcmil

SCHEDULE BASED ON NEC TABLE 310.15(B)(16), 60 DEGREE CELSIUS CONDUCTOR 100 AMPS OR LESS AND 75 DEGREE CELSIUS CONDUCTOR GREATER THAN 100 AMPS. SIZES REFERENCED ARE MINIMUM. CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL CONDUCTOR SIZES TO ACCOMMODATE VOLTAGE DROP.
PLAN NOTATION:

(X)— - SINGLE-PHASE, TWO-WIRE FEEDER, NUMBER IS THE FEEDER ID #

[X]— - SINGLE OR THREE-PHASE, THREE-WIRE FEEDER, NUMBER IS THE FEEDER ID #

(X)— - THREE PHASE, FOUR-WIRE FEEDER, NUMBER IS THE FEEDER ID#



1 PARTIAL ONE-LINE DIAGRAM
SCALE: 1/8" = 1'-0"

NOTES:
1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PANEL EQUIPMENT RATED FOR OR EXCEEDING THE SHORT CIRCUIT RATING AT THE POINT OF INSTALLATION AND PROVIDING ARC FLASH LABELS PER NEC.

Architect
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p: 833-380-6180

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ELECTRICAL RISER & SCHEDULES

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ELECTRICAL SPECIFICATIONS

1. SCOPE

1.1. APPLICABLE REQUIREMENTS OF CONDITIONS OF CONTRACT AND OF SECTIONS LISTED UNDER GENERAL REQUIREMENTS APPLY TO WORK OF THIS SECTION.

2. GENERAL PROVISIONS

2.1. IN GENERAL, THE WORK INCLUDES: ELECTRICAL WORK AND THE KINDRED MATERIALS AND OPERATIONS AS INDICATED ON THE DRAWINGS AND AS SPECIFIED IN THE FOLLOWING ARTICLES.

2.2. JOB INFORMATION: OBTAIN AT BUILDING INCLUDING:
- 2.2.1. CONDITIONS AFFECTING THIS SECTION OF THE WORK.
- 2.2.2. ACCESSIBILITY
- 2.2.3. STORAGE SPACE

3. GENERAL REQUIREMENTS

3.1. THIS SECTION OF THE SPECIFICATIONS APPLIES TO ALL ELECTRICAL WORK. THE FRONT END DOCUMENTS AND DIVISION 1 FORM A PART OF THESE SPECIFICATIONS AND THE CONTRACTOR SHALL CONSULT THEM IN DETAIL. ELECTRICAL WORK INDICATED IN OTHER SECTIONS OF THE SPECIFICATIONS TO BE DONE BY THE ELECTRICAL CONTRACTOR SHALL BE INCLUDED IN THE WORK OF THIS SECTION.

4. DEFINITIONS

4.1. CERTAIN TERMS USED HEREIN; ON THE DRAWINGS; AND IN THE CONTRACT DOCUMENTS, SHALL BE DEFINED AS FOLLOWS:
- 4.1.1. PROVIDE: FURNISH AND INSTALL COMPLETE AND READY FOR SERVICE.
- 4.1.2. EXPOSED: EXPOSED TO VIEW IN ANY ROOM, HALLWAY, PASSAGEWAY, OR OUTSIDE.
- 4.1.3. APPROVAL: THE APPROVAL OF THE ARCHITECT IN WRITING OR BY SIGNED RUBBER STAMP APPLIED TO DRAWINGS, ILLUSTRATIONS, ETC.

5. INTENT OF DRAWINGS AND SPECIFICATIONS

5.1. THESE SPECIFICATIONS AND ATTENDANT DRAWINGS ARE INTENDED TO COVER A COMPLETE INSTALLATION OF SYSTEMS. THE OMISSION OF EXPRESSED REFERENCE TO ANY ITEM OF LABOR OR MATERIAL NECESSARY FOR THE PROPER EXECUTION OF THE WORK IN ACCORDANCE WITH PRESENT PRACTICES OF THE TRADE SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING SUCH ADDITIONAL LABOR AND MATERIALS.

6. DRAWINGS

6.1. THE ELECTRICAL DRAWINGS DO NOT ATTEMPT TO SHOW THE COMPLETE DETAILS OF BUILDING CONSTRUCTION WHICH AFFECT THE ELECTRICAL INSTALLATION. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL, CIVIL, STRUCTURAL AND MECHANICAL DRAWINGS FOR ADDITIONAL DETAILS WHICH AFFECT THE PROPER INSTALLATION OF THIS WORK.

6.2. BRING ANY DISCREPANCIES TO THE ATTENTION OF THE A/E FOR RESOLUTION.

6.3. THE CONTRACTOR IS CAUTIONED THAT DIAGRAMS SHOWING ELECTRICAL CONNECTIONS AND/OR CIRCUITING ARE DIAGRAMMATIC ONLY AND MUST NOT BE USED FOR OBTAINING LINEAL RUNS OF WIRE TO CONDUIT. WIRING DIAGRAMS DO NOT NECESSARILY SHOW THE EXACT PHYSICAL ARRANGEMENT OF THE EQUIPMENT.

7. MATERIAL AND EQUIPMENT

7.1. ALL MATERIAL AND EQUIPMENT SHALL BE NEW AND OF THE QUALITY USED FOR THE PURPOSE IN GOOD COMMERCIAL PRACTICE, AND SHALL BE STANDARD PRODUCT OF REPUTABLE MANUFACTURERS. EACH MAJOR COMPONENT OF EQUIPMENT SHALL HAVE THE MANUFACTURER'S NAME, CATALOG NUMBER, AND CAPACITY OR RATING ON A NAMEPLATE, SECURELY AFFIXED ON THE EQUIPMENT IN A CONSPICUOUS PLACE.

8. SUBSTITUTION AND APPROVAL OF MATERIAL

7.1. SUCH REQUESTS SHALL BE ACCOMPANIED BY THREE COPIES OF ALL NECESSARY ILLUSTRATIONS, CUTS, DRAWINGS AND DESCRIPTIONS OF MATERIAL PROPOSED FOR SUBSTITUTION AND SHALL FULLY DESCRIBE ALL POINTS IN WHICH IT DIFFERS FROM THE ARTICLES SPECIFIED. TWO COPIES WILL BE RETAINED BY THE ARCHITECT AND ONE COPY RETURNED TO THE CONTRACTOR WITH APPROVAL OR REVISIONS INDICATED THEREON.

8. DAMAGE TO OTHER WORK

8.1. THE ELECTRICAL CONTRACTOR WILL BE HELD RIGIDLY RESPONSIBLE FOR ALL DAMAGES TO THE WORK OF HIS OWN OR ANY OTHER TRADE RESULTING FROM THE EXECUTION OF HIS WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ADEQUATELY PROTECT HIS WORK AT ALL TIMES. ALL DAMAGES RESULTING FROM HIS OPERATIONS SHALL BE REPAIRED OR THE DAMAGED PORTIONS REPLACED BY THE PARTY ORIGINALLY PERFORMING THE WORK, (TO THE ENTIRE SATISFACTION OF THE ARCHITECT), AND ALL COST THEREOF SHALL BE BORNE BY THE CONTRACTOR RESPONSIBLE FOR THE DAMAGE.

9. COOPERATION WITH OTHER TRADES

9.1. THIS CONTRACTOR SHALL COMPLETELY COOPERATE WITH ALL OTHER TRADES IN THE MATTER OF PLANNING AND EXECUTING OF THE WORK. EVERY REASONABLE EFFORT SHALL BE MADE TO PREVENT CONFLICT AND INTERFERENCES AS TO SPACE REQUIREMENTS, DIMENSIONS, LOCATIONS, OPENINGS, SLEEVING OR OTHER MATTERS WHICH TEND TO DELAY OR OBSTRUCT THE WORK OF ANY TRADE.

10. NEGLIGENCE

10.1. SHOULD THE CONTRACTOR FAIL TO PROVIDE MATERIALS, TEMPLATES, ETC., OR OTHER NECESSARY INFORMATION CAUSING DELAY OR EXPENSE TO ANOTHER PARTY, HE SHALL PAY THE ACTUAL AMOUNT OF THE DAMAGES TO THE PARTY WHO SUSTAINED THE LOSS.

11. FIELD CHANGES

11.1. SHOULD ANY CHANGE IN DRAWINGS OR SPECIFICATIONS BE REQUIRED TO COMPLY WITH LOCAL REGULATIONS AND/OR FIELD CONDITIONS, THE CONTRACTOR SHALL REFER SAME TO ARCHITECT FOR APPROVAL BEFORE ANY WORK WHICH DEVIATES FROM THE ORIGINAL REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS IS STARTED. IN THE EVENT OF DISAGREEMENTS AS TO THE NECESSITY OF SUCH CHANGES, THE DECISION OF THE ARCHITECT SHALL BE FINAL.

12. CUTTING AND PATCHING

12.1. AS NECESSARY AND WITH APPROVAL TO PERMIT THE INSTALLATION OF CONDUIT OR ANY PART OF THE WORK UNDER THIS BRANCH. ANY COST CAUSED BY DEFECTIVE OR ILL-TIMED WORK SHALL BE BY THE PARTY RESPONSIBLE THEREFOR. PATCHING OF HOLES, OPENINGS, ETC. RESULTING FROM THE WORK OF THIS BRANCH SHALL BE FURNISHED BY THIS CONTRACTOR.

12.2. 1.1DEMOLITION, RENOVATION AND DISPOSITION OF EXISTING EQUIPMENT.

12.2.1. THIS CONTRACTOR SHALL NOTE THAT THE EXISTING BUILDING WILL REMAIN IN SERVICE DURING PORTIONS OF THE CONSTRUCTION PERIOD. AREAS OF THE BUILDING WILL BE VACATED AS REQUIRED TO FACILITATE CONSTRUCTION. THIS CONTRACTOR SHALL PROCEED WITH THE COMPLETION OF HIS WORK IN SUCH A MANNER AS TO CAUSE THE LEAST POSSIBLE INTERFERENCE WITH THE OWNER'S OPERATION. ALL WORK REQUIRED IN THE EXISTING BUILDING SHALL BE DONE IN A MANNER AND TIME ACCEPTABLE TO THE OWNER. OUTAGES AND OTHER WORK RENDERING EXISTING EQUIPMENT INOPERATIVE SHALL BE HELD TO A MINIMUM - PRIOR ARRANGEMENTS FOR EACH SHALL BE MADE WITH THE OWNER AND SHALL BE ACCEPTABLE AS TO TIME AND DURATION

12.2.2. ELECTRICAL EQUIPMENT IN CONFLICT WITH CONSTRUCTION SHALL BE REMOVED AND/OR RELOCATED AS INDICATED ON THE DRAWINGS, AS DIRECTED OR REQUIRED. THIS CONTRACTOR SHALL REMOVE ALL ELECTRICAL EQUIPMENT RELEASED FROM SERVICE AS A RESULT OF CONSTRUCTION, AND NO EQUIPMENT REMOVED SHALL BE REUSED, EXCEPT AS SPECIFICALLY DIRECTED ON THE DRAWINGS OR ELSEWHERE HEREIN, THE OWNER SHALL HAVE THE PRIVILEGE TO RETAIN OWNERSHIP OF ANY ELECTRICAL EQUIPMENT THAT HAS BEEN REMOVED, AND ALL SUCH EQUIPMENT SHALL BE RELOCATED TO A DESIGNATED TEMPORARY LOCATION FOR STORAGE UNTIL REMOVED BY THE OWNER. ALL OTHER EQUIPMENT, CONDUIT, CONDUCTORS, AND MISCELLANEOUS HARDWARE REMOVED SHALL BECOME THE PROPERTY OF THIS CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.

12.2.3. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE WORK OF OTHER TRADES AS MAY BE NECESSARY TO FACILITATE THE INSTALLATION OF ELECTRICAL WORK IN THE EXISTING BUILDING. SUCH WORK NECESSARY THAT IS NORMALLY DONE BY OTHER TRADES AND IS NOT COVERED AS A PART OF OTHER DIVISIONS OF THE WORK SHALL BE DONE UNDER THE DIRECTION AND AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR.

12.2.4. THIS WORK SHALL INCLUDE BUT IS NOT LIMITED TO, CUTTING, PATCHING, AND REFINISHING AND ALL NECESSARY AND REQUIRED TO LEAVE EXISTING BUILDING IN ACCEPTABLLE CONDITION .

13. COMPLETION DATES

13.1. THIS CONTRACTOR SHALL BE IN A POSITION TO MEET ALL COMPLETION DATES ESTABLISHED BY THE ARCHITECT AND SHALL FURNISH ALL LABOR OF ALL CLASSES REQUIRED TO MEET SUCH SCHEDULES AND COMPLETION DATES.

14. STANDARDS, CODES AND PERMITS

14.1. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH NATIONAL, STATE AND LOCAL ELECTRICAL CODES, LAWS, ORDINANCES AND REGULATIONS. COMPLY WITH ALL APPLICABLE OSHA REGULATIONS AND ALL REQUIREMENTS IMPOSED BY THE AUTHORITY HAVING JURISDICTION.

14.2. ALL MATERIALS SHALL HAVE A U.L. LABEL WHERE A U.L. STANDARD AND/OR TEST EXISTS.

14.3. PREPARE AND SUBMIT TO ALL AUTHORITIES HAVING JURISDICTION, FOR THEIR APPROVAL, ALL APPLICATIONS AND WORKING DRAWINGS REQUIRED BY THEM. SECURE AND PAY FOR ALL PERMITS AND LICENSES REQUIRED.

15. CLEAN-UP

15.1. THIS CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE FROM EXCESSIVE ACCUMULATION OF WASTE MATERIAL OR RUBBISH RESULTING FROM HIS WORK, INCLUDING TOOLS, SCAFFOLDING AND SURPLUS MATERIALS, AND HE SHALL LEAVE HIS WORK BROOM-CLEAN OR ITS EQUIVALENT. IN CASE OF DISPUTES, THE ARCHITECT MAY ORDER THE REMOVAL OF SUCH RUBBISH AND CHARGE THE COST TO THE RESPONSIBLE CONTRACTOR AS DETERMINED BY THE ARCHITECT. AT THE TIME OF FINAL CLEAN-UP ALL FIXTURES AND EQUIPMENT SHALL BE THOROUGHLY CLEANED AND LEFT IN PROPER CONDITION FOR THEIR INTENDED USE.

16. TESTS

16.1. GENERAL: THE CONTRACTOR SHALL PROVIDE ALL INSTRUMENTATION, LABOR AND CONDUCT ALL TESTS REQUIRED BY THE ARCHITECT AND ENGINEER. ALL TESTS SHALL BE MADE BEFORE ANY CIRCUIT OR ITEM OF EQUIPMENT IS PERMANENTLY ENERGIZED. CIRCUITS SHALL BE PHASED OUT AND LOADS SHALL BE DISTRIBUTED AS EVENLY AS POSSIBLE ON ALL PHASES. ALL PHASE CONDUCTORS SHALL BE ENTIRELY FREE FROM GROUNDS AND SHORT CIRCUITS. ALL INSTRUMENTATION AND PERSONNEL REQUIRED FOR TESTING SHALL BE PROVIDED BY THE CONTRACTOR AND ALL TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE ARCHITECT OR HIS AUTHORIZED REPRESENTATIVE.

16.2. SYSTEM TESTS:
- 16.1.1. THE FOLLOWING TESTS ARE REQUIRED PRIOR TO ENERGIZATION OF THE ELECTRICAL SYSTEM:
  - 16.1.1.1. SERVICE AND BUILDING GROUND TESTS.
  - 16.1.1.2. SECONDARY FEEDERS SHALL HAVE AN INSULATION RESISTANCE TEST UTILIZING A MEGGER APPLYING A TEST POTENTIAL OF 500 VOLTS DC MINIMUM.
  - 16.1.1.3. ESTABLISH SECONDARY PHASE TO GROUND VOLTAGES.
  - 16.1.1.4. SET TRANSFORMER TAPS TO DELIVER NOMINAL RATED VOLTAGE.
  - 16.1.1.5. ESTABLISH PROPER PHASE RELATIONSHIP AND MOTOR ROTATION.

16.2. THE FOLLOWING TESTS ARE REQUIRED UNDER NORMAL LOAD CONDITION:
- 16.2.1. RECORD SECONDARY PHASE TO PHASE AND PHASE TO GROUND VOLTAGES AND PHASE CURRENTS AT ALL MAJOR EQUIPMENT, APPARATUS, AND ON ALL SECONDARY FEEDERS. VOLTAGE READINGS SHALL BE TAKEN AT LINE SIDE TERMINALS OF DISTRIBUTION CENTERS AND PANELBOARDS.
- 16.2.2. CONFIRM PROPER PHASE RELATIONSHIP AND MOTOR ROTATION.
- 16.2.3. CONFIRM LOAD BALANCE AT DISTRIBUTION CENTERS AND PANELS. REBALANCE LOAD IF NECESSARY SUCH THAT THE MINIMUM UNBALANCE BETWEEN PHASES SHALL NOT EXCEED 7-1/2%.
- 16.2.4. RESET TRANSFORMER TAPS IF NECESSARY TO DELIVER NOMINAL RATED VOLTAGE. IDENTIFY FINAL TAP SETTINGS ON TRANSFORMERS NAMEPLATES.
- 16.2.5. CONFIRM OPERATION OF ALL ELECTRICALLY OPERATED APPARATUS, SUCH AS CIRCUIT BREAKERS, TRANSFER SWITCHES, ETC., BY EXERCISING SAME UNDER LOAD.
- 16.2.6. CONFIRM VOLTAGE DROP DOES NOT EXCEED NEC STANDARDS.

16.3. RECORD ALL SETTINGS AND CALIBRATIONS OF CIRCUIT BREAKERS, TRANSFER SWITCHES, TRANSFORMERS, METERS, TIMING DEVICES, ETC.

16.4. RECORDS: ALL TEST DATA OBTAINED BY THE PEC OR MANUFACTURER/SUPPLIER SHALL BE RECORDED AND FILED WITH THE MAINTENANCE MANUAL AS PART OF PERMANENT JOB RECORDS. TEST DATA SHALL INCLUDE IDENTIFICATION OF INSTRUMENTS EMPLOYED, (FIELD TEST ONLY) CONDITION OF TEST (TIME, DATE, WEATHER, ETC.), PARAMETERS OF TEST, PERSONNEL CONDUCTING TEST, AND ANY PERTINENT INFORMATION OR CONDITIONS NOTED DURING THE TEST.

17. SHOP DRAWINGS

17.4. SUBMIT TO ENGINEER FOR REVIEW, COPIES OF MANUFACTURER'S SHOP DRAWINGS AND/OR EQUIPMENT BROCHURE DEPICTING:
- 17.4.1. LIGHTING FIXTURES AND CONTROLS
- 17.4.2. PANELBOARDS
- 17.4.3. ENCLOSED CONTROLLERS, STARTERS AND DISCONNECTS
- 17.4.4. OVERCURRENT PROTECTION, BREAKERS AND FUSES
- 17.4.5. LIGHTING CONTROL PANEL
- 17.4.6. OTHER MATERIALS AS SELECTED BY THE ENGINEER.

17.5. SHOP DRAWINGS SHALL BEAR THE CONTRACTOR'S STAMP INDICATING APPROVAL.

17.6. ANY EQUIPMENT FABRICATION PRIOR TO SHOP DRAWING REVIEW SHALL BE AT THE CONTRACTOR'S RISK.

18. WORKMANSHIP

18.1. THE INSTALLATION OF ALL WORK SHALL BE MADE SO THAT ITS SEVERAL COMPONENT PARTS WILL FUNCTION AS A WORKABLE SYSTEM COMPLETE WITH ALL ACCESSORIES NECESSARY FOR ITS OPERATION, AND SHALL BE LEFT WITH ALL EQUIPMENT PROPERLY ADJUSTED AND IN WORKING ORDER. THE WORK SHALL BE EXECUTED IN CONFORMITY WITH THE BEST ACCEPTED STANDARD PRACTICE OF THE TRADE SO AS TO CONTRIBUTE TO EFFICIENCY AND APPEARANCE. IT SHALL ALSO BE EXECUTED SO THAT THE INSTALLATION WILL CONFORM AND ADJUST ITSELF TO THE BUILDING STRUCTURE, ITS EQUIPMENT AND ITS USAGE.

19. DRAWINGS OF OTHER TRADES

19.1. THE CONTRACTOR SHALL CONSULT THE DRAWINGS OF THE WORK FOR THE VARIOUS OTHER TRADES; FIELD LAYOUTS OF THE PARTIES PERFORMING THE WORK OF THE OTHER TRADES; THEIR SHOP DRAWINGS, AND HE SHALL BE GOVERNED ACCORDINGLY IN LAYING OUT HIS WORK.

19.2. SPECIFICALLY EXAMINE SHOP DRAWINGS TO CONFIRM VOLTAGE, CURRENT CHARACTERISTICS, AND OTHER WIRING REQUIREMENTS FOR UTILIZATION EQUIPMENT. BRING ANY DISCREPANCIES TO THE ATTENTION OF THE A/E.

20. FIELD MEASUREMENTS

20.1. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY FOR HIS WORK AND SHALL ASSUME THE FULL RESPONSIBILITY FOR THEIR ACCURACY.

21. STRUCTURAL INTERFERENCES

21.1. SHOULD ANY STRUCTURAL INTERFERENCES PREVENT THE INSTALLATION OF THE OUTLETS, RUNNING OF CONDUITS, ETC., AT POINTS SHOWN ON DRAWINGS, THE NECESSARY MINOR DEVIATIONS THEREFROM, AS DETERMINED BY THE ARCHITECT, MAY BE PERMITTED. MINOR CHANGES IN THE POSITION OF THE OUTLETS OR EQUIPMENT IF DECIDED UPON BEFORE ANY WORK HAS BEEN DONE BY THE CONTRACTOR SHALL BE MADE WITHOUT ADDITIONAL CHARGE.

22. EXAMINATION OF PLANS, SPECIFICATIONS AND SITE

22.1. BEFORE SUBMITTING A BID, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL FEATURES OF THE BUILDING AND SITE WHICH MAY AFFECT THE EXECUTION OF HIS WORK. NO EXTRA PAYMENT WILL BE ALLOWED FOR THE FAILURE TO OBTAIN THIS INFORMATION. IF IN THE OPINION OF THE CONTRACTOR THERE ARE OMISSIONS OR ERRORS IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CLARIFY THESE POINTS WITH THE ARCHITECT BEFORE SUBMITTING HIS BID. IN LIEU OF WRITTEN CLARIFICATION BY ADDENDUM, RESOLVE ALL CONFLICTS IN FAVOR OF THE GREATER QUANTITY OR BETTER QUALITY.

23. GUARANTEE

23.1. THE CONTRACTOR SHALL UNCONDITIONALLY GUARANTEE HIS WORK AND ALL COMPONENTS THEREOF, EXCLUDING LAMPS, FOR A PERIOD OF ONE YEAR FROM THE DATE OF HIS FINAL PAYMENT. HE SHALL REMEDY ANY DEFECTS IN WORKMANSHIP AND REPAIR OR REPLACE ANY FAULTY EQUIPMENT WHICH SHALL APPEAR WITHIN THE GUARANTEE PERIOD TO THE ENTIRE SATISFACTION OF THE ARCHITECT AT NO ADDITIONAL CHARGE.

24. ELECTRICAL SYSTEM

24.1. PROVIDE ELECTRICAL DISTRIBUTION SYSTEMS AS INDICATED ON THE DRAWINGS WITH ALL NECESSARY BRANCH CIRCUIT WIRING AND ASSOCIATED EQUIPMENT AS SPECIFIED HEREINAFTER OR ON INSTALLATION.

24.2. PROVIDE ALL CIRCUIT WIRING FOR COOLING AND VENTILATING EQUIPMENT INCLUDING THE FINAL ELECTRICAL CONNECTION TO ALL LINE VOLTAGE EQUIPMENT.

24.3. PROVIDE LIGHTING FIXTURES AND LAMPS AS DESCRIBED IN LIGHTING FIXTURE SCHEDULE.

24.4. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.

25. CONDUIT

25.1. PROVIDE A COMPLETE CONDUIT SYSTEM AS REQUIRED TO PROVIDE CIRCUITING AND SWITCH ARRANGEMENTS AS SHOWN ON THE PLANS.

25.2. CONDUIT SIZES SHALL BE AS REQUIRED BY CODE.

25.3. CONDUITS SHALL BE CONCEALED EXCEPT IN MECHANICAL OR STORAGE ROOMS. ANY EXCEPTIONS ARE NOTED ON THE DRAWINGS.

25.4. CONDUITS EXPOSED TO THE EXTERIOR SHALL BE RIGID HEAVY WALL GALVANIZED STEEL OR I.M.C. ALL CONDUIT IN CONCRETE OR UNDERGROUND SHALL BE RIGID STEEL, I.M.C., OR SCHEDULE 40 PVC CONTAINING A GREEN GROUND WIRE SIZED PER CODE.

25.5. FLEXIBLE METAL CONDUIT SHALL BE 1/2" MINIMUM NOMINAL TRADE SIZE. LENGTH SHALL NOT EXCEED 24" FOR CONNECTION TO MOTORIZED EQUIPMENT. GROUNDED LIQUID TIGHT WHERE EXPOSED TO WATER. ADD GREEN GROUND WIRE TO JUMP FLEXIBLE CONDUIT FOR ALL MOTORS. FLEXIBLE METAL CONDUIT MAY ONLY BE USED FOR FINAL CONNECTION TO MOTORS AND LIGHTING FIXTURES ABOVE SUSPENDED CEILINGS.

26. COUPLINGS, CONNECTORS AND FITTINGS

26.1. USE STANDARD STEEL ITEMS TO PROPERLY ATTACH CONDUITS, OUTLET BOXES, PULL BOXES, CABINETS, ETC., TO PROVIDE A COMPLETE RACEWAY SYSTEM. USE COMPRESSION OR SET SCREWS TYPE FITTINGS. ALL CONNECTORS SHALL HAVE INSULATED THROATS; INDENTATION TYPE, DIECAST, AND PUSH-ON TYPE FITTINGS ARE NOT ACCEPTABLE. BUSHING FOR RIGID H.W. CONDUIT SHALL BE REINFORCED INSULATED TYPE USED WITH DOUBLE LOCKNUTS.

27. OUTLET BOXES

27.1. PROVIDE OUTLET BOXES BY APPLETON, STEEL CITY, OR EQUAL AS REQUIRED TO ACCOMMODATE THE DEVICE INDICATED BY SYMBOL ON THE DRAWINGS, SIZED IN ACCORDANCE WITH CODE, WITH THE FOLLOWING MINIMUM REQUIREMENTS.

27.2. OUTLET BOXES SHALL BE DIE FORMED, GALVANIZED AND SECURELY FASTENED IN PLACE PLUMB AND LEVEL WITH ADJACENT CONSTRUCTION NOT DEPENDENT UPON CONDUIT FOR SUPPORT.

27.3. MULTI-GANG DIE FORMED BOXES SHALL BE PROVIDED FOR ALL DEVICES INDICATED ADJACENT TO ONE ANOTHER ON THE PLANS.

28. PULL BOXES AND JUNCTION BOXES

28.1. PROVIDE AS REQUIRED BY CODE, OF CODE GAUGE STEEL IN SIZES AS REQUIRED BY THE CODE. COVERS SHALL BE OF THE SAME MATERIAL FASTENED WITH BRASS MACHINE SCREWS. BOXES AND COVERS SHALL HAVE GALVANIZED FINISH AND THEY SHALL BE SECURELY FASTENED TO STRUCTURAL MEMBERS.

29. CONDUCTORS

29.1. CONDUCTORS SHALL BE NEW SOFT DRAWN COPPER, NO. 8 AND LARGER SHALL BE STRANDED; NO. 12 SHALL BE MINIMUM SIZE UNLESS OTHERWISE INDICATED, WITH 600 VOLT INSULATION, COLOR-CODED AS REQUIRED BY CODE. WIRE MUST BE DELIVERED TO JOB SITE IN ORIGINAL CARTONS.

29.2. WIRE AND CABLE FOR GENERAL INTERIOR USE SHALL HAVE 600 VOLT INSULATION. SIZES SMALLER THAN NO. 8 SHALL COMPLY WITH CODE FOR TYPE THHN/THWN. SIZE NO. 8 AND LARGER SHALL COMPLY WITH CODE FOR TYPE THW.

30. WIRE JOINTS, SPLICES AND CONNECTORS

30.1. BRANCH LIGHTING CIRCUITS NO. 10 AND SMALLER SHALL BE SCOTCHLOCK TYPE H SPRING COMPRESSION CONNECTOR AS MANUFACTURED BY MINNESOTA MINING AND MANUFACTURING CO. OR PIGGY PIGTAILS AS MANUFACTURED BY THOMAS AND BETTS MANUFACTURING CO.

30.2. FEEDER AND POWER WIRING: MECHANICAL TYPE LUGS AND CONNECTORS ON SIZES NO. 8 AND LARGER.

30.3. INSULATION: USE ONE HALF-LAPPED OKONITE RUBBER TAPE OR SCOTCH #33 AND COMPLY WITH ALL CODE REQUIREMENTS.

31. ELECTRICAL SERVICE

31.1. PROVIDE (2) NEW ELECTRICAL SERVICE AT 120/208V, 3 PHASE, 4 WIRE AS INDICATED ON CONSTRUCTION DOCUMENTS.

31.2. COORDINATE ALL ASPECTS OF THE SERVICE WITH THE ELECTRIC UTILITY AND COMPLY WITH ALL THEIR REQUIREMENTS.

31.3. COST OF SERVICE BY OWNER.

32. GROUNDING

32.1. COMPLETE RACEWAY SYSTEM SHALL BE GROUNDED SO GROUND WILL BE ELECTRICALLY CONTINUOUS FROM SOURCE TO ALL OUTLET BOXES AND EQUIPMENT.

32.2. PROVIDE BONDING CONDUCTORS AS REQUIRED TO SECURELY GROUND ALL ELECTRICAL EQUIPMENT ENCLOSURES, INCLUDING LIGHTING FIXTURES IF THEY HAVE METALLIC HOUSING AND ARE CORD CONNECTED.

32.3. FLEXIBLE METAL CONDUIT MUST BE JUMPERED WITH A GREEN GROUNDING CONDUCTOR.

32.4. GROUND SERVICE PER CODE.

33. BRANCH CIRCUIT WIRING

33.1. SEE PLANS FOR GENERAL ARRANGEMENT OF CIRCUITS, CONDUIT RUNS, AND RATINGS OF BRANCH CIRCUITS AND SPECIAL CIRCUITS.

33.2. PROVIDE EVERYTHING NECESSARY TO COMPLY WITH THE GENERAL SCHEME SHOWN, INCLUDING ALL TYPES OF CONTROL.

33.3. CIRCUIT NUMBERS AS SHOWN ON PLANS ARE FOR CONTRACTOR TO PLAN HIS WIRING AND FOR ESTIMATING PURPOSES. THESE NUMBERS ARE NOT NECESSARILY CONSECUTIVE NUMBERS OF THE PANELBOARD BREAKERS. BALANCED LOAD ON BUS IS TO BE THE DETERMINING FACTOR IN ARRANGEMENT OF CIRCUITS. BALANCE LOADING TO WITHIN 7 1/2%.

33.4. MINIMUM SIZE OF LIGHTING SYSTEM BRANCH CIRCUIT CONDUCTORS TO BE #12 AWG.

33.5. CONDUCTORS TERMINATING AT WIRED OUTLETS SHALL EXTEND AT LEAST EIGHT (8) INCHES BEYOND OUTLET BOX CONDUIT FITTING.

33.6. 120 VOLT CIRCUIT HOME RUNS GREATER THAN 100 FEET IN LENGTH SHALL HAVE #10 AWG MINIMUM SIZE BETWEEN PANEL AND FIRST RECEPTACLE OR FIXTURE OUTLET.

33.7. CIRCUIT BREAKERS:
- 33.7.1. PANEL-MOUNTED CIRCUIT BREAKERS SHALL BE SINGLE-POLE AND MULTI-POLE COMMON TRIP, QUICK-MAKE AND QUICK-BREAK OVER CENTER TOGGLE TYPE SWITCHING MECHANISM ARRANGED FOR MANUAL AND AUTOMATIC OPERATION WITH THERMAL MAGNETIC TRIP ELEMENT FREE FROM HANDLE WITH AMPERE RATING AND BREAKER POSITIONS, I.E., ON, OFF, AND TRIP CLEARLY VISIBLE. MINIMUM 10,000 A.I.C. OR AS OTHERWISE INDICATED ON DRAWINGS OR REQUIRED TO MEET THE MAXIMUM FAULT CURRENT WHERE INSTALLED IN THE ELECTRICAL SYSTEM. PLUG-ON BREAKERS SHALL BE ACCEPTABLE.
- 33.7.2. CIRCUIT BREAKERS SHALL BE U.L. LISTED AND SHALL CONFORM WITH THE LATEST APPLICABLE NEMA STANDARDS.

33.8. CIRCUIT DIRECTORIES: FURNISH AND INSTALL IN DIRECTORY FRAME ON INSIDE OF DOOR OF EACH PANEL CABINET A TYPEWRITTEN DIRECTORY IDENTIFYING EACH CIRCUIT.

34. DISCONNECT SWITCHES

34.1. PROVIDE HEAVY DUTY FUSIBLE TYPE DISCONNECT SWITCHES OF TYPES SCHEDULES AT LOCATIONS SHOWN ON THE DRAWINGS.

34.2. IN ADDITION, PROVIDE OTHER DISCONNECT SWITCHES AS NECESSARY AND REQUIRED WITH POLES AND VOLTAGE RATINGS AS REQUIRED FOR THE APPLICATION.

34.3. DISCONNECT SWITCHES SHALL BE HEAVY DUTY SWITCH OPERATED TYPE WITH COVER INTERLOCK AND ENCLOSED ARC CHAMBER, QUICK-MAKE AND QUICK-BREAK AND PROVISION FOR PADLOCKING IN EITHER THE OPEN OR CLOSED POSITION. ALL HEAVY DUTY, SAFETY SWITCHES 30-600A, SHALL BE PROVIDED WITH CLASS R REJECTION STYLE FUSE CLIPS. THE COMBINATION RATING OF THE HEAVY DUTY SWITCH AND R FUSE SHALL BE 200,000 SYMMETRICAL AMPS AND LABELED AS SUCH. APPROVED MANUFACTURERS: SQUARE D AND EATON/CUTLER-HAMMER.

34.4. SEE "MOTOR WIRING" OF THESE SPECIFICATIONS AS TO REQUIREMENTS PERTAINING TO MOTOR DISCONNECT SWITCHES AND FURNISH AND INSTALL SAME IN ACCORDANCE WITH REQUIREMENTS THEREIN.

35. LIGHTING FIXTURES, LAMPS AND BALLASTS

35.1. GENERAL:
- 35.1.1. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL LIGHT FIXTURES AS SHOWN ON THE DRAWINGS.
- 35.1.2. THE APPROXIMATE LOCATION OF LIGHTING FIXTURES IS SHOWN ON THE DRAWINGS. THE EXACT LOCATION SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.
- 35.1.3. THE FIXTURE TYPES THAT SHALL BE INSTALLED ARE DEPICTED ON THE DRAWINGS. THE ELECTRICAL CONTRACTOR SHALL FURTHER EXAMINE ALL CONSTRUCTION AND SUPPLY ALL REQUIRED ACCESSORIES TO HANG THE FIXTURES.
- 35.1.4. THE CONTRACTOR SHALL VERIFY CEILING TYPES AND PROVIDE COMPATIBLE FIXTURES. CONFIRM LOCATION WITH ARCHITECTURAL REFLECTED CEILING PLAN.
- 35.1.5. ALL FIXTURES IN LAY-IN CEILING SHALL RECEIVE THEIR FINAL CONNECTION VIA A 6'-0" LENGTH OF FLEXIBLE METALLIC CONDUIT TO PERMIT RELOCATION.

35.2. ALL OUTDOOR DRIVERS SHALL BE DESIGNED FOR OPERATION DOWN TO MINUS 20 DEG. F.

36. IDENTIFICATION

36.1. GENERAL:
- 36.1.1. MATERIALS AND EQUIPMENT INSTALLED UNDER THIS SECTION SHALL BE CLEARLY IDENTIFIED AS LISTED BELOW.
- 36.1.2. LOCATE IDENTIFICATION CONSPICUOUSLY.
- 36.1.3. TERMINOLOGY IS TO BE APPROVED BY ARCHITECT.
- 36.1.4. SEE PLANS FOR ANY ADDITIONAL ITEMS TO BE IDENTIFIED.
- 36.1.5. LOADS SUCH AS MOTORS SHALL BE DESCRIBED BY FUNCTION RATHER THAN BY THE SYSTEM OR BY ARBITRARY NUMBER AS SHOWN ON ELECTRICAL PLANS.
- 36.1.6. USE ABBREVIATIONS SPARINGLY

36.2. LAMINATED BAKELITE PLATES: ENGRAVED PLASTIC NAMEPLATE SHALL BE SECURELY FASTENED TO THE FOLLOWING EQUIPMENT, SIZE 1" X 4" WITH 3/8" HIGH LETTERS; UNLESS SPACE AVAILABLE DICTATES DIFFERENTLY.
- 36.2.1. EACH PANELBOARD, CONTACTOR, TIME SWITCH, STARTER OR DISCONNECT SWITCH. LOCATE ON INSIDE COVER OF PANELS.
- 37.2.1. EACH FEEDER AT ALL ACCESSIBLE LOCATIONS.
- 37.2.2. EACH END OF EMPTY CONDUIT RUNS TO INDICATE THE INTENDED USE OF THE CONDUIT AND THE LOCATION OF OPPOSITE END. USE ROOM NUMBERS THAT ARE PERMANENTLY ASSIGNED.

37.3. TYPEWRITTEN DIRECTORY: EACH PANELBOARD SHALL BE PROVIDED WITH A TYPEWRITTEN DIRECTORY ATTACHED TO THE INSIDE OF PANEL DOOR AND COVERED WITH CLEAR PLASTIC INDICATING LOAD SERVED AND ROOMS SERVED BY EACH PROTECTIVE DEVICE IN THE RESPECTIVE PANEL.

37.4. SWITCH STATION:
- 37.4.1. ALL SWITCHES SHALL BE ENGRAVED INDICATING CONTROLLED ITEM.
- 37.4.2. ALL REMOTE SWITCHES SHALL BE ENGRAVED INDICATING CONTROLLED ITEM.

37.5. CONDUCTOR IDENTIFICATION:
- 37.5.1. IDENTIFY EACH CONDUCTOR AT EACH WIRING DEVICE

PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER	MODEL	DESCRIPTION	WSFU			DFU
				HW	CW	TOTAL	VALUE
DF-1	ELKAY	LK4408BFGRY	OUTDOOR, WALL MOUNTED BI-LEVEL DRINKING FOUNTAIN WITH BOTTLE FILLING STATION, HEAVY DUTY, STAINLESS STEEL, VANDAL RESISTANT, PUSH BUTTON ACTIVATED, GRAY FINISH.	-	0.25	0.25	0.5
FD-1	ZURN	Z415S	SQUARE CAST IRON FLOOR DRAIN, COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH SEEPAGE SLOTS. POLISHED NICKLE BRONZE, HEEL-PROOF TOP, LIGHT DUTY STRAINER.	-	-	-	4.0
HB-1	WOODFORD	B65	HOSE BIBB IN CONCEALED, LOCKABLE BOX, NON-FREEZE, LOOSE KEY, AUTOMATIC DRAINING WITH ANTI-SIPHON VACUUM BREAKER, CHROME FINISH	-	4.0	4.0	-
L-1	KOHLER	K-2031	WALL HUNG, WHITE, VITREOUS CHINA, ADA LAVATORY WITH OVERFLOW AND BACKSPLASH. OVERALL DIMENSIONS: 20-3/4"X18-1/4"X12-7/8". FAUCET: CHICAGO FAUCETS 116.606.AB.1 BATTERY POWERED, SENSOR ACTIVATED, SINGLE HOLE WITH 0.5 GPM NON-AERATING LAMINAR FLOW, VANDAL PROOF. PROVIDE WITH KOHLER K-7129-A GRID DRAIN, P-TRAP, AND LOOSE KEY STOPS. PROVIDE "HANDY-SHIELD MAXX" INSULATION ON P-TRAP, WATER VALVES AND EXPOSED SUPPLY PIPING.	0.5	0.5	1.0	1.0
MB-1	MUSTEE	63M	FLOOR MOUNTED, MOLDED STONE MOP BASIN WITH OVERALL DIMENSIONS: 24"X24"X10". FAUCET: MUSTEE 63.300A HEAVY DUTY, CHROME PLATED BRASS WITH TOP REINFORCING BAR AND PAIL HOOK. PROVIDE WITH HOSE CONNECTION VACUUM BREAKER EQUAL TO WATTS 8FR. PROVIDE WITH MUSTEE 65.700 HOSE AND HOSE HOLDER AND MUSTEE 65.600 MOP HANGER.	2.0	2.0	3.0	3.0
UR-1	KOHLER	K-4991-ET	VITREOUS CHINA WALL-MOUNT ADA WASHOUT URINAL WITH 3/4" TOP SPUD. OVERALL DIMENSIONS: 26 7/8" X 18" X 14 1/8". FLUSHOMETER: SLOAN G2 8186 BATTERY POWERED, SENSOR ACTIVATED, 0.5 GPF. FIXTURE SUPPORT: JAY R. SMITH 0637.	-	2.0	2.0	2.0
WC-1	KOHLER	K-96057	VITREOUS CHINA, FLOOR MOUNT, SIPHON JET, ADA WATER CLOSET WITH 1-1/2" TOP SPUD. OVERALL DIMENSIONS: 21-7/8"X14-5/8"X16-5/8". FLUSHOMETER: SLOAN G2 8111 BATTERY POWERED, SENSOR ACTIVATED, 1.28 GPF.	-	6.5	6.5	6.0

NOTES: CONTRACTOR IS RESPONSIBLE FOR COORDINATING NECESSARY ELECTRICAL PROVISION WITH DIVISION 26 CONTRACTOR. DIVISION 22 CONTRACTOR IS RESPONSIBLE FOR ALL LOW VOLTAGE (24V) WIRING FOR ALL PLUMBING FIXTURES AND EQUIPMENT. PROVIDE ALL NECESSARY TRANSFORMERS TO ACCOMMODATE POWER SUPPLIES INDICATED ON ELECTRICAL DRAWINGS. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ANY POWER SUPPLY PROVISIONS BEYOND WHAT IS INDICATED ON THE ELECTRICAL DRAWINGS.

PUMPS

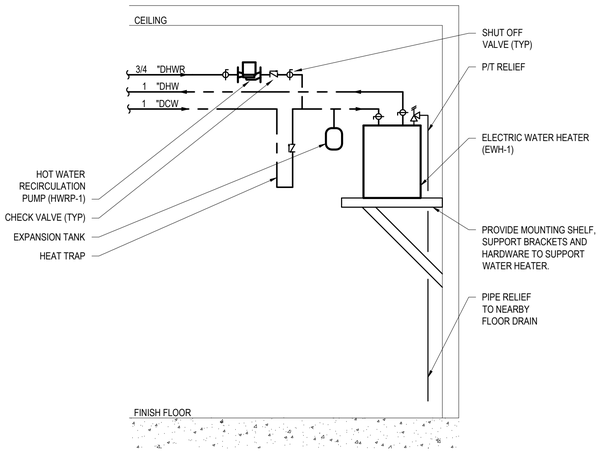
MARK	MANUFACT	MODEL	TYPE	SERVICE	GPM MIN.	HEAD FT WC	MOTOR (WATTS)	RPM	VOLTS	PHASE	REMARKS
HWRP -1	BELL & GOSSETT	NBF-12	INLINE	BRONZE	2	10	55	2,800	120	1	1,2

1. PROVIDE WITH STARTER & DISCONNECT.
2. PROVIDE WITH AQUASTAT & TIMER.

ELECTRIC WATER HEATER

MARK	MANUFACTURER	MODEL	GALLON CAPACITY	DATA			HEIGHT	DIAMETER	REMARKS
				KW	VOLT	PHASE			
EWH-1	A.O. SMITH	DSE-20A-9	20	9	240	1	31.75"	22"	1,2

1 INCLUDE TEMPERATURE CONTROL, PRESSURE RELIEF VALVE, DRAIN VALVE
2 SINGLE ELEMENT WATER HEATER
3 PROVIDE WITH EXPANSION TANK EQUAL TO B&G PTA-5



1 ELECTRIC WATER HEATER DETAIL
N.T.S.

ABBREVIATIONS

AD	AREA DRAIN
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
BOP	BOTTOM OF PIPE
CA	COMBUSTION AIR
CO	CLEANOUT
DN	DOWN
ET-*	EXPANSION TANK
EWC-*	ELECTRIC WATER COOLER
FCO	FLOOR CLEANOUT
FD-*	FLOOR DRAIN
GI-*	GREASE INTERCEPTOR
HB-*	HOSE BIBB
HWRP-*	HOT WATER RECIRCULATION PUMP
IWH-*	INSTANTANEOUS WATER HEATER
L-*	LAVATORY
MB-*	MOP BASIN
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OD-*	OVERFLOW DRAIN
RD-*	ROOF DRAIN
S-*	SINK
SH-*	SHOWER
SP-*	SUMP PUMP
SS-*	SERVICE SINK
ST-*	STORAGE TANK
STP-*	SOLAR THERMAL PANEL
UR-*	URINAL
VFD	VARIABLE FREQUENCY DRIVE
WC-*	WATER CLOSET
WCO	WALL CLEANOUT
WH-*	WATER HEATER
WWHP-*	WATER-TO-WATER HEAT PUMP
X-*	EXISTING
YCO	YARD CLEANOUT

PLUMBING PIPING LEGEND

- NEW PLUMING EQUIPMENT
- EXISTING PLUMBING COMPONENT
- DEMOLISHED PLUMBING COMPONENT
- PLUMBING EQUIPMENT SERVICE AREA
- P## — KEY NOTE
- DCW — NEW DOMESTIC COLD WATER
- X-DCW — EXISTING DOMESTIC COLD WATER
- DHW — NEW DOMESTIC HOT WATER
- X-DHW — EXISTING DOMESTIC HOT WATER
- DHWR — NEW DOMESTIC HOT WATER RETURN
- X-DHWR — EXISTING DOMESTIC HOT WATER RETURN
- DTW — NEW DOMESTIC TEMPERED WATER
- X-DTW — EXISTING DOMESTIC TEMPERED WATER
- FPCH — NEW FIRE PROTECTION - CHEMICAL PIPE
- FPD — NEW FIRE PROTECTION - DRY PIPE
- FPW — NEW FIRE PROTECTION - WET PIPE
- X-FP — EXISTING FIRE PROTECTION
- IRR — NEW IRRIGATION
- X-IRR — EXISTING IRRIGATION
- SS — NEW SANITARY SEWER
- X-SS — EXISTING SANITARY SEWER
- V — NEW SANITARY VENT
- X-V — EXISTING SANITARY VENT
- STOF — NEW STORM OVERFLOW
- X-STOF — EXISTING STORM OVERFLOW
- SD — NEW STORM SEWER
- X-SD — EXISTING STORM SEWER
- DEMOLISHED PIPING (ALL SYSTEMS)
- EQUIPMENT / WH / X-X / FLOOR / TAG — PLUMBING EQUIPMENT TAG ELECTRICALLY POWERED
- EQUIPMENT / WC / X-X / FLOOR / TAG — PLUMBING EQUIPMENT TAG NOT ELECTRICALLY POWERED

- BALL VALVE
- BUTTERFLY VALVE
- CHECK VALVE
- CIRCUIT SETTER
- 2-WAY ELECTRONIC CONTROL VALVE
- 3-WAY ELECTRONIC CONTROL VALVE
- GATE VALVE
- HOSEBIBB/DRAIN VALVE
- OS&Y VALVE
- PLUG VALVE
- PRESSURE & TEMPERATURE RELIEF VALVE
- PRESSURE REGULATING VALVE
- TRIPLE DUTY VALVE
- AIR VENT
- FLEX PIPE
- FLOOR DRAIN / ROOF DRAIN
- P-T PLUG
- PIPE BREAK
- PIPE CAPPED END
- PIPE CLEANOUT
- PIPE ELBOW/TEE DOWN
- PIPE ELBOW/TEE UP
- CONNECT TO EXISTING
- PUMP
- REDUCER
- STRAINER
- UNION
- FLOW GAUGE
- FS — FLOW SENSOR
- PRESSURE GAUGE
- PS — PRESSURE SENSOR
- TEMPERATURE GAUGE
- TS — TEMPERATURE SENSOR

GENERAL NOTES

1. DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL REQUIRED OFFSETS FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL INSTALL MATERIAL AND EQUIPMENT TO CONFORM TO THE STRUCTURE, EQUIPMENT CONNECTIONS AND SHALL MAINTAIN APPROPRIATE CLEARANCES.
2. ALL WORK SHALL COMPLY WITH APPLICABLE NATIONAL, STATE, LOCAL CODES, FEDERAL AND STATE REGULATIONS, AND ALL REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION.
3. CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
4. THE CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE FULL EXTENT OF WORK AND PROJECT CONDITIONS. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATIONS OF THE CONTRACT.

PLUMBING SHEET INDEX

NUMBER	SHEET NAME
P0.1	PLUMBING NOTES, LEGEND, AND ABBREVIATIONS
P1.0	PLUMBING UNDERGROUND PLAN
P2.0	PLUMBING FLOOR PLAN
P3.0	PLUMBING ISOMETRICS

WATER CALCULATION WORKSHEET

INFORMATION NEEDED FOR WATER SERVICE SIZING

1	Demand of building in water supply fixture units:	124.75	WSFU
1a	Demand of building in WSFU converted to Gallons per Minute.	75	GPM
2	Elevation difference from main or external pressure tank to building control valve:	8	FEET
3	Size of water meter (if applicable):	2	
4	Developed length from main or external pressure tank to building control valve	175	FEET
5	Low pressure at main in street or external pressure tank:	75	PSI

CALCULATE WATER SERVICE PRESSURE LOSS

6	Low pressure at main in street or external pressure tank. (value of # 5 above)		75	PSI
7	Determine pressure loss due to friction in 4 inch diameter water service. Water service piping is COPPER. Pressure loss per 100 ft = 0.3 x 1.75	0.525		
		Subtotal	74.5	PSI
8	Determine pressure loss or gain due to elevation (multiply the value of # 2 above by 0.434):		3.5	PSI
9	Available pressure after the bldg. control valve:		71.0	PSI

CALCULATE THE PRESSURE AVAILABLE FOR UNIFORM LOSS (VALUE OF "A")

A = [B - (C + D + E+F+G)] / H x 100

B	Available pressure after the bldg. control valve. (from # 9 above):		71.0	PSI
C	Pressure loss of water meter (when meter is required)		3	PSI
D	Pressure required at controlling fixture (Controlling fixture is: WATER CLOSET)		35	PSI
E	Difference in elevation between building control valve and the controlling fixture in feet	1 x 0.434	0.4	
F	Pressure loss due to water treatment devices and backflow preventors which serve the controlling fixture.		0	PSI
G	Pressure loss through tankless water heaters, combination boiler / hot water heaters, heat exchangers which serve the controlling fixture:		0	PSI
H	Developed length from building control valve to controlling fixture in feet	90 x 1.5	135	FT
A	**Pressure available for uniform loss (psi/100' of pipe).**		**24.1**	**PSI / 100'**

Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

Project Info. — 22005

Riverside Park Restrooms

New Construction

600 Labaree St
Watertown, WI

Sheet Title

PLUMBING NOTES, LEGEND, AND ABBREVIATIONS

Drawn by	Checked by
KJW	CMH

Revisions

No.	Date	Description
	01.23.2024	Bid & Permit Set

2023-06-30 Bid & Permit Set

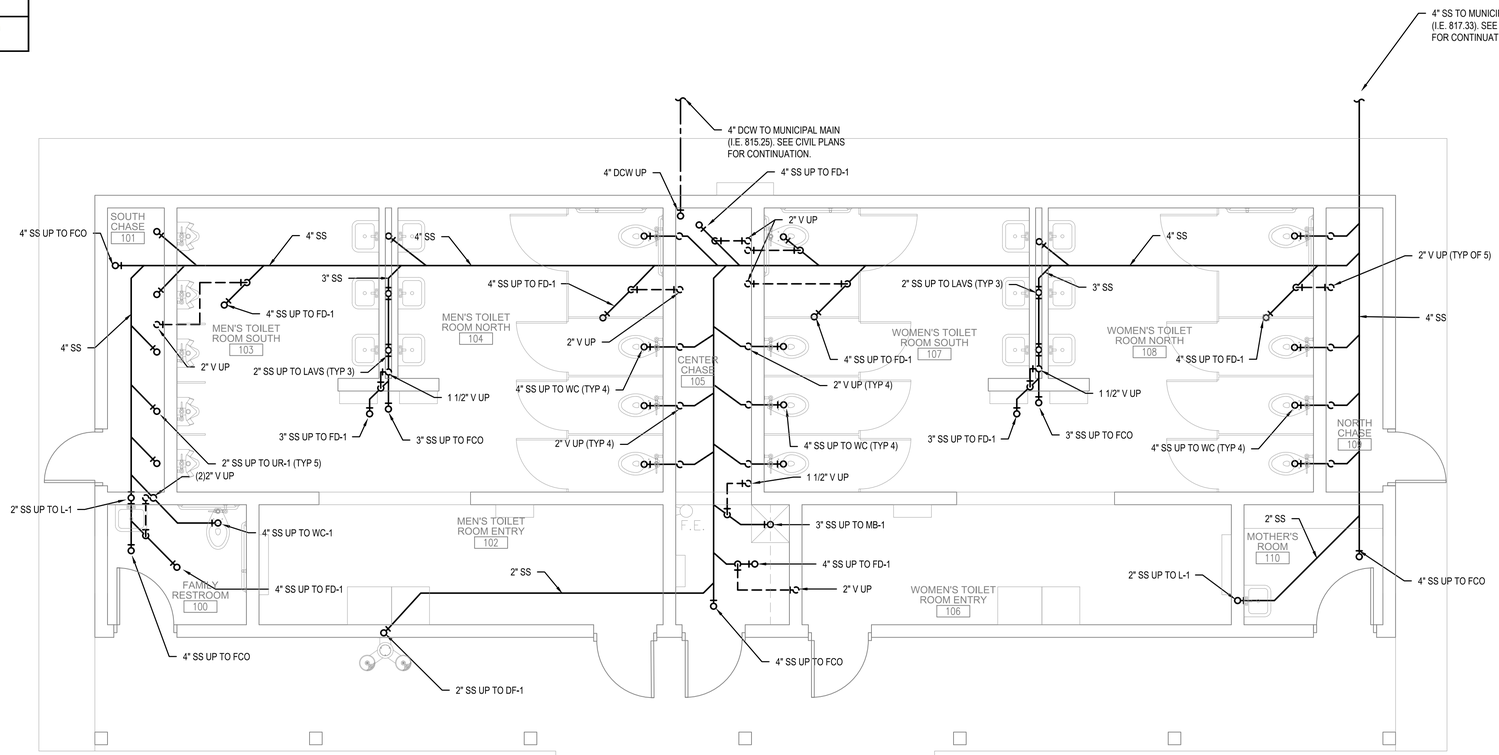
Sheet No.

P0.1

ibc engineering services, inc.

THIS BAR APPEARS 2" LONG ON FULL SIZE SHEETS.

SANITARY PIPING SLOPE	
PIPE SIZE	SLOPE
< 2"	1/4" / 12"
> 2"	1/8" / 12"



1 PLUMBING UNDERGROUND PLAN
SCALE: 1/4" = 1'-0"

Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

Project Info. — 22005

Riverside Park Restrooms

New Construction

600 Labaree St
Watertown, WI

Sheet Title

PLUMBING UNDERGROUND PLAN

Drawn by	Checked by
KJW	CMH

Revisions

No.	Date	Description
	01.23.2024	Bid & Permit Set

2023-06-30 Bid & Permit Set

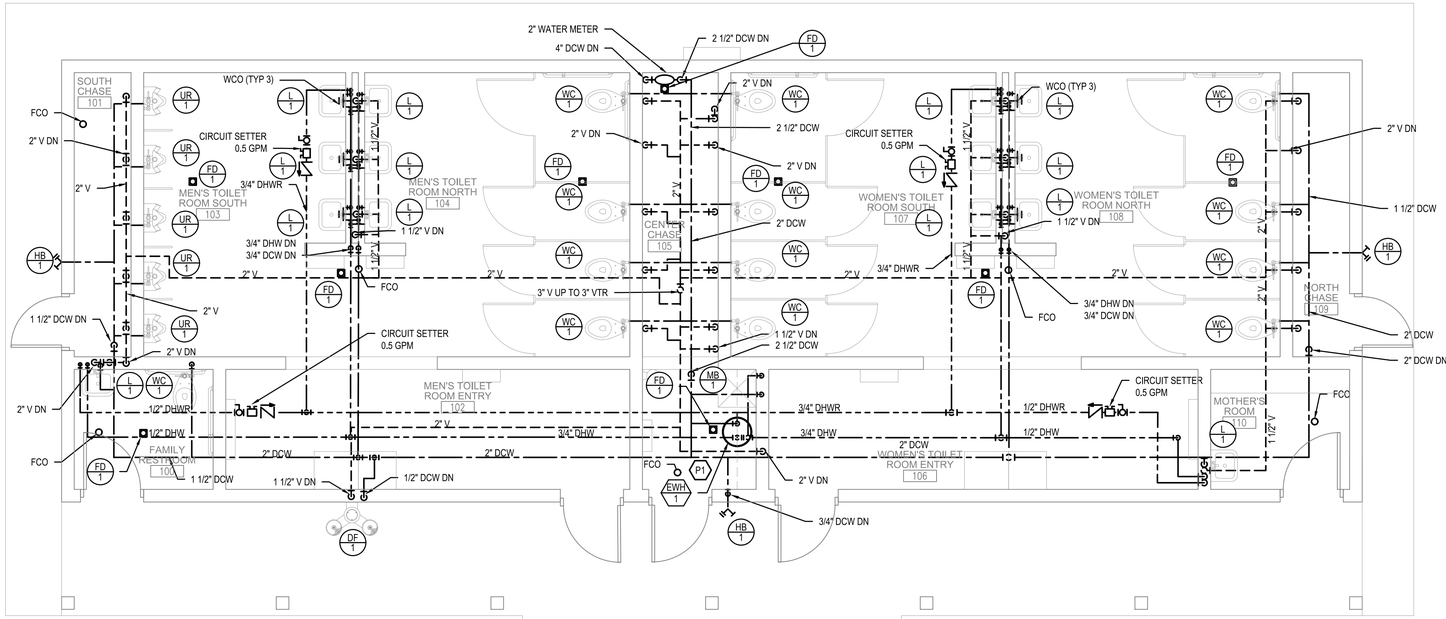
Sheet No.

P1.0

ibc engineering services, inc.

THIS BAR APPEARS 2" LONG ON FULL SIZE SHEETS.

FIXTURE CONNECTIONS				
MARK	DCW	DHW	SS	V
DF-1	1/2"	-	1 1/2"	1 1/2"
HB-1	3/4"	-	-	-
L-1	1/2"	1/2"	2"	1 1/2"
MB-1	1/2"	1/2"	3"	1 1/2"
UR-1	3/4"	-	2"	1 1/2"
WC-1	1 1/2"	-	4"	2"



1 PLUMBING FLOOR PLAN
SCALE: 1/4" = 1'-0"

KEY NOTES

1	PIPE 1" DCW, 1" DHW, 3/4" DHWR TO EWH-1. REFER TO DETAIL 1 ON SHEET P0.1

Architect
259 South Street, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

Project Info. — 22005

Riverside Park Restrooms

New Construction

600 Labaree St
Watertown, WI

Sheet Title

PLUMBING FLOOR PLAN

Drawn by	Checked by
KJW	CMH

Revisions

No.	Date	Description
	01.23.2024	Bid & Permit Set

2023-06-30 Bid & Permit Set

Sheet No.

P2.0

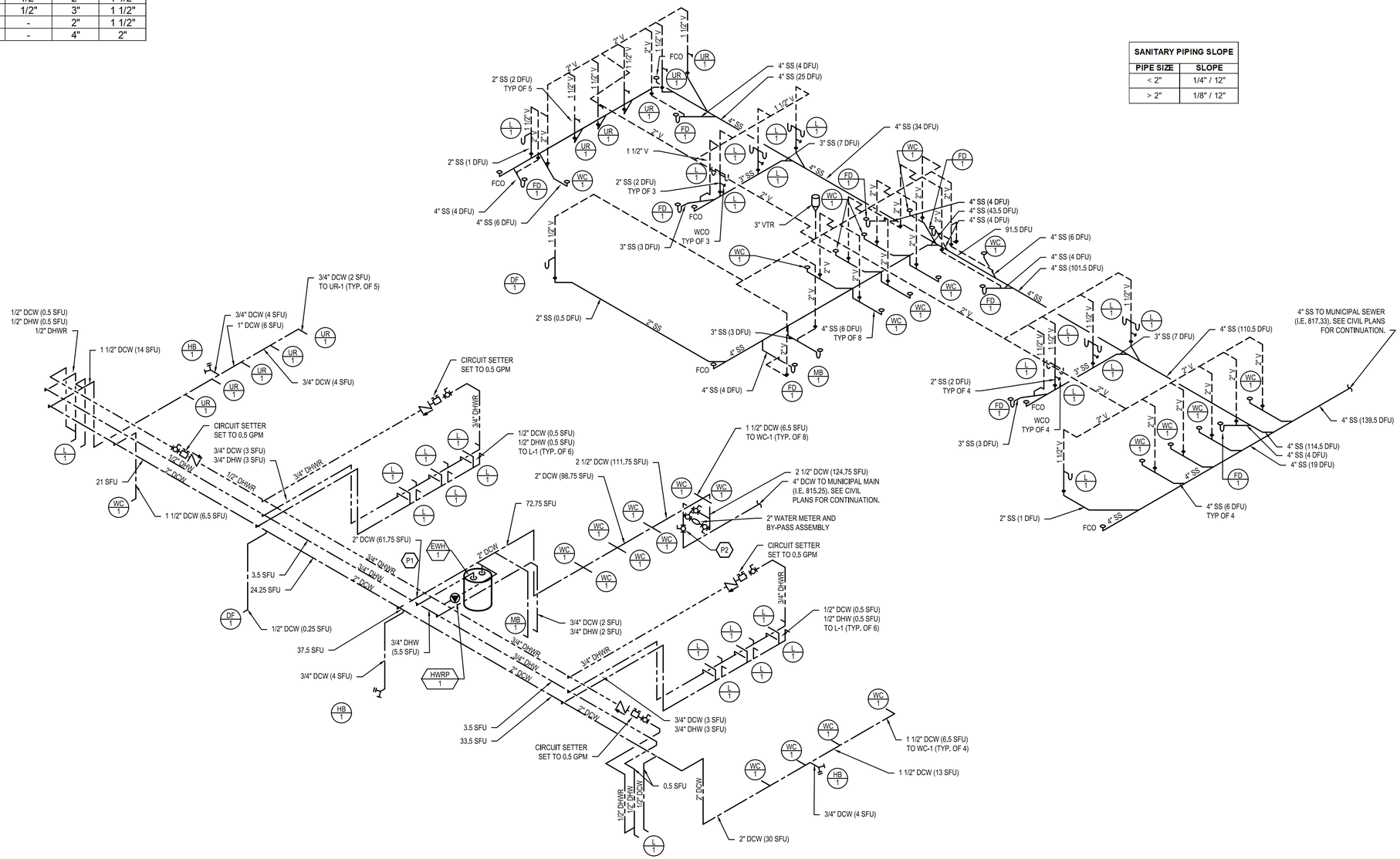
ibc engineering services, inc.

THIS BAR APPEARS 2" LONG ON FULL SIZE SHEETS.

FIXTURE CONNECTIONS				
MARK	DCW	DHW	SS	V
DF-1	1/2"	-	1 1/2"	1 1/2"
HB-1	3/4"	-	-	-
L-1	1/2"	1/2"	2"	1 1/2"
MB-1	1/2"	1/2"	3"	1 1/2"
UR-1	3/4"	-	2"	1 1/2"
WC-1	1 1/2"	-	4"	2"

KEY NOTES	
1	PIPE 1" DCW (9 SFU), 1" DHW (9 SFU), 3/4" DHWR TO EWH-1. REFER TO DETAIL 1 ON SHEET P0.1
2	PROVIDE BLOWOUT VALVE AT BUILDING WATER METER FOR ADEQUATE WINTERIZATION OF TO FACILITY.

SANITARY PIPING SLOPE	
PIPE SIZE	SLOPE
< 2"	1/4" / 12"
> 2"	1/8" / 12"



1 PLUMBING ISOMETRICS
N.T.S.

Architect
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p: 833-380-6180

Project Info. — 22005

Riverside Park Restrooms

New Construction

600 Labaree St
Watertown, WI

Sheet Title

PLUMBING ISOMETRICS

Drawn by	Checked by
KJW	CMH

Revisions

No.	Date	Description
	01.23.2024	Bid & Permit Set

2023-06-30 Bid & Permit Set

Sheet No.

P3.0

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THIS BAR APPEARS 2" LONG ON FULL SIZE SHEETS.

DESIGN CRITERIA

1. BUILDING CODE - INTERNATIONAL BUILDING CODE (IBC) 2015 / ASCE7-10
2. DEAD LOADS
   - ROOF 15 PSF
3. ROOF LIVE LOADS 20 PSF
4. FLOOR LIVE LOADS
   - PUBLIC AREAS 100 PSF
   - STORAGE 125 PSF
5. SNOW LOADS
   - GROUND SNOW, Pg 30 PSF
   - EXPOSURE FACTOR, Ce 1.0
   - TEMPERATURE FACTOR, Ct 1.2
   - SLOPED ROOF FACTOR, Cs 1.0
   - IMPORTANCE FACTOR, Is 1.0
   - FLAT ROOF SNOW, Pf 25.2 PSF
   - SLOPED ROOF SNOW, Ps 25.2 PSF
   - SLIDING & DRIFTING SNOW, IN ADDITION TO FLAT ROOF SNOW, SEE PLANS
   - UNBALANCED SNOW PER ASCE 7
6. WIND LOADS
   - ULTIMATE WIND SPEED, V 115 MPH
   - RISK CATEGORY II
   - EXPOSURE CATEGORY C
   - INTERNAL PRESSURE COEFFICIENT, Gcpi ±0.18
   - COMPONENTS & CLADDING NOT DESIGNED BY THE ENGINEER OF RECORD SHALL BE DESIGNED FOR THE WIND PRESSURES SHOWN ON THE COMPONENTS AND CLADDING DIAGRAM. WIND PRESSURES FOR LARGER TRIBUTARY AREAS MAY BE USED BASED ON DELEGATED DESIGN CALCULATIONS.
7. SEISMIC LOADS
   - RISK CATEGORY II
   - IMPORTANCE FACTOR, Ie 1.0
   - SITE CLASS D
   - MAPPED SPECTRAL RESPONSE...
     - Ss 0.083 g
     - S1 0.045 g
   - SPECTRAL RESPONSE COEFFICIENTS
     - SDS 0.089 g
     - SD1 0.072 g
   - SEISMIC DESIGN CATEGORY B
   - SEISMIC FORCE RESISTING SYSTEM ORDINARY REINFORCED MASONRY SHEAR WALLS
   - RESPONSE MODIFICATION FACTOR, R 2
   - RESPONSE COEFFICIENT, Cs 0.044
   - DESIGN BASE SHEAR Cs x (WEIGHT OF BUILDING)
   - ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE
8. SOIL DESIGN VALUES
   - REFERENCE GEOTECHNICAL REPORT
   - PEPARED BY TERRACON CONSULATANTS, INC DATED ***06/23/2002***
   - SOIL UNIT WEIGHT (γ) 120 PCF
   - ALLOWABLE SOIL BEARING PRESSURES
     - VERTICAL (NET) 3,000 PSF
9. COMPONENT DESIGN
   - WOOD ROOF TRUSSES
     - DEAD
       - TOP CHORD 10.0 PSF
       - BOTTOM CHORD 5.0 PSF
     - LIVE
       - BOTTOM CHORD 5.0 PSF
     - SNOW
       - TOP CHORD SEE NOTE 5
     - DEFLECTION CRITERIA
       - LL L/360
       - TL L/240

GENERAL REQUIREMENTS

1. THE CONTRACT DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INCLUDE THE METHOD OF CONSTRUCTION. CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO: BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, TEMPORARY STRUCTURES, AND PARTIALLY COMPLETED WORK. OBSERVATION VISITS TO THE SITE BY STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
2. GENERAL CONTRACTOR TO DISTRIBUTE ALL SHEETS IN THE SET TO SUBCONTRACTORS.
3. THE ARCHITECT AND/OR ENGINEER OF RECORD SHALL NOT HAVE CONTROL OVER OR BE IN CHARGE OF, AND SHALL NOT BE RESPONSIBLE IN ANY WAY FOR CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH ANY CONSTRUCTION ACTIVITIES, SINCE THESE ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY.
4. SUBMITTALS PREPARED BY SUBCONTRACTORS SHALL BE REVIEWED BY CONTRACTOR PRIOR TO SUBMITTING TO ARCHITECT/ENGINEER.
5. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS AT THE JOB SITE. ANY DISCREPANCIES BETWEEN THE CONDITIONS FOUND AND THOSE INDICATED IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
6. SEE DOCUMENTS FROM OTHER DISCIPLINES FOR FLOOR, WALL, AND ROOF OPENINGS, TRENCHES, PITS, PIPE SLEEVES, EQUIPMENT PADS, METAL PAN STAIRS, MISCELLANEOUS IRON, ETC.
7. DO NOT PLACE PIPES, DUCTS, CHASES, ETC. IN STRUCTURAL BEAM AND COLUMN MEMBERS. DO NOT CUT ANY STRUCTURAL MEMBER FOR PIPES, DUCTS, ETC., UNLESS NOTED OTHERWISE. NOTIFY STRUCTURAL ENGINEER WHEN DOCUMENTS BY OTHER DISCIPLINES SHOW OPENINGS, POCKETS, ETC. NOT INDICATED IN THE STRUCTURAL DRAWINGS BUT ARE LOCATED IN THE STRUCTURAL MEMBERS. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM STRUCTURAL ENGINEER FOR INSTALLATION OF SUCH PIPES, DUCTS, CHASES, ETC.
8. DETAILS LABELED "TYPICAL" ON THE STRUCTURAL DRAWINGS APPLY TO ALL SITUATIONS OCCURRING ON PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE LOCATIONS SPECIFICALLY INDICATED. WHERE A DETAIL IS NOT INDICATED, THE DETAIL SHALL BE THE SAME AS FOR OTHER SIMILAR CONDITIONS.
9. CONTRACTOR DESIGNED ELEMENTS SHALL BE DESIGNED BY LICENSED PROFESSIONAL ENGINEERS REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, DESIGN LOAD DATA, SUPPORT REACTIONS, AND CERTIFICATION THAT ELEMENTS WERE DESIGNED FOR LOADS SPECIFIED IN THE CONTRACT DOCUMENTS OR IN THE BUILDING CODE. ALL DOCUMENTS NOTED SHALL BE SEALED BY THE LICENSED ENGINEER. IF CRITERIA INDICATED ARE NOT SUFFICIENT, SUBMIT A WRITTEN REQUEST FOR ADDITIONAL INFORMATION TO THE ARCHITECT. THE FOLLOWING ELEMENTS AND THEIR CONNECTIONS SHALL BE CONTRACTOR DESIGNED:
   A. WOOD TRUSSES

CONCRETE

CODES:	
ACI 301	*SPECIFICATION FOR STRUCTURAL CONCRETE*
ACI MCP	*MANUAL OF CONCRETE PRACTICE*
ACI 318	*BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE*
ACI 318.1	*BUILDING CODE REQUIREMENTS FOR STRUCTURAL PLAIN CONCRETE*

MATERIALS (28 DAY COMPRESSIVE STRENGTH):	
FOOTINGS	f'c=3,000 PSI
INTERIOR SLAB ON GRADE	f'c=4,000 PSI
EXTERIOR SLAB ON GRADE (EXCLUDING SIDEWALKS)	f'c=5,000 PSI
FOUNDATION WALLS / GRADE BEAMS / PIERS	f'c=4,500 PSI
BEAMS / COLUMNS	f'c=4,000 PSI
CONCRETE ON METAL DECK	f'c=4,000 PSI
CONCRETE TOPPING	f'c=4,000 PSI

1. CONCRETE MIX DESIGN (INCLUDING AGGREGATE SIZE, WATER CEMENT RATIO, AIR ENTRAINMENT, ADMIXTURES, SLUMP AND HISTORY OF BREAK TESTS) SHALL BE SUBMITTED TO THE EOR FOR APPROVAL PRIOR TO THE COMMENCEMENT OF ANY WORK. CONCRETE SHALL BE NORMAL WEIGHT UNO.
2. MAXIMUM WATER/CEMENT RATIO PERMITTED SHALL BE 0.50 FOR INTERIOR SLABS ON GRADE, 0.45 FOR BELOW GRADE CONCRETE AND 0.40 FOR CONCRETE EXPOSED TO WATER AND DEICING CHEMICALS.
3. CONCRETE WHICH WILL BE EXPOSED TO THE WEATHER (INCLUDING FOUNDATION WALLS) SHALL HAVE AIR-ENTRAINING ADMIXTURE AS REQUIRED TO PROVIDE 6% ± 1% AIR ENTRAINMENT.
4. MAXIMUM AGGREGATE SIZE SHALL BE 3/4" FOR SLABS ON GRADE, WALLS, BEAMS & COLUMNS, 1" FOR FOOTINGS AND 3/8" FOR TOPPING SLABS. NORMAL WEIGHT AGGREGATE TO CONFORM TO ASTM C33, LIGHTWEIGHT AGGREGATE TO CONFORM TO ASTM C330.
5. CONCRETE SHALL BE EVALUATED ACCORDING TO METHOD 1 OR METHOD 2 AS DESCRIBED IN ACI 301. THE RESULTS OF THESE ANALYSES SHALL BE SUBMITTED TO THE EOR FOR APPROVAL PRIOR TO ANY WORK.
6. THE CONTRACTOR SHALL MAKE PROVISIONS TO ALLOW AN INDEPENDENT TESTING AGENCY TO CAST 4 TEST CYLINDERS FOR EACH 50 CUBIC YARDS OF CONCRETE PLACED, OR FOR ANY DAY'S OPERATION. THE TESTING AGENCY SHALL BE RESPONSIBLE FOR CASTING AND CURING SPECIMENS IN COMPLIANCE TO ASTM C31 AND CASTING TESTING SPECIMENS IN COMPLIANCE TO ASTM C39.
7. DRAWINGS SHOWING THE LOCATION OF CONSTRUCTION JOINTS, CONTROL JOINTS, AND PLACING SEQUENCE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO THE PREPARATION OF REINFORCING SHOP DRAWINGS. MAXIMUM POUR LENGTHS OF WALLS TO BE 40'-0" AND A MINIMUM OF 4'-0" AWAY FROM INTERSECTIONS AND CORNERS.
8. GROUT USED TO SET PLATES SHALL BE NON-SHRINK AND NON-METALLIC.
9. THE CONTRACTOR SHALL USE SMOOTH FORMS FOR EXPOSED CONCRETE SURFACES. BOARD FORMS MAY BE USED FOR UNEXPOSED CONCRETE SURFACES. EARTH FORMS ARE FORBIDDEN.
10. PROVIDE A MINIMUM OF 6" OF COMPACTED GRANULAR FILL UNDER ALL SLABS ON GRADE.
11. VAPOR BARRIER TO BE 10 MILS THICKNESS MINIMUM, LAP MINIMUM 6" AND TAPE ALL SEAMS. VERIFY ADDITIONAL REQUIREMENTS WITH ARCHITECT.
12. FLOOR FLATNESS AND LEVELNESS OF SLAB ON GRADE CONCRETE SHALL HAVE THE FOLLOWING TOLERANCES, AS RECOGNIZED BY THE MOST CURRENT VERSION OF ASTM E 1155 AND ACI 302.1. SEE SPECIFICATION FOR FURTHER REQUIREMENTS (F(F) SPECIFIED OVERALL VALUE (SOV) OF 50, MINIMUM LOCALIZED VALUE (MLV) OF 25 AND F(L) SPECIFIED OVERALL VALUE (SOV) OF 33, MINIMUM LOCALIZED VALVE (MLV) OF 17).

SPREAD FOUNDATIONS

1. ALL FOUNDATIONS SHALL BE SUPPORTED ON APPROVED EXISTING SUBGRADE OR APPROVED COMPACTED STRUCTURAL FILL HAVING A MINIMUM ALLOWABLE BEARING CAPACITY AS INDICATED IN THE SOIL DESIGN VALUES.
2. SUBSURFACE CONDITIONS SHALL BE IMPROVED TO MEET CAPACITY WHEN REQUIRED, AS RECOMMENDED IN GEOTECHNICAL REPORT.
3. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE VALIDITY OF THE SUBSURFACE CONDITIONS DESCRIBED IN THE DRAWINGS, SPECIFICATIONS, TEST BORINGS OR GEOTECHNICAL REPORTS. THIS DATA IS INCLUDED TO ASSIST THE CONTRACTOR DURING BIDDING AND SUBSEQUENT CONSTRUCTION, AND TO REPRESENT CONDITIONS ONLY AT SPECIFIC LOCATIONS AT THE PARTICULAR TIME THE OBSERVATIONS WERE MADE.
4. ALL EXTERIOR FOUNDATIONS SHALL BEAR ON APPROVED SUBGRADE AT MINIMUM DEPTH OF 4'-0 BELOW ADJACENT FINISH EXTERIOR GRADE.
5. FOOTING ELEVATIONS SHOWN ON THE DRAWINGS REPRESENT ESTIMATED DEPTHS AND ARE NOT TO BE CONSTRUED AS LIMITING THE AMOUNT OF EXCAVATION REQUIRED TO REACH SUITABLE BEARING MATERIAL.
6. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORTS IN ALL EXCAVATIONS AS REQUIRED TO PREVENT HORIZONTAL MOVEMENT OR VERTICAL SETTLEMENT OF SURROUNDING SOIL AND/OR PROPERTY WHICH WILL ENDANGER LIVES OR PROPERTY.
7. THE CONTRACTOR SHALL PROVIDE CONTROL OF SURFACE AND SUBSURFACE WATER PROMPTLY TO ENSURE THAT ALL FOUNDATION WORK IS PERFORMED IN A DRY CONDITION.
8. FOUNDATIONS SHALL NOT BE PLACED ON FROZEN SUBGRADE.
9. THE CONTRACTOR SHALL PROTECT IN-PLACE FOUNDATIONS AND SLABS-ON-GRADE FROM FROST PENETRATION UNTIL THE PROJECT IS COMPLETE.
10. FOUNDATION WALLS SHALL BE BRACED DURING BACKFILLING AND COMPACTION OPERATIONS. BRACING SHALL BE LEFT IN PLACE UNTIL PERMANENT STRUCTURAL SUPPORT SYSTEM IS INSTALLED AND APPROVED BY THE ENGINEER.
11. WHERE FOUNDATION WALLS HAVE FILL ON BOTH SIDES, BACKFILLING SHALL BE DONE SIMULTANEOUSLY ON BOTH SIDES OF THE WALL.

CONCRETE REINFORCING

CODES:	
ACI 315	*DETAIL AND DETAILING OF CONCRETE REINFORCEMENT*
ACI 318	*BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE*
MSP2	*CRSI MANUAL OF STANDARD PRACTICE*
AWS D1.4	*STRUCTURAL WELDING CODE - REINFORCING STEEL*
WRI	*WELDED WIRE FABRIC MANUAL OF STANDARD PRACTICE*

MATERIALS:		
REINFORCING BARS	ASTM A615 Gr 60	Fy=60 KSI
WELDED WIRE FABRIC	ASTM A185	
MACRO FIBER REINFORCING	ASTM C1116 Type III	

1. THE REINFORCEMENT FABRICATOR SHALL PROVIDE AND SCHEDULE ON SHOP DRAWINGS ALL REQUIRED REINFORCING STEEL AND NECESSARY ACCESSORIES TO HOLD REINFORCEMENT SECURELY IN PLACE AT THE CORRECT LOCATIONS.
2. THE REQUIRED CLEARANCE FOR REINFORCEMENT (UNO) SHALL BE 3" FOR CONCRETE PLACED DIRECTLY AGAINST EARTH, 2" (#6 & LARGER) AND 1 1/2" (#5 & SMALLER) FOR CONCRETE EXPOSED TO EARTH OR WEATHER, 1 1/2" (# 14 & LARGER) AND 3/4" (#11 & SMALLER) FOR CONCRETE NOT EXPOSED TO EARTH OR WEATHER.
3. THE CONTRACTOR SHALL REFER TO TYPICAL DETAILS SHOWN ON THE CONTRACT DRAWINGS FOR ADDITIONAL REINFORCING REQUIREMENTS.
4. WHERE REINFORCEMENT IS REQUIRED IN SECTIONS, REINFORCEMENT IS CONSIDERED TYPICAL WHERE EVER THE SECTION APPLIES.
5. WELDED WIRE FABRIC SHALL HAVE A MINIMUM OF 6" LAP AND BE TIED TOGETHER.
6. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF COMPLETION OF REINFORCEMENT INSTALLATION AND ALLOW AT LEAST 24 HOURS BEFORE SCHEDULED CONCRETE PLACEMENT FOR THE ARCHITECT TO INSPECT REINFORCEMENT.

PREFABRICATED WOOD TRUSSES

CODES:	
TRUSS PLATE INSTITUTE	*DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES*

1. THE WOOD TRUSS FABRICATOR SHALL SUBMIT CALCULATIONS TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO FABRICATION. THE CALCULATIONS MUST BE STAMPED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE LOCAL JURISDICTION.
2. THE WOOD TRUSSES SHALL BE ERECTED AND BRACED IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN "BRACING OF WOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS".
3. ALL WOOD TRUSSES SHALL BE SUPPORTED BY DIRECT END BEARING ON WALLS, BEAMS, COLUMNS, OR JOIST HANGERS.
4. DESIGN LOADS FOR TRUSSES SHALL BE AS NOTED ON DRAWINGS.
5. DESIGN TRUSS MEMBERS FOR CONCENTRATED LOADS OF SPRINKLER PIPING AND OTHER MECHANICAL LOADS.

REINFORCED MASONRY

CODES:	
ACI 530.1/ASCE 6/TMS 602	*SPECIFICATION FOR MASONRY STRUCTURES*
ACI 530/ASCE 5/TMS 402	*BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES*

MATERIALS:		
CONCRETE MASONRY BLOCK	ASTM C-90	2,000 PSI
TYPE M/S MORTAR	ASTM C270	
GROUT (28 DAY STRENGTH)	ASTM C476	2,000 PSI
REINFORCING BARS	ASTM A615 Gr 60	Fy=60 KSI

1. THE REQUIRED MINIMUM 28 DAY COMPRESSIVE STRENGTH OF THE COMBINATION OF CONCRETE BLOCK, GROUT AND MORTAR ON THE NET AREA OF THE CONSTRUCTION (f'm) SHALL BE A MINIMUM OF 2,000 PSI.
2. ALL CONCRETE BLOCK MASONRY UNITS SHALL BE NORMAL WEIGHT.
3. ALL CONCRETE BLOCK MASONRY UNITS SHALL BE LAID IN RUNNING BOND, UNO.
4. MASONRY BLOCK CELLS CONTAINING VERTICAL REINFORCING SHALL BE GROUTED SOLID. FILLING CELLS WITH MORTAR IS UNACCEPTABLE.
5. ALL BOND BEAMS TO BE GROUTED SOLID.
6. THE BASE OF EACH CELL IN WHICH REINFORCING BAR IS PLACED MUST HAVE A CLEAN OUT HOLE.
7. VERTICAL REINFORCING BARS SHALL BE LAPPED PER SCHEDULE. MECHANICAL SPLICES MAY BE USED IN LIEU OF LAP SPLICES.
8. PROVIDE CONTINUOUS REINFORCED BOND-BEAMS IN ALL REINFORCED MASONRY WALLS AT THE TOP, AND AS REQUIRED IN THE CONTRACT DRAWINGS. BOND-BEAMS AT THE TOP OF THE WALL SHALL BE CONTINUOUS AT MASONRY CONTROL JOINTS. ALL OTHER BOND-BEAMS SHALL NOT BE CONTINUOUS AT MASONRY CONTROL JOINTS. BOND-BEAM REINFORCING SHALL EXTEND INTO AND BE CONTINUOUS WITH ALL INTERSECTING BOND-BEAMS.
9. REINFORCED MASONRY WALLS SHALL HAVE #9 GAUGE (LADDER TYPE) HORIZONTAL REINFORCING AT SPACING AS NOTED ON CONTRACT DRAWINGS, BUT AT A MAXIMUM OF 16" O.C. VERTICALLY.
10. FILL CORES OF MASONRY UNDER ALL BEARING PLATES. THE MINIMUM WIDTH SHALL BE 3 TIMES THE BEARING PLATE LENGTH FOR THREE COURSES BELOW BEARING, UNO.
11. BRACE ALL MASONRY WALLS DURING CONSTRUCTION AS REQUIRED TO RESIST WIND AND OTHER TEMPORARY LOADS UNTIL FINAL STRUCTURAL MEMBERS ARE INSTALLED.
12. PROVIDE BAR POSITIONERS ON ALL REINFORCING TO HOLD AND MAINTAIN PROPER REBAR LOCATIONS AND COVER DURING GROUTING.

STRUCTURAL WOOD CONSTRUCTION

CODES:	
NFPA	*NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION*
NFPA	*DESIGN VALUES FOR WOOD CONSTRUCTION*
AITC	*TIMBER CONSTRUCTION MANUAL, PART II, DESIGN SPECIFICATIONS*
APA	*US PRODUCT STANDARD PS 1-83 FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD*
AFPA	*AMERICAN FOREST AND PAPER ASSOCIATION - MANUAL FOR ENGINEERED WOOD CONSTRUCTION*

MATERIALS:		SPECIES/GRADE
SAWN LUMBER WALL STUDS COLUMNS JOISTS & BEAMS	ASTM D1990-96A OR ASTM D245	 SPF STUD SPF No.1/No.2 SPF No.1/No.2
I-JOISTS	ASTM D5055	
LSL WALL STUDS HEADERS		 1.3E 1.3E
LVL WALL STUDS HEADERS	ASTM D5055	 2600 Fb, 2.0E
PSL BEAMS COLUMNS	ASTM D5055	 2.0E 1.8E
GLUE-LAMINATED TIMBER	AITC A190.1 & ASTM D3737	DF BALANCED 24F -1.8E
WOOD PANELS (COMPOSITE, ORIENTED STRANDBOARD & PLYWOOD)	DOC PS 1 OR PS 2	APA RATED
PRESERVATIVE TREATED WOOD	AWPA STD U1 & M4	S. PINE No.2
FIRE-RETARDANT TREATED LUMBER	IBC 2303.2 ASTM E84 CLASS A	S. PINE No.2
TONGUE & GROOVE DECKING	AMERICAN FOREST AND PAPER ASSOCIATION WOOD CONSTRUCTION DATA 2	Fb=1000 PSI E=1.8 KSI

1. ALL WOOD SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 15% PRIOR TO INSTALLATION. MOISTURE CONTENT SHALL BE DETERMINED PER ASTM D4442.
2. ALL WOOD SHALL BE PROTECTED FROM MOISTURE BEFORE INSTALLATION. ALL WOOD STORED AT THE BUILDING SITE SHALL BE ELEVATED 6" ABOVE THE GROUND AND COVERED WITH PLASTIC TARPAULINS.
3. ALL STRUCTURAL WOOD SHALL MEET OR EXCEED ALLOWABLE UNIT STRESSES AND/OR GRADE AS REQUIRED BY THE DRAWINGS.
4. JOISTS SHALL BE BRIDGED WITH 1" X 3" CROSS BRIDGING, OR EQUAL, AT INTERVALS NOT EXCEEDING 8' -0" O.C.
5. ALL WOOD PERMANENTLY EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND, MASONRY OR CONCRETE SHALL HAVE A PRESERVATIVE TREATMENT EQUAL TO 0.4 P.C.F RETENTION OF PRESSURE INJECTED PRESERVATIVE.
6. ALL JOISTS AND RAFTERS SHALL BE SUPPORTED BY DIRECT END BEARING ON WALLS, BEAMS OR JOIST HANGERS.
7. WOOD MEMBERS SHALL NOT BE IN DIRECT CONTACT WITH CONCRETE OR MASONRY WITHOUT BEING MADE OF NATURALLY DURABLE OR PRESERVATIVE TREATED WOOD UNLESS 1/2" AIR SPACE IS PROVIDED AROUND (TOP, SIDES, END) OF WOOD RAFTERS/JOISTS/GIRDERS; IMPERVIOUS MOISTURE BARRIER OR 1" ELEVATED BASE IS PROVIDED AT WOOD COLUMNS; IMPERVIOUS MOISTURE BARRIER IS PROVIDED AT SILL PLATES.
8. WOOD STRUCTURAL PANELS SHALL BE LAID WITH THE LONG PANEL DIRECTION PERPENDICULAR TO THE SUPPORTING MEMBERS, WITH ENDS STAGGERED.
9. WOOD STRUCTURAL PANELS SHALL BEAR THE APPROPRIATE GRADING STAMP BY THE REVIEWING AGENCY.
10. ALL NAILS GIVEN ON THE PLANS SHALL BE CONSIDERED "COMMON NAILS" UNLESS NOTED ON THE PLANS.
11. ALL FASTENERS FOR WOOD CONSTRUCTION CONNECTORS (JOIST HANGERS, ETC.) SHALL BE PROVIDED BY OR APPROVED BY THE CONNECTOR'S MANUFACTURER.
12. ALL FASTENERS AND WOOD CONSTRUCTION CONNECTORS IN CONTACT WITH PRESERVATIVE-TREATED OR FIRE TREATED WOOD SHALL BE STAINLESS STEEL.
13. ALL FASTENERS AND WOOD CONSTRUCTION CONNECTORS IN CONTACT WITH FIRE RETARDANT TREATED WOOD USED IN INTERIOR APPLICATIONS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. IN THE ABSENCE OF MANUFACTURER'S RECOMMENDATIONS FASTENERS AND WOOD CONSTRUCTION CONNECTORS SHALL BE STAINLESS STEEL OR HOT-DIPPED GALVANIZED STEEL.
14. ALL BOLTS AND LAG SCREWS SHALL CONFORM TO ASTM A307 OR HOT DIP GALV. WASHERS SHALL BE PROVIDED BETWEEN THE HEAD OR NUT AND THE WOOD SURFACE.
15. NO WOOD MEMBER SHALL BE CUT, NOTCHED, OR DRILLED WITHOUT THE SPECIFIC WRITTEN PERMISSION OF THE EOR.
16. THE GLUE-LAMINATED TIMBER FABRICATOR SHALL SUBMIT DRAWINGS AND CALCULATIONS, INCLUDING CONNECTIONS, TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO FABRICATION. THE CALCULATIONS MUST BE STAMPED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE LOCAL JURISDICTION.

STRUCTURAL STEEL

CODES:	
AISC	*SPECIFICATION FOR DESIGN, FABRICATION AND ERECTION OF STEEL FOR BUILDINGS*
AISC	*CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES*
AWS D1.1	*STRUCTURAL WELDING CODE - STEEL*
AISC	*STRUCTURAL STEEL DETAILING MANUAL*

MATERIALS:		
HOT ROLLED W & WT SHAPES	ASTM A992	Fy=50 KSI
ANGLES, CHANNELS & PLATES	ASTM A36	Fy=36 KSI
S + M SHAPES	ASTM A36	Fy=36 KSI
HP SHAPES	ASTM A572 Gr 50	Fy=50 KSI
STEEL PIPE	ASTM A53 Gr B	Fy=35 KSI
RECTANGULAR HSS	ASTM A500 Gr B	Fy=46 KSI
ROUND HSS	ASTM A500 Gr B	Fy=42 KSI
HIGH STRENGTH BOLTS	ASTM A325	
HEAVY HEX NUTS	ASTM A563	
HARDENED STEEL WASHERS	ASTM A436	
ANCHOR RODS	ASTM F1554 Gr 36	Fy=36 KSI
THREADED RODS	ASTM A36	Fy=36 KSI
HEADED STUD ANCHORS	ASTM A108	

1. PROVIDE 2 MIL THICKNESS RED OR GRAY OXIDE PRIMER ON ALL STEEL SURFACES (UNO).
2. ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED PER ASTM A123 AND FASTENERS HOT DIPPED GALVANIZED PER ASTM A153.
3. ANCHOR RODS SHALL BE PRESET WITH TEMPLATES.
4. LEVELING PLATES AND BEARING PLATES SHALL BE SET IN A FULL BED OF NON-SHRINK GROUT.
5. CONNECTIONS MAY BE BOLTED OR WELDED AT THE FABRICATORS OPTION. BOLTED CONNECTIONS SHALL BE A MINIMUM BOLT DIAMETER OF 3/4" (UNO), HIGH STRENGTH BOLTS IN SINGLE OR DOUBLE SHEAR (UNO) AND SIMPLE SHEAR CONNECTIONS SHALL BE CAPABLE OF END ROTATION PER AISC REQUIREMENTS FOR UNRESTRAINED MEMBERS.
6. THE MINIMUM FILLET WELD SIZE SHALL NOT BE LESS THAN 3/16" (UNO).
7. ALL WELDS SHALL USE WELD METAL CONFORMING TO E70XX AND CONFORMING TO AWS WELDING PROCEDURES AND STANDARDS.
8. ALL WELDS SHALL BE MADE BY AWS CERTIFIED WELDERS CERTIFIED IN THE POSITION IN WHICH THE WELD IS TO BE MADE.
9. THE ERECTION OF ANY STRUCTURAL STEEL MEMBERS SHALL NOT COMMENCE UNTIL ALL SUPPORTING CONCRETE/MASONRY ELEMENTS HAVE ATTAINED AT LEAST 75% OF THEIR INTENDED MINIMUM COMPRESSIVE STRENGTH.
10. THE CONTRACTOR SHALL PROVIDE TEMPORARY ERECTION BRACING AND SUPPORTS AS REQUIRED FOR THE SAFE ERECTION OF ALL STEEL. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL PERMANENT BRACING HAS BEEN INSTALLED AND FLOOR SLAB CONCRETE HAS ATTAINED 75% OF ITS REQUIRED STRENGTH.
11. STRUCTURAL STEEL SHALL BE TRUE AND PLUMB BEFORE FINAL BOLTING OR WELDING OF CONNECTIONS.
12. THE CONTRACTOR SHALL NOT MODIFY OR CUT ANY STRUCTURAL STEEL WITHOUT WRITTEN APPROVAL FROM THE EOR.
13. THE CONTRACTOR SHALL FIELD TOUCH UP ALL ABRASIONS, BURNS, AND SIMILAR DEFECTS IN PAINT OF STRUCTURAL STEEL.
14. PROVIDE 1/4" CLOSURE/END PLATES FOR ALL OPEN ENDS OF HSS & PIPE MEMBERS.

POST- INSTALLED ANCHORS

1. THE DIAMETER, EMBEDMENT LENGTH AND TYPE OF ADHESIVE ANCHORS, EXPANSION ANCHORS, AND SCREW ANCHORS SHALL BE AS SPECIFIED ON THE DRAWINGS.
2. THE SUBSTITUTION OF OTHER MANUFACTURER'S SIMILAR PRODUCTS IS ALLOWED, PROVIDED THAT THE SIZE IS EQUAL TO, AND CAPACITY IN SHEAR AND UPLIFT ARE EQUAL TO OR GREATER THAN WHAT IS SPECIFIED ON THE DRAWINGS. THE COST OF REDESIGN OF SUCH SUBSTITUTIONS SHALL BE BORE BY THE CONTRACTOR.
3. INSTALLATION OF ANCHORS SHALL STRICTLY FOLLOW ALL MANUFACTURER'S WRITTEN INSTRUCTIONS AND SPECIFICATIONS. ALL DRILL HOLE PREPARATIONS SHALL BE FOLLOWED.
4. NO LOAD SHALL BE APPLIED TO ADHESIVE ANCHORS PRIOR TO THE FULL CURE TIME AS SPECIFIED BY THE MANUFACTURER.
5. TESTING OF 10% OF ALL INSTALLED ANCHORS IS REQUIRED. TESTED ANCHORS SHALL MEET THE MANUFACTURERS PROOF LOAD REQUIREMENTS AND/OR INSTALLATION TORQUE REQUIREMENTS. MALFUNCTIONING FASTENERS SHALL BE REPLACED.

STRUCTURAL SHEET INDEX

Sheet Number	Sheet Name
S0.1	GENERAL NOTES
S0.2	SCHEDULES
S1.0	FOUNDATION PLAN
S1.1	ROOF FRAMING PLAN
S1.2	HIGH ROOF FRAMING PLAN
S3.0	CONCRETE SECTIONS & DETAILS
S3.1	CONCRETE SECTIONS & DETAILS
S4.0	MASONRY SECTIONS & DETAILS
S6.0	WOOD SECTIONS & DETAILS
S6.1	WOOD SECTION & DETAILS

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12308 Corporate Pkwy, Suite 450
Mequon, WI 53092 | 262.236.9372
C4E Project #: 21325

THRIVE ARCHITECTS
Architect
259 South Stree, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

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RIVERSIDE PARK RESTROOMS

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GENERAL NOTES

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S0.1

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SHEARWALL SCHEDULE

MARK	BLOCKED/ UNBLOCKED	EXTERIOR SHEATHING		INTERIOR SHEATHING		SILL PLATE ANCHORS
		TYPE	FASTENING	TYPE	FASTENING	
SW1	BLOCKED	APA RATED 7/16"	8d (1 3/8" PEN MIN) @ 6/12	SEE ARCH	-	SIMPSON 1/4" Ø SDS HD SCREW @ 12" OC (3" PEN MIN) @ WOOD
SW2	BLOCKED	APA RATED 7/16"	8d (1 3/8" PEN MIN) @ 4/12	SEE ARCH	-	SIMPSON 1/4" Ø SDS HD SCREW @ 6" OC (3" PEN MIN) @ WOOD

NOTES:
1. SEE TYPICAL SHEARWALL DETAIL.
2. LETTER AFTER SHEARWALL DESIGNATION DENOTES ANCHORAGE TYPE, SEE SHEARWALL ANCHORAGE SCHEDULE.

SHEARWALL ANCHORAGE

LABEL	STRAP	HOLDOWN	THREADED ROD Ø	ENDPOST
A	-	DTT2Z	1/2"	(1) 2x

NOTE:
1. SEE TYPICAL HOLDOWN ANCHORAGE DETAIL FOR THREADED ROD EMBEDMENT LENGTH AND ANCHORAGE REINFORCING.
2. HOLDOWNS ONLY REQUIRED AT CONCRETE, USE STRAPS ELSEWHERE. SEE TYPICAL SHEARWALL DETAIL.
3. AT STRAPS, PROVIDE 1/2 OF SPECIFIED NAILS IN EACH END LENGTH. BETWEEN END LENGTHS, PROVIDE NAILS @ 6" ON CENTER.
4. IF SHEARWALL ENDS ARE UNALIGNED, CONTINUE END POST TO FOUNDATION AND PROVIDE HOLDOWN. IF SHEARWALL IS SUPPORTED BY BEAM, PROVIDE STRAPS AND WRAP AROUND BEAM.

CONCRETE SLAB ON GRADE SCHEDULE

MARK	SYSTEM DEPTH	CONCRETE SLAB			COMPACTED GRAVEL THICKNESS	REMARKS
		TYPE	THICKNESS	SLAB REINFORCING		
SOG 5	11"	NWC	5"	FORTA FERRO FIBER REINFORCING (3 LB/CY)	6"	SEE TYPICAL SLAB JOINT DETAIL

WOOD DECK/SHEATHING SCHEDULE

MARK	SYSTEM DEPTH	STRUCTURAL LAYER		TOPPING/OVERLAYMENT		REMARKS
		TYPE	THICKNESS	TYPE	THICKNESS	
WD062	5/8"	PLYWOOD/OSB WOOD SHEATHING	5/8"	-		PROVIDE SIMPSON PSC CLIPS AT PANEL EDGES

PIER SCHEDULE

MARK	DIMENSIONS			REINFORCING		REMARKS
	DIAMETER	WIDTH	DEPTH	VERTICAL	TIES	
P1		1'-0"	1'-0"	(4)-#6	#3 @1'-0" OC	

LINTEL SCHEDULE

MARK	LINTEL	JAMB REINF	LINTEL TYPE	REMARKS
L1	8" BOND BEAM W/ (2)-#5 CONT	(1) #5	A	
L2	16" BOND BEAM W/ (2)-#5 CON	(1) #5	A	

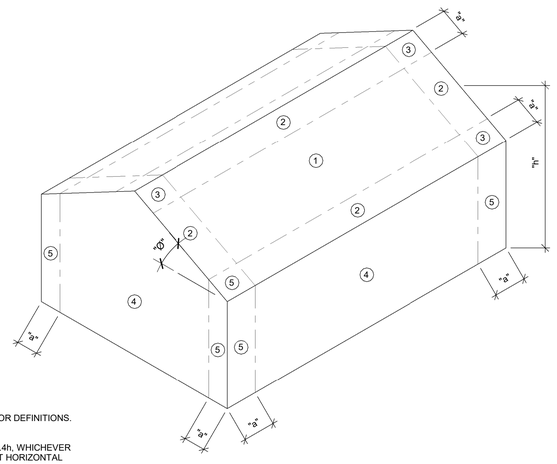
WOOD COLUMN SCHEDULE

MARK	SIZE	GRADE	TOP CONNECTION	BOTTOM CONNECTION	REMARKS
WC1	6X6 TIMBER	SPF No.1/No.2	CCQ	ABU	GALVANIZE CONNECTIONS WHEN EXPOSED TO WEATHER

WOOD HEADER SCHEDULE

MARK	SIZE	GRADE	JAMB STUDS	KING STUDS	REMARKS
H1	(3) 2x8	SPF	(1) 2x	(1) 2x	

ULTIMATE ROOF SURFACE PRESSURE (PSF)			
AREA (SF)	10.0	50.0	100.0
NEGATIVE ZONE 1	-27.0	-25.3	-24.5
NEGATIVE ZONE 2	-47.0	-38.3	-34.5
NEGATIVE ZONE 3	-69.5	-59.0	-54.5
POSITIVE ZONE 1	17.0	16.0	16.0
POSITIVE ZONES 2 & 3	-	-	-
OVERHANG ZONE 1 & 2	-55.0	-55.0	-55.0
OVERHANG ZONE 3	-92.5	-71.5	-62.5
ULTIMATE PARAPET SURFACE PRESSURE (PSF)			
AREA (SF)	10.0	50.0	100.0
CASE A: INTERIOR ZONE	0.0	0.0	0.0
CASE A: CORNER ZONE	0.0	0.0	0.0
CASE B: INTERIOR ZONE	0.0	0.0	0.0
CASE B: CORNER ZONE	0.0	0.0	0.0
ULTIMATE WALL SURFACE PRESSURE (PSF)			
AREA (SF)	10.0	100.0	200.0
NEGATIVE ZONE 4	-32.0	-27.6	-26.3
NEGATIVE ZONE 5	-39.5	-30.7	-28.0
POSITIVE ZONE 4 & 5	29.5	25.1	23.8



NOTE:
1. REFER TO "WIND LOADS AT COMPONENTS AND CLADDING" FOR DEFINITIONS.
(1) THROUGH (5) INDICATES WIND LOAD ZONES.
2. NOTATION:
"a" 10 PERCENT OF LEAST HORIZONTAL DIMENSION OR 0.4h, WHICHEVER IS SMALLER, BUT NOT LESS THAN EITHER 4" OF LEAST HORIZONTAL DIMENSION OR 3 FT.
"h" MEAN ROOF HEIGHT, IN FEET, EXCEPT THAT EAVE HEIGHT SHALL BE USED FOR Ø ≤ 10°
"Ø" ANGLE OF PLANE OF ROOF FROM HORIZONTAL, IN DEGREES.

1 / S0.2 COMPONENTS & CLADDING DIAGRAM

SCALE: 1" = 1'-0"

THRIVE ARCHITECTS

Architect
259 South Stree, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

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SCHEDULES

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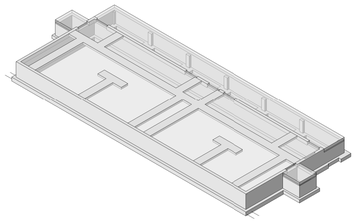
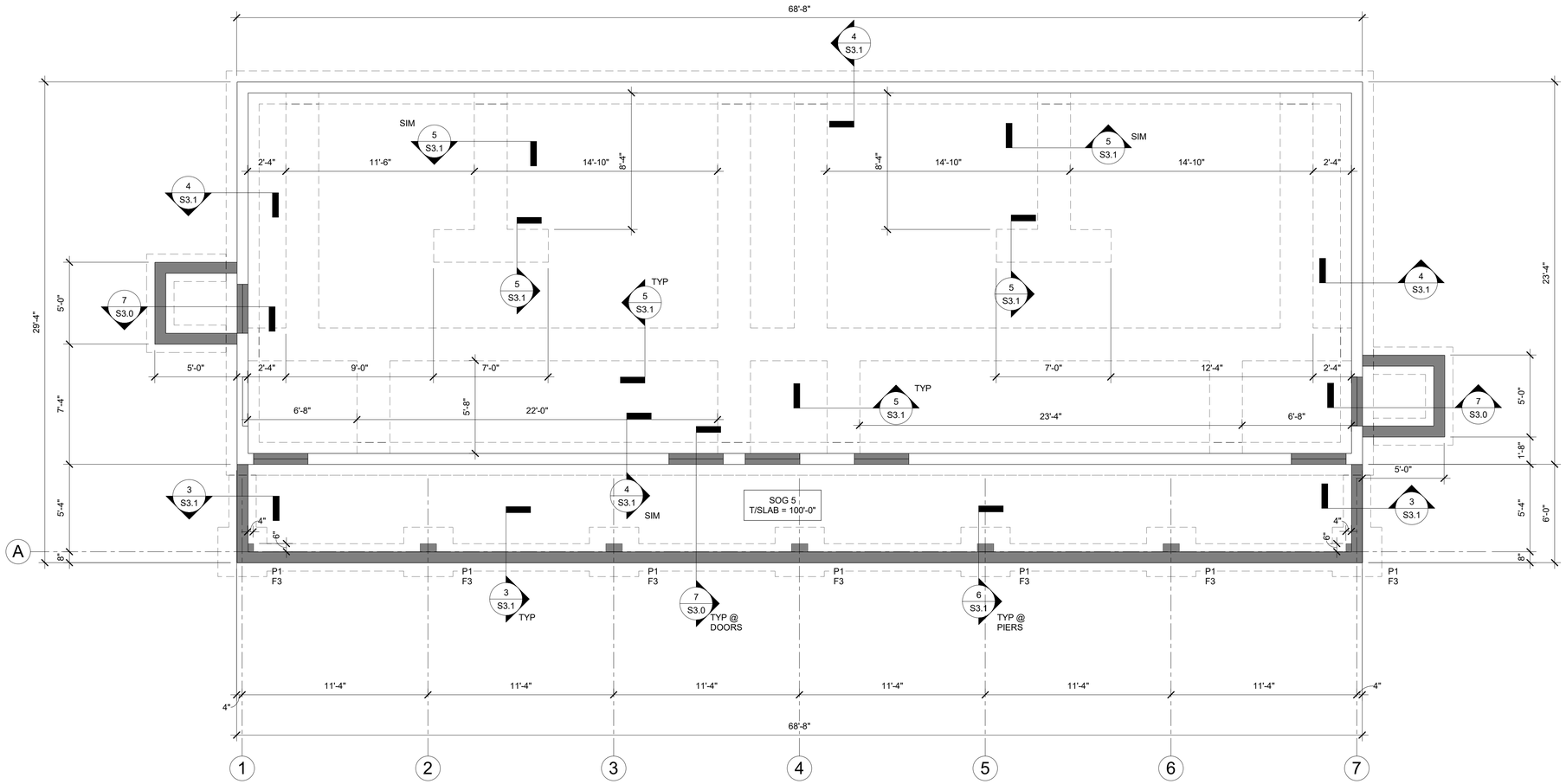


FOUNDATION PLAN NOTES:

1. SEE SHEET S0.1 FOR GENERAL NOTES AND S0.2 FOR SCHEDULES.
2. SEE SHEET S3.0.FOR FOUNDATION WALL CONSTRUCTION JOINTS AND TYPICAL REINFORCING DETAILS.
3. TOP OF EXTERIOR FOOTING ELEVATION = 96'-0" UNO.
4. TOP OF INTERIOR FOOTING ELEVATION = 100'-0" UNO.
5. TOP OF PIER ELEVATION = 99'-4" UNO.
6. TOP OF FOUNDATION WALL ELEVATION = 100'-0" UNO.
7. SEE MECHANICAL DRAWINGS FOR HOUSEKEEPING PADS REQUIRED FOR MECHANICAL EQUIPMENT.
8. SEE ARCHITECTURAL DRAWINGS FOR DOOR OPENING SIZES AND LOCATIONS IN WALLS.



1 / S1.0 FOUNDATION PLAN

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

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Architect
259 South Stree, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

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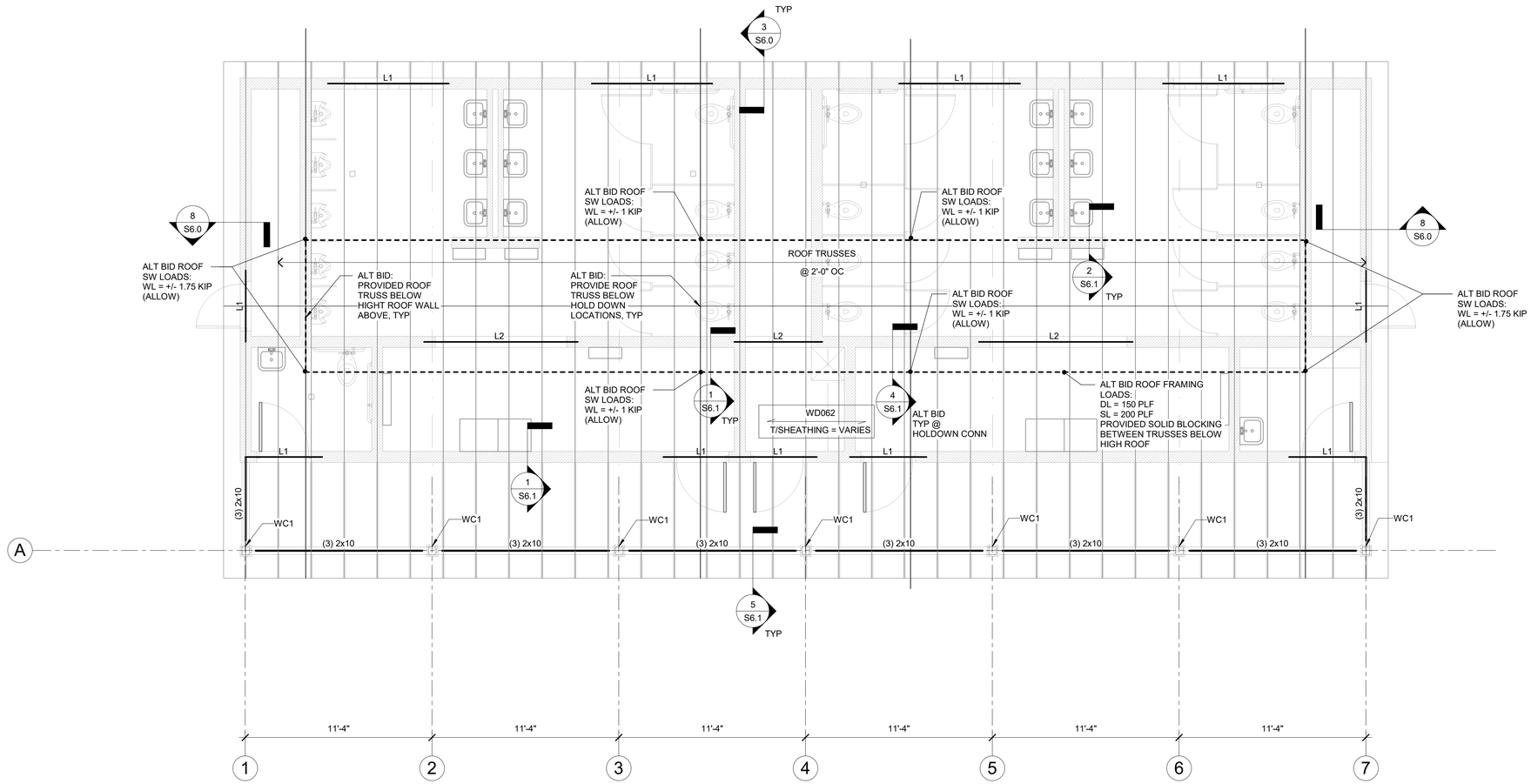
HIGH ROOF PLAN NOTES:

1. SEE SHEET S0.1 FOR GENERAL NOTES AND S0.2 FOR SCHEDULES.
2. SEE SHEET S4.0 FOR TYPICAL MASONRY SECTIONS AND DETAILS, INCLUDING TYPICAL WALL REINFORCING.
3. SEE SHEET S6.0 FOR TYPICAL WOOD SECTIONS AND DETAILS.
4. SEE ARCHITECTURAL DRAWINGS FOR TRUSS PROFILES, HEEL HEIGHTS, TRUSS BEARING ELEVATIONS AND ROOF SLOPES.
5. COORDINATE FINAL SIZE AND LOCATION OF OPENINGS, EQUIPMENT AND ROOF DRAINS WITH MECHANICAL AND PLUMBING CONTRACTORS.
6. ALL HEADERS AND BEAMS TO BE DROPPED UNO.
7. ALL WOOD STUD BEARING WALLS TO BE 2x6 SPF No.1/No.2 @ 16" OC.



1 S1.1 ROOF FRAMING PLAN

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

THRIVE ARCHITECTS

Architect

259 South Stree, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

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ROOF FRAMING PLAN

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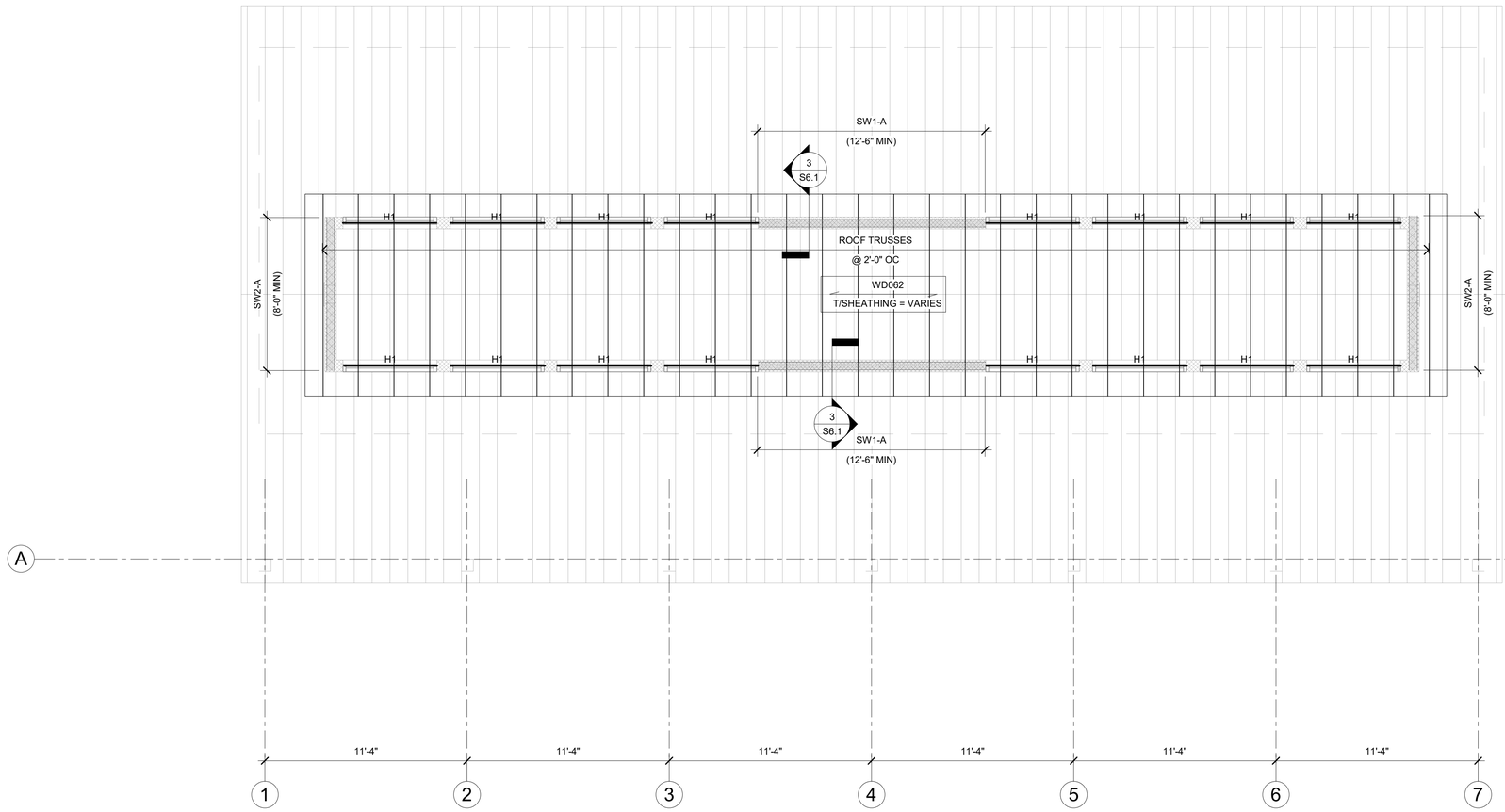
6. PROVIDE L1 LINTEL FOR ALL LOUVER OPENINGS. COORDINATE WITH ARCH & MEP FOR LOCATIONS AND SIZES.



1 / S1.2 HIGH ROOF FRAMING PLAN - ALTERNATE BID

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

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HIGH ROOF FRAMING PLAN

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S1.2

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12308 Corporate Pkwy, Suite 450
Mequon, WI 53092 | 262.236.9372
C4E Project #: 21325

1/11/2024 11:44:49 AM

REINFORCING LAP SPLICE LENGTH SCHEDULE										
f'c (PSI)	LOCATION	BAR SIZE								
		#3	#4	#5	#6	#7	#8	#9	#10	#11
3,000	TOP BARS	28	38	47	56	81	93	105	118	131
	OTHERS	22	29	36	43	63	72	81	91	101
4,000	TOP BARS	25	33	41	49	71	81	91	102	114
	OTHERS	19	25	31	37	54	62	70	79	87

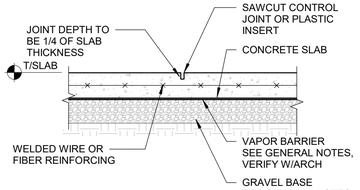
NOTES:
1. TABULATED VALUES ARE BASED ON GRADE 60 REINFORCING BARS AND NORMAL WEIGHT CONCRETE.
2. TENSION LAP SPLICE LENGTHS ARE CALCULATED PER ACI 318-14. LENGTHS ARE IN INCHES.
3. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS.
4. SPLICE LENGTHS IN THIS SCHEDULE ARE BASED ON CLEAR COVER AT LEAST 1.0 BAR Ø AND CLEAR SPACING AT LEAST 2.0 BAR Ø.

SECTION 1: SLAB-ON-GRADE NOTES
1. SLAB-ON-GRADE CONSTRUCTION SHOULD CONFORM WITH THE RECOMMENDATIONS AND REQUIREMENTS SET FORTH IN THE LATEST RELEASE OF ACI 302 GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION.
2. REFER TO GEOTECHNICAL REPORT AND/OR ARCHITECTURAL DRAWINGS & SPECIFICATIONS FOR SUB-FLOOR DRAINAGE SYSTEM, SUBGRADE PREPARATION, MUD SLAB AND/OR VAPOR RETARDER REQUIREMENTS.
3. THE SUBGRADE SHALL BE FREE OF STANDING WATER AT THE TIME OF CONCRETE PLACEMENT.
4. REFER TO PLANS FOR SLAB THICKNESS ("T") AND REINFORCEMENT (WWF OR REINFORCEMENT BARS). REFER TO SPECIFICATIONS FOR FIBER REINFORCEMENT TO BE INCORPORATED IN CONCRETE MIX, IF ANY. WHERE PRESENT, REINFORCING BARS SHALL BE CHAIRED BY SOIL SUPPORTED SLAB BOLSTERS.
5. PROVIDE (2) #5 x 6'-0" AT ALL RE-ENTRANT CORNERS AND OTHER SIMILAR SLAB DISCONTINUITIES.
6. UNLESS SHOWN OTHERWISE ON THE DRAWINGS, PROVIDE CONTROL AND/OR CONSTRUCTION JOINTS AT EVERY COLUMN LINE AND IN BETWEEN THE COLUMNS SUCH THAT THE JOINT SPACING DOES NOT EXCEED 36 x ("T") UNO. THE RESULTING PANELS SHOULD BE APPROXIMATELY SQUARE.

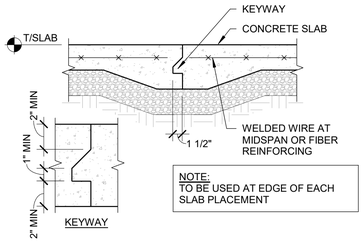
SECTION 2: CONSTRUCTION JOINT NOTES
1. BREAK THE BOND BETWEEN NEW AND PREVIOUSLY PLACES SLABS BY SPRAYING OR BY PAINTING THE EXPOSED SIDE OF THE JOINT WITH A CURING COMPOUND, ASPHALTIC EMULSION, OR FORM OIL.

SECTION 3: CONTROL JOINT NOTES
1. FOR SAW-CUT CONTROL JOINTS, MAKE THE SAW-CUT AS SOON AS THE SLAB IS ABLE TO SUPPORT THE WEIGHT OF WORKERS AND SAWING EQUIPMENT WITHOUT DAMAGE TO THE FINISHED SURFACE OF THE SLAB, BUT WITHIN 24 HOURS.
2. DEPTH OF SAW-CUT SHOULD BE 1 1/4" IF PRODUCED USING THE EARLY ENTRY DRY-CUT PROCESS AND "T"/4 (1" MIN) IF PRODUCED USING THE CONVENTIONAL WET-CUT PROCESS.
3. REFER TO SPECIFICATIONS REGARDING EPOXY RESIN OR ELASTOMERIC SEALANT REQUIREMENTS FILL CONTROL JOINTS.

SECTION 4: FORMED CONTROL JOINT OPTION NOTES
1. FORM CONTROL JOINTS BY INSERTING A PRE-MOLDED STRIP INTO THE FRESH CONCRETE UNTIL THE TOP SURFACE OF THE STRIP IS FLUSH WITH THE TOP SURFACE OF THE SLAB.
2. TOOL THE SLAB EDGES ROUND ON EACH SIDE OF THE INSERT, 1/8" MAX RADIUS.
3. AFTER THE CONCRETE HAS CURED, REMOVE THE INSERTS AND CLEAN THE GROOVE OF LOOSE DEBRIS.

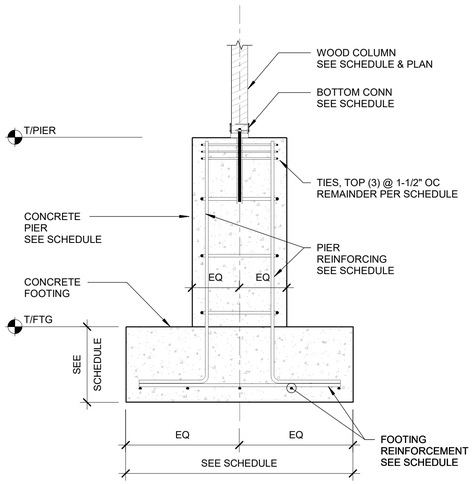


SLAB CONTROL JOINT

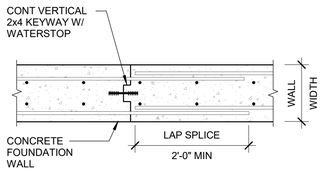


NOTE:
TO BE USED AT EDGE OF EACH SLAB PLACEMENT

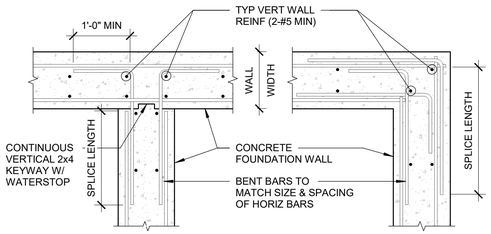
SLAB CONSTRUCTION JOINT

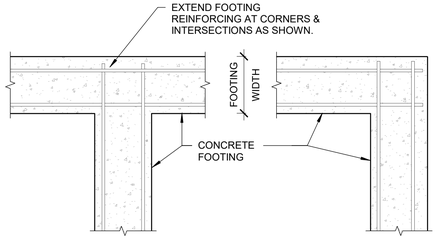


1 S3.0 TYPICAL CONCRETE REINFORCING LAP LENGTHS
SCALE: NTS

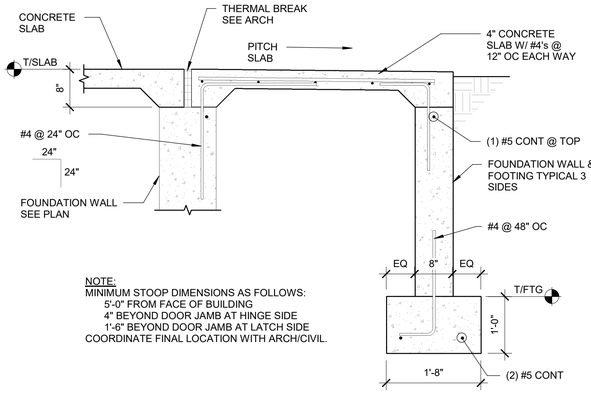


2 S3.0 TYPICAL SLAB JOINTS
SCALE: NTS





3 S3.0 TYPICAL CONCRETE PIER DETAIL
SCALE: NTS



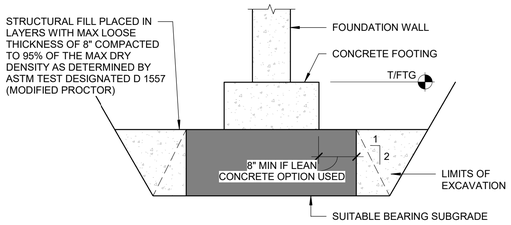
NOTE:
MINIMUM STOOP DIMENSIONS AS FOLLOWS:
5'-0" FROM FACE OF BUILDING
4" BEYOND DOOR JAMB AT HINGE SIDE
1'-6" BEYOND DOOR JAMB AT LATCH SIDE
COORDINATE FINAL LOCATION WITH ARCH/CIVIL.

4 S3.0 TYPICAL WALL CONSTRUCTION JOINT
SCALE: NTS

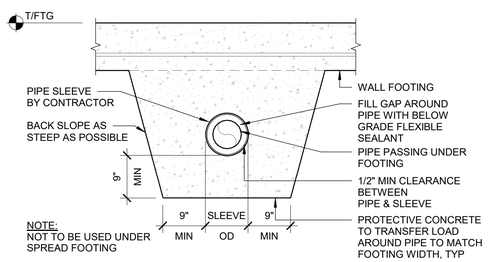
5 S3.0 TYPICAL WALL REINFORCING
SCALE: NTS

6 S3.0 TYPICAL FOOTING REINFORCING
SCALE: NTS

7 S3.0 TYPICAL STOOP SECTION
SCALE: NTS

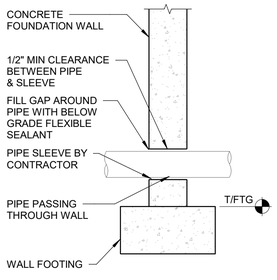


NOTES:
1. CONTRACTOR'S OPTION: ELIMINATE STRUCTURAL FILL BY LOWERING DESIGNED FOOTING ELEVATION SO THAT FOOTING RESTS DIRECTLY ON SUITABLE BEARING SUBGRADE, PROVIDE LEAN CONCRETE (f'c = 500 PSI MIN) UNDER THE FOOTING AS SHOWN HATCHED ABOVE, OR INCREASE FOOTING THICKNESS TO REACH SUITABLE BEARING SUBGRADE.
2. THIS DETAIL APPLIES ONLY AT THOSE LOCATIONS WHERE GEOTECH ENGINEER DEEMS SOILS AT DESIGNED FOOTING ELEVATIONS ARE INADEQUATE FOR FOOTING SUPPORT. WHERE THIS WORK IS REQUIRED, CONTRACTOR WILL BE COMPENSATED ON A PRE-ESTABLISHED UNIT COST AGREED UPON BY THE CONTRACTOR, ARCHITECT/ENGINEER, AND OWNER.

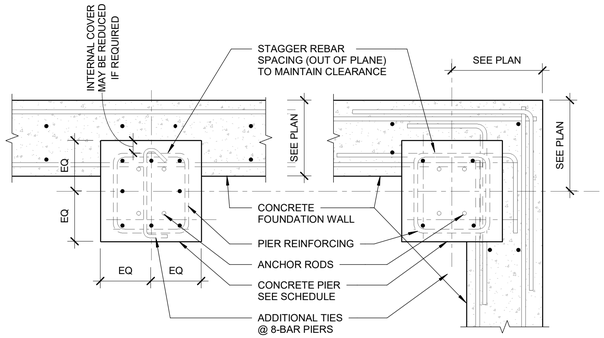


NOTE:
NOT TO BE USED UNDER SPREAD FOOTING

UNDER WALL FOOTING



THROUGH WALL



8 S3.0 TYPICAL OVER EXCAVATION DETAIL
SCALE: NTS

9 S3.0 TYPICAL PIPE CROSSING FOUNDATION WALL
SCALE: NTS

10 S3.0 TYPICAL PIER AT WALL AND CORNER
SCALE: NTS

THRIVE ARCHITECTS

Architect
259 South Stree, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

Project Info. 22005

RIVERSIDE PARK RESTROOMS

New Construction

600 Labaree St
Watertown, WI

Sheet Title

CONCRETE SECTIONS & DETAILS

Drawn by	Checked by
C4E	C4E

Revisions

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2024-01-23 Bid & Permit Set

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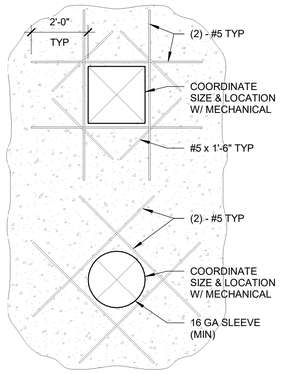
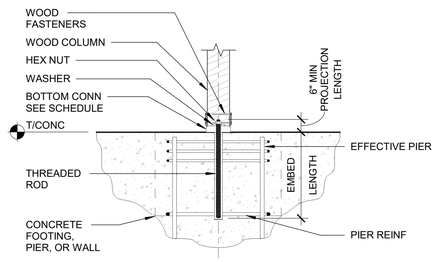


NOTES:

1. APPLIES TO 24" (MAX) OPENINGS THROUGH FOUNDATION WALL.
2. TOP OF OPENING TO BE 24" (MIN) FROM TOP OF WALL.
3. REINFORCING LAYERS TO MATCH FOUNDATION WALL.
4. USE 90° STANDARD HOOK AT CORNERS AND ENDS OF WALL.

1 S3.1 TYPICAL CONCRETE WALL PENETRATION

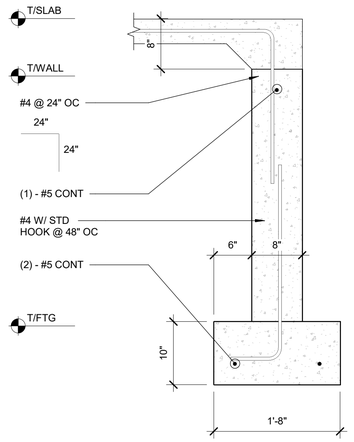
SCALE: NTS



CONN TYPE	WOOD FASTENERS	THREADED ROD Ø (IN.)	EMBED LENGTH (IN.)	EPOXY TYPE
SIMPSON ABA44	(6) - 10d	1/2	4 1/4	HILTI HIT-RE 500
SIMPSON ABA66	(8) - 16d	5/8	5	HILTI HIT-RE 500
SIMPSON ABU88	(18) - 16d	(2) - 5/8	6 5/8	HILTI HIT-RE 500

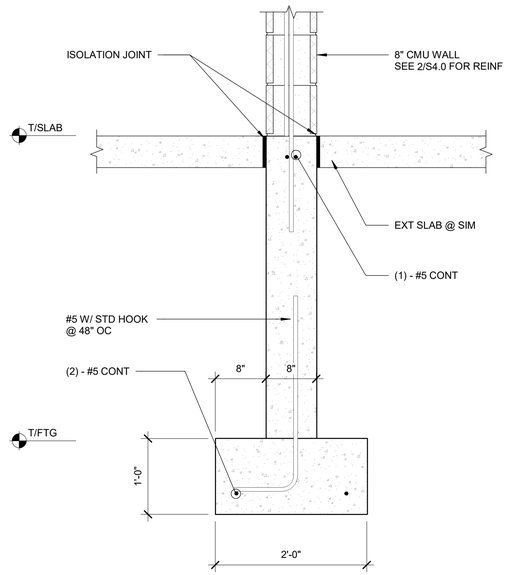
2 S3.1 TYPICAL WOOD COLUMN BASE

SCALE: NTS



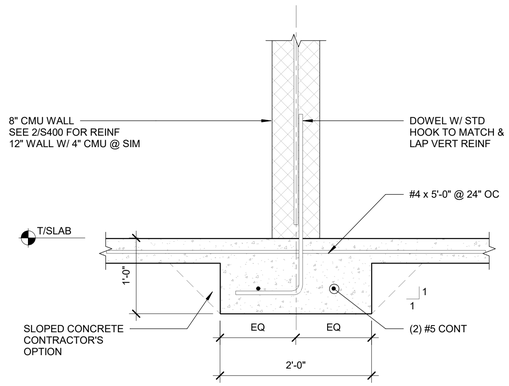
3 S3.1 SECTION

SCALE: NTS



4 S3.1 SECTION

SCALE: NTS



5 S3.1 SECTION

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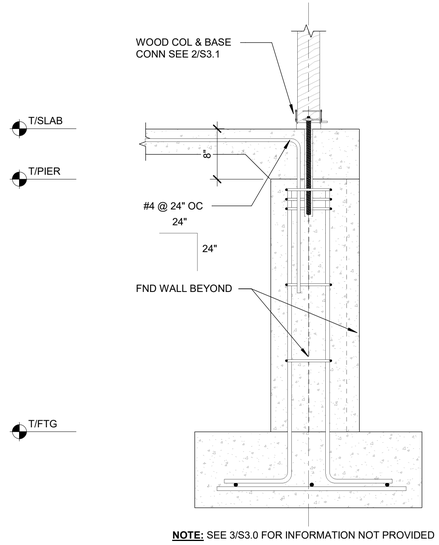

NOTE: SEE 3/S3.0 FOR INFORMATION NOT PROVIDED

6 S3.1 SECTION

SCALE: NTS

THRIVE ARCHITECTS

Architect
259 South Stree, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

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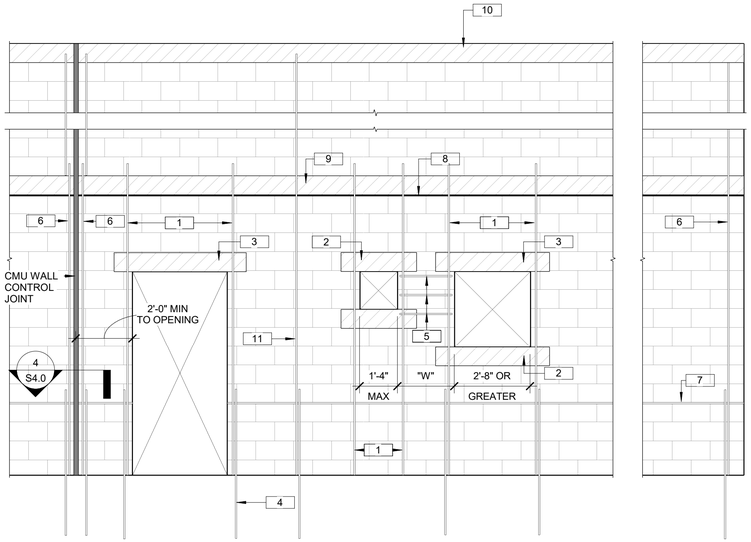
C4E Project #: 21325

MASONRY BAR LAP LENGTHS (Ld) F'm = 2,000 psi

BAR SIZE	8" & 10" BLOCK CLEAR COVER ≥ 1 3/4"	12" BLOCK CLEAR COVER ≥ 2"	CENTERED IN 8" BLOCK	CENTERED IN 10" BLOCK	CENTERED IN 12" BLOCK
#3	15"	13"	8"	8"	8"
#4	25"	22"	13"	10"	10"
#5	39"	35"	20"	16"	13"
#6	MECH SP	MECH SP	38"	29"	24"
#7	MECH SP	MECH SP	MECH SP	40"	33"
#8	MECH SP	MECH SP	MECH SP	MECH SP	MECH SP
#9	NA	MECH SP	NA	MECH SP	MECH SP
#10	NA	MECH SP	NA	MECH SP	MECH SP
#11	NA	MECH SP	NA	NA	MECH SP

1 S4.0 TYPICAL MASONRY REINFORCING LAP LENGTHS

SCALE: NTS

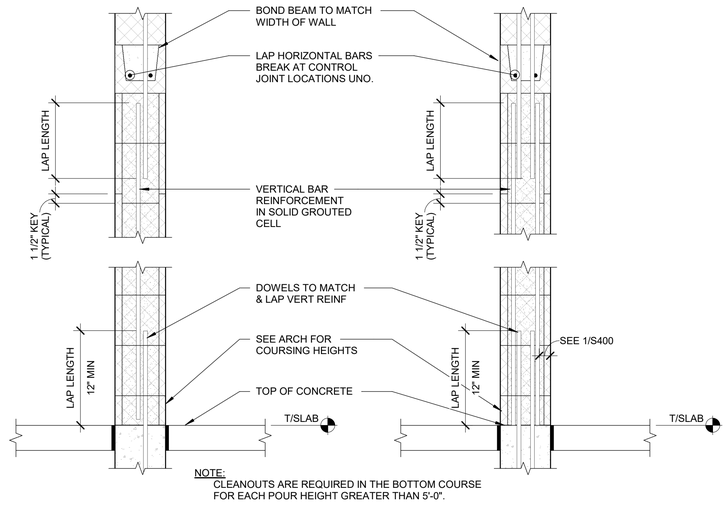


NOTES:

1. JAMB REINFORCEMENT PER LINTEL SCHEDULE OR LINTEL DETAILS. MIN (1) #5 EA JAMB.
2. 8" BOND BEAM W/ (1) #5 CONT.
3. LINTEL SEE SCHEDULE
4. DOWELS TO MATCH & LAP VERTICAL REINFORCEMENT.
5. WHEN "W" IS LESS THAN 2'-0" AT 8" CMU WALL AND 3'-0" AT 12" CMU WALL, ADD 1/4" CLOSED TIE SETS AT 8" OC.
6. REINFORCE VERT CELLS AT END OF WALL AND ADJACENT TO CONTROL JOINTS.
7. HORIZ JOINT REINFORCEMENT, SEE GENERAL NOTES.
8. ROOF OR FLOOR LINE BEYOND.
9. 8" BOND BEAM W/ (2) #4 CONT AT ROOF OR FLOOR LINE, UNO.
10. 8" BOND BEAM W/ (2) #4 CONT AT TOP OF WALL, UNO.
11. #5 @ 48" OC TYPICAL WALL REINFORCING, UNO,

2 S4.0 TYP CMU WALL REINFORCEMENT

SCALE: NTS



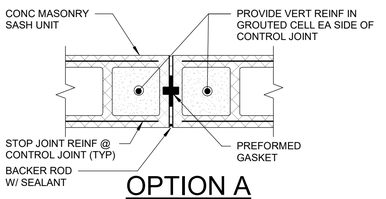
NOTE:
CLEANOUTS ARE REQUIRED IN THE BOTTOM COURSE FOR EACH POUR HEIGHT GREATER THAN 5'-0".

1 LAYER OF REINFORCING

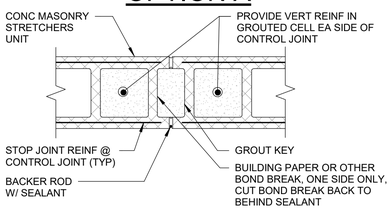
2 LAYERS OF REINFORCING

3 S4.0 TYPICAL REINFORCED CMU WALL CONSTRUCTION DETAIL

SCALE: NTS



OPTION A

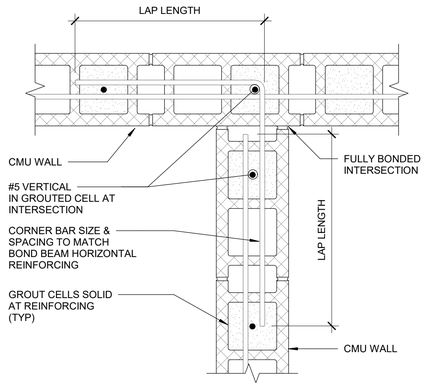


OPTION B

NOTE:
PROVIDE CONTROL JOINTS IN MASONRY WALLS AS FOLLOWS:
EXTERIOR CONCRETE MASONRY 25' OC TYPICAL
12' MAX FROM CORNERS
INTERIOR CONCRETE MASONRY 25' OC TYPICAL
12' MAX FROM CORNERS

4 S4.0 CMU CONTROL JOINT

SCALE: NTS



5 S4.0 CMU WALL INTERSECTION

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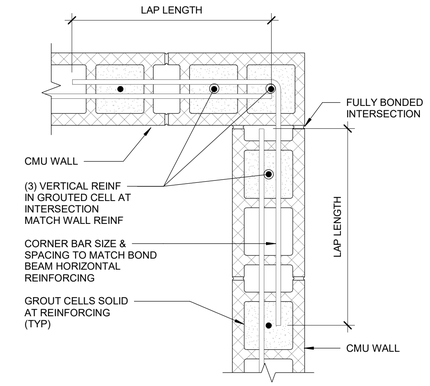

6 S4.0 CMU WALL CORNER

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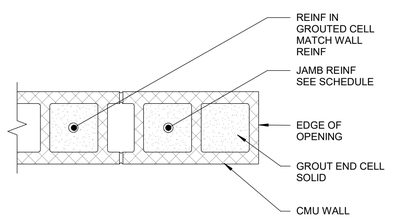

7 S4.0 CMU WALL END

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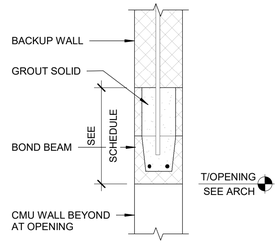

A S4.0 LINTEL TYPE A

SCALE: NTS

THRIVE ARCHITECTS

Architect
259 South Stree, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

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MASONRY SECTIONS & DETAILS

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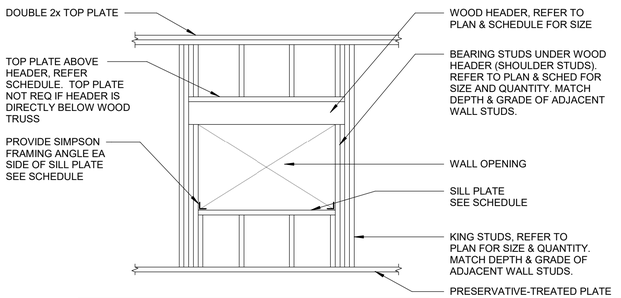
1/11/2024 11:45:14 AM

TYPICAL FASTENING SCHEDULE		
CONNECTION TYPE:	NAILING - COMMON NAILS: (UNLESS OTHER CONNECTION IS REQUIRED)	NAILING - STRIP NAILS: (UNLESS OTHER CONNECTION IS REQUIRED)
DOUBLE TOP PLATES, FACE NAIL DOUBLE TOP PLATES, LAP SPLICE, FACE NAIL TOP PLATES, LAPS & INTERSECTIONS, FACE NAIL	16d COMMON (3-1/2"x0.135") @ 16" OC (8) 16d COMMON (3-1/2"x0.162") (2) 16d COMMON (3-1/2"x0.162")	3"x0.131" @ 12" OC (12) 3"x0.131" (3) 3"x0.131"
TOP PLATE TO STUD, END NAIL CONT HEADER TO STUD, TOENAIL STUD TO SOLE PLATE	(2) 16d COMMON (3-1/2"x0.162") (4) 8d COMMON (2-1/2"x0.131") (4) 8d COMMON (2-1/2"x0.131"), TOENAIL OR (2) 16d COMMON (3-1/2"x0.162"), END NAIL	3"x0.131" -- (4) 3"x0131" TOENAIL (3) 3"x0.131" END NAIL
BUILT-UP STUD COLUMNS, FACE NAIL BUILT-UP CORNER STUDS & SUPPORT STUDS	10d COMMON (3"x0.148") @ 16" OC STAGGERED 16d COMMON (3-1/2"x0.162") @ 24" OC STAGGERED	3"x0.131" @ 12" OC STAGGERED 3"x0.131" @ 16" OC STAGGERED
BUILT-UP HEADER, FACE NAIL	16d COMMON (3-1/2"x0.162") @ 12" OC ALONG EACH EDGE	--
PLYWOOD/OSB ROOF SHEATHING (APA RATED) UNLESS NOTED OTHERWISE	8d COMMON (2-1/2"x0.131") @ 6" OC AT SUPPORTED PANEL EDGES 8d COMMON (2-1/2"x0.131") @ 12" OC AT INTERMEDIATE MEMBERS IN FIELD OF PANELS	3"x0.131" @ 6" OC AT SUPPORTED PANEL EDGES 3"x0.131" @ 12" OC AT INTERMEDIATE MEMBERS IN FIELD OF PANELS
JOIST TO SILL OR GIRDER, TOENAIL RIM JOIST TO TOP PLATE, TOENAIL BLOCKING BTWN JOIST/RAFTERS TO TOP PL, TOENAIL	(3) 8d COMMON (2-1/2"x0.131") 8d COMMON (2-1/2"x0.131") @ 6" OC (3) 8d COMMON (2-1/2"x0.131")	(3) 3"x0.131" 3"x0.131" @ 6" OC (3) 3"x0.131"
JOIST TO RIM BOARD, FACE NAIL SOLE PLATE TO JOIST/BLOCKING, FACE NAIL	(3) 16d COMMON (3-1/2"x0.162") 16d COMMON (3-1/2"x0.135") @ 16" OC	(4) 3"x0.131" 3"x0.131" @ 8" OC
FLOOR SHEATHING (APA RATED) UNLESS NOTED OTHERWISE	#8 SCREWS @ 6" OC AT SUPPORTED PANEL EDGES #8 SCREWS @ 12" OC AT INTERMEDIATE MEMBERS IN FIELD OF PANELS W/ CONSTRUCTION ADHESIVE	#8 SCREWS @ 6" OC AT SUPPORTED PANEL EDGES #8 SCREWS @ 12" OC AT INTERMEDIATE MEMBERS IN FIELD OF PANELS W/ CONSTRUCTION ADHESIVE

1 S6.0 TYPICAL WOOD FASTENING SCHEDULE

SCALE: NTS

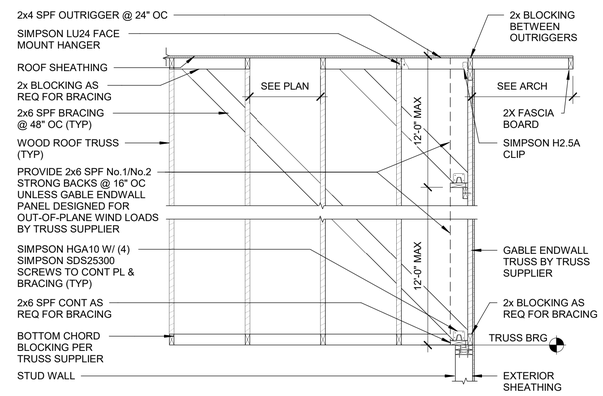


OPENING WIDTH	SILL PLATE SIZE	PLATE GRADE	FRAMING ANGLE
0'-0" TO 4'-0"	2x6	SPF STUD	-
4'-0" TO 8'-0"	2x6	SPF No.1/No.2	A35
8'-0" TO 11'-0"	1 3/4"x5 1/2"	2.0E LVL	A35
11'-0" TO 14'-0"	(2) 1 3/4"x5 1/2"	2.0E LVL	A35
14'-0" TO 16'-0"	(3) 1 3/4"x5 1/2"	2.0E LVL	A35

NOTE:
USE SIMPSON HH HEADER HANGER FOR HEADER CONNECTION TO WOOD COLUMNS.

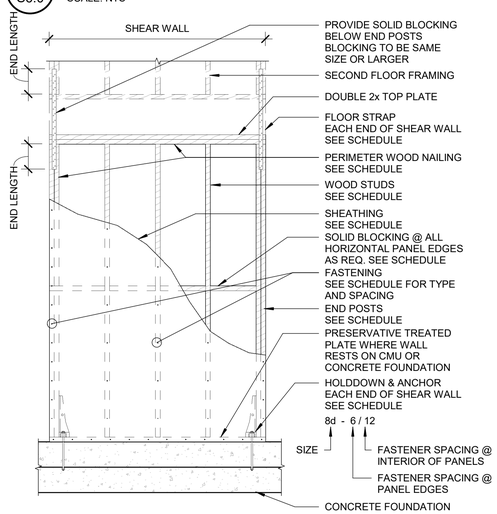
4 S6.0 TYPICAL FRAMING AROUND AN OPENING IN A WOOD STUD BEARING WALL

SCALE: NTS



7 S6.0 TYPICAL GABLE END DETAIL - STUD WALL

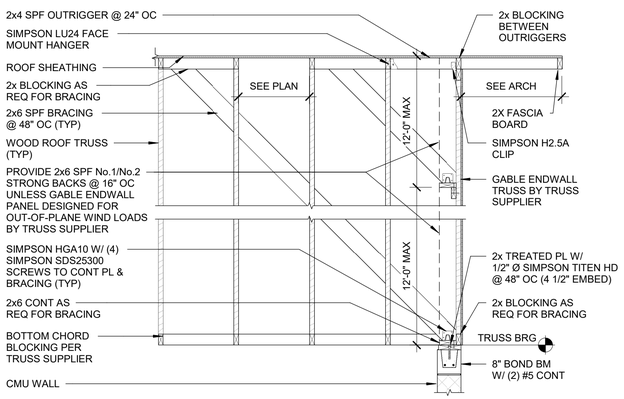
SCALE: NTS



NOTES:
1. TYPICAL DETAILS SHOWN WITH PLYWOOD OR OSB SHEATHING. GYPSUM BOARD SHEAR WALLS SIMILAR, SEE SCHEDULE FOR FASTENERS AND SPACING.
2. CONTRACTOR OPTION: WOOD SHEATHING MAY BE ORIENTED W/ LONG DIMENSION VERTICAL-OPPOSITE WHAT IS SHOWN ON DETAIL.

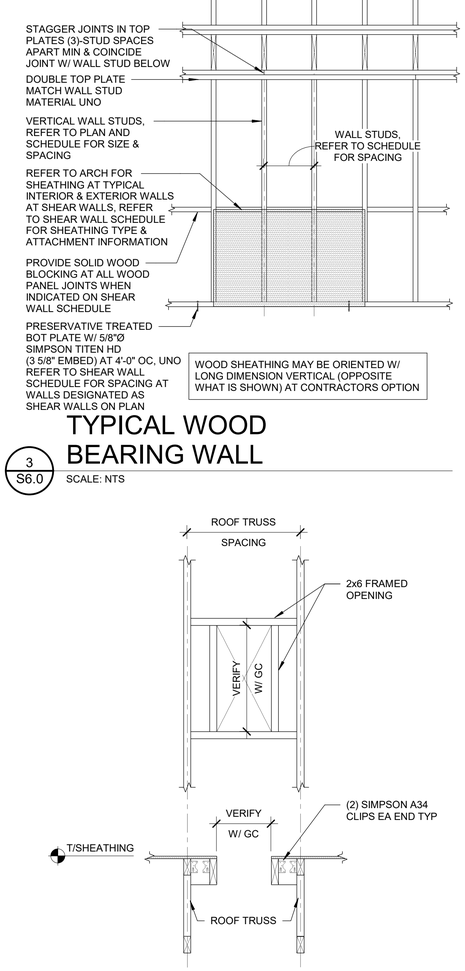
5 S6.0 TYPICAL WOOD SHEAR WALL

SCALE: NTS



8 S6.0 TYPICAL GABLE END DETAIL - CMU WALL

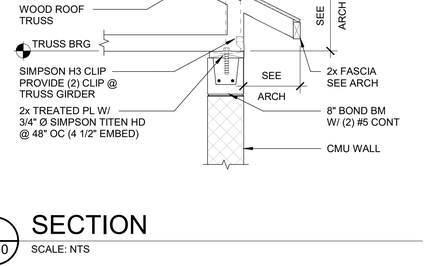
SCALE: NTS



WOOD SHEATHING MAY BE ORIENTED W/ LONG DIMENSION VERTICAL (OPPOSITE WHAT IS SHOWN) AT CONTRACTORS OPTION

3 S6.0 TYPICAL WOOD BEARING WALL

SCALE: NTS



NOTES:
1. PROVIDE FRAMING FOR OPENINGS LARGER THAN 8" X 8", 8" Ø OR SUPPORTING EQUIPMENT IN EXCESS OF 50 LBS.
2. GENERAL CONTRACTOR TO COORDINATE FINAL SIZE AND LOCATIONS OF MECHANICAL AND PLUMBING OPENINGS.

6 S6.0 TYPICAL ROOF OPENING

SCALE: NTS

9 S6.0 SECTION

SCALE: NTS

THRIVE ARCHITECTS

Architect
259 South Stree, Suite A
WAUKESHA, WI 53186
p: 833-380-6180

Project Info. 22005

RIVERSIDE PARK RESTROOMS

New Construction

600 Labaree St
Watertown, WI

Sheet Title

WOOD SECTIONS & DETAILS

Drawn by	Checked by
C4E	C4E

Revisions

No.	Date	Description
	01.23.2024	Bid & Permit Set

2024-01-23 Bid & Permit Set

Sheet No.

S6.0

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Mequon, WI 53092 | 262.236.9372
C4E Project #: 21325

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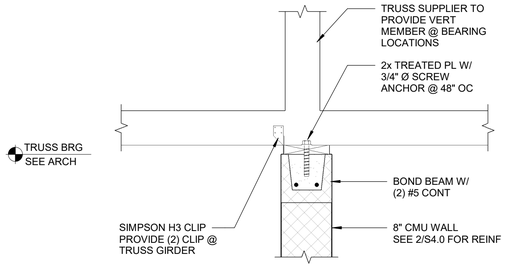

1 / S6.1 SECTION
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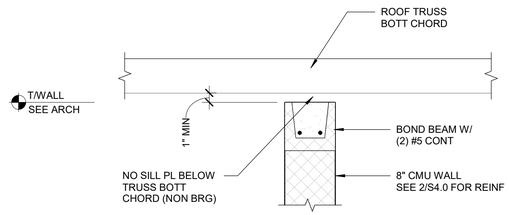

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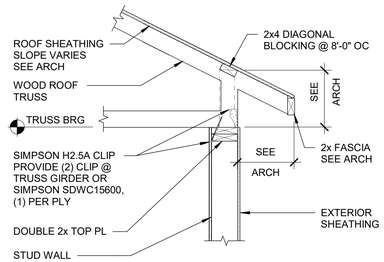

3 / S6.1 SECTION
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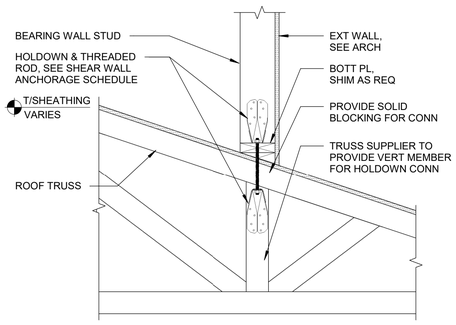
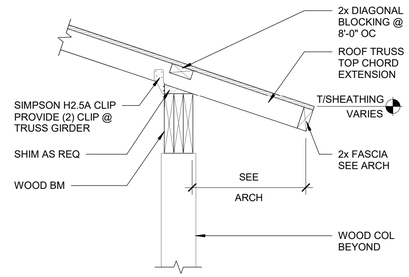


NOTE: SEE 1/S1.1 FOR TRUSS DESIGN LOADS

4 / S6.1 SECTION
SCALE: NTS



5 / S6.1 SECTION
SCALE: NTS

THRIVE ARCHITECTS

Architect
259 South Stree, Suite A
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WOOD SECTION & DETAILS

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