PLAN COMMISSION
MEETING
Mukwonago Municipal Building / Board Room
440 River Crest Court, Mukwonago, WI 53149
May 12, 2026 at 6:30 PM

AGENDA

1. **Call to Order**

2. **Roll Call**

3. **Comments from the Public**

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

4. **Approval of Minutes**

   4.1 Approval of March 10 2026 Plan Commission Minutes as prepared and distributed

5. **New Business**

   5.1 Discussion and possible recommendation to approve **Resolution 2026-33** for a CSM review for STH 83 Industrial Multi-Tenant Building Project Site, Parcel #A477300004, Briohn Building Corporation (applicant)

   5.2 Discussion and possible approval of **PC Resolution 2026-06** for a Site Plan and Architectural Review for the STH 83 Industrial Multi-Tenant Building Project, Parcel #A477300004

   5.3 Discussion and possible approval of **PC Resolution 2026-07** for a Site Plan and Architectural Review for an accessory structure at the existing YMCA Facility, Parcel MUKV2013995006.

   5.4 Discussion and possible recommendation to approve **Resolution 2026-34** for a

CSM for the dedication of public right-of-way and lot combination for the McAdams properties adjacent to Meacham Street and Pleasant Lane, MUKV1976146, MUKV1976143 and MUKV1976980.

5.5 Discussion and possible recommendation to approve **Resolution 2026-35** for a CSM review for The First Congressional Church of Mukwonago Property, Located at 231 Roberts Drive, Parcels MUKV197490, MUKV1963090, and MUKV1963091

5.6 Status Update on Zoning Code

6. Adjournment

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

MINUTES OF THE PLAN COMMISSION MEETING
Tuesday, March 10, 2026

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

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

Roll Call
Commissioners present:	Fred Winchowky, Village President
	Eric Brill
	Karl Kettner
	John Meiners
	Tim Rutenbeck
	Jason Wamser
Also present:	Diana Dykstra, Administrator
	Peter Gesch, Village Planner
	Shay Zerfas, Deputy Clerk/ Treasurer

Comments from the Public
None.
Closed at 6:31 p.m.

Approval of Minutes
Meiners/Rutenbeck motion to approve minutes from February 10, 2025, regular meeting. Unanimously carried.

Public Hearing
Conditional Use Permit for a new Concession Stand Building located in Indianhead Park, Parcel MUKV2009959, applicant (Village of Mukwonago Department of Public Works).
None.
Closed 6:33pm

New Business

Discussion/recommendation to the Village Board to approve Resolution 2026-23 for Conditional Use and Prescribing Conditions for Construction of a Concession Barn in Indianhead Park on Parcel MUKV 2009959, Mukwonago, WI

Planner Gesch provided an overview of the proposed building located in Indianhead Park. The building will include plumbing and a sink. Due to its location within a floodplain, certain regulatory requirements and restrictions must be met.

Meiners/Brill motioned to recommend approval of Resolution 2026-23 for Conditional Use and Prescribing Conditions for Construction of a Concession Barn in Indianhead Park on Parcel MUKV 2009959, Mukwonago, WI
Unanimously Carried**.**

Discussion and possible approval of PC Resolution 2026-05 for a Site Plan and Architectural Review for the Construction of an Accessory Structure Concession Barn, located at Indianhead Park on Main Street, Parcel MUKV 2009959

Planner Gesch provided an overview of the project related to the Site Plan and Architectural Review, including discussion of pathways, lighting, and the building's overall appearance. Due to the floodplain location, grading has been modified to slightly elevate the structure and ensure compliance with applicable floodplain requirements.

Public Works Director Ron Bittner explained that the building will closely mimic the original structure, as it is an iconic piece of history. The high school will assist with designing the exterior painting in collaboration with some of the original artists. The selected location maximizes the space in front of the Phantom Junction Stage while still meeting floodplain requirements.

Meiners/Brill motioned to approve PC Resolution 2026-05 for a Site Plan and Architectural Review for the Construction of an Accessory Structure Concession Barn, located at Indianhead Park on Main Street, Parcel MUKV 2009959
Unanimously Carried**.**

Discussion/recommendation to the Village Board to approve Ordinance No. 1041 Allowing Land Zoned for Commercial, or Mixed-Use Development to be Subdivided into not more than Ten Parcels through preparation of a Certified Survey Map

Planner Gesch provided an overview of the ordinance, noting that the Village has received questions regarding why it has not been updated to align with state law in effect since 2014. This update brings the Village's ordinance into compliance with state law

Meiners/Rutenbeck motioned to recommend approval of Ordinance No. 1041 Allowing Land Zoned for Commercial or Mixed-Use Development to be Subdivided into not more than Ten Parcels through preparation of a Certified Survey Map
Unanimously Carried**.**

DRAFT

Discussion and possible approval of PC Resolution 2026-03 a Site Plan and Architectural Review for the Relocation and Modification to Existing Driveway Entrances for Field Park, located at 933 N. Rochester Street, Parcel MUKV1963995

Planner Gesch provided an overview of the project, explaining that it is coordinated with upcoming work on State Highway 83 and County NN, as well as the Kiwanis property development

Meiners/Rutenbeck motioned to approve PC Resolution 2026-03 a Site Plan and Architectural Review for the Relocation and Modification to Existing Driveway Entrances for Field Park, located at 933 N. Rochester Street, Parcel MUKV1963995

Discussion and possible approval of PC Resolution 2026-04 a Site Plan and Architectural Review for Burn Boot Camp & Perfect Fit Health Clubs located at 950 Main Street, Parcel MUKV 2009989001

Planner Gesch provided an overview of the project for the vacant lot, noting that the proposal consists of a single building designed to be divided and occupied by two businesses. Flat roofs are permitted with Planning Commission approval, and the proposed roof design is consistent with other nearby businesses.
Commissioner Wamser raised questions regarding the color palette and the south side of the building, expressing concern that it does resemble a barn and requesting a more aesthetically pleasing design.
David Baum of Schroeder and Holt Architects explained that the businesses will operate on a class-based model rather than as an open gym concept. The exterior will feature a mix of cultured stone and metal panels, with colors matching those submitted in the application. Two revisions were noted: the front elevation will have the door and windows reversed, and the side elevation will replace standard windows with a windowed garage door.

Meiners/Wamser motioned to approve PC Resolution 2026-04 a Site Plan and Architectural Review for Burn Boot Camp & Perfect Fit Health Clubs located at 950 Main Street, Parcel MUKV 2009989001 with the conditions that on the East Elevation the windows on the right be mirrored on the left and that all changes can be approved by staff and that the requested revisions be approved for the front elevation and side elevation as stated.

Status update on Zoning Code Rewrite Project.

Administrator Dykstra provided a status update on the Zoning Code progress. No action taken.

Adjournment

Meeting adjourned at 7:16pm

Respectfully Submitted,
Shay Zerfas
Deputy Clerk/Treasurer

PLAN COMMISSION STAFF REPORT

TO: Village of Mukwonago Plan Commission

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

REPORT DATE: May 4, 2026

MEETING DATE: May 12, 2026, 6:30 P.M.

SUBJECT: STH 83 Industrial Multi-Tenant Building – CSM Review

BASIC INFORMATION	
Project:	STH 83 Industrial Multi-Tenant Building CSM
Applicant:	Briohn Building Corporation
Professional Land Surveyor:	Capitol Survey Enterprises
Request:	CSM Application Approval
Staff Recommendation:	Approve with Conditions

PARCEL DATA/CHARACTERISTICS	
Tax Key:	A477300004
Existing Acreage:	14.36 Acres
Current Use:	Agricultural
Proposed Use:	Industrial / Manufacturing
Reason for Request:	CSM Approval
Land Use Classification:	Industrial / Manufacturing
Zoning Classification:	M-4 – Medium/Heavy Industrial

Project Summary & Overview

The applicant is proposing to construct a multi-tenant industrial building on the aforementioned parcel. As part of the project development, a CSM is being completed to dedicate public right-of-way for a future connector road to the north. The CSM is required to clearly define the property for development from the right-of-way for the roadway.

The applicant has submitted the CSM for review and it has been reviewed by staff and a Professional Land Surveyor with Ruekert & Mielke, Inc. for compliance with Village Ordinances and State Statutory requirements. Attached to this staff report is a series of comments that should be addressed prior to signing and recording the document.

CSM Review Comments – Briohn Land Development, LLC, Village of Mukwonago
Reviewed by B. Rozite 4/23/2026 (*reviewer's comments in italics*)

Per. Ch. 236, Wis. Stats. And Ch. A-E7, Wis. Admin. Code:
s. A-E 7.05(4) Describe all monuments used for determining the location of the parcel and show by bearing and distance their relationship to the surveyed parcel and indicate whether such monuments were found or placed. (Including monuments from adjoiners and section split.

Add a distance from the S. Witness corner to the southeast corner of Lot 2.

s. 236.34(1m)(c) "CERTIFIED SURVEY MAP" shall be printed on the map in prominent letters on each sheet with the location of the land by government lot, recorded private claim, quarter-quarter section, section, township, range and county noted.

Show only the section quarter-quarters that this current CSM is located in. This affects the headers on each sheet and the Surveyor's Certificate.

s. 236.20(3)(b) The monuments at the ends of the boundary (tie)line shall be described and the bearing and distance between them shown.

*The tie distance, shown as 2084.19' on Sheet 1 computes to **2070.55'**.*

Per Ch. 45 Land Division Ordinance, Village of Mukwonago:
§ 45-94. Additional information required.
(a) (4) All existing buildings, watercourses, drainage ditches, and other features pertinent to proper division;
(a) (6) The setbacks or building lines required by the planning commission;

§ 45-95. State plane coordinate system.
All distances and bearings shall be referenced to the Wisconsin Coordinate System, South Zone, and adjusted to the county and/or Village control survey.

Add the coordinate system reference to the Basis of Bearing.

General Comments:
1) The bearing in the bearing reference on Sheet 1 should read "**S** 00°24'11" E.
2) Change the owner's name to Briohn Land Development, LLC in the Surveyor's Certificate.
3) Change lines 3-4 of the owner's certificate to " ...map to be surveyed, divided, mapped and dedicated as represented on this map**. We also certify that this map is required to be submitted to the Village of Mukwonago for approval**."
4) Change the county name to "**Walworth**" in the Village Board Approval certificate.
5) If the contours on Sheet 2 are based on a vertical datum or reference system, it should be noted.
6) The 30' water main and sanitary sewer easements shall be shown on the CSM.

Staff Review

Engineering:	See Attached Comments.
Public Works	No comments.
Utilities	No comments.
Police	No comments.
Fire:	No comments.
Building Inspection	No comments.
Planning	No comments.

Recommended Action

Staff recommends the Village Board approve the CSM as outlined in the attached resolution.

Attachments

1. Proposed CSM
2. Supporting Application Documents

VILLAGE OF MUKWONAGO
WAUKESHA AND WALWORTH COUNTIES

RESOLUTION NO. 2026-33

A RESOLUTION FOR A CSM REVIEW FOR THE STH 83 INDUSTRIAL MULTI-TENANT BUILDING PROJECT SITE, PARCEL #A477300004, BRIOHN BUILDING CORPORATION (APPLICANT)

WHEREAS, pursuant to Section 45, Article IV of the Mukwonago Code of Ordinances, an application for a CSM Review has been submitted, which application was filed in the office of the Village Clerk, Village of Mukwonago, Wisconsin, and

WHEREAS, the application has been submitted by Briohn Building Corporation, and

WHEREAS, the applicant is seeking approval of a CSM for the purpose of land division to create a parcel for development and a public right-of-way for a future roadway, and

WHEREAS, the proposed CSM conforms to the requirements of the Village of Mukwonago Zoning Code for the district in which the property resides.

NOW, THEREFORE, BE IT RESOLVED by the Village Board of the Village of Mukwonago, Wisconsin hereby approves the CSM for the STH 83 Industrial Multi-Tenant Building Project, based upon the plans submitted to the Village, subject to the conditions listed below:

1. The applicant shall address the comments provided within the staff report prior to signature.
2. The CSM shall be recorded with the Walworth County Register of Deeds within 30 days of its approval.

Passed and adopted by the Village of Mukwonago Village Board this 20th day of May, 2026.

VILLAGE OF MUKWONAGO

By: _____
Fred Winchowky, Village President

Attest: _____
Lana Kropf, Village Clerk

CERTIFIED SURVEY MAP NO._____

OUTLOT 3 OF CERTIFIED SURVEY MAP NO. 4773, RECORDED APRIL 30, 2018, AS DOCUMENT NO. 965823, BEING A PART OF THE NORTHEAST 1/4, SOUTHEAST 1/4, SOUTHWEST 1/4 AND NORTHWEST 1/4 OF THE NORTHEAST 1/4, AND THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, ALL IN SECTION 1, TOWN 4 NORTH, RANGE 18 EAST, IN THE VILLAGE OF MUKWONAGO, COUNTY OF WALWORTH, STATE OF WISCONSIN

PREPARED FOR:
BRIOHN LAND DEVELOPMENT, LLC
3885 N. BROOKFIELD RD.
BROKKFIELD, WI 53045

TAX KEY NO.:
A477300004

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

ALL ANGULAR MEASUREMENTS WERE MADE TO THE NEAREST ONE SECOND

ALL BEARINGS REFER TO EAST LINE OF THE NORTHEAST 1/4 OF SECTION 1, WHICH HAS A WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, BEARING OF N 00°24'11" E.

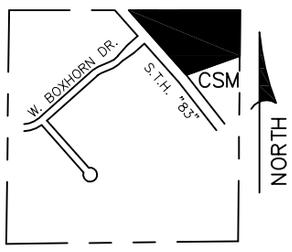
NORTH

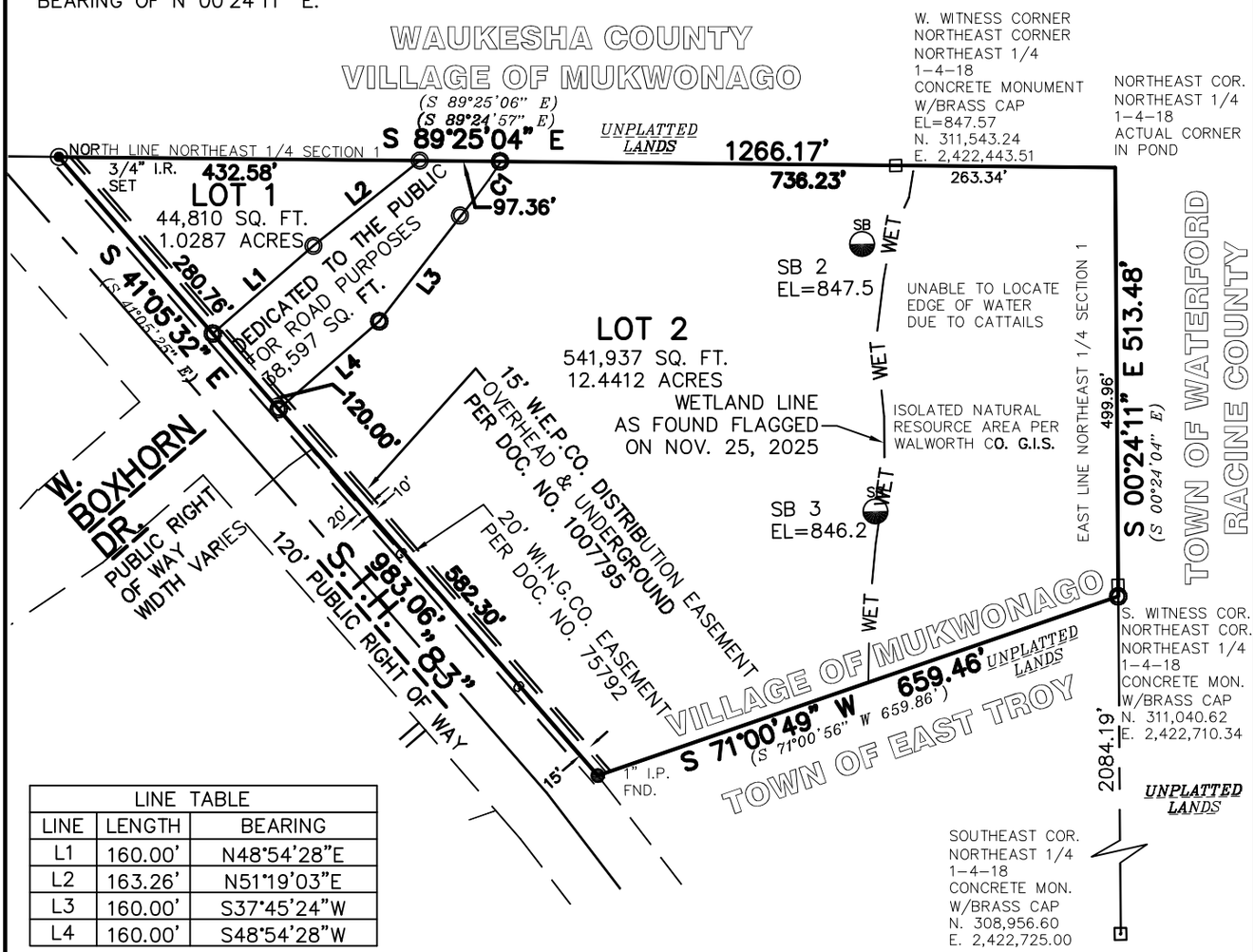
GRAPHIC SCALE
0 200 400
1 INCH = 200 FT.

● INDICATES FOUND 3/4" IRON ROD UNLESS OTHERWISE NOTED.

○ INDICATES 3/4" DIA. IRON ROD, 18" IN LENGTH, WEIGHING 1.68 LBS PER LINEAL FOOT, SET.

VICINITY MAP
1" = 2000'
NE 1/4 1-4-18





LINE TABLE		
LINE	LENGTH	BEARING
L1	160.00'	N48°54'28"E
L2	163.26'	N51°19'03"E
L3	160.00'	S37°45'24"W
L4	160.00'	S48°54'28"W

CURVE TABLE					
CURVE	LENGTH	RADIUS	CHORD	CHORD BEARING	DELTA
C1	80.82'	610.00'	80.76'	S36°27'15"W	7°35'29"

CAPITOL SURVEY ENTERPRISES
2015 LA CHANDELLE CT.
BROOKFIELD, WI 53045
PH: (262) 786-6600
FAX: (262) 786-6608
WWW.CAPITOLSURVEY.COM

WISCONSIN
MICHAEL J. BERRY
S-2445
BROOKFIELD, WI
LAND SURVEYOR

DECEMBER 29, 2025

PROJECT NO. 25-156
THIS INSTRUMENT DRAFTED BY MICHAEL J. BERRY

SHEET 1 OF 4

CERTIFIED SURVEY MAP NO._____

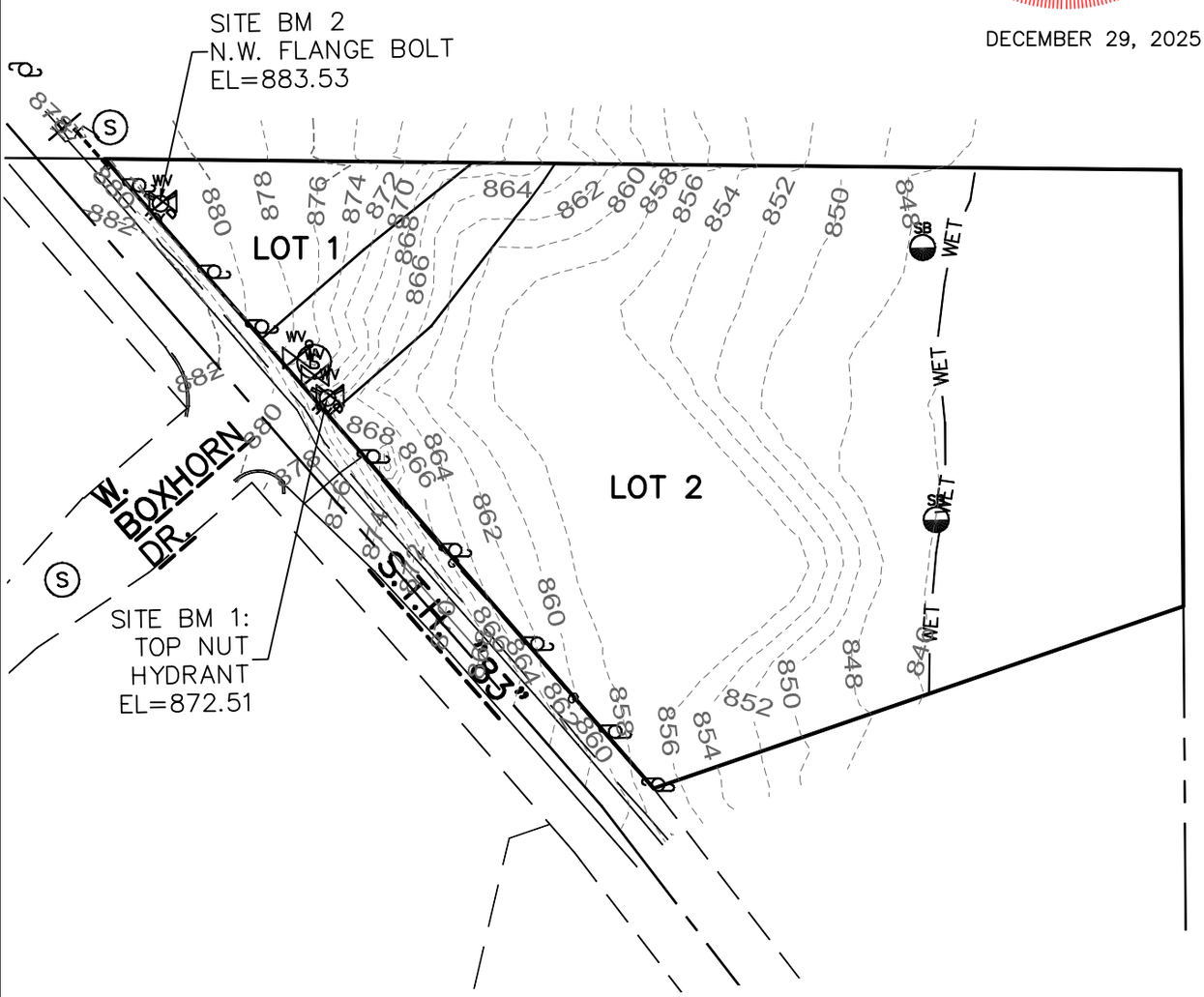
OUTLOT 3 OF CERTIFIED SURVEY MAP NO. 4773, RECORDED APRIL 30, 2018, AS DOCUMENT NO. 965823, BEING A PART OF THE NORTHEAST 1/4, SOUTHEAST 1/4, SOUTHWEST 1/4 AND NORTHWEST 1/4 OF THE NORTHEAST 1/4, AND THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, ALL IN SECTION 1, TOWN 4 NORTH, RANGE 18 EAST, IN THE VILLAGE OF MUKWONAGO, COUNTY OF WALWORTH, STATE OF WISCONSIN

NORTH

GRAPHIC SCALE
0 200 400
1 INCH = 200 FT.

WISCONSIN
MICHAEL J. BERRY
S-2545
BROOKFIELD, WI
LAND SURVEYOR

DECEMBER 29, 2025



LEGEND

SAN	SANITARY SEWER
ST	STORM SEWER
W	WATER MAIN
G	BURIED GAS LINE
TEL	BURIED TELEPHONE LINE
E	BURIED ELECTRIC LINE
FO	BURIED FIBER OPTIC LINE
//	OVERHEAD UTILITY LINES
CATV	BURIED CABLE TELEVISION LINES
COMB	COMBINATION SEWER
	WOOD FENCE
	METAL FENCE
	EDGE OF TREES AND BRUSH
994.32 DS	DOOR SILL ELEVATION
	FIRE DEPARTMENT CONNECTION
	ELECTRIC TRANSFORMER
EM	ELECTRIC METER
EP	ELECTRIC PEDESTAL
EB	ELECTRIC BOX AT GRADE
TB	TELEPHONE BOX AT GRADE
TP	TELEPHONE PEDESTAL
TV	TV PEDESTAL
GM	GAS METER
A	AIR CONDITIONER
	UTILITY POLE
	WOOD SIGN
	METAL SIGN
	FLAG POLE
	BOLLARD
	BOLLARD LIGHT
	YARD LIGHT
WV	HYDRANT
	WATER VALVE
GV	GAS VALVE
MH	MANHOLE
ST	STORM MANHOLE
CB	CATCH BASIN
	CURB INLET
M	METAL LIGHT POLE
C	CONCRETE LIGHT POLE
W	WOOD LIGHT POLE
MB	MAIL BOX
OF	FIBER OPTIC MARKER
GUY	GUY WIRE

THIS INSTRUMENT DRAFTED BY MICHAEL J. BERRY

SHEET 2 OF 4

CERTIFIED SURVEY MAP NO._____

OUTLOT 3 OF CERTIFIED SURVEY MAP NO. 4773, RECORDED APRIL 30, 2018, AS DOCUMENT NO. 965823, BEING A PART OF THE NORTHEAST 1/4, SOUTHEAST 1/4, SOUTHWEST 1/4 AND NORTHWEST 1/4 OF THE NORTHEAST 1/4, AND THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, ALL IN SECTION 1, TOWN 4 NORTH, RANGE 18 EAST, IN THE VILLAGE OF MUKWONAGO, COUNTY OF WALWORTH, STATE OF WISCONSIN

SURVEYOR'S CERTIFICATE

STATE OF WISCONSIN)
WAUKESHA COUNTY) SS

I, MICHAEL J BERRY, PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY:

THAT I HAVE SURVEYED, DIVIDED AND MAPPED A REDIVISION OF OUTLOT 3 OF CERTIFIED SURVEY MAP NO. 4773, RECORDED APRIL 30, 2018, AS DOCUMENT NO. 965823, BEING A PART OF THE NORTHEAST 1/4, SOUTHEAST 1/4, SOUTHWEST 1/4 AND NORTHWEST 1/4 OF THE NORTHEAST 1/4, AND THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, ALL IN SECTION 1, TOWN 4 NORTH, RANGE 18 EAST, IN THE VILLAGE OF MUKWONAGO, COUNTY OF WALWORTH, STATE OF WISCONSIN.

CONTAINING 625,344 SQUARE FEET OR 14.3559 ACRES

THAT I HAVE MADE SUCH SURVEY, LAND DIVISION AND MAP BY THE DIRECTION OF JEFFREY R. TJUGUM, OWNER OF SAID LAND.

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

THAT I HAVE FULLY COMPLIED WITH THE PROVISIONS OF CHAPTER 236.34 OF THE STATUTES OF THE STATE OF WISCONSIN, CHAPTER 45 OF THE VILLAGE OF MUKWONAGO MUNICIPAL CODE IN SURVEYING, DIVIDING, AND MAPPING THE SAME.

DATED THIS 29TH DAY OF DECEMBER, 2025.

PROFESSIONAL LAND SURVEYOR,
S–2545
STATE OF WISCONSIN



THIS INSTRUMENT DRAFTED BY MICHAEL J. BERRY

SHEET 3 OF 4

CERTIFIED SURVEY MAP NO._____

OUTLOT 3 OF CERTIFIED SURVEY MAP NO. 4773, RECORDED APRIL 30, 2018, AS DOCUMENT NO. 965823, BEING A PART OF THE NORTHEAST 1/4, SOUTHEAST 1/4, SOUTHWEST 1/4 AND NORTHWEST 1/4 OF THE NORTHEAST 1/4, AND THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, ALL IN SECTION 1, TOWN 4 NORTH, RANGE 18 EAST, IN THE VILLAGE OF MUKWONAGO, COUNTY OF WALWORTH, STATE OF WISCONSIN

CORPORATE OWNER'S CERTIFICATE

BRIOHN LAND DEVELOPMENT, LLC, A WISCONSIN LIMITED LIABILTY COMPANY EXISTING UNDER THE LAWS OF THE STATE OF WISCONSIN, AS OWNER, CERTIFY THAT THEY HAVE CAUSED THE LAND DESCRIBED ON THIS MAP TO BE SURVEYED, DIVIDED, MAPPED AND DEDICATED, AS REPRESENTED ON THIS MAP IN ACCORDANCE WITH THE ORDINANCES OF THE VILLAGE OF MUKWONAGO.

IN WITNESS WHEREOF, BRIOHN LAND DEVELOPMENT, LLC. HAS CAUSED THESE PRESENTS TO BE SIGNED BY NELSON E. WILLIAMS, ITS MANAGER AT _____, WISCONSIN, THIS ____ DAY OF _____ , 2026.

_____
NELSON E. WILLIAMS
MANAGER

STATE OF WISCONSIN)
COUNTY) SS

PERSONALLY CAME BEFORE ME THIS_____DAY OF_____, 2026 NELSON E. WILLIAMS TO ME KNOWN TO BE THE PERSON WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED THE SAME.

_____
NOTARY PUBLIC
STATE OF WISCONSIN
MY COMMISSION EXPIRES: _____

VILLAGE OF MUKWONAGO PLAN COMMISSION APPROVAL

THIS CERTIFIED SURVEY MAP, AND ITS DEDICATIONS, IS HEREBY APPROVED BY THE PLAN COMMISSION OF THE VILLAGE OF MUKWONAGO ON THIS DAY_____OF_____, 2026.

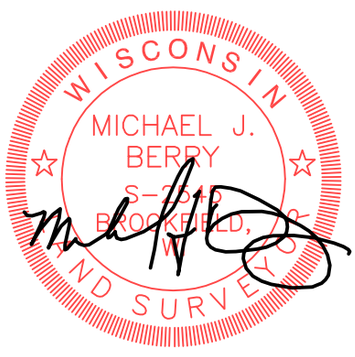
_____ _____
DIANA DYKSTRA, CHAIRPERSON DATE

MUKWONAGO VILLAGE BOARD APPROVAL

THIS CERTIFIED SURVEY MAP, BEING PART OF THE OF THE NORTHEAST 1/4 OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 18 EAST, IN THE VILLAGE OF MUKWONAGO, WAUKESHA COUNTY, WISCONSIN, HAVING BEEN APPROVED BY THE VILLAGE OF MUKWONAGO PLANNING COMMISION, IS HEREBY APPROVED AND ACCEPTED BY THE VILLAGE OF MUKWONAGO BOARD ON THIS DAY_____OF_____, 2026.

_____ _____
FRED WINCHOWKY, VILLAGE PRESIDENT DATE

_____ _____
LANA C. KROPF, CLERK/TREASURER DATE



DECEMBER 29, 2025

THIS INSTRUMENT DRAFTED BY MICHAEL J. BERRY

SHEET 4 OF 4

Village of Mukwonago
440 River Crest Ct
Mukwonago, WI 53149
Phone: (262) 363-6420
planning@villageofmukwonago.gov
www.villageofmukwonago.gov

VILLAGE OF MUKWONAGO
CERTIFIED SURVEY MAP REVIEW/PLATS REQUIREMENTS

- ☐ Application Completeness: See page 2 for complete list of submittals.
- ☐ Pre-Application Meetings: Available upon request.
- ☐ Application Submission:
  - ☐ **Applications must be submitted electronically** through the Village on-line permit system. The system may be accessed through this link.
  - ☐ If you are a new user, you will need to start by creating a "Contractor" account. A "Contractor" is a non-owner (Business Owner, Design Professional, etc). If you are the property AND business owner, you may apply as a "Homeowner".
  - ☐ Once you arrive to the site you will need to apply for a "Planning, Zoning, or Engineering Process". This link can be found on the left side of the screen under Planning and Zoning page of the Village website. The program will allow you search by the address, apply for appropriate application, input various information, and upload documents.
  - ☐ Fees: Fees may be paid in one of three ways.
    1. You may pay your fee online. After the application is submitted staff has received and reviewed the application an email will be sent to the applicant (email that is provided) letting you know that you can pay the fee online. There is an additional fee associated with this option.
    2. You may pay with cash or a check by mailing or bring the check to Village Hall. There is not a transaction fee associated with this option.
    3. You may pay with a credit card at Village Hall during normal hours and in person. There is a transaction fee association with this option.
- ☐ Meeting Dates: Plan Commission meets on the second Tuesday of each month at 6:30 p.m. A schedule of meeting dates can be found at our web site. The Village Board meets on the 3rd Wednesday of the month at 6:30p.m.
- ☐ Application Deadlines: Applications deadlines are approximately 5 weeks prior to the scheduled meeting. A schedule of deadlines may be found on our web site.

PROCEDURAL CHECKLIST FOR A CERTIFIED SURVEY MAP/PLATS REVIEW AND APPROVAL

This form is designed to be a guide for submitting a complete application for an CSM/PLATS.

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

Application:

- ☐ Online Application Completed
- ☐ Application fee: current fee schedule
- ☐ Agreement for Reimbursable Services Acknowledgement

Required site drawings:

- ☐ Survey of the property done by a Certified Land Surveyor
- ☐ Plat of Lands Proposed (if applicable)

Other Documents:

- ☐ Proposed Use/Development Plan (if applicable)
- ☐ Electronic Submittals are required. All documents need to be uploaded into the BS&A Software.
- ☐ Any additional information as determined by Village Staff.

PLAN COMMISSION STAFF REPORT

TO: Village of Mukwonago Plan Commission

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

REPORT DATE: May 4, 2026

MEETING DATE: May 12, 2026, 6:30 P.M.

SUBJECT: STH 83 Industrial Multi-Tenant Building - Site Plan & Architectural Review

BASIC INFORMATION	
Project:	STH 83 Industrial Multi-Tenant Building
Applicant:	Briohn Building Corporation
Consulting Engineer:	Briohn Design Group, LLC
Consulting Architect:	Briohn Design Group, LLC
Request:	Site Plan & Architectural Review
Staff Recommendation:	Approve with Conditions

PARCEL DATA/CHARACTERISTICS	
Tax Key:	A477300004
Acreage:	14.36 Acres
Current Use:	Vacant
Proposed Use:	Industrial/Manufacturing
Reason for Request:	New Development
Land Use Classification:	Industrial
Zoning Classification:	M-4 Medium/Heavy Industrial

Project Summary & Overview

The applicant is proposing to construct a multi-tenant manufacturing and industrial building on the proposed site. The project will consist of an entrance roadway, parking lot and drive aisle improvements, site sewer, water, and storm water facilities, and a three-tenant building for lease. Occupants of the facility will be determined after construction and the necessary occupancy certificates will be issued at that time for future tenants.

An operational plan and narrative has been provided by the applicant for more information on specific development plans.

Staff Review

Engineering:	Final SWMP will be required prior to building permit issuance. SWMA is also required. Final SWMP and SWMA shall provide Phosphorus reduction calculations – no limit is specified in the current Village Ordinance, but the documentation must be provided. In the final SWMP submittal, applicant shall confirm that the tailwater elevation of the adjacent natural resources does not affect the performance of the storm pond. SWMA shall be submitted for review and approval. Letter of credit will be required for on-site storm water improvements. Letter of credit also needs to include the public water main extension.
Public Works	A barrier or guardrail shall be provided at the top of the retraining wall along the entrance roadway.
Utilities	No comments at this time.
Police	No comments at this time.
Fire:	A WB-50 turning template shall be provided for movements throughout the site. Applicant shall revise plan after any further review by the Fire Chief.
Building Inspection	No comments at this time.
Planning	Applicant shall designate area for refuse storage if refuse is collected outside. Plans should be submitted demonstrating adherence to Village Standards prior to permit approval. The submitted plan of operation indicates that the parking requirement is being met. Per the Village Ordinance, 3 stalls are required for every 1,000 SF of building area. This equates to 351 parking stalls. The code allows for a reduction in required stalls for areas used primarily for warehouse and storage. This equates to 234 parking stalls. Based on the proposed use of the building and the provided estimated occupant load of approximately 110 employees, the provided parking stall count seems adequate. A requirement for additional stalls would result in an excessive amount of impervious area added that would negatively impact adjacent natural resources.

Recommended Action
Staff recommends the Planning Commission approve with conditions enumerated in the provided resolution.

Attachments

1. Application Documents

VILLAGE OF MUKWONAGO
WAUKESHA AND WALWORTH COUNTIES

PC RESOLUTION NO. 2026-06

A RESOLUTION FOR A SITE PLAN AND ARCHITECTURAL REVIEW FOR THE STH 83 INDUSTRIAL MULTI-TENANT BUILDING PROJECT, PARCEL A477300004

WHEREAS, pursuant to Section 100-601 of the Zoning Code, an application for a site plan and architectural review has been filed for the approval of a Multi-Tenant Industrial/Manufacturing Building, which application was filed in the office of the Village Clerk, Village of Mukwonago, Wisconsin, and

WHEREAS, the application has been submitted by Briohn Building corporation, and

WHEREAS, the project involves the construction of an approximately 117,000 square foot building development and associated site improvements, and

WHEREAS, the project complies with the requirements of the Village of Mukwonago zoning code.

NOW, THEREFORE, BE IT RESOLVED by the Plan Commission of the Village of Mukwonago, Wisconsin hereby approves the site plan and architectural review for the STH 83 Industrial Multi-Tenant Building Project based upon the plans submitted to the Village.

NOW, THEREFORE, BE IT FURTHER RESOLVED the site plan and architectural review approval shall be subject to the following conditions:

1. All staff comments provided in the staff report shall be addressed.
2. If changes are made to the provided plans, prior to any land disturbing activity, the applicant must submit a complete and final set of site construction plans to the Village and receive approval of said plans prior to issuance of any building permits. Plans shall include but are not limited to grading, utilities, utility calculations, erosion control, landscaping, lighting, building architecture, building materials and other plans as required. All Village department heads must verify in writing whether they have approved the final plans within their purview prior to the issuance of building permits. Any outstanding matters must be resolved to staff's satisfaction. Construction shall comply with any conditions of approval issued by staff.
3. All required regulatory agency permits shall be received and provided to the Village prior to the start of construction.
4. Prior to any land-disturbing activity, a pre-construction meeting must be held with the applicant's representatives and primary contractors, and Village department heads and representatives. The applicant representative shall coordinate such meeting.
5. The applicant must obtain all required building permits within six months of this date, and start construction within six months of the date of building permit issuance and continue in good faith to completion.

6. All work related to this project must comply with all project plans approved by the Village.
7. The developer must comply with all requirements related to impact fees imposed by the Village. If an irrigation system is planned, the applicant shall disclose that to the Village Utilities Director at the time of impact fee calculation.
8. The developer shall comply with all parts of the Municipal Code as it relates to this project.
9. If the approved plans need to be revised to address any of the conditions of approval or to conform to Building and Fire Safety Codes, the Zoning Administrator and the Building Inspectors are authorized to approve minor modifications so long as the overall project elements remain unchanged. If they determine that the revision is substantial, the plans must be submitted to the Plan Commission for review and approval.
10. All lighting within the parking lot and building lighting shall be full cut off lighting and meet municipal standards. Building lighting shall not be direct light or the appearance of light towards adjoining properties. The Police Department or Zoning Administrator, after completion or any modification to the lighting in the future, may request adjustments.
11. Landscaping shall be installed per Village standards and approved plans, if applicable. The landscaping plan shall be revised in accordance with the comments issued by the Village Planner.
12. The applicant shall provide a plan and rendering for the proposed dumpster enclosure. The dumpster enclosure shall be constructed of masonry compatible with the principal building materials used on the street side of the building.
13. The applicant shall comply with all verbal changes requested by the Plan Commission, if any.
14. Any future modification to the site such as modification of parking, lighting, grading, signage, fences, etc. may require Site Plan and Architectural Review.

Passed and adopted by the Village of Mukwonago Plan Commission this 12th day of May, 2026.

VILLAGE OF MUKWONAGO

By: _____
Fred Winchowky, Village President

Attest: _____
Shay Zerfas, Deputy Clerk-Treasurer

HFR electric inc
RESIDENTIAL · COMMERCIAL · INDUSTRIAL
227 Weil Drive · Slinger, WI 53086
Phone(262)644-6940 · Fax(262)644-7647

Hwy 83 Mukwonago

Exterior Lighting Submittal 3-25-2026

Type: A



D-Series Size 1
LED Area Luminaire

Catalog Number

Notes

Type

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

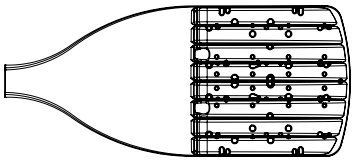
Introduction

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

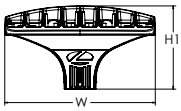
The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000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

Specifications

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







Design Select options indicated by this color background.

design select

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

Ordering Information

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

DSX1 LED

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

Control options

Shipped installed

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

Other options

Shipped installed

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

Shipped separately

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

Finish *(required)*

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

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Ordering Information

Accessories

Ordered and shipped separately.

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

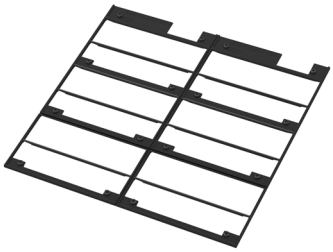
NOTES

1 Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.
2 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
3 T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
4 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
5 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
6 HVOLT not available with package P1 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
7 XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
8 XVOLT not available in packages P1 or P10. XVOLT not available with P1 ,P2, P5, P7, P9, P10, P11 and P13 when combined with option NLTAIR2 PIRHN or PIR. XVOLT not available with fusing (SF or DF).
9 SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
10 WBA cannot be combined with Type 5 distributions plus photocell (PER).
11 NLTAIR2 and PIRHN must be ordered together. For more information on nLight AIR2 visit this link
12 NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50, DMG and DS. NLTAIR2 PIRHN not available with P1 and P10 using HVOLT.
13 PIR not available with NLTAIR2 PIRHN, PER, PER5, PER7, FAO BL30, BL50, DMG and DS.
14 PER/PER5/PER7 not available with NLTAIR2 PIRHN, PIR, BL30, BL50, FAO, DMG and DS. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
15 FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, DMG and DS.
16 BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO, DMG and DS. BL30 or BL50 must specify 120 or 277V.
17 DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DS.
18 DS not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DMG.
19 DS requires (2) separately switched circuits. DS provides 50/50 fixture operation via (2) different sets of leads using (2) drivers. DS only available with packages P8, P9, P10, P11, P12 and P13.
20 Reference Motion Sensor Default Settings table on page 4 to see functionality.
21 Reference Controls Options table on page 4.
22 HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
23 CCE option not available with option BS and EGSR. Contact Technical Support for availability.
24 Option HA not available with performance packages P4, P5, P7, P8, P9 and P13.
25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
26 Single fuse (SF) requires 120V, 277V, or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).

Shield Accessories



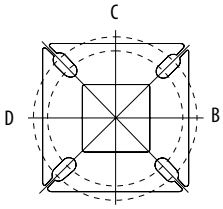
External Glare Shield (EGSR)

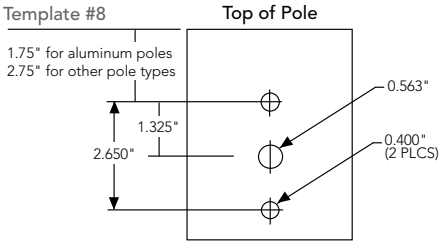


House Side Shield (HS)

Drilling

HANDHOLE ORIENTATION





Tenon Mounting Slipfitter

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

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

DSX1 Area Luminaire - EPA

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

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

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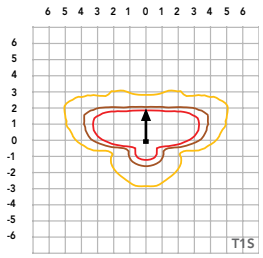
Photometric Diagrams

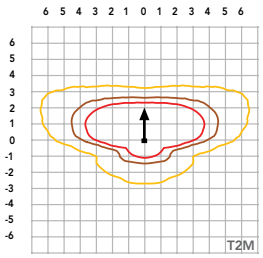
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's homepage.

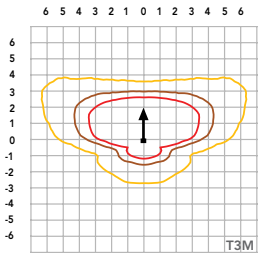
Isofootcandle plots for the DSX1 LED P9 40K 70CRI. Distances are in units of mounting height (25').

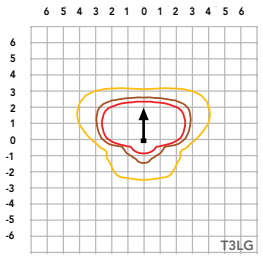
LEGEND

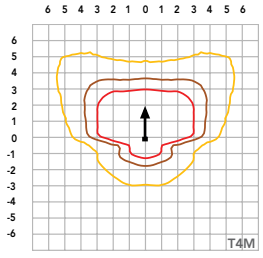
- 0.1 fc
- 0.5 fc
- 1.0 fc

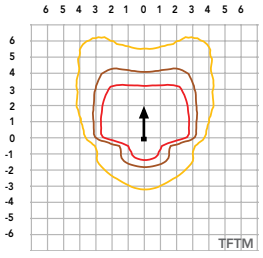


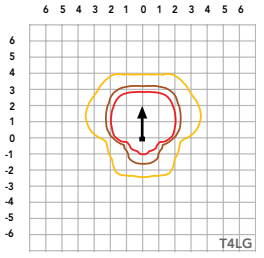


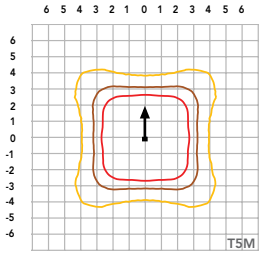


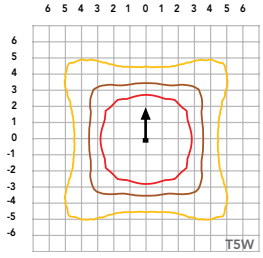


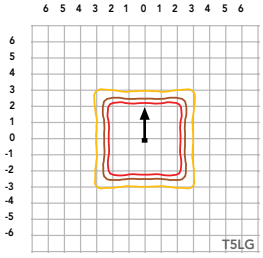


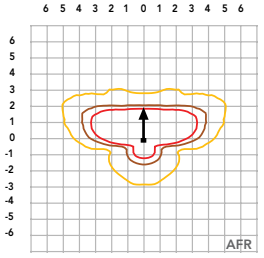


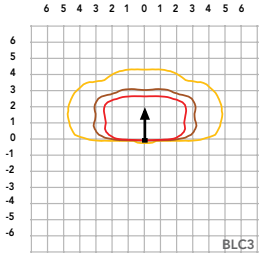


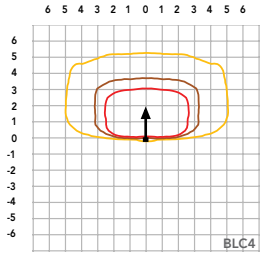


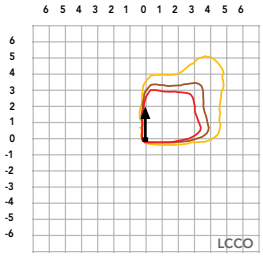


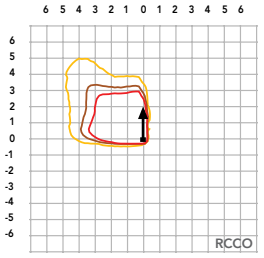












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Lumen Ambient Temperature (LAT) Multipliers

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

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	50°F	1.02
20°C	68°F	1.01
25°C	**77°C**	**1.00**
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

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

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

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.95
50,000	0.90
100,000	0.81

FAO Dimming Settings

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use maximum published values by package listed on specification sheet (input watts and lumens by optic type).

Electrical Load

	Performance Package	LED Count	Drive Current (mA)	Wattage	Current (A) 120V	208V	240V	277V	347V	480V
Forward Optics (Non-Rotated)	P1	30	530	51	0.42	0.24	0.21	0.18	0.15	0.11
	P2	30	700	68	0.56	0.33	0.28	0.24	0.20	0.14
	P3	30	1050	104	0.85	0.49	0.43	0.37	0.29	0.21
	P4	30	1250	125	1.03	0.60	0.52	0.45	0.36	0.26
	P5	30	1400	142	1.15	0.66	0.58	0.50	0.40	0.29
	P6	40	1250	167	1.38	0.79	0.69	0.60	0.48	0.34
	P7	40	1400	188	1.54	0.89	0.77	0.67	0.53	0.38
	P8	60	1100	216	1.80	1.04	0.90	0.78	0.62	0.45
	P9	60	1400	279	2.31	1.33	1.15	1.00	0.80	0.58
Rotated Optics (Requires L90 or R90)	P10	60	530	101	0.84	0.49	0.42	0.37	0.29	0.21
	P11	60	700	135	1.12	0.65	0.56	0.49	0.39	0.28
	P12	60	1050	206	1.72	0.99	0.86	0.74	0.59	0.43
	P13	60	1400	279	2.30	1.33	1.15	1.00	0.79	0.57

LED Color Temperature / Color Rendering Multipliers

	70 CRI		80CRI		90CRI	
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)

Note: Some LED types are available as per special request. Contact Technical Support for more information.

Motion Sensor Default Settings

Option	Unoccupied Dimmed Level	High Level (when occupied)	Phototcell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
NLTAIR2 PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS (not available on DSX0)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PER5 or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclypse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V

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Performance Data

Lumen Output

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Contact factory for performance data on any configurations not shown here.

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	51W	30	530	T1S	7,776	1	0	2	153	8,104	1	0	2	159	8,262	1	0	2	162
				T2M	7,203	1	0	3	142	7,507	2	0	3	147	7,653	2	0	3	150
				T3M	7,287	1	0	3	143	7,594	1	0	3	149	7,742	1	0	3	152
				T3LG	6,509	1	0	1	128	6,783	1	0	1	133	6,916	1	0	1	136
				T4M	7,395	1	0	3	145	7,707	1	0	3	151	7,857	1	0	3	154
				T4LG	6,726	1	0	1	132	7,010	1	0	1	138	7,146	1	0	1	140
				TFTM	7,446	1	0	3	146	7,760	1	0	3	152	7,912	1	0	3	155
				T5M	7,609	3	0	2	149	7,930	3	0	2	156	8,084	3	0	2	159
				T5W	7,732	3	0	2	152	8,058	4	0	2	158	8,215	4	0	2	161
				T5LG	7,631	3	0	1	150	7,953	3	0	1	156	8,108	3	0	1	159
				BLC3	5,300	0	0	2	104	5,524	0	0	2	109	5,631	0	0	2	111
				BLC4	5,474	0	0	3	108	5,705	0	0	3	112	5,816	0	0	3	114
				RCCO	5,348	0	0	2	105	5,573	0	0	2	109	5,682	0	0	2	112
				LCCO	5,348	0	0	2	105	5,573	0	0	2	109	5,682	0	0	2	112
				AFR	7,776	1	0	2	153	8,104	1	0	2	159	8,262	1	0	2	162
P2	68W	30	700	T1S	9,997	1	0	2	147	10,418	1	0	2	154	10,621	1	0	2	157
				T2M	9,260	2	0	3	137	9,651	2	0	3	142	9,839	2	0	3	145
				T3M	9,368	2	0	3	138	9,763	2	0	3	144	9,953	2	0	3	147
				T3LG	8,368	1	0	2	123	8,721	1	0	2	129	8,891	1	0	2	131
				T4M	9,507	2	0	3	140	9,909	2	0	3	146	10,102	2	0	3	149
				T4LG	8,647	1	0	2	128	9,012	1	0	2	133	9,187	1	0	2	136
				TFTM	9,573	2	0	3	141	9,977	2	0	3	147	10,172	2	0	3	150
				T5M	9,782	4	0	2	144	10,195	4	0	2	150	10,393	4	0	2	153
				T5W	9,940	4	0	2	147	10,360	4	0	2	153	10,562	4	0	2	156
				T5LG	9,810	3	0	1	145	10,224	3	0	1	151	10,423	3	0	1	154
				BLC3	6,814	0	0	2	101	7,101	0	0	2	105	7,240	0	0	2	107
				BLC4	7,038	0	0	3	104	7,334	0	0	3	108	7,477	0	0	3	110
				RCCO	6,875	1	0	2	101	7,165	1	0	2	106	7,305	1	0	2	108
				LCCO	6,875	1	0	2	101	7,165	1	0	2	106	7,305	1	0	2	108
				AFR	9,997	1	0	2	147	10,418	1	0	2	154	10,621	1	0	2	157
P3	102W	30	1050	T1S	14,093	2	0	2	138	14,687	2	0	2	144	14,973	2	0	2	147
				T2M	13,055	2	0	3	128	13,605	2	0	3	133	13,871	2	0	3	136
				T3M	13,206	2	0	4	129	13,763	2	0	4	135	14,031	2	0	4	137
				T3LG	11,797	2	0	2	115	12,294	2	0	2	120	12,534	2	0	2	123
				T4M	13,403	2	0	4	131	13,968	2	0	4	137	14,241	2	0	4	139
				T4LG	12,190	2	0	2	119	12,704	2	0	2	124	12,952	2	0	2	127
				TFTM	13,496	2	0	4	132	14,065	2	0	4	138	14,339	2	0	4	140
				T5M	13,790	4	0	2	135	14,371	4	0	2	141	14,652	4	0	2	143
				T5W	14,013	4	0	3	137	14,605	4	0	3	143	14,889	4	0	3	146
				T5LG	13,830	3	0	2	135	14,413	3	0	2	141	14,694	3	0	2	144
				BLC3	9,606	0	0	2	94	10,011	0	0	2	98	10,206	0	0	2	100
				BLC4	9,921	0	0	3	97	10,340	0	0	3	101	10,541	0	0	3	103
				RCCO	9,692	1	0	2	95	10,101	1	0	2	99	10,298	1	0	2	101
				LCCO	9,692	1	0	2	95	10,101	1	0	2	99	10,298	1	0	2	101
				AFR	14,093	2	0	2	138	14,687	2	0	2	144	14,973	2	0	2	147

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Performance Data

Lumen Output

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Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P4	124W	30	1250	T1S	16,416	2	0	3	132	17,109	2	0	3	138	17,442	2	0	3	141
				T2M	15,207	3	0	4	123	15,849	3	0	4	128	16,158	3	0	4	130
				T3M	15,383	2	0	4	124	16,032	2	0	4	129	16,345	2	0	4	132
				T3LG	13,742	2	0	2	111	14,321	2	0	2	116	14,600	2	0	2	118
				T4M	15,613	2	0	4	126	16,272	2	0	4	131	16,589	2	0	4	134
				T4LG	14,200	2	0	2	115	14,799	2	0	2	119	15,087	2	0	2	122
				TFTM	15,721	2	0	4	127	16,384	2	0	4	132	16,703	2	0	4	135
				T5M	16,063	4	0	2	130	16,741	4	0	2	135	17,067	4	0	2	138
				T5W	16,324	5	0	3	132	17,013	5	0	3	137	17,344	5	0	3	140
				T5LG	16,110	3	0	2	130	16,790	4	0	2	135	17,117	4	0	2	138
				BLC3	11,190	0	0	3	90	11,662	0	0	3	94	11,889	0	0	3	96
				BLC4	11,557	0	0	3	93	12,044	0	0	3	97	12,279	0	0	4	99
				RCCO	11,291	1	0	3	91	11,767	1	0	3	95	11,996	1	0	3	97
				LCCO	11,291	1	0	3	91	11,767	1	0	3	95	11,996	1	0	3	97
				AFR	16,416	2	0	3	132	17,109	2	0	3	138	17,442	2	0	3	141
P5	138W	30	1400	T1S	18,052	2	0	3	131	18,814	2	0	3	136	19,180	2	0	3	139
				T2M	16,723	3	0	4	121	17,428	3	0	4	126	17,768	3	0	4	129
				T3M	16,917	3	0	4	122	17,630	3	0	4	128	17,974	3	0	4	130
				T3LG	15,111	2	0	2	109	15,749	2	0	2	114	16,055	2	0	2	116
				T4M	17,169	3	0	5	124	17,893	3	0	5	130	18,242	3	0	5	132
				T4LG	15,615	2	0	2	113	16,274	2	0	2	118	16,591	2	0	2	120
				TFTM	17,288	2	0	4	125	18,017	2	0	5	130	18,368	3	0	5	133
				T5M	17,664	5	0	3	128	18,410	5	0	3	133	18,768	5	0	3	136
				T5W	17,951	5	0	3	130	18,708	5	0	3	135	19,073	5	0	3	138
				T5LG	17,716	4	0	2	128	18,463	4	0	2	134	18,823	4	0	2	136
				BLC3	12,305	0	0	3	89	12,824	0	0	3	93	13,074	0	0	3	95
				BLC4	12,709	0	0	4	92	13,245	0	0	4	96	13,503	0	0	4	98
				RCCO	12,416	1	0	3	90	12,940	1	0	3	94	13,192	1	0	3	95
				LCCO	12,416	1	0	3	90	12,940	1	0	3	94	13,192	1	0	3	95
				AFR	18,052	2	0	3	131	18,814	2	0	3	136	19,180	2	0	3	139
P6	165W	40	1250	T1S	21,031	2	0	3	127	21,918	2	0	3	133	22,345	2	0	3	135
				T2M	19,482	3	0	4	118	20,303	3	0	4	123	20,699	3	0	4	125
				T3M	19,708	3	0	5	119	20,539	3	0	5	124	20,939	3	0	5	127
				T3LG	17,604	2	0	2	107	18,347	2	0	2	111	18,704	2	0	2	113
				T4M	20,001	3	0	5	121	20,845	3	0	5	126	21,251	3	0	5	129
				T4LG	18,191	2	0	2	110	18,959	2	0	2	115	19,328	2	0	2	117
				TFTM	20,140	3	0	5	122	20,989	3	0	5	127	21,398	3	0	5	129
				T5M	20,579	5	0	3	125	21,447	5	0	3	130	21,865	5	0	3	132
				T5W	20,912	5	0	3	127	21,795	5	0	3	132	22,219	5	0	3	134
				T5LG	20,638	4	0	2	125	21,509	4	0	2	130	21,928	4	0	2	133
				BLC3	14,335	0	0	3	87	14,940	0	0	3	90	15,231	0	0	3	92
				BLC4	14,805	0	0	4	90	15,430	0	0	4	93	15,731	0	0	4	95
				RCCO	14,464	1	0	3	88	15,074	1	0	3	91	15,368	1	0	3	93
				LCCO	14,464	1	0	3	88	15,074	1	0	3	91	15,368	1	0	3	93
				AFR	21,031	2	0	3	127	21,918	2	0	3	133	22,345	2	0	3	135

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Performance Data

Lumen Output

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Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P7	184W	40	1400	T1S	22,741	2	0	3	123	23,700	2	0	3	129	24,162	3	0	3	131
				T2M	21,066	3	0	4	114	21,955	3	0	4	119	22,383	3	0	4	121
				T3M	21,311	3	0	5	116	22,210	3	0	5	120	22,642	3	0	5	123
				T3LG	19,036	2	0	2	103	19,839	2	0	3	108	20,226	2	0	3	110
				T4M	21,628	3	0	5	117	22,541	3	0	5	122	22,980	3	0	5	125
				T4LG	19,671	2	0	2	107	20,501	2	0	3	111	20,900	2	0	3	113
				TFTM	21,778	3	0	5	118	22,697	3	0	5	123	23,139	3	0	5	125
				T5M	22,252	5	0	3	121	23,191	5	0	3	126	23,643	5	0	3	128
				T5W	22,613	5	0	3	123	23,567	5	0	4	128	24,027	5	0	4	130
				T5LG	22,317	4	0	2	121	23,258	4	0	2	126	23,712	4	0	2	129
				BLC3	15,501	0	0	3	84	16,155	0	0	4	88	16,470	0	0	4	89
				BLC4	16,010	0	0	4	87	16,685	0	0	4	90	17,010	0	0	4	92
				RCCO	15,641	1	0	3	85	16,301	1	0	3	89	16,619	1	0	3	90
				LCCO	15,641	1	0	3	85	16,301	1	0	3	89	16,619	1	0	3	90
				AFR	22,741	2	0	3	123	23,700	2	0	3	129	24,162	3	0	3	131
P8	216W	60	1100	T1S	28,701	3	0	3	133	29,912	3	0	4	139	30,495	3	0	4	141
				T2M	26,587	3	0	5	123	27,709	3	0	5	128	28,249	3	0	5	131
				T3M	26,895	3	0	5	125	28,030	3	0	5	130	28,576	3	0	5	132
				T3LG	24,025	3	0	3	111	25,038	3	0	3	116	25,526	3	0	3	118
				T4M	27,296	3	0	5	127	28,448	3	0	5	132	29,002	3	0	5	134
				T4LG	24,826	3	0	3	115	25,873	3	0	3	120	26,378	3	0	3	122
				TFTM	27,485	3	0	5	127	28,645	3	0	5	133	29,203	3	0	5	135
				T5M	28,084	5	0	4	130	29,269	5	0	4	136	29,839	5	0	4	138
				T5W	28,539	5	0	4	132	29,743	5	0	4	138	30,323	5	0	4	141
				T5LG	28,165	4	0	2	131	29,354	4	0	2	136	29,926	4	0	2	139
				BLC3	19,563	0	0	4	91	20,388	0	0	4	94	20,786	0	0	4	96
				BLC4	20,205	0	0	5	94	21,057	0	0	5	98	21,468	0	0	5	99
				RCCO	19,740	1	0	4	91	20,572	1	0	4	95	20,973	1	0	4	97
				LCCO	19,740	1	0	4	91	20,572	1	0	4	95	20,973	1	0	4	97
				AFR	28,701	3	0	3	133	29,912	3	0	4	139	30,495	3	0	4	141
P9	277W	60	1400	T1S	34,819	3	0	4	126	36,288	3	0	4	131	36,996	3	0	4	134
				T2M	32,255	3	0	5	116	33,616	3	0	5	121	34,271	3	0	5	124
				T3M	32,629	3	0	5	118	34,006	3	0	5	123	34,668	3	0	5	125
				T3LG	29,146	3	0	3	105	30,376	3	0	4	110	30,968	3	0	4	112
				T4M	33,116	3	0	5	120	34,513	3	0	5	125	35,185	3	0	5	127
				T4LG	30,119	3	0	3	109	31,389	3	0	4	113	32,001	3	0	4	116
				TFTM	33,345	3	0	5	120	34,751	3	0	5	125	35,429	3	0	5	128
				T5M	34,071	5	0	4	123	35,509	5	0	4	128	36,201	5	0	4	131
				T5W	34,624	5	0	4	125	36,084	5	0	4	130	36,788	5	0	4	133
				T5LG	34,170	5	0	3	123	35,612	5	0	3	129	36,306	5	0	3	131
				BLC3	23,734	0	0	4	86	24,735	0	0	4	89	25,217	0	0	4	91
				BLC4	24,513	0	0	5	88	25,547	0	0	5	92	26,045	0	0	5	94
				RCCO	23,948	1	0	4	86	24,958	1	0	4	90	25,445	1	0	4	92
				LCCO	23,948	1	0	4	86	24,958	1	0	4	90	25,445	1	0	4	92
				AFR	34,819	3	0	4	126	36,288	3	0	4	131	36,996	3	0	4	134

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Performance Data

Lumen Output

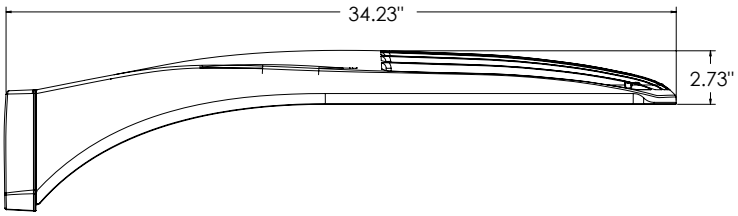
Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

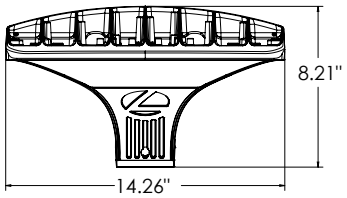
Rotated Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P10	101W	60	530	T1S	15,164	3	0	3	150	15,803	3	0	3	156	16,112	3	0	3	159
				T2M	14,047	4	0	4	139	14,640	4	0	4	145	14,925	4	0	4	147
				T3M	14,208	4	0	4	140	14,807	4	0	4	146	15,096	4	0	4	149
				T3LG	12,693	3	0	3	125	13,229	3	0	3	131	13,487	3	0	3	133
				T4M	14,420	4	0	4	142	15,028	4	0	4	148	15,321	4	0	4	151
				T4LG	13,115	3	0	3	129	13,668	3	0	3	135	13,934	3	0	3	138
				TFTM	14,522	4	0	4	143	15,134	4	0	4	149	15,429	4	0	4	152
				T5M	14,836	4	0	2	146	15,462	4	0	2	153	15,763	4	0	2	156
				T5W	15,076	4	0	3	149	15,712	5	0	3	155	16,019	5	0	3	158
				T5LG	14,879	3	0	2	147	15,507	3	0	2	153	15,809	3	0	2	156
				BLC3	10,335	3	0	3	102	10,771	4	0	4	106	10,981	4	0	4	108
				BLC4	10,674	4	0	4	105	11,124	4	0	4	110	11,341	4	0	4	112
				RCCO	10,429	1	0	2	103	10,869	1	0	2	107	11,080	1	0	2	109
				LCCO	10,429	1	0	2	103	10,869	1	0	2	107	11,080	1	0	2	109
				AFR	15,164	3	0	3	150	15,803	3	0	3	156	16,112	3	0	3	159
P11	135W	60	700	T1S	19,437	4	0	4	144	20,257	4	0	4	150	20,651	4	0	4	153
				T2M	18,005	4	0	4	133	18,765	4	0	4	139	19,131	4	0	4	142
				T3M	18,211	4	0	4	135	18,980	4	0	4	141	19,350	4	0	4	143
				T3LG	16,270	3	0	3	121	16,957	3	0	3	126	17,287	4	0	4	128
				T4M	18,483	4	0	4	137	19,263	5	0	5	143	19,638	5	0	5	146
				T4LG	16,810	3	0	3	125	17,519	3	0	3	130	17,861	3	0	3	132
				TFTM	18,614	4	0	4	138	19,399	4	0	4	144	19,777	5	0	5	147
				T5M	19,017	5	0	3	141	19,819	5	0	3	147	20,205	5	0	3	150
				T5W	19,325	5	0	3	143	20,140	5	0	3	149	20,533	5	0	3	152
				T5LG	19,072	4	0	2	141	19,876	4	0	2	147	20,264	4	0	2	150
				BLC3	13,247	4	0	4	98	13,806	4	0	4	102	14,075	4	0	4	104
				BLC4	13,682	4	0	4	101	14,259	4	0	4	106	14,537	4	0	4	108
				RCCO	13,367	1	0	3	99	13,931	1	0	3	103	14,203	1	0	3	105
				LCCO	13,367	1	0	3	99	13,931	1	0	3	103	14,203	1	0	3	105
				AFR	19,437	4	0	4	144	20,257	4	0	4	150	20,651	4	0	4	153
P12	206W	60	1050	T1S	27,457	4	0	4	133	28,616	4	0	4	139	29,174	4	0	4	142
				T2M	25,436	5	0	5	124	26,509	5	0	5	129	27,025	5	0	5	131
				T3M	25,727	5	0	5	125	26,812	5	0	5	130	27,335	5	0	5	133
				T3LG	22,984	4	0	4	112	23,954	4	0	4	116	24,421	4	0	4	119
				T4M	26,110	5	0	5	127	27,212	5	0	5	132	27,742	5	0	5	135
				T4LG	23,747	4	0	4	115	24,749	4	0	4	120	25,231	4	0	4	123
				TFTM	26,295	5	0	5	128	27,404	5	0	5	133	27,938	5	0	5	136
				T5M	26,864	5	0	4	130	27,997	5	0	4	136	28,543	5	0	4	139
				T5W	27,299	5	0	4	133	28,451	5	0	4	138	29,006	5	0	4	141
				T5LG	26,942	4	0	2	131	28,078	4	0	2	136	28,626	4	0	2	139
				BLC3	18,714	4	0	4	91	19,504	4	0	4	95	19,884	4	0	4	97
				BLC4	19,327	5	0	5	94	20,143	5	0	5	98	20,535	5	0	5	100
				RCCO	18,883	1	0	4	92	19,680	1	0	4	96	20,064	1	0	4	97
				LCCO	18,883	1	0	4	92	19,680	1	0	4	96	20,064	1	0	4	97
				AFR	27,457	4	0	4	133	28,616	4	0	4	139	29,174	4	0	4	142
P13	276W	60	1400	T1S	34,436	5	0	5	125	35,889	5	0	5	130	36,588	5	0	5	133
				T2M	31,900	5	0	5	116	33,246	5	0	5	121	33,894	5	0	5	123
				T3M	32,265	5	0	5	117	33,626	5	0	5	122	34,282	5	0	5	124
				T3LG	28,826	4	0	4	105	30,042	4	0	4	109	30,628	4	0	4	111
				T4M	32,746	5	0	5	119	34,128	5	0	5	124	34,793	5	0	5	126
				T4LG	29,782	4	0	4	108	31,039	4	0	4	113	31,644	5	0	4	115
				TFTM	32,978	5	0	5	120	34,369	5	0	5	125	35,039	5	0	5	127
				T5M	33,692	5	0	4	122	35,113	5	0	4	127	35,797	5	0	4	130
				T5W	34,238	5	0	4	124	35,682	5	0	4	129	36,378	5	0	4	132
				T5LG	33,789	5	0	3	122	35,215	5	0	3	128	35,901	5	0	3	130
				BLC3	23,471	5	0	5	85	24,461	5	0	5	89	24,937	5	0	5	90
				BLC4	24,240	5	0	5	88	25,262	5	0	5	92	25,755	5	0	5	93
				RCCO	23,683	1	0	4	86	24,682	1	0	4	89	25,163	1	0	4	91
				LCCO	23,683	1	0	4	86	24,682	1	0	4	89	25,163	1	0	4	91
				AFR	34,436	5	0	5	125	35,889	5	0	5	130	36,588	5	0	5	133

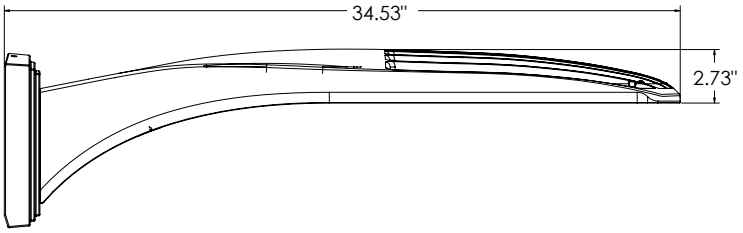
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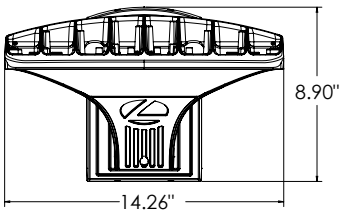
Dimensions



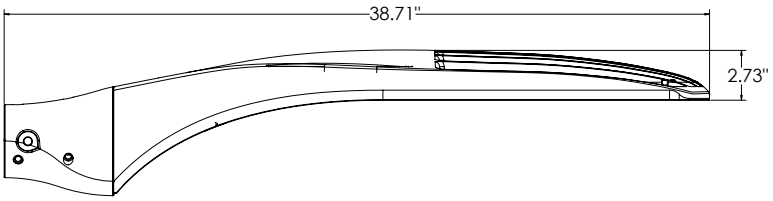


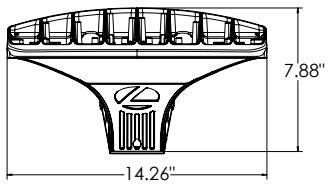
DSX1 with RPA, RPA5, SPA5, SPA8N mount
Weight: 36 lbs





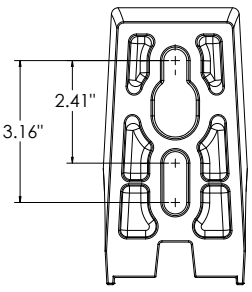
DSX1 with WBA mount
Weight: 38 lbs



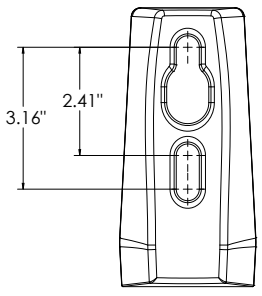


DSX1 with MA mount
Weight: 39 lbs

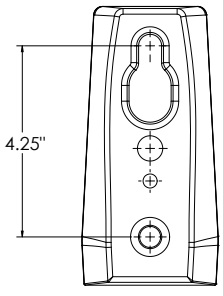
SPA (STANDARD ARM)



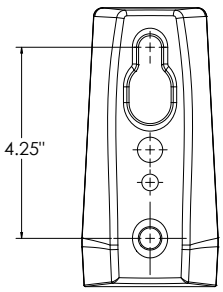
RPA



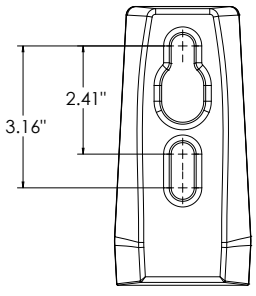
SPA5



RPA5



SPA8N



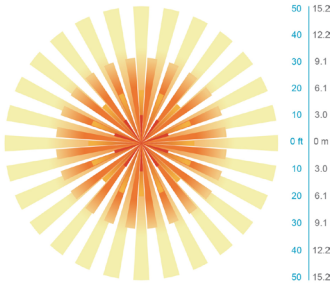
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nLight Control - Sensor Coverage and Settings

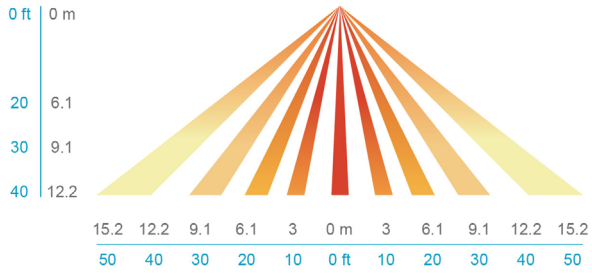
nLight Sensor Coverage Pattern

NLTAIR2 PIRHN





Top



Side

FEATURES & SPECIFICATIONS

INTENDED USE

The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 3G for SPA and MA. 1.5G for mountings RPA, RPA5, SPA5 and SPA8N. Low EPA (0.69 ft^2) for optimized pole wind loading.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

Coastal Construction (CCE)

Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times may apply.

OPTICS

Precision-molded proprietary silicone lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in standard 3000 K, 4000 K and 5000 K (70 CRI) configurations. 80CRI configurations are also available. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L81/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS

The DSX1 LED area luminaire has a number of control options. DSX Size 1, comes standard with 0-10V dimming drivers. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensor with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

nLIGHT AIR CONTROLS

The DSX1 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

INSTALLATION

Integral mounting arm allows for fast mounting using Lithonia standard #8 drilling and accommodates pole drilling's from 2.41 to 3.12" on center. The standard "SPA" option for square poles and the "RPA" option for round poles use the #8 drilling. For #5 pole drillings, use SPA5 or RPA5. Additional mountings are available including a wall bracket (WBA) and mast arm (MA) option that allows luminaire attachment to a 2 3/8" horizontal mast arm.

LISTINGS

UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP66 rated. Rated for -40ºC minimum ambient.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

GOVERNMENT PROCUREMENT

BAA – Buy America(n) Act: Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.
BABA – Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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The Village of
Mukwonago
Where life, leisure and business thrive.

AGREEMENT FOR REIMBURSABLE SERVICES
Petitioner/Applicant/Property Owner

The Applicant is required to provide the Village with an executed copy of this agreement as a prerequisite to the processing of the development application.

In accordance with Village of Mukwonago Municipal Code of Ordinances Section 70-15 Professionals' Fees, the Village may retain the services of professional consultants (including but not limited to planners, engineers, architects, attorneys, environmental specialists, recreation specialists, and other experts) to assist in its review for all land division, site plan, conditional use, zoning, and other applications which require review. The Village reserves the right to charge for its actual cost for these services, as well as for staff time, publication costs, mileage, equipment used in the processing of this application.

The Property Owner additionally acknowledges that review fees which are applied to an Applicant, but not paid by such Applicant, may be charged by the Village as an assessment against the subject property as a special charge for current services provided the property per Wis. Stat Sec 66.0627.

According to the Village of Mukwonago Municipal Code, and depending on the size of the development, the Applicant may be required to deposit an amount into an escrow account with the Village before incurring any costs. In the event the undersigned(s) fails to replenish the escrow account within (72) hours of a request by the Village to do so, the undersigned(s) agree that the Village, following written notice shall have the right, in its sole discretion, to terminate providing of professional services concerning the review of the pending application/petition for the project or request. The pending application will not receive further consideration by the Village until the escrow account is replenished as required per VMMC 70.15.

Further, the Village shall have the right to refrain from taking any further action whatsoever with regards to the project or request and that the same shall remain in abeyance until the escrow or outstanding invoices are in good standing. The undersigned(s) agree that the Village may withhold any other action, legislative or ministerial, which may include the issuance of zoning permits, licenses, approval and/or execution of any development agreements, economic development agreements, economic incentive agreements, or recording of plats, approval of zoning actions, code amendments, contracts, or any other Village action for, on or upon the subject property, until the default is cured.

The undersigned(s) agree that they shall fully cooperate with the Village, its officials, staff and Professional Consultants with respect to the proposed project or request. The undersigned(s) acknowledge that the Village's Professional Consultants solely represent the Village and the Village's interest, and do not represent the undersigned in any manner.

Project Name: Briohn Land Development - Industrial - Outlot 3
Project Type & Description: Proposed Industrial Building on Outlot 3 at Boxhorn Drive and Highway 83
Tax Key (s) involved:

Applicant Name: Devon Pittman	Phone Number: 262-222-8292
Business Name: Briohn Building Corporation	FEIN#
Mailing Address - (include City, State, Zip Code): 3885 North Brookfield Road, Suite 200, Brookfield, Wisconsin 53045	
Bill To: (If different)	
Billing Address (If different)	
E-mail Address: dpittman@briohn.com	

Property Owner's Name (if different): Briohn Land Development, LLC	Property Owner's Phone Number: 262-222-8292
Mailing Address - (include City, State, Zip Code): 3885 North Brookfield Road, Suite 200, Brookfield, Wisconsin 53045	

By signing this Agreement, the undersigned(s) acknowledge that they have read the foregoing paragraphs and fully understand and agree to comply with the terms set forth herein. Further, by signing below, each signatory warrants that he/she/it has been duly authorized by the applicant, its chief executive or governing body to do so..

The undersigned(s) agree that that they shall be jointly and severally liable for payment of fees referred to in this Agreement and Section 70-15 of the Village of Mukwonago Municipal Code of Ordinances.

Signature of Applicant (Date)

Signature of Property Owner (If different than applicant) (Date)

This Form shall be submitted to Village Clerk/Treasurer at below address or via email at: ddykstra@villageofmukwonago.com

(Rev 10/19)

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

VILLAGE OF MUKWONAGO
SITE PLAN, ARCHITECTURAL, AND PLANNED UNIT DEVELOPMENT (PUD) APPLICATION
Application Fee: Below

Date Submitted: 03/26/2026

FEES

(Please check one)

- ❑ Minor Site Plan (Buildings less than 600 sq. ft.): $135.00 plus $.02 per sq. ft.
- ☒ Site Plan and/or Architectural Review: $250.00 plus $.02 per sq. ft.
- ❑ Conceptual Site Plan and/or Architectural Review: $200.00 plus $.02 per sq. ft.
- ❑ Planned Unit Development (PUD) Review: $185.00 plus $25.00/unit
- ❑ Resubmittal of or Amendment to Site Plan and/or Architectural Review: $200.00

CONTACTS

Zoning and Planning Department
Contact:
Phone: (262) 363-6420 ex 2111
Fax: (262) 363-6425
Email: planner@villageofmukwonago.com

GUIDELINES

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

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

Mail completed applications to:	Village Planner ATTN: Site Plan/Architectural Plan/Planned Unit Development 440 River Crest Ct Mukwonago, WI 53149
Deliver to:	Village Clerk's Office 440 River Crest Ct
Email to:	planner@villageofmukwonago.com

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

APPLICANT *(Full Legal Name)*

Name: Devon Pittman

Company: Briohn Building Corporation

Address: 3885 North Brookfield Road, Suite 200 **City:** Brookfield **State:** WI **Zip:** 53045

Daytime Phone: 262-222-8292 **Fax:**

E-Mail: dpittman@briohn.com

APPLICANT IS REPRESENTED BY *(Full Legal Name)*

Name:

Company:

Address: **City:** **State:** **Zip:**

Daytime Phone: **Fax:**

E-Mail:

cwenzler@briohn.com

ARCHITECT

Name: Christopher Wenzler

Company: Briohn Design Group LLC

Address: 3885 North Brookfield Road, Suite 200 **City:** Brookfield **State:** WI **Zip:** 53045

Daytime Phone: 262-222-8370 **Fax:**

E-Mail: cwenzler@briohn.com

PROFESSIONAL ENGINEER

Name: Rizal Iskandarsjach

Company: Briohn Design Group LLC

Address: 3885 North Brookfield Road, Suite 200 **City:** Brookfield **State:** WI **Zip:**

Daytime Phone: 262-222-8321 **Fax:**

E-Mail: riz@briohn.com

REGISTERED SURVEYOR

Name: Mike Berry

Company: Capitol Survey Enterprises

Address: 2015 La Chandelle Court **City:** Brookfield **State:** WI **Zip:** 53045

Daytime Phone: 262-786-6600 **Fax:**

E-Mail: mikeb@capitolsurvey.com

CONTRACTOR

Name: Cary Bilicki

Company: Briohn Building Corporation

Address: 3885 North Brookfield Road, Suite 200 **City:** Brookfield **State:** WI **Zip:** 53045

Daytime Phone: 262-222-8390 **Fax:**

E-Mail: cbilicki@briohn.com

PROPERTY INFORMATION

Property Owner (s) *(if different from applicant)*: Briohn Land Develoment LLC

Address: 3885 North Brookfield Road, Suite 200 **City:** Brookfield **State:** WI **Zip:** 53045

Daytime Phone: 262-222-8292 **Fax:**

E-Mail: dpittman@briohn.com

Present Zoning: M-4 **Tax Key No(s).:** Part of A47730004

Location/Address: SEC of Boxhorn & Hwy 83

Present Use: Vacant Land **Intended Use:** Industrial Warehouse Building

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

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

Application:

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

Other Documents:

- ☒ Five(5) complete sets of Application and materials, in addition to the original, for Village of Mukwonago review.
- ☒ Project Summary: Please attach a statement detailing the reasons and background for this request including: details of proposal, services provided, wares sold, plans and hours of operation, number of employees, frequency of customer visits, frequency of deliveries to site, description of any interior/exterior modifications or additions to be made to property, any outside storage (dumpsters, trucks, materials…), number of parking stalls, screening/buffer type, any other information available. ***PLEASE EXPLAIN IN DETAIL.***
- ☒ **Electronic Submittals are required.** Email (or CD ROM) with all plans and submittal materials in Adobe PDF to planner@villageofmukwonago.com.
- ☐ Any additional information as determined by Village staff.

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

CERTIFICATION

Applicant hereby certifies that:

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

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

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

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

Signature - Property Owner	Signature - Applicant
Briohn Land Development LLC Joe Jursenas, Member Name & Title (PRINT)	Briohn Building Corporation Devon Pittman, Development Manager Name & Title (PRINT)
03/26/2026 Date	03/26/2026 Date
Signature - Property Owner	Signature – Applicant's Representative
Name & Title (PRINT)	Name & Title (PRINT)
Date	Date

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

SITE PLAN NARRATIVE AND PLAN OF OPERATIONS

Briohn Land Development – 117,000 square foot Industrial Building

1. Agent and Property Owner Information

Property Owner:
Full Legal Name: Briohn Land Development LLC
Mailing Address: 3885 N. Brookfield Road, Suite 200, Brookfield, Wisconsin 53045
Phone: 262-222-8292
Email: dpittman@briohn.com

Agent:
Full Legal Name: Devon Pittman
Company: Briohn Building Corporation
Mailing Address: 3885 N. Brookfield Road, Brookfield, WI 53045
Phone: 262-222-8292
Email: dpittman@briohn.com

2. Design Professionals

The following professionals were engaged in the preparation of this Plan and supporting materials:

Engineer:
Firm Name: Briohn Design Group
Contact Person: Rizal Iskandarsjach
Phone / Email: 262-222-8321 / riz@briohn.com

Surveyor:
Firm Name: Capitol Survey Enterprises
Contact Person: Mike Berry
Phone / Email: 262-786-6600 / mikeb@capitolsurvey.com

Architect:
Firm Name: Briohn Design Group
Contact Person: Chris Wenzler
Phone / Email: 262-222-8370 / cwenzler@briohn.com

3. Zoning Information

Existing Zoning District(s): M-4 – Heavy Manufacturing

4. Existing Land Uses

The subject property is currently vacant.

Surrounding land uses generally include:

North: Vacant Land – Agricultural Use (B-4 Zoning)

South: Vacant Land – Wetlands and Environmental Corridor (Town of East Troy)

East: Vacant Land – Agricultural (Town of East Troy)

West: Industrial Park – Industrial Building (M-2 Zoning)

5. Proposed Land Uses

The Property Owner proposes to develop and/or use the subject property for:

The construction of a 117,000 square foot modern industrial building constructed of tilt-up concrete panels on a steel frame. The building is intended to be a multi-tenant industrial building which is designed to house up to four tenants. The processes housed in the building are expected to cater to light-manufacturing and warehousing uses. At this time, there is not a specific user defined, but we anticipate requesting separate occupancy permits as the building is leased up.

The proposed use is compatible with the adjacent land uses and would be consistent with the surrounding area.

6. Comprehensive Plan Designation

According to the adopted Comprehensive Plan, the subject property is designated as:

Land Use Category: Industrial

The proposed development is consistent with this designation and requires no adjustment to the Comprehensive Plan.

7. Projected Occupancy and Activity

Projected Number of Employees: Since the tenants of the building are not yet known, it is difficult to estimate the number of employees, but the building facilities could accommodate roughly 110 employees.

Estimated Daily Deliveries/Truck Traffic: Depending on the number of tenants and their future operations, it is impractical to give a number at this time. We would ask that the consideration of this detail be considered at the time of an occupancy permit.

8. Existing Environmental Features

There is a delineated wetland on the east end of the property, and the design of the building has been tailored to accommodate the same. No disturbance of the wetland is anticipated.

9. Development Quantities

Total Site Area: 541,937 sq. ft. (12.4412 acres)

Total Building Floor Area: 117,000 sq. ft.

Total Pavement Area: 117,524 sq.ft.

Open Space Area: 307,413 sq. ft. (7.06 acres)

10. Development Ratios and Density

Floor Area Ratio (FAR): 21.5892%

Open Space Ratio: 56.7248%

The proposed development meets or exceeds applicable zoning standards.

11. Operational Considerations – Utilities and Services

Hours of Operation: Given that this is a multi-tenant building that has not yet been leased, we are unable to say what the hours of operations might be, but we would expect that there may be users that may require 24-hour operations but this would be addressed at the occupancy permitting process.

Utilities:

The facilities will be serviced by municipal sewer and water. There are no processes anticipated at this time in the facility that will require any large amounts of water and the usage is anticipated to be primarily related to the sanitary needs of the employees on site.

Electric service will likely be 800 amps as there is no defined requirement for heavy duty electric consumption.

12. Operational Considerations – Potential Nuisances

The following is a discussion of potential nuisances and the steps taken to avoid any impact of the use in the business park. There is no expectation that there will be any explosive risk, excessive noise, vibrations, or odors so to that end, they are not discussed in this narrative.

Street Access & Traffic Visibility

The building entrance is off of a proposed public road, east of Highway 83, the same is already planned for the Village of Mukwonago to install in tandem with the construction of this building. The building will be serviced by one access point; which will be located on the future public roadway. This access splits almost immediately offering automobile traffic access to the western side of the building with truck traffic being directed to the eastern truck court and dock areas.

Parking & Loading

The parking lot is accessed via the loop drive heading west from the main access point on the future proposed public road and the site plan has been designed to maximize available parking. The current parking count meets minimum design requirements per zoning ordinance and is currently at 116 with five ADA spaces.

The truck court is located on the east side of the proposed building and is separated as much as possible from the access to the parking lot to reduce the potential for trucks and passenger vehicles to be moving within the same loading areas. There are a total of 18 loading docks and four drive-in doors which can accommodate a variety of industrial users.

Exterior Storage

There is no anticipated outdoor storage and to the extent there is any required in the future, we would work with the village on obtaining a Conditional Use Permit for the same if it is required.

Exterior Lighting

Photometric plan and lighting cutsheets have been attached to the plan and the proposed lighting has been designed to adhere to Village requirements.

Waste Materials

All refuse and waste generated from the facility will be serviced regularly by licensed contractors in accordance with regulatory requirements.

Stormwater & Drainage

One drainage basin will be located on the east side of the truck court between the edge of pavement and the wetlands. Design of the stormwater management facilities will be in compliance with the municipal and DNR requirements for the same.

Hazardous Materials

There may be small amounts of materials used for cleaning and servicing of equipment stored on-site. None of which will be in quantities large enough to create concern. All materials of this nature shall be stored safely and in compliance with manufacturers' specifications. Disposal of any hazardous materials shall be handled by certified professionals.

Security

Safety is always a priority for our team and we will work with the future users to install their typical security protocols and systems. The implementation of these measures will be handled by the user and the Landlord at the time of occupancy.

14. Compatibility with Surrounding Properties

The proposed development is designed to be compatible with nearby properties through appropriate setbacks, building orientation, landscaping, screening, and operational controls.

15. Future Expansion

The parcel is not large enough to accommodate any future expansion.

16. Exterior Building Materials

- **Primary Building Materials:** Tilt-up pre-cast concrete over steel frame including storefront glazing near the office and reception areas.
- **Roof Materials:** Flat ballasted rubber roofing system.

All exterior materials will comply with applicable zoning and design standards. The color palette and signage will be aesthetically pleasing and without any bright colors.

Conclusion

This Site Plan Narrative and Plan of Operations is intended to provide the Plan Commission and village staff with a clear understanding of the proposed development, its operations, and its relationship to surrounding properties. Briohn Land Development and Briohn Building are excited to partner with the village on another building to add to the growing Mukwonago Industrial Park and we welcome any discussion and comments that we can incorporate into our design to make this building a welcome addition to the community.

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PROPOSED NEW MULTI-BUILDING FOR:

INDUSTRIAL MULTI-TENANT

BOXHORN DRIVE & HWY 83
MUKWONAGO, WISCONSIN



SHEET INDEX

0-GENERAL	
T1.0	TITLE SHEET
1-CIVIL	
A1-0	ALTA SURVEY
C1.0	SITE DIMENSION AND PAVEMENT ID PLAN
C1.1	FIRE DEPARTMENT EXHIBIT
C2.0	SITE GRADING PLAN
C2.1	SITE EROSION CONTROL PLAN
C3.0	SITE UTILITY PLAN
C4.0	SITE NOTES AND DETAILS
C4.1	SITE NOTES AND DETAILS
2-LANDSCAPING	
L1.0	LANDSCAPE PLAN
L2.0	LANDSCAPE NOTES, DETAILS & SCHEDULE
5-ARCHTECTURAL	
A1.0	OVERALL FLOOR PLAN
A1.1	OVERALL CLERESTORY FLOOR PLAN
A4.0	OVERALL ROOF PLAN
A5.0	OVERALL EXTERIOR ELEVATIONS
A5.1	EXTERIOR RENDERINGS
A5.2	EXTERIOR RENDERINGS
7-ELECTRICAL	
E1.0	EXTERIOR PHOTOMETRIC LIGHTING PLAN

PLAN COMMISSION SET
MARCH 27, 2026

OWNER :

BRIOHN LAND DEVELOPMENT, LLC
NELSON WILLIAMS
3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(262) 790-0500 PHONE
nwilliams@briohn.com

GENERAL CONTRACTOR :

BRIOHN BUILDING CORPORATION
CARY BILICKI
3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(262) 790-0500 PHONE
(262) 790-0505 FAX
cbilicki@briohn.com

ARCHITECT :

BRIOHN DESIGN GROUP LLC
CHRISTOPHER WENZLER, AIA
3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(262) 790-0500 PHONE
(262) 790-0505 FAX
cwenzler@briohn.com

STRUCTURAL ENGINEER:

BRIOHN DESIGN GROUP LLC
KEVIN JANKOWSKI, PE
3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(262) 790-0500 PHONE
(262) 790-0505 FAX
kjankowski@briohn.com

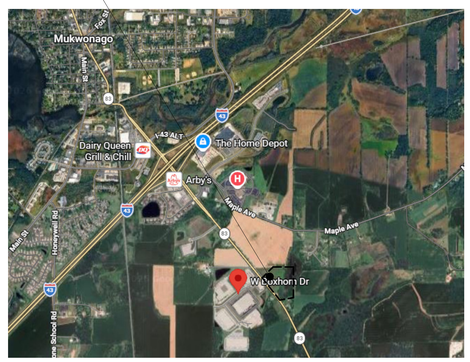
CIVIL ENGINEER:

BRIOHN DESIGN GROUP, LLC.
RIZAL ISKANDARSJACH, P.E.
3885 N. BROOKFIELD RD., SUITE 200
BROOKFIELD, WISCONSIN 53045
(414) 790-0500 PHONE
(414) 790-0505 FAX

LANDSCAPE ARCHITECT:

LANDCO2
HEATHER GROGAN, PLA
5032 W. FOREST HOME AVE., #5
MILWAUKEE, WISCONSIN 53219
(414) 622-0103 PHONE
heather@landco2.com

PROJECT LOCATION:



SITE LOCATION MAP
SCALE: N.T.S.

NORTH

PROJECT INFORMATION:

BUILDING CODE:
2021 INTERNATIONAL BUILDING CODE WITH WISCONSIN AMENDMENTS SPS 362
2021 INTERNATIONAL EXISTING BUILDING CODE WITH WISCONSIN AMENDMENTS SPS 366
ACCESSIBILITY CODE:
2021 INTERNATIONAL BUILDING CODE WITH WISCONSIN AMENDMENTS SPS 362
2017 ICC/ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
ENERGY CODE:
2021 IECC INTERNATIONAL ENERGY CONSERVATION CODE WITH WISCONSIN AMENDMENTS SPS 363
MECHANICAL CODE:
2021 INTERNATIONAL MECHANICAL CODE WITH WISCONSIN AMENDMENTS SPS 364
PLUMBING CODE:
2018 WISCONSIN PLUMBING CODE SPS 381-387
ELECTRICAL CODE:
2017 NFPA 70 NATIONAL ELECTRICAL CODE WITH WISCONSIN AMENDMENTS SPS316
FIRE CODE:
SPS 314 FIRE PREVENTION

OCCUPANCY:	PRIMARY	S-1 (MODERATE HAZARD STORAGE)
CLASS OF CONSTRUCTION:	TYPE 2B	
SPRINKLER SYSTEM:	NONE	
FLOOR LEVELS:	1	
NUMBER OF STORIES	1	NOTE:
BUILDING FOOTPRINT:	117,000 SF	ALL MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SPRINKLER ENGINEERTING BY DESIGN-BUILD CONTRACTORS
BUILDING AREA:	116,835 SF	

ZONING:	M-4	LIMITED BUSINESS & INDUSTRIAL PARK
SETBACKS:	STREET:	25' per 25' OF GREENSPACE.
	SIDE:	15' per 15' OF GREENSPACE.
	REAR:	35' per 35' OF GREENSPACE.
PARKING:	111	STANDARD STALLS
	5	HANDICAPPED STALLS

ACTUAL

APPLICABLE TO ALL PLAN VIEWS

BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD,
SUITE 200
BROOKFIELD WISCONSIN
53045-1950

SHEET TITLE: TITLE SHEET

INDUSTRIAL MULTI-TENANT
BOXHORN DRIVE & HWY 83
MUKWONAGO, WISCONSIN

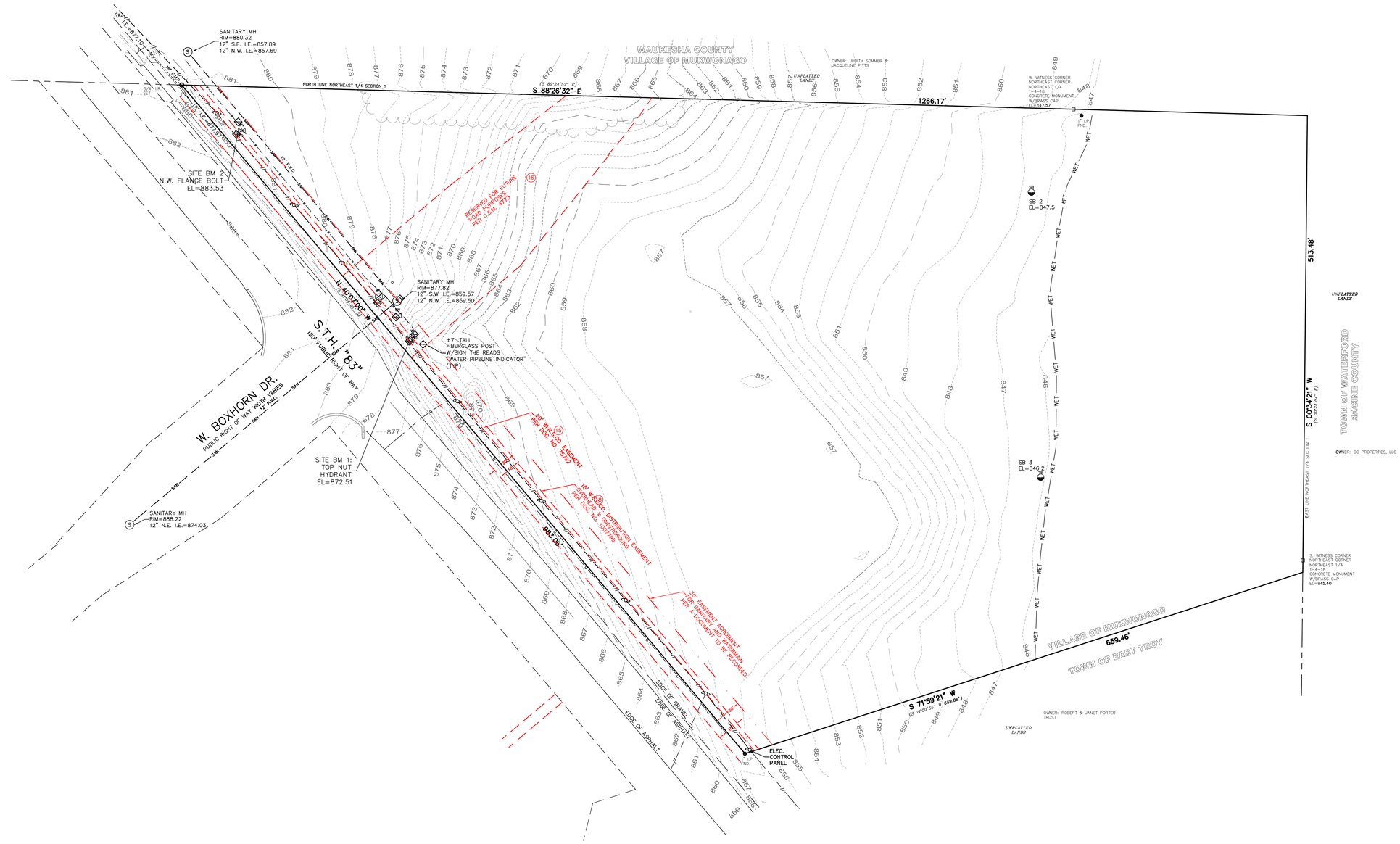
PROGRESS SET
NOT FOR CONSTRUCTION

Revision

Date

JOB: 250123
DRAWN: CJR
CHECKED: CW
DATE: 2026-03-27

SHEET: T1.0



LEGAL DESCRIPTION

OUTLOT 3 OF CERTIFIED SURVEY MAP NO. 4773, RECORDED APRIL 30, 2018, AS DOCUMENT NO. 965823, BEING A PART OF THE NORTHEAST 1/4, SOUTHEAST 1/4, SOUTHWEST 1/4 AND NORTHWEST 1/4 OF THE NORTHEAST 1/4, AND THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, ALL IN SECTION 1, TOWN 4 NORTH, RANGE 18 EAST, IN THE VILLAGE OF MUKWONAGO, COUNTY OF WALWORTH, STATE OF WISCONSIN.

FOR INFORMATIONAL PURPOSES ONLY:
PROPERTY ADDRESS: SITUATED ON STH "83", MUKWONAGO, WI 53120
TAX KEY NUMBER: #A477300004

SCHEDULE B, PART 2 – EXCEPTION

12 RIGHTS OF THE PUBLIC IN ANY PORTION OF THE LAND LYING BELOW THE ORDINARY HIGH WATER MARK OF UNNAMED POND, AND RIGHTS OF THE GOVERNMENT TO REGULATE THE USE OF THE SHORE AND RIPARIAN RIGHTS. THIS COMMITMENT AND/OR POLICY DOES NOT INSURE THE EXACT LOCATION OF ANY PORTION OF THE LAND CREATED BY GRADUAL BUILDUP OF THE SHORE (ACCRETION) OR THE LOWERING OF THE WATER LEVEL (RELICTION), OR THE TITLE TO LAND CUT OFF BY A CHANGE IN THE COURSE OF THE WATER BODY (AVULSION), OR TO ARTIFICIALLY FILLED LAND.
AFFECTS PROPERTY BY LOCATION – UNABLE TO DETERMINE APPROXIMATE HIGHWATER MARK OR DEFINE A SHORE LINE DUE TO CATTAILS

13 EASEMENT GRANTED TO THE MILWAUKEE ELECTRIC RAILWAY AND LIGHT COMPANY AND OTHER MATTERS CONTAINED IN THE INSTRUMENT RECORDED APRIL 16, 1930 AS DOCUMENT NO. 284052.
FOR POLES, WIRES AND GUYS ALONG S.T.H. "83" – DOES NOT AFFECT

14 EASEMENT GRANTED TO WISCONSIN ELECTRIC POWER COMPANY AND OTHER MATTERS CONTAINED IN THE INSTRUMENT RECORDED SEPTEMBER 5, 1947 AS DOCUMENT NO. 401145.
MAY AFFECT PROPERTY – BLANKET DESCRIPTION CANNOT BE PLOTTED

15 EASEMENT GRANTED TO WISCONSIN NATURAL GAS COMPANY AND OTHER MATTERS CONTAINED IN THE INSTRUMENT RECORDED JANUARY 14, 1982 AS DOCUMENT NO. 75792.
AFFECTS PROPERTY AS PLOTTED HEREON

16 EASEMENTS, RESTRICTIONS AND OTHER MATTERS SHOWN ON CERTIFIED SURVEY MAP NO. 4773 RECORDED APRIL 30, 2018 AS DOCUMENT NO. 965823.
AFFECTS PROPERTY AS PLOTTED HEREON

17 AMENDED AND RESTATED STORM WATER MANAGEMENT AGREEMENT AND OTHER MATTERS CONTAINED IN THE INSTRUMENT RECORDED MAY 25, 2018 AS DOCUMENT NO. 967739, AMENDED BY FIRST AMENDMENT TO AMENDED AND RESTATED STORM WATER MANAGEMENT AGREEMENT RECORDED SEPTEMBER 23, 2021 AS DOCUMENT NO. 1047104.
AFFECTS PROPERTY BY DESCRIPTION – GENERAL IN NATURE, NOTHING PLOTTED

18 DISTRIBUTION EASEMENT OVERHEAD & UNDERGROUND GRANTED TO WISCONSIN ELECTRIC POWER COMPANY, A WISCONSIN CORPORATION DOING BUSINESS AS WE ENERGIES AND OTHER MATTERS CONTAINED IN THE INSTRUMENT RECORDED AUGUST 8, 2019 AS DOCUMENT NO. 992056, CORRECTED BY AFFIDAVIT OF CORRECTION RECORDED APRIL 20, 2020 AS DOCUMENT NO. 1007795.
AFFECTS PROPERTY AS PLOTTED HEREON

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 INCH = 50 FT.

MISCELLANEOUS NOTES

1. THIS SURVEY WAS MADE IN ACCORDANCE WITH LAWS AND/OR MINIMUM STANDARDS OF THE STATE OF WISCONSIN.

2. THE PROPERTY DESCRIBED HEREON (THE "PROPERTY") IS THE SAME AS THE PROPERTY DESCRIBED IN KNIGHT BARRY TITLE GROUP COMMITMENT NO. 2367715, WITH A COMMITMENT DATE: OCTOBER 27, 2025 AT 12:00 AM, LAST REVISED ON OCTOBER 30, 2025 AT 11:05 AM AND THAT ALL EASEMENTS, COVENANTS AND RESTRICTIONS REFERENCED IN SAID TITLE COMMITMENT OR APPARENT FROM A PHYSICAL INSPECTION OF THE PROPERTY OR OTHERWISE KNOWN TO ME HAVE BEEN PLOTTED HEREON OR OTHERWISE NOTED AS TO THEIR EFFECT ON THE PROPERTY.

3. 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. DIGGERS TICKET NO. 20251201704.

4. NO ZONING INFORMATION WAS PROVIDED BY THE CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE AT THE TIME OF SURVEY.

5. THE ABOVE DESCRIBED PROPERTY AS SHOWN HEREON CONTAINS: 625,344 SQUARE FEET OR 14.3559 ACRES.

6. THE TOTAL NUMBER OF STRIPED PARKING SPACES ON THE PROPERTY IS 0

7. 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. 55127C0110E, WITH AN EFFECTIVE DATE OF APRIL 6, 2022, IN COMMUNITY NO. 550485, VILLAGE OF MUKWONAGO, WHICH IS THE COMMUNITY IN WHICH THE SUBJECT PROPERTY IS SITUATED.

8. THERE IS NO OBSERVED EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS ON THE PROPERTY AT TIME OF SURVEY.

9. THERE IS NO INFORMATION AVAILABLE FROM THE VILLAGE OF MUKWONAGO REGARDING PROPOSED CHANGES IN STREET RIGHT OF WAY LINES ADJOINING THE PROPERTY AT THE TIME OF SURVEY.

10. THERE IS OBSERVED EVIDENCE OF DELINEATED WETLANDS EXISTING ON SUBJECT PROPERTY AT TIME OF SURVEY.

11. ALL BEARINGS ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, WALWORTH COUNTY.

12. ELEVATIONS REFER TO THE NORTH AMERICAN DATUM OF 1988 (NAVD88). PROJECT BENCHMARK: A CONCRETE MONUMENT WITH BRASS CAP MARKING THE WEST WITNESS CORNER FOR THE NORTHEAST CORNER OF SECTION 1. TOP/CAP = 847.57

13. SITE BENCHMARKS AS SHOWN HEREON.

14. NO BUILDINGS WERE OBSERVED AT THE TIME OF THE SURVEY

TO; BRIOHN LAND DEVELOPMENT, LLC, A WISCONSIN LIMITED LIABILITY COMPANY, VILLAGE OF MUKWONAGO, FIRST AMERICAN TITLE INSURANCE COMPANY AND KNIGHT BARRY TITLE, INC:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 7(a)(b)(1)(c), 8, 9, 11(a), 13, 16 AND 17 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON NOVEMBER 24, 2025.

NOVEMBER 26, 2025

MICHAEL J. BERRY, P.L.S.
PROFESSIONAL LAND SURVEYOR S-2545

WISCONSIN
MICHAEL J. BERRY
S-2545
BROOKFIELD, WI
LAND SURVEYOR

REVISED: 12/16/25 – ADDED ITEM 15.
REVISED: 12/17/25 – ADD TO CERTIFICATE
REVISED: 1/9/26 – ADD PROPOSED EASEMENT

LEGEND

SAN	SANITARY SEWER	ELECTRIC TRANSFORMER	HYDRANT
ST	STORM SEWER	ELECTRIC METER	WATER VALVE
W	WATER MAIN	ELECTRIC PEDESTAL	GAS VALVE
G	BURIED GAS LINE	ELECTRIC BOX AT GRADE	MANHOLE
TEL	BURIED TELEPHONE LINE	TELEPHONE BOX AT GRADE	STORM MANHOLE
E	BURIED ELECTRIC LINE	TELEPHONE PEDESTAL	CATCH BASIN
FO	BURIED FIBER OPTIC LINE	TV PEDESTAL	CURB INLET
OHU	OVERHEAD UTILITY LINES	GAS METER	METAL LIGHT POLE
CATV	BURIED CABLE TELEVISION LINES	AIR CONDITIONER	CONCRETE LIGHT POLE
COMB	COMBINATION SEWER	UTILITY POLE	WOOD LIGHT POLE
	WOOD FENCE	WOOD SIGN	MAIL BOX
	METAL FENCE	METAL SIGN	FIBER OPTIC MARKER
	EDGE OF TREES AND BRUSH	FLAG POLE	GUY WIRE
994.32 DS	DOOR SILL ELEVATION	BOLLARD	
	FIRE DEPARTMENT CONNECTION	BOLLARD LIGHT	
		YARD LIGHT	

ALTA/NSPS LAND TITLE SURVEY

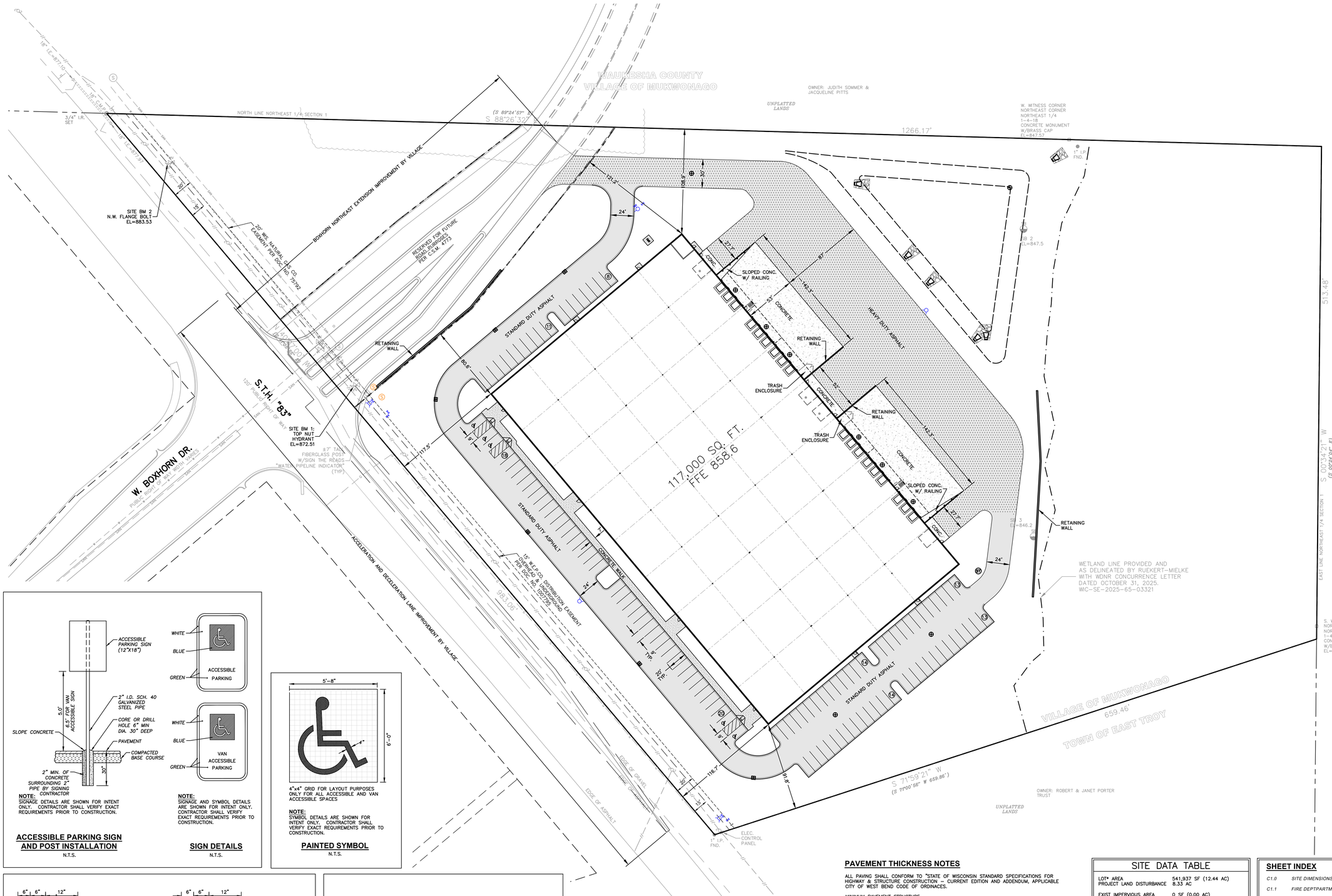
FOR

OUTLOT 3

STATE ROAD "83"
MUKWONAGO, WI

DRAWN BY:	DHS	DATE:	NOV. 26, 2025
CHECKED BY:	MJB	DRAWING NO.	AL - 0
CSE JOB NO.:	25-156	SHEET	1 OF 1

CSE
CAPITOL SURVEY ENTERPRISES
2015 LA CHANDELLE CT.
BROOKFIELD, WI 53045
PH: (262) 786-6600
FAX: (414) 786-6608
WWW.CAPITOLSURVEY.COM



NOTE: SIGNAGE DETAILS ARE SHOWN FOR INTENT ONLY. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS PRIOR TO CONSTRUCTION.

ACCESSIBLE PARKING SIGN AND POST INSTALLATION

N.T.S.

NOTE: SIGNAGE AND SYMBOL DETAILS ARE SHOWN FOR INTENT ONLY. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS PRIOR TO CONSTRUCTION.

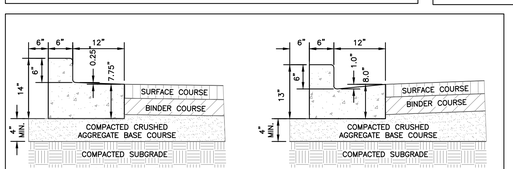
SIGN DETAILS

N.T.S.

NOTE: SYMBOL DETAILS ARE SHOWN FOR INTENT ONLY. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS PRIOR TO CONSTRUCTION.

PAINTED SYMBOL

N.T.S.

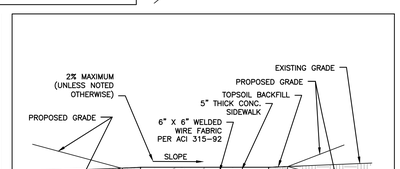


GENERAL NOTES

1. LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15 FEET NOR LESS THAN 6 FEET. THE JOINTS SHALL BE A MINIMUM OF 3 INCHES IN DEPTH
2. EXPANSION JOINTS SHALL BE PLACED TRANSVERSELY AT RADIUS POINTS ON CURVES OF RADIUS 200 FEET OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER OF RECORD. THE EXPANSION JOINT FILLER SHALL BE A ONE PIECE FIBER BOARD OR THE APPROVED EQUIVALENT MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 0.5 INCH THICK.
3. IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE

18" STANDARD CURB & GUTTER

N.T.S.



CONCRETE SIDEWALK

N.T.S.

PAVEMENT THICKNESS NOTES

ALL PAVING SHALL CONFORM TO "STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION – CURRENT EDITION AND ADDENDUM, APPLICABLE CITY OF WEST BEND CODE OF ORDINACES.

MINIMUM PAVEMENT STRUCTURE

CONCRETE PAVEMENT (TRUCK DOCK, APRON ENT.)
- 8" CONCRETE
- 6" CRUSHED AGGREGATE BASE COURSE
  - CLEAN RECYCLED CRUSHED CONCRETE MAY BE USED IF APPROVED BY GEOTECH ENGINEER OF RECORD.

CONCRETE STOOPS
- 5" CONCRETE
- 4" CRUSHED AGGREGATE BASE COURSE
  - CLEAN RECYCLED CRUSHED CONCRETE MAY BE USED IF APPROVED BY GEOTECH ENGINEER OF RECORD.

STANDARD DUTY ASPHALT PAVEMENT
- 3-1/2" ASPHALTIC CONCRETE (2 LIFTS)
  - 1-1/2" SURFACE LAYER
  - 2" BINDER LAYER
- 8" CRUSHED AGGREGATE BASE COURSE
  - CLEAN RECYCLED CRUSHED CONCRETE MAY BE USED IF APPROVED BY GEOTECH ENGINEER OF RECORD.

HEAVY DUTY ASPHALT PAVEMENT
- 4-1/2" ASPHALTIC CONCRETE (2 LIFTS)
  - 2 SURFACE LAYER
  - 2-1/2" BINDER LAYER
- 10" CRUSHED AGGREGATE BASE COURSE
  - CLEAN RECYCLED CRUSHED CONCRETE MAY BE USED IF APPROVED BY GEOTECH ENGINEER OF RECORD.

SITE DATA TABLE

LOT* AREA PROJECT LAND DISTURBANCE	541,937 SF (12.44 AC) 8.33 AC
EXIST IMPERVIOUS AREA	0 SF (0.00 AC)
EXIST PERVIOUS AREA % GREEN SPACE	541,937 SF (9.24 AC) 100%
PROPOSED IMPERVIOUS AREA	234,524 SF (5.38 AC)
BUILDING PAVEMENT	117,000 SF 117,524 SF
PROPOSED PERVIOUS AREA % OF "GREEN" SPACE	307,413 SF (7.06 AC) 56.7%
PROPOSED CAR PARKING STALLS: STANDARD CAR STALLS: ADA ACCESSIBLE STALLS	116 111 5 (5 REQ'D)

*PROJECT PROPERTY: LOT 1 OF A PROPOSED CERTIFIED SURVEY MAP, BEING A REDIVISION OF OUTLOT 3 OF CERTIFIED SURVEY MAP NO. 4773, RECORDED IN WALWORTH COUNTY REGISTER OF DEEDS OFFICE ON APRIL 30, 2018, AS DOCUMENT NO. 965823, LOCATED IN PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 18 EAST, VILLAGE OF MUKWONAGO, WALWORTH COUNTY, WISCONSIN.

SHEET INDEX

C1.0	SITE DIMENSIONS AND PAVEMENT ID PLAN
C1.1	FIRE DEPTPARTMENT EXHIBIT
C2.0	SITE GRADING PLAN
C2.1	SITE EROSION CONTROL PLAN
C3.0	SITE UTILITY PLAN
C4.0	SITE NOTES AND DETAILS
C4.1	SITE NOTES AND DETAILS

THE PROPERTY IS CURENTLY ZONED M-4, MEDIUM/HEAVY INDUSTRIAL DISTRICT. PER VILLAGE OF MUKWONAGO ZONING MAP.

BUILDING SETBACKS CHAP. 100-206(e)(2):

a. Min. street yard setback: 25 ft per 25 ft of greenspace.
b. Min. interior side yard setback: 15 ft per 15 ft of greenspace.
c. Min. rear yard setback: 35 ft per 10 ft of greenspace.

BUILDING SIZE CHAP. 100-206(e)(3):

a. Maximum height:
   1. Principal building: 45 feet.
   2. Accessory building: 15 feet.

BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE: SITE DIMENSIONS AND PLAVEMENT ID PLAN

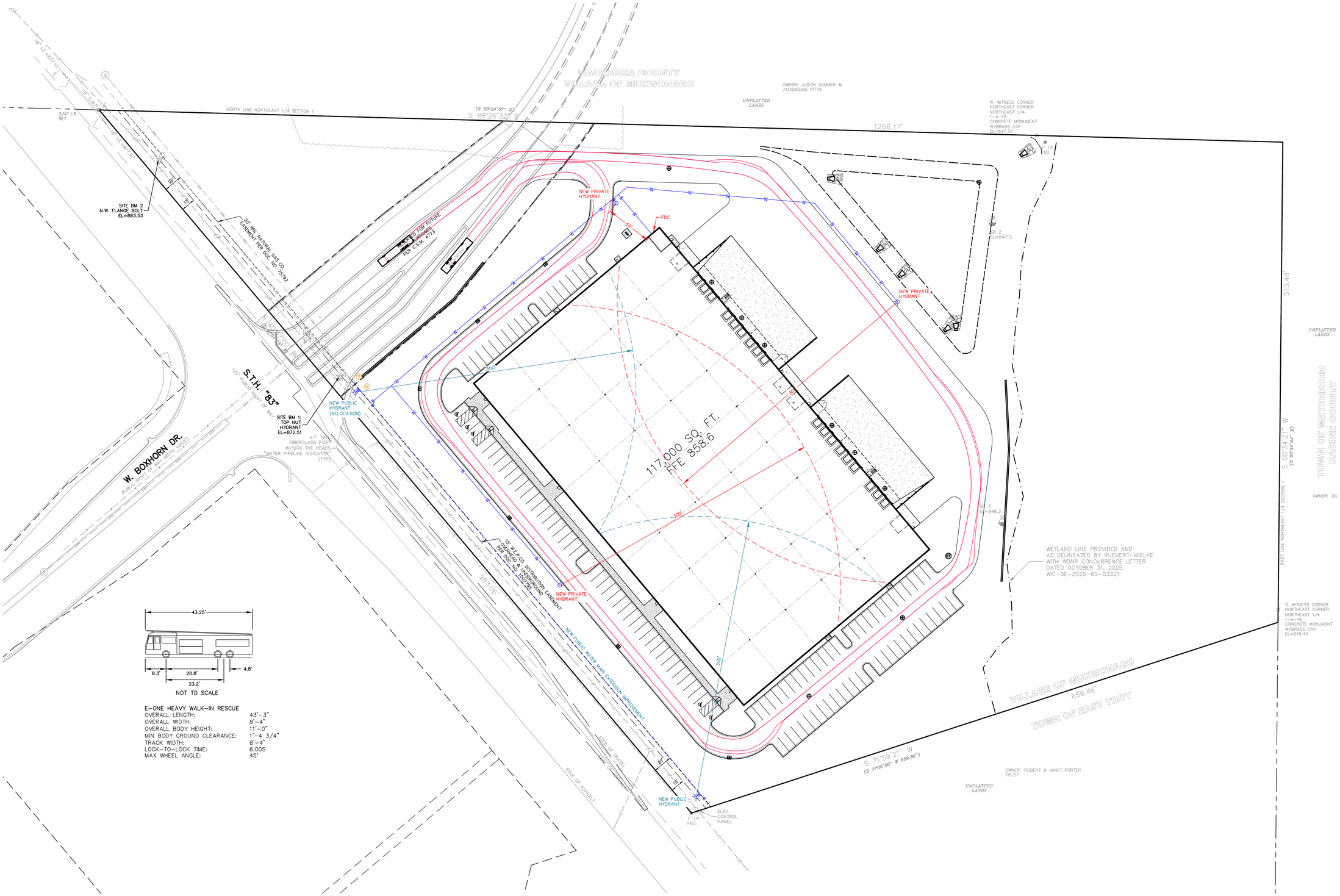
PROPOSED BUILDING FOR:
BLD MUKWONAGO 83 INDUSTRIAL
E. BOXHORN DR./S.T.H "83"
MUKWONAGO, WISCONSIN

Revision	Date

JOB: 250123
DRAWN:
CHECKED:
DATE: 03-27-2026
SHEET: C1.0

DRAFT - NOT FOR CONSTRUCTION

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E-ONE HEAVY WALK-IN RESCUE

OVERALL LENGTH:	43'-3"
OVERALL WIDTH:	8'-4"
OVERALL BODY HEIGHT:	11'-0"
MIN BODY GROUND CLEARANCE:	1'-4 3/4"
TRACK WIDTH:	8'-4"
LOCK-TO-LOCK TIME:	6.00S
MAX WHEEL ANGLE:	45°

BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
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SHEET TITLE
SITE DIMENSIONS AND PLAVEMENT ID PLAN

PROPOSED BUILDING FOR:
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Revision

Date

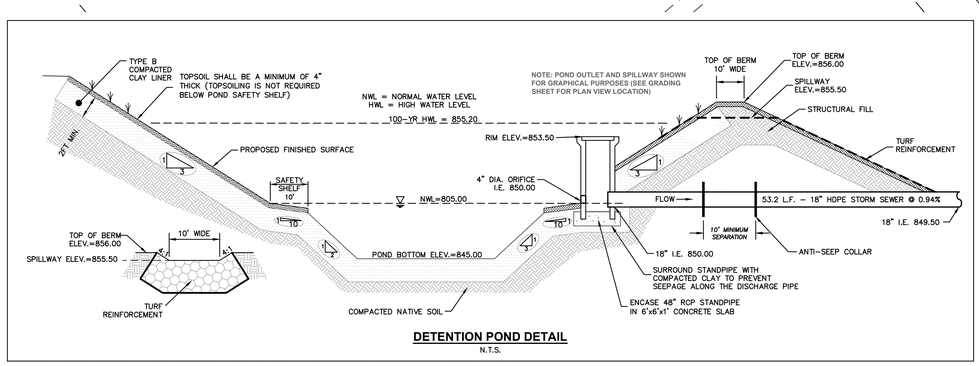
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DATE:	03-27-2026
SHEET:	C1.1

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POND GENERAL NOTES

1. ALL CONSTRUCTION SHALL MEET THE SPECIFICATIONS OF "WDNR WET DETENTION POND TECHNICAL STANDARD 1001".
2. ALL WORK TO BE CONDUCTED IN CONFORMANCE WITH THE STORMWATER MANAGEMENT PLAN FOR THE PROJECT SITE AS APPROVED BY THE REGULATORY ENGINEER OF RECORD.
3. OWNER OR CONTRACTOR MUST CONSULT LANDSCAPE ARCHITECT OR ECOLOGICAL PLANNING AGENCY FOR APPROPRIATE PLANTS AND PLANTING CONFIGURATIONS.
4. CLAY LINER SHALL BE A MINIMUM OF 2-FEET THICK. CLAY SHALL BE COMPACTED AT ±2.0% OPTIMAL MOISTURE CONTENT TO 90% MODIFIED PROCTOR. MEDIUM STIFF TO STIFF CLAYS PRESENT ONSITE MAY BE USED AT THE DISCRETION OF THE GEOTECHNICAL ENGINEER OF RECORD.
5. CONTRACTOR SHALL POSITION ANTI-SEEP COLLARS SUCH THAT THE COLLARS ARE COMPLETELY CONTAINED WITHIN EMBANKMENT.
6. FOR CONSTRUCTED EMBANKMENTS WHERE THE PERMANENT POOL IS PONDED 3FT OR MORE AGAINST THE EMBANKMENT, THERE SHALL BE A CORE TRENCH OR KEYWAY ALONG THE CENTERLINE OF THE EMBANKMENT UP TO THE PERMANENT POOL ELEVATION. THE CORE TRENCH OR KEYWAY SHALL BE A MINIMUM OF 2FT DEEP AND 8FT WIDE WITH A SIDE SLOPE OF 1:1 OR FLATTER.



DETENTION POND DETAIL

N.T.S.

north

SCALE IN FEET

40' 0 40'

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BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE: SITE GRADING PLAN

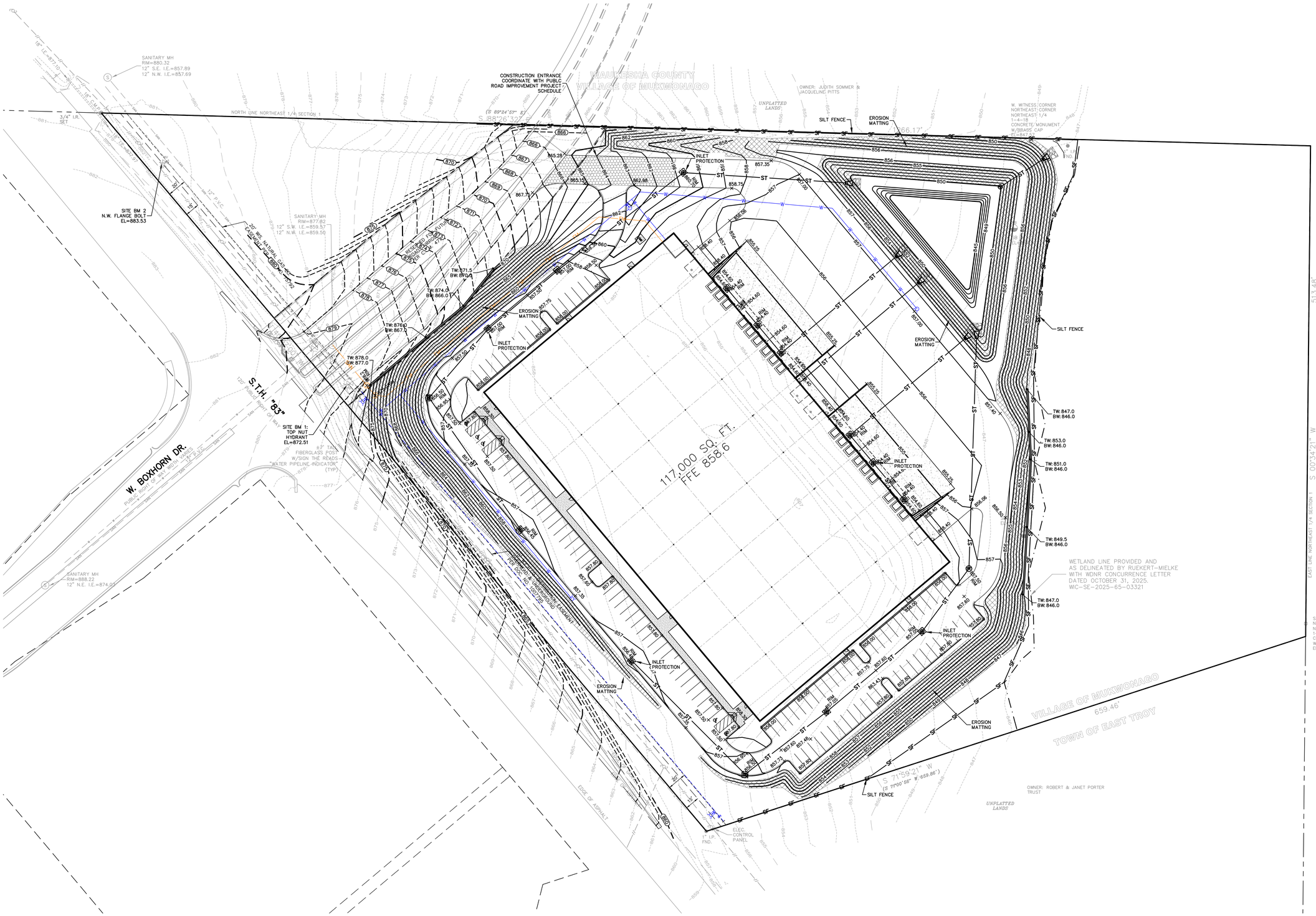
PROPOSED BUILDING FOR:
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E. BOXHORN DR./S.T.H "83"
MUKWONAGO, WISCONSIN

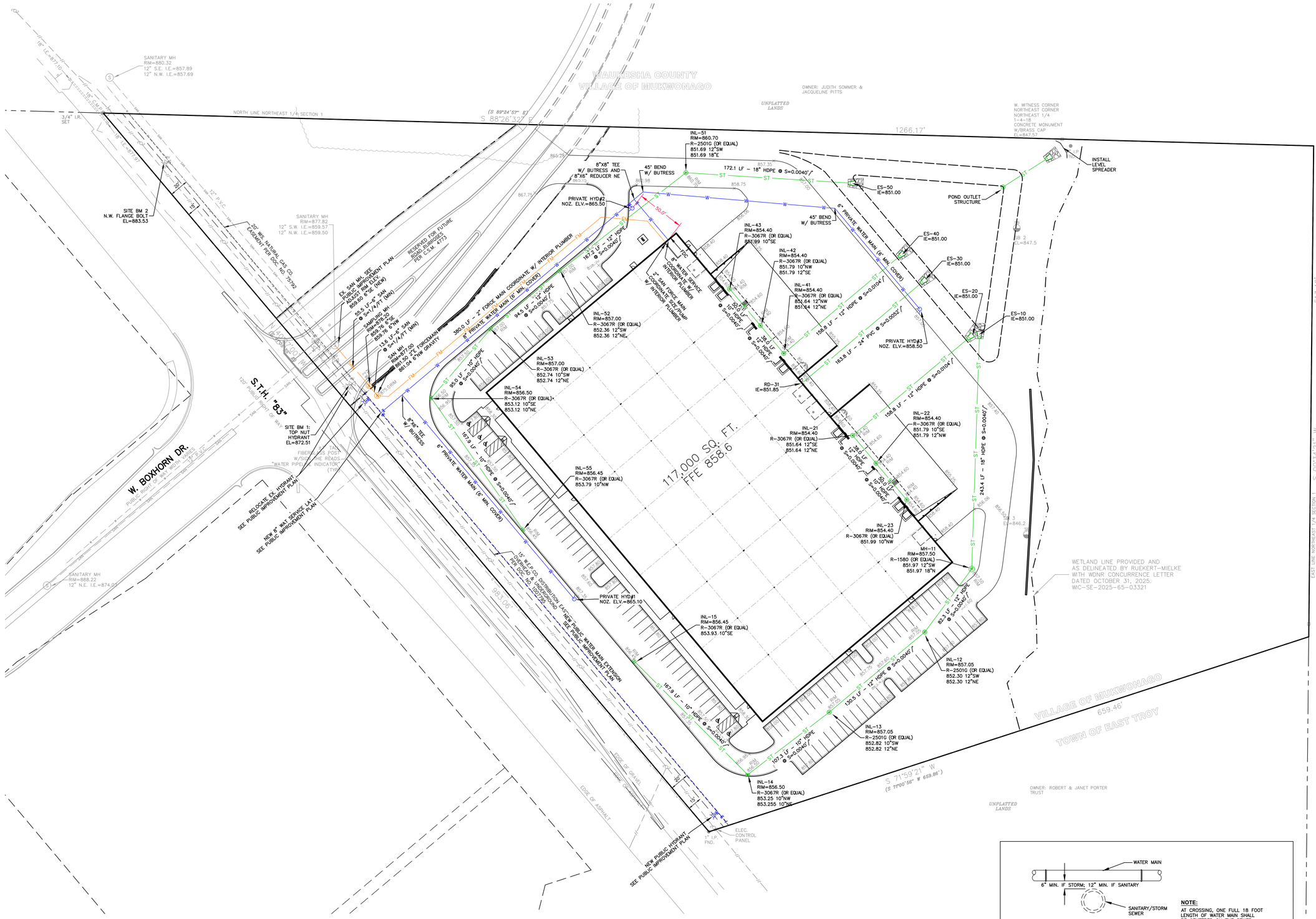
Revision	Date

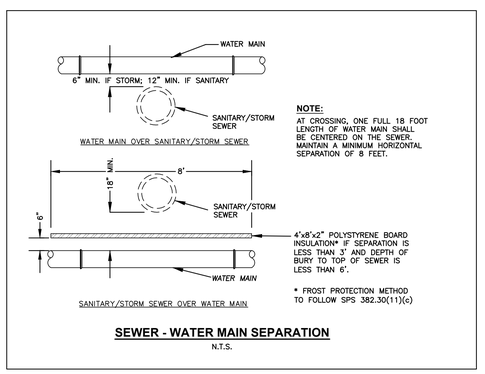
JOB:	250123
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CHECKED:	
DATE:	03-27-2026

SHEET: C2.0

DRAFT - NOT FOR CONSTRUCTION


WAUKESHA COUNTY
VILLAGE OF MUKWONAGO
CONSTRUCTION ENTRANCE COORDINATE WITH PUBLIC ROAD IMPROVEMENT PROJECT SCHEDULE
SILT FENCE
EROSION MATTING
INLET PROTECTION
SITE BM 2
N.W. FLANGE BOLT
EL=883.53
SITE BM 1:
TOP NUT
HYDRANT
EL=872.51
S.T.H. "83"
W. BOXHORN DR.
117,000 SQ. FT.
FFE 858.6
TW: 871.5
BW: 870.0
TW: 874.0
BW: 866.0
TW: 876.0
BW: 867.0
TW: 878.0
BW: 877.0
TW: 847.0
BW: 846.0
TW: 853.0
BW: 846.0
TW: 851.0
BW: 846.0
TW: 849.5
BW: 846.0
TW: 847.0
BW: 846.0
WETLAND LINE PROVIDED AND AS DELINEATED BY RUEKERT-MIELKE WITH WDNR CONCURRENCE LETTER DATED OCTOBER 31, 2025. WIC-SE-2025-65-03321
OWNER: JUDITH SOMMER & JACQUELINE PITTS
OWNER: ROBERT & JANET PORTER TRUST
OWNER: DC PROF
UNPLATTED LANDS
TOWN OF WATERFORD
RACINE COUNTY
VILLAGE OF MUKWONAGO
TOWN OF EAST TROY
S 71°59'21" W
(S 7°00'56" W 659.96')
659.46'
S 00°34'21" W
(S 00°34'04" E)
513.48'
W. WITNESS CORNER NORTHEAST CORNER NORTHEAST 1/4 1-4-18 CONCRETE MONUMENT W/BRASS CAP
S. WITNESS CORNER NORTHEAST CORNER NORTHEAST 1/4 1-4-18 CONCRETE MONUMENT W/BRASS CAP EL=845.40
SANITARY MH RIM=880.32 12" S.E. I.E.=857.89 12" N.W. I.E.=857.69
SANITARY MH RIM=877.82 12" S.W. I.E.=859.57 12" N.W. I.E.=859.50
SANITARY MH RIM=888.22 12" N.E. I.E.=874.03
NORTH LINE NORTHEAST 1/4 SECTION 1
EAST LINE NORTHEAST 1/4 SECTION 1
EDGE OF ASPHALT
ELEC. CONTROL PANEL
1" I.P. FND.
3/4" I.R. SET
FIBERGLASS POST W/SIGN THE READS "WATER PIPELINE INDICATOR" (TYP)
20' WIS. NATURAL GAS EASEMENT DOC. NO. 1007789
PERMANENT EASEMENT FOR PUBLIC ROAD PURPOSES DOC. NO. 1007789
TEMPORARY EASEMENT DOC. NO. 1007789
FUTURE 12" P.V.C.
FUTURE 15" R.C.P.
FUTURE 18" R.C.P.
FUTURE 24" R.C.P.
FUTURE 30" R.C.P.
FUTURE 36" R.C.P.
FUTURE 42" R.C.P.
FUTURE 48" R.C.P.
FUTURE 54" R.C.P.
FUTURE 60" R.C.P.
FUTURE 66" R.C.P.
FUTURE 72" R.C.P.
FUTURE 78" R.C.P.
FUTURE 84" R.C.P.
FUTURE 90" R.C.P.
FUTURE





SEWER - WATER MAIN SEPARATION

N.T.S.

BRIOHN

DESIGN GROUP

3885 N.BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE

SITE UTILITY PLAN

PROPOSED BUILDING FOR:
BLD MUKWONAGO 83 INDUSTRIAL
E. BOXHORN DR./S.T.H "83"
MUKWONAGO, WISCONSIN

Revision

Date

JOB:	250123
DRAWN:	
CHECKED:	
DATE:	03-27-2026
SHEET:	C3.0

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GENERAL NOTES AND SPECIFICATIONS

1. THE INTENTION OF THE PLANS AND SPECIFICATIONS IS TO SET FORTH PERFORMANCE AND CONSTRUCTION MATERIAL STANDARDS FOR THE PROPER EXECUTION OF WORK. ALL WORKS CONTAINED WITHIN THE PLANS AND SPECIFICATIONS SHALL BE COMPLETED IN ACCORDANCE WITH ALL REQUIREMENTS FROM LOCAL, STATE, FEDERAL OR OTHER GOVERNING AGENCY'S LAWS, REGULATIONS, JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., AND THE OWNER'S DIRECTION.

2. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY ADDITIONAL SOILS INVESTIGATIONS THEY FEEL IS NECESSARY FOR THE PROPER EVALUATION OF THE SITE FOR PURPOSES OF PLANNING, BIDDING, OR CONSTRUCTING THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.

3. THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND UNDERSTAND ALL COMPONENTS OF THE PLANS AND SPECIFICATIONS, INCLUDING FIELD VERIFYING SOIL CONDITIONS, PRIOR TO SUBMISSION OF A BID PROPOSAL.

4. THE CONTRACTOR SHALL PROMPTLY REPORT ANY ERRORS OR AMBIGUITIES DISCOVERED AS PART OF THEIR REVIEW OF PLANS, SPECIFICATIONS, REPORTS AND FIELD INVESTIGATIONS.

5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COMPUTATION OF QUANTITIES AND WORK REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR'S BID SHALL BE BASED ON THEIR OWN COMPUTATIONS AND UNDER NO CIRCUMSTANCES BE BASED ON THE ENGINEER'S ESTIMATE.

6. QUESTIONS/CLARIFICATIONS WILL BE INTERPRETED BY ENGINEER/OWNER PRIOR TO THE AWARD OF CONTRACT. ENGINEER/OWNER WILL SUBMIT OFFICIAL RESPONSES IN WRITING. INTERPRETATIONS PRESENTED IN OFFICIAL RESPONSES SHALL BE BINDING ON ALL PARTIES ASSOCIATED WITH THE CONTRACT. IN NO WAY SHALL WORD-OF-MOUTH DIALOG CONSTITUTE AN OFFICIAL RESPONSE.

7. PRIOR TO START OF WORK, CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL CONDITIONS OF THE SITE, AND SHALL ACCOUNT FOR CONDITIONS THAT AFFECT, OR MAY AFFECT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, LIMITATIONS OF WORK ACCESS, SPACE LIMITATIONS, OVERHEAD OBSTRUCTIONS, TRAFFIC PATTERNS, LOCAL REQUIREMENTS, ADJACENT ACTIVITIES, ETC. FAILURE TO CONSIDER SITE CONDITIONS SHALL NOT BE CAUSE FOR CLAIM OF JOB EXTRAS.

8. COMMENCEMENT OF CONSTRUCTION SHALL EXPLICITLY CONFIRM THAT THE CONTRACTOR HAS REVIEWED THE PLANS AND SPECIFICATIONS IN THEIR ENTIRETY AND CERTIFIES THAT THEIR SUBMITTED BID PROPOSAL CONTAINS PROVISIONS TO COMPLETE THE PROJECT, WITH THE EXCEPTION OF UNFORESEEN FIELD CONDITIONS; ALL APPLICABLE PERMITS HAVE BEEN OBTAINED; AND CONTRACTOR UNDERSTANDS ALL OF THE REQUIREMENTS OF THE PROJECT.

9. SHOULD ANY DISCREPANCIES OR CONFLICTS IN THE PLANS OR SPECIFICATIONS BE DISCOVERED AFTER THE AWARD OF CONTRACT, ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY AND CONSTRUCTION OF ITEMS AFFECTED BY THE DISCREPANCIES/CONFLICTS SHALL NOT COMMENCE, OR CONTINUE, UNTIL A WRITTEN RESPONSE FROM ENGINEER/OWNER IS DISTRIBUTED. IN THE EVENT OF A CONFLICT BETWEEN REFERENCED CODES, STANDARDS, SPECIFICATIONS AND PLANS, THE ONE ESTABLISHING THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.

10. THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS AND LICENSES TO COMPLETE THE PROJECT. OBTAINING PERMITS, OR DELAYS IN OBTAINING PERMITS, IS NOT CAUSE FOR DELAY OF THE CONTRACT OR SCHEDULE. CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS.

11. THE CONTRACTOR SHALL NOTIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND "DIGGER'S HOTLINE" IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS. CONTRACTOR IS RESPONSIBLE TO DETERMINE WHICH ORDINANCES/CODES/RULES/ETC. ARE APPLICABLE.

12. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO INITIATE, INSTITUTE, ENFORCE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND JOB SITE SAFETY PROGRAMS IN CONNECTION WITH THE WORK.

13. CONTRACTOR SHALL KEEP THE JOBSITE CLEAN AND ORDERLY AT ALL TIMES. ALL LOCATIONS OF THE SITE SHALL BE KEPT IN A WORKING MANNER SUCH THAT DEBRIS IS REMOVED CONTINUOUSLY AND ALL RESPECTIVE CONTRACTORS OPERATE UNDER GENERAL 'GOOD HOUSEKEEPING.'

14. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, BDG, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.

15. ALL FIELD/DRAIN TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE IMMEDIATELY REPORTED TO ENGINEER/OWNER. TILES ORIGINATING OUTSIDE THE PROJECT LIMITS SHALL BE RECONNECTED OR REROUTED TO MAINTAIN DRAINAGE. ENGINEER/OWNER SHALL DETERMINE THE MOST FAVORABLE METHOD OF RE-ESTABLISHMENT OF OFFSITE DRAINAGE. IF TILE IS ENCOUNTERED DURING TRENCH EXCAVATIONS, RE-ESTABLISHING TILE FUNCTIONALITY SHALL BE CONSIDERED AN INCIDENTAL EXPENSE.

PAVING NOTES

1. ALL PAVING SHALL CONFORM TO "STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION AND APPLICABLE VILLAGE OF MUKWONAGO ORDINANCES.

2. CONCRETE PAVING SPECIFICATIONS–

   CODES AND STANDARDS – THE PLACING, CONSTRUCTION AND COMPOSITION OF THE CONCRETE PAVEMENT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 415 AND 416 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION. HEREAFTER, THIS PUBLICATION WILL BE REFERRED TO AS STATE HIGHWAY SPECIFICATIONS.

   CRUSHED AGGREGATE BASE COURSE – THE BASE COURSE SHALL CONFORM TO SECTIONS 301 AND 305, STATE HIGHWAY SPECIFICATIONS. CLEAN RECYCLED CRUSHED CONCRETE MAY BE USED IF APPROVED BY GEOTECH ENGINEER OF RECORD.

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

3. ASPHALTIC CONCRETE PAVING SPECIFICATIONS–

   CODES AND STANDARDS – THE PLACING, CONSTRUCTION AND COMPOSITION OF THE ASPHALTIC BASE COURSE AND ASPHALTIC CONCRETE SURFACING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 450, 455, 460 AND 465 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, EDITION OF 2005. HEREAFTER, THIS PUBLICATION WILL BE REFERRED TO AS STATE HIGHWAY SPECIFICATIONS.

   WEATHER LIMITATIONS – APPLY TACK COATS WHEN AMBIENT TEMPERATURE IS ABOVE 50° F (10° C) AND WHEN TEMPERATURE HAS NOT BEEN BELOW 35° F (1° C) FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION. DO NOT APPLY WHEN BASE IS WET OR CONTAINS EXCESS AMOUNTS OF MOISTURE. CONSTRUCT ASPHALTIC CONCRETE SURFACE COURSE WHEN ATMOSPHERIC TEMPERATURE IS ABOVE 40° F (4° C) AND WHEN BASE IS DRY AND WHEN WEATHER IS NOT RAINY. BASE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30° F (–1° C).

   GRADE CONTROL – ESTABLISH AND MAINTAIN REQUIRED LINES AND ELEVATIONS FOR EACH COURSE DURING CONSTRUCTION.

   CRUSHED AGGREGATE BASE COURSE – THE TOP LAYER OF BASE COURSE SHALL CONFORM TO SECTIONS 301 AND 305, STATE HIGHWAY SPECIFICATIONS. CLEAN RECYCLED CRUSHED CONCRETE MAY BE USED IF APPROVED BY GEOTECH ENGINEER OF RECORD.

   BINDER COURSE AGGREGATE – THE AGGREGATE FOR THE BINDER COURSE SHALL CONFORM TO SECTIONS 460.2.7 AND 315, STATE HIGHWAY SPECIFICATIONS.

   SURFACE COURSE AGGREGATE – THE AGGREGATE FOR THE SURFACE COURSE SHALL CONFORM TO SECTIONS 460.2.7 AND 465, STATE HIGHWAY SPECIFICATIONS.

   ASPHALTIC MATERIALS – THE ASPHALTIC MATERIALS SHALL CONFORM TO SECTION 455 AND 460, STATE HIGHWAY SPECIFICATIONS.

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

PAVEMENT STRIPING NOTES

1. CONTRACTOR SHALL CONSULT STRIPING COLOR WITH OWNER PRIOR TO CONSTRUCTION.
2. PROVIDE CONTRACTOR GRADE ACRYLIC, STRIPING PAINT FOR NEW ASPHALT OR COATED ASPHALT. ALL STRIPING SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. THOROUGHLY CLEAN SURFACES FREE OF DIRT, SAND, GRAVEL, OIL AND OTHER FOREIGN MATTER. CONTRACTOR RESPONSIBLE TO INSPECT PAVEMENT SURFACES FOR CONDITIONS AND DEFECTS THAT WILL ADVERSELY AFFECT QUALITY OF WORK, AND WHICH CANNOT BE PUT INTO AN ACCEPTABLE CONDITION THROUGH NORMAL PREPARATORY WORK AS SPECIFIED.
4. DO NOT PLACE MARKING OVER UNSOUND PAVEMENTS. IF THESE CONDITIONS EXIST, NOTIFY OWNER. STARTING INSTALLATION CONSTITUTES CONTRACTOR'S ACCEPTANCE OF SURFACE AS SUITABLE FOR INSTALLATION.
5. LAYOUT MARKINGS USING GUIDE LINES, TEMPLATES AND FORMS. STENCILS AND TEMPLATES SHALL BE PROFESSIONALLY MADE TO INDUSTRY STANDARDS. "FREE HAND" PAINTING OF ARROWS, SYMBOLS, OR WORDING SHALL NOT BE ALLOWED. APPLY STRIPES STRAIGHT AND EVEN.
6. PROTECT ADJACENT CURBS, WALKS, FENCES, AND OTHER ITEMS FROM RECEIVING PAINT.
7. APPLY MARKING PAINT AT A RATE OF ONE (1) GALLON PER THREE TO FOUR HUNDRED (300–400) LINEAL FEET OF FOUR (4) INCH WIDE STRIPES. (OR TO MFG. SPECIFICATIONS)
8. BARRICADE MARKED AREAS DURING INSTALLATION AND UNTIL THE MARKING PAINT IS DRIED AND READY FOR TRAFFIC.
9. ALL HANDICAPPED ACCESSIBLE PARKING SHALL BE LOCATED PER 2009 IBC 1106.6

CONSTRUCTION SITE SEQUENCING

1. INSTALL PERIMETER SILT FENCE, EXISTING INLET PROTECTION, AND TEMPORARY CONSTRUCTION ENTRANCE.
2. STRIP AND STOCKPILE TOPSOIL, INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE.
3. CONDUCT GRADING FOR POND AS TEMPORARY SEDIMENT TRAP. INSTALL DIVERSION BERM.
4. CONDUCT ROUGH GRADING EFFORTS.
5. INSTALL UTILITY PIPING AND STRUCTURES, IMMEDIATELY INSTALL INLET PROTECTION.
6. COMPLETE FINAL GRADING, INSTALLATION OF GRAVEL BASE COURSES, PLACEMENT OF CURBS, PAVEMENTS, WALKS, ETC.
7. REMOVE TRAPPED SEDIMENT FROM ROUGH GRADING IN POND, IF NEEDED.
8. PLACE TOPSOIL AND IMMEDIATELY STABILIZE DISTURBED AREAS WITH EROSION CONTROLS.
9. EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER THAT MEETS OR EXCEEDS THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES DEFINITION OF 'FINAL STABILIZATION'.

   CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM 1 AS NEEDED TO COMPLETE CONSTRUCTION IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS.

EROSION AND SEDIMENT CONTROL NOTES:

1. ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN WISCONSIN'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) TECHNICAL STANDARDS (REFERRED TO AS BMP'S) AND VILLAGE OF MUKWONAGO ORDINANCE. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMP'S). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF, AND UNDERSTAND, THE BMP'S PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
2. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL CONTROL MEASURES AS DIRECTED BY BRIOHN DESIGN GROUP (BDG) OR GOVERNING AGENCIES SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
3. MODIFICATIONS TO THE APPROVED EROSION CONTROL PLAN IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMP'S. ALL MODIFICATIONS MUST BE APPROVED BY BDG/MUNICIPALITY PRIOR TO DEVIATION OF THE APPROVED PLAN.
4. INSTALL PERIMETER EROSION CONTROL MEASURES (SUCH AS CONSTRUCTION ENTRANCES, SILT FENCE AND EXISTING INLET PROTECTION) PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE COVER, AS SHOWN ON PLAN IN ORDER TO PROTECT ADJACENT PROPERTIES/STORM SEWER SYSTEMS FROM SEDIMENT TRANSPORT.
5. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL LOCATIONS OF VEHICLE INGRESS/EGRESS POINTS. CONTRACTOR IS RESPONSIBLE TO COORDINATE LOCATION(S) WITH THE PROPER AUTHORITIES, PROVIDE NECESSARY FEES AND OBTAIN ALL REQUIRED APPROVALS OR PERMITS. ADDITIONAL CONSTRUCTION ENTRANCES OTHER THAN AS SHOWN ON THE PLANS MUST BE PRIOR APPROVED BY THE APPLICABLE GOVERNING AGENCIES PRIOR TO INSTALLATION.
6. PAVED SURFACES ADJACENT TO CONSTRUCTION ENTRANCES SHALL BE SWEPT AND/OR SCRAPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR DUST AFTER THE END OF EACH WORK DAY AND AS REQUESTED BY THE GOVERNING AGENCIES.
7. ALL EXISTING STORM SEWER FACILITIES THAT WILL COLLECT RUNOFF FROM DISTURBED AREAS SHALL BE PROTECTED TO PREVENT SEDIMENT DEPOSITION WITHIN STORM SEWER SYSTEMS. INLET PROTECTION SHALL BE IMMEDIATELY FITTED AT THE INLET OF ALL INSTALLED STORM SEWER INLETS, STRUCTURES, PIPES, AND SWALES SHALL BE KEPT CLEAN AND FREE OF SEDIMENTATION AND DEBRIS.
8. EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, SANITARY SEWER, WATER MAIN, ETC.) OUTSIDE OF THE PUBLIC RIGHT-OF-WAYS SHALL INCORPORATE THE FOLLOWING:
   - PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
   - BACKFILL, COMPACT, AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
   - DISCHARGE TRENCH WATER INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH BMP'S PRIOR TO RELEASE INTO STORM SEWER OR DITCHES.
9. AT A MINIMUM, SEDIMENT BASINS AND NECESSARY TEMPORARY DRAINAGE PROVISIONS SHALL BE CONSTRUCTED AND OPERATIONAL BEFORE BEGINNING OF SIGNIFICANT MASS GRADING OPERATIONS TO PREVENT OFFSITE DISCHARGE OF UNTREATED RUNOFF.
10. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR INSPECTION AND REPAIR DURING CONSTRUCTION. THE OWNER WILL BE RESPONSIBLE IF EROSION CONTROL IS REQUIRED AFTER THE CONTRACTOR HAS COMPLETED THE PROJECT.
11. TOPSOIL STOCKPILES SHALL HAVE A BERM OR TRENCH AROUND THE CIRCUMFERENCE AND PERIMETER SILT FENCE TO CONTROL SILT. IF TOPSOIL STOCKPILE REMAINS UNDISTURBED FOR MORE THAN SEVEN (7) DAYS, TEMPORARY SEEDING AND STABILIZATION IS REQUIRED.
12. EROSION CONTROL MEASURES TEMPORARILY REMOVED FOR UNAVOIDABLE CONSTRUCTION ACTIVITIES SHALL BE IN WORKING ORDER PRIOR TO THE COMPLETION OF EACH WORK DAY.
13. MAINTAIN SOIL EROSION CONTROL DEVICES THROUGH THE DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCES ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.
14. PUMPS MAY BE USED AS BYPASS DEVICES. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS.
15. GRADING EFFORTS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. EROSION AND SEDIMENT CONTROL MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES. AREAS THAT WILL NOT BE WORKED FOR A PERIOD OF THIRTY (30) DAYS REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH TECHNICAL STANDARDS.
16. ALL DISTURBED SLOPES EXCEEDING 4:1 YET LESS THAN 3:1, SHALL BE STABILIZED WITH NORTH AMERICAN GREEN S75BN EROSION MATTING (OR APPROVED EQUAL) AND ALL SLOPES EXCEEDING 3:1 YET LESS THAN 2:1 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN C125BN (OR APPROVED EQUAL) OR APPLICATION OF AN APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. EROSION MATTING AND/OR NETTING USED ONSITE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
17. DURING PERIODS OF EXTENDED DRY WEATHER, THE CONTRACTOR SHALL KEEP A WATER TRUCK ON SITE FOR THE PURPOSE OF WATERING DOWN SOILS WHICH MAY OTHERWISE BECOME AIRBORNE. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING WIND EROSION (DUST) DURING CONSTRUCTION AT HIS/HER EXPENSE.
18. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE VISUALLY INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM ON A DAILY BASIS.
19. QUALIFIED PERSONNEL (PROVIDED BY THE GENERAL/PRIME CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL 0.5-INCH, OR MORE, PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERVAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT. REPORTING SHALL BE IN ACCORDANCE WITH PART IV D.4. (a–f). OF THE NPDES GENERAL PERMIT. CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
20. THE FOLLOWING MAINTENANCE PRACTICES SHALL BE USED TO MAINTAIN, IN GOOD AND EFFECTIVE OPERATING CONDITIONS, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES, AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN. UPON IDENTIFICATION, DEFICIENCIES IN STORMWATER CONTROLS SHALL BE ADDRESSED IMMEDIATELY. THE MAINTENANCE PROCEDURES FOR THIS DEVELOPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO THE BELOW.

   - SILT FENCE – REPAIR OR REPLACE ANY DAMAGED FILTER FABRIC AND/OR STAKES. REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE ABOVE GROUND HEIGHT OF THE FENCE.
   - CONSTRUCTION ENTRANCE – AS NEEDED, ADD STONE TO MAINTAIN CONSTRUCTION ENTRANCE DIMENSIONS AND EFFECTIVENESS.
   - DITCH CHECK (STRAW BALES) – RE-SECURE STAKES; ADJUST OR REPOSITION BALES TO ADDRESS PROPER FLOW OF STORMWATER; AND REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE HEIGHT OF THE BALE.
   - EROSION CONTROL MATTING – REPAIR MATTING IMMEDIATELY IF INSPECTION REVEALS BREACHED OR FAILED CONDITIONS. REPAIR AND RE-GRADE SOIL WHERE CHANNELIZATION HAS OCCURRED.
   - DIVERSION BERM/SWALE – REPLACE OR RE-COMPACT THE CONSTRUCTION MATERIALS AS NECESSARY.
   - INLET PROTECTION – CLEAN, REPAIR OR REPLACE FILTER FABRIC AND/OR STONE WHEN CONTROL MEASURE IS CLOGGED. INLET FILTER BAGS SHALL BE REPLACED ONCE BAG BECOMES ONE-HALF FULL OF SEDIMENT.

   ADDITIONAL POLLUTANT CONTROL MEASURES TO BE IMPLEMENTED DURING CONSTRUCTION ACTIVITIES SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING.

   - CONSTRUCTION WASTE SHALL BE PROPERLY DISPOSED OF. THIS INCLUDES ALL CONSTRUCTION SITE WASTE MATERIAL, SANITARY WASTE, AND WASTE FROM VEHICLE TRACKING OF SEDIMENTS. THE CONTRACTOR SHALL ENSURE THAT NO MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, BURNED, OR DISCHARGED TO THE WATERS OF THE STATE. VEHICLES HAULING MATERIAL AWAY FROM THE SITE SHALL BE COVERED WITH A TARPAULIN TO PREVENT BLOWING DEBRIS.
   - DUST CONTROL SHALL BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING METHODS:
     - A. COVERING 30% OR MORE OF THE SOIL SURFACE WITH A NON-ERODIBLE MATERIAL.
     - B. ROUGHENING THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND. RIDGES SHALL BE AT LEAST SIX (6) INCHES IN HEIGHT.
     - C. FREQUENT WATERING OF EXCAVATION AND FILL AREAS.
     - D. PROVIDING GRAVEL OR PAVING AT ENTRANCE/EXIT DRIVES, PARKING AREAS AND TRANSIT PATHS.
   - STREET SWEEPING SHALL BE PERFORMED TO IMMEDIATELY REMOVE ANY SEDIMENT TRACKED ON PAVEMENTS.

UTILITY NOTES

1. EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY FOR PROPOSED UTILITY CONNECTIONS AND/OR TO AVOID DAMAGE THERETO. CONTRACTOR SHALL CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.
2. ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN (WISCONSIN LATEST EDITION AND ADDENDUM) 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.
3. UTILITY CONSTRUCTION AND SPECIFICATIONS SHALL COMPLY WITH THE VILLAGE OF MUKWONAGO PROVISIONS AND WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES DSPS 382.
4. TRACER WIRES SHALL BE INSTALLED AS NECESSARY IN ACCORD WITH 182.0715(2R) OF THE STATE STATUTES AND VILLAGE OF MUKWONAGO REQUIREMENTS.
5. LENGTHS OF PROPOSED UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLAN. LENGTHS ARE SHOWN FOR CONTRACTOR CONVENIENCE ONLY. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPUTATIONS OF MATERIALS REQUIRED TO COMPLETE WORK. LENGTHS SHALL BE FIELD VERIFIED DURING CONSTRUCTION.
6. CONTRACTOR SHALL ADJUST AND/OR RECONSTRUCT EXISTING UTILITY COVERS (SUCH AS MANHOLE COVERS, VALVE BOX COVERS, ETC.) TO MATCH FINISHED GRADES OF THE AREAS DISTURBED DURING CONSTRUCTION.
7. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS, AND SIZES OF PROPOSED UTILITIES AND CHECK ALL UTILITY CROSSINGS FOR CONFLICTS PRIOR TO ATTEMPTING CONNECTIONS AND BEGINNING UTILITY CONSTRUCTION.
8. STORM SEWER SPECIFICATIONS –

   PIPE – REINFORCED CONCRETE PIPE (RCP) SHALL MEET THE REQUIREMENTS OF ASTM CLASS IV (MINIMUM) C-76 WITH RUBBER GASKET JOINTS CONFORMING TO ASTM C-443; HIGH DENSITY DUAL-WALL POLYETHYLENE N-12 CORRUGATED PIPE (HDPE) SHALL BE AS MANUFACTURED BY ADS OR EQUAL WITH WATER TIGHT JOINTS, AND SHALL MEET THE REQUIREMENTS OF AASHTO DESIGNATION M-294 TYPE "S", OR POLYVINYL CHLORIDE (PVC) – CLASS PS46 MEETING AASHTO M278, AS NOTED.

   INLETS/CATCH BASINS – INLETS/CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FILE NO. 25 OF THE "STANDARD SPECIFICATIONS" WITH A 1'–8" X 2'–6" MAXIMUM OPENING. FRAME & GRATE SHALL BE NEENAH R–2080 WITH TYPE A GRATE, OR EQUAL. CURB FRAME & GRATE SHALL BE NEENAH R–3067, OR EQUAL.

   BACKFILL AND BEDDING – STORM SEWER SHALL BE CONSTRUCTED WITH GRAVEL BACKFILL AND CLASS "B" BEDDING 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".

   MANHOLE FRAMES AND COVERS – MANHOLE FRAMES AND COVERS SHALL BE NEENAH R–1642 WITH TYPE "B" SELF SEALING LIDS, NON–ROCKING OR EQUAL .

   FIELD TILE CONNECTION – ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE INCLUDED IN THE UNIT PRICE(S) FOR STORM SEWER. TILE LINES CROSSED BY THE TRENCH SHALL BE REPLACED WITH THE SAME MATERIAL AS THE STORM SEWER.
9. WATER MAIN SPECIFICATIONS –

   PIPE – WATER MAIN SHALL BE POLYVINYL CHLORIDE (PVC) PIPE MEETING THE REQUIREMENTS OF AWWA STANDARD C–900, CLASS 150, DR–18, WITH CAST IRON O.D. AND INTEGRAL ELASTOMERIC BELL AND SPIGOT JOINTS. 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.

   10–GAUGE TRACER WIRE SHALL BE INSTALLED ALONG THE ENTIRE LENGTH OF ALL PRIVATE WATER MAINS, HYDRANT LEADS, FIRE DEPARTMENT CONNECTION LEADS AND LATERALS. THE TRACER WIRE SHALL BE EXTENDED TO THE SURFACE AT THE BUILDING WALL AND ALL OTHER SYSTEM LIMITS AND ENCLOSED IN RISER BOX WITH 'WATER' ON THE COVER.

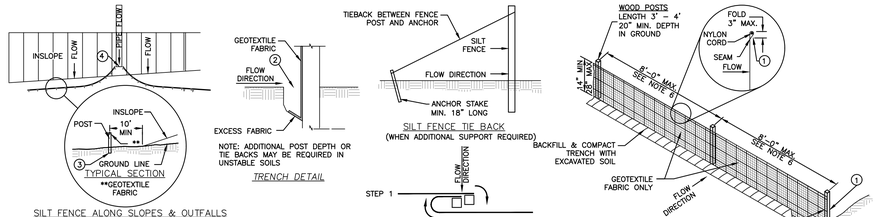
   HYDRANTS – HYDRANTS SHALL CONFORM TO THE SPECIFICATIONS OF THE VILLAGE OF MUKWONAGO AND IN ACCORDANCE WITH AWWA NO. 38 OF THE "STANDARD SPECIFICATIONS." THE DISTANCE FROM THE GROUND LINE TO THE CENTERLINE OF THE LOWEST NOZZLE AND THE LOWEST CONNECTION OF THE FIRE DEPARTMENT SHALL BE NO LESS THAN 18–INCHES AND NO GREATER THAN 23–INCHES.

   VALVES AND FITTINGS – VALVES AND FITTINGS INSTALLED WITHIN THE ROADWAY RIGHT OF WAY SHALL CONFORM TO THE CITY SPECIFICATIONS FOR TYPE AND MANUFACTURER. .

   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 – BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE WITH CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS". SLURRY BACKFILL REQUIRED FOR AREAS UNDER THE PUBLIC PAVEMENT AND CURB. 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".
10. SANITARY SEWER SPECIFICATIONS –

    PIPE – SANITARY SEWER P

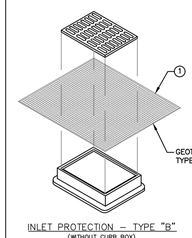


SILT FENCE ALONG SLOPES & OUTFALLS

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 DETAIL
N.T.S.

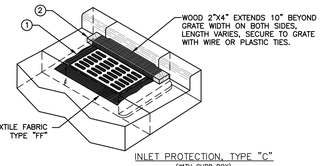


INLET PROTECTION – TYPE "B"
(WITHOUT CURB BOX)

TYPE "B" INSTALLATION NOTES

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.



INLET PROTECTION, TYPE "C"
(WITH CURB BOX)

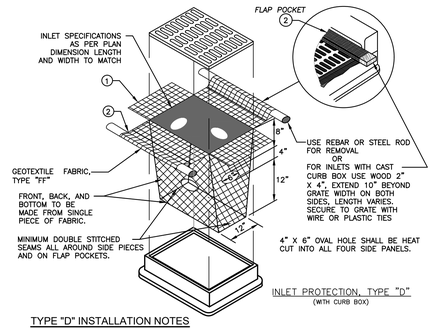
GENERAL NOTES

1. TYPE "FF" GEOTEXTILE FABRIC INLET PROTECTION SHALL BE SELECTED FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S PRODUCT ACCEPTABILITY (PAL) LIST. FABRIC INLET PROTECTION AND MANUFACTURED ALTERNATIVES SHALL BE IN COMPLIANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARD 1060.
2. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE 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 POCKET WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

(2) FOR INLET PROTECTION, TYPE "C" (WITH CURB BOX), AN ADDITIONAL 18 INCHES 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) FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.

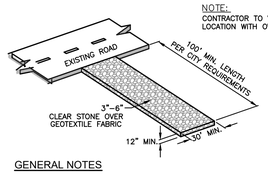


INLET PROTECTION, TYPE "D"
(WITH CURB BOX)

TYPE "D" INSTALLATION NOTES

1. 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.
2. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE GRATE.
3. 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.

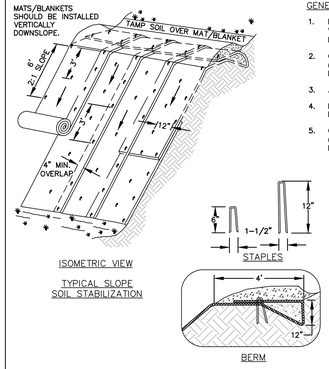
INLET PROTECTION
N.T.S.



GENERAL NOTES

1. TRACKING PADS SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE SITE.
2. THE AGGREGATE FOR TRACKING PADS SHALL BE 3 TO 6–INCH CLEAR OR WASHED STONE. ALL MATERIAL TO BE RETAINED ON A 3–INCH SIEVE.
3. THE AGGREGATE SHALL BE PLACED IN A LAYER AT LEAST 12–INCHES THICK. ON SITES WHERE SATURATED CONDITIONS ARE EXPECTED DURING THE LIFE OF THE PAD, THE PAD SHALL BE UNDERLAIN WITH WisDOT TYPE "R" GEOTEXTILE FABRIC TO PREVENT MIGRATION OF UNDERLYING SOILS INTO THE STONE LAYER.
4. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT. THE TRACKING PAD SHALL BE A MINIMUM 100–FEET LONG.
5. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, AT THE END OF EACH WORKING DAY.
6. TRACKING PADS SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24–HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5–INCHES OF RAIN OR MORE DURING A 24–HOUR PERIOD.
7. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED BY SCRAPING OR TOP–DRESSING WITH ADDITIONAL AGGREGATE.

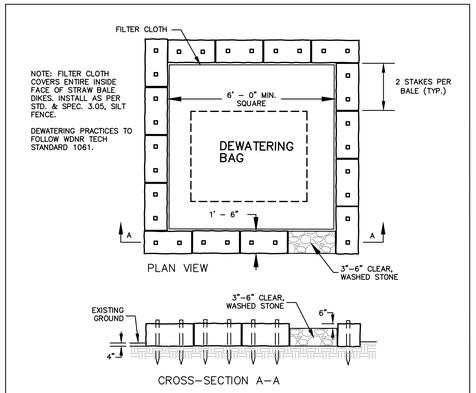
CONSTRUCTION ENTRANCE
N.T.S.



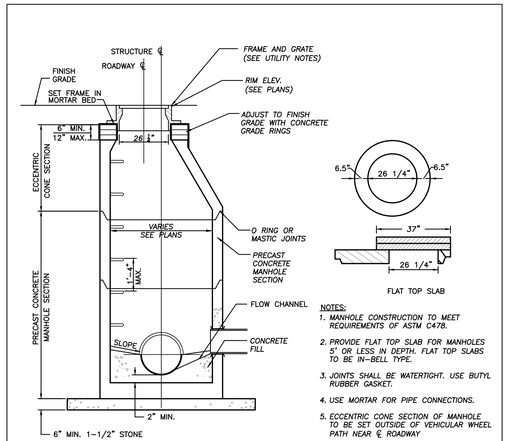
GENERAL NOTES:

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.

EROSION MATTING
N.T.S.

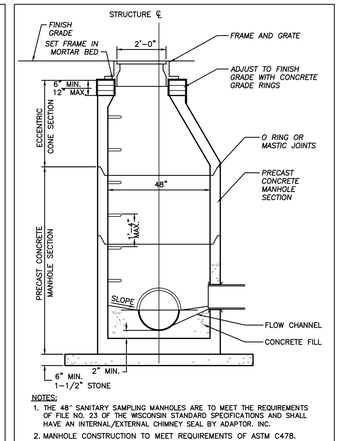


HAY BALE SEDIMENT DEWATERING PIT
N.T.S.



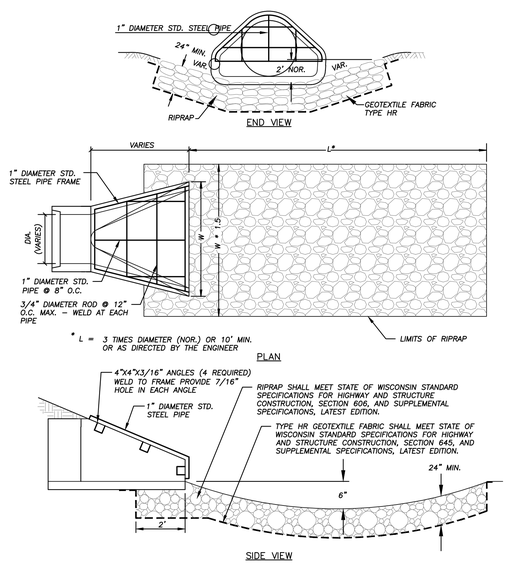
NOTES:
1. MANHOLE CONSTRUCTION TO MEET REQUIREMENTS OF ASTM C478.
2. PROVIDE FLAT TOP SLAB FOR MANHOLES 5' OR LESS IN DEPTH. FLAT TOP SLABS TO BE IN–BELL TYPE.
3. JOINTS SHALL BE WATERTIGHT. USE BUTYL RUBBER GASKET.
4. USE MORTAR FOR PIPE CONNECTIONS.
5. ECCENTRIC CONE SECTION OF MANHOLE TO BE SET OUTSIDE OF VEHICULAR WHEEL PATH NEAR ℄ ROADWAY

STANDARD STORM INLET/MH DETAIL
N.T.S.

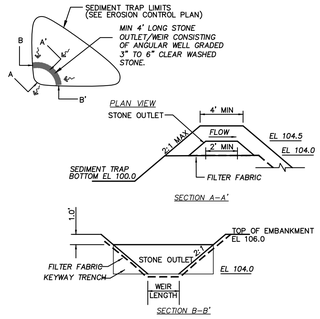


NOTES:
1. THE 48" SANITARY SAMPLING MANHOLES ARE TO MEET THE REQUIREMENTS OF FILE NO. 23 OF THE WISCONSIN STANDARD SPECIFICATIONS AND SHALL HAVE AN INTERNAL/EXTERNAL CHIMNEY SEAL BY ADAPTOR, INC.
2. MANHOLE CONSTRUCTION TO MEET REQUIREMENTS OF ASTM C478.
3. JOINTS SHALL BE WATERTIGHT. USE BUTYL RUBBER GASKET.
4. USE MORTAR FOR PIPE CONNECTIONS.

STANDARD SANITARY MH DETAIL
N.T.S.



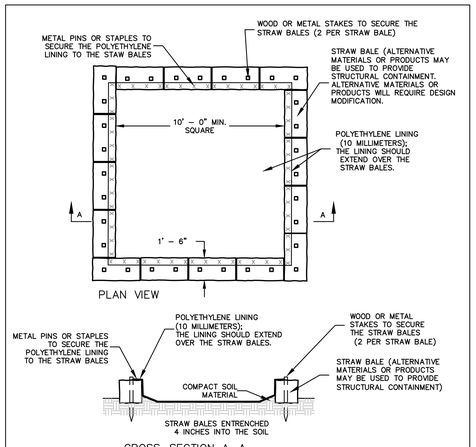
APRON ENDWALL WITH GRATE
N.T.S.



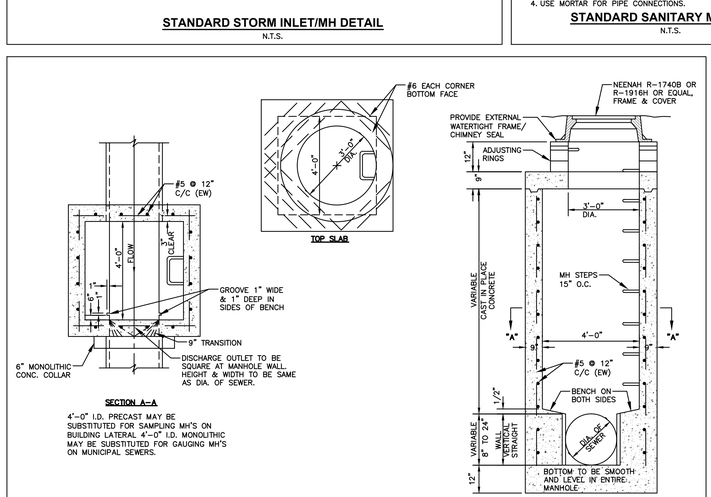
GENERAL NOTES

1. SEDIMENT TRAP SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1063.
2. SIDE SLOPES SHALL BE STABILIZED AS SOON AS THEY ARE CONSTRUCTED.
3. IF THE OUTLET BECOMES CLOGGED IT SHALL BE CLEANED TO RESTORE FLOW CAPACITY.
4. THE DEPTH OF THE SEDIMENT TRAP FROM THE BOTTOM OF THE TRAP TO THE INVERT OF THE STONE OUTLET SHALL BE AT LEAST 3 FEET.
5. THE SEDIMENT TRAP SHALL HAVE A LENGTH TO WIDTH RATIO OF AT LEAST 2:1. SIDE SLOPES SHALL BE NO STEEPER THAN 2:1
6. MAINTENANCE SHALL BE COMPLETED AS SOON AS POSSIBLE WITH CONSIDERATION TO SITE CONDITIONS. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF ONE FOOT
7. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF WDNR TS 1056.

SEDIMENT TRAP
N.T.S.



CONCRETE WASHOUT STATION
N.T.S.



SAMPLING AND GAUGING MANHOLE
N.T.S.

REV. 12–6–2018

BRIOHN
DESIGN GROUP
3885 N.BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
SITE NOTES AND DETAILS

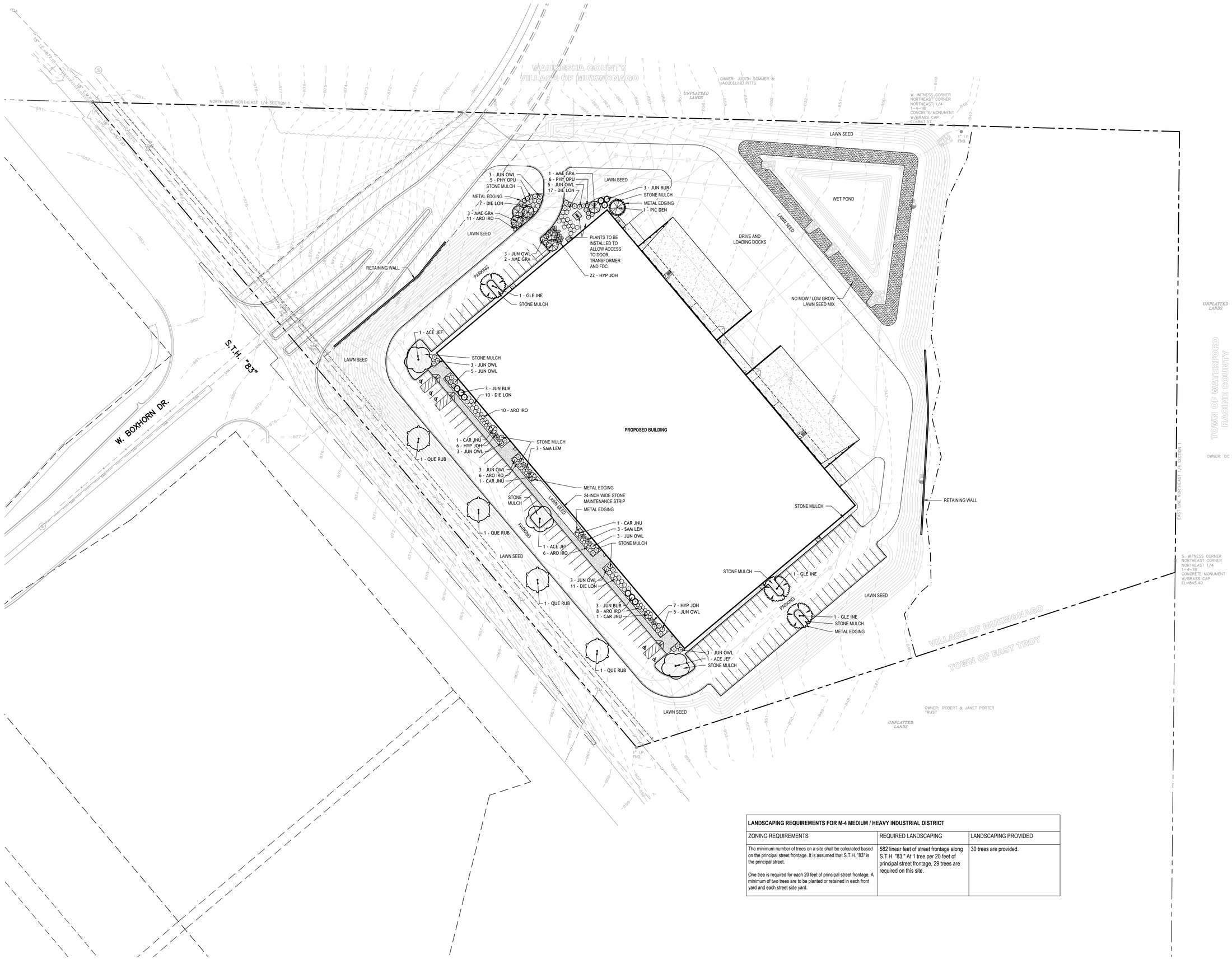
PROPOSED BUILDING FOR:
BLD MUKWONAGO 83 INDUSTRIAL
E. BOXHORN DR./S.T.H "83"
MUKWONAGO, WISCONSIN

Revision	Date

JOB:	250123
DRAWN:	
CHECKED:	
DATE:	03-27-2026
SHEET:	C4.1

DRAFT - NOT FOR CONSTRUCTION

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LANDSCAPING REQUIREMENTS FOR M-4 MEDIUM / HEAVY INDUSTRIAL DISTRICT

ZONING REQUIREMENTS	REQUIRED LANDSCAPING	LANDSCAPING PROVIDED
The minimum number of trees on a site shall be calculated based on the principal street frontage. It is assumed that S.T.H. "83" is the principal street. One tree is required for each 20 feet of principal street frontage. A minimum of two trees are to be planted or retained in each front yard and each street side yard.	582 linear feet of street frontage along S.T.H. "83." At 1 tree per 20 feet of principal street frontage, 29 trees are required on this site.	30 trees are provided.

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

LANDCO2
P.O. BOX 12043
MILWAUKEE, WI 53212
www.LANDCO2.com

SHEET TITLE
LANDSCAPE PLAN

PROPOSED BUILDING FOR:
BLD MUKWONAGO 83 INDUSTRIAL
E. BOXHORN DR./S.T.H "83"
MUKWONAGO, WISCONSIN

Revision	Date

JOB: 250123
DRAWN: HG
CHECKED: JS
DATE: 03-27-2026
SHEET: L1.0

DRAFT - NOT FOR CONSTRUCTION

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GENERAL

LANDSCAPE NOTES

1. CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED SITE ELEMENTS AND NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES. SURVEY DATA OF EXISTING CONDITIONS WAS SUPPLIED BY OTHERS.
2. CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES AND NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS. CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN THE VICINITY OF UNDERGROUND UTILITIES.
3. CONTRACTOR SHALL PROVIDE MINIMUM 2% SLOPE AWAY FROM ALL STRUCTURES.
4. CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED. LEAVE AREAS TO RECEIVE TOPSOIL 3" BELOW FINAL FINISHED GRADE IN PLANTING AREAS AND 1" BELOW FINAL FINISHED GRADE IN LAWN AREAS.
5. TOP OF MULCH SHALL BE ½" MINIMUM BELOW THE TOP OF WALKS AND CURBS
6. ALL REQUIRED LANDSCAPE AREAS SHALL BE PROVIDED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM WITH RAIN AND FREEZE SENSORS AND EVAPOTRANSPIRATION (ET) WEATHER-BASED CONTROLLERS AND SAID IRRIGATION SYSTEM SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL AND INSTALLED BY A LICENSED IRRIGATOR.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED LANDSCAPE AND IRRIGATION PERMITS.

MAINTENANCE NOTES

1. THE OWNER, TENANT AND THEIR AGENT, IF ANY, SHALL BE JOINTLY AND SEVERALLY RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE.
2. THE LANDSCAPE SHALL BE MAINTAINED IN A MANNER COMMON TO THE PRACTICE, INCLUDING MOWING, EDGING, PRUNING, FERTILIZING, WATERING, WEEDING, TRASH REMOVAL, AND OTHER SUCH ACTIVITIES.
3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK FROM THE TIME OF PLANTING FOR 60 DAYS, OR UNTIL FINAL ACCEPTANCE BY THE OWNER. AN ON-SITE INSPECTION BY THE OWNER'S AGENT WILL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
4. DURING WORK, PREMISES SHALL BE KEPT NEAT AND ORDERLY AT ALL TIMES. ALL TRASH AND DEBRIS SHALL BE REMOVED FROM THE SITE AS THE WORK PROGRESSES. KEEP PAVED AREAS CLEAN BY SWEEPING OR HOSING THEM AT THE END OF EACH WORK DAY.
5. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS THROUGH ONE (1) YEAR AFTER FINAL ACCEPTANCE BY THE OWNER'S AGENT. PLANTS SHALL BE IN HEALTHY CONDITION AT THE END OF THE GUARANTEE PERIOD. ALL PLANT MATERIALS WHICH DIE SHALL BE REPLACED WITH PLANT MATERIAL OF EQUAL OR BETTER VALUE AT NO COST TO OWNER. RESTORE BEDS AS NECESSARY FOLLOWING PLANT REPLACEMENT.
6. THE OWNER SHALL BE RESPONSIBLE FOR THE CONTINUED MAINTENANCE, REPAIR AND REPLACEMENT OF ALL LANDSCAPING MATERIALS AS NECESSARY FOLLOWING THE 60 DAY CONTRACTOR MAINTENANCE PERIOD.

QUALITY ASSURANCE

1. LANDSCAPE CONTRACTOR SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK.
2. SELECTION OF PLANT MATERIAL: MAKE CONTACT WITH SUPPLIERS IMMEDIATELY UPON NOTICE OF CONTRACT ACCEPTANCE TO SELECT AND BOOK MATERIALS.
3. SUBSTITUTIONS: DO NOT MAKE PLANT MATERIAL SUBSTITUTIONS. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF NON-AVAILABILITY TO LANDSCAPE ARCHITECT, TOGETHER WITH PROPOSAL FOR USE OF EQUIVALENT MATERIAL. WRITTEN VERIFICATION WILL BE REQUIRED DOCUMENTING MATERIAL SELECTION, SOURCE AND DELIVERY SCHEDULE TO SITE.
4. MEASUREMENTS: TAKE CALIPER MEASUREMENTS OF TREES SIX INCHES ABOVE GROUND. MEASURE MAIN BODY OF ALL PLANT MATERIAL FOR HEIGHT AND SPREAD DIMENSIONS, NOT FROM TIP-TO-TIP.
5. LANDSCAPE ARCHITECT OR OWNER, SHALL INSPECT ALL PLANT MATERIAL WITH RESPECT TO GENUS, SPECIES, CULTIVAR/VARIETY, SIZE AND QUALITY, INCLUDING SIZE AND CONDITION OF ROOT SYSTEMS, LIMBS, BRANCHING HABIT, INSECTS, INJURIES, OR OTHER LATENT DEFECTS UPON ARRIVAL TO SITE OR DURING INSTALLATION.
6. LANDSCAPE ARCHITECT OR OWNER MAY REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING THE WORK PROCESS. REMOVE REJECTED MATERIALS FROM SITE AND REPLACE WITH ACCEPTABLE MATERIAL AT NO ADDITIONAL COST TO THE OWNER. PLANTS DAMAGED IN TRANSIT OR AT THE JOB SITE SHALL BE REJECTED.

PRODUCT DELIVERY, STORAGE AND HANDLING

1. DELIVER ONLY PLANT MATERIALS THAT CAN BE PLANTED IN ONE DAY UNLESS ADEQUATE STORAGE AND WATERING FACILITIES ARE AVAILABLE ON THE JOB SITE.
2. PROTECT PLANTS DURING DELIVERY TO PREVENT DAMAGE TO ROOT BALLS OR DESICCATION OF LEAVES. KEEP PLANTS MOIST AT ALL TIMES. COVER ALL MATERIALS DURING TRANSPORT. PROTECT ROOT BALLS BY HEELING IN WITH SAWDUST OR OTHER APPROVED MOISTURE RETAINING MATERIAL IF NO PLANTED WITHIN 24 HOURS OF DELIVERY.
3. TO AVOID DAMAGE OR STRESS, DO NOT LIFT, MOVE, ADJUST TO PLUMB, OR OTHERWISE MANIPULATE PLANTS BY TRUNK OR STEMS.
4. DELIVER PLANTS WITH LEGIBLE IDENTIFICATION LABELS.

MATERIALS

PLANTS

1. ALL PLANTS SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1, MOST RECENT EDITION.
2. PLANTS SHALL CONFORM TO THE SIZE GIVEN ON THE PLAN, AND SHALL BE HEALTHY, SYMMETRICAL, WELL-SHAPED, FULL BRANCHED AND FREE OF DISEASE AND INSECTS.
3. ALL PLANTS WHICH ARE FOUND UNSUITABLE IN GROWTH, OR ARE IN ANY UNHEALTHY, BADLY SHAPED, OR UNDERSIZED CONDITION WILL BE REJECTED BY THE LANDSCAPE ARCHITECT EITHER BEFORE OR AFTER PLANTING AND SHALL BE REMOVED AT THE EXPENSE OF THE LANDSCAPE CONTRACTOR AND REPLACED WITH ACCEPTABLE PLANT AS SPECIFIED AT NO ADDITIONAL COST TO THE OWNER.
4. PLANTS SHALL NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR AT LEAST 2 YEARS.
5. PLANTS SHALL BE FRESHLY DUG FROM DURING THE MOST RECENT APPROPRIATE HARVEST SEASON.
6. PRUNING SHALL BE LIMITED TO DEAD BRANCHES, LIMBS DAMAGED OR BROKEN DURING THE PLANTING PROCESS. PRUNING SHALL CONFORM TO AMERICAN STANDARD FOR TREE CARE OPERATIONS ANSI A300.

SOILS

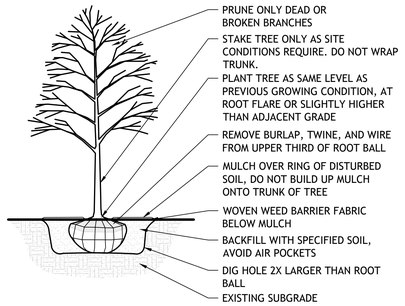
1. PLANTING SOIL AND TOPSOIL TO BE A CLEAN, FRIABLE LOAM FROM A LOCAL SOURCE, FREE FROM STONES OR DEBRIS OVER ¾" IN DIAMETER, AND FREE FROM TOXINS AND WEEDS. TOPSOIL SHALL HAVE A pH VALUE BETWEEN 5.5 AND 7. ORGANIC MATERIAL SHALL BE 2.0-5.0% OF TOTAL DRY WEIGHT. SOLUBLE SALT LEVELS SHALL BE LESS THAN 2 mmho/cm. PLANTING SOIL AND TOPSOIL SHALL BE TESTED AND AMENDED TO MEET THESE SPECIFICATIONS.
2. COMPOST SHALL BE COMMERCIALLY PREPARED, PEAT-FREE COMPOST AND MEET US COMPOST COUNCIL STA/TMECC CRITERIA AND SHALL CONSIST OF PLANT-BASED MATERIALS, COMPOSTED FOR A MINIMUM OF 9 MONTHS AT TEMPERATURES SUFFICIENT TO BREAK DOWN ALL WOODY FIBERS, SEEDS, AND LEAF STRUCTURES.
3. ALL PLANTING AREAS WITHIN THE DRIP LINE OF EXISTING TREES SHALL BE PREPARED BY TILLING EXISTING SOIL TO A DEPTH OF SIX (6") INCHES PRIOR TO PLACING COMPOST AND FERTILIZER. APPLY FERTILIZER AS PER MANUFACTURER'S RECOMMENDATIONS. ADD THREE (3") INCHES OF COMPOST AND TILL INTO A DEPTH OF SIX (6") INCHES OF THE TOPSOIL. ALL PLANTING AREAS WITHOUT EXISTING TREES SHALL BE PREPARED BY TILLING EXISTING SOIL TO A DEPTH OF EIGHTEEN (18") INCHES PRIOR TO PLACING COMPOST AND FERTILIZER. APPLY FERTILIZER AS PER MANUFACTURER'S RECOMMENDATIONS. ADD SIX (6") INCHES OF COMPOST AND TILL INTO A DEPTH OF EIGHTEEN (18") INCHES OF THE TOPSOIL.
4. BACKFILL FOR TREE PITS SHALL CONSIST OF EXISTING TOPSOIL ON SITE (OR IMPORTED AS NEEDED) FREE FROM LARGE CLUMPS, ROCKS, DEBRIS, SUBSOILS, ETC., PLACED IN NINE (9") LAYERS AND WATERED IN THOROUGHLY.

OTHER MATERIALS

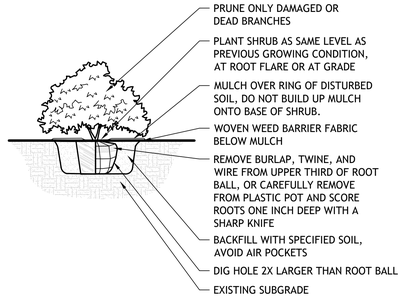
1. EDGING: EDGING SHALL BE METAL EDGING IN THE LOCATIONS INDICATED ON THE PLAN. EDGING FOR STONE MAINTENANCE STRIP SHALL BE 5" DEEP, METAL EDGING, TO BE APPROVED BY OWNER'S AGENT.
2. STONE MULCH: 4-INCH DEPTH "MISSISSIPPI" DECORATIVE STONE CHIPS BY HALQUIST STONE OR APPROVED EQUAL TO BE INTALLED IN THE LOCATIONS INDICATED ON THE PLAN FOLLOWING THE MANUFACTURER'S INSTRUCTIONS. THE GEOTEXTILE FABRIC BELOW STONE MULCH SHALL BE PERMEABLE NONWOVEN MIRAFI MSCAPE E OR APPROVED EQUAL.
3. STONE MAINTENANCE STRIP: "MISSISSIPPI" DECORATIVE STONE CHIPS BY HALQUIST STONE OR APPROVED EQUAL TO BE INSTALLED IN THE LOCATIONS INDICATED ON THE PLAN FOLLOWING THE MANUFACTURER'S INSTRUCTIONS. THE GEOTEXTILE FABRIC SHALL BE PERMEABLE NONWOVEN MIRAFI MSCAPE OR APPROVED EQUAL.
4. LAWN SEED: DISTURBED LAWN AREAS LABELED AS SUCH ON PLAN, SHALL BE SPREAD BY HAND BROADCAST METHOD OR APPROPRIATE SPREADER EQUIPMENT WITH 'MADISON PARKS' OR EQUIVALENT SEED MIX AS APPROVED BY OWNER'S AGENT, AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. IN ADDITION TO LAWN SEED, ANNUAL RYE SHALL BE APPLIED TO ALL DISTURBED AREAS WITH SLOPES EXCEEDING 3:1 AT A RATE OF 1 ½ POUNDS PER 1000 SQUARE FEET. FERTILIZE AND MULCH PER MANUFACTURER'S RECOMMENDATIONS.
2. NO MOW / LOW GROW LAWN SEED MIX: AREAS LABELED AS SUCH ON PLAN SHALL BE SPREAD BY HAND BROADCAST METHOD AT THE RECOMMENDED RATE OF 4-6 LBS PER 1000 SQUARE FEET WITH "NO MOW / LOW GROW LAWN SEED MIX" AVAILABLE FROM REINDERS, OR EQUIVALENT SEED MIX AS APPROVED BY THE OWNER'S AGENT, AND INSTALLED PER NURSERY RECOMMENDATIONS.

INSTALLATION

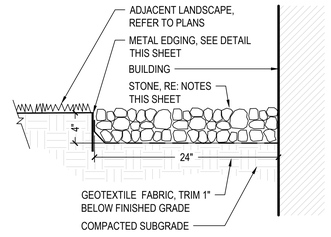
1. PLANT MATERIALS SHALL BE DELIVERED TO THE SITE ONLY AFTER THE BEDS ARE PREPARED AND AREAS ARE READY FOR PLANTING.
2. EXCAVATE PITS WITH VERTICAL SIDES AND HORIZONTAL BOTTOM. TREE PITS SHALL BE LARGE ENOUGH TO PERMIT HANDLING AND PLANTING WITHOUT INJURY TO THE ROOT BALLS, AND SHALL BE PLACED AT THE SAME DEPTH RELATIVE TO FINISH GRADE AS IT DID TO THE SOIL SURFACE IN THE ORIGINAL PLACE OF GROWTH.
3. SHRUB AND TREE PITS SHALL BE NO LESS THAN TWO TIMES WIDER THAN THE LATERAL DIMENSIONS OF THE EARTH BALL AND NO DEEPER THAN ITS VERTICAL DIMENSION. THE SIDES OF THE HOLE SHALL BE ROUGH AND JAGGED, NEVER SLICK AND GLAZED, ROUGH UP WITH SHOVEL IF NEEDED.
4. BACKFILL HOLE WITH 5 PARTS EXISTING SOIL AND 1 PART PLANT BED PREPARATION SOIL. CAREFULLY SETTLE BY WATERING TO PREVENT AIR POCKETS. REMOVE THE BURLAP, NYLON, STRING, AND WIRE FROM THE TOP ⅓ OF THE BALL. MULCH THE TOP OF THE BALL WITH A MINIMUM OF TWO (2") INCHES OF SPECIFIED MULCH OVER THE PLANTING PIT.
5. DO NOT WRAP TREES. STAKE TREES AND LARGE SHRUBS ONLY AS SITE CONDITIONS REQUIRE.



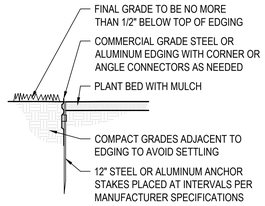
01 TREE PLANTING
NTS



02 SHRUB PLANTING
NTS



03 24-INCH WIDE STONE MAINTENANCE STRIP
NTS



04 METAL EDGING
NTS

PLANT SCHEDULE

SYMBOL	CODE	BOTANICAL / COMMON NAME	CONT	PLANTING SIZE	MATURE HT	MATURE SP	QTY
TREES							
	ACE JEF	Acer x freemanii `Jeffsred` / Autumn Blaze Maple	B & B	3" Min. Cal.	50`	40`	3
	AME GRA	Amelanchier x grandiflora `Autumn Brilliance` / `Autumn Brilliance` Serviceberry	B & B	6 FT. Tall Min.	30`	25`	6
	CAR JNU	Carpinus caroliniana `J.N. Upright` / Firespire Musclewood	B & B	2" Min. Cal.	20`	10`	4
	GLE INE	Gleditsia triacanthos inermis / Thornless Common Honeylocust	B & B	3" Min. Cal.	60`	50`	3
	JUN BUR	Juniperus virginiana `Burkii` / Burk Red Cedar	B & B	6 FT. Tall Min.	25`	8`	9
	PIC DEN	Picea glauca `Densata` / Black Hills Spruce	B & B	6 FT. Tall Min.	30`	25`	1
	QUE RUB	Quercus rubra / Red Oak	B & B	3" Min. Cal.	75`	75`	4
SHRUBS							
	ARO IRO	Aronia melanocarpa `Iroquois Beauty` / Black Chokeberry	3 gal	Container	3`	4`	41
	DIE LON	Diervilla lonicera / Dwarf Bush Honeysuckle	3 gal	Container	4`	5`	45
	HYP JOH	Hypericum kalmianum / Kalm's St. Johnswort	3 gal	Container	3`	3`	35
	JUN OWL	Juniperus virginiana `Grey Owl` / Eastern Redcedar	3 gal	Container	3`	6`	39
	PHY OPU	Physocarpus opulifolius / Ninebark	3 gal	Container	8`	6`	11
	SAM LEM	Sambucus racemosa `Lemon Lace` / Lemon Lace Elderberry	3 gal	Container	5`	5`	6

BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

LANDCO2
P.O. BOX 12043
MILWAUKEE, WI 53212
www.LANDCO2.com

SHEET TITLE: LANDSCAPE NOTES, DETAILS & SCHEDULE

PROPOSED BUILDING FOR:
BLD MUKWONAGO 83 INDUSTRIAL
E. BOXHORN DR./S.T.H "83"
MUKWONAGO, WISCONSIN

Revision

Date

JOB:	250123
DRAWN:	HG
CHECKED:	JS
DATE:	03-27-2026
SHEET:	L2.0

DRAFT - NOT FOR CONSTRUCTION

File: K:\Projects\250123 – Hwy 83 Mukwonago – BLD\07 Design\Drawings\Revit and DWG Project files\Civil\dwg\250123 LANDSCAPE.dwg Layout: L2.0 User: rlekondonjosh Plotted: Mar 26, 2026 – 2:22pm Xref's:

FLOOR PLAN LEGEND

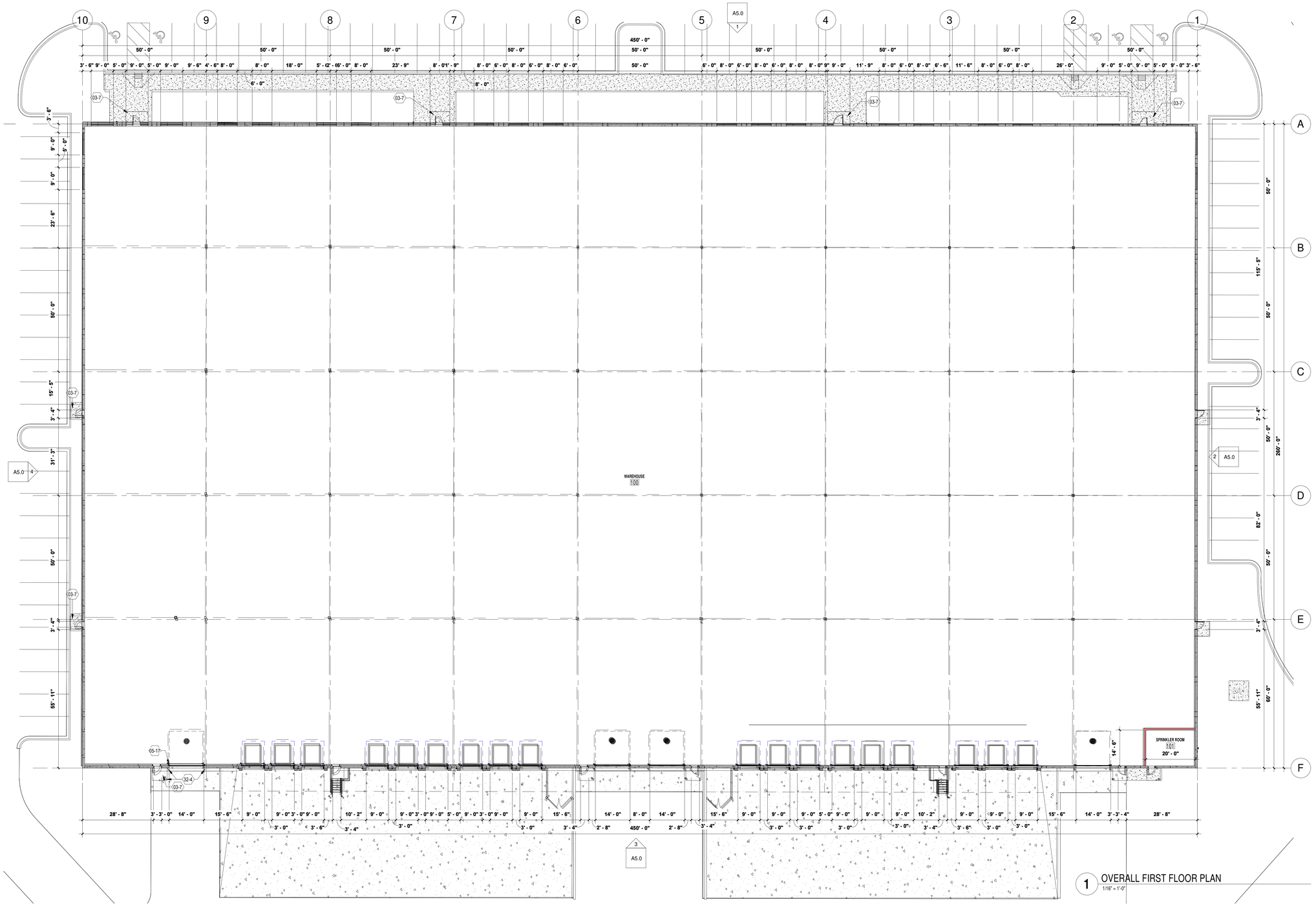
ROOM 100	ROOM NAME / ROOM NUMBER		PARTITION TO BE DEMOLISHED
(100)	DOOR NUMBER		DOOR AND FRAME TO BE REMOVED
A	PARTITION TYPE		
1	KEYNOTES		EXISTING PARTITION TO REMAIN
F.E.	SURFACE MOUNTED FIRE EXTINGUISHER		EXISTING DOOR TO REMAIN
F.E.C.	RECESSED EXTINGUISHER CABINET & FIRE EXTINGUISHER		NEW CONSTRUCTION
	EXIT LIGHT		NEW DOOR & FRAME
	EXIT LIGHT (DIRECTIONAL)		
BL1	BORROWED LIGHT TAG		
TP-1	TOILET ACCESSORY TAG		

GENERAL NOTES - NEW FLOOR...

1	VERIFY ALL CONDITIONS, DIMENSIONS AND ALIGNMENT OF WALLS. BRING ANY DISCREPANCIES TO BRIOHN'S ATTENTION PRIOR TO FABRICATION/CONSTRUCTION BEGINS.
2	VERIFY LOCATION OF ACCESS PANELS WITH MECHANICAL AND ELECTRICAL DRAWINGS.
3	AREA SHALL BE KEPT BROOM CLEAN AND FREE OF DEBRIS DURING CONSTRUCTION.
4	SEE EXTERIOR ELEVATIONS SHEET A5.0 FOR WINDOW TYPES.
5	SEE SHEET A0.2 & A0.3 FOR ADA REQUIREMENTS AND MOUNTING HEIGHTS
6	SEE SHEET A1.2 FOR PARTITION TYPE.
7	EXTERIOR WALLS IN OFFICE AREA TO BE FURRED OUT WITH STUD HELD 1" OFF FACE OF EXTERIOR WALL, CAVITY FILLED WITH BATT INSULATION. SEE FLOOR PLAN FOR PARTITION TYPE.
8	FURNITURE AND APPLIANCES PROVIDED BY OWNER AND ARE SHOWN FOR REFERENCE ONLY.
9	ALL FLOORS THROUGH OUT ARE TO BE SEALED CONCRETE WITH CAULKED CONTROL JOINTS.
10	EXPOSED STEEL DECK, JOISTS, GIRDERS AND COLUMNS ARE TO BE PRIME GREY.

KEYNOTE LEGEND

MARK	FLOOR PLAN CODED NOTES
03-7	CONCRETE STOOP (SEE STRUCTURAL & CIVIL DWGS)
05-17	7' STEEL BOLLARDS EACH SIDE OF OVERHEAD DOOR (TYP)., PAINTED SAFETY YELLOW.
32-4	6" DIAMETER X 4'-0" TALL CONCRETE FILLED STEEL PIPE BOLLARD(S). PAINTED SAFETY YELLOW. COORDINATE WITH CIVIL PLANS. COORDINATE PLACEMENT WITH GROUND-MOUNTED MECHANICAL EQUIPMENT.



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

BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950

SHEET TITLE
OVERALL FLOOR PLAN

INDUSTRIAL MULTI-TENANT
BOXHORN DRIVE & HWY 83
MUKWONAGO, WISCONSIN

PROGRESS SET
NOT FOR CONSTRUCTION

Revision

Date

ACTUAL

APPLICABLE TO ALL PLAN VIEWS

JOB:	250123
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CHECKED:	PG
DATE:	2026-03-27

SHEET:
A1.0

GENERAL NOTES - NEW FLOOR...

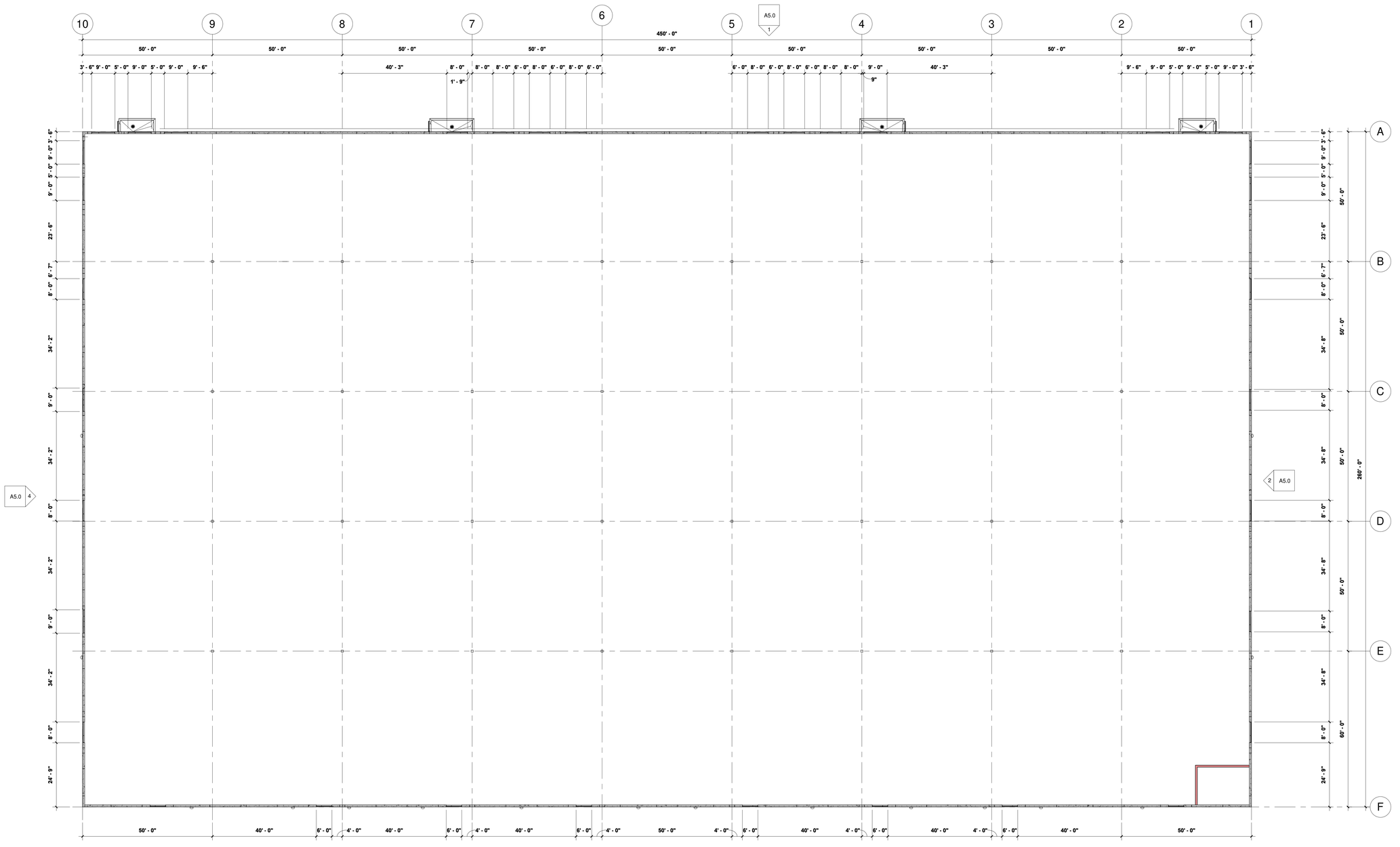
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2	VERIFY LOCATION OF ACCESS PANELS WITH MECHANICAL AND ELECTRICAL DRAWINGS.
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9	ALL FLOORS THROUGH OUT ARE TO BE SEALED CONCRETE WITH CAULKED CONTROL JOINTS.
10	EXPOSED STEEL DECK, JOISTS, GIRDERS AND COLUMNS ARE TO BE PRIME GREY.

KEYNOTE LEGEND

MARK	FLOOR PLAN CODED NOTES

FLOOR PLAN LEGEND

ROOM	ROOM NAME		PARTITION TO BE DEMOLISHED
100	ROOM NUMBER		
100	DOOR NUMBER		DOOR AND FRAME TO BE REMOVED
A	PARTITION TYPE		
1	KEYNOTES		EXISTING PARTITION TO REMAIN
F.E.	SURFACE MOUNTED FIRE EXTINGUISHER		EXISTING DOOR TO REMAIN
F.E.C.	RECESSED EXTINGUISHER CABINET & FIRE EXTINGUISHER		NEW CONSTRUCTION
	EXIT LIGHT		NEW DOOR & FRAME
	EXIT LIGHT (DIRECTIONAL)		
BL-1	BORROWED LIGHT TAG		
TP-1	TOILET ACCESSORY TAG		



1 CLERESTORY PLAN
1/16" = 1'-0"

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SHEET TITLE
OVERALL CLERESTORY FLOOR PLAN

INDUSTRIAL MULTI-TENANT
BOXHORN DRIVE & HWY 83
MUKWONAGO, WISCONSIN

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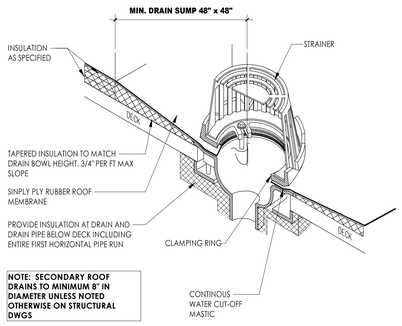
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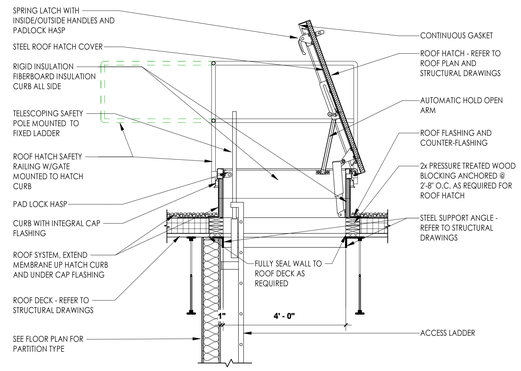
APPLICABLE TO ALL PLAN VIEWS

JOB:	250123
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DATE:	2026-03-27

SHEET:
A1.1



3 ROOF DRAIN DETAIL
1/2" = 1'-0"



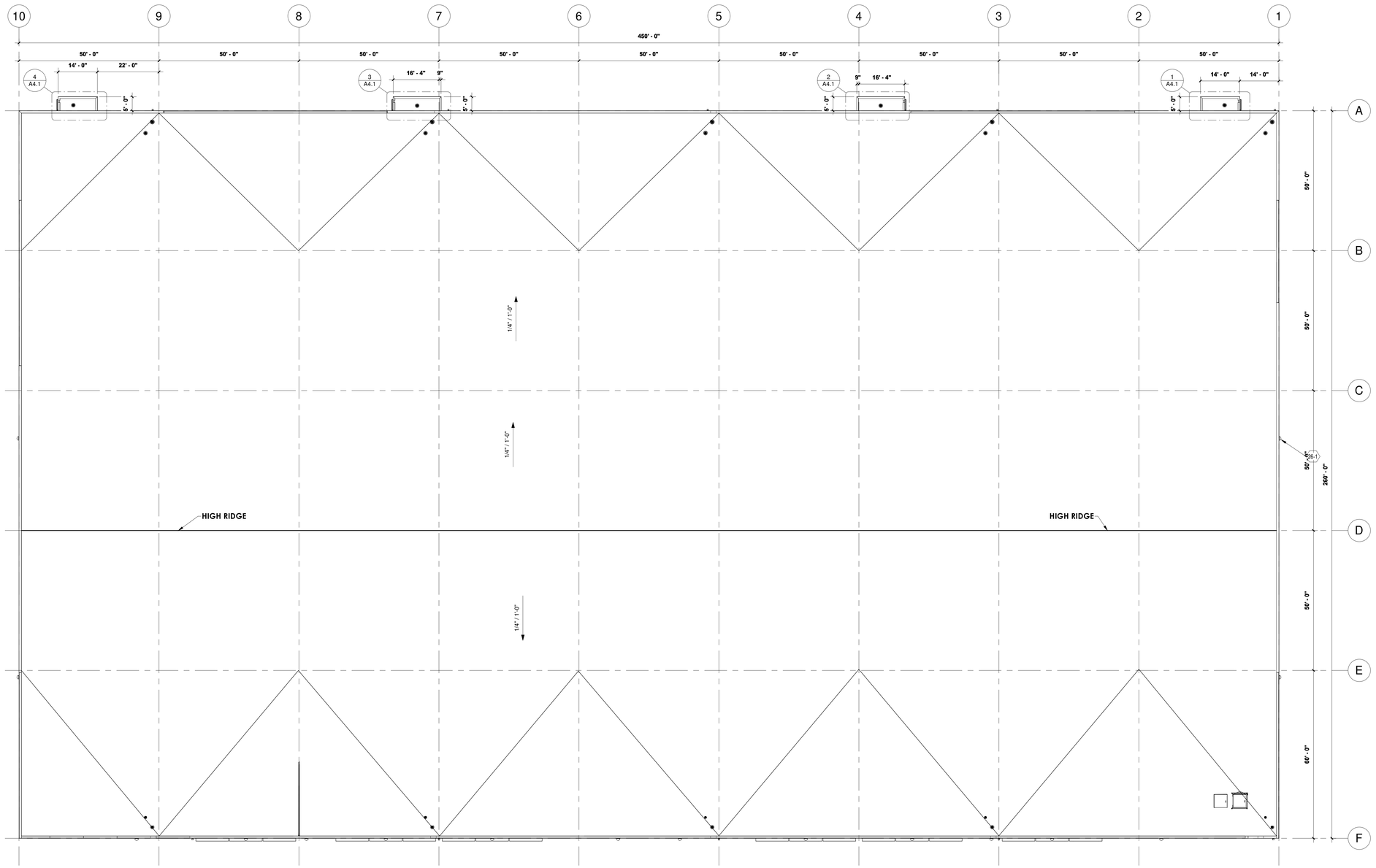
2 ROOF HATCH W/SAFETY RAILING
1/2" = 1'-0"

GENERAL NOTES - ROOF PLAN

1	SEE STRUCTURAL DWGS FOR FURTHER STRUCTURAL INFORMATION.
2	COORDINATE ROOF SCREEN SIZE WITH MECHANICAL UNITS. SEE STUCTURAL DRAWINGS FOR FURTHER INFORMATION.
3	SEE SHEET A4.2 FOR OTHER CANOPY AND TUBE SUN SHADES PLANS
4	PROVIDE ROOF PAVERS AT ROOF HATCH AND AT ALL ROOF TOP UNITS. REFER TO HVAC PLAN BY OTHERS FOR LOCATIONS.

KEYNOTE LEGEND

MARK	FLOOR PLAN CODED NOTES
26-1	EXTERIOR LIGHT FIXTURE - CUT-OFF LED WALLPACK - SEE LIGHTING PLAN FOR FIXTURE TYPE AND MOUNTING HEIGHT



1 OVERALL ROOF PLAN
1/16" = 1'-0"

ACTUAL

APPLICABLE TO ALL PLAN VIEWS

BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950

SHEET TITLE
OVERALL ROOF PLAN

INDUSTRIAL MULTI-TENANT
BOXHORN DRIVE & HWY 83
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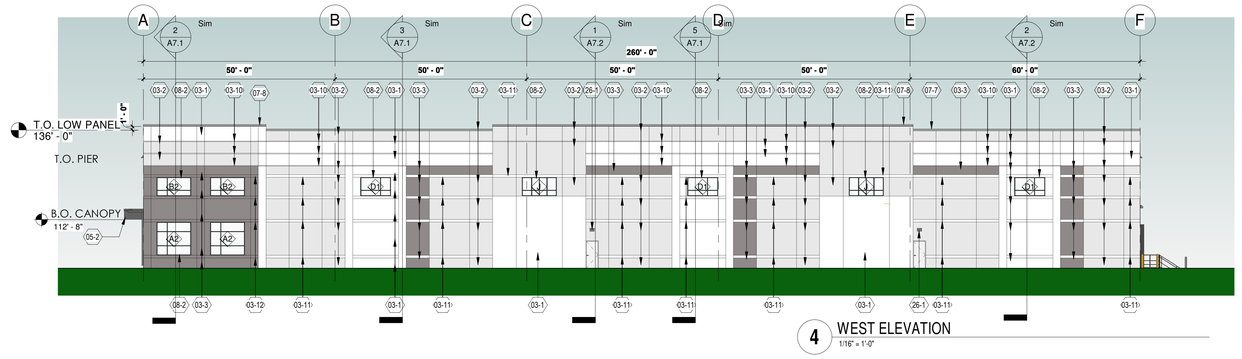
PROGRESS SET
NOT FOR CONSTRUCTION

Revision

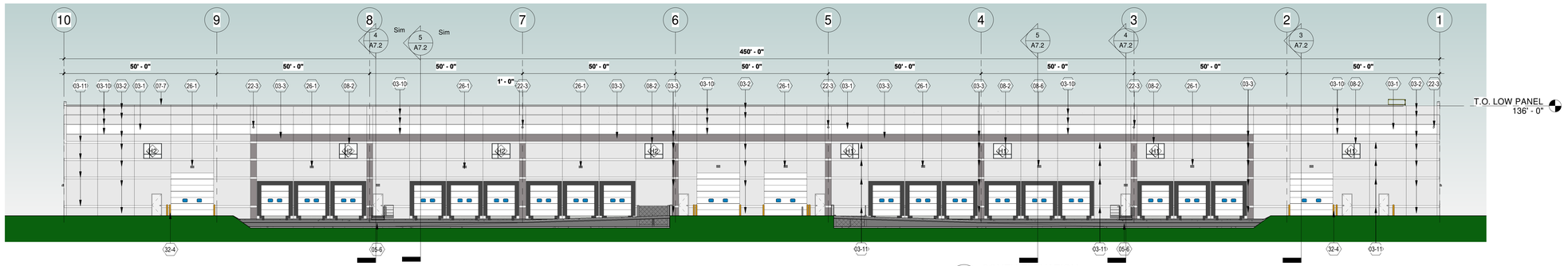
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DATE:	2026-03-27

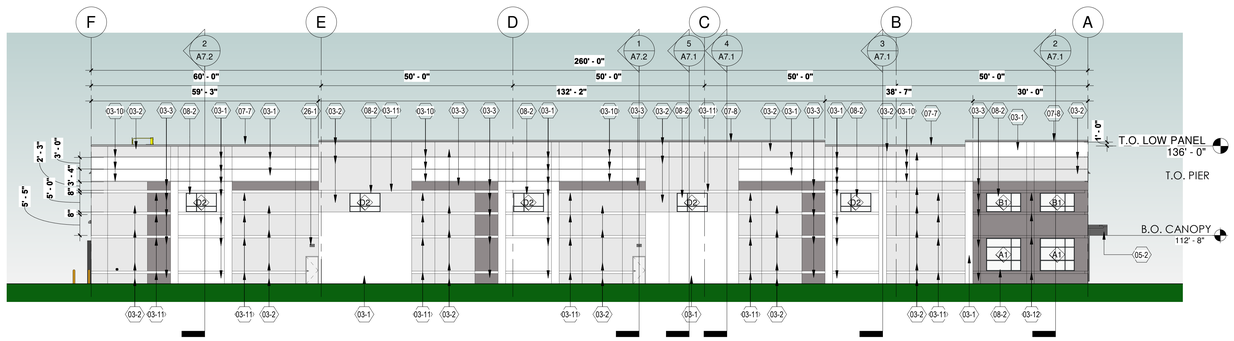
SHEET:
A4.0



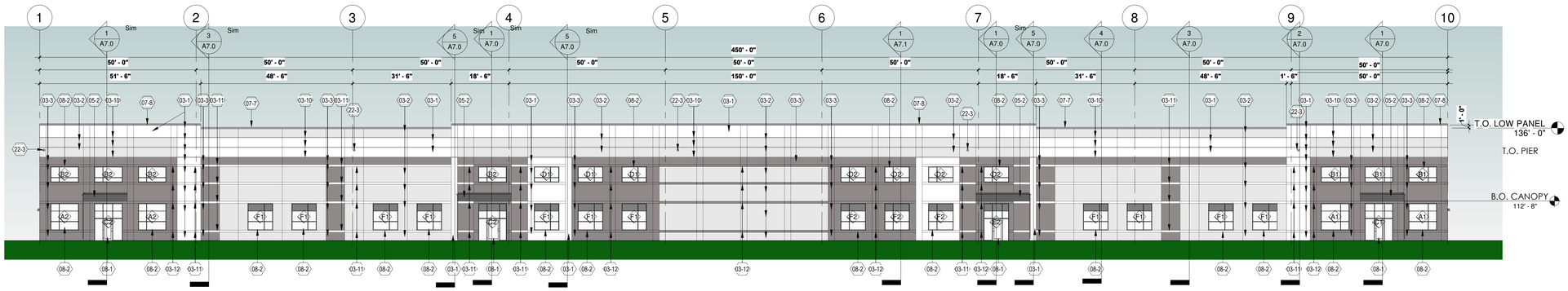
4 WEST ELEVATION
1/16" = 1'-0"



3 SOUTH ELEVATION
1/16" = 1'-0"



2 EAST ELEVATION
1/16" = 1'-0"



1 NORTH ELEVATION
1/16" = 1'-0"

KEYNOTE LEGEND

MARK	FLOOR PLAN CODED NOTES
03-1	EXTERIOR PRECAST CONCRETE WALL PANEL SHALL BE INSULATED WITH PAINTED FINISH - FIELD COLOR 1: (SEE MATERIALS LEGEND)
03-2	EXTERIOR PRECAST CONCRETE WALL PANEL SHALL BE INSULATED WITH PAINTED FINISH - LIGHT GREY ACCENT COLOR 2: (SEE MATERIALS LEGEND)
03-3	EXTERIOR PRECAST CONCRETE WALL PANEL SHALL BE INSULATED WITH PAINTED FINISH - MEDIUM GREY ACCENT COLOR 3:(SEE EXTERIOR MATERIALS LEGEND)
03-10	2" X 1/2" DEEP REVEAL (HORIZONTAL) PAINTED COLOR 1 (SEE EXTERIOR MATERIALS LEGEND).
03-11	8" X 1/2" DEEP REVEAL (HORIZONTAL) PAINTED COLOR 1 (SEE EXTERIOR MATERIALS LEGEND).
03-12	8" X 1/2" DEEP REVEAL (HORIZONTAL) PAINTED COLOR 3 (SEE EXTERIOR MATERIALS LEGEND).
05-2	PREFINISHED METAL PANEL
05-6	EXTERIOR STEEL STAIRS WITH GALVANIZED STEEL BAR GRATE TREADS AND LANDING, PROVIDE STEEL CLOSED RISERS WITH PIPE GUARD/HAND RAILING DESIGN AND FABRICATION TO BE CODE/OSHA/ANSI COMPLIANT. STEEL TO BE PAINTED.
07-7	PRE FINISHED METAL 24 GA. GRAVEL STOP COLOR SHALL BE "DARK BRONZE".
07-8	PRE FINISHED METAL 24 GA. COPING COLOR & PROFILE TO MATCH EXISTING ADJACENT COPING.
08-1	ALUMINUM STOREFRONT ENTRY SYSTEM
08-2	ALUMINUM STOREFRONT
08-6	9'-0" X 10'-0" INSULATED OH DOOR FACTORY FINISHED WITH VISION WINDOWS, 35,000 LB DOCK LEVELERS, DOCK SEALS, AND BUMPERS.
22-3	"LAMBS-TONGUE ROOF DRAIN OVERFLOW NOZZLE. SEE ROOF PLAN FOR ADDITIONAL NOTES. COORDINATE WALL PENETRATION WITH PRECAST SUPPLIER.
26-1	EXTERIOR LIGHT FIXTURE - CUT-OFF LED WALLPACK - SEE LIGHTING PLAN FOR FIXTURE TYPE AND MOUNTING HEIGHT
32-4	6" DIAMETER X 4'-0" TALL CONCRETE FILLED STEEL PIPE BOLLARD(S). PAINTED SAFETY YELLOW. COORDINATE WITH CIVIL PLANS. COORDINATE PLACEMENT WITH GROUND-MOUNTED MECHANICAL EQUIPMENT.

PAINTERS NOTE:

PAINTING OF EXTERIOR PRECAST WALL PANELS: CHOOSE ONE SUPPLIER FOR BOTH BASE COLOR AND ACCENT COLORS. PRECAST WALL PANELS SHALL WEATHER FOR 90 DAYS PRIOR TO PAINT APPLICATION. PAINT SHALL NOT BE APPLIED WHEN SURFACE AND AIR TEMPERATURE IS UNDER 45 DEGREES FAHRENHEIT AND TEMPERATURES SHALL BE RISING.

1. **ACRYLIC CONCRETE STAIN (BASE COLOR):**
   A. (2) COATS OF HALLMAN LINDSAY #167 GRIP CRETE ACRYLIC STAIN OR
   B. (2) COATS SHERWIN WILLIAMS LOXON VERTICAL STAIN OR
   C. (2) COATS BENJAMIN MOORE TUFFCRETE WB CONCRETE STAIN.
2. **ACCENT COLOR:**
   A. (2) COATS OF HALLMAN LINDSAY #174 WEATHER GUARD 100% ACRYLIC HOUSE PAINT OR
   B. (2) COATS SHERWIN WILLIAMS SUPER PAINT HOUSE PAINT OR
   C. (2) COATS BENJAMIN AURA 100% ACRYLIC HOUSE PAINT.

PRECASTER NOTE:

PRECASTER TO PROVIDE COVERS FOR ALL ROUND RECESSED POCKETS AND PROVIDE CLOSED CELL SPRAY FOAM INSULATION WITH STEEL PREFINISHED METAL COVER PLATES FOR ALL OTHER SHAPE OPENINGS OR RECESSED AREAS (BEAM, LINTEL, JOIST, GIRDER BEARING OR OTHER POCKETED CONDITIONS) ON INTERIOR SIDE OF THE PRECAST WALL PANELS

EXTERIOR BUILDING SYSTEMS:

ROOF SYSTEM #1: BALLASTED 45 MIL EPDM ROOF MEMBRANE ON 6" DIRECT TO DECK APPROVED EPS INSULATION (R25 - TWO LAYERS OF 3", STAGGERED) ON METAL DECK (SEE STRUCTURAL DRAWINGS)

ROOF SYSTEM #2: FULLY ADHERED 45 MIL EPDM ROOF MEMBRANE ON TAPPERED DIRECT TO DECK APPROVED EPS INSULATION (MINIMUM 1") TAPPERED TO ROOF DRAIN, ON METAL DECK (SEE STRUCTURAL DRAWINGS)

INSULATED PRECAST WALL PANEL SYSTEM: 10" INSULATED PRECAST CONCRETE WALL PANEL (R-14)

EXTERIOR MATERIALS LEGEND

- PAINTED SMOOTH FACED PRECAST PANEL & REVEAL; COLOR 1 (WHITE): SWXXXX
- PAINTED SMOOTH FACED PRECAST PANEL; COLOR 2 (LIGHT GREY): SWXXX
- PAINTED SMOOTH FACED PRECAST PANEL; COLOR 3 (MEDIUM GREY): SWXXX

BRIOHN
DESIGN GROUP
3885 N BROOKFIELD ROAD,
SUITE 200
BROOKFIELD WISCONSIN
53045-1950

SHEET TITLE
OVERALL EXTERIOR ELEVATIONS

INDUSTRIAL MULTI-TENANT
BOXHORN DRIVE & HWY 83
MUKWONAGO, WISCONSIN

Revision

PROGRESS SET
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Date

JOB:	250123
DRAWN:	CJR
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DATE:	2026-03-27

SHEET:
A5.0



VIEW LOOKING SOUTHEAST



VIEW LOOKING WEST

BRIOHN

DESIGN GROUP

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BROOKFIELD WISCONSIN 53045-1950
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(262) 790-9505 FAX

SHEET TITLE
EXTERIOR RENDERINGS

INDUSTRIAL MULTI-TENANT
BOXHORN DRIVE & HWY 83
MUKWONAGO, WISCONSIN

Revision

Date

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SHEET:
A5.1



VIEW LOOKING NORTHEAST



VIEW LOOKING SOUTHWEST

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DESIGN GROUP
3880 N BROOKFIELD ROAD, SUITE 200
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SHEET TITLE
EXTERIOR RENDERINGS

INDUSTRIAL MULTI-TENANT
BOXHORN DRIVE & HWY 83
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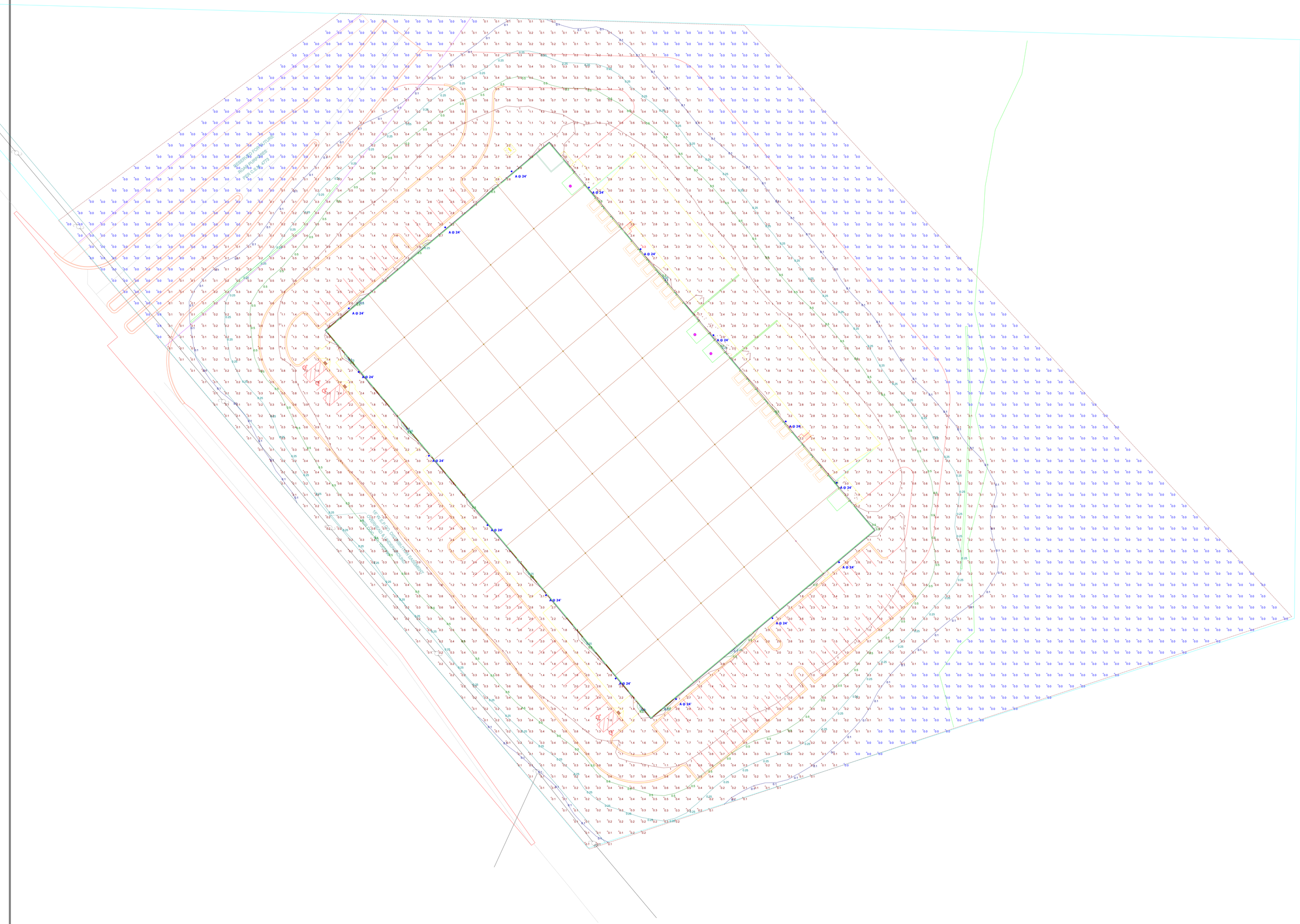
Revision	Date

JOB:	250123
DRAWN:	CW
CHECKED:	CW
DATE:	2026-03-27

SHEET:
A5.2

Schedule							
Symbol	Label	QTY	Manufacturer	Catalog	Description	Lamp Output	Input Power
	A	16	Lithonia Lighting	DSX1 LED P5 40K 80CRI T4M	D-Series Size 1 Area Luminaire P5 Performance Package 4000K CCT 80 CRI Type 4 Medium	16418	138.16

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	0.6 fc	3.3 fc	0.0 fc	N/A	N/A



HFR electric
ELECTRICAL CONTRACTOR
RESIDENTIAL • COMMERCIAL • INDUSTRIAL

Mukwonago Hwy 83

Designer
HFR electric inc.
Date
03/27/2026
Scale
Not to Scale
Drawing No.
E1.0
Summary

1 of 1

BRIOHN BUILDING CORPORATION

DESIGN / BUILD CONSTRUCTION

ARCHITECTURAL DESIGN

DEVELOPMENT

PROPERTY MANAGEMENT

March 27, 2026

To: Village of Mukwonago Plan Commission

RE: Mukwonago BLD83 Storm Water Management Summary

Please find below the storm water management design summary of the proposed Mukwonago BLD83 project. The onsite storm water pond was designed to meet the Village Chapter 34 code and WDNR technical standards. The onsite storm water pond was sized for this development, and the proposed public road extension of Boxhorn Drive and any potential development on the northwest remnant 1 acre site north of the proposed road extension.

Design Requirements:

- Storm Quantity Peak Flow:
  - 100-yr, 24 hr. design storm reduced to 10-yr, 24 pre-development conditions.
  - 10-yr, 24 hr. design storm reduced to 2-yr, 24 pre-development conditions.
  - 2-yr, 24 hr. design storm meet the 2-yr, 24 pre-development conditions.
  - 2-yr, 24 hr. design storm meet the 2-yr, 24 pre-development conditions.

Table 1 – Peak Release Rates

Storm Event	Existing Total (cfs)	Proposed Designed Total (cfs)
1-year	8.50	0.61
2-year	10.96	0.67
10-year	22.30	3.77
100-year	49.85	15.83

See Appendix 1

- Storm Quality:
  For new land development and in-fill development, 80% reduction in total suspended solids load

Table 2 – Total Suspended Solids Loading

Without Controls (lbs)	With Controls (lbs)	Percent Reduction (%)
4,618	826.5	82.10

See Appendix 2

- Infiltration:
  For high impervious development, >80% connected impervious surface, provide 60% Post-Development Infiltration Volume with 2% maximum effective infiltration area of the site.

  The site is exempt from infiltration based on the proposed bottom of infiltration area have a measured infiltration rate of less than 0.6 inches per hour. *See Appendix 2*

Please contact me with additional questions. We look forward to receiving final approval from the Village on this development.

Thank you,

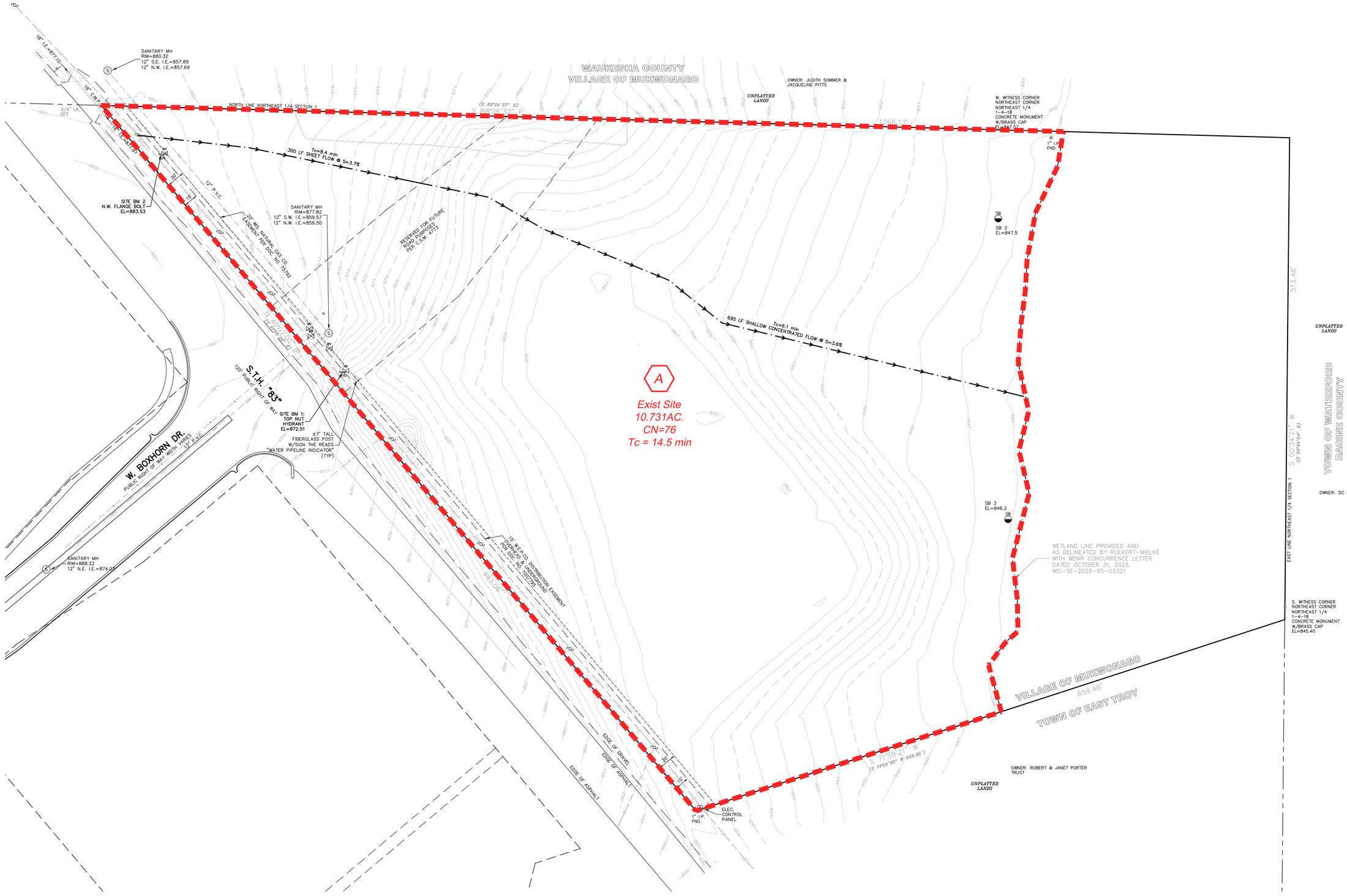
Rizal Iskandarsjach, P.L.S., P.E.
Civil Engineer
riz@briohn.com
262-790-0500

APPENDIX 1

Water Quantity Calculations

- Existing Conditions Hydrology Exhibit
- Existing Conditions HydroCAD Output
- Proposed Conditions Hydrology Exhibit
- Proposed Conditions HydroCAD Output

BRIOHN
DESIGN GROUP



THIS DRAWING SHALL BE USED AS A WATERSHED REFERENCE ONLY

File: K:\Projects\250123 – Hwy 83 Mukwonago – BLD\07 Design\Drawings\Revit and DWG Project files\Civil\dwg\250123 HYDROLOGY.dwg Layout: H-1 User: nkanderskich Plotted: Mar 27, 2026 – 10:52am Xref's:

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BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
EXISTING HYDROLOGY EXHIBIT

PROPOSED BUILDING FOR:
BLD MUKWONAGO 83 INDUSTRIAL
E. BOXHORN DR./S.T.H "83"
MUKWONAGO, WISCONSIN

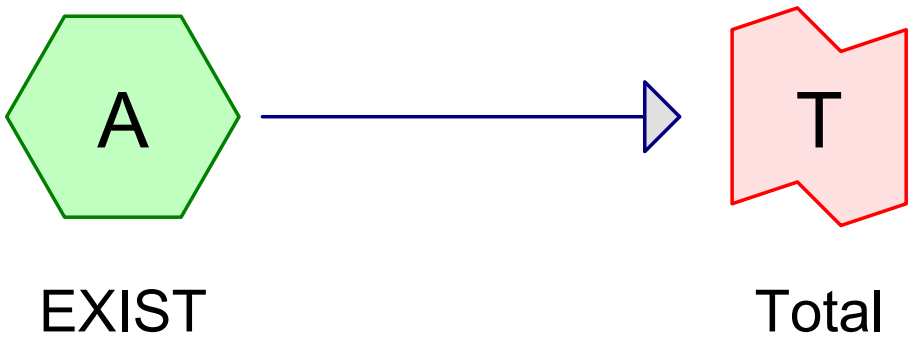
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JOB: 250123
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CHECKED:
DATE: 03-27-2026
SHEET: H-1

DRAFT - NOT FOR CONSTRUCTION

north
SCALE IN FEET
40' 0 40'



Subcat Reach Pond Link

Routing Diagram for 250123 EXIST
Prepared by Briohn Building Corporation, Printed 3/27/2026
HydroCAD® 10.20-8a s/n 13230 © 2025 HydroCAD Software Solutions LLC

Rainfall Events Listing

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

Summary for Subcatchment A: EXIST

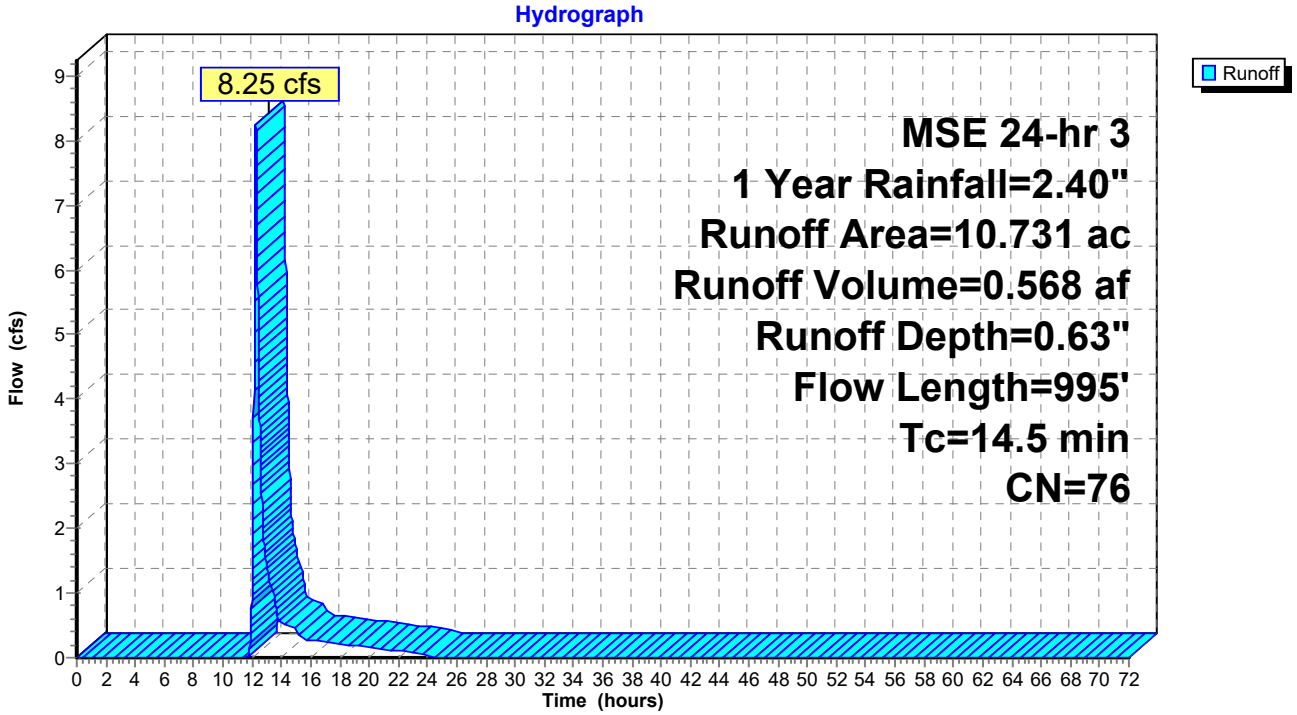
Runoff = 8.25 cfs @ 12.25 hrs, Volume= 0.568 af, Depth= 0.63"
Routed to Link T : Total

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1 Year Rainfall=2.40"

	Area (ac)	CN	Description
*	1.116	55	Village Code Cropland HSG A
*	1.287	69	Villgae Code Cropland HSG B
*	5.838	78	Village Code Cropland HSG C
*	2.490	83	Village Code Cropland HSG D
	10.731	76	Weighted Average
	10.731		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.4	300	0.0367	0.60		**Sheet Flow, Sheet Flow** Fallow n= 0.050 P2= 2.70"
6.1	695	0.0360	1.90		**Shallow Concentrated Flow, Shallow Conc.** Nearly Bare & Untilled Kv= 10.0 fps
14.5	995	Total			

Subcatchment A: EXIST



Hydrograph for Subcatchment A: EXIST

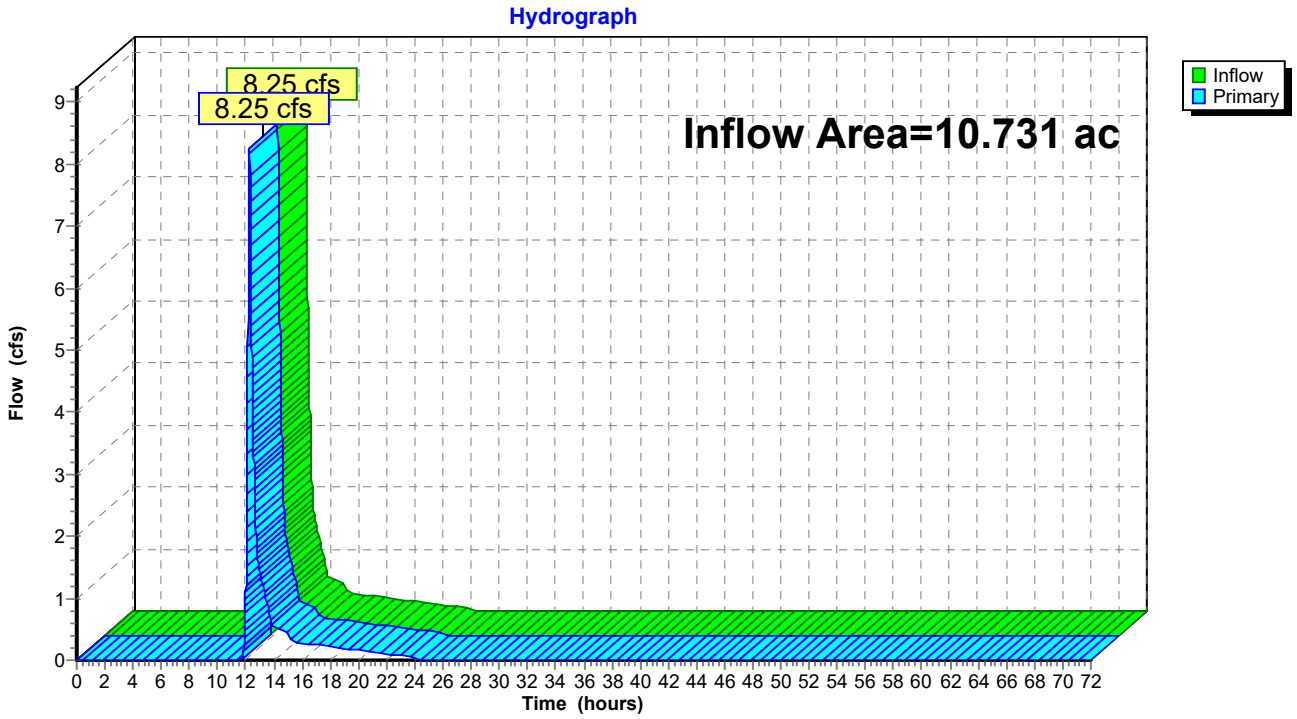
Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.02	0.00	0.00
3.00	0.04	0.00	0.00
4.00	0.06	0.00	0.00
5.00	0.09	0.00	0.00
6.00	0.12	0.00	0.00
7.00	0.16	0.00	0.00
8.00	0.20	0.00	0.00
9.00	0.25	0.00	0.00
10.00	0.33	0.00	0.00
11.00	0.46	0.00	0.00
12.00	1.11	0.06	**1.10**
13.00	1.94	0.38	**1.39**
14.00	2.07	0.45	0.52
15.00	2.15	0.49	0.47
16.00	2.20	0.52	0.27
17.00	2.24	0.54	0.24
18.00	2.28	0.56	0.22
19.00	2.31	0.58	0.19
20.00	2.34	0.60	0.16
21.00	2.36	0.61	0.14
22.00	2.38	0.62	0.11
23.00	2.39	0.63	0.08
24.00	**2.40**	**0.63**	0.05
25.00	2.40	0.63	0.00
26.00	2.40	0.63	0.00
27.00	2.40	0.63	0.00
28.00	2.40	0.63	0.00
29.00	2.40	0.63	0.00
30.00	2.40	0.63	0.00
31.00	2.40	0.63	0.00
32.00	2.40	0.63	0.00
33.00	2.40	0.63	0.00
34.00	2.40	0.63	0.00
35.00	2.40	0.63	0.00
36.00	2.40	0.63	0.00
37.00	2.40	0.63	0.00
38.00	2.40	0.63	0.00
39.00	2.40	0.63	0.00
40.00	2.40	0.63	0.00
41.00	2.40	0.63	0.00
42.00	2.40	0.63	0.00
43.00	2.40	0.63	0.00
44.00	2.40	0.63	0.00
45.00	2.40	0.63	0.00
46.00	2.40	0.63	0.00
47.00	2.40	0.63	0.00
48.00	2.40	0.63	0.00
49.00	2.40	0.63	0.00
50.00	2.40	0.63	0.00
51.00	2.40	0.63	0.00
52.00	2.40	0.63	0.00
53.00	2.40	0.63	0.00
54.00	2.40	0.63	0.00
55.00	2.40	0.63	0.00
56.00	2.40	0.63	0.00
57.00	2.40	0.63	0.00
58.00	2.40	0.63	0.00
59.00	2.40	0.63	0.00
60.00	2.40	0.63	0.00
61.00	2.40	0.63	0.00
62.00	2.40	0.63	0.00
63.00	2.40	0.63	0.00
64.00	2.40	0.63	0.00
65.00	2.40	0.63	0.00
66.00	2.40	0.63	0.00
67.00	2.40	0.63	0.00
68.00	2.40	0.63	0.00
69.00	2.40	0.63	0.00
70.00	2.40	0.63	0.00
71.00	2.40	0.63	0.00
72.00	2.40	0.63	0.00

Summary for Link T: Total

Inflow Area = 10.731 ac, 0.00% Impervious, Inflow Depth = 0.63" for 1 Year event
Inflow = 8.25 cfs @ 12.25 hrs, Volume= 0.568 af
Primary = 8.25 cfs @ 12.25 hrs, Volume= 0.568 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link T: Total



Hydrograph for Link T: Total

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	**0.00**	0.00	52.00	0.00	0.00	0.00
1.00	0.00	0.00	0.00	53.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	54.00	0.00	0.00	0.00
3.00	0.00	0.00	0.00	55.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	56.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00	57.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00
7.00	0.00	0.00	0.00	59.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00
9.00	0.00	0.00	0.00	61.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	62.00	0.00	0.00	0.00
11.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00
12.00	**1.10**	0.00	**1.10**	64.00	0.00	0.00	0.00
13.00	**1.39**	0.00	**1.39**	65.00	0.00	0.00	0.00
14.00	0.52	0.00	0.52	66.00	0.00	0.00	0.00
15.00	0.47	0.00	0.47	67.00	0.00	0.00	0.00
16.00	0.27	0.00	0.27	68.00	0.00	0.00	0.00
17.00	0.24	0.00	0.24	69.00	0.00	0.00	0.00
18.00	0.22	0.00	0.22	70.00	0.00	0.00	0.00
19.00	0.19	0.00	0.19	71.00	0.00	0.00	0.00
20.00	0.16	0.00	0.16	72.00	0.00	0.00	0.00
21.00	0.14	0.00	0.14				
22.00	0.11	0.00	0.11				
23.00	0.08	0.00	0.08				
24.00	0.05	0.00	0.05				
25.00	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				
27.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
29.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
31.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
33.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
35.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
37.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
39.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
41.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
43.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
45.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
47.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
49.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
51.00	0.00	0.00	0.00				

Summary for Subcatchment A: EXIST

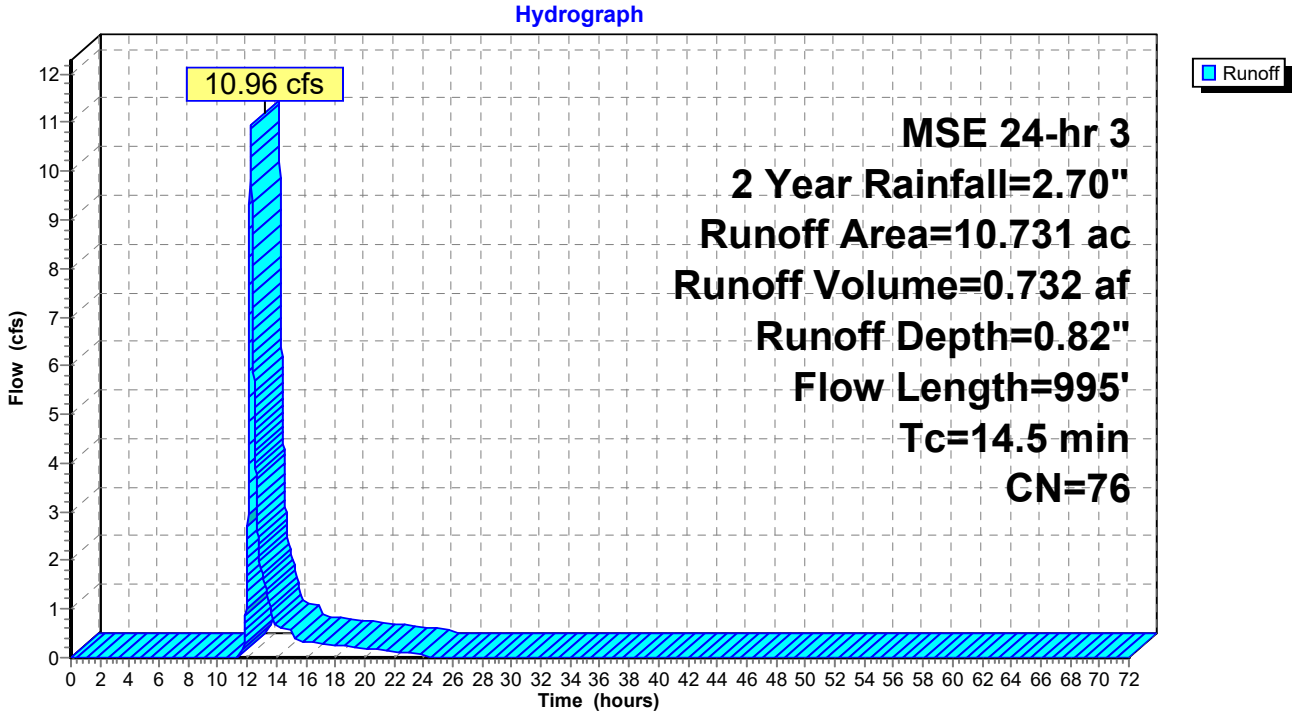
Runoff = 10.96 cfs @ 12.24 hrs, Volume= 0.732 af, Depth= 0.82"
Routed to Link T : Total

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2 Year Rainfall=2.70"

	Area (ac)	CN	Description
*	1.116	55	Village Code Cropland HSG A
*	1.287	69	Villgae Code Cropland HSG B
*	5.838	78	Village Code Cropland HSG C
*	2.490	83	Village Code Cropland HSG D
	10.731	76	Weighted Average
	10.731		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.4	300	0.0367	0.60		**Sheet Flow, Sheet Flow** Fallow n= 0.050 P2= 2.70"
6.1	695	0.0360	1.90		**Shallow Concentrated Flow, Shallow Conc.** Nearly Bare & Untilled Kv= 10.0 fps
14.5	995	Total			

Subcatchment A: EXIST



Hydrograph for Subcatchment A: EXIST

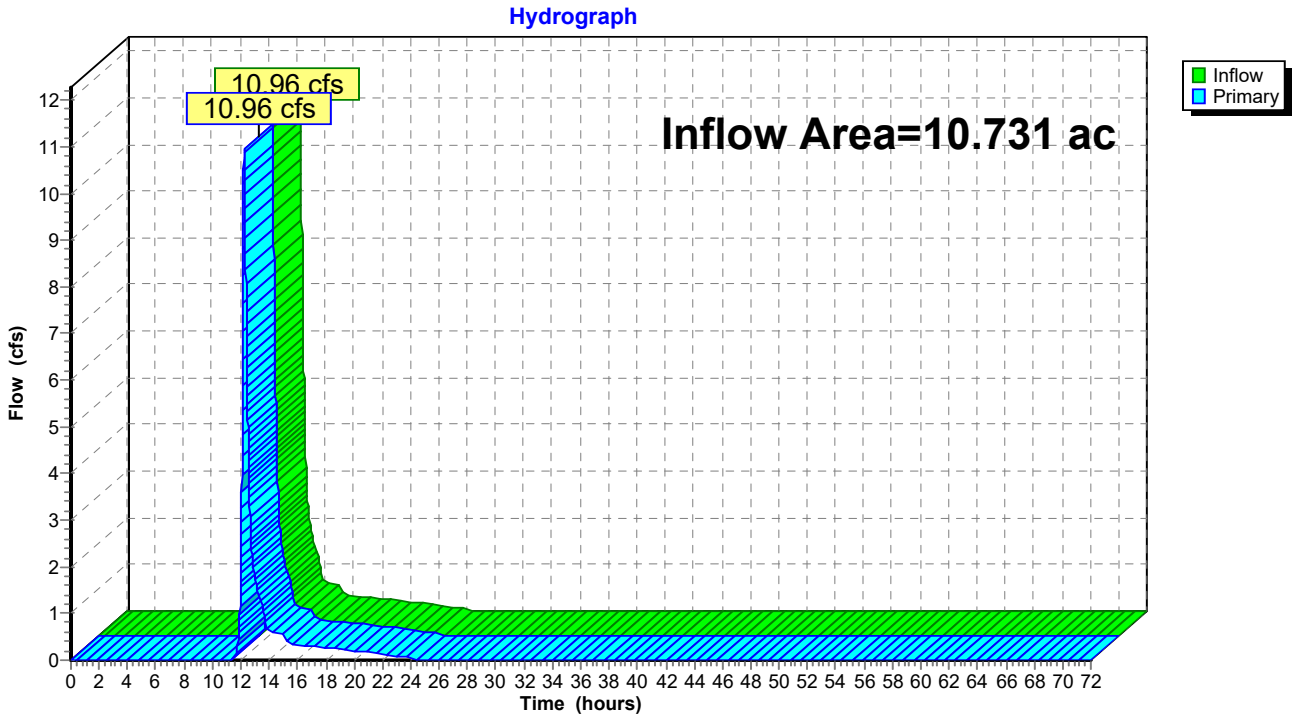
Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.02	0.00	0.00
3.00	0.04	0.00	0.00
4.00	0.07	0.00	0.00
5.00	0.10	0.00	0.00
6.00	0.14	0.00	0.00
7.00	0.18	0.00	0.00
8.00	0.23	0.00	0.00
9.00	0.28	0.00	0.00
10.00	0.37	0.00	0.00
11.00	0.52	0.00	0.00
12.00	1.25	0.10	**1.86**
13.00	2.18	0.51	**1.73**
14.00	2.33	0.59	0.64
15.00	2.42	0.65	0.57
16.00	2.47	0.68	0.33
17.00	2.52	0.71	0.30
18.00	2.56	0.73	0.27
19.00	2.60	0.76	0.23
20.00	2.63	0.77	0.20
21.00	2.66	0.79	0.16
22.00	2.68	0.80	0.13
23.00	2.69	0.81	0.09
24.00	**2.70**	**0.82**	0.06
25.00	2.70	0.82	0.00
26.00	2.70	0.82	0.00
27.00	2.70	0.82	0.00
28.00	2.70	0.82	0.00
29.00	2.70	0.82	0.00
30.00	2.70	0.82	0.00
31.00	2.70	0.82	0.00
32.00	2.70	0.82	0.00
33.00	2.70	0.82	0.00
34.00	2.70	0.82	0.00
35.00	2.70	0.82	0.00
36.00	2.70	0.82	0.00
37.00	2.70	0.82	0.00
38.00	2.70	0.82	0.00
39.00	2.70	0.82	0.00
40.00	2.70	0.82	0.00
41.00	2.70	0.82	0.00
42.00	2.70	0.82	0.00
43.00	2.70	0.82	0.00
44.00	2.70	0.82	0.00
45.00	2.70	0.82	0.00
46.00	2.70	0.82	0.00
47.00	2.70	0.82	0.00
48.00	2.70	0.82	0.00
49.00	2.70	0.82	0.00
50.00	2.70	0.82	0.00
51.00	2.70	0.82	0.00
52.00	2.70	0.82	0.00
53.00	2.70	0.82	0.00
54.00	2.70	0.82	0.00
55.00	2.70	0.82	0.00
56.00	2.70	0.82	0.00
57.00	2.70	0.82	0.00
58.00	2.70	0.82	0.00
59.00	2.70	0.82	0.00
60.00	2.70	0.82	0.00
61.00	2.70	0.82	0.00
62.00	2.70	0.82	0.00
63.00	2.70	0.82	0.00
64.00	2.70	0.82	0.00
65.00	2.70	0.82	0.00
66.00	2.70	0.82	0.00
67.00	2.70	0.82	0.00
68.00	2.70	0.82	0.00
69.00	2.70	0.82	0.00
70.00	2.70	0.82	0.00
71.00	2.70	0.82	0.00
72.00	2.70	0.82	0.00

Summary for Link T: Total

Inflow Area = 10.731 ac, 0.00% Impervious, Inflow Depth = 0.82" for 2 Year event
Inflow = 10.96 cfs @ 12.24 hrs, Volume= 0.732 af
Primary = 10.96 cfs @ 12.24 hrs, Volume= 0.732 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link T: Total



Hydrograph for Link T: Total

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	**0.00**	0.00	52.00	0.00	0.00	0.00
1.00	0.00	0.00	0.00	53.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	54.00	0.00	0.00	0.00
3.00	0.00	0.00	0.00	55.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	56.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00	57.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00
7.00	0.00	0.00	0.00	59.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00
9.00	0.00	0.00	0.00	61.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	62.00	0.00	0.00	0.00
11.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00
12.00	**1.86**	0.00	**1.86**	64.00	0.00	0.00	0.00
13.00	**1.73**	0.00	**1.73**	65.00	0.00	0.00	0.00
14.00	0.64	0.00	0.64	66.00	0.00	0.00	0.00
15.00	0.57	0.00	0.57	67.00	0.00	0.00	0.00
16.00	0.33	0.00	0.33	68.00	0.00	0.00	0.00
17.00	0.30	0.00	0.30	69.00	0.00	0.00	0.00
18.00	0.27	0.00	0.27	70.00	0.00	0.00	0.00
19.00	0.23	0.00	0.23	71.00	0.00	0.00	0.00
20.00	0.20	0.00	0.20	72.00	0.00	0.00	0.00
21.00	0.16	0.00	0.16				
22.00	0.13	0.00	0.13				
23.00	0.09	0.00	0.09				
24.00	0.06	0.00	0.06				
25.00	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				
27.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
29.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
31.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
33.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
35.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
37.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
39.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
41.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
43.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
45.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
47.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
49.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
51.00	0.00	0.00	0.00				

Summary for Subcatchment A: EXIST

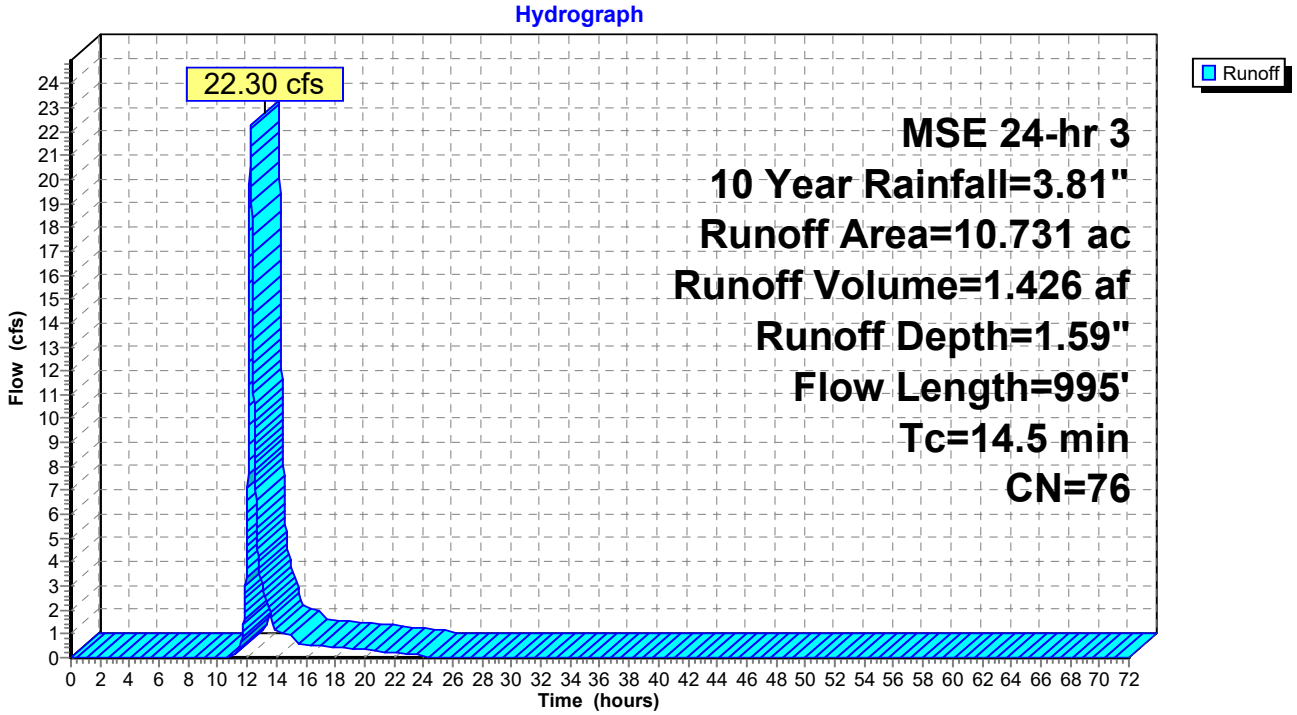
Runoff = 22.30 cfs @ 12.23 hrs, Volume= 1.426 af, Depth= 1.59"
Routed to Link T : Total

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10 Year Rainfall=3.81"

	Area (ac)	CN	Description
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	10.731	76	Weighted Average
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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.4	300	0.0367	0.60		**Sheet Flow, Sheet Flow** Fallow n= 0.050 P2= 2.70"
6.1	695	0.0360	1.90		**Shallow Concentrated Flow, Shallow Conc.** Nearly Bare & Untilled Kv= 10.0 fps
14.5	995	Total			

Subcatchment A: EXIST



Hydrograph for Subcatchment A: EXIST

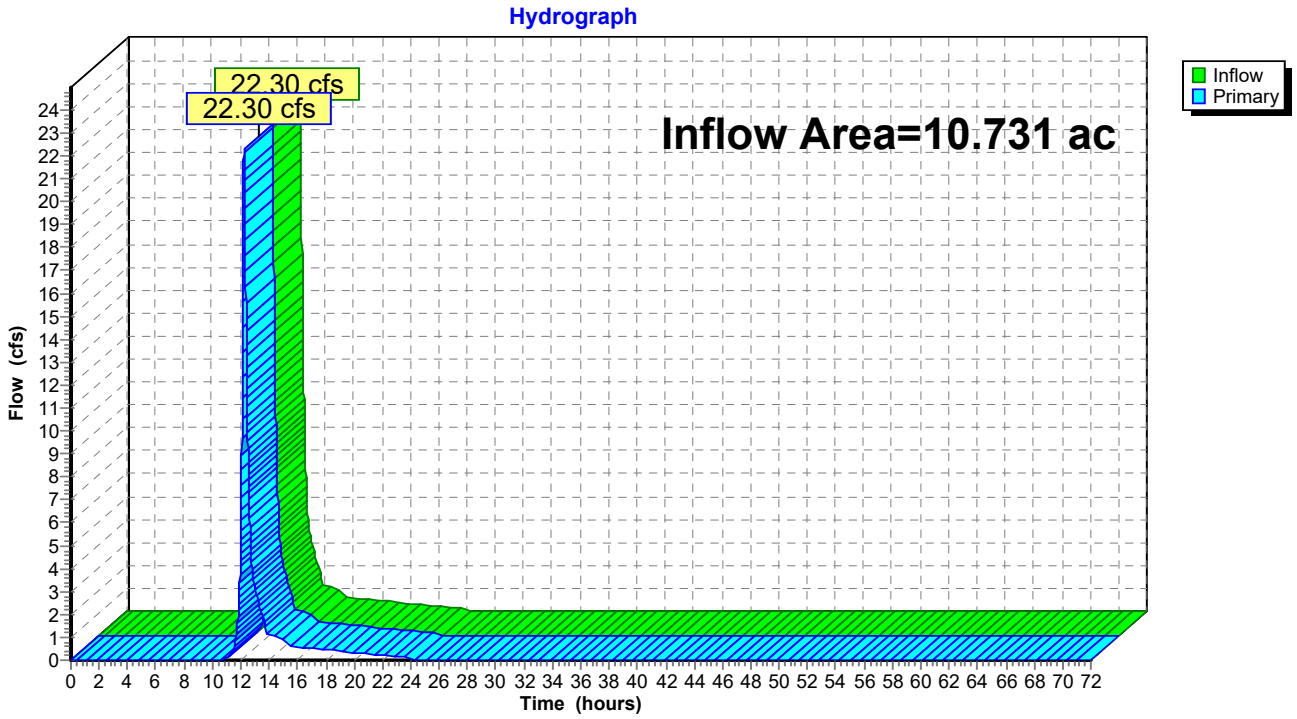
Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.03	0.00	0.00
3.00	0.06	0.00	0.00
4.00	0.10	0.00	0.00
5.00	0.14	0.00	0.00
6.00	0.19	0.00	0.00
7.00	0.25	0.00	0.00
8.00	0.32	0.00	0.00
9.00	0.39	0.00	0.00
10.00	0.52	0.00	0.00
11.00	0.73	0.00	0.07
12.00	1.76	0.30	**5.31**
13.00	3.08	1.07	**3.06**
14.00	3.29	1.21	1.11
15.00	3.42	1.31	0.98
16.00	3.49	1.36	0.56
17.00	3.56	1.41	0.51
18.00	3.62	1.45	0.45
19.00	3.67	1.49	0.39
20.00	3.71	1.52	0.33
21.00	3.75	1.55	0.28
22.00	3.78	1.57	0.21
23.00	3.80	1.58	0.15
24.00	**3.81**	**1.59**	0.09
25.00	3.81	1.59	0.00
26.00	3.81	1.59	0.00
27.00	3.81	1.59	0.00
28.00	3.81	1.59	0.00
29.00	3.81	1.59	0.00
30.00	3.81	1.59	0.00
31.00	3.81	1.59	0.00
32.00	3.81	1.59	0.00
33.00	3.81	1.59	0.00
34.00	3.81	1.59	0.00
35.00	3.81	1.59	0.00
36.00	3.81	1.59	0.00
37.00	3.81	1.59	0.00
38.00	3.81	1.59	0.00
39.00	3.81	1.59	0.00
40.00	3.81	1.59	0.00
41.00	3.81	1.59	0.00
42.00	3.81	1.59	0.00
43.00	3.81	1.59	0.00
44.00	3.81	1.59	0.00
45.00	3.81	1.59	0.00
46.00	3.81	1.59	0.00
47.00	3.81	1.59	0.00
48.00	3.81	1.59	0.00
49.00	3.81	1.59	0.00
50.00	3.81	1.59	0.00
51.00	3.81	1.59	0.00
52.00	3.81	1.59	0.00
53.00	3.81	1.59	0.00
54.00	3.81	1.59	0.00
55.00	3.81	1.59	0.00
56.00	3.81	1.59	0.00
57.00	3.81	1.59	0.00
58.00	3.81	1.59	0.00
59.00	3.81	1.59	0.00
60.00	3.81	1.59	0.00
61.00	3.81	1.59	0.00
62.00	3.81	1.59	0.00
63.00	3.81	1.59	0.00
64.00	3.81	1.59	0.00
65.00	3.81	1.59	0.00
66.00	3.81	1.59	0.00
67.00	3.81	1.59	0.00
68.00	3.81	1.59	0.00
69.00	3.81	1.59	0.00
70.00	3.81	1.59	0.00
71.00	3.81	1.59	0.00
72.00	3.81	1.59	0.00

Summary for Link T: Total

Inflow Area = 10.731 ac, 0.00% Impervious, Inflow Depth = 1.59" for 10 Year event
Inflow = 22.30 cfs @ 12.23 hrs, Volume= 1.426 af
Primary = 22.30 cfs @ 12.23 hrs, Volume= 1.426 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link T: Total



Hydrograph for Link T: Total

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	**0.00**	0.00	52.00	0.00	0.00	0.00
1.00	0.00	0.00	0.00	53.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	54.00	0.00	0.00	0.00
3.00	0.00	0.00	0.00	55.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	56.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00	57.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00
7.00	0.00	0.00	0.00	59.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00
9.00	0.00	0.00	0.00	61.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	62.00	0.00	0.00	0.00
11.00	0.07	0.00	0.07	63.00	0.00	0.00	0.00
12.00	**5.31**	0.00	**5.31**	64.00	0.00	0.00	0.00
13.00	**3.06**	0.00	**3.06**	65.00	0.00	0.00	0.00
14.00	1.11	0.00	1.11	66.00	0.00	0.00	0.00
15.00	0.98	0.00	0.98	67.00	0.00	0.00	0.00
16.00	0.56	0.00	0.56	68.00	0.00	0.00	0.00
17.00	0.51	0.00	0.51	69.00	0.00	0.00	0.00
18.00	0.45	0.00	0.45	70.00	0.00	0.00	0.00
19.00	0.39	0.00	0.39	71.00	0.00	0.00	0.00
20.00	0.33	0.00	0.33	72.00	0.00	0.00	0.00
21.00	0.28	0.00	0.28				
22.00	0.21	0.00	0.21				
23.00	0.15	0.00	0.15				
24.00	0.09	0.00	0.09				
25.00	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				
27.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
29.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
31.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
33.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
35.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
37.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
39.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
41.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
43.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
45.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
47.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
49.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
51.00	0.00	0.00	0.00				

Summary for Subcatchment A: EXIST

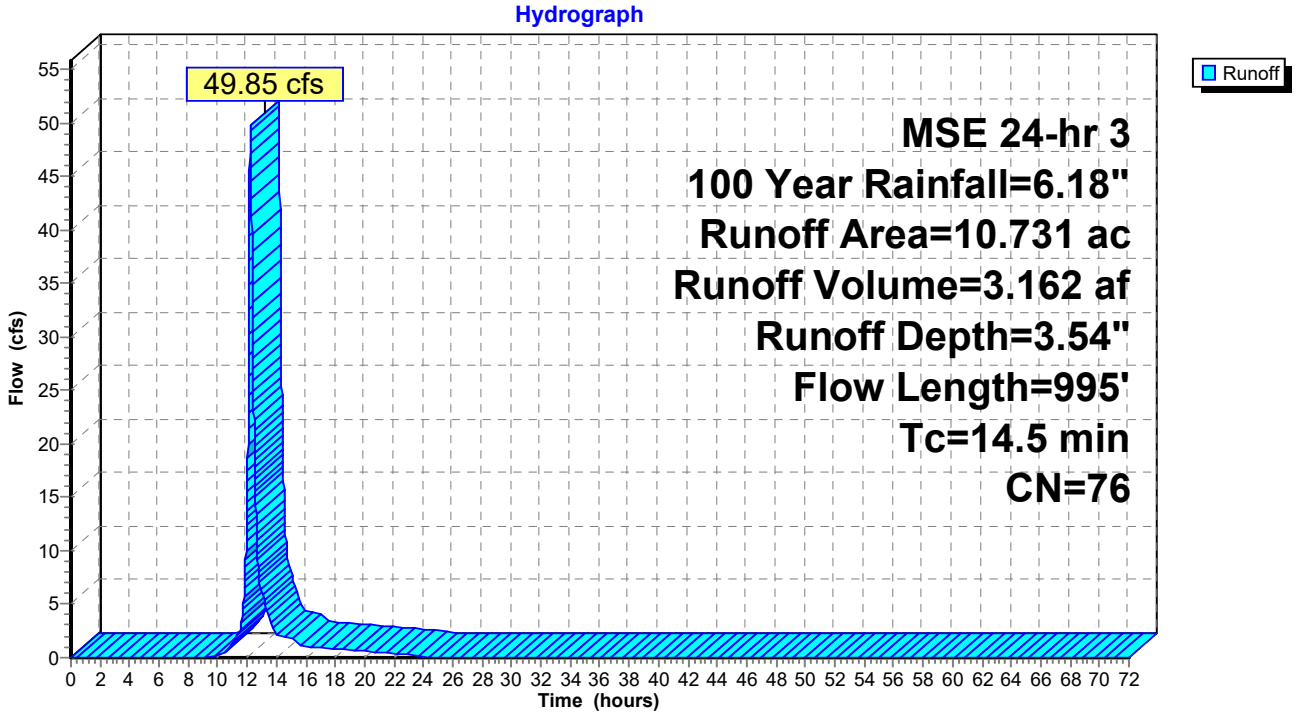
Runoff = 49.85 cfs @ 12.23 hrs, Volume= 3.162 af, Depth= 3.54"
Routed to Link T : Total

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100 Year Rainfall=6.18"

	Area (ac)	CN	Description
*	1.116	55	Village Code Cropland HSG A
*	1.287	69	Villgae Code Cropland HSG B
*	5.838	78	Village Code Cropland HSG C
*	2.490	83	Village Code Cropland HSG D
	10.731	76	Weighted Average
	10.731		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.4	300	0.0367	0.60		**Sheet Flow, Sheet Flow** Fallow n= 0.050 P2= 2.70"
6.1	695	0.0360	1.90		**Shallow Concentrated Flow, Shallow Conc.** Nearly Bare & Untilled Kv= 10.0 fps
14.5	995	Total			

Subcatchment A: EXIST



Hydrograph for Subcatchment A: EXIST

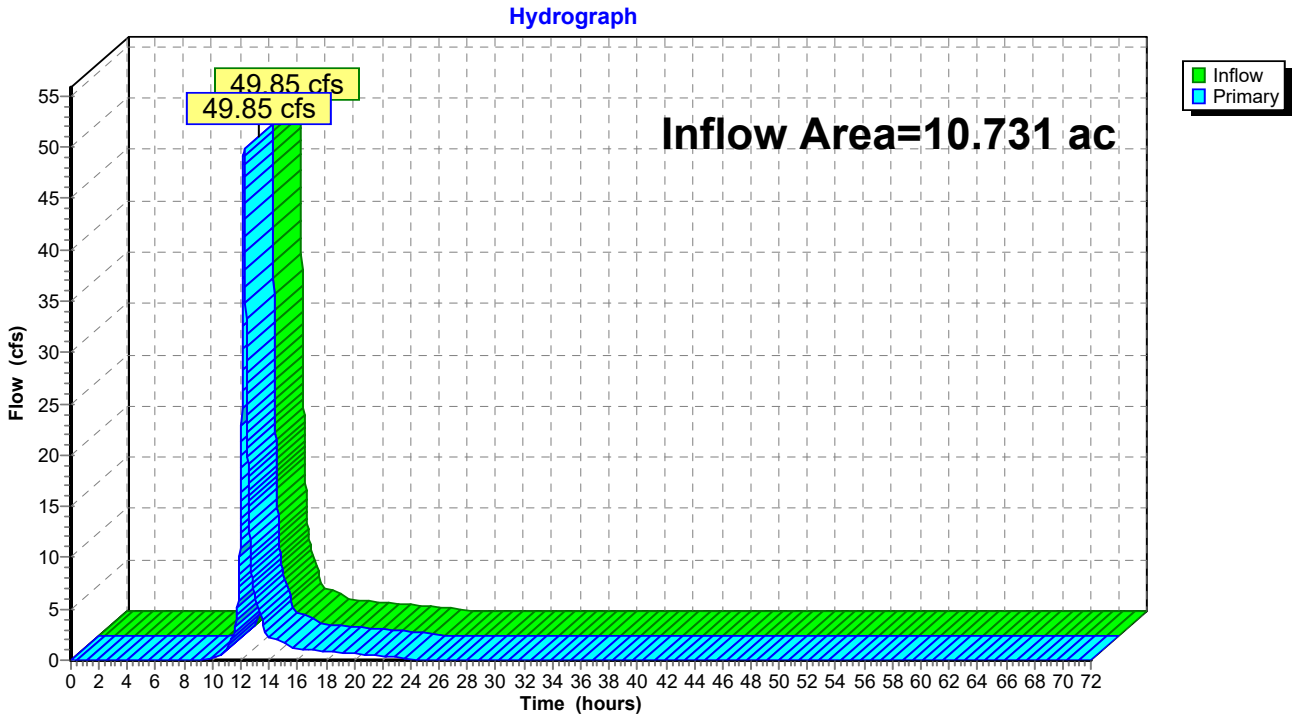
Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.02	0.00	0.00
2.00	0.06	0.00	0.00
3.00	0.10	0.00	0.00
4.00	0.16	0.00	0.00
5.00	0.23	0.00	0.00
6.00	0.31	0.00	0.00
7.00	0.41	0.00	0.00
8.00	0.52	0.00	0.00
9.00	0.64	0.00	0.00
10.00	0.85	0.01	0.23
11.00	1.19	0.08	1.17
12.00	2.86	0.92	**14.62**
13.00	4.99	2.53	**6.03**
14.00	5.33	2.81	2.14
15.00	5.54	2.99	1.87
16.00	5.66	3.09	1.07
17.00	5.77	3.18	0.96
18.00	5.87	3.26	0.85
19.00	5.95	3.34	0.74
20.00	6.02	3.40	0.63
21.00	6.08	3.45	0.52
22.00	6.12	3.49	0.40
23.00	6.16	3.52	0.29
24.00	**6.18**	**3.54**	0.18
25.00	6.18	3.54	0.00
26.00	6.18	3.54	0.00
27.00	6.18	3.54	0.00
28.00	6.18	3.54	0.00
29.00	6.18	3.54	0.00
30.00	6.18	3.54	0.00
31.00	6.18	3.54	0.00
32.00	6.18	3.54	0.00
33.00	6.18	3.54	0.00
34.00	6.18	3.54	0.00
35.00	6.18	3.54	0.00
36.00	6.18	3.54	0.00
37.00	6.18	3.54	0.00
38.00	6.18	3.54	0.00
39.00	6.18	3.54	0.00
40.00	6.18	3.54	0.00
41.00	6.18	3.54	0.00
42.00	6.18	3.54	0.00
43.00	6.18	3.54	0.00
44.00	6.18	3.54	0.00
45.00	6.18	3.54	0.00
46.00	6.18	3.54	0.00
47.00	6.18	3.54	0.00
48.00	6.18	3.54	0.00
49.00	6.18	3.54	0.00
50.00	6.18	3.54	0.00
51.00	6.18	3.54	0.00
52.00	6.18	3.54	0.00
53.00	6.18	3.54	0.00
54.00	6.18	3.54	0.00
55.00	6.18	3.54	0.00
56.00	6.18	3.54	0.00
57.00	6.18	3.54	0.00
58.00	6.18	3.54	0.00
59.00	6.18	3.54	0.00
60.00	6.18	3.54	0.00
61.00	6.18	3.54	0.00
62.00	6.18	3.54	0.00
63.00	6.18	3.54	0.00
64.00	6.18	3.54	0.00
65.00	6.18	3.54	0.00
66.00	6.18	3.54	0.00
67.00	6.18	3.54	0.00
68.00	6.18	3.54	0.00
69.00	6.18	3.54	0.00
70.00	6.18	3.54	0.00
71.00	6.18	3.54	0.00
72.00	6.18	3.54	0.00

Summary for Link T: Total

Inflow Area = 10.731 ac, 0.00% Impervious, Inflow Depth = 3.54" for 100 Year event
Inflow = 49.85 cfs @ 12.23 hrs, Volume= 3.162 af
Primary = 49.85 cfs @ 12.23 hrs, Volume= 3.162 af, Atten= 0%, Lag= 0.0 min

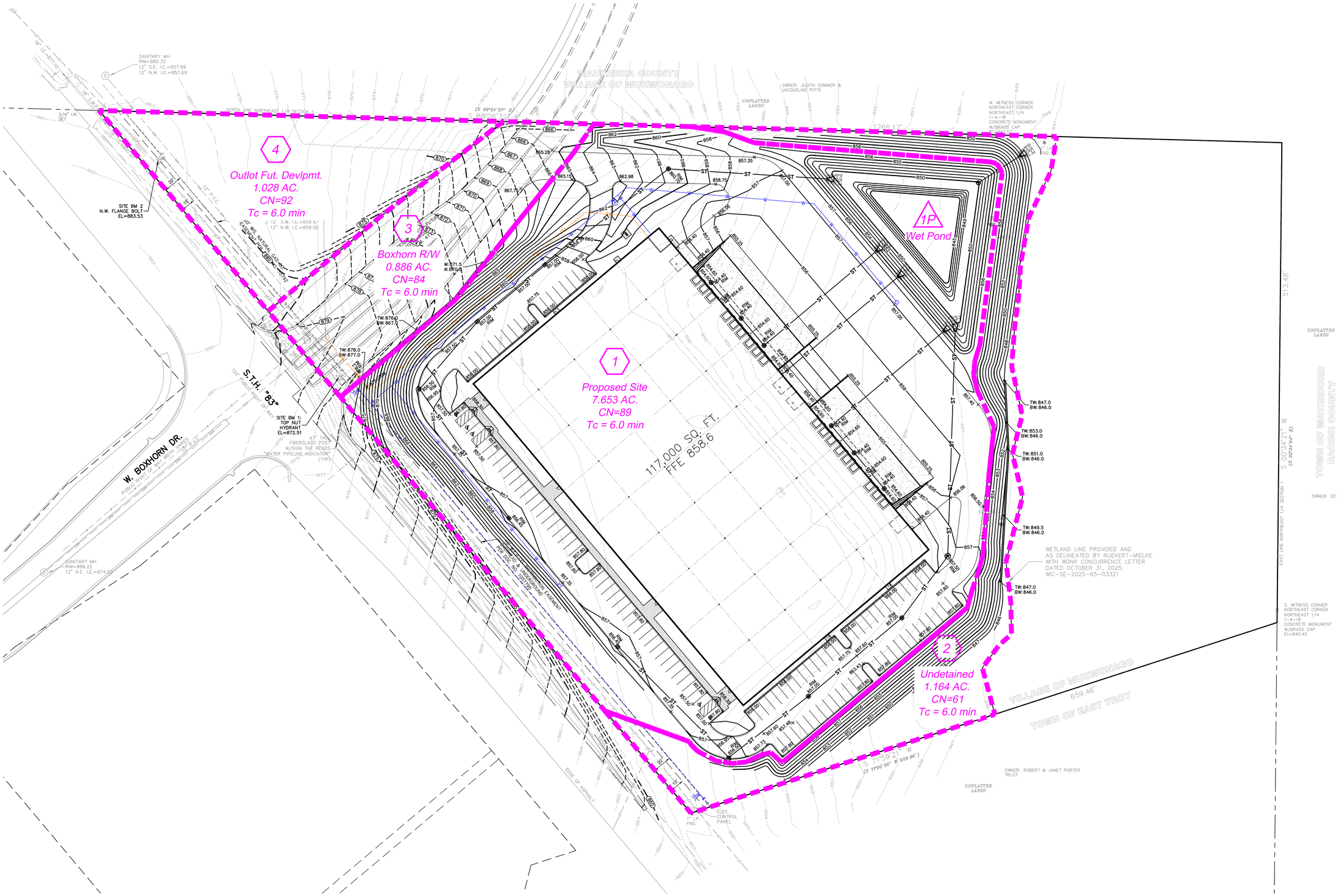
Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link T: Total



Hydrograph for Link T: Total

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	**0.00**	0.00	52.00	0.00	0.00	0.00
1.00	0.00	0.00	0.00	53.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	54.00	0.00	0.00	0.00
3.00	0.00	0.00	0.00	55.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	56.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00	57.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00
7.00	0.00	0.00	0.00	59.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00
9.00	0.00	0.00	0.00	61.00	0.00	0.00	0.00
10.00	0.23	0.00	0.23	62.00	0.00	0.00	0.00
11.00	1.17	0.00	1.17	63.00	0.00	0.00	0.00
12.00	**14.62**	0.00	**14.62**	64.00	0.00	0.00	0.00
13.00	**6.03**	0.00	**6.03**	65.00	0.00	0.00	0.00
14.00	2.14	0.00	2.14	66.00	0.00	0.00	0.00
15.00	1.87	0.00	1.87	67.00	0.00	0.00	0.00
16.00	1.07	0.00	1.07	68.00	0.00	0.00	0.00
17.00	0.96	0.00	0.96	69.00	0.00	0.00	0.00
18.00	0.85	0.00	0.85	70.00	0.00	0.00	0.00
19.00	0.74	0.00	0.74	71.00	0.00	0.00	0.00
20.00	0.63	0.00	0.63	72.00	0.00	0.00	0.00
21.00	0.52	0.00	0.52				
22.00	0.40	0.00	0.40				
23.00	0.29	0.00	0.29				
24.00	0.18	0.00	0.18				
25.00	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				
27.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
29.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
31.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
33.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
35.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
37.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
39.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
41.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
43.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
45.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
47.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
49.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
51.00	0.00	0.00	0.00				



THIS DRAWING SHALL BE USED AS A WATERSHED REFERENCE ONLY

BRIOHN
DESIGN GROUP
3885 N.BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
PROPOSED HYDROLOGY EXHIBIT

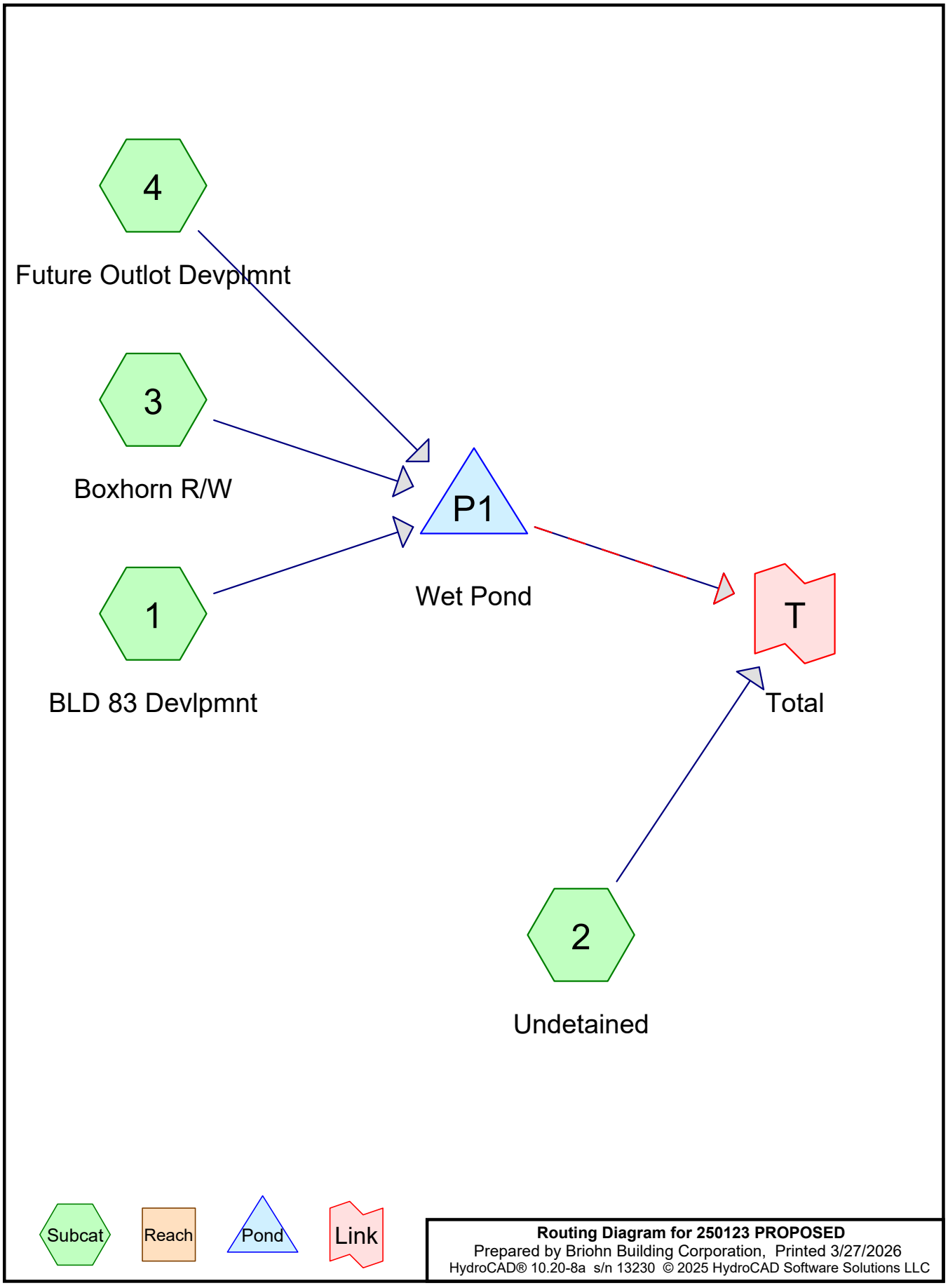
PROPOSED BUILDING FOR:
BLD MUKWONAGO 83 INDUSTRIAL
E. BOXHORN DR./S.T.H "83"
MUKWONAGO, WISCONSIN

Revision	Date

JOB:	250123
DRAWN:	
CHECKED:	
DATE:	03-27-2026
SHEET:	H-2

DRAFT - NOT FOR CONSTRUCTION

File: K:\Projects\250123 - Hwy 83 Mukwonago - BLD\07 Design\Drawings\Revit and DWG Project Files\Civil\dwg\250123 HYDROLOGY.dwg Layout: H-2 User: nkandorejoch Plotted: Mar 27, 2026 - 10:51am Xref's:


4
Future Outlot Devplmnt
3
Boxhorn R/W
1
BLD 83 Devlpmnt
P1
Wet Pond
T
Total
2
Undetained
Subcat
Reach
Pond
Link
Routing Diagram for 250123 PROPOSED
Prepared by Briohn Building Corporation, Printed 3/27/2026
HydroCAD® 10.20-8a s/n 13230 © 2025 HydroCAD Software Solutions LLC

Rainfall Events Listing

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

Summary for Subcatchment 1: BLD 83 Devlpmnt

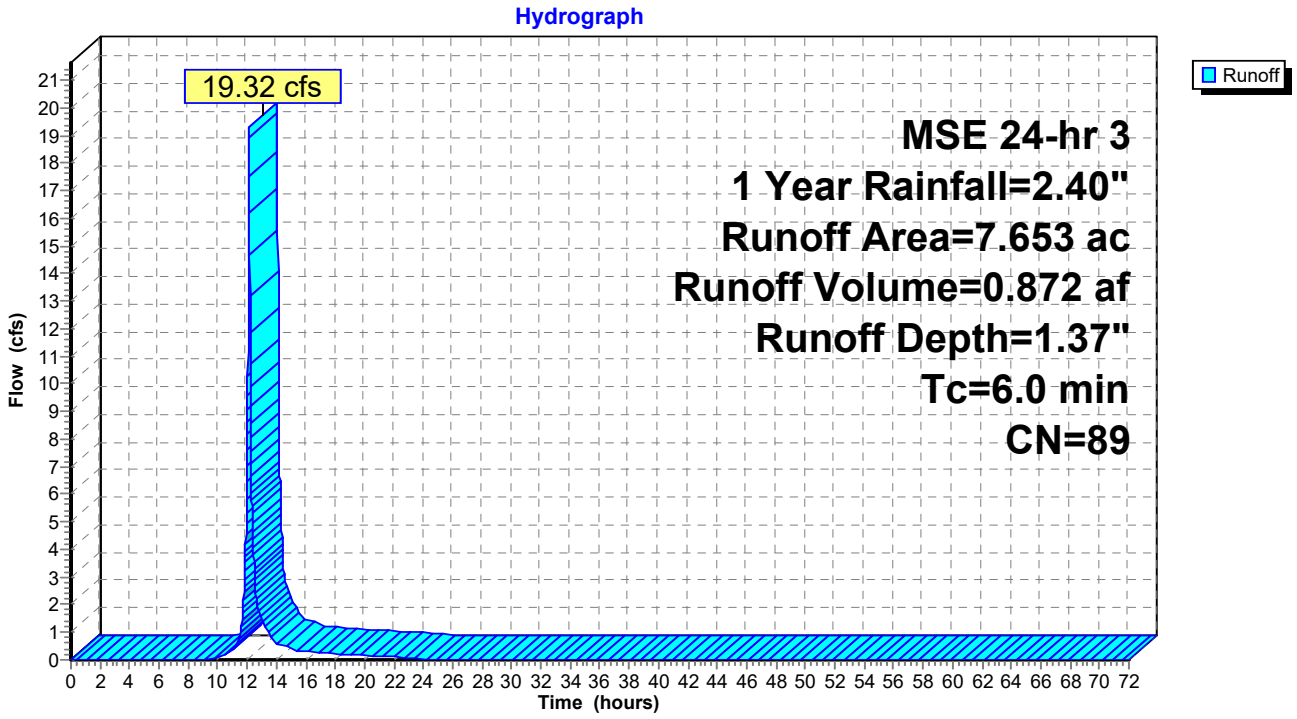
Runoff = 19.32 cfs @ 12.13 hrs, Volume= 0.872 af, Depth= 1.37"
Routed to Pond P1 : Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1 Year Rainfall=2.40"

	Area (ac)	CN	Description
*	2.686	98	Building
*	2.719	98	Paved Area
	0.290	98	Water Surface, HSG B
	1.958	61	>75% Grass cover, Good, HSG B
	7.653	89	Weighted Average
	1.958		25.58% Pervious Area
	5.695		74.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 1: BLD 83 Devlpmnt



Hydrograph for Subcatchment 1: BLD 83 Devlpmnt

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.02	0.00	0.00
3.00	0.04	0.00	0.00
4.00	0.06	0.00	0.00
5.00	0.09	0.00	0.00
6.00	0.12	0.00	0.00
7.00	0.16	0.00	0.00
8.00	0.20	0.00	0.00
9.00	0.25	0.00	0.00
10.00	0.33	0.01	0.07
11.00	0.46	0.03	0.40
12.00	1.11	0.36	**8.17**
13.00	1.94	0.98	**1.49**
14.00	2.07	1.09	0.57
15.00	2.15	1.16	0.51
16.00	2.20	1.20	0.29
17.00	2.24	1.23	0.26
18.00	2.28	1.26	0.23
19.00	2.31	1.29	0.20
20.00	2.34	1.31	0.17
21.00	2.36	1.33	0.14
22.00	2.38	1.35	0.11
23.00	2.39	1.36	0.08
24.00	**2.40**	**1.37**	0.04
25.00	2.40	1.37	0.00
26.00	2.40	1.37	0.00
27.00	2.40	1.37	0.00
28.00	2.40	1.37	0.00
29.00	2.40	1.37	0.00
30.00	2.40	1.37	0.00
31.00	2.40	1.37	0.00
32.00	2.40	1.37	0.00
33.00	2.40	1.37	0.00
34.00	2.40	1.37	0.00
35.00	2.40	1.37	0.00
36.00	2.40	1.37	0.00
37.00	2.40	1.37	0.00
38.00	2.40	1.37	0.00
39.00	2.40	1.37	0.00
40.00	2.40	1.37	0.00
41.00	2.40	1.37	0.00
42.00	2.40	1.37	0.00
43.00	2.40	1.37	0.00
44.00	2.40	1.37	0.00
45.00	2.40	1.37	0.00
46.00	2.40	1.37	0.00
47.00	2.40	1.37	0.00
48.00	2.40	1.37	0.00
49.00	2.40	1.37	0.00
50.00	2.40	1.37	0.00
51.00	2.40	1.37	0.00
52.00	2.40	1.37	0.00
53.00	2.40	1.37	0.00
54.00	2.40	1.37	0.00
55.00	2.40	1.37	0.00
56.00	2.40	1.37	0.00
57.00	2.40	1.37	0.00
58.00	2.40	1.37	0.00
59.00	2.40	1.37	0.00
60.00	2.40	1.37	0.00
61.00	2.40	1.37	0.00
62.00	2.40	1.37	0.00
63.00	2.40	1.37	0.00
64.00	2.40	1.37	0.00
65.00	2.40	1.37	0.00
66.00	2.40	1.37	0.00
67.00	2.40	1.37	0.00
68.00	2.40	1.37	0.00
69.00	2.40	1.37	0.00
70.00	2.40	1.37	0.00
71.00	2.40	1.37	0.00
72.00	2.40	1.37	0.00

Summary for Subcatchment 2: Undetained

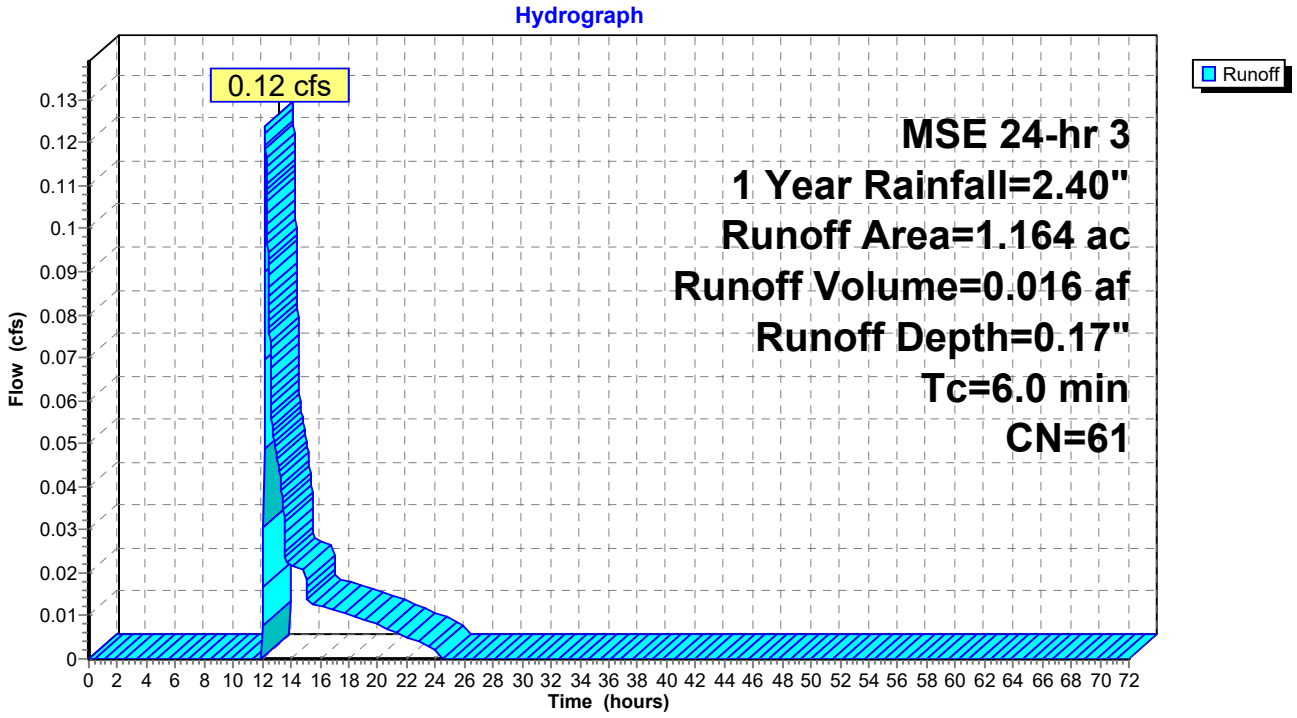
Runoff = 0.12 cfs @ 12.18 hrs, Volume= 0.016 af, Depth= 0.17"
Routed to Link T : Total

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1 Year Rainfall=2.40"

Area (ac)	CN	Description
1.164	61	>75% Grass cover, Good, HSG B
1.164		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 2: Undetained



Hydrograph for Subcatchment 2: Undetained

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.02	0.00	0.00
3.00	0.04	0.00	0.00
4.00	0.06	0.00	0.00
5.00	0.09	0.00	0.00
6.00	0.12	0.00	0.00
7.00	0.16	0.00	0.00
8.00	0.20	0.00	0.00
9.00	0.25	0.00	0.00
10.00	0.33	0.00	0.00
11.00	0.46	0.00	0.00
12.00	1.11	0.00	**0.00**
13.00	1.94	0.06	**0.05**
14.00	2.07	0.09	0.02
15.00	2.15	0.11	0.02
16.00	2.20	0.12	0.01
17.00	2.24	0.13	0.01
18.00	2.28	0.14	0.01
19.00	2.31	0.14	0.01
20.00	2.34	0.15	0.01
21.00	2.36	0.16	0.01
22.00	2.38	0.16	0.01
23.00	2.39	0.16	0.00
24.00	**2.40**	**0.17**	0.00
25.00	2.40	0.17	0.00
26.00	2.40	0.17	0.00
27.00	2.40	0.17	0.00
28.00	2.40	0.17	0.00
29.00	2.40	0.17	0.00
30.00	2.40	0.17	0.00
31.00	2.40	0.17	0.00
32.00	2.40	0.17	0.00
33.00	2.40	0.17	0.00
34.00	2.40	0.17	0.00
35.00	2.40	0.17	0.00
36.00	2.40	0.17	0.00
37.00	2.40	0.17	0.00
38.00	2.40	0.17	0.00
39.00	2.40	0.17	0.00
40.00	2.40	0.17	0.00
41.00	2.40	0.17	0.00
42.00	2.40	0.17	0.00
43.00	2.40	0.17	0.00
44.00	2.40	0.17	0.00
45.00	2.40	0.17	0.00
46.00	2.40	0.17	0.00
47.00	2.40	0.17	0.00
48.00	2.40	0.17	0.00
49.00	2.40	0.17	0.00
50.00	2.40	0.17	0.00
51.00	2.40	0.17	0.00
52.00	2.40	0.17	0.00
53.00	2.40	0.17	0.00
54.00	2.40	0.17	0.00
55.00	2.40	0.17	0.00
56.00	2.40	0.17	0.00
57.00	2.40	0.17	0.00
58.00	2.40	0.17	0.00
59.00	2.40	0.17	0.00
60.00	2.40	0.17	0.00
61.00	2.40	0.17	0.00
62.00	2.40	0.17	0.00
63.00	2.40	0.17	0.00
64.00	2.40	0.17	0.00
65.00	2.40	0.17	0.00
66.00	2.40	0.17	0.00
67.00	2.40	0.17	0.00
68.00	2.40	0.17	0.00
69.00	2.40	0.17	0.00
70.00	2.40	0.17	0.00
71.00	2.40	0.17	0.00
72.00	2.40	0.17	0.00

Summary for Subcatchment 3: Boxhorn R/W

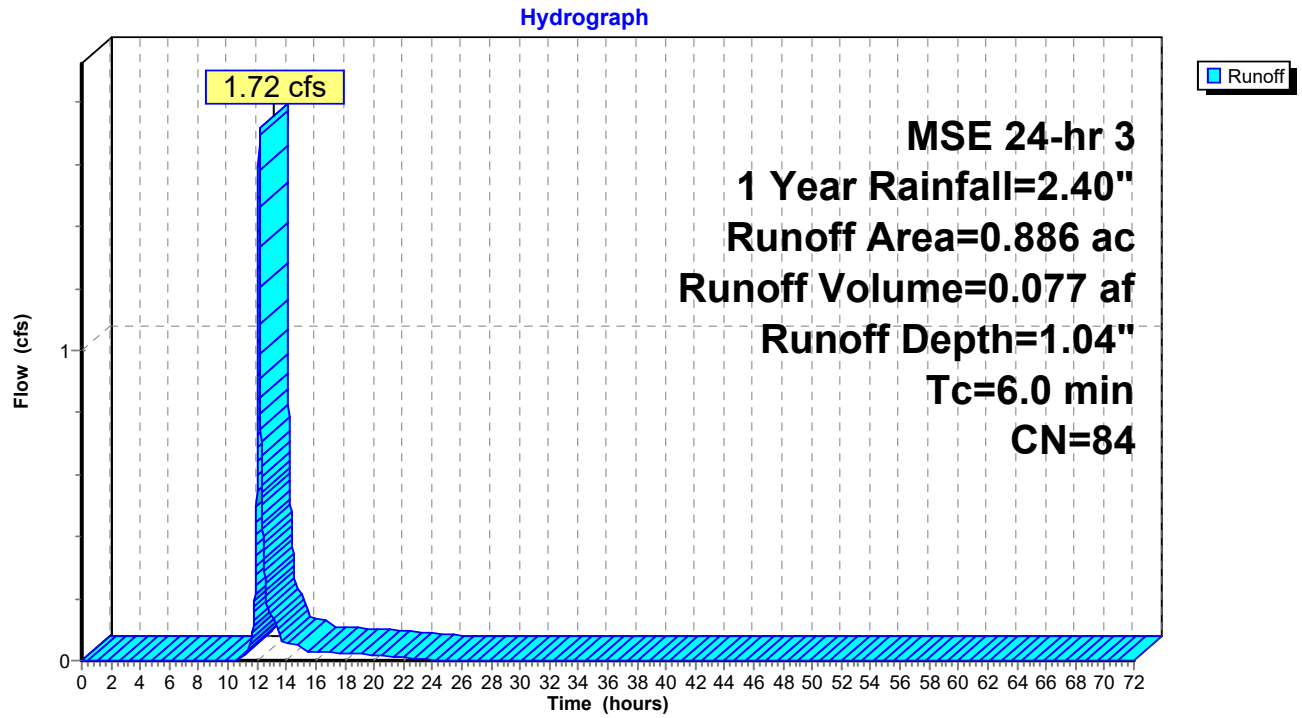
Runoff = 1.72 cfs @ 12.14 hrs, Volume= 0.077 af, Depth= 1.04"
Routed to Pond P1 : Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1 Year Rainfall=2.40"

	Area (ac)	CN	Description
*	0.489	98	Road pavement
*	0.064	98	Public walk
	0.333	61	>75% Grass cover, Good, HSG B
	0.886	84	Weighted Average
	0.333		37.58% Pervious Area
	0.553		62.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 3: Boxhorn R/W



Hydrograph for Subcatchment 3: Boxhorn R/W

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.02	0.00	0.00
3.00	0.04	0.00	0.00
4.00	0.06	0.00	0.00
5.00	0.09	0.00	0.00
6.00	0.12	0.00	0.00
7.00	0.16	0.00	0.00
8.00	0.20	0.00	0.00
9.00	0.25	0.00	0.00
10.00	0.33	0.00	0.00
11.00	0.46	0.00	0.01
12.00	1.11	0.20	**0.65**
13.00	1.94	0.70	**0.15**
14.00	2.07	0.79	0.06
15.00	2.15	0.85	0.05
16.00	2.20	0.89	0.03
17.00	2.24	0.92	0.03
18.00	2.28	0.95	0.02
19.00	2.31	0.97	0.02
20.00	2.34	0.99	0.02
21.00	2.36	1.01	0.01
22.00	2.38	1.02	0.01
23.00	2.39	1.03	0.01
24.00	**2.40**	**1.04**	0.00
25.00	2.40	1.04	0.00
26.00	2.40	1.04	0.00
27.00	2.40	1.04	0.00
28.00	2.40	1.04	0.00
29.00	2.40	1.04	0.00
30.00	2.40	1.04	0.00
31.00	2.40	1.04	0.00
32.00	2.40	1.04	0.00
33.00	2.40	1.04	0.00
34.00	2.40	1.04	0.00
35.00	2.40	1.04	0.00
36.00	2.40	1.04	0.00
37.00	2.40	1.04	0.00
38.00	2.40	1.04	0.00
39.00	2.40	1.04	0.00
40.00	2.40	1.04	0.00
41.00	2.40	1.04	0.00
42.00	2.40	1.04	0.00
43.00	2.40	1.04	0.00
44.00	2.40	1.04	0.00
45.00	2.40	1.04	0.00
46.00	2.40	1.04	0.00
47.00	2.40	1.04	0.00
48.00	2.40	1.04	0.00
49.00	2.40	1.04	0.00
50.00	2.40	1.04	0.00
51.00	2.40	1.04	0.00
52.00	2.40	1.04	0.00
53.00	2.40	1.04	0.00
54.00	2.40	1.04	0.00
55.00	2.40	1.04	0.00
56.00	2.40	1.04	0.00
57.00	2.40	1.04	0.00
58.00	2.40	1.04	0.00
59.00	2.40	1.04	0.00
60.00	2.40	1.04	0.00
61.00	2.40	1.04	0.00
62.00	2.40	1.04	0.00
63.00	2.40	1.04	0.00
64.00	2.40	1.04	0.00
65.00	2.40	1.04	0.00
66.00	2.40	1.04	0.00
67.00	2.40	1.04	0.00
68.00	2.40	1.04	0.00
69.00	2.40	1.04	0.00
70.00	2.40	1.04	0.00
71.00	2.40	1.04	0.00
72.00	2.40	1.04	0.00

Summary for Subcatchment 4: Future Outlot Devplmnt

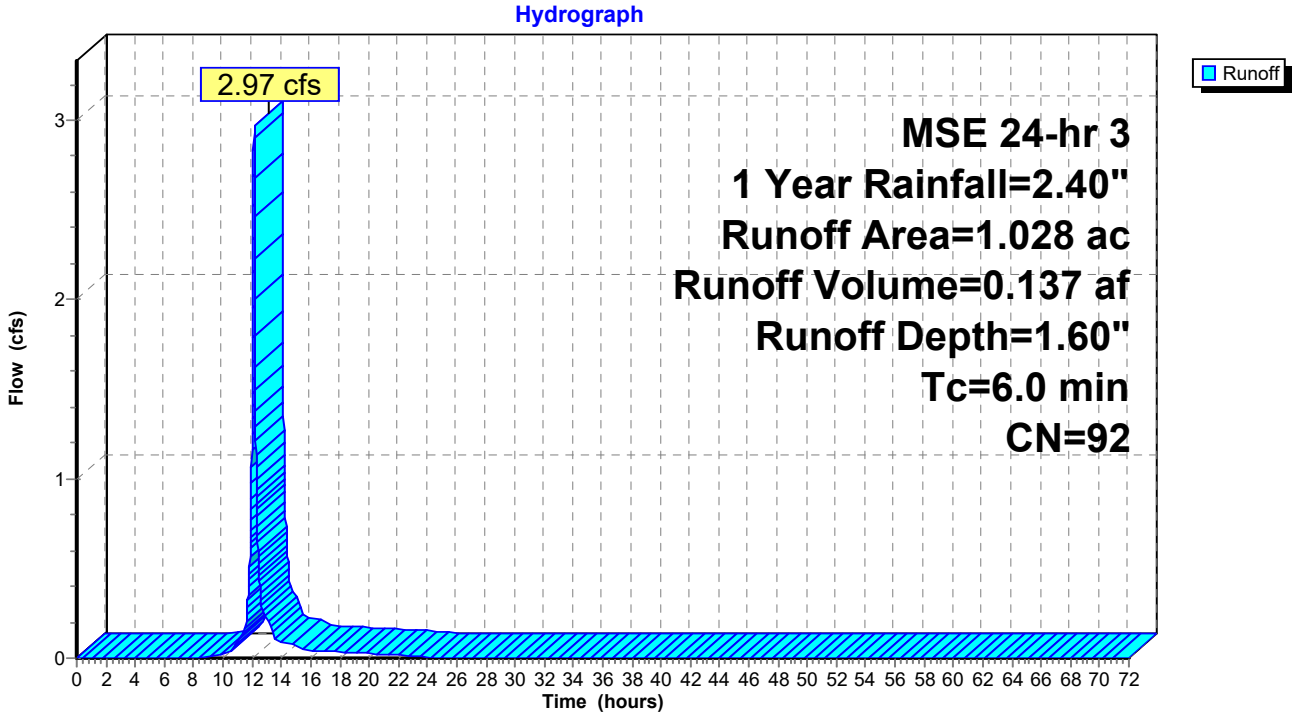
Runoff = 2.97 cfs @ 12.13 hrs, Volume= 0.137 af, Depth= 1.60"
Routed to Pond P1 : Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1 Year Rainfall=2.40"

Area (ac)	CN	Description
1.028	92	Urban commercial, 85% imp, HSG B
0.154		15.00% Pervious Area
0.874		85.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 4: Future Outlot Devplmnt



Hydrograph for Subcatchment 4: Future Outlot Devplmnt

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.02	0.00	0.00
3.00	0.04	0.00	0.00
4.00	0.06	0.00	0.00
5.00	0.09	0.00	0.00
6.00	0.12	0.00	0.00
7.00	0.16	0.00	0.00
8.00	0.20	0.00	0.00
9.00	0.25	0.01	0.01
10.00	0.33	0.02	0.02
11.00	0.46	0.07	0.09
12.00	1.11	0.49	**1.34**
13.00	1.94	1.18	**0.22**
14.00	2.07	1.30	0.08
15.00	2.15	1.37	0.07
16.00	2.20	1.42	0.04
17.00	2.24	1.45	0.04
18.00	2.28	1.49	0.03
19.00	2.31	1.52	0.03
20.00	2.34	1.54	0.02
21.00	2.36	1.56	0.02
22.00	2.38	1.58	0.02
23.00	2.39	1.59	0.01
24.00	**2.40**	**1.60**	0.01
25.00	2.40	1.60	0.00
26.00	2.40	1.60	0.00
27.00	2.40	1.60	0.00
28.00	2.40	1.60	0.00
29.00	2.40	1.60	0.00
30.00	2.40	1.60	0.00
31.00	2.40	1.60	0.00
32.00	2.40	1.60	0.00
33.00	2.40	1.60	0.00
34.00	2.40	1.60	0.00
35.00	2.40	1.60	0.00
36.00	2.40	1.60	0.00
37.00	2.40	1.60	0.00
38.00	2.40	1.60	0.00
39.00	2.40	1.60	0.00
40.00	2.40	1.60	0.00
41.00	2.40	1.60	0.00
42.00	2.40	1.60	0.00
43.00	2.40	1.60	0.00
44.00	2.40	1.60	0.00
45.00	2.40	1.60	0.00
46.00	2.40	1.60	0.00
47.00	2.40	1.60	0.00
48.00	2.40	1.60	0.00
49.00	2.40	1.60	0.00
50.00	2.40	1.60	0.00
51.00	2.40	1.60	0.00
52.00	2.40	1.60	0.00
53.00	2.40	1.60	0.00
54.00	2.40	1.60	0.00
55.00	2.40	1.60	0.00
56.00	2.40	1.60	0.00
57.00	2.40	1.60	0.00
58.00	2.40	1.60	0.00
59.00	2.40	1.60	0.00
60.00	2.40	1.60	0.00
61.00	2.40	1.60	0.00
62.00	2.40	1.60	0.00
63.00	2.40	1.60	0.00
64.00	2.40	1.60	0.00
65.00	2.40	1.60	0.00
66.00	2.40	1.60	0.00
67.00	2.40	1.60	0.00
68.00	2.40	1.60	0.00
69.00	2.40	1.60	0.00
70.00	2.40	1.60	0.00
71.00	2.40	1.60	0.00
72.00	2.40	1.60	0.00

Summary for Pond P1: Wet Pond

Inflow Area = 9.567 ac, 74.44% Impervious, Inflow Depth = 1.36" for 1 Year event
Inflow = 24.01 cfs @ 12.13 hrs, Volume= 1.086 af
Outflow = 0.61 cfs @ 15.04 hrs, Volume= 1.076 af, Atten= 97%, Lag= 174.5 min
Primary = 0.61 cfs @ 15.04 hrs, Volume= 1.076 af
Routed to Link T : Total
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link T : Total

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 852.28' @ 15.04 hrs Surf.Area= 16,565 sf Storage= 33,158 cf

Plug-Flow detention time= 697.6 min calculated for 1.076 af (99% of inflow)
Center-of-Mass det. time= 692.2 min (1,492.4 - 800.1)

Volume	Invert	Avail.Storage	Storage Description
#1	850.00'	108,399 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

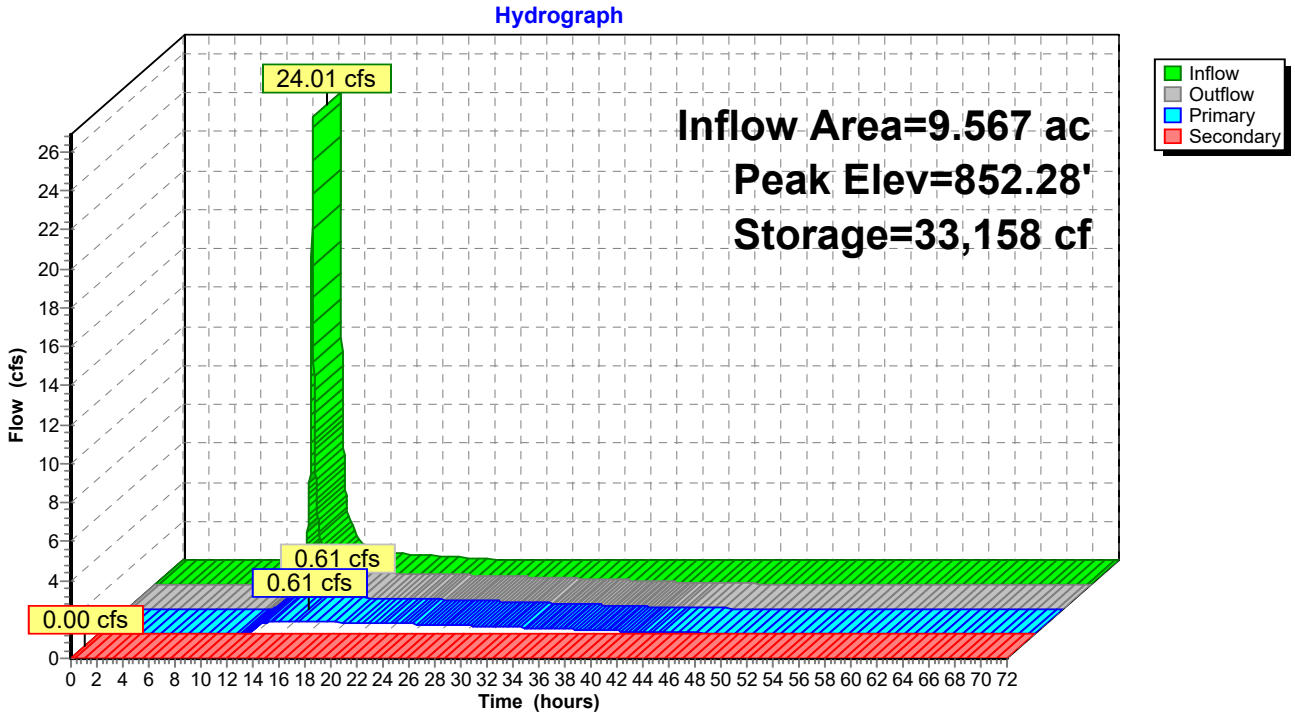
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
850.00	12,631	521.5	0	0	12,631
851.00	14,292	555.6	13,453	13,453	15,603
852.00	16,056	589.8	15,165	28,618	18,772
853.00	17,923	623.9	16,981	45,599	22,121
854.00	19,874	653.0	18,890	64,489	25,146
855.00	21,861	671.8	20,860	85,349	27,236
856.00	24,260	777.5	23,050	108,399	39,448

Device	Routing	Invert	Outlet Devices
#1	Primary	850.00'	**18.0" Round Culvert** L= 53.2' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 850.00' / 849.50' S= 0.0094 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf
#2	Device 1	850.00'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	853.50'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	855.50'	**10.0' long + 4.0 '/' SideZ x 8.0' 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) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

Primary OutFlow Max=0.61 cfs @ 15.04 hrs HW=852.28' TW=847.00' (Fixed TW Elev= 847.00')
└─**1=Culvert** (Passes 0.61 cfs of 9.28 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.61 cfs @ 7.00 fps)
  └─**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=850.00' (Free Discharge)
└─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond P1: Wet Pond



Hydrograph for Pond P1: Wet Pond

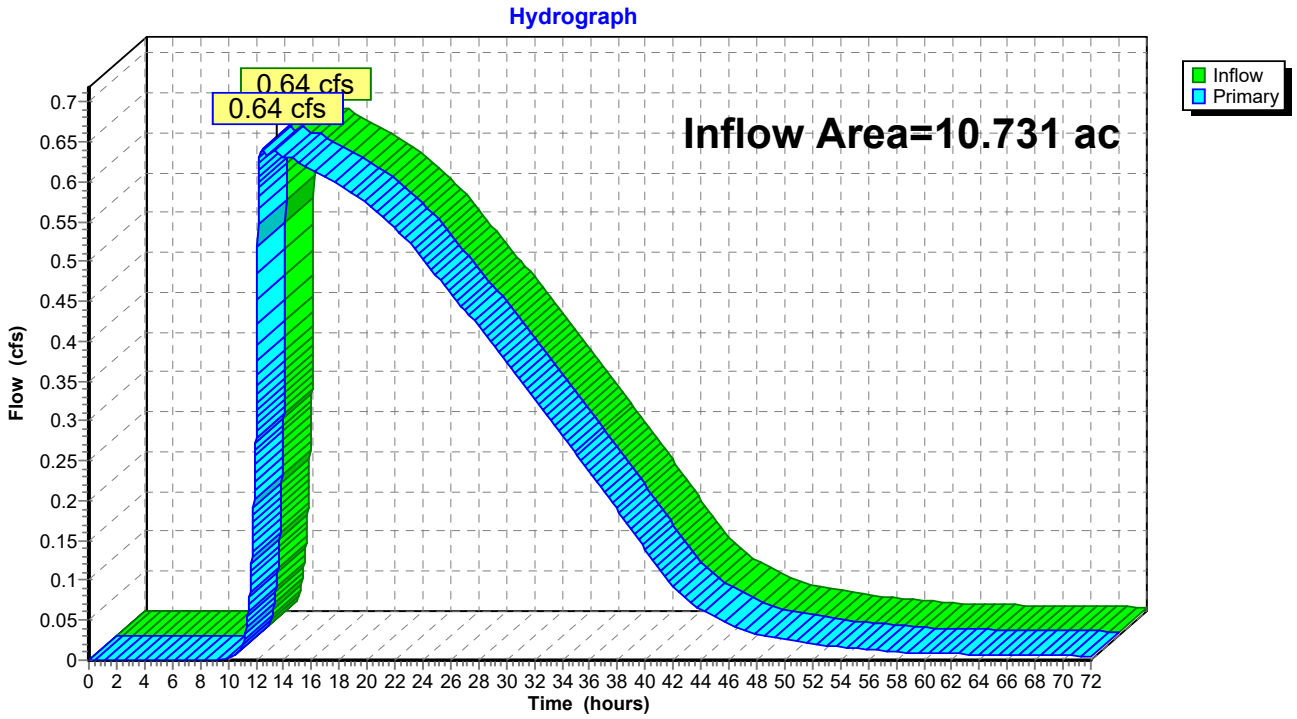
Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	850.00	0.00	0.00	**0.00**
2.00	0.00	0	850.00	0.00	0.00	0.00
4.00	0.00	0	850.00	0.00	0.00	0.00
6.00	0.00	0	850.00	0.00	0.00	0.00
8.00	0.00	2	850.00	0.00	0.00	0.00
10.00	0.10	195	850.02	0.00	0.00	0.00
12.00	**10.15**	8,019	850.61	0.28	0.28	0.00
14.00	**0.71**	**32,924**	**852.26**	**0.61**	**0.61**	0.00
16.00	0.36	**32,417**	**852.23**	**0.60**	**0.60**	0.00
18.00	0.29	30,473	852.11	0.59	0.59	0.00
20.00	0.21	28,127	851.97	0.56	0.56	0.00
22.00	0.13	25,404	851.80	0.54	0.54	0.00
24.00	0.05	22,338	851.60	0.50	0.50	0.00
26.00	0.00	18,884	851.37	0.46	0.46	0.00
28.00	0.00	15,717	851.16	0.42	0.42	0.00
30.00	0.00	12,865	850.96	0.37	0.37	0.00
32.00	0.00	10,335	850.78	0.33	0.33	0.00
34.00	0.00	8,134	850.62	0.28	0.28	0.00
36.00	0.00	6,269	850.48	0.24	0.24	0.00
38.00	0.00	4,745	850.37	0.19	0.19	0.00
40.00	0.00	3,565	850.28	0.14	0.14	0.00
42.00	0.00	2,740	850.21	0.09	0.09	0.00
44.00	0.00	2,182	850.17	0.06	0.06	0.00
46.00	0.00	1,791	850.14	0.05	0.05	0.00
48.00	0.00	1,512	850.12	0.03	0.03	0.00
50.00	0.00	1,300	850.10	0.03	0.03	0.00
52.00	0.00	1,132	850.09	0.02	0.02	0.00
54.00	0.00	999	850.08	0.02	0.02	0.00
56.00	0.00	893	850.07	0.01	0.01	0.00
58.00	0.00	808	850.06	0.01	0.01	0.00
60.00	0.00	741	850.06	0.01	0.01	0.00
62.00	0.00	681	850.05	0.01	0.01	0.00
64.00	0.00	626	850.05	0.01	0.01	0.00
66.00	0.00	575	850.05	0.01	0.01	0.00
68.00	0.00	529	850.04	0.01	0.01	0.00
70.00	0.00	486	850.04	0.01	0.01	0.00
72.00	0.00	447	850.04	0.01	0.01	0.00

Summary for Link T: Total

Inflow Area = 10.731 ac, 66.37% Impervious, Inflow Depth > 1.22" for 1 Year event
Inflow = 0.64 cfs @ 12.44 hrs, Volume= 1.092 af
Primary = 0.64 cfs @ 12.44 hrs, Volume= 1.092 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link T: Total



Hydrograph for Link T: Total

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	**0.00**	0.00
1.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00
3.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00
7.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00
9.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00
11.00	0.02	0.00	0.02
12.00	**0.28**	0.00	**0.28**
13.00	**0.64**	0.00	**0.64**
14.00	0.63	0.00	0.63
15.00	0.63	0.00	0.63
16.00	0.62	0.00	0.62
17.00	0.61	0.00	0.61
18.00	0.60	0.00	0.60
19.00	0.59	0.00	0.59
20.00	0.57	0.00	0.57
21.00	0.56	0.00	0.56
22.00	0.54	0.00	0.54
23.00	0.52	0.00	0.52
24.00	0.51	0.00	0.51
25.00	0.48	0.00	0.48
26.00	0.46	0.00	0.46
27.00	0.44	0.00	0.44
28.00	0.42	0.00	0.42
29.00	0.40	0.00	0.40
30.00	0.37	0.00	0.37
31.00	0.35	0.00	0.35
32.00	0.33	0.00	0.33
33.00	0.31	0.00	0.31
34.00	0.28	0.00	0.28
35.00	0.26	0.00	0.26
36.00	0.24	0.00	0.24
37.00	0.21	0.00	0.21
38.00	0.19	0.00	0.19
39.00	0.16	0.00	0.16
40.00	0.14	0.00	0.14
41.00	0.11	0.00	0.11
42.00	0.09	0.00	0.09
43.00	0.08	0.00	0.08
44.00	0.06	0.00	0.06
45.00	0.05	0.00	0.05
46.00	0.05	0.00	0.05
47.00	0.04	0.00	0.04
48.00	0.03	0.00	0.03
49.00	0.03	0.00	0.03
50.00	0.03	0.00	0.03
51.00	0.02	0.00	0.02
52.00	0.02	0.00	0.02
53.00	0.02	0.00	0.02
54.00	0.02	0.00	0.02
55.00	0.01	0.00	0.01
56.00	0.01	0.00	0.01
57.00	0.01	0.00	0.01
58.00	0.01	0.00	0.01
59.00	0.01	0.00	0.01
60.00	0.01	0.00	0.01
61.00	0.01	0.00	0.01
62.00	0.01	0.00	0.01
63.00	0.01	0.00	0.01
64.00	0.01	0.00	0.01
65.00	0.01	0.00	0.01
66.00	0.01	0.00	0.01
67.00	0.01	0.00	0.01
68.00	0.01	0.00	0.01
69.00	0.01	0.00	0.01
70.00	0.01	0.00	0.01
71.00	0.01	0.00	0.01
72.00	0.01	0.00	0.01

Summary for Subcatchment 1: BLD 83 Devlpmnt

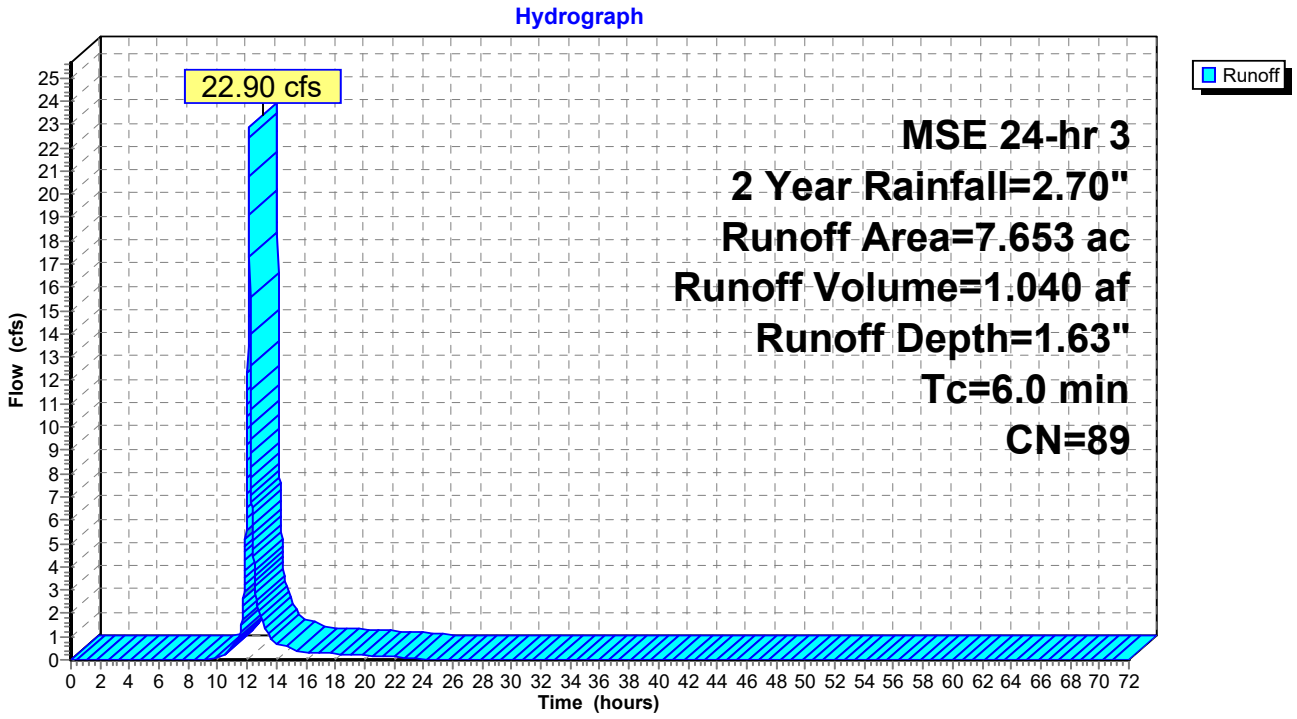
Runoff = 22.90 cfs @ 12.13 hrs, Volume= 1.040 af, Depth= 1.63"
Routed to Pond P1 : Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2 Year Rainfall=2.70"

	Area (ac)	CN	Description
*	2.686	98	Building
*	2.719	98	Paved Area
	0.290	98	Water Surface, HSG B
	1.958	61	>75% Grass cover, Good, HSG B
	7.653	89	Weighted Average
	1.958		25.58% Pervious Area
	5.695		74.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 1: BLD 83 Devlpmnt



Hydrograph for Subcatchment 1: BLD 83 Devlpmnt

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.02	0.00	0.00
3.00	0.04	0.00	0.00
4.00	0.07	0.00	0.00
5.00	0.10	0.00	0.00
6.00	0.14	0.00	0.00
7.00	0.18	0.00	0.00
8.00	0.23	0.00	0.00
9.00	0.28	0.00	0.02
10.00	0.37	0.01	0.12
11.00	0.52	0.05	0.55
12.00	1.25	0.45	**9.91**
13.00	2.18	1.18	**1.73**
14.00	2.33	1.31	0.66
15.00	2.42	1.39	0.59
16.00	2.47	1.43	0.34
17.00	2.52	1.47	0.30
18.00	2.56	1.51	0.27
19.00	2.60	1.54	0.23
20.00	2.63	1.57	0.20
21.00	2.66	1.59	0.16
22.00	2.68	1.61	0.12
23.00	2.69	1.62	0.09
24.00	**2.70**	**1.63**	0.05
25.00	2.70	1.63	0.00
26.00	2.70	1.63	0.00
27.00	2.70	1.63	0.00
28.00	2.70	1.63	0.00
29.00	2.70	1.63	0.00
30.00	2.70	1.63	0.00
31.00	2.70	1.63	0.00
32.00	2.70	1.63	0.00
33.00	2.70	1.63	0.00
34.00	2.70	1.63	0.00
35.00	2.70	1.63	0.00
36.00	2.70	1.63	0.00
37.00	2.70	1.63	0.00
38.00	2.70	1.63	0.00
39.00	2.70	1.63	0.00
40.00	2.70	1.63	0.00
41.00	2.70	1.63	0.00
42.00	2.70	1.63	0.00
43.00	2.70	1.63	0.00
44.00	2.70	1.63	0.00
45.00	2.70	1.63	0.00
46.00	2.70	1.63	0.00
47.00	2.70	1.63	0.00
48.00	2.70	1.63	0.00
49.00	2.70	1.63	0.00
50.00	2.70	1.63	0.00
51.00	2.70	1.63	0.00
52.00	2.70	1.63	0.00
53.00	2.70	1.63	0.00
54.00	2.70	1.63	0.00
55.00	2.70	1.63	0.00
56.00	2.70	1.63	0.00
57.00	2.70	1.63	0.00
58.00	2.70	1.63	0.00
59.00	2.70	1.63	0.00
60.00	2.70	1.63	0.00
61.00	2.70	1.63	0.00
62.00	2.70	1.63	0.00
63.00	2.70	1.63	0.00
64.00	2.70	1.63	0.00
65.00	2.70	1.63	0.00
66.00	2.70	1.63	0.00
67.00	2.70	1.63	0.00
68.00	2.70	1.63	0.00
69.00	2.70	1.63	0.00
70.00	2.70	1.63	0.00
71.00	2.70	1.63	0.00
72.00	2.70	1.63	0.00

Summary for Subcatchment 2: Undetained

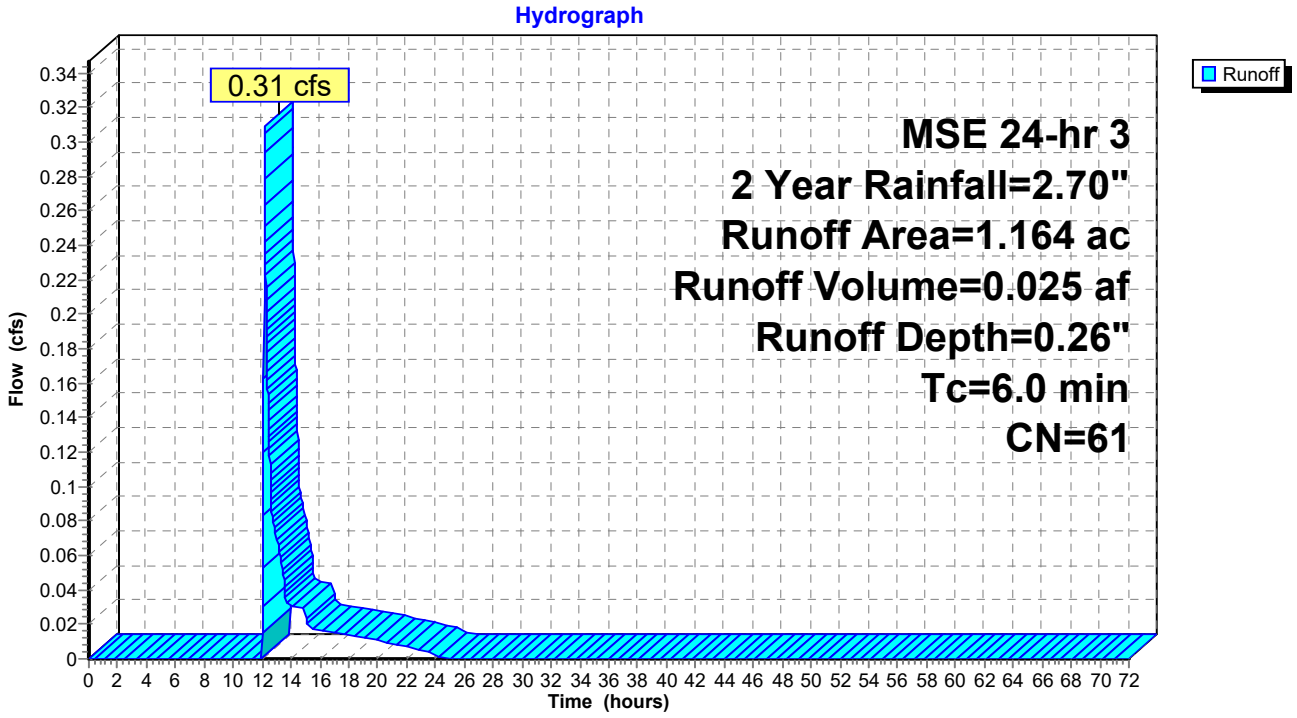
Runoff = 0.31 cfs @ 12.16 hrs, Volume= 0.025 af, Depth= 0.26"
Routed to Link T : Total

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2 Year Rainfall=2.70"

Area (ac)	CN	Description
1.164	61	>75% Grass cover, Good, HSG B
1.164		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 2: Undetained



Hydrograph for Subcatchment 2: Undetained

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.02	0.00	0.00
3.00	0.04	0.00	0.00
4.00	0.07	0.00	0.00
5.00	0.10	0.00	0.00
6.00	0.14	0.00	0.00
7.00	0.18	0.00	0.00
8.00	0.23	0.00	0.00
9.00	0.28	0.00	0.00
10.00	0.37	0.00	0.00
11.00	0.52	0.00	0.00
12.00	1.25	0.00	**0.00**
13.00	2.18	0.11	**0.07**
14.00	2.33	0.15	0.03
15.00	2.42	0.17	0.03
16.00	2.47	0.19	0.02
17.00	2.52	0.20	0.02
18.00	2.56	0.21	0.01
19.00	2.60	0.23	0.01
20.00	2.63	0.24	0.01
21.00	2.66	0.24	0.01
22.00	2.68	0.25	0.01
23.00	2.69	0.26	0.00
24.00	**2.70**	**0.26**	0.00
25.00	2.70	0.26	0.00
26.00	2.70	0.26	0.00
27.00	2.70	0.26	0.00
28.00	2.70	0.26	0.00
29.00	2.70	0.26	0.00
30.00	2.70	0.26	0.00
31.00	2.70	0.26	0.00
32.00	2.70	0.26	0.00
33.00	2.70	0.26	0.00
34.00	2.70	0.26	0.00
35.00	2.70	0.26	0.00
36.00	2.70	0.26	0.00
37.00	2.70	0.26	0.00
38.00	2.70	0.26	0.00
39.00	2.70	0.26	0.00
40.00	2.70	0.26	0.00
41.00	2.70	0.26	0.00
42.00	2.70	0.26	0.00
43.00	2.70	0.26	0.00
44.00	2.70	0.26	0.00
45.00	2.70	0.26	0.00
46.00	2.70	0.26	0.00
47.00	2.70	0.26	0.00
48.00	2.70	0.26	0.00
49.00	2.70	0.26	0.00
50.00	2.70	0.26	0.00
51.00	2.70	0.26	0.00
52.00	2.70	0.26	0.00
53.00	2.70	0.26	0.00
54.00	2.70	0.26	0.00
55.00	2.70	0.26	0.00
56.00	2.70	0.26	0.00
57.00	2.70	0.26	0.00
58.00	2.70	0.26	0.00
59.00	2.70	0.26	0.00
60.00	2.70	0.26	0.00
61.00	2.70	0.26	0.00
62.00	2.70	0.26	0.00
63.00	2.70	0.26	0.00
64.00	2.70	0.26	0.00
65.00	2.70	0.26	0.00
66.00	2.70	0.26	0.00
67.00	2.70	0.26	0.00
68.00	2.70	0.26	0.00
69.00	2.70	0.26	0.00
70.00	2.70	0.26	0.00
71.00	2.70	0.26	0.00
72.00	2.70	0.26	0.00

Summary for Subcatchment 3: Boxhorn R/W

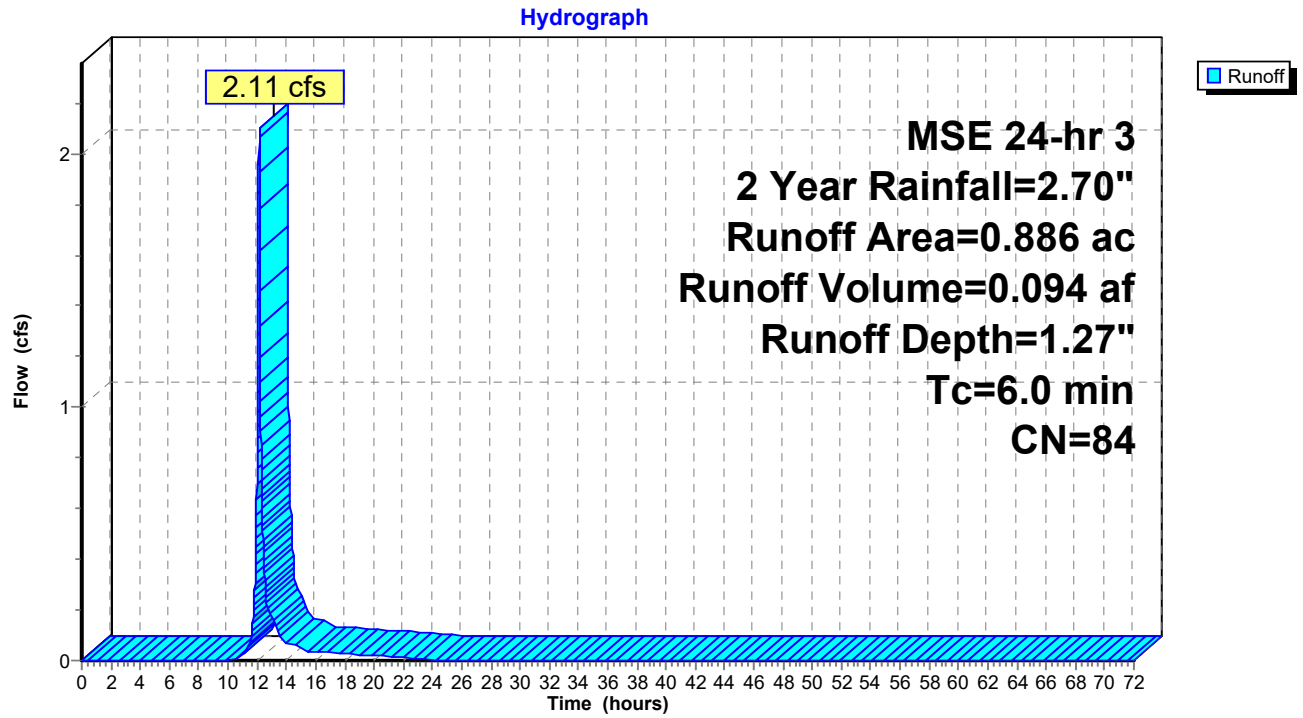
Runoff = 2.11 cfs @ 12.14 hrs, Volume= 0.094 af, Depth= 1.27"
Routed to Pond P1 : Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2 Year Rainfall=2.70"

	Area (ac)	CN	Description
*	0.489	98	Road pavement
*	0.064	98	Public walk
	0.333	61	>75% Grass cover, Good, HSG B
	0.886	84	Weighted Average
	0.333		37.58% Pervious Area
	0.553		62.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 3: Boxhorn R/W



Hydrograph for Subcatchment 3: Boxhorn R/W

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.02	0.00	0.00
3.00	0.04	0.00	0.00
4.00	0.07	0.00	0.00
5.00	0.10	0.00	0.00
6.00	0.14	0.00	0.00
7.00	0.18	0.00	0.00
8.00	0.23	0.00	0.00
9.00	0.28	0.00	0.00
10.00	0.37	0.00	0.00
11.00	0.52	0.01	0.02
12.00	1.25	0.27	**0.82**
13.00	2.18	0.87	**0.17**
14.00	2.33	0.98	0.07
15.00	2.42	1.06	0.06
16.00	2.47	1.10	0.03
17.00	2.52	1.13	0.03
18.00	2.56	1.16	0.03
19.00	2.60	1.19	0.02
20.00	2.63	1.22	0.02
21.00	2.66	1.24	0.02
22.00	2.68	1.25	0.01
23.00	2.69	1.27	0.01
24.00	**2.70**	**1.27**	0.01
25.00	2.70	1.27	0.00
26.00	2.70	1.27	0.00
27.00	2.70	1.27	0.00
28.00	2.70	1.27	0.00
29.00	2.70	1.27	0.00
30.00	2.70	1.27	0.00
31.00	2.70	1.27	0.00
32.00	2.70	1.27	0.00
33.00	2.70	1.27	0.00
34.00	2.70	1.27	0.00
35.00	2.70	1.27	0.00
36.00	2.70	1.27	0.00
37.00	2.70	1.27	0.00
38.00	2.70	1.27	0.00
39.00	2.70	1.27	0.00
40.00	2.70	1.27	0.00
41.00	2.70	1.27	0.00
42.00	2.70	1.27	0.00
43.00	2.70	1.27	0.00
44.00	2.70	1.27	0.00
45.00	2.70	1.27	0.00
46.00	2.70	1.27	0.00
47.00	2.70	1.27	0.00
48.00	2.70	1.27	0.00
49.00	2.70	1.27	0.00
50.00	2.70	1.27	0.00
51.00	2.70	1.27	0.00
52.00	2.70	1.27	0.00
53.00	2.70	1.27	0.00
54.00	2.70	1.27	0.00
55.00	2.70	1.27	0.00
56.00	2.70	1.27	0.00
57.00	2.70	1.27	0.00
58.00	2.70	1.27	0.00
59.00	2.70	1.27	0.00
60.00	2.70	1.27	0.00
61.00	2.70	1.27	0.00
62.00	2.70	1.27	0.00
63.00	2.70	1.27	0.00
64.00	2.70	1.27	0.00
65.00	2.70	1.27	0.00
66.00	2.70	1.27	0.00
67.00	2.70	1.27	0.00
68.00	2.70	1.27	0.00
69.00	2.70	1.27	0.00
70.00	2.70	1.27	0.00
71.00	2.70	1.27	0.00
72.00	2.70	1.27	0.00

Summary for Subcatchment 4: Future Outlot Devplmnt

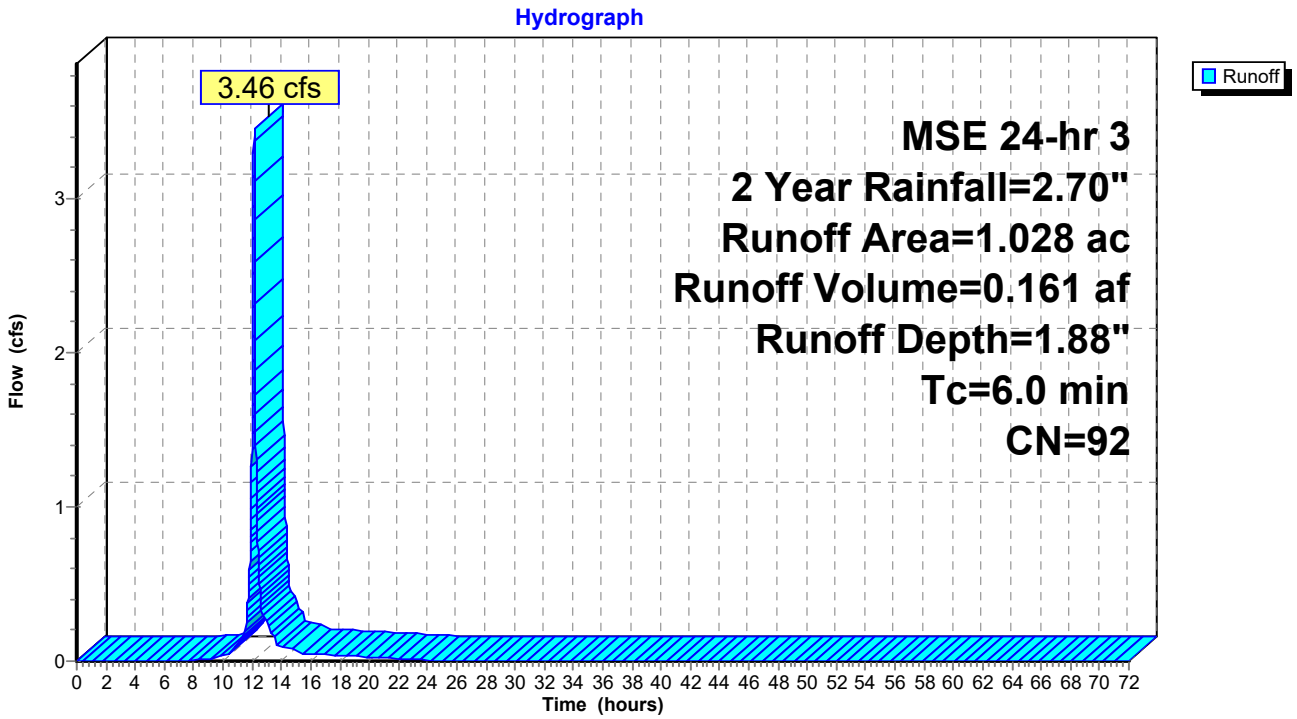
Runoff = 3.46 cfs @ 12.13 hrs, Volume= 0.161 af, Depth= 1.88"
Routed to Pond P1 : Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2 Year Rainfall=2.70"

Area (ac)	CN	Description
1.028	92	Urban commercial, 85% imp, HSG B
0.154		15.00% Pervious Area
0.874		85.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 4: Future Outlot Devplmnt



Hydrograph for Subcatchment 4: Future Outlot Devplmnt

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.02	0.00	0.00
3.00	0.04	0.00	0.00
4.00	0.07	0.00	0.00
5.00	0.10	0.00	0.00
6.00	0.14	0.00	0.00
7.00	0.18	0.00	0.00
8.00	0.23	0.00	0.01
9.00	0.28	0.01	0.01
10.00	0.37	0.04	0.03
11.00	0.52	0.10	0.11
12.00	1.25	0.59	**1.58**
13.00	2.18	1.40	**0.25**
14.00	2.33	1.54	0.10
15.00	2.42	1.62	0.08
16.00	2.47	1.67	0.05
17.00	2.52	1.71	0.04
18.00	2.56	1.75	0.04
19.00	2.60	1.78	0.03
20.00	2.63	1.81	0.03
21.00	2.66	1.84	0.02
22.00	2.68	1.86	0.02
23.00	2.69	1.87	0.01
24.00	**2.70**	**1.88**	0.01
25.00	2.70	1.88	0.00
26.00	2.70	1.88	0.00
27.00	2.70	1.88	0.00
28.00	2.70	1.88	0.00
29.00	2.70	1.88	0.00
30.00	2.70	1.88	0.00
31.00	2.70	1.88	0.00
32.00	2.70	1.88	0.00
33.00	2.70	1.88	0.00
34.00	2.70	1.88	0.00
35.00	2.70	1.88	0.00
36.00	2.70	1.88	0.00
37.00	2.70	1.88	0.00
38.00	2.70	1.88	0.00
39.00	2.70	1.88	0.00
40.00	2.70	1.88	0.00
41.00	2.70	1.88	0.00
42.00	2.70	1.88	0.00
43.00	2.70	1.88	0.00
44.00	2.70	1.88	0.00
45.00	2.70	1.88	0.00
46.00	2.70	1.88	0.00
47.00	2.70	1.88	0.00
48.00	2.70	1.88	0.00
49.00	2.70	1.88	0.00
50.00	2.70	1.88	0.00
51.00	2.70	1.88	0.00
52.00	2.70	1.88	0.00
53.00	2.70	1.88	0.00
54.00	2.70	1.88	0.00
55.00	2.70	1.88	0.00
56.00	2.70	1.88	0.00
57.00	2.70	1.88	0.00
58.00	2.70	1.88	0.00
59.00	2.70	1.88	0.00
60.00	2.70	1.88	0.00
61.00	2.70	1.88	0.00
62.00	2.70	1.88	0.00
63.00	2.70	1.88	0.00
64.00	2.70	1.88	0.00
65.00	2.70	1.88	0.00
66.00	2.70	1.88	0.00
67.00	2.70	1.88	0.00
68.00	2.70	1.88	0.00
69.00	2.70	1.88	0.00
70.00	2.70	1.88	0.00
71.00	2.70	1.88	0.00
72.00	2.70	1.88	0.00

Summary for Pond P1: Wet Pond

Inflow Area = 9.567 ac, 74.44% Impervious, Inflow Depth = 1.62" for 2 Year event
Inflow = 28.46 cfs @ 12.13 hrs, Volume= 1.295 af
Outflow = 0.67 cfs @ 15.06 hrs, Volume= 1.283 af, Atten= 98%, Lag= 175.6 min
Primary = 0.67 cfs @ 15.06 hrs, Volume= 1.283 af
Routed to Link T : Total
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link T : Total

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 852.70' @ 15.06 hrs Surf.Area= 17,354 sf Storage= 40,330 cf

Plug-Flow detention time= 757.8 min calculated for 1.283 af (99% of inflow)
Center-of-Mass det. time= 752.7 min (1,549.3 - 796.7)

Volume	Invert	Avail.Storage	Storage Description
#1	850.00'	108,399 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

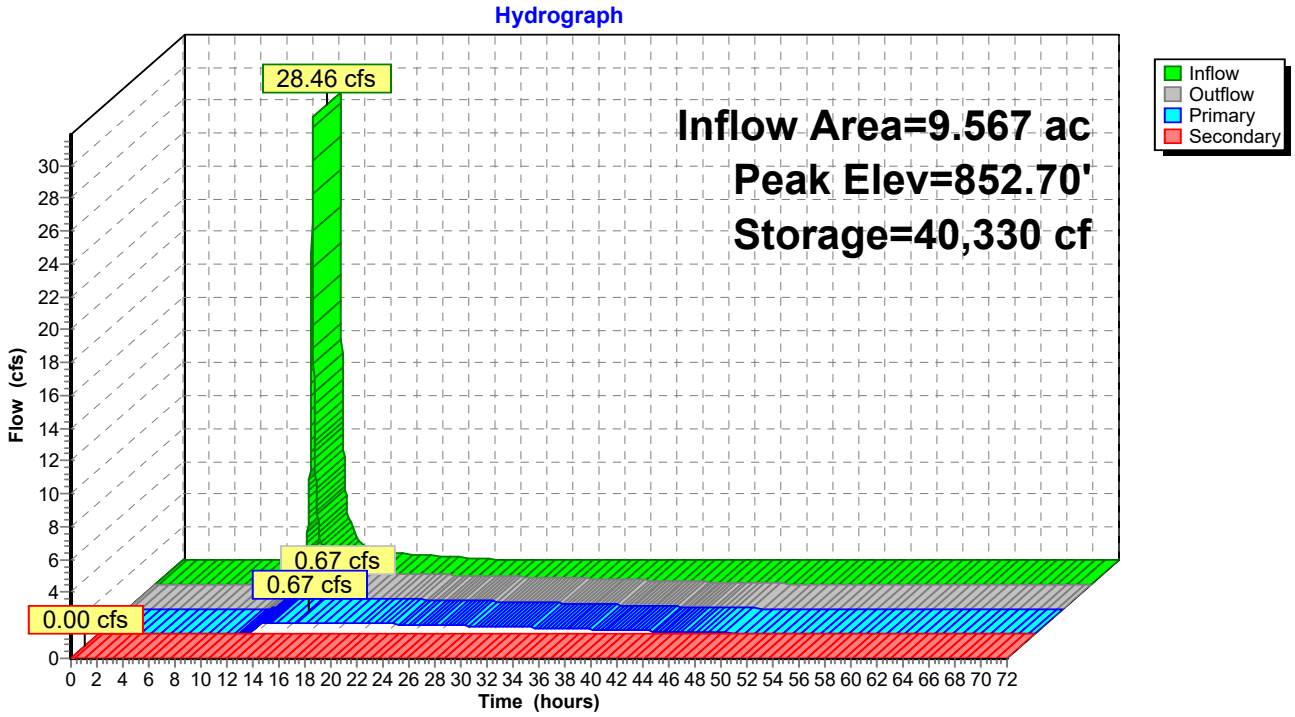
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
850.00	12,631	521.5	0	0	12,631
851.00	14,292	555.6	13,453	13,453	15,603
852.00	16,056	589.8	15,165	28,618	18,772
853.00	17,923	623.9	16,981	45,599	22,121
854.00	19,874	653.0	18,890	64,489	25,146
855.00	21,861	671.8	20,860	85,349	27,236
856.00	24,260	777.5	23,050	108,399	39,448

Device	Routing	Invert	Outlet Devices
#1	Primary	850.00'	**18.0" Round Culvert** L= 53.2' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 850.00' / 849.50' S= 0.0094 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf
#2	Device 1	850.00'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	853.50'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	855.50'	**10.0' long + 4.0 '/' SideZ x 8.0' 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) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

Primary OutFlow Max=0.67 cfs @ 15.06 hrs HW=852.70' TW=847.00' (Fixed TW Elev= 847.00')
└─**1=Culvert** (Passes 0.67 cfs of 10.49 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.67 cfs @ 7.67 fps)
  └─**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=850.00' (Free Discharge)
└─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond P1: Wet Pond



Hydrograph for Pond P1: Wet Pond

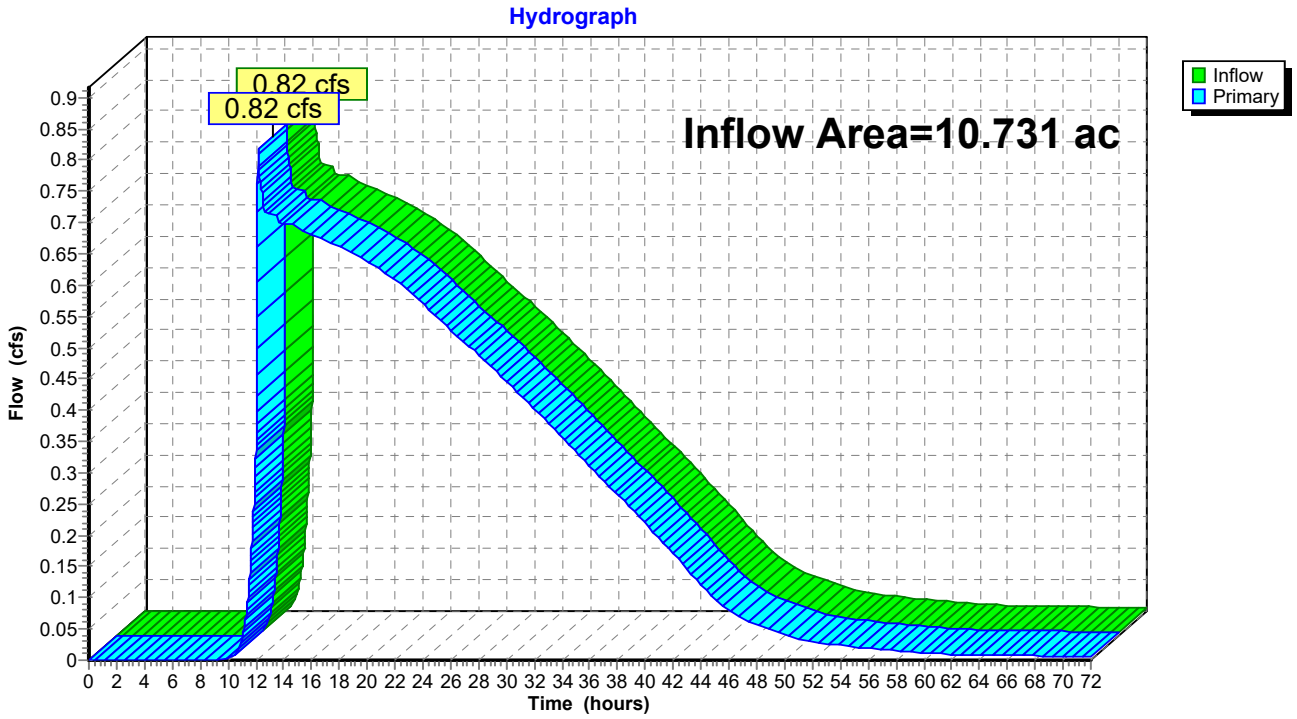
Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	850.00	0.00	0.00	**0.00**
2.00	0.00	0	850.00	0.00	0.00	0.00
4.00	0.00	0	850.00	0.00	0.00	0.00
6.00	0.00	0	850.00	0.00	0.00	0.00
8.00	0.01	9	850.00	0.00	0.00	0.00
10.00	0.16	387	850.03	0.00	0.00	0.00
12.00	**12.31**	10,266	850.77	0.33	0.33	0.00
14.00	**0.83**	**39,914**	**852.68**	**0.67**	**0.67**	0.00
16.00	0.42	**39,596**	**852.66**	**0.66**	**0.66**	0.00
18.00	0.33	37,583	852.54	0.65	0.65	0.00
20.00	0.24	35,068	852.39	0.63	0.63	0.00
22.00	0.15	32,077	852.21	0.60	0.60	0.00
24.00	0.06	28,645	852.00	0.57	0.57	0.00
26.00	0.00	24,710	851.75	0.53	0.53	0.00
28.00	0.00	21,048	851.52	0.49	0.49	0.00
30.00	0.00	17,686	851.29	0.45	0.45	0.00
32.00	0.00	14,635	851.08	0.40	0.40	0.00
34.00	0.00	11,900	850.89	0.36	0.36	0.00
36.00	0.00	9,489	850.72	0.31	0.31	0.00
38.00	0.00	7,411	850.57	0.27	0.27	0.00
40.00	0.00	5,670	850.44	0.22	0.22	0.00
42.00	0.00	4,272	850.33	0.17	0.17	0.00
44.00	0.00	3,225	850.25	0.12	0.12	0.00
46.00	0.00	2,510	850.20	0.08	0.08	0.00
48.00	0.00	2,023	850.16	0.06	0.06	0.00
50.00	0.00	1,678	850.13	0.04	0.04	0.00
52.00	0.00	1,429	850.11	0.03	0.03	0.00
54.00	0.00	1,234	850.10	0.02	0.02	0.00
56.00	0.00	1,080	850.08	0.02	0.02	0.00
58.00	0.00	957	850.08	0.02	0.02	0.00
60.00	0.00	859	850.07	0.01	0.01	0.00
62.00	0.00	782	850.06	0.01	0.01	0.00
64.00	0.00	718	850.06	0.01	0.01	0.00
66.00	0.00	660	850.05	0.01	0.01	0.00
68.00	0.00	607	850.05	0.01	0.01	0.00
70.00	0.00	558	850.04	0.01	0.01	0.00
72.00	0.00	513	850.04	0.01	0.01	0.00

Summary for Link T: Total

Inflow Area = 10.731 ac, 66.37% Impervious, Inflow Depth > 1.46" for 2 Year event
Inflow = 0.82 cfs @ 12.17 hrs, Volume= 1.308 af
Primary = 0.82 cfs @ 12.17 hrs, Volume= 1.308 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link T: Total



Hydrograph for Link T: Total

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	**0.00**	0.00	52.00	0.03	0.00	0.03
1.00	0.00	0.00	0.00	53.00	0.03	0.00	0.03
2.00	0.00	0.00	0.00	54.00	0.02	0.00	0.02
3.00	0.00	0.00	0.00	55.00	0.02	0.00	0.02
4.00	0.00	0.00	0.00	56.00	0.02	0.00	0.02
5.00	0.00	0.00	0.00	57.00	0.02	0.00	0.02
6.00	0.00	0.00	0.00	58.00	0.02	0.00	0.02
7.00	0.00	0.00	0.00	59.00	0.01	0.00	0.01
8.00	0.00	0.00	0.00	60.00	0.01	0.00	0.01
9.00	0.00	0.00	0.00	61.00	0.01	0.00	0.01
10.00	0.00	0.00	0.00	62.00	0.01	0.00	0.01
11.00	0.03	0.00	0.03	63.00	0.01	0.00	0.01
12.00	**0.33**	0.00	**0.33**	64.00	0.01	0.00	0.01
13.00	**0.72**	0.00	**0.72**	65.00	0.01	0.00	0.01
14.00	0.70	0.00	0.70	66.00	0.01	0.00	0.01
15.00	0.70	0.00	0.70	67.00	0.01	0.00	0.01
16.00	0.68	0.00	0.68	68.00	0.01	0.00	0.01
17.00	0.67	0.00	0.67	69.00	0.01	0.00	0.01
18.00	0.66	0.00	0.66	70.00	0.01	0.00	0.01
19.00	0.65	0.00	0.65	71.00	0.01	0.00	0.01
20.00	0.64	0.00	0.64	72.00	0.01	0.00	0.01
21.00	0.62	0.00	0.62				
22.00	0.61	0.00	0.61				
23.00	0.59	0.00	0.59				
24.00	0.57	0.00	0.57				
25.00	0.55	0.00	0.55				
26.00	0.53	0.00	0.53				
27.00	0.51	0.00	0.51				
28.00	0.49	0.00	0.49				
29.00	0.47	0.00	0.47				
30.00	0.45	0.00	0.45				
31.00	0.42	0.00	0.42				
32.00	0.40	0.00	0.40				
33.00	0.38	0.00	0.38				
34.00	0.36	0.00	0.36				
35.00	0.33	0.00	0.33				
36.00	0.31	0.00	0.31				
37.00	0.29	0.00	0.29				
38.00	0.27	0.00	0.27				
39.00	0.24	0.00	0.24				
40.00	0.22	0.00	0.22				
41.00	0.19	0.00	0.19				
42.00	0.17	0.00	0.17				
43.00	0.15	0.00	0.15				
44.00	0.12	0.00	0.12				
45.00	0.10	0.00	0.10				
46.00	0.08	0.00	0.08				
47.00	0.07	0.00	0.07				
48.00	0.06	0.00	0.06				
49.00	0.05	0.00	0.05				
50.00	0.04	0.00	0.04				
51.00	0.03	0.00	0.03				

Summary for Subcatchment 1: BLD 83 Devlpmnt

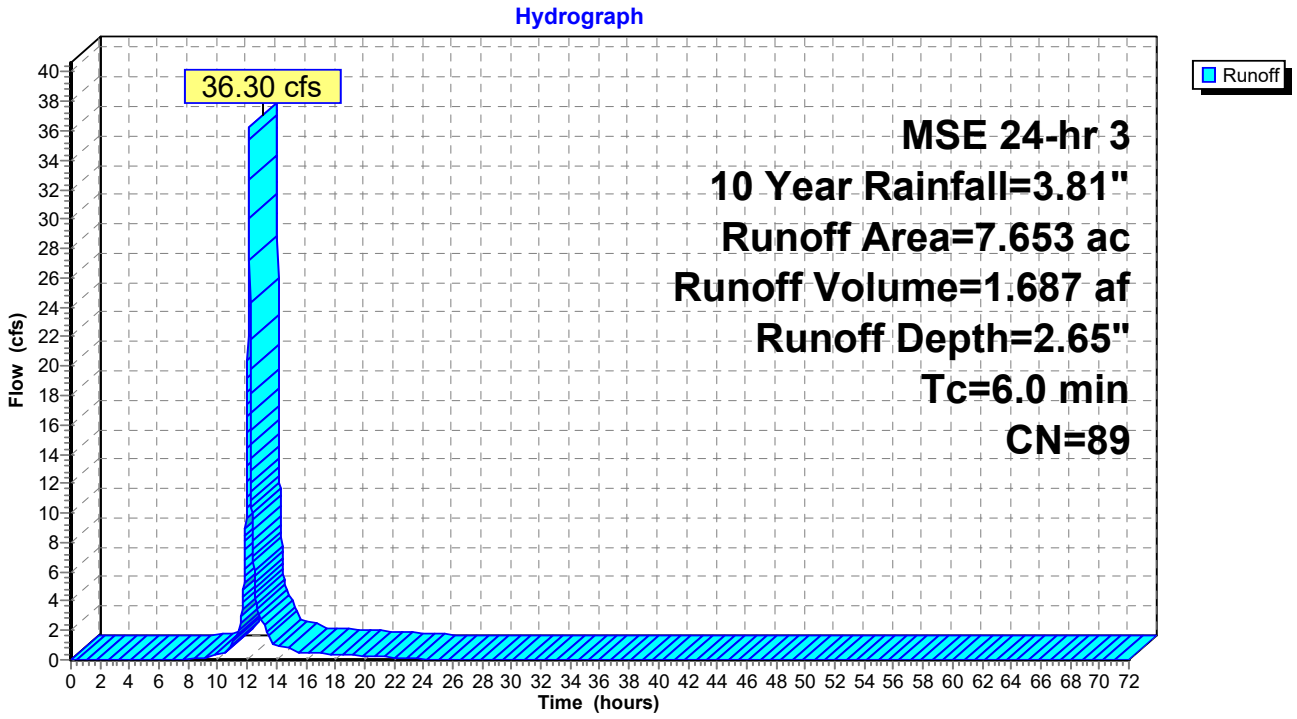
Runoff = 36.30 cfs @ 12.13 hrs, Volume= 1.687 af, Depth= 2.65"
Routed to Pond P1 : Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10 Year Rainfall=3.81"

	Area (ac)	CN	Description
*	2.686	98	Building
*	2.719	98	Paved Area
	0.290	98	Water Surface, HSG B
	1.958	61	>75% Grass cover, Good, HSG B
	7.653	89	Weighted Average
	1.958		25.58% Pervious Area
	5.695		74.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 1: BLD 83 Devlpmnt



Hydrograph for Subcatchment 1: BLD 83 Devlpmnt

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.03	0.00	0.00
3.00	0.06	0.00	0.00
4.00	0.10	0.00	0.00
5.00	0.14	0.00	0.00
6.00	0.19	0.00	0.00
7.00	0.25	0.00	0.00
8.00	0.32	0.00	0.05
9.00	0.39	0.02	0.11
10.00	0.52	0.05	0.34
11.00	0.73	0.14	1.17
12.00	1.76	0.84	**16.55**
13.00	3.08	1.97	**2.62**
14.00	3.29	2.16	1.00
15.00	3.42	2.28	0.88
16.00	3.49	2.35	0.50
17.00	3.56	2.41	0.45
18.00	3.62	2.46	0.40
19.00	3.67	2.51	0.34
20.00	3.71	2.55	0.29
21.00	3.75	2.59	0.24
22.00	3.78	2.61	0.18
23.00	3.80	2.63	0.13
24.00	**3.81**	**2.65**	0.08
25.00	3.81	2.65	0.00
26.00	3.81	2.65	0.00
27.00	3.81	2.65	0.00
28.00	3.81	2.65	0.00
29.00	3.81	2.65	0.00
30.00	3.81	2.65	0.00
31.00	3.81	2.65	0.00
32.00	3.81	2.65	0.00
33.00	3.81	2.65	0.00
34.00	3.81	2.65	0.00
35.00	3.81	2.65	0.00
36.00	3.81	2.65	0.00
37.00	3.81	2.65	0.00
38.00	3.81	2.65	0.00
39.00	3.81	2.65	0.00
40.00	3.81	2.65	0.00
41.00	3.81	2.65	0.00
42.00	3.81	2.65	0.00
43.00	3.81	2.65	0.00
44.00	3.81	2.65	0.00
45.00	3.81	2.65	0.00
46.00	3.81	2.65	0.00
47.00	3.81	2.65	0.00
48.00	3.81	2.65	0.00
49.00	3.81	2.65	0.00
50.00	3.81	2.65	0.00
51.00	3.81	2.65	0.00
52.00	3.81	2.65	0.00
53.00	3.81	2.65	0.00
54.00	3.81	2.65	0.00
55.00	3.81	2.65	0.00
56.00	3.81	2.65	0.00
57.00	3.81	2.65	0.00
58.00	3.81	2.65	0.00
59.00	3.81	2.65	0.00
60.00	3.81	2.65	0.00
61.00	3.81	2.65	0.00
62.00	3.81	2.65	0.00
63.00	3.81	2.65	0.00
64.00	3.81	2.65	0.00
65.00	3.81	2.65	0.00
66.00	3.81	2.65	0.00
67.00	3.81	2.65	0.00
68.00	3.81	2.65	0.00
69.00	3.81	2.65	0.00
70.00	3.81	2.65	0.00
71.00	3.81	2.65	0.00
72.00	3.81	2.65	0.00

Summary for Subcatchment 2: Undetained

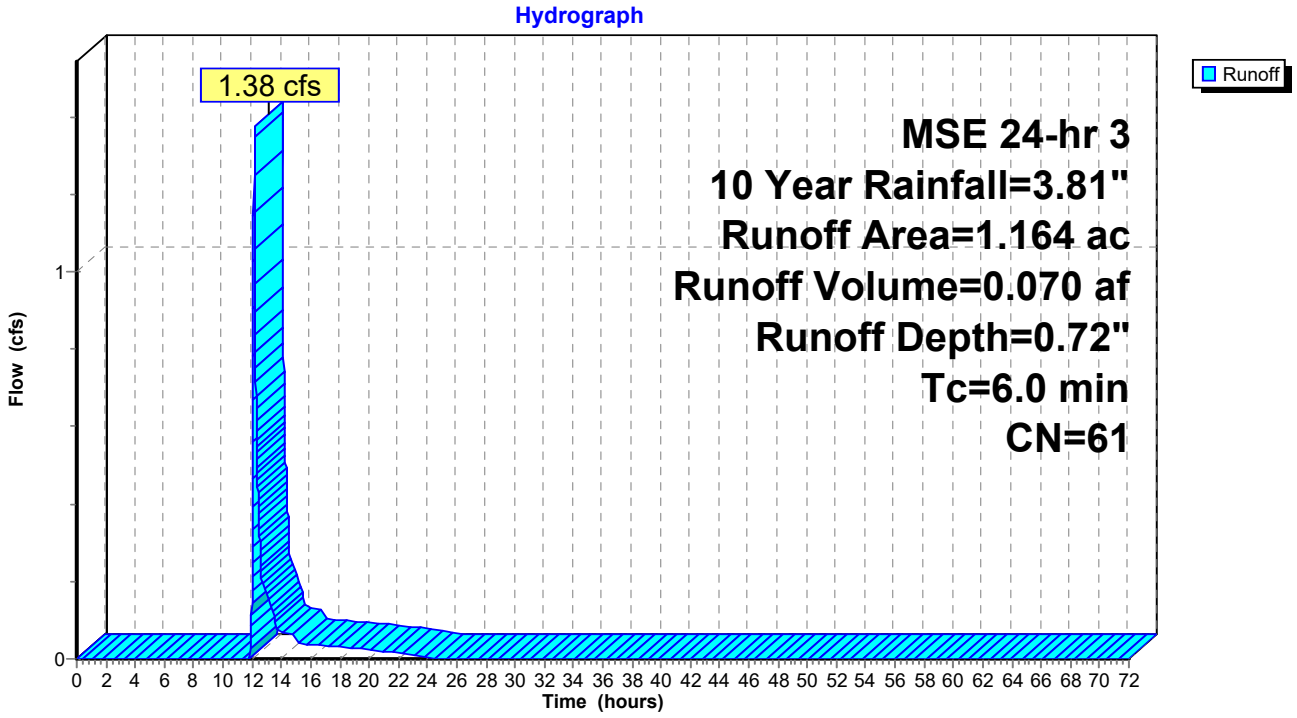
Runoff = 1.38 cfs @ 12.14 hrs, Volume= 0.070 af, Depth= 0.72"
Routed to Link T : Total

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10 Year Rainfall=3.81"

Area (ac)	CN	Description
1.164	61	>75% Grass cover, Good, HSG B
1.164		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 2: Undetained



Hydrograph for Subcatchment 2: Undetained

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.03	0.00	0.00
3.00	0.06	0.00	0.00
4.00	0.10	0.00	0.00
5.00	0.14	0.00	0.00
6.00	0.19	0.00	0.00
7.00	0.25	0.00	0.00
8.00	0.32	0.00	0.00
9.00	0.39	0.00	0.00
10.00	0.52	0.00	0.00
11.00	0.73	0.00	0.00
12.00	1.76	0.03	**0.21**
13.00	3.08	0.39	**0.17**
14.00	3.29	0.48	0.07
15.00	3.42	0.54	0.06
16.00	3.49	0.57	0.04
17.00	3.56	0.60	0.03
18.00	3.62	0.63	0.03
19.00	3.67	0.65	0.03
20.00	3.71	0.67	0.02
21.00	3.75	0.69	0.02
22.00	3.78	0.70	0.01
23.00	3.80	0.71	0.01
24.00	**3.81**	**0.72**	0.01
25.00	3.81	0.72	0.00
26.00	3.81	0.72	0.00
27.00	3.81	0.72	0.00
28.00	3.81	0.72	0.00
29.00	3.81	0.72	0.00
30.00	3.81	0.72	0.00
31.00	3.81	0.72	0.00
32.00	3.81	0.72	0.00
33.00	3.81	0.72	0.00
34.00	3.81	0.72	0.00
35.00	3.81	0.72	0.00
36.00	3.81	0.72	0.00
37.00	3.81	0.72	0.00
38.00	3.81	0.72	0.00
39.00	3.81	0.72	0.00
40.00	3.81	0.72	0.00
41.00	3.81	0.72	0.00
42.00	3.81	0.72	0.00
43.00	3.81	0.72	0.00
44.00	3.81	0.72	0.00
45.00	3.81	0.72	0.00
46.00	3.81	0.72	0.00
47.00	3.81	0.72	0.00
48.00	3.81	0.72	0.00
49.00	3.81	0.72	0.00
50.00	3.81	0.72	0.00
51.00	3.81	0.72	0.00
52.00	3.81	0.72	0.00
53.00	3.81	0.72	0.00
54.00	3.81	0.72	0.00
55.00	3.81	0.72	0.00
56.00	3.81	0.72	0.00
57.00	3.81	0.72	0.00
58.00	3.81	0.72	0.00
59.00	3.81	0.72	0.00
60.00	3.81	0.72	0.00
61.00	3.81	0.72	0.00
62.00	3.81	0.72	0.00
63.00	3.81	0.72	0.00
64.00	3.81	0.72	0.00
65.00	3.81	0.72	0.00
66.00	3.81	0.72	0.00
67.00	3.81	0.72	0.00
68.00	3.81	0.72	0.00
69.00	3.81	0.72	0.00
70.00	3.81	0.72	0.00
71.00	3.81	0.72	0.00
72.00	3.81	0.72	0.00

Summary for Subcatchment 3: Boxhorn R/W

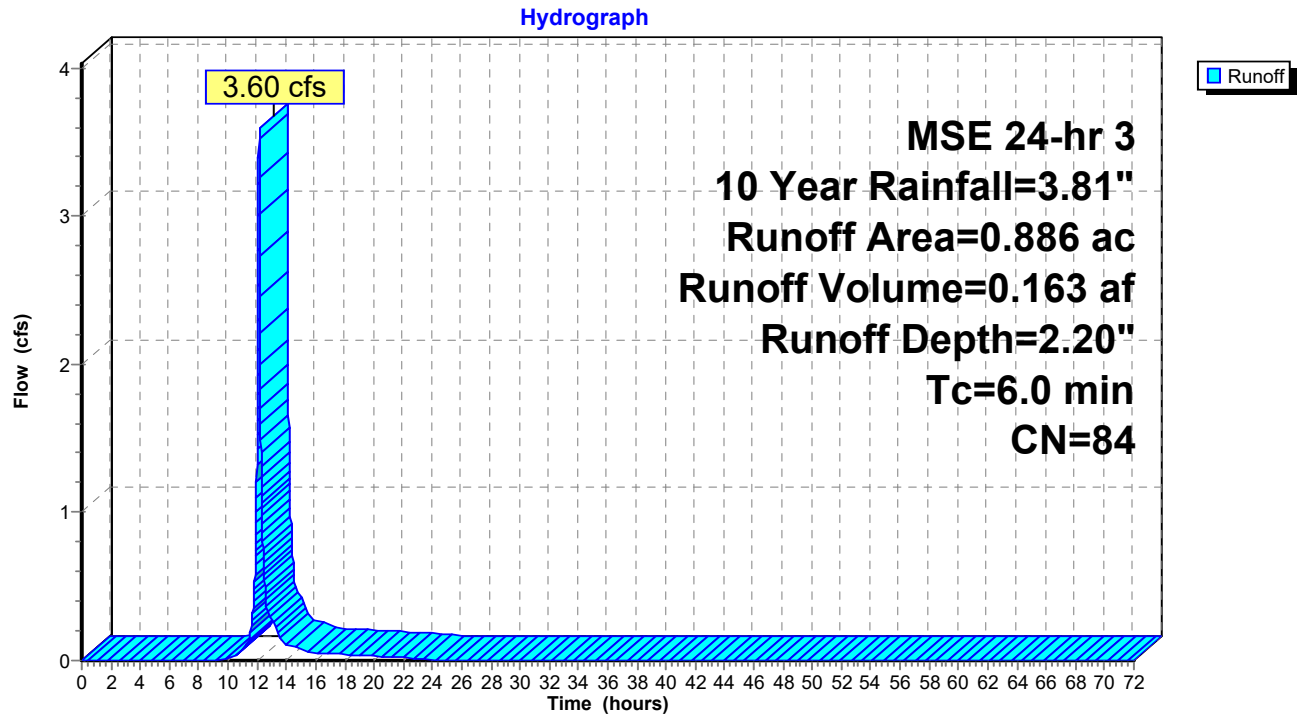
Runoff = 3.60 cfs @ 12.13 hrs, Volume= 0.163 af, Depth= 2.20"
Routed to Pond P1 : Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10 Year Rainfall=3.81"

	Area (ac)	CN	Description
*	0.489	98	Road pavement
*	0.064	98	Public walk
	0.333	61	>75% Grass cover, Good, HSG B
	0.886	84	Weighted Average
	0.333		37.58% Pervious Area
	0.553		62.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 3: Boxhorn R/W



Hydrograph for Subcatchment 3: Boxhorn R/W

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.03	0.00	0.00
3.00	0.06	0.00	0.00
4.00	0.10	0.00	0.00
5.00	0.14	0.00	0.00
6.00	0.19	0.00	0.00
7.00	0.25	0.00	0.00
8.00	0.32	0.00	0.00
9.00	0.39	0.00	0.00
10.00	0.52	0.01	0.02
11.00	0.73	0.06	0.08
12.00	1.76	0.58	**1.53**
13.00	3.08	1.58	**0.28**
14.00	3.29	1.75	0.11
15.00	3.42	1.87	0.09
16.00	3.49	1.93	0.05
17.00	3.56	1.99	0.05
18.00	3.62	2.04	0.04
19.00	3.67	2.08	0.04
20.00	3.71	2.12	0.03
21.00	3.75	2.15	0.03
22.00	3.78	2.17	0.02
23.00	3.80	2.19	0.01
24.00	**3.81**	**2.20**	0.01
25.00	3.81	2.20	0.00
26.00	3.81	2.20	0.00
27.00	3.81	2.20	0.00
28.00	3.81	2.20	0.00
29.00	3.81	2.20	0.00
30.00	3.81	2.20	0.00
31.00	3.81	2.20	0.00
32.00	3.81	2.20	0.00
33.00	3.81	2.20	0.00
34.00	3.81	2.20	0.00
35.00	3.81	2.20	0.00
36.00	3.81	2.20	0.00
37.00	3.81	2.20	0.00
38.00	3.81	2.20	0.00
39.00	3.81	2.20	0.00
40.00	3.81	2.20	0.00
41.00	3.81	2.20	0.00
42.00	3.81	2.20	0.00
43.00	3.81	2.20	0.00
44.00	3.81	2.20	0.00
45.00	3.81	2.20	0.00
46.00	3.81	2.20	0.00
47.00	3.81	2.20	0.00
48.00	3.81	2.20	0.00
49.00	3.81	2.20	0.00
50.00	3.81	2.20	0.00
51.00	3.81	2.20	0.00
52.00	3.81	2.20	0.00
53.00	3.81	2.20	0.00
54.00	3.81	2.20	0.00
55.00	3.81	2.20	0.00
56.00	3.81	2.20	0.00
57.00	3.81	2.20	0.00
58.00	3.81	2.20	0.00
59.00	3.81	2.20	0.00
60.00	3.81	2.20	0.00
61.00	3.81	2.20	0.00
62.00	3.81	2.20	0.00
63.00	3.81	2.20	0.00
64.00	3.81	2.20	0.00
65.00	3.81	2.20	0.00
66.00	3.81	2.20	0.00
67.00	3.81	2.20	0.00
68.00	3.81	2.20	0.00
69.00	3.81	2.20	0.00
70.00	3.81	2.20	0.00
71.00	3.81	2.20	0.00
72.00	3.81	2.20	0.00

Summary for Subcatchment 4: Future Outlot Devplmnt

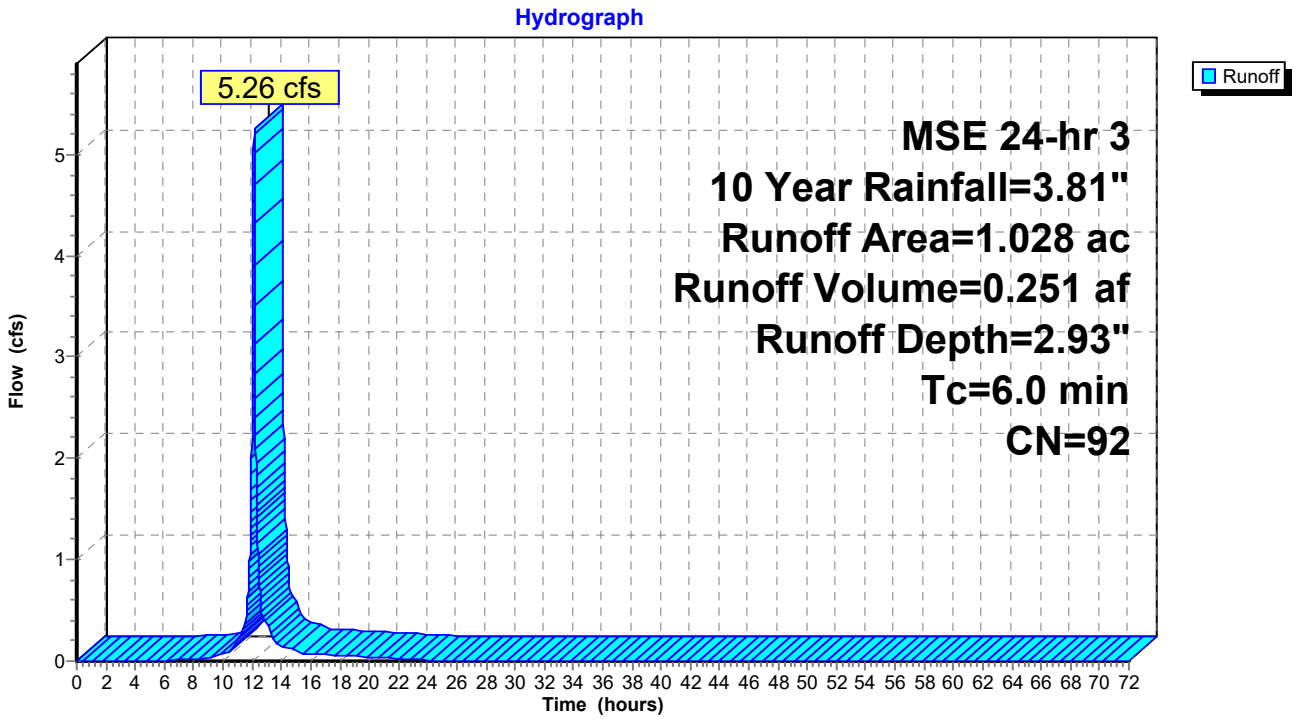
Runoff = 5.26 cfs @ 12.13 hrs, Volume= 0.251 af, Depth= 2.93"
Routed to Pond P1 : Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10 Year Rainfall=3.81"

Area (ac)	CN	Description
1.028	92	Urban commercial, 85% imp, HSG B
0.154		15.00% Pervious Area
0.874		85.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 4: Future Outlot Devplmnt



Hydrograph for Subcatchment 4: Future Outlot Devplmnt

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.01	0.00	0.00
2.00	0.03	0.00	0.00
3.00	0.06	0.00	0.00
4.00	0.10	0.00	0.00
5.00	0.14	0.00	0.00
6.00	0.19	0.00	0.00
7.00	0.25	0.01	0.01
8.00	0.32	0.02	0.02
9.00	0.39	0.04	0.03
10.00	0.52	0.10	0.07
11.00	0.73	0.22	0.21
12.00	1.76	1.03	**2.49**
13.00	3.08	2.23	**0.37**
14.00	3.29	2.43	0.14
15.00	3.42	2.56	0.12
16.00	3.49	2.63	0.07
17.00	3.56	2.69	0.06
18.00	3.62	2.75	0.06
19.00	3.67	2.80	0.05
20.00	3.71	2.84	0.04
21.00	3.75	2.87	0.03
22.00	3.78	2.90	0.03
23.00	3.80	2.92	0.02
24.00	**3.81**	**2.93**	0.01
25.00	3.81	2.93	0.00
26.00	3.81	2.93	0.00
27.00	3.81	2.93	0.00
28.00	3.81	2.93	0.00
29.00	3.81	2.93	0.00
30.00	3.81	2.93	0.00
31.00	3.81	2.93	0.00
32.00	3.81	2.93	0.00
33.00	3.81	2.93	0.00
34.00	3.81	2.93	0.00
35.00	3.81	2.93	0.00
36.00	3.81	2.93	0.00
37.00	3.81	2.93	0.00
38.00	3.81	2.93	0.00
39.00	3.81	2.93	0.00
40.00	3.81	2.93	0.00
41.00	3.81	2.93	0.00
42.00	3.81	2.93	0.00
43.00	3.81	2.93	0.00
44.00	3.81	2.93	0.00
45.00	3.81	2.93	0.00
46.00	3.81	2.93	0.00
47.00	3.81	2.93	0.00
48.00	3.81	2.93	0.00
49.00	3.81	2.93	0.00
50.00	3.81	2.93	0.00
51.00	3.81	2.93	0.00
52.00	3.81	2.93	0.00
53.00	3.81	2.93	0.00
54.00	3.81	2.93	0.00
55.00	3.81	2.93	0.00
56.00	3.81	2.93	0.00
57.00	3.81	2.93	0.00
58.00	3.81	2.93	0.00
59.00	3.81	2.93	0.00
60.00	3.81	2.93	0.00
61.00	3.81	2.93	0.00
62.00	3.81	2.93	0.00
63.00	3.81	2.93	0.00
64.00	3.81	2.93	0.00
65.00	3.81	2.93	0.00
66.00	3.81	2.93	0.00
67.00	3.81	2.93	0.00
68.00	3.81	2.93	0.00
69.00	3.81	2.93	0.00
70.00	3.81	2.93	0.00
71.00	3.81	2.93	0.00
72.00	3.81	2.93	0.00

Summary for Pond P1: Wet Pond

Inflow Area = 9.567 ac, 74.44% Impervious, Inflow Depth = 2.64" for 10 Year event
Inflow = 45.16 cfs @ 12.13 hrs, Volume= 2.101 af
Outflow = 3.77 cfs @ 12.79 hrs, Volume= 2.085 af, Atten= 92%, Lag= 39.6 min
Primary = 3.77 cfs @ 12.79 hrs, Volume= 2.085 af
Routed to Link T : Total
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link T : Total

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 853.67' @ 12.79 hrs Surf.Area= 19,226 sf Storage= 58,103 cf

Plug-Flow detention time= 751.7 min calculated for 2.085 af (99% of inflow)
Center-of-Mass det. time= 747.2 min (1,534.3 - 787.1)

Volume	Invert	Avail.Storage	Storage Description
#1	850.00'	108,399 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

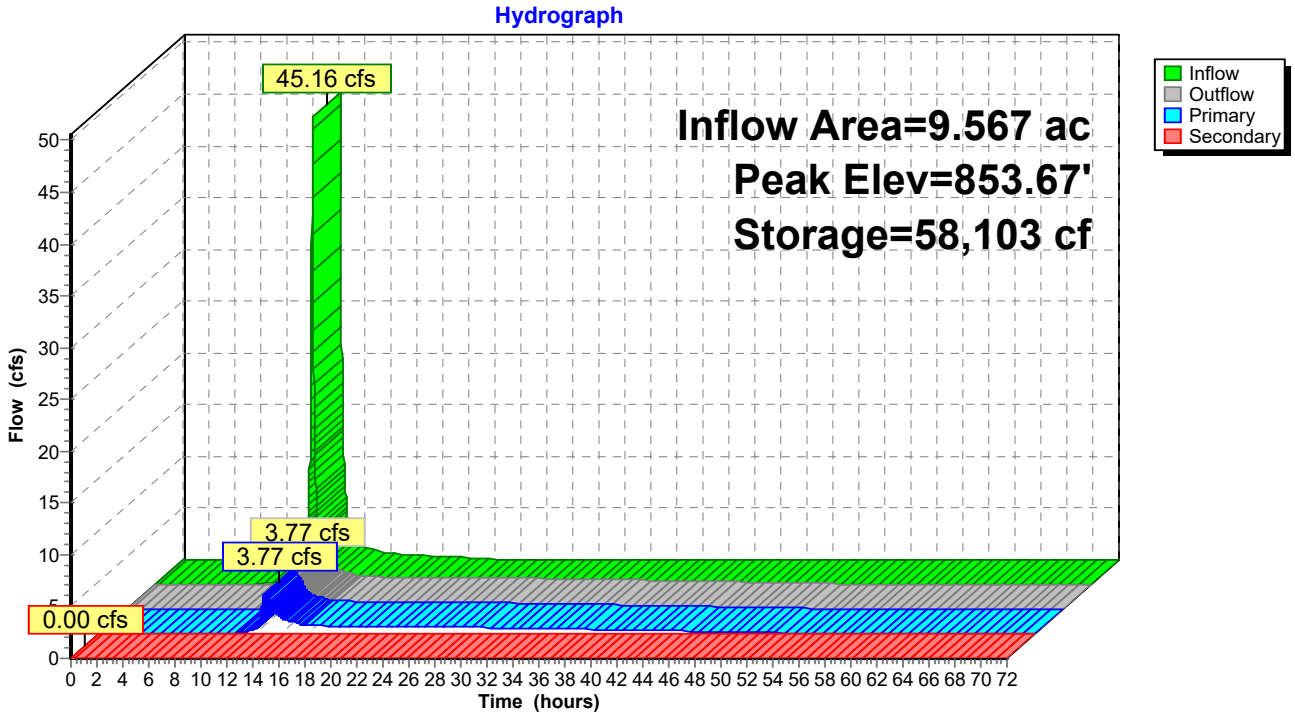
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
850.00	12,631	521.5	0	0	12,631
851.00	14,292	555.6	13,453	13,453	15,603
852.00	16,056	589.8	15,165	28,618	18,772
853.00	17,923	623.9	16,981	45,599	22,121
854.00	19,874	653.0	18,890	64,489	25,146
855.00	21,861	671.8	20,860	85,349	27,236
856.00	24,260	777.5	23,050	108,399	39,448

Device	Routing	Invert	Outlet Devices
#1	Primary	850.00'	**18.0" Round Culvert** L= 53.2' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 850.00' / 849.50' S= 0.0094 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf
#2	Device 1	850.00'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	853.50'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	855.50'	**10.0' long + 4.0 '/' SideZ x 8.0' 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) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

Primary OutFlow Max=3.75 cfs @ 12.79 hrs HW=853.67' TW=847.00' (Fixed TW Elev= 847.00')
└─**1=Culvert** (Passes 3.75 cfs of 12.84 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.79 cfs @ 9.02 fps)
  └─**3=Orifice/Grate** (Weir Controls 2.96 cfs @ 1.36 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=850.00' (Free Discharge)
└─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond P1: Wet Pond



Hydrograph for Pond P1: Wet Pond

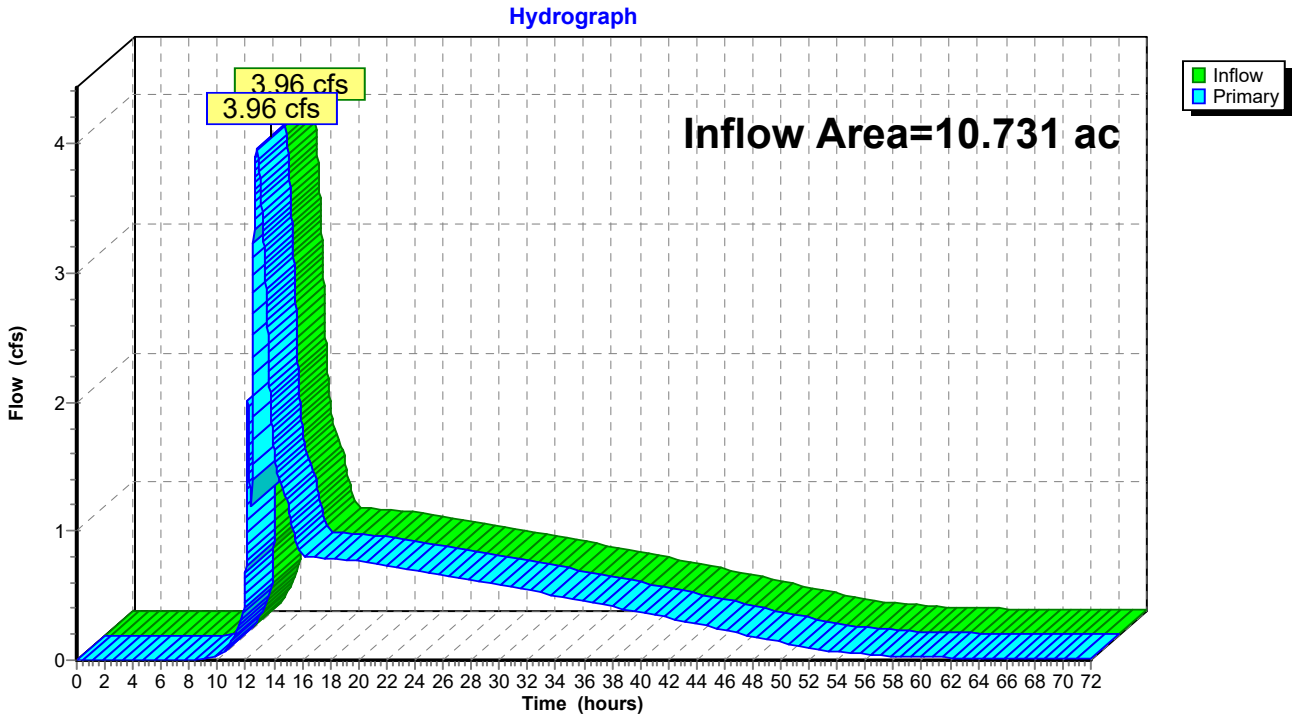
Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	850.00	0.00	0.00	**0.00**
2.00	0.00	0	850.00	0.00	0.00	0.00
4.00	0.00	0	850.00	0.00	0.00	0.00
6.00	0.00	1	850.00	0.00	0.00	0.00
8.00	0.07	159	850.01	0.00	0.00	0.00
10.00	0.43	1,587	850.12	0.04	0.04	0.00
12.00	**20.58**	**19,685**	**851.43**	**0.47**	**0.47**	0.00
14.00	**1.24**	**56,098**	**853.57**	**1.56**	**1.56**	0.00
16.00	0.63	54,789	853.50	0.77	0.77	0.00
18.00	0.50	53,341	853.42	0.76	0.76	0.00
20.00	0.36	51,025	853.30	0.74	0.74	0.00
22.00	0.23	47,875	853.13	0.72	0.72	0.00
24.00	0.09	43,930	852.91	0.70	0.70	0.00
26.00	0.00	39,082	852.63	0.66	0.66	0.00
28.00	0.00	34,469	852.36	0.62	0.62	0.00
30.00	0.00	30,130	852.09	0.58	0.58	0.00
32.00	0.00	26,073	851.84	0.54	0.54	0.00
34.00	0.00	22,306	851.60	0.50	0.50	0.00
36.00	0.00	18,838	851.37	0.46	0.46	0.00
38.00	0.00	15,676	851.15	0.42	0.42	0.00
40.00	0.00	12,828	850.96	0.37	0.37	0.00
42.00	0.00	10,303	850.78	0.33	0.33	0.00
44.00	0.00	8,106	850.62	0.28	0.28	0.00
46.00	0.00	6,245	850.48	0.24	0.24	0.00
48.00	0.00	4,726	850.37	0.19	0.19	0.00
50.00	0.00	3,552	850.28	0.14	0.14	0.00
52.00	0.00	2,731	850.21	0.09	0.09	0.00
54.00	0.00	2,176	850.17	0.06	0.06	0.00
56.00	0.00	1,787	850.14	0.05	0.05	0.00
58.00	0.00	1,509	850.12	0.03	0.03	0.00
60.00	0.00	1,298	850.10	0.03	0.03	0.00
62.00	0.00	1,130	850.09	0.02	0.02	0.00
64.00	0.00	997	850.08	0.02	0.02	0.00
66.00	0.00	891	850.07	0.01	0.01	0.00
68.00	0.00	807	850.06	0.01	0.01	0.00
70.00	0.00	740	850.06	0.01	0.01	0.00
72.00	0.00	680	850.05	0.01	0.01	0.00

Summary for Link T: Total

Inflow Area = 10.731 ac, 66.37% Impervious, Inflow Depth > 2.41" for 10 Year event
Inflow = 3.96 cfs @ 12.78 hrs, Volume= 2.155 af
Primary = 3.96 cfs @ 12.78 hrs, Volume= 2.155 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link T: Total



Hydrograph for Link T: Total

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	**0.00**	0.00	52.00	0.09	0.00	0.09
1.00	0.00	0.00	0.00	53.00	0.08	0.00	0.08
2.00	0.00	0.00	0.00	54.00	0.06	0.00	0.06
3.00	0.00	0.00	0.00	55.00	0.05	0.00	0.05
4.00	0.00	0.00	0.00	56.00	0.05	0.00	0.05
5.00	0.00	0.00	0.00	57.00	0.04	0.00	0.04
6.00	0.00	0.00	0.00	58.00	0.03	0.00	0.03
7.00	0.00	0.00	0.00	59.00	0.03	0.00	0.03
8.00	0.00	0.00	0.00	60.00	0.03	0.00	0.03
9.00	0.01	0.00	0.01	61.00	0.02	0.00	0.02
10.00	0.04	0.00	0.04	62.00	0.02	0.00	0.02
11.00	0.16	0.00	0.16	63.00	0.02	0.00	0.02
12.00	**0.68**	0.00	**0.68**	64.00	0.02	0.00	0.02
13.00	**3.75**	0.00	**3.75**	65.00	0.01	0.00	0.01
14.00	1.63	0.00	1.63	66.00	0.01	0.00	0.01
15.00	1.22	0.00	1.22	67.00	0.01	0.00	0.01
16.00	0.80	0.00	0.80	68.00	0.01	0.00	0.01
17.00	0.80	0.00	0.80	69.00	0.01	0.00	0.01
18.00	0.79	0.00	0.79	70.00	0.01	0.00	0.01
19.00	0.78	0.00	0.78	71.00	0.01	0.00	0.01
20.00	0.77	0.00	0.77	72.00	0.01	0.00	0.01
21.00	0.75	0.00	0.75				
22.00	0.74	0.00	0.74				
23.00	0.72	0.00	0.72				
24.00	0.70	0.00	0.70				
25.00	0.68	0.00	0.68				
26.00	0.66	0.00	0.66				
27.00	0.64	0.00	0.64				
28.00	0.62	0.00	0.62				
29.00	0.60	0.00	0.60				
30.00	0.58	0.00	0.58				
31.00	0.56	0.00	0.56				
32.00	0.54	0.00	0.54				
33.00	0.52	0.00	0.52				
34.00	0.50	0.00	0.50				
35.00	0.48	0.00	0.48				
36.00	0.46	0.00	0.46				
37.00	0.44	0.00	0.44				
38.00	0.42	0.00	0.42				
39.00	0.40	0.00	0.40				
40.00	0.37	0.00	0.37				
41.00	0.35	0.00	0.35				
42.00	0.33	0.00	0.33				
43.00	0.31	0.00	0.31				
44.00	0.28	0.00	0.28				
45.00	0.26	0.00	0.26				
46.00	0.24	0.00	0.24				
47.00	0.21	0.00	0.21				
48.00	0.19	0.00	0.19				
49.00	0.16	0.00	0.16				
50.00	0.14	0.00	0.14				
51.00	0.11	0.00	0.11				

Summary for Subcatchment 1: BLD 83 Devlpmnt

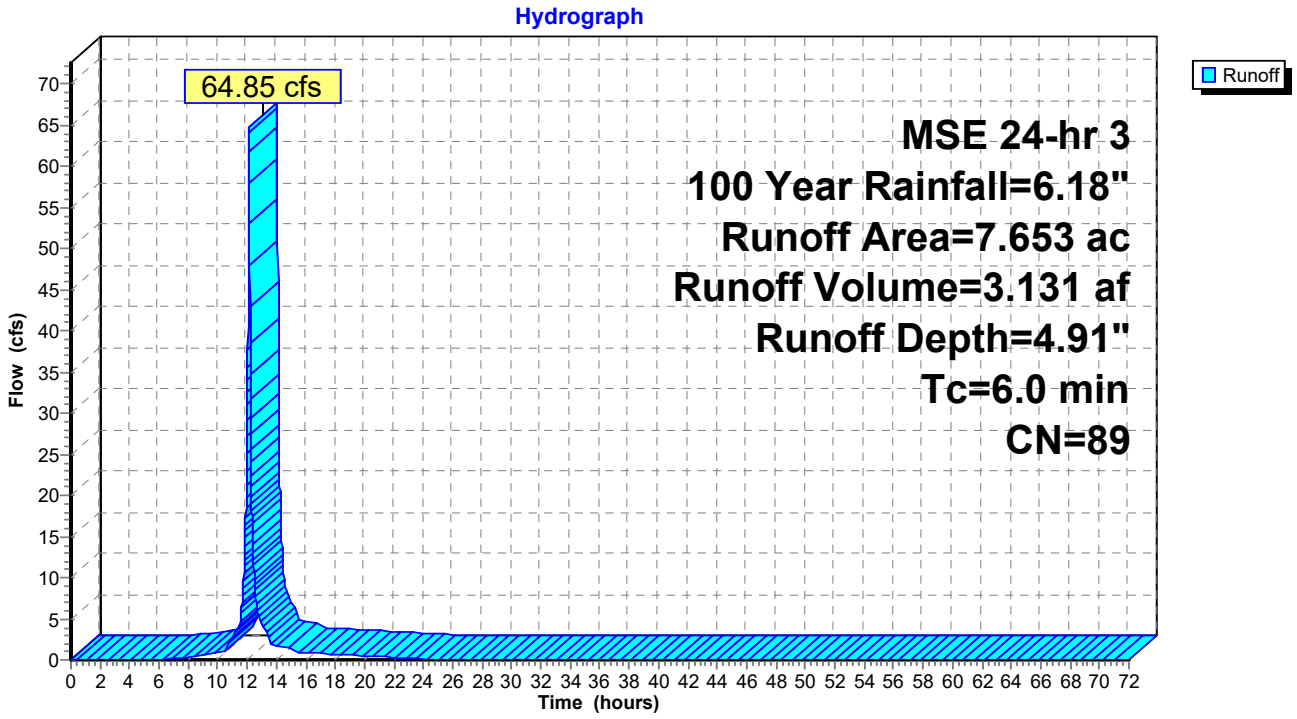
Runoff = 64.85 cfs @ 12.13 hrs, Volume= 3.131 af, Depth= 4.91"
Routed to Pond P1 : Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100 Year Rainfall=6.18"

	Area (ac)	CN	Description
*	2.686	98	Building
*	2.719	98	Paved Area
	0.290	98	Water Surface, HSG B
	1.958	61	>75% Grass cover, Good, HSG B
	7.653	89	Weighted Average
	1.958		25.58% Pervious Area
	5.695		74.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 1: BLD 83 Devlpmnt



Hydrograph for Subcatchment 1: BLD 83 Devlpmnt

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.02	0.00	0.00
2.00	0.06	0.00	0.00
3.00	0.10	0.00	0.00
4.00	0.16	0.00	0.00
5.00	0.23	0.00	0.00
6.00	0.31	0.00	0.06
7.00	0.41	0.02	0.16
8.00	0.52	0.05	0.27
9.00	0.64	0.09	0.40
10.00	0.85	0.20	0.93
11.00	1.19	0.41	2.69
12.00	2.86	1.77	**31.04**
13.00	4.99	3.76	**4.48**
14.00	5.33	4.09	1.70
15.00	5.54	4.29	1.49
16.00	5.66	4.41	0.85
17.00	5.77	4.51	0.76
18.00	5.87	4.60	0.67
19.00	5.95	4.69	0.58
20.00	6.02	4.75	0.49
21.00	6.08	4.81	0.40
22.00	6.12	4.86	0.31
23.00	6.16	4.89	0.22
24.00	**6.18**	**4.91**	0.13
25.00	6.18	4.91	0.00
26.00	6.18	4.91	0.00
27.00	6.18	4.91	0.00
28.00	6.18	4.91	0.00
29.00	6.18	4.91	0.00
30.00	6.18	4.91	0.00
31.00	6.18	4.91	0.00
32.00	6.18	4.91	0.00
33.00	6.18	4.91	0.00
34.00	6.18	4.91	0.00
35.00	6.18	4.91	0.00
36.00	6.18	4.91	0.00
37.00	6.18	4.91	0.00
38.00	6.18	4.91	0.00
39.00	6.18	4.91	0.00
40.00	6.18	4.91	0.00
41.00	6.18	4.91	0.00
42.00	6.18	4.91	0.00
43.00	6.18	4.91	0.00
44.00	6.18	4.91	0.00
45.00	6.18	4.91	0.00
46.00	6.18	4.91	0.00
47.00	6.18	4.91	0.00
48.00	6.18	4.91	0.00
49.00	6.18	4.91	0.00
50.00	6.18	4.91	0.00
51.00	6.18	4.91	0.00
52.00	6.18	4.91	0.00
53.00	6.18	4.91	0.00
54.00	6.18	4.91	0.00
55.00	6.18	4.91	0.00
56.00	6.18	4.91	0.00
57.00	6.18	4.91	0.00
58.00	6.18	4.91	0.00
59.00	6.18	4.91	0.00
60.00	6.18	4.91	0.00
61.00	6.18	4.91	0.00
62.00	6.18	4.91	0.00
63.00	6.18	4.91	0.00
64.00	6.18	4.91	0.00
65.00	6.18	4.91	0.00
66.00	6.18	4.91	0.00
67.00	6.18	4.91	0.00
68.00	6.18	4.91	0.00
69.00	6.18	4.91	0.00
70.00	6.18	4.91	0.00
71.00	6.18	4.91	0.00
72.00	6.18	4.91	0.00

Summary for Subcatchment 2: Undetained

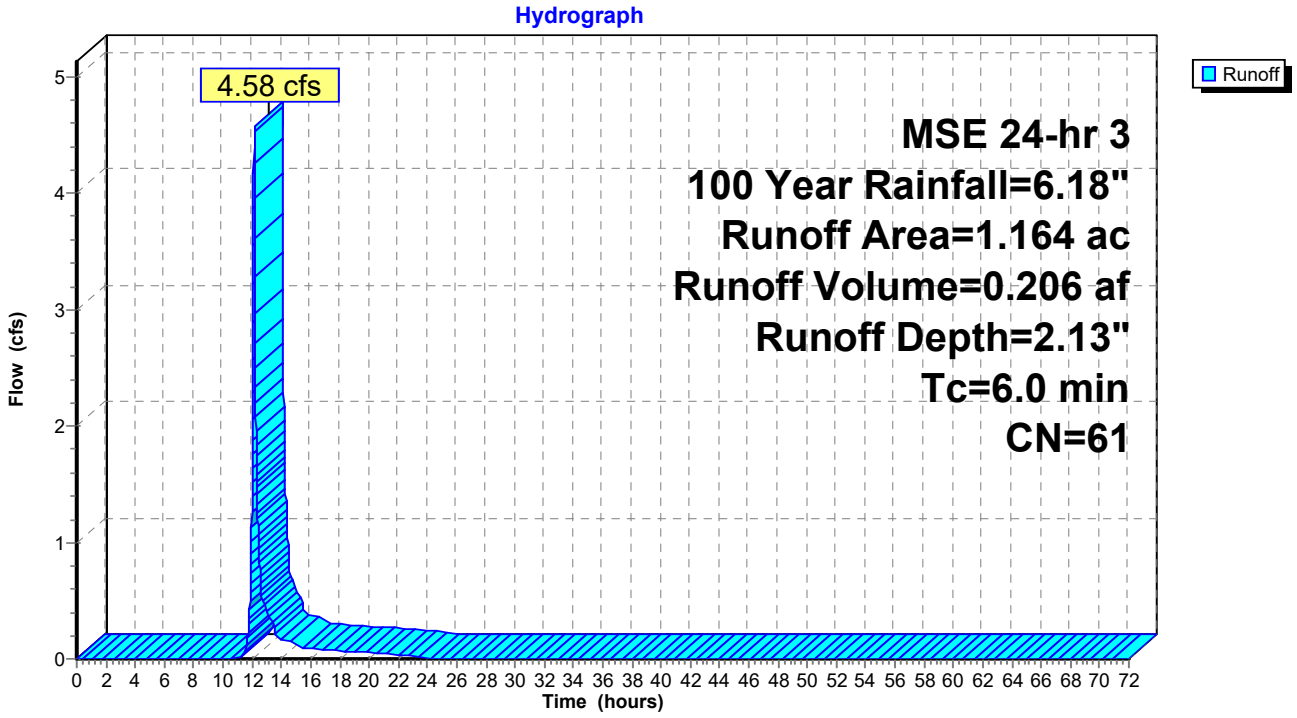
Runoff = 4.58 cfs @ 12.14 hrs, Volume= 0.206 af, Depth= 2.13"
Routed to Link T : Total

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100 Year Rainfall=6.18"

Area (ac)	CN	Description
1.164	61	>75% Grass cover, Good, HSG B
1.164		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 2: Undetained



Hydrograph for Subcatchment 2: Undetained

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.02	0.00	0.00
2.00	0.06	0.00	0.00
3.00	0.10	0.00	0.00
4.00	0.16	0.00	0.00
5.00	0.23	0.00	0.00
6.00	0.31	0.00	0.00
7.00	0.41	0.00	0.00
8.00	0.52	0.00	0.00
9.00	0.64	0.00	0.00
10.00	0.85	0.00	0.00
11.00	1.19	0.00	0.00
12.00	2.86	0.31	**1.52**
13.00	4.99	1.36	**0.42**
14.00	5.33	1.57	0.17
15.00	5.54	1.71	0.15
16.00	5.66	1.78	0.09
17.00	5.77	1.85	0.08
18.00	5.87	1.92	0.07
19.00	5.95	1.97	0.06
20.00	6.02	2.02	0.05
21.00	6.08	2.06	0.04
22.00	6.12	2.09	0.03
23.00	6.16	2.11	0.02
24.00	**6.18**	**2.13**	0.01
25.00	6.18	2.13	0.00
26.00	6.18	2.13	0.00
27.00	6.18	2.13	0.00
28.00	6.18	2.13	0.00
29.00	6.18	2.13	0.00
30.00	6.18	2.13	0.00
31.00	6.18	2.13	0.00
32.00	6.18	2.13	0.00
33.00	6.18	2.13	0.00
34.00	6.18	2.13	0.00
35.00	6.18	2.13	0.00
36.00	6.18	2.13	0.00
37.00	6.18	2.13	0.00
38.00	6.18	2.13	0.00
39.00	6.18	2.13	0.00
40.00	6.18	2.13	0.00
41.00	6.18	2.13	0.00
42.00	6.18	2.13	0.00
43.00	6.18	2.13	0.00
44.00	6.18	2.13	0.00
45.00	6.18	2.13	0.00
46.00	6.18	2.13	0.00
47.00	6.18	2.13	0.00
48.00	6.18	2.13	0.00
49.00	6.18	2.13	0.00
50.00	6.18	2.13	0.00
51.00	6.18	2.13	0.00
52.00	6.18	2.13	0.00
53.00	6.18	2.13	0.00
54.00	6.18	2.13	0.00
55.00	6.18	2.13	0.00
56.00	6.18	2.13	0.00
57.00	6.18	2.13	0.00
58.00	6.18	2.13	0.00
59.00	6.18	2.13	0.00
60.00	6.18	2.13	0.00
61.00	6.18	2.13	0.00
62.00	6.18	2.13	0.00
63.00	6.18	2.13	0.00
64.00	6.18	2.13	0.00
65.00	6.18	2.13	0.00
66.00	6.18	2.13	0.00
67.00	6.18	2.13	0.00
68.00	6.18	2.13	0.00
69.00	6.18	2.13	0.00
70.00	6.18	2.13	0.00
71.00	6.18	2.13	0.00
72.00	6.18	2.13	0.00

Summary for Subcatchment 3: Boxhorn R/W

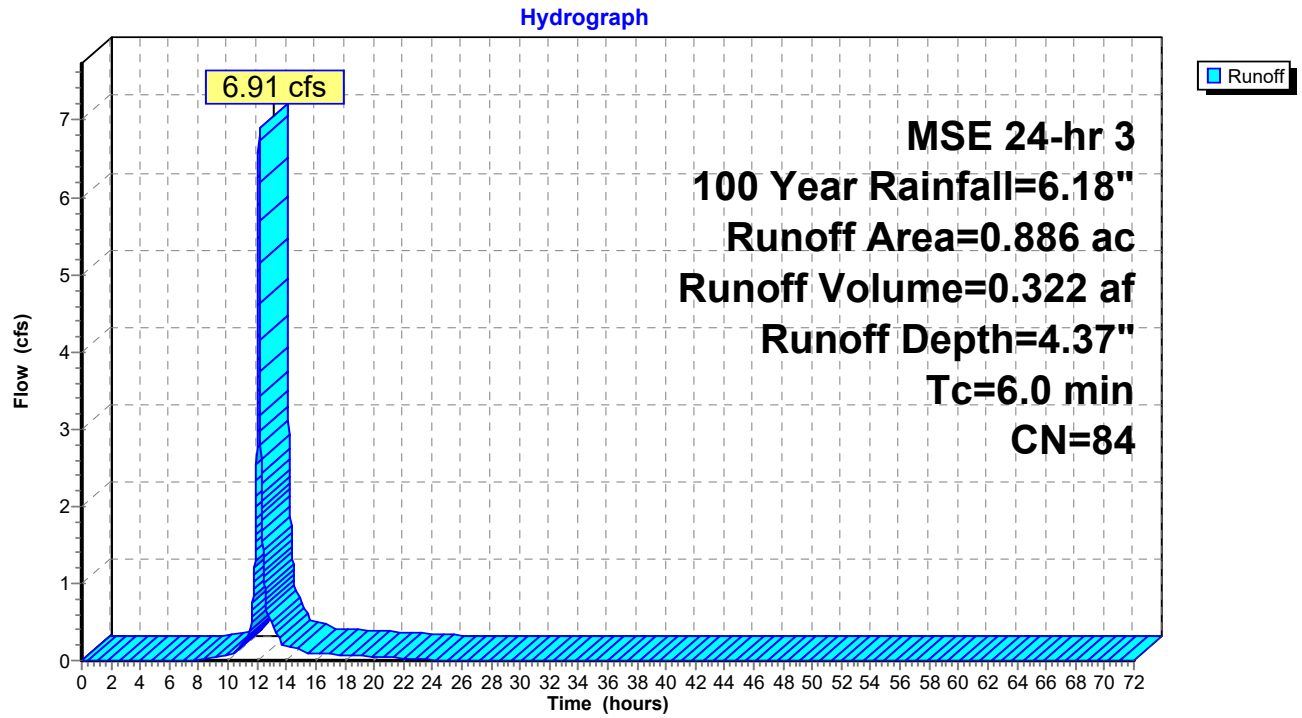
Runoff = 6.91 cfs @ 12.13 hrs, Volume= 0.322 af, Depth= 4.37"
Routed to Pond P1 : Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100 Year Rainfall=6.18"

	Area (ac)	CN	Description
*	0.489	98	Road pavement
*	0.064	98	Public walk
	0.333	61	>75% Grass cover, Good, HSG B
	0.886	84	Weighted Average
	0.333		37.58% Pervious Area
	0.553		62.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 3: Boxhorn R/W



Hydrograph for Subcatchment 3: Boxhorn R/W

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.02	0.00	0.00
2.00	0.06	0.00	0.00
3.00	0.10	0.00	0.00
4.00	0.16	0.00	0.00
5.00	0.23	0.00	0.00
6.00	0.31	0.00	0.00
7.00	0.41	0.00	0.00
8.00	0.52	0.01	0.01
9.00	0.64	0.03	0.02
10.00	0.85	0.09	0.07
11.00	1.19	0.24	0.23
12.00	2.86	1.40	**3.17**
13.00	4.99	3.26	**0.50**
14.00	5.33	3.57	0.19
15.00	5.54	3.77	0.17
16.00	5.66	3.88	0.10
17.00	5.77	3.98	0.08
18.00	5.87	4.07	0.08
19.00	5.95	4.15	0.07
20.00	6.02	4.21	0.06
21.00	6.08	4.27	0.04
22.00	6.12	4.31	0.03
23.00	6.16	4.34	0.02
24.00	**6.18**	**4.37**	0.01
25.00	6.18	4.37	0.00
26.00	6.18	4.37	0.00
27.00	6.18	4.37	0.00
28.00	6.18	4.37	0.00
29.00	6.18	4.37	0.00
30.00	6.18	4.37	0.00
31.00	6.18	4.37	0.00
32.00	6.18	4.37	0.00
33.00	6.18	4.37	0.00
34.00	6.18	4.37	0.00
35.00	6.18	4.37	0.00
36.00	6.18	4.37	0.00
37.00	6.18	4.37	0.00
38.00	6.18	4.37	0.00
39.00	6.18	4.37	0.00
40.00	6.18	4.37	0.00
41.00	6.18	4.37	0.00
42.00	6.18	4.37	0.00
43.00	6.18	4.37	0.00
44.00	6.18	4.37	0.00
45.00	6.18	4.37	0.00
46.00	6.18	4.37	0.00
47.00	6.18	4.37	0.00
48.00	6.18	4.37	0.00
49.00	6.18	4.37	0.00
50.00	6.18	4.37	0.00
51.00	6.18	4.37	0.00
52.00	6.18	4.37	0.00
53.00	6.18	4.37	0.00
54.00	6.18	4.37	0.00
55.00	6.18	4.37	0.00
56.00	6.18	4.37	0.00
57.00	6.18	4.37	0.00
58.00	6.18	4.37	0.00
59.00	6.18	4.37	0.00
60.00	6.18	4.37	0.00
61.00	6.18	4.37	0.00
62.00	6.18	4.37	0.00
63.00	6.18	4.37	0.00
64.00	6.18	4.37	0.00
65.00	6.18	4.37	0.00
66.00	6.18	4.37	0.00
67.00	6.18	4.37	0.00
68.00	6.18	4.37	0.00
69.00	6.18	4.37	0.00
70.00	6.18	4.37	0.00
71.00	6.18	4.37	0.00
72.00	6.18	4.37	0.00

Summary for Subcatchment 4: Future Outlot Devplmnt

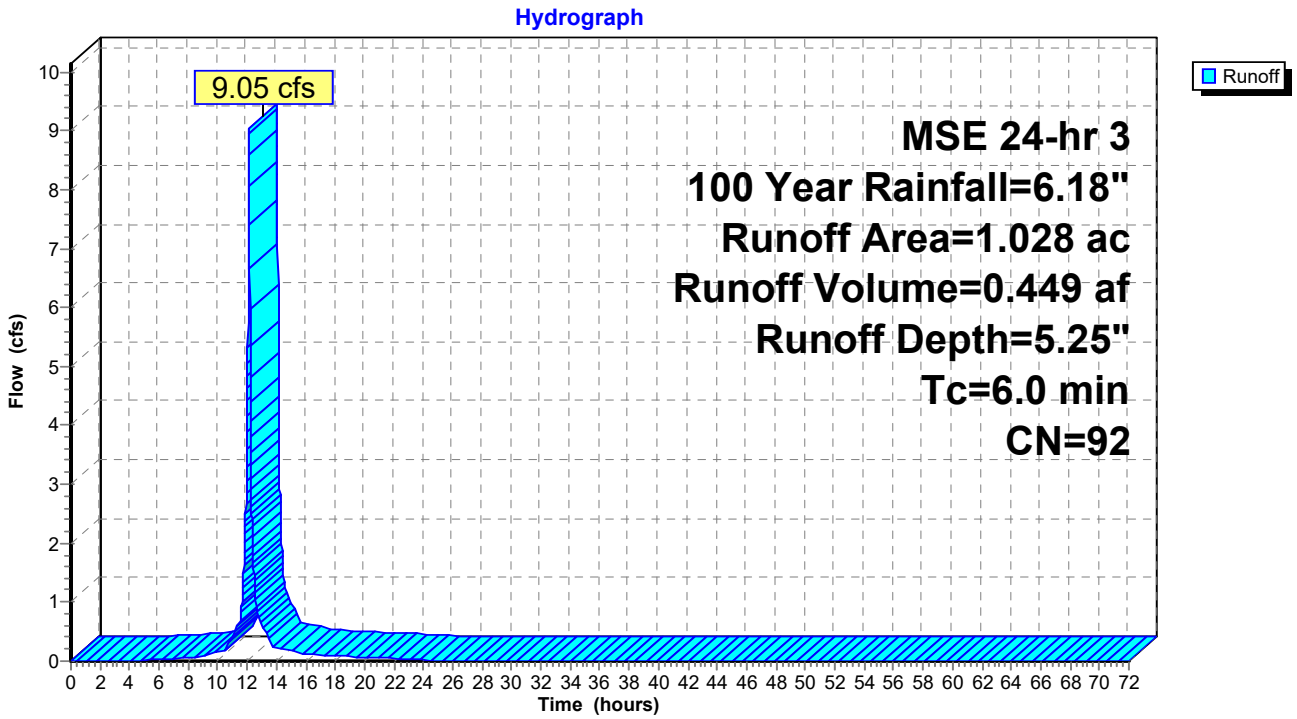
Runoff = 9.05 cfs @ 12.13 hrs, Volume= 0.449 af, Depth= 5.25"
Routed to Pond P1 : Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100 Year Rainfall=6.18"

Area (ac)	CN	Description
1.028	92	Urban commercial, 85% imp, HSG B
0.154		15.00% Pervious Area
0.874		85.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, TR-55 min**

Subcatchment 4: Future Outlot Devplmnt



Hydrograph for Subcatchment 4: Future Outlot Devplmnt

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
1.00	0.02	0.00	0.00
2.00	0.06	0.00	0.00
3.00	0.10	0.00	0.00
4.00	0.16	0.00	0.00
5.00	0.23	0.00	0.01
6.00	0.31	0.02	0.02
7.00	0.41	0.05	0.04
8.00	0.52	0.10	0.06
9.00	0.64	0.16	0.07
10.00	0.85	0.30	0.16
11.00	1.19	0.55	0.42
12.00	2.86	2.03	**4.43**
13.00	4.99	4.08	**0.61**
14.00	5.33	4.41	0.23
15.00	5.54	4.62	0.20
16.00	5.66	4.74	0.12
17.00	5.77	4.84	0.10
18.00	5.87	4.94	0.09
19.00	5.95	5.02	0.08
20.00	6.02	5.09	0.07
21.00	6.08	5.15	0.05
22.00	6.12	5.19	0.04
23.00	6.16	5.22	0.03
24.00	**6.18**	**5.25**	0.02
25.00	6.18	5.25	0.00
26.00	6.18	5.25	0.00
27.00	6.18	5.25	0.00
28.00	6.18	5.25	0.00
29.00	6.18	5.25	0.00
30.00	6.18	5.25	0.00
31.00	6.18	5.25	0.00
32.00	6.18	5.25	0.00
33.00	6.18	5.25	0.00
34.00	6.18	5.25	0.00
35.00	6.18	5.25	0.00
36.00	6.18	5.25	0.00
37.00	6.18	5.25	0.00
38.00	6.18	5.25	0.00
39.00	6.18	5.25	0.00
40.00	6.18	5.25	0.00
41.00	6.18	5.25	0.00
42.00	6.18	5.25	0.00
43.00	6.18	5.25	0.00
44.00	6.18	5.25	0.00
45.00	6.18	5.25	0.00
46.00	6.18	5.25	0.00
47.00	6.18	5.25	0.00
48.00	6.18	5.25	0.00
49.00	6.18	5.25	0.00
50.00	6.18	5.25	0.00
51.00	6.18	5.25	0.00
52.00	6.18	5.25	0.00
53.00	6.18	5.25	0.00
54.00	6.18	5.25	0.00
55.00	6.18	5.25	0.00
56.00	6.18	5.25	0.00
57.00	6.18	5.25	0.00
58.00	6.18	5.25	0.00
59.00	6.18	5.25	0.00
60.00	6.18	5.25	0.00
61.00	6.18	5.25	0.00
62.00	6.18	5.25	0.00
63.00	6.18	5.25	0.00
64.00	6.18	5.25	0.00
65.00	6.18	5.25	0.00
66.00	6.18	5.25	0.00
67.00	6.18	5.25	0.00
68.00	6.18	5.25	0.00
69.00	6.18	5.25	0.00
70.00	6.18	5.25	0.00
71.00	6.18	5.25	0.00
72.00	6.18	5.25	0.00

Summary for Pond P1: Wet Pond

Inflow Area = 9.567 ac, 74.44% Impervious, Inflow Depth = 4.90" for 100 Year event
Inflow = 80.81 cfs @ 12.13 hrs, Volume= 3.903 af
Outflow = 15.83 cfs @ 12.40 hrs, Volume= 3.886 af, Atten= 80%, Lag= 16.3 min
Primary = 15.83 cfs @ 12.40 hrs, Volume= 3.886 af
Routed to Link T : Total
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link T : Total

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 855.20' @ 12.40 hrs Surf.Area= 22,323 sf Storage= 89,697 cf

Plug-Flow detention time= 466.6 min calculated for 3.885 af (100% of inflow)
Center-of-Mass det. time= 464.2 min (1,239.1 - 775.0)

Volume	Invert	Avail.Storage	Storage Description
#1	850.00'	108,399 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

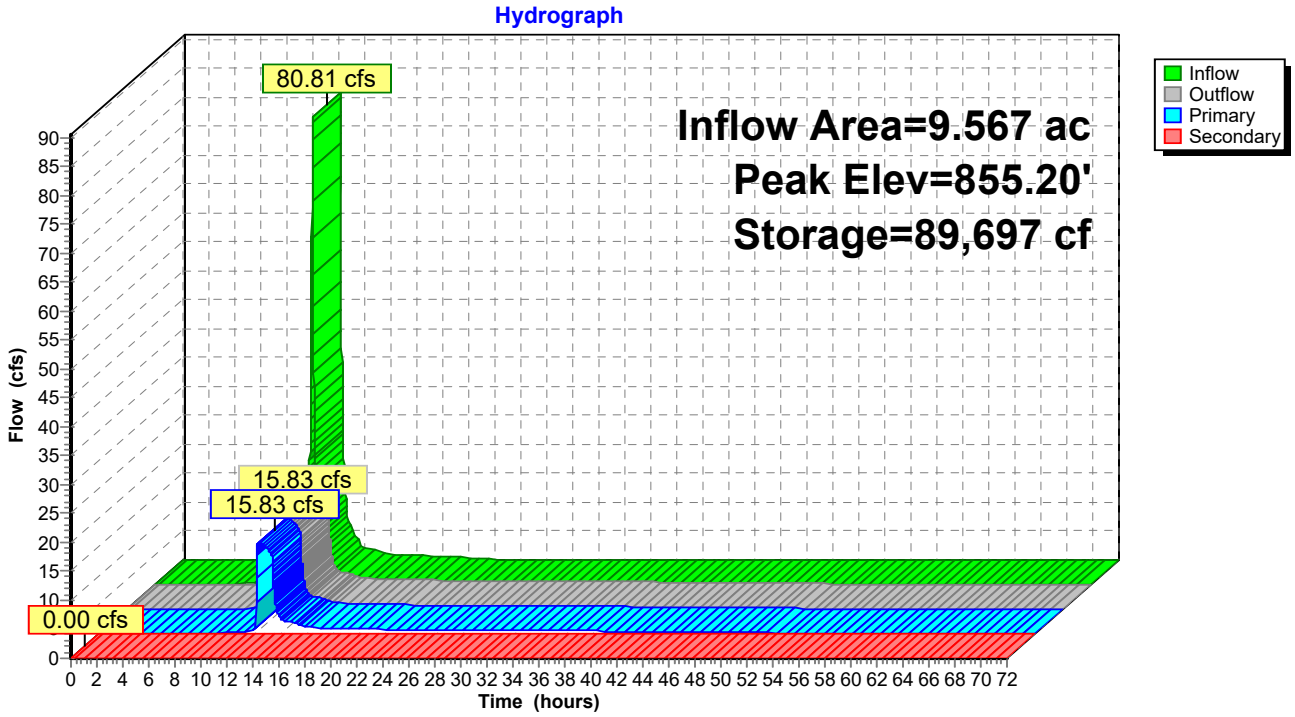
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
850.00	12,631	521.5	0	0	12,631
851.00	14,292	555.6	13,453	13,453	15,603
852.00	16,056	589.8	15,165	28,618	18,772
853.00	17,923	623.9	16,981	45,599	22,121
854.00	19,874	653.0	18,890	64,489	25,146
855.00	21,861	671.8	20,860	85,349	27,236
856.00	24,260	777.5	23,050	108,399	39,448

Device	Routing	Invert	Outlet Devices
#1	Primary	850.00'	**18.0" Round Culvert** L= 53.2' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 850.00' / 849.50' S= 0.0094 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf
#2	Device 1	850.00'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	853.50'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	855.50'	**10.0' long + 4.0 '/' SideZ x 8.0' 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) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

Primary OutFlow Max=15.83 cfs @ 12.40 hrs HW=855.20' TW=847.00' (Fixed TW Elev= 847.00')
└─**1=Culvert** (Inlet Controls 15.83 cfs @ 8.96 fps)
└─**2=Orifice/Grate** (Passes < 0.94 cfs potential flow)
└─**3=Orifice/Grate** (Passes < 78.82 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=850.00' (Free Discharge)
└─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond P1: Wet Pond



Hydrograph for Pond P1: Wet Pond

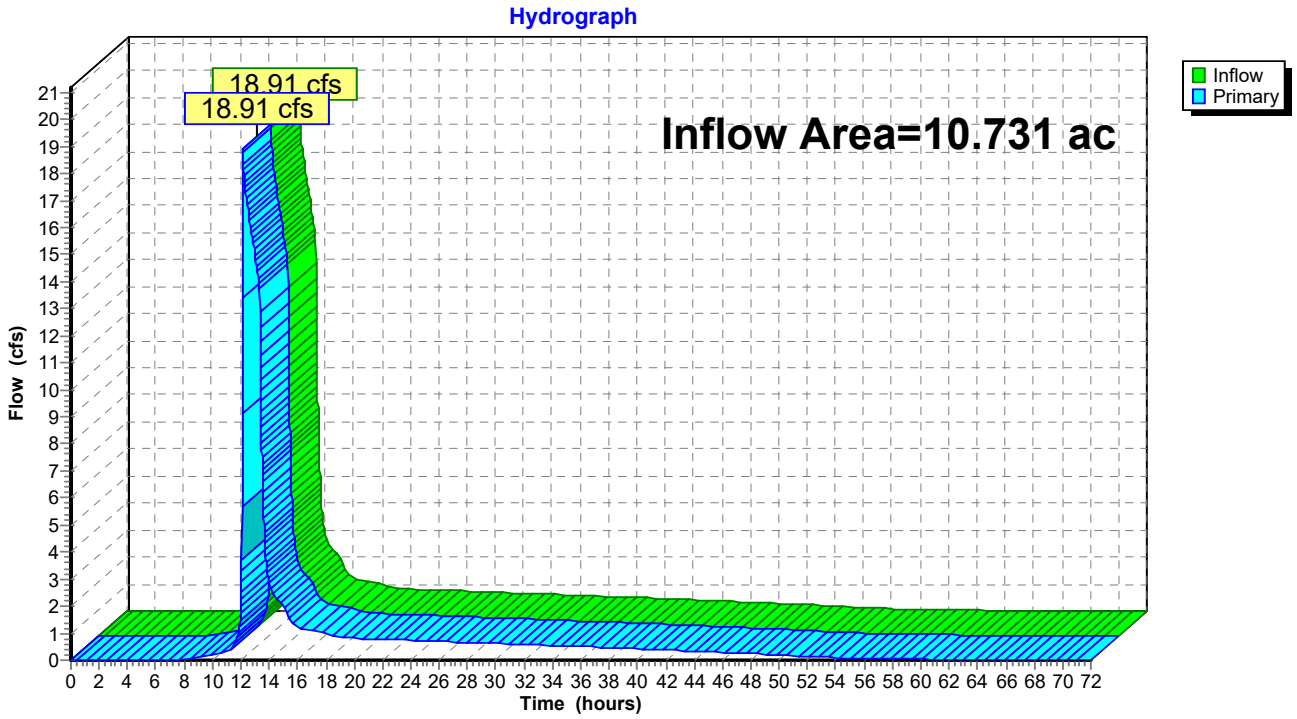
Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	850.00	0.00	0.00	**0.00**
2.00	0.00	0	850.00	0.00	0.00	0.00
4.00	0.00	0	850.00	0.00	0.00	0.00
6.00	0.08	140	850.01	0.00	0.00	0.00
8.00	0.34	1,539	850.12	0.03	0.03	0.00
10.00	1.15	5,609	850.43	0.22	0.22	0.00
12.00	**38.63**	**43,212**	**852.87**	**0.69**	**0.69**	0.00
14.00	**2.12**	**57,207**	**853.63**	**2.67**	**2.67**	0.00
16.00	1.07	55,611	853.54	1.15	1.15	0.00
18.00	0.84	55,126	853.52	0.91	0.91	0.00
20.00	0.61	54,510	853.48	0.77	0.77	0.00
22.00	0.39	52,639	853.38	0.75	0.75	0.00
24.00	0.16	49,251	853.20	0.73	0.73	0.00
26.00	0.00	44,157	852.92	0.70	0.70	0.00
28.00	0.00	39,268	852.64	0.66	0.66	0.00
30.00	0.00	34,644	852.37	0.62	0.62	0.00
32.00	0.00	30,294	852.10	0.58	0.58	0.00
34.00	0.00	26,226	851.85	0.55	0.55	0.00
36.00	0.00	22,447	851.61	0.50	0.50	0.00
38.00	0.00	18,967	851.38	0.46	0.46	0.00
40.00	0.00	15,793	851.16	0.42	0.42	0.00
42.00	0.00	12,933	850.96	0.38	0.38	0.00
44.00	0.00	10,395	850.78	0.33	0.33	0.00
46.00	0.00	8,185	850.62	0.28	0.28	0.00
48.00	0.00	6,311	850.48	0.24	0.24	0.00
50.00	0.00	4,779	850.37	0.19	0.19	0.00
52.00	0.00	3,591	850.28	0.14	0.14	0.00
54.00	0.00	2,757	850.22	0.09	0.09	0.00
56.00	0.00	2,194	850.17	0.06	0.06	0.00
58.00	0.00	1,800	850.14	0.05	0.05	0.00
60.00	0.00	1,518	850.12	0.03	0.03	0.00
62.00	0.00	1,305	850.10	0.03	0.03	0.00
64.00	0.00	1,136	850.09	0.02	0.02	0.00
66.00	0.00	1,002	850.08	0.02	0.02	0.00
68.00	0.00	895	850.07	0.01	0.01	0.00
70.00	0.00	810	850.06	0.01	0.01	0.00
72.00	0.00	742	850.06	0.01	0.01	0.00

Summary for Link T: Total

Inflow Area = 10.731 ac, 66.37% Impervious, Inflow Depth > 4.58" for 100 Year event
Inflow = 18.91 cfs @ 12.15 hrs, Volume= 4.092 af
Primary = 18.91 cfs @ 12.15 hrs, Volume= 4.092 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link T: Total



Hydrograph for Link T: Total

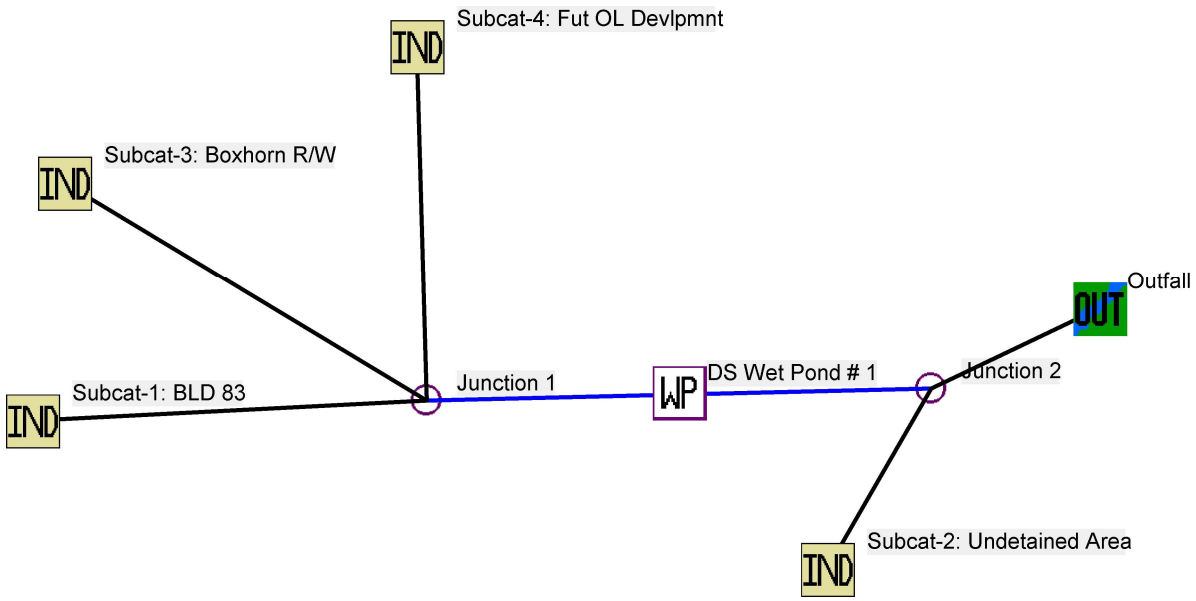
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	**0.00**	0.00	52.00	0.14	0.00	0.14
1.00	0.00	0.00	0.00	53.00	0.12	0.00	0.12
2.00	0.00	0.00	0.00	54.00	0.09	0.00	0.09
3.00	0.00	0.00	0.00	55.00	0.08	0.00	0.08
4.00	0.00	0.00	0.00	56.00	0.06	0.00	0.06
5.00	0.00	0.00	0.00	57.00	0.05	0.00	0.05
6.00	0.00	0.00	0.00	58.00	0.05	0.00	0.05
7.00	0.01	0.00	0.01	59.00	0.04	0.00	0.04
8.00	0.03	0.00	0.03	60.00	0.03	0.00	0.03
9.00	0.10	0.00	0.10	61.00	0.03	0.00	0.03
10.00	0.22	0.00	0.22	62.00	0.03	0.00	0.03
11.00	0.34	0.00	0.34	63.00	0.02	0.00	0.02
12.00	**2.21**	0.00	**2.21**	64.00	0.02	0.00	0.02
13.00	**14.96**	0.00	**14.96**	65.00	0.02	0.00	0.02
14.00	2.84	0.00	2.84	66.00	0.02	0.00	0.02
15.00	2.11	0.00	2.11	67.00	0.01	0.00	0.01
16.00	1.23	0.00	1.23	68.00	0.01	0.00	0.01
17.00	1.10	0.00	1.10	69.00	0.01	0.00	0.01
18.00	0.98	0.00	0.98	70.00	0.01	0.00	0.01
19.00	0.86	0.00	0.86	71.00	0.01	0.00	0.01
20.00	0.82	0.00	0.82	72.00	0.01	0.00	0.01
21.00	0.80	0.00	0.80				
22.00	0.79	0.00	0.79				
23.00	0.77	0.00	0.77				
24.00	0.75	0.00	0.75				
25.00	0.71	0.00	0.71				
26.00	0.70	0.00	0.70				
27.00	0.68	0.00	0.68				
28.00	0.66	0.00	0.66				
29.00	0.64	0.00	0.64				
30.00	0.62	0.00	0.62				
31.00	0.60	0.00	0.60				
32.00	0.58	0.00	0.58				
33.00	0.57	0.00	0.57				
34.00	0.55	0.00	0.55				
35.00	0.52	0.00	0.52				
36.00	0.50	0.00	0.50				
37.00	0.48	0.00	0.48				
38.00	0.46	0.00	0.46				
39.00	0.44	0.00	0.44				
40.00	0.42	0.00	0.42				
41.00	0.40	0.00	0.40				
42.00	0.38	0.00	0.38				
43.00	0.35	0.00	0.35				
44.00	0.33	0.00	0.33				
45.00	0.31	0.00	0.31				
46.00	0.28	0.00	0.28				
47.00	0.26	0.00	0.26				
48.00	0.24	0.00	0.24				
49.00	0.21	0.00	0.21				
50.00	0.19	0.00	0.19				
51.00	0.17	0.00	0.17				

APPENDIX 2

Water Quality Calculations

- WinSLAMM Diagrams
- WinSLAMM Inputs
- WinSLAMM Outputs

BRIOHN
DESIGN GROUP


Subcat-4: Fut OL Devlpmnt
IND
Subcat-3: Boxhorn R/W
IND
Outfall
OUT
Subcat-1: BLD 83
IND
Junction 1
WP
DS Wet Pond # 1
Junction 2
Subcat-2: Undetained Area
IND

Data file name: K:\Projects\250123 - Hwy 83 Mukwonago - BLD\07 Design\Drawings\Revit and DWG Project files\Civil\SWMP\parts\250123 BLD83.mdb
WinSLAMM Version 10.5.0
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
If Other Device Pollutant Load Reduction Values = 1, Off-site Pollutant Loads are Removed from Pollutant Load % Reduction calculations
Seed for random number generator: -42
Study period starting date: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Date: 03-27-2026 Time: 10:32:04
Site information:

LU# 1 - Industrial: Subcat-1: BLD 83 Total area (ac): 7.653
1 - Roofs 1: 2.686 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 1.148 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 1.482 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.089 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 1.958 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
70 - Water Body Areas: 0.290 ac. PSD File: Source Area PSD File:

LU# 2 - Industrial: Subcat-2: Undetained Area Total area (ac): 1.164
45 - Large Landscaped Areas 1: 1.164 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 3 - Industrial: Subcat-3: Boxhorn R/W Total area (ac): 0.886
31 - Sidewalks 1: 0.064 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
37 - Streets 1: 0.489 ac. Smooth Street Length = 0.066 mi Street Width = 61.125 ft Street Edges = 4
Default St. Dirt Accum. Annual Winter Load = 2500 lbs PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
51 - Small Landscaped Areas 1: 0.333 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 4 - Industrial: Subcat-4: Fut OL Devlpmnt Total area (ac): 1.028
1 - Roofs 1: 0.155 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 0.400 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
51 - Small Landscaped Areas 1: 0.473 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Wet Detention Pond CP# 1 (DS) - DS Wet Pond # 1
Particle Size Distribution file name: Not needed - calculated by program
Initial stage elevation (ft): 0
Peak to Average Flow Ratio: 3.8
Maximum flow allowed into pond (cfs): No maximum value entered
Outlet Characteristics:
Outlet type: Orifice 1
1. Orifice diameter (ft): 0.33
2. Number of orifices: 1
3. Invert elevation above datum (ft): 5
Outlet type: Broad Crested Weir
1. Weir crest length (ft): 10
2. Weir crest width (ft): 10
3. Height from datum to bottom of weir opening: 11
Outlet type: Vertical Stand Pipe
1. Stand pipe diameter (ft): 4
2. Stand pipe height above datum (ft): 8.5
Pond stage and surface area

Entry Number	Stage (ft)	Pond Area (acres)	Natural Seepage (in/hr)	Other Outflow (cfs)
0	0.00	0.0000	0.00	0.00
1	0.01	0.1105	0.00	0.00
2	1.00	0.1263	0.00	0.00
3	2.00	0.1431	0.00	0.00
4	3.00	0.1609	0.00	0.00
5	4.00	0.1798	0.00	0.00
6	5.00	0.2900	0.00	0.00
7	6.00	0.3686	0.00	0.00
8	7.00	0.4115	0.00	0.00
9	8.00	0.4562	0.00	0.00
10	9.00	0.4562	0.00	0.00
11	10.00	0.5019	0.00	0.00
12	11.00	0.5569	0.00	0.00
13	12.00	0.9971	0.00	0.00

SLAMM for Windows Version 10.5.0
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Data file name: K:\Projects\250123 - Hwy 83 Mukwonago - BLD\07 Design\Drawings\Revit and DWG Project files\Civil\SWMP\parts\250123 BLD83.mdb
WinSLAMM Version 10.5.0
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
If Other Device Pollutant Load Reduction Values = 1, Off-site Pollutant Loads are Removed from Pollutant Load % Reduction calculations
Seed for random number generator: -42
Study period starting date: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Model Run Start Date: 01/05/69 Model Run End Date: 12/31/69
Date of run: 03-27-2026 Time of run: 10:31:07
Total Area Modeled (acres): 10.731
Years in Model Run: 0.99

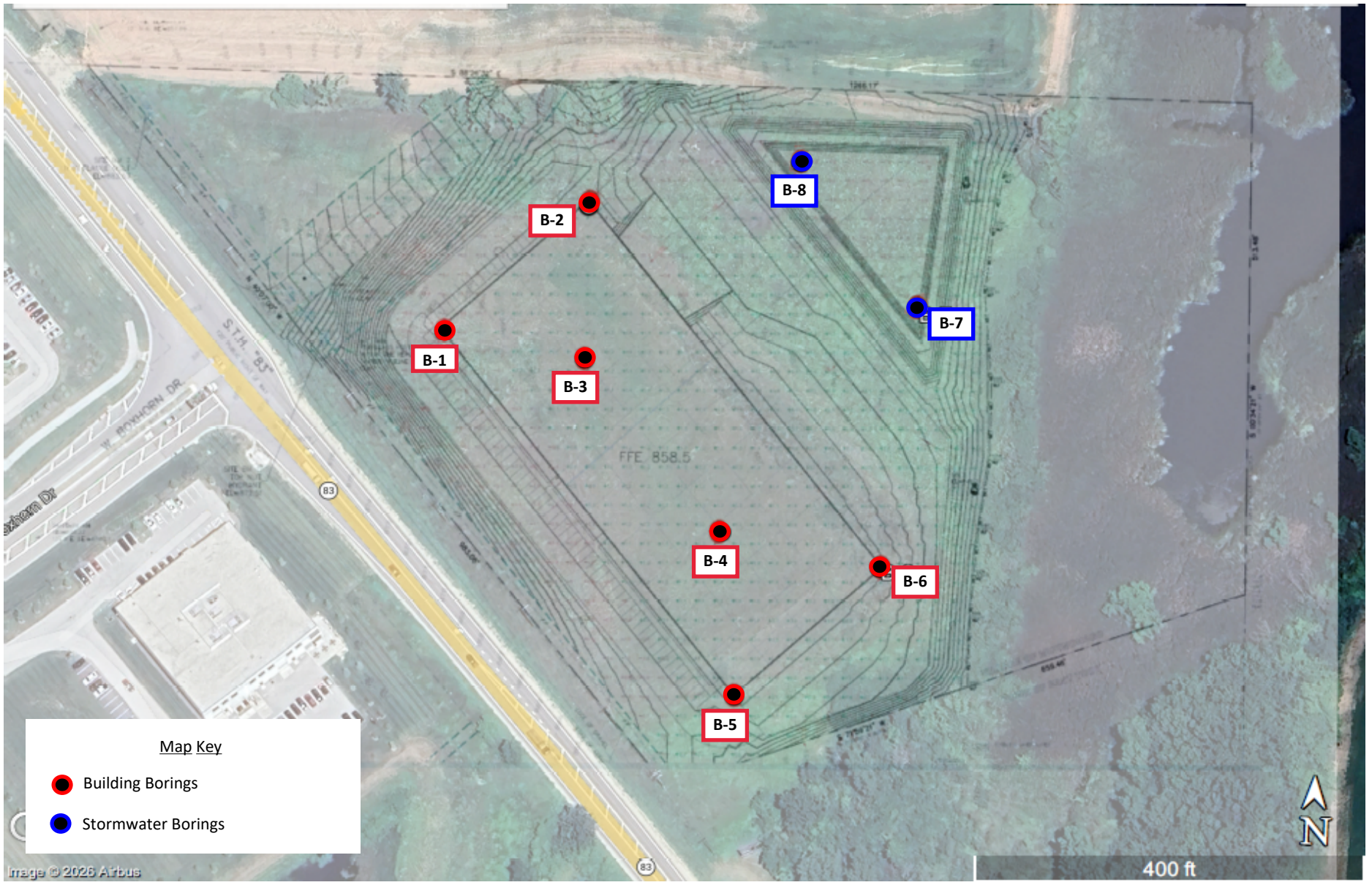
	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of all Land Uses without Controls:	570031	-	129.8	4618	-
Outfall Total with Controls:	535368	6.08%	24.73	826.5	82.10%
Annualized Total After Outfall Controls:	542803			838.0	

APPENDIX 3

Soil Data (PSI-Intertek March 24, 2026, Report)

- Fig 1 Boring Location Map
- DSPS Soil Evaluation Form

BRIOHN
DESIGN GROUP



intertek psi	Proposed Mukwonago Outlet 3 Development East Side of W. Boxhorn Drive and STH 83 Mukwonago, Wisconsin	SCALE: 1 inch = 110 feet (approx.)
		DATE: 03/23/2026
	FIGURE 1: BORING LOCATION PLAN	PROJECT NUMBER: 00523607

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

SOIL EVALUATION - STORM

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

Attach complete site plan on paper not less that 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: Waukesha

Parcel I.D.:

Reviewed by:

Date:

Property Owner	Property Location: STH 83, Mukwonago, WI
	Govt. Lot

Property Owner's Mailing Address	Lot #	Block #	Subd. Name or CSM#

City	State	Zip Code	Phone Number	☒ City ☐ Village ☐ Town	Nearest Road
				Mukwonago	STH 83

Drainage area _____ ☐ sq. ft. ☐ acres

Optional:

Test Site Suitable for (check all that apply)

☐ Irrigation ☐ Bioretention trench ☐ Trench(es)

☐ Rain Garden ☐ Grassed swale ☐ Reuse

☐ Infiltration trench ☐ SDS (> 15' wide) ☐ Other _____

Hydraulic Application Test Method:

☒ Morphological Evaluation

☐ Double Ring Infiltrometer

☐ Other (specify)

Soil Moisture

Date of Borings: February 23, 2026

USDA-NRCS WETS Value: 12

☐ **Dry =1;**

☒ **Normal = 2;**

☐ **Wet = 3.**

1 Obs. # ☒ Boring ☐ Pit B-7

Ground surface elevation ± Elevation of limiting factor: 3'±

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	0-14	10YR 3/2		l	1 f sbk	mfr		<15		0.24
2	14-36	10YR 4/4		cl	1 f sbk	mfi		<15		0.03
3	36-84	10YR 5/4	m 2 p 10YR 6/1	sicl	1 thin pl	mfi		<15		0.04
4	84-108	10YR 5/4		sicl	1 thin pl	mfi		<15		0.04
5	108-156	10YR 4/3		cl	1 thin pl	mvfi		<15		0.03
6	156-180	10YR 6/2		scl	1 thin pl	mfi		<15		0.11
7	180-240	10YR 5/2		sicl	1 f sbk	mfi		<15		0.04

Comment: redoximorphic features at about 3 feet to about 7 feet; grayish soils at about 13 feet

2 Obs. # ☒ Boring ☐ Pit B-8

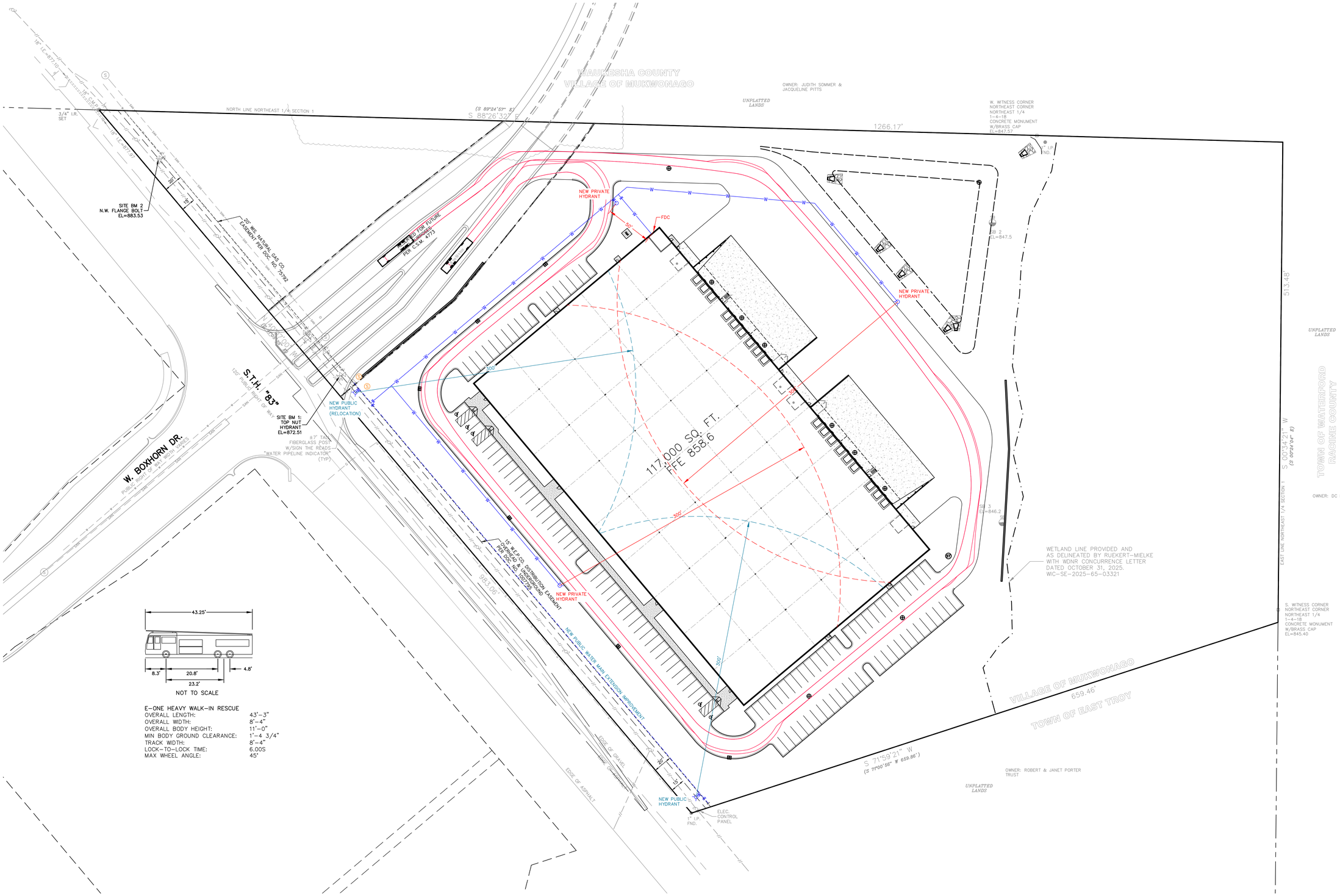
Ground surface elevation ± Elevation of limiting factor: 3'±

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	0-14	10YR 2/2		sl	0 m	mfr		<15		0.5
2	14-36	10YR 5/4		scl	1 f sbk	mfi		<15		0.11
3	36-84	10YR 5/4	m 2 d 10YR 7/2	grcl	1 f sbk	mfi		>15		0.03
4	84-108	10YR 5/4		sicl	1 f sbk	mfi		<15		0.04
5	108-204	10YR 6/3		sicl	1 f sbk	mfi		<15		0.04
6	204-240	10YR 6/3		vgrl	1 f sbk	mfr		>35		0.24

Comment: possible fill to about 1 foot; redoximorphic features at about 3 feet to about 7 feet

CST/PSS Name (Please Print)	Signature	CST/PSS/Geologist Number
Patrick J. Patterson		G-229
Address	**Date Evaluation Conducted**	**Telephone Number**
821 Corporate Court, Waukesha, WI 53189	3/9/2026	262 521 2125

SBD-10793 (R.01/17)



NOT TO SCALE

E-ONE HEAVY WALK-IN RESCUE

OVERALL LENGTH:	43'-3"
OVERALL WIDTH:	8'-4"
OVERALL BODY HEIGHT:	11'-0"
MIN BODY GROUND CLEARANCE:	1'-4 3/4"
TRACK WIDTH:	8'-4"
LOCK-TO-LOCK TIME:	6.00S
MAX WHEEL ANGLE:	45°

BRIOHN DESIGN GROUP
3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 790-0500 PHONE
(262) 790-0505 FAX

SHEET TITLE
SITE DIMENSIONS AND PLAVEMENT ID PLAN

PROPOSED BUILDING FOR:
BLD MUKWONAGO 83 INDUSTRIAL
E. BOXHORN DR./S.T.H "83"
MUKWONAGO, WISCONSIN

Revision

Date

JOB: 250123
DRAWN:
CHECKED:
DATE: 03-27-2026
SHEET: C1.1

DRAFT - NOT FOR CONSTRUCTION

File: K:\Projects\250123 - Hwy 83 Mukwonago - BLD\07 Design\Drawings\Revit and DWG Project files\Civil\dwg\250123 C1 PlanID.dwg Layout: C1.1 User: rlekandersjosh Plotted: Mar 27, 2026 - 9:20am Xref's:

HFR electric inc
RESIDENTIAL · COMMERCIAL · INDUSTRIAL
227 Weil Drive · Slinger, WI 53086
Phone(262)644-6940 · Fax(262)644-7647

Hwy 83 Mukwonago

Exterior Lighting Submittal 3-25-2026

Type: A



D-Series Size 1
LED Area Luminaire

Catalog Number

Notes

Type

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

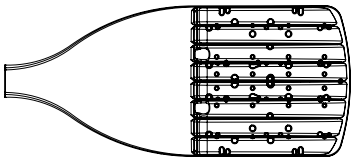
Introduction

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

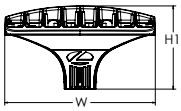
The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000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

Specifications

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







Design Select options indicated by this color background.

design select

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

Ordering Information

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

DSX1 LED

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

Control options

Shipped installed

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

Other options

Shipped installed

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

Shipped separately

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

Finish *(required)*

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

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Ordering Information

Accessories

Ordered and shipped separately.

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

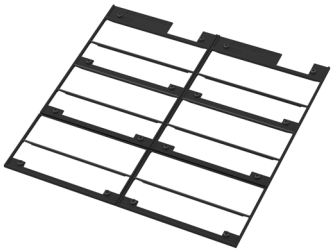
NOTES

1 Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.
2 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
3 T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
4 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
5 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
6 HVOLT not available with package P1 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
7 XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
8 XVOLT not available in packages P1 or P10. XVOLT not available with P1 ,P2, P5, P7, P9, P10, P11 and P13 when combined with option NLTAIR2 PIRHN or PIR. XVOLT not available with fusing (SF or DF).
9 SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
10 WBA cannot be combined with Type 5 distributions plus photocell (PER).
11 NLTAIR2 and PIRHN must be ordered together. For more information on nLight AIR2 visit this link
12 NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50, DMG and DS. NLTAIR2 PIRHN not available with P1 and P10 using HVOLT.
13 PIR not available with NLTAIR2 PIRHN, PER, PER5, PER7, FAO BL30, BL50, DMG and DS.
14 PER/PER5/PER7 not available with NLTAIR2 PIRHN, PIR, BL30, BL50, FAO, DMG and DS. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
15 FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, DMG and DS.
16 BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO, DMG and DS. BL30 or BL50 must specify 120 or 277V.
17 DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DS.
18 DS not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DMG.
19 DS requires (2) separately switched circuits. DS provides 50/50 fixture operation via (2) different sets of leads using (2) drivers. DS only available with packages P8, P9, P10, P11, P12 and P13.
20 Reference Motion Sensor Default Settings table on page 4 to see functionality.
21 Reference Controls Options table on page 4.
22 HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
23 CCE option not available with option BS and EGSR. Contact Technical Support for availability.
24 Option HA not available with performance packages P4, P5, P7, P8, P9 and P13.
25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
26 Single fuse (SF) requires 120V, 277V, or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).

Shield Accessories



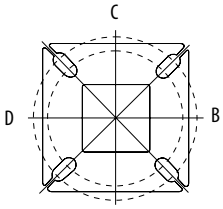
External Glare Shield (EGSR)

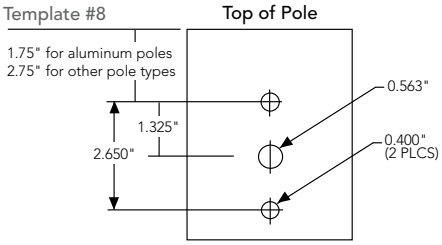


House Side Shield (HS)

Drilling

HANDHOLE ORIENTATION





Tenon Mounting Slipfitter

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

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

DSX1 Area Luminaire - EPA

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

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

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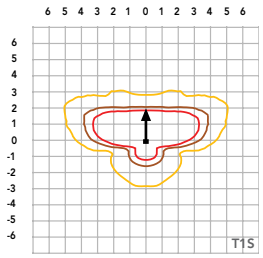
Photometric Diagrams

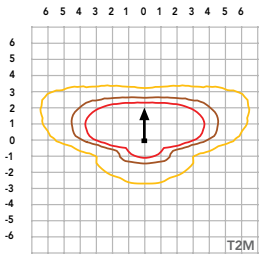
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's homepage.

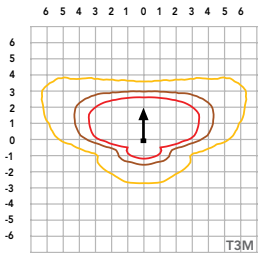
Isofootcandle plots for the DSX1 LED P9 40K 70CRI. Distances are in units of mounting height (25').

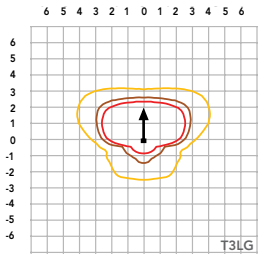
LEGEND

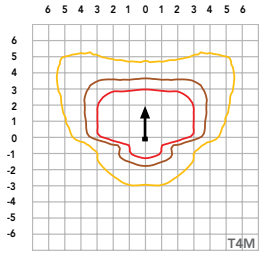
- 0.1 fc
- 0.5 fc
- 1.0 fc

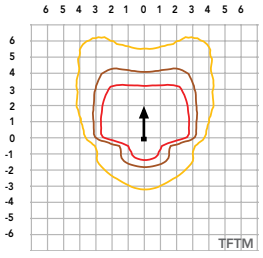


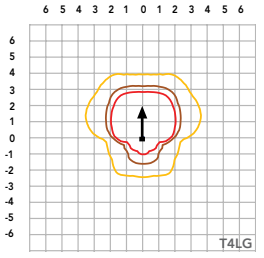


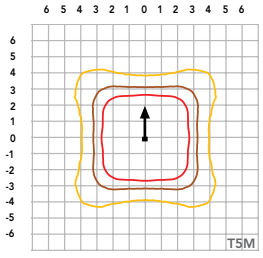


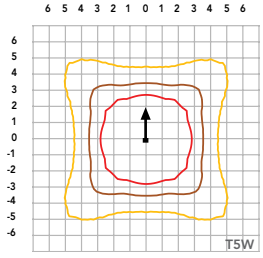


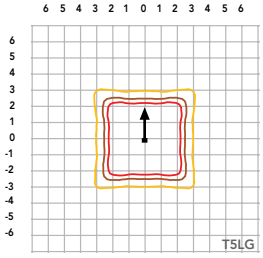


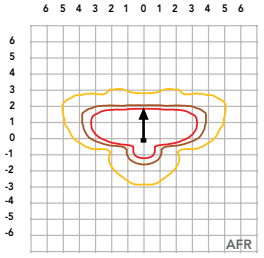


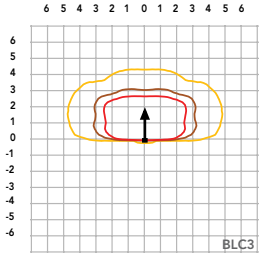


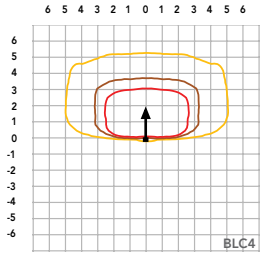


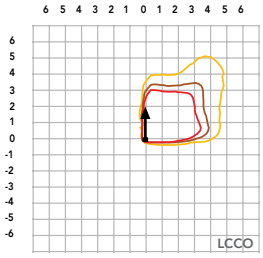


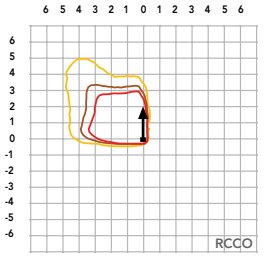












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Performance Data

Lumen Ambient Temperature (LAT) Multipliers

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

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	50°F	1.02
20°C	68°F	1.01
25°C	**77°C**	**1.00**
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

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

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

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.95
50,000	0.90
100,000	0.81

FAO Dimming Settings

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use maximum published values by package listed on specification sheet (input watts and lumens by optic type).

Electrical Load

	Performance Package	LED Count	Drive Current (mA)	Wattage	Current (A) 120V	208V	240V	277V	347V	480V
Forward Optics (Non-Rotated)	P1	30	530	51	0.42	0.24	0.21	0.18	0.15	0.11
	P2	30	700	68	0.56	0.33	0.28	0.24	0.20	0.14
	P3	30	1050	104	0.85	0.49	0.43	0.37	0.29	0.21
	P4	30	1250	125	1.03	0.60	0.52	0.45	0.36	0.26
	P5	30	1400	142	1.15	0.66	0.58	0.50	0.40	0.29
	P6	40	1250	167	1.38	0.79	0.69	0.60	0.48	0.34
	P7	40	1400	188	1.54	0.89	0.77	0.67	0.53	0.38
	P8	60	1100	216	1.80	1.04	0.90	0.78	0.62	0.45
	P9	60	1400	279	2.31	1.33	1.15	1.00	0.80	0.58
Rotated Optics (Requires L90 or R90)	P10	60	530	101	0.84	0.49	0.42	0.37	0.29	0.21
	P11	60	700	135	1.12	0.65	0.56	0.49	0.39	0.28
	P12	60	1050	206	1.72	0.99	0.86	0.74	0.59	0.43
	P13	60	1400	279	2.30	1.33	1.15	1.00	0.79	0.57

LED Color Temperature / Color Rendering Multipliers

	70 CRI		80CRI		90CRI	
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)

Note: Some LED types are available as per special request. Contact Technical Support for more information.

Motion Sensor Default Settings

Option	Unoccupied Dimmed Level	High Level (when occupied)	Phototcell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
NLTAIR2 PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS (not available on DSX0)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PER5 or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclypse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V

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Performance Data

Lumen Output

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

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	51W	30	530	T1S	7,776	1	0	2	153	8,104	1	0	2	159	8,262	1	0	2	162
				T2M	7,203	1	0	3	142	7,507	2	0	3	147	7,653	2	0	3	150
				T3M	7,287	1	0	3	143	7,594	1	0	3	149	7,742	1	0	3	152
				T3LG	6,509	1	0	1	128	6,783	1	0	1	133	6,916	1	0	1	136
				T4M	7,395	1	0	3	145	7,707	1	0	3	151	7,857	1	0	3	154
				T4LG	6,726	1	0	1	132	7,010	1	0	1	138	7,146	1	0	1	140
				TFTM	7,446	1	0	3	146	7,760	1	0	3	152	7,912	1	0	3	155
				T5M	7,609	3	0	2	149	7,930	3	0	2	156	8,084	3	0	2	159
				T5W	7,732	3	0	2	152	8,058	4	0	2	158	8,215	4	0	2	161
				T5LG	7,631	3	0	1	150	7,953	3	0	1	156	8,108	3	0	1	159
				BLC3	5,300	0	0	2	104	5,524	0	0	2	109	5,631	0	0	2	111
				BLC4	5,474	0	0	3	108	5,705	0	0	3	112	5,816	0	0	3	114
				RCCO	5,348	0	0	2	105	5,573	0	0	2	109	5,682	0	0	2	112
				LCCO	5,348	0	0	2	105	5,573	0	0	2	109	5,682	0	0	2	112
				AFR	7,776	1	0	2	153	8,104	1	0	2	159	8,262	1	0	2	162
P2	68W	30	700	T1S	9,997	1	0	2	147	10,418	1	0	2	154	10,621	1	0	2	157
				T2M	9,260	2	0	3	137	9,651	2	0	3	142	9,839	2	0	3	145
				T3M	9,368	2	0	3	138	9,763	2	0	3	144	9,953	2	0	3	147
				T3LG	8,368	1	0	2	123	8,721	1	0	2	129	8,891	1	0	2	131
				T4M	9,507	2	0	3	140	9,909	2	0	3	146	10,102	2	0	3	149
				T4LG	8,647	1	0	2	128	9,012	1	0	2	133	9,187	1	0	2	136
				TFTM	9,573	2	0	3	141	9,977	2	0	3	147	10,172	2	0	3	150
				T5M	9,782	4	0	2	144	10,195	4	0	2	150	10,393	4	0	2	153
				T5W	9,940	4	0	2	147	10,360	4	0	2	153	10,562	4	0	2	156
				T5LG	9,810	3	0	1	145	10,224	3	0	1	151	10,423	3	0	1	154
				BLC3	6,814	0	0	2	101	7,101	0	0	2	105	7,240	0	0	2	107
				BLC4	7,038	0	0	3	104	7,334	0	0	3	108	7,477	0	0	3	110
				RCCO	6,875	1	0	2	101	7,165	1	0	2	106	7,305	1	0	2	108
				LCCO	6,875	1	0	2	101	7,165	1	0	2	106	7,305	1	0	2	108
				AFR	9,997	1	0	2	147	10,418	1	0	2	154	10,621	1	0	2	157
P3	102W	30	1050	T1S	14,093	2	0	2	138	14,687	2	0	2	144	14,973	2	0	2	147
				T2M	13,055	2	0	3	128	13,605	2	0	3	133	13,871	2	0	3	136
				T3M	13,206	2	0	4	129	13,763	2	0	4	135	14,031	2	0	4	137
				T3LG	11,797	2	0	2	115	12,294	2	0	2	120	12,534	2	0	2	123
				T4M	13,403	2	0	4	131	13,968	2	0	4	137	14,241	2	0	4	139
				T4LG	12,190	2	0	2	119	12,704	2	0	2	124	12,952	2	0	2	127
				TFTM	13,496	2	0	4	132	14,065	2	0	4	138	14,339	2	0	4	140
				T5M	13,790	4	0	2	135	14,371	4	0	2	141	14,652	4	0	2	143
				T5W	14,013	4	0	3	137	14,605	4	0	3	143	14,889	4	0	3	146
				T5LG	13,830	3	0	2	135	14,413	3	0	2	141	14,694	3	0	2	144
				BLC3	9,606	0	0	2	94	10,011	0	0	2	98	10,206	0	0	2	100
				BLC4	9,921	0	0	3	97	10,340	0	0	3	101	10,541	0	0	3	103
				RCCO	9,692	1	0	2	95	10,101	1	0	2	99	10,298	1	0	2	101
				LCCO	9,692	1	0	2	95	10,101	1	0	2	99	10,298	1	0	2	101
				AFR	14,093	2	0	2	138	14,687	2	0	2	144	14,973	2	0	2	147

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Performance Data

Lumen Output

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Contact factory for performance data on any configurations not shown here.

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P4	124W	30	1250	T1S	16,416	2	0	3	132	17,109	2	0	3	138	17,442	2	0	3	141
				T2M	15,207	3	0	4	123	15,849	3	0	4	128	16,158	3	0	4	130
				T3M	15,383	2	0	4	124	16,032	2	0	4	129	16,345	2	0	4	132
				T3LG	13,742	2	0	2	111	14,321	2	0	2	116	14,600	2	0	2	118
				T4M	15,613	2	0	4	126	16,272	2	0	4	131	16,589	2	0	4	134
				T4LG	14,200	2	0	2	115	14,799	2	0	2	119	15,087	2	0	2	122
				TFTM	15,721	2	0	4	127	16,384	2	0	4	132	16,703	2	0	4	135
				T5M	16,063	4	0	2	130	16,741	4	0	2	135	17,067	4	0	2	138
				T5W	16,324	5	0	3	132	17,013	5	0	3	137	17,344	5	0	3	140
				T5LG	16,110	3	0	2	130	16,790	4	0	2	135	17,117	4	0	2	138
				BLC3	11,190	0	0	3	90	11,662	0	0	3	94	11,889	0	0	3	96
				BLC4	11,557	0	0	3	93	12,044	0	0	3	97	12,279	0	0	4	99
				RCCO	11,291	1	0	3	91	11,767	1	0	3	95	11,996	1	0	3	97
				LCCO	11,291	1	0	3	91	11,767	1	0	3	95	11,996	1	0	3	97
				AFR	16,416	2	0	3	132	17,109	2	0	3	138	17,442	2	0	3	141
P5	138W	30	1400	T1S	18,052	2	0	3	131	18,814	2	0	3	136	19,180	2	0	3	139
				T2M	16,723	3	0	4	121	17,428	3	0	4	126	17,768	3	0	4	129
				T3M	16,917	3	0	4	122	17,630	3	0	4	128	17,974	3	0	4	130
				T3LG	15,111	2	0	2	109	15,749	2	0	2	114	16,055	2	0	2	116
				T4M	17,169	3	0	5	124	17,893	3	0	5	130	18,242	3	0	5	132
				T4LG	15,615	2	0	2	113	16,274	2	0	2	118	16,591	2	0	2	120
				TFTM	17,288	2	0	4	125	18,017	2	0	5	130	18,368	3	0	5	133
				T5M	17,664	5	0	3	128	18,410	5	0	3	133	18,768	5	0	3	136
				T5W	17,951	5	0	3	130	18,708	5	0	3	135	19,073	5	0	3	138
				T5LG	17,716	4	0	2	128	18,463	4	0	2	134	18,823	4	0	2	136
				BLC3	12,305	0	0	3	89	12,824	0	0	3	93	13,074	0	0	3	95
				BLC4	12,709	0	0	4	92	13,245	0	0	4	96	13,503	0	0	4	98
				RCCO	12,416	1	0	3	90	12,940	1	0	3	94	13,192	1	0	3	95
				LCCO	12,416	1	0	3	90	12,940	1	0	3	94	13,192	1	0	3	95
				AFR	18,052	2	0	3	131	18,814	2	0	3	136	19,180	2	0	3	139
P6	165W	40	1250	T1S	21,031	2	0	3	127	21,918	2	0	3	133	22,345	2	0	3	135
				T2M	19,482	3	0	4	118	20,303	3	0	4	123	20,699	3	0	4	125
				T3M	19,708	3	0	5	119	20,539	3	0	5	124	20,939	3	0	5	127
				T3LG	17,604	2	0	2	107	18,347	2	0	2	111	18,704	2	0	2	113
				T4M	20,001	3	0	5	121	20,845	3	0	5	126	21,251	3	0	5	129
				T4LG	18,191	2	0	2	110	18,959	2	0	2	115	19,328	2	0	2	117
				TFTM	20,140	3	0	5	122	20,989	3	0	5	127	21,398	3	0	5	129
				T5M	20,579	5	0	3	125	21,447	5	0	3	130	21,865	5	0	3	132
				T5W	20,912	5	0	3	127	21,795	5	0	3	132	22,219	5	0	3	134
				T5LG	20,638	4	0	2	125	21,509	4	0	2	130	21,928	4	0	2	133
				BLC3	14,335	0	0	3	87	14,940	0	0	3	90	15,231	0	0	3	92
				BLC4	14,805	0	0	4	90	15,430	0	0	4	93	15,731	0	0	4	95
				RCCO	14,464	1	0	3	88	15,074	1	0	3	91	15,368	1	0	3	93
				LCCO	14,464	1	0	3	88	15,074	1	0	3	91	15,368	1	0	3	93
				AFR	21,031	2	0	3	127	21,918	2	0	3	133	22,345	2	0	3	135

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Performance Data

Lumen Output

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

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P7	184W	40	1400	T1S	22,741	2	0	3	123	23,700	2	0	3	129	24,162	3	0	3	131
				T2M	21,066	3	0	4	114	21,955	3	0	4	119	22,383	3	0	4	121
				T3M	21,311	3	0	5	116	22,210	3	0	5	120	22,642	3	0	5	123
				T3LG	19,036	2	0	2	103	19,839	2	0	3	108	20,226	2	0	3	110
				T4M	21,628	3	0	5	117	22,541	3	0	5	122	22,980	3	0	5	125
				T4LG	19,671	2	0	2	107	20,501	2	0	3	111	20,900	2	0	3	113
				TFTM	21,778	3	0	5	118	22,697	3	0	5	123	23,139	3	0	5	125
				T5M	22,252	5	0	3	121	23,191	5	0	3	126	23,643	5	0	3	128
				T5W	22,613	5	0	3	123	23,567	5	0	4	128	24,027	5	0	4	130
				T5LG	22,317	4	0	2	121	23,258	4	0	2	126	23,712	4	0	2	129
				BLC3	15,501	0	0	3	84	16,155	0	0	4	88	16,470	0	0	4	89
				BLC4	16,010	0	0	4	87	16,685	0	0	4	90	17,010	0	0	4	92
				RCCO	15,641	1	0	3	85	16,301	1	0	3	89	16,619	1	0	3	90
				LCCO	15,641	1	0	3	85	16,301	1	0	3	89	16,619	1	0	3	90
				AFR	22,741	2	0	3	123	23,700	2	0	3	129	24,162	3	0	3	131
P8	216W	60	1100	T1S	28,701	3	0	3	133	29,912	3	0	4	139	30,495	3	0	4	141
				T2M	26,587	3	0	5	123	27,709	3	0	5	128	28,249	3	0	5	131
				T3M	26,895	3	0	5	125	28,030	3	0	5	130	28,576	3	0	5	132
				T3LG	24,025	3	0	3	111	25,038	3	0	3	116	25,526	3	0	3	118
				T4M	27,296	3	0	5	127	28,448	3	0	5	132	29,002	3	0	5	134
				T4LG	24,826	3	0	3	115	25,873	3	0	3	120	26,378	3	0	3	122
				TFTM	27,485	3	0	5	127	28,645	3	0	5	133	29,203	3	0	5	135
				T5M	28,084	5	0	4	130	29,269	5	0	4	136	29,839	5	0	4	138
				T5W	28,539	5	0	4	132	29,743	5	0	4	138	30,323	5	0	4	141
				T5LG	28,165	4	0	2	131	29,354	4	0	2	136	29,926	4	0	2	139
				BLC3	19,563	0	0	4	91	20,388	0	0	4	94	20,786	0	0	4	96
				BLC4	20,205	0	0	5	94	21,057	0	0	5	98	21,468	0	0	5	99
				RCCO	19,740	1	0	4	91	20,572	1	0	4	95	20,973	1	0	4	97
				LCCO	19,740	1	0	4	91	20,572	1	0	4	95	20,973	1	0	4	97
				AFR	28,701	3	0	3	133	29,912	3	0	4	139	30,495	3	0	4	141
P9	277W	60	1400	T1S	34,819	3	0	4	126	36,288	3	0	4	131	36,996	3	0	4	134
				T2M	32,255	3	0	5	116	33,616	3	0	5	121	34,271	3	0	5	124
				T3M	32,629	3	0	5	118	34,006	3	0	5	123	34,668	3	0	5	125
				T3LG	29,146	3	0	3	105	30,376	3	0	4	110	30,968	3	0	4	112
				T4M	33,116	3	0	5	120	34,513	3	0	5	125	35,185	3	0	5	127
				T4LG	30,119	3	0	3	109	31,389	3	0	4	113	32,001	3	0	4	116
				TFTM	33,345	3	0	5	120	34,751	3	0	5	125	35,429	3	0	5	128
				T5M	34,071	5	0	4	123	35,509	5	0	4	128	36,201	5	0	4	131
				T5W	34,624	5	0	4	125	36,084	5	0	4	130	36,788	5	0	4	133
				T5LG	34,170	5	0	3	123	35,612	5	0	3	129	36,306	5	0	3	131
				BLC3	23,734	0	0	4	86	24,735	0	0	4	89	25,217	0	0	4	91
				BLC4	24,513	0	0	5	88	25,547	0	0	5	92	26,045	0	0	5	94
				RCCO	23,948	1	0	4	86	24,958	1	0	4	90	25,445	1	0	4	92
				LCCO	23,948	1	0	4	86	24,958	1	0	4	90	25,445	1	0	4	92
				AFR	34,819	3	0	4	126	36,288	3	0	4	131	36,996	3	0	4	134

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Performance Data

Lumen Output

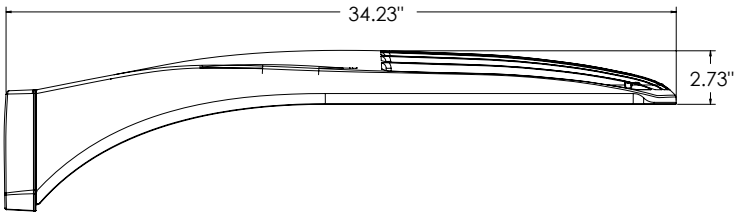
Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

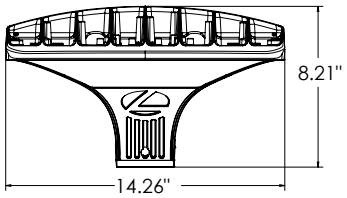
Rotated Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P10	101W	60	530	T1S	15,164	3	0	3	150	15,803	3	0	3	156	16,112	3	0	3	159
				T2M	14,047	4	0	4	139	14,640	4	0	4	145	14,925	4	0	4	147
				T3M	14,208	4	0	4	140	14,807	4	0	4	146	15,096	4	0	4	149
				T3LG	12,693	3	0	3	125	13,229	3	0	3	131	13,487	3	0	3	133
				T4M	14,420	4	0	4	142	15,028	4	0	4	148	15,321	4	0	4	151
				T4LG	13,115	3	0	3	129	13,668	3	0	3	135	13,934	3	0	3	138
				TFTM	14,522	4	0	4	143	15,134	4	0	4	149	15,429	4	0	4	152
				T5M	14,836	4	0	2	146	15,462	4	0	2	153	15,763	4	0	2	156
				T5W	15,076	4	0	3	149	15,712	5	0	3	155	16,019	5	0	3	158
				T5LG	14,879	3	0	2	147	15,507	3	0	2	153	15,809	3	0	2	156
				BLC3	10,335	3	0	3	102	10,771	4	0	4	106	10,981	4	0	4	108
				BLC4	10,674	4	0	4	105	11,124	4	0	4	110	11,341	4	0	4	112
				RCCO	10,429	1	0	2	103	10,869	1	0	2	107	11,080	1	0	2	109
				LCCO	10,429	1	0	2	103	10,869	1	0	2	107	11,080	1	0	2	109
				AFR	15,164	3	0	3	150	15,803	3	0	3	156	16,112	3	0	3	159
P11	135W	60	700	T1S	19,437	4	0	4	144	20,257	4	0	4	150	20,651	4	0	4	153
				T2M	18,005	4	0	4	133	18,765	4	0	4	139	19,131	4	0	4	142
				T3M	18,211	4	0	4	135	18,980	4	0	4	141	19,350	4	0	4	143
				T3LG	16,270	3	0	3	121	16,957	3	0	3	126	17,287	4	0	4	128
				T4M	18,483	4	0	4	137	19,263	5	0	5	143	19,638	5	0	5	146
				T4LG	16,810	3	0	3	125	17,519	3	0	3	130	17,861	3	0	3	132
				TFTM	18,614	4	0	4	138	19,399	4	0	4	144	19,777	5	0	5	147
				T5M	19,017	5	0	3	141	19,819	5	0	3	147	20,205	5	0	3	150
				T5W	19,325	5	0	3	143	20,140	5	0	3	149	20,533	5	0	3	152
				T5LG	19,072	4	0	2	141	19,876	4	0	2	147	20,264	4	0	2	150
				BLC3	13,247	4	0	4	98	13,806	4	0	4	102	14,075	4	0	4	104
				BLC4	13,682	4	0	4	101	14,259	4	0	4	106	14,537	4	0	4	108
				RCCO	13,367	1	0	3	99	13,931	1	0	3	103	14,203	1	0	3	105
				LCCO	13,367	1	0	3	99	13,931	1	0	3	103	14,203	1	0	3	105
				AFR	19,437	4	0	4	144	20,257	4	0	4	150	20,651	4	0	4	153
P12	206W	60	1050	T1S	27,457	4	0	4	133	28,616	4	0	4	139	29,174	4	0	4	142
				T2M	25,436	5	0	5	124	26,509	5	0	5	129	27,025	5	0	5	131
				T3M	25,727	5	0	5	125	26,812	5	0	5	130	27,335	5	0	5	133
				T3LG	22,984	4	0	4	112	23,954	4	0	4	116	24,421	4	0	4	119
				T4M	26,110	5	0	5	127	27,212	5	0	5	132	27,742	5	0	5	135
				T4LG	23,747	4	0	4	115	24,749	4	0	4	120	25,231	4	0	4	123
				TFTM	26,295	5	0	5	128	27,404	5	0	5	133	27,938	5	0	5	136
				T5M	26,864	5	0	4	130	27,997	5	0	4	136	28,543	5	0	4	139
				T5W	27,299	5	0	4	133	28,451	5	0	4	138	29,006	5	0	4	141
				T5LG	26,942	4	0	2	131	28,078	4	0	2	136	28,626	4	0	2	139
				BLC3	18,714	4	0	4	91	19,504	4	0	4	95	19,884	4	0	4	97
				BLC4	19,327	5	0	5	94	20,143	5	0	5	98	20,535	5	0	5	100
				RCCO	18,883	1	0	4	92	19,680	1	0	4	96	20,064	1	0	4	97
				LCCO	18,883	1	0	4	92	19,680	1	0	4	96	20,064	1	0	4	97
				AFR	27,457	4	0	4	133	28,616	4	0	4	139	29,174	4	0	4	142
P13	276W	60	1400	T1S	34,436	5	0	5	125	35,889	5	0	5	130	36,588	5	0	5	133
				T2M	31,900	5	0	5	116	33,246	5	0	5	121	33,894	5	0	5	123
				T3M	32,265	5	0	5	117	33,626	5	0	5	122	34,282	5	0	5	124
				T3LG	28,826	4	0	4	105	30,042	4	0	4	109	30,628	4	0	4	111
				T4M	32,746	5	0	5	119	34,128	5	0	5	124	34,793	5	0	5	126
				T4LG	29,782	4	0	4	108	31,039	4	0	4	113	31,644	5	0	4	115
				TFTM	32,978	5	0	5	120	34,369	5	0	5	125	35,039	5	0	5	127
				T5M	33,692	5	0	4	122	35,113	5	0	4	127	35,797	5	0	4	130
				T5W	34,238	5	0	4	124	35,682	5	0	4	129	36,378	5	0	4	132
				T5LG	33,789	5	0	3	122	35,215	5	0	3	128	35,901	5	0	3	130
				BLC3	23,471	5	0	5	85	24,461	5	0	5	89	24,937	5	0	5	90
				BLC4	24,240	5	0	5	88	25,262	5	0	5	92	25,755	5	0	5	93
				RCCO	23,683	1	0	4	86	24,682	1	0	4	89	25,163	1	0	4	91
				LCCO	23,683	1	0	4	86	24,682	1	0	4	89	25,163	1	0	4	91
				AFR	34,436	5	0	5	125	35,889	5	0	5	130	36,588	5	0	5	133

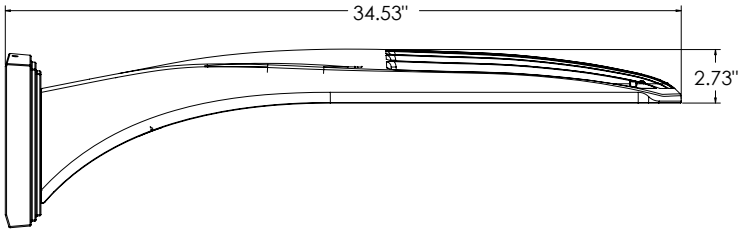
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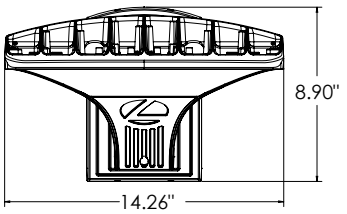
Dimensions



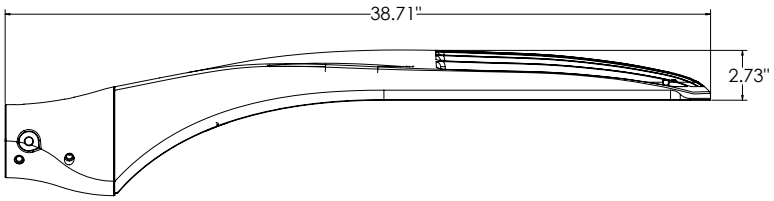


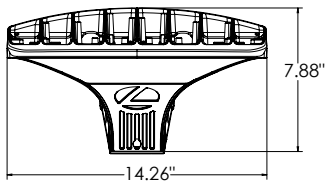
DSX1 with RPA, RPA5, SPA5, SPA8N mount
Weight: 36 lbs





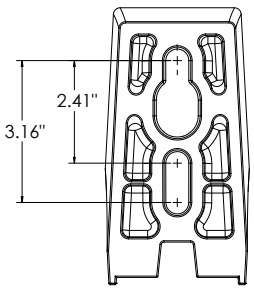
DSX1 with WBA mount
Weight: 38 lbs



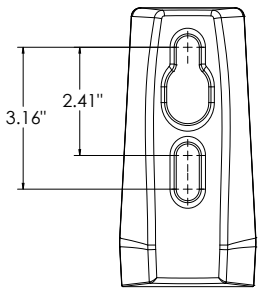


DSX1 with MA mount
Weight: 39 lbs

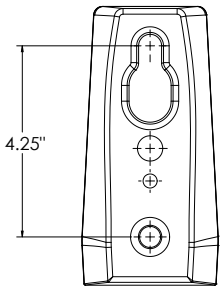
SPA (STANDARD ARM)



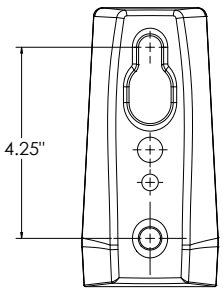
RPA



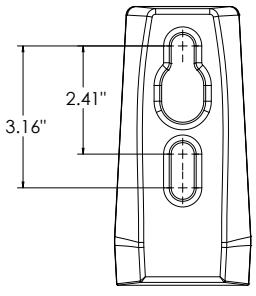
SPA5



RPA5



SPA8N



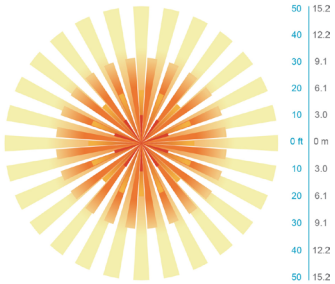
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nLight Control - Sensor Coverage and Settings

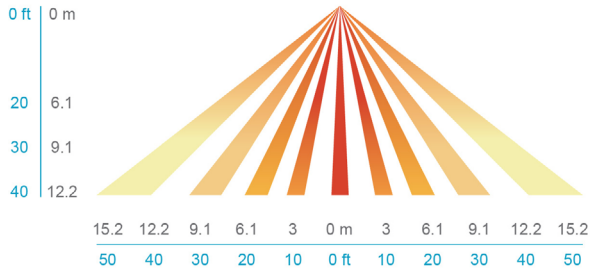
nLight Sensor Coverage Pattern

NLTAIR2 PIRHN





Top



Side

FEATURES & SPECIFICATIONS

INTENDED USE

The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 3G for SPA and MA. 1.5G for mountings RPA, RPA5, SPA5 and SPA8N. Low EPA (0.69 ft^2) for optimized pole wind loading.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

Coastal Construction (CCE)

Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times may apply.

OPTICS

Precision-molded proprietary silicone lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in standard 3000 K, 4000 K and 5000 K (70 CRI) configurations. 80CRI configurations are also available. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L81/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS

The DSX1 LED area luminaire has a number of control options. DSX Size 1, comes standard with 0-10V dimming drivers. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensor with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

nLIGHT AIR CONTROLS

The DSX1 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

INSTALLATION

Integral mounting arm allows for fast mounting using Lithonia standard #8 drilling and accommodates pole drilling's from 2.41 to 3.12" on center. The standard "SPA" option for square poles and the "RPA" option for round poles use the #8 drilling. For #5 pole drillings, use SPA5 or RPA5. Additional mountings are available including a wall bracket (WBA) and mast arm (MA) option that allows luminaire attachment to a 2 3/8" horizontal mast arm.

LISTINGS

UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP66 rated. Rated for -40ºC minimum ambient.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

GOVERNMENT PROCUREMENT

BAA – Buy America(n) Act: Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.
BABA – Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

© 2011-2025 Acuity Brands Lighting, Inc. All rights reserved.

PLAN COMMISSION STAFF REPORT

TO: Village of Mukwonago Plan Commission

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

REPORT DATE: May 4, 2026

MEETING DATE: May 12, 2026, 6:30 P.M.

SUBJECT: YMCA – Accessory Structure - Site Plan & Architectural Review

BASIC INFORMATION	
Project:	YMCA Accessory Structure
Applicant:	YMCA of Greater Waukesha County
Consulting Engineer:	N/A
Consulting Architect:	Groth Design Group
Request:	Site Plan & Architectural Review
Staff Recommendation:	Approve with Conditions

PARCEL DATA/CHARACTERISTICS	
Tax Key:	MUKV2013995006
Acreage:	8.02 Acres
Current Use:	YMCA Facility
Proposed Use:	YMCA Facility
Reason for Request:	Accessory Structure
Land Use Classification:	Business
Zoning Classification:	B-4 Commercial Business Design District

Project Summary & Overview

The applicant is proposing to construct an accessory structure in the rear of the property to accommodate outdoor activity supply storage. The applicant has submitted renderings, a site plan, and a project narrative that details the project in more depth.

Staff Review

Engineering: No comments at this time.

Public Works No comments at this time.

Utilities	No comments at this time.
Police	No comments at this time.
Fire:	No comments at this time.
Building Inspection	No comments at this time.
Planning	No comments at this time.

Recommended Action
Staff recommends the Planning Commission approve with conditions enumerated in the provided resolution.

Attachments

1. Application Documents

VILLAGE OF MUKWONAGO
SITE PLAN, ARCHITECTURAL, AND PLANNED UNIT DEVELOPMENT (PUD) APPLICATION
Application Fee: Below

Date Submitted: 4/10/2026

FEES

(Please check one)

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

CONTACTS

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

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

GUIDELINES

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

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

Mail completed applications to:	Village Planner 440 River Crest Ct Mukwonago, WI 53149
Deliver to:	Village Clerk's Office 440 River Crest Ct
Email to:	trutenbeck@villageofmukwonago.gov

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

APPLICANT *(Full Legal Name)*

Name: Chris Becker, CEO
Company: YMCA of Greater Waukesha County
Address: 245 E Wolf Run **City:** Mukwonago **State:** WI **Zip:** 53149
Daytime Phone: 262-330-5200 **Fax:** _____
E-Mail: CBECKER@GWCYMCA.ORG

APPLICANT IS REPRESENTED BY *(Full Legal Name)*

Name: Chris Becker, CEO

Company: YMCA of Greater Waukesha County

Address: 3610 Michelle Witmer Memorial Drive City: New Berlin State: WI Zip: 53151

Daytime Phone: 262-330-5200 Fax:

E-Mail: CBECKER@GWCYMCA.ORG

ARCHITECT

Name: Vince La Barbera

Company: Groth Design Group

Address: 600 W Virginia Suite 602 City: Milwaukee State: WI Zip: 53204

Daytime Phone: 262-377-8001 ext 219 Fax:

E-Mail: vlabarbera@gdg-architects.com

PROFESSIONAL ENGINEER

Name:

Company:

Address: City: State: Zip:

Daytime Phone: Fax:

E-Mail:

REGISTERED SURVEYOR

Name:

Company:

Address: City: State: Zip:

Daytime Phone: Fax:

E-Mail:

CONTRACTOR

Name: Mike Toomey

Company: Toomey Construction LLC

Address: 1802 22nd St City: Kenosha State: WI Zip: 53140

Daytime Phone: 262-945-0924 Fax:

E-Mail: MIKE@TOOMEYCON.COM

Chris Becker, CEO

PROPERTY INFORMATION

Property Owner (s) *(if different from applicant)*: Mukwonago YMCA Inc

Address: 245 E Wolf Run **City:** Mukwonago **State:** WI **Zip:** 53149

Daytime Phone: 262-330-5200 **Fax:** _____

E-Mail: CBECKER@GWCYMCA.ORG

Present Zoning: _____ **Tax Key No(s).:** MUKV2013995006

Location/Address: _____

Present Use: _____ **Intended Use:** no change

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

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

Application:

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

Other Documents:

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

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

CERTIFICATION

Applicant hereby certifies that:

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

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

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

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

Chris Becker
Signature - Property Owner

Chris Becker, CEO
Name & Title (PRINT)

4/10/2026
Date

Chris Becker
Signature - Applicant

Chris Becker, CEO
Name & Title (PRINT)

4/10/2026
Date

Signature - Property Owner

Name & Title (PRINT)

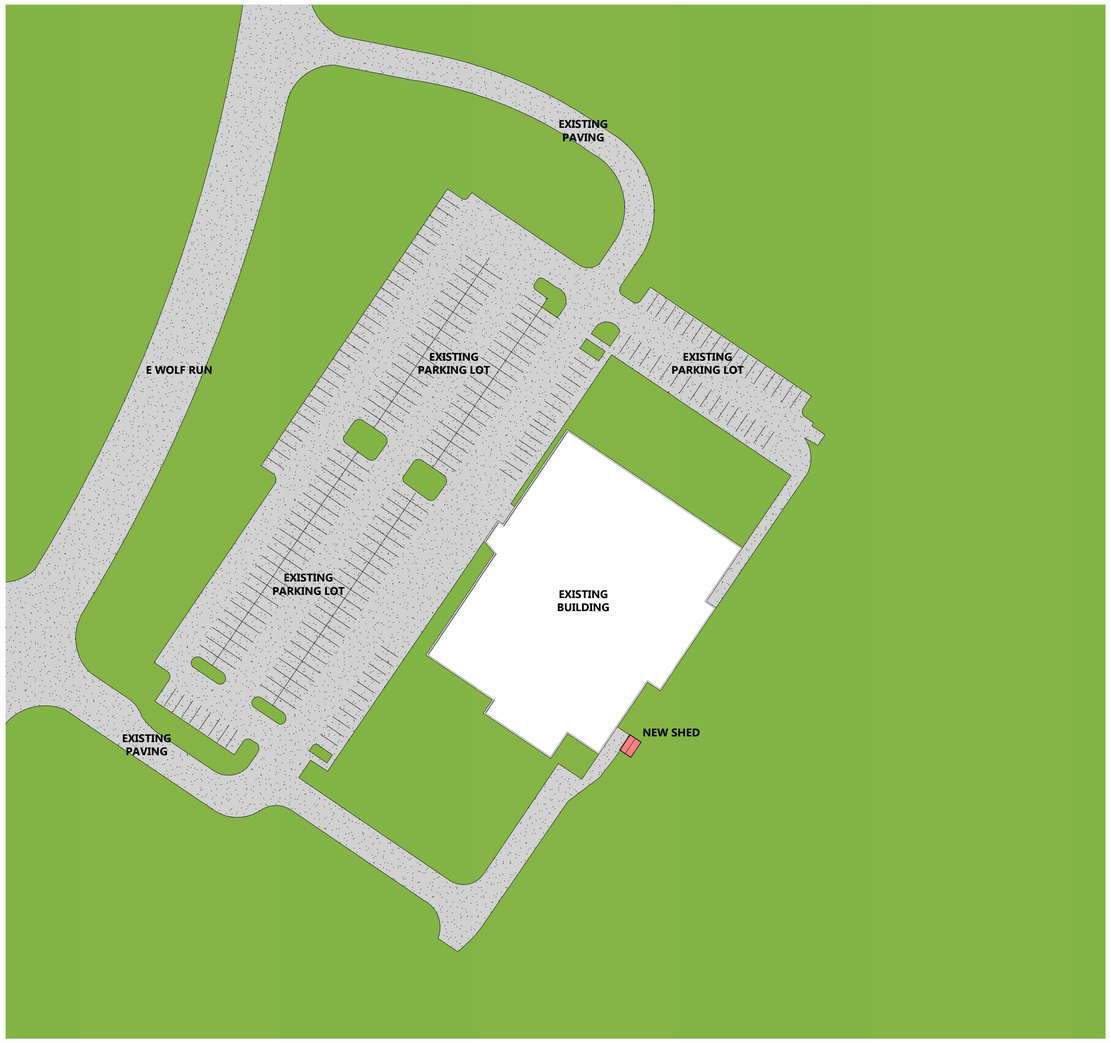
Date

Signature – Applicant's Representative

Name & Title (PRINT)

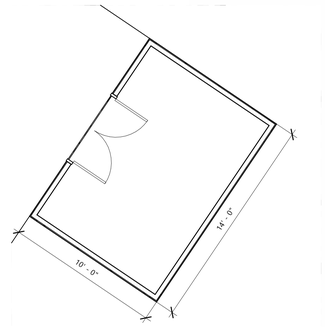
Date

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



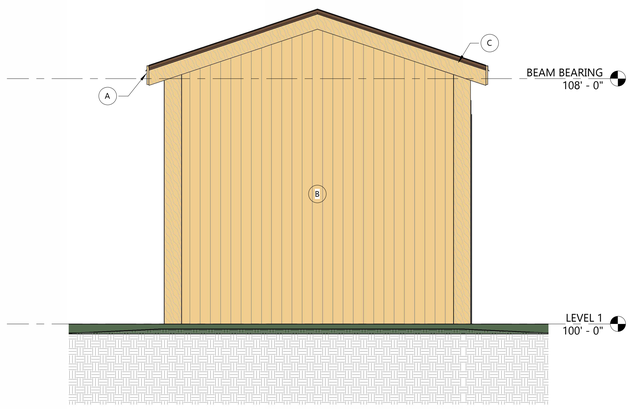
1 SITE PLAN
A1

1" = 50'-0"



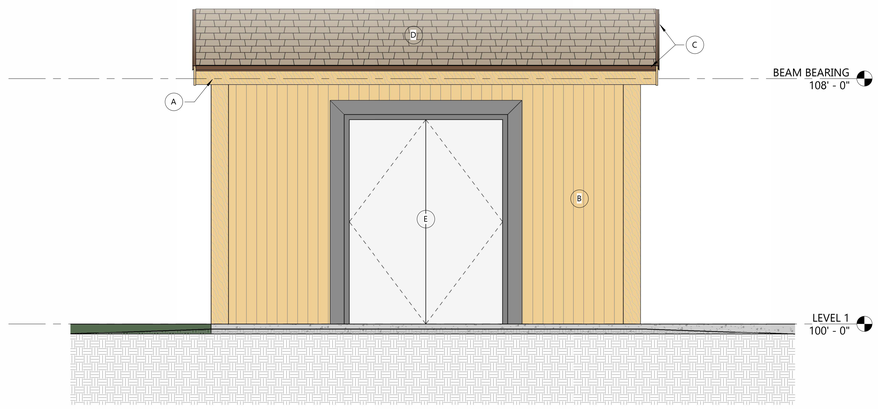
2 LEVEL 1 - FLOOR PLAN
A1

1/4" = 1'-0"



3 NORTH ELEVATION
A1

1/2" = 1'-0"



4 WEST ELEVATION
A1

1/2" = 1'-0"

KEYED EXTERIOR ELEVATIONS	
TAG #	DESCRIPTION
A	1X PAINTED WOOD FASCIA
B	PAINTED WOOD PANEL WITH 4" REVEAL SPACING
C	PREFINISHED METAL DRIP EDGE
D	DARK GREY ASPHALT SHINGLES
E	FIBERGLASS DOUBLE DOOR

GROTH Design Group

N58 W6181 COLUMBIA RD.
P.O. BOX 332
CEDARBURG, WISCONSIN 53012

PH. (262) 377-8001
FX. (262) 377-8003

TOOMEY CONSTRUCTION

1802 22ND STREET
KENOSHA, WI 53140
262.945.0924

PROJECT

MUKWONAGO YMCA

245 E WOLF RUN
MUKWONAGO, WI 53149

ISSUE

NO.	REV. DATE	DESCRIPTION

PROJECT INFO

Date
04.10.2026

Project No.
26.000

SHEET TITLE

FLOOR PLAN, SITE PLAN & ELEVATIONS

SCHEMATIC DESIGN SET

A1

4/10/2026 11:58:50 AM

© Groth Design Group, Inc.



GROTH
Design
Group

N58 W6181 COLUMBIA RD.
P.O. BOX 332
CEDARBURG, WISCONSIN 53012

PH. (262) 377-8001
FX. (262) 377-8003

TOOMEY
CONSTRUCTION

1802 22ND STREET
KENOSHA, WI 53140
262.945.0924

PROJECT

MUKWONAGO YMCA

**245 E WOLF RUN
MUKWONAGO,
WI 53149**

ISSUE

NO. REV. DATE DESCRIPTION

PROJECT INFO

Date
04.10.2026

Project No.
26.000

SHEET TITLE

RENDERING

SCHEMATIC DESIGN SET

A2

4/10/2026 11:58:50 AM

© Groth Design Group, Inc.

Toomey Construction
1802 22nd St
Kenosha WI 53140
(262) 945-0924

April 10, 2026

Project Description: Mukwonago YMCA Shed

Mukwonago YMCA
245 E Wolf Run
Mukwonago, WI 53149

The Mukwonago YMCA is proposing to build one 140 square foot storage shed behind the building at 245 E Wolf Run. The purpose of the shed is to provide additional storage and is intended to be used for storage of equipment and supplies for various programs to benefit the YMCA community members.

Sincerely,

Mike Toomey
TOOMEY CONSTRUCTION

VILLAGE OF MUKWONAGO
WAUKESHA AND WALWORTH COUNTIES

PC RESOLUTION NO. 2026-07

A RESOLUTION FOR A SITE PLAN AND ARCHITECTURAL REVIEW FOR AN ACCESSORY STRUCTURE AT THE EXISTING YMCA FACILITY, PARCEL MUKV2013995006

WHEREAS, pursuant to Section 100-601 of the Zoning Code, an application for a site plan and architectural review has been filed for the approval of an accessory structure, which application was filed in the office of the Village Clerk, Village of Mukwonago, Wisconsin, and

WHEREAS, the application has been submitted by the YMCA of Greater Waukesha County, and

WHEREAS, the project involves the construction of an approximately 140 square foot accessory storage shed, and

WHEREAS, the project complies with the requirements of the Village of Mukwonago zoning code.

NOW, THEREFORE, BE IT RESOLVED by the Plan Commission of the Village of Mukwonago, Wisconsin hereby approves the site plan and architectural review for the accessory structure for the existing YMCA facility, based upon the plans submitted to the Village.

NOW, THEREFORE, BE IT FURTHER RESOLVED the site plan and architectural review approval shall be subject to the following conditions:

1. If changes are made to the provided plans, prior to any land disturbing activity, the applicant must submit a complete and final set of site construction plans to the Village and receive approval of said plans prior to issuance of any building permits. Plans shall include but are not limited to grading, utilities, utility calculations, erosion control, landscaping, lighting, building architecture, building materials and other plans as required. All Village department heads must verify in writing whether they have approved the final plans within their purview prior to the issuance of building permits. Any outstanding matters must be resolved to staff's satisfaction. Construction shall comply with any conditions of approval issued by staff.
2. The applicant must obtain all required building permits within six months of this date, and start construction within six months of the date of building permit issuance and continue in good faith to completion.
3. All work related to this project must comply with all project plans approved by the Village.
4. The developer shall comply with all parts of the Municipal Code as it relates to this project.
5. The applicant shall comply with all verbal changes requested by the Plan Commission, if any.
6. Any future modification to the site such as modification of parking, lighting, grading, signage, fences, etc. may require Site Plan and Architectural Review.

Passed and adopted by the Village of Mukwonago Plan Commission this 12th day of May, 2026.

VILLAGE OF MUKWONAGO

By: _____
Fred Winchowky, Village President

Attest: _____
Shay Zerfas, Deputy Clerk-Treasurer

PLAN COMMISSION STAFF REPORT

TO: Village of Mukwonago Plan Commission

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

REPORT DATE: May 4, 2026

MEETING DATE: May 12, 2026, 6:30 P.M.

SUBJECT: McAdams Property – CSM Review

BASIC INFORMATION	
Project:	McAdams Property CSM
Applicant:	Village of Mukwonago
Professional Land Surveyor:	Ruekert & Mielke, Inc.
Request:	CSM Application Approval
Staff Recommendation:	Approve with Conditions

PARCEL DATA/CHARACTERISTICS	
Tax Key:	See CSM
Existing Acreage:	See CSM
Current Use:	Vacant
Proposed Use:	Business
Reason for Request:	CSM Approval
Land Use Classification:	Business / Public ROW
Zoning Classification:	B-2 – General Business District

Project Summary & Overview

The Village of Mukwonago has prepared a CSM through their Engineer Consultant to dedicate additional right-of-way on Meacham Street and to create public right-of-way on Pleasant Lane to accommodate future development of the adjacent properties. Through discussions with the existing land-owner, the Village has determined that this is in the best interest of the further development of existing vacant parcels in the downtown area. Additionally, this land dedication will give the Village the necessary area to provide proper public access to parcels that don't currently have it.

Additionally, the CSM combines two existing lots adjacent to Meacham Street that will facilitate streamlined development approval in the future.

The property owner has agreed to this dedication and the CSM as proposed and has already signed a copy of the CSM for approval. A project narrative is provided with more detail.

Staff Review

Engineering:	See Attached Comments.
Public Works	No comments.
Utilities	No comments.
Police	No comments.
Fire:	No comments.
Building Inspection	No comments.
Planning	No comments.

Recommended Action

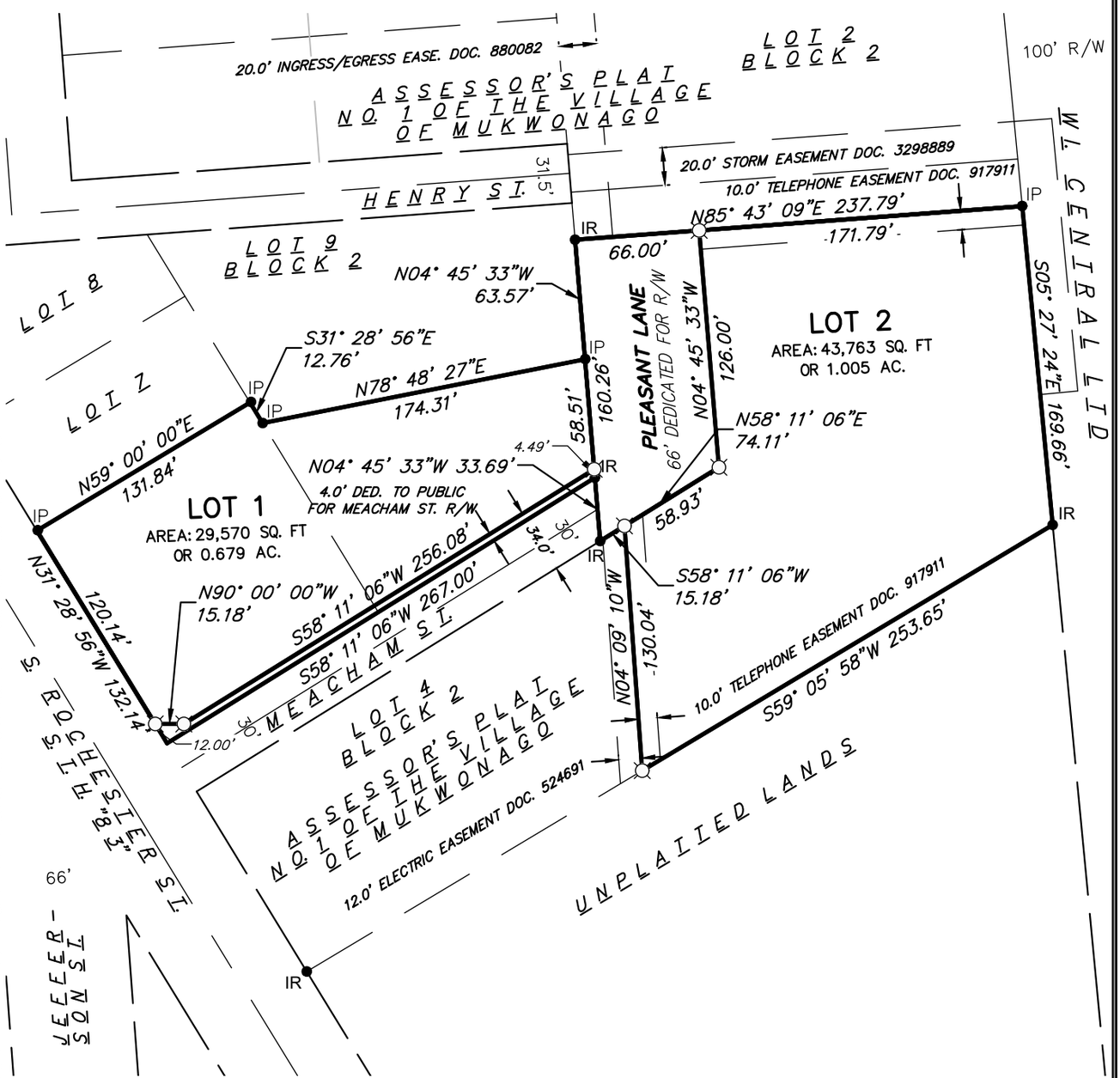
Staff recommends the Village Board approve the CSM as outlined in the attached resolution.

Attachments

1. Proposed CSM
2. Supporting Application Documents

CERTIFIED SURVEY MAP NO. _____

LOTS 3, 5 AND 6, BLOCK 2 OF ASSESSOR'S PLAT NO. 1 OF THE VILLAGE OF MUKWONAGO, IN THE NORTHEAST 1/4 AND NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 26, TOWN 5 NORTH, RANGE 18 EAST, IN THE VILLAGE OF MUKWONAGO, WAUKESHA COUNTY, WISCONSIN



IP 1" IRON PIPE FOUND

IR 3/4" REBAR FOUND

3/4" X 18" REBAR SET 1.5 LB/FT.

CONCRETE MONUMENT WITH BRASS CAP

WISCONSIN
BAIBA M. ROZITE
S-2351
MILWAUKEE WI
LAND SURVEYOR

PREPARED FOR:
VILLAGE OF MUKWONAGO
440 RIVER CREST COURT
MUKWONAGO, WI 53149

PREPARED BY:
RUEKERT & MIELKE, INC.
W233 N2080 RIDGEVIEW PKWY.
WAUKESHA, WI 53188

N
W E
S

BEARINGS ARE REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, NAD83, SOUTH ZONE, N. LINE OF SE 1/4 OF SEC. 26-05-18 BEARING N89° 28' 24"E.

0 40 80 160
SCALE IN FEET

Ruekert • Mielke
Waukesha • Kenosha • Madison
Global Water Center • Fox Valley
www.ruekertmielke.com

SHEET 1 OF 3

THIS INSTRUMENT WAS DRAFTED BY B. ROZITE, P.L.S. (04/14/2026) CHECKED BY T. PLACEK (04/16/2026)

C:\USERS\BROZITE\DCVACCDOCS\RUEKERT & MIELKE, INC-\12 - VILLAGE OF MUKWONAGO - MEACHAM STREET AND PLEASANT LANE RECONSTRUCTION\PROJECT FILES\CAD\CSMZ-CSMMSPLR.DWG

CERTIFIED SURVEY MAP NO. _____

LOTS 3, 5 AND 6, BLOCK 2 OF ASSESSOR'S PLAT NO. 1 OF THE VILLAGE OF MUKWONAGO, IN THE NORTHEAST 1/4 AND NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 26, TOWN 5 NORTH, RANGE 18 EAST, IN THE VILLAGE OF MUKWONAGO, WAUKESHA COUNTY, WISCONSIN

SURVEYOR'S CERTIFICATE

STATE OF WISCONSIN }
COUNTY OF WAUKESHA } SS

I, Baiba M. Rozite, Ruekert & Mielke, Inc., Professional Land Surveyor, do hereby certify that I have surveyed, divided and mapped Lots 3, 5 and 6, Block 2 of Assessor's Plat No. 1 of the Village of Mukwonago, in the Northeast 1/4 and Northwest 1/4 of the Southeast 1/4 of Section 26, Town 5 North, Range 18 East, in the Village of Mukwonago, Waukesha County, Wisconsin.

That I have made this survey, land division and map by the direction of the JOHN AND LORRAINE McADAMS FAMILY TRUST, owner of said land.

That such map is a correct representation of all the exterior boundaries of the land surveyed and the division thereof made.

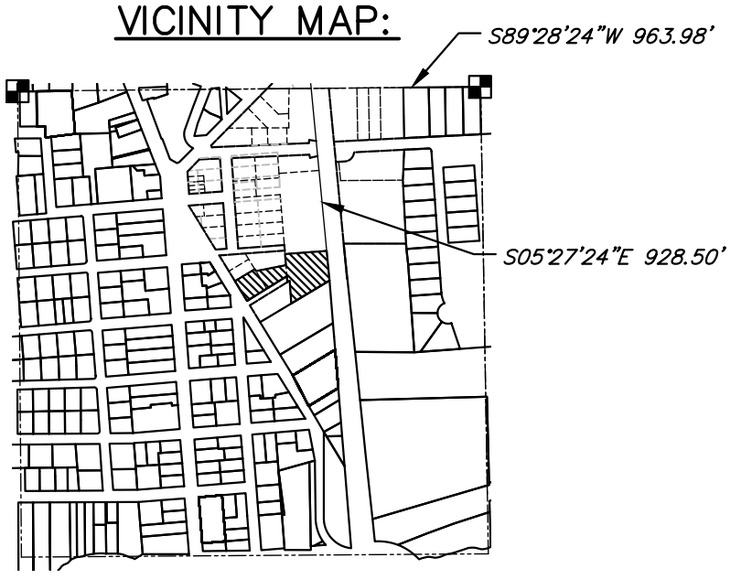
That I have fully complied with the provisions of Chapter 236 of the Wisconsin Statutes and the Village of Mukwonago land division ordinance in surveying, dividing and mapping of same.

_____
Baiba M. Rozite, PLS – 2351

Date of field work: 08–04–2025



VICINITY MAP:



SOUTHEAST 1/4 OF SECTION 26, TOWN 5 NORTH, RANGE 18 EAST

NOT TO SCALE

Ruekert • Mielke
Waukesha • Kenosha • Madison
Global Water Center • Fox Valley
www.ruekertmielke.com

SHEET 2 OF 3

THIS INSTRUMENT WAS DRAFTED BY B. ROZITE, P.L.S. (04/14/2026) CHECKED BY T. PLACEK (04/16/2026)

C:\USERS\BROZITE\DCVACCDOCS\RUEKERT & MIELKE, INC-\12 - VILLAGE OF MUKWONAGO - MEACHAM STREET AND PLEASANT LANE RECONSTRUCTION\PROJECT FILES\CAD\CSMZ-CSMMSPLR.DWG

CERTIFIED SURVEY MAP NO. _____

LOTS 3, 5 AND 6, BLOCK 2 OF ASSESSOR'S PLAT NO. 1 OF THE VILLAGE OF MUKWONAGO, IN THE NORTHEAST 1/4 AND NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 26, TOWN 5 NORTH, RANGE 18 EAST, IN THE VILLAGE OF MUKWONAGO, WAUKESHA COUNTY, WISCONSIN

OWNER'S CERTIFICATE OF DEDICATION:

JOHN AND LORRAINE McADAMS FAMILY TRUST, as owner, does hereby certify that said OWNER caused the land described on this map to be surveyed, divided, mapped and dedicated as represented on this map.

JOHN AND LORRAINE McADAMS FAMILY TRUST, as owner, does further certify that this Certified Survey Map is to be submitted to the following for approval or objection:

The Village of Mukwonago

WITNESS the hand and seal of said owner(s) this _____ day of _____ , 20 _____ .

In the presence of:

_____ _____
Signature Printed Name and Title

_____ _____
Signature Printed Name and Title

STATE OF WISCONSIN }
COUNTY OF _____ } SS

Personally came before me this _____day of _____ , 20 ___ , _____ _____. _____of the JOHN AND LORRAINE McADAMS FAMILY TRUST, to me known to be the _____ of said JOHN AND LORRAINE McADAMS FAMILY TRUST, and acknowledged that they executed the foregoing instrument, by its authority.

_____
Notary Public, _____ County, _____ My Commission Expires _____

VILLAGE BOARD APPROVAL:

Resolved, that this Certified Survey Map, in the Village of Mukwonago, is hereby approved by the Village Board of the Village of Mukwonago.

Dated this _____ day of _____ , 20 ___ .

_____ _____
Fred H. Winchowky, Village President Lana Kropf, Village Clerk

I hereby certify that the foregoing is a copy of a resolution adopted by the Village Board of the Village of Mukwonago.

_____
Lana Kropf, Village Clerk

PLAN COMMISSION APPROVAL:

Resolved, that this Certified Survey Map, in the Village of Mukwonago is hereby approved by the Village of Mukwonago Plan Commission.

_____ _____ _____
Fred H. Winchowky, Chairman Shay Zerfas, Deputy Clerk Date

WISCONSIN
BAIBA M.
ROZITE
S-2351
MILWAUKEE
WI
LAND SURVEYOR

SHEET 3 OF 3

Ruekert • Mielke
Waukesha • Kenosha • Madison
Global Water Center • Fox Valley
www.ruekertmielke.com

THIS INSTRUMENT WAS DRAFTED BY B. ROZITE, P.L.S. (04/14/2026) CHECKED BY T. PLACEK (04/16/2026)

C:\USERS\BROZITE\DCVACCDOCS\RUEKERT & MIELKE, INC-\12 - VILLAGE OF MUKWONAGO - MEACHAM STREET AND PLEASANT LANE RECONSTRUCTION\PROJECT FILES\CAD\CSMZ-CSMMSPLR.DWG

Village of Mukwonago

440 River Crest Court, Mukwonago, Wisconsin 53149
www.villageofmukwonago.com | (262) 363-6447 | Fax: (262)363-7197

Certified Survey Map (CSM) Modification Report

Applicant: Ron Bittner, Public Works Director, Village of Mukwonago.

Property Owner: John and Lorraine McAdams Family Trust

This Certified Survey Map (CSM) modification request is submitted by Ron Bittner on behalf of the John and Lorraine McAdams Family Trust and includes multiple components intended to improve lot configuration and support planned public infrastructure.

The proposal consolidates Tax Key Nos. MUKV1976146 and MUKV1976143 into a single lot under common ownership. As part of this lot consolidation, the owner will dedicate an additional four (4) feet of right-of-way along Meacham Street. Meacham Street currently consists of a 30-foot right-of-way; the additional dedication will expand the corridor to better accommodate a two-lane roadway with a sidewalk on the north side along the combined lot, consistent with local street and pedestrian standards.

In addition, Tax Key No. MUKV1976980 is included in the CSM to facilitate the dedication of a 66-foot right-of-way for a future public street. This future street is intended to provide a connection between Meacham Street and Jefferson Street, supporting long-term transportation connectivity, circulation, and orderly development within the surrounding area.

Overall, the proposed CSM modification advances both private development objectives and public planning goals through strategic lot consolidation and right-of-way dedication.

Regards,

Village of Mukwonago

Ron Bittner

Public Works Director/Weed Commissioner

VILLAGE OF MUKWONAGO

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

Application Fee: Below

Date Submitted: 4/17/26

FEES

(Please check one)

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

CONTACTS

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

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

GUIDELINES

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

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

Mail completed applications to:	Village Planner 440 River Crest Ct Mukwonago, WI 53149
Deliver to:	Village Clerk's Office 440 River Crest Ct
Email to:	trutenbeck@villageofmukwonago.gov

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

APPLICANT *(Full Legal Name)*

Name: Ron Bittner
Company: Village of Mukwonago
Address: 440 River Crest Ct **City:** Mukwonago **State:** WI **Zip:** 53149
Daytime Phone: 414-550-7507 **Fax:**
E-Mail: rbittner@villageofmukwonago.gov

APPLICANT IS REPRESENTED BY *(Full Legal Name)*

Name: Ron Bittner

Company: _____

Address: _____ City: _____ State: ____ Zip: _____

Daytime Phone: _____ Fax: _____

E-Mail: _____

ARCHITECT

Name: _____

Company: _____

Address: _____ City: _____ State: ____ Zip: _____

Daytime Phone: _____ Fax: _____

E-Mail: _____

PROFESSIONAL ENGINEER

Name: Mike Machalski

Company: Ruekert-Mielke

Address: W233 N2080 Ridgeview Parkway City: Waukesha State: WI Zip: 53188

Daytime Phone: 262-953-3304 Fax: _____

E-Mail: MMichalski@ruekert-mielke.com

REGISTERED SURVEYOR

Name: Baiba M. Rozite

Company: Ruerkert-Mielke

Address: W233 N2080 Ridgeview Parkway City: Waukesha State: WI Zip: 53188

Daytime Phone: 262-953-1094 Fax: _____

E-Mail: BRozite@ruekrt-mielke.com

CONTRACTOR

Name: _____

Company: _____

Address: _____ City: _____ State: ____ Zip: _____

Daytime Phone: _____ Fax: _____

E-Mail: _____

PROPERTY INFORMATION

Property Owner (s) *(if different from applicant)*: John & Lorraine Mcadams Family Trust

Address: 110 Regency Cir. **City:** Oconomowoc **State:** WI **Zip:** 53066-9240

Daytime Phone: _____ **Fax:** _____

E-Mail: _____

Present Zoning: _____ **Tax Key No(s).:** _____

Location/Address: _____

Present Use: _____ **Intended Use:** _____

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

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

Application:

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

Other Documents:

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

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

CERTIFICATION

Applicant hereby certifies that:

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

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

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

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

Signature - Property Owner	Signature - Applicant
Name & Title (PRINT)	Name & Title (PRINT)
Date	Date
Signature - Property Owner	Signature – Applicant's Representative
Name & Title (PRINT)	Name & Title (PRINT)
Date	Date

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

VILLAGE OF MUKWONAGO
WAUKESHA AND WALWORTH COUNTIES

RESOLUTION NO. 2026-34

A RESOLUTION FOR A CSM REVIEW FOR THE DEDICATION OF PUBLIC RIGHT-OF-WAY AND LOT COMBINATION FOR THE MCADAMS PROPERTIES ADJACENT TO MEACHAM STREET AND PLEASANT LANE

WHEREAS, pursuant to Section 45, Article IV of the Mukwonago Code of Ordinances, an application for a CSM Review has been submitted, which application was filed in the office of the Village Clerk, Village of Mukwonago, Wisconsin, and

WHEREAS, the application has been submitted by the Village of Mukwonago Department of Public Works, and

WHEREAS, the applicant is seeking approval of a CSM for the purpose the creation of Public Right-of-Way and the combination of two existing parcels for future development, and

WHEREAS, the proposed CSM conforms to the requirements of the Village of Mukwonago Zoning Code for the district in which the property resides.

NOW, THEREFORE, BE IT RESOLVED by the Village Board of the Village of Mukwonago, Wisconsin hereby approves the CSM for the McAdams Property, based upon the plans submitted to the Village, subject to the conditions listed below:

1. The CSM shall be recorded with the Waukesha County Register of Deeds within 30 days of its approval.

Passed and adopted by the Village of Mukwonago Village Board this 20th day of May, 2026.

VILLAGE OF MUKWONAGO

By: _____
Fred Winchowky, Village President

Attest: _____
Lana Kropf, Village Clerk

PLAN COMMISSION STAFF REPORT

TO: Village of Mukwonago Plan Commission

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

REPORT DATE: May 5, 2026

MEETING DATE: May 12, 2026, 6:30 P.M.

SUBJECT: First Congressional Church – CSM Review

BASIC INFORMATION	
Project:	First Congressional Church CSM
Applicant:	First Congressional Church of Mukwonago
Professional Land Surveyor:	V2G Surveying, LLC
Request:	CSM Application Approval
Staff Recommendation:	Approve with Conditions

PARCEL DATA/CHARACTERISTICS	
Tax Key:	MUKV1974906, MUKV1963090, MUKV1963091
Existing Acreage:	3.63 Acres Total Combined
Current Use:	Church / Institutional
Proposed Use:	Church / Institutional
Reason for Request:	CSM Approval
Land Use Classification:	Residential
Zoning Classification:	R-2 Single Family Historical Lot Residential

Project Summary & Overview

The current church parcel includes a house that the church is looking to parcel off and sell. The church also owns the two lots at the corner of Roberts Drive and Park View Lane. The church is looking to combine the two corner lots with the main church parcel in order to meet the minimum green space requirements in the R-2 District. This will also result in a separate parcel on the inside corner of Robert's Drive as a stand-alone single family residential property.

Staff comments are provided below for changes to the proposed CSM that must be made prior to signature and recording.

Staff Review

Engineering:	See attached PLS review comments to address prior to signature and recording.
Public Works	No comments.
Utilities	No comments.
Police	No comments.
Fire:	No comments.
Building Inspection	No comments.
Planning	As proposed, the church parcel does not meet the minimum 2-acre requirement for a church/school use in the R-2 District. A mark-up of the CSM is provided showing where the eastern property line of the church must be shifted, at a minimum, to meet the 2-acre minimum requirement. This shift in the proposed property line will result in meeting the minimum lot area and also maintain the minimum green space requirement for the church property. The shift in the lot line will still allow the single family home property on the corner to meet the minimum R-2 zoning requirements. In the R-2 District, a church or school is a conditional use. However, since no modifications are being proposed to the current use or site for the church, other than the CSM, staff does not feel it is necessary to get a new conditional use permit in place. The current church and school does not meet the rear yard set-back but since no modifications are proposed, there are no requirements to impose at this time. Any future modifications to the church/school building via a change in occupancy or site plan review will require a conditional use permit and a review of the rear yard setback for a variance on the existing structure.

Recommended Action

Staff recommends the Village Board approve the CSM as outlined in the attached resolution.

Attachments

1. Proposed CSM
2. Supporting Application Documents

CSM Review Comments – First Congregational, Village of Mukwonago
Reviewed by B. Rozite 4/23/2026 (*reviewer's comments in italics*)

Per. Ch. 236, Wis. Stats. And Ch. A-E7, Wis. Admin. Code:
s. 236.34(1m)(a) The ratio of error in latitude and departure closure may not exceed 1'/3000'.

*The legal description in the Surveyor's Certificate does not form a mathematically closed figure and does not match the map bearing of S89°**24**'45"W along the south line and the 1**39.83**' distance along the north line of Lot 1*.

s. 236.20(2)(c) The map shall show the length and bearing of the exterior boundaries, the boundary lines of all blocks, public grounds, streets, and alleys, and all lot lines.

Show the 612.25' total along the south line of Lot 1 and Lot 2,
the 752.42' total distance along the north line of Lot 1 and Lot 2,
the distance and bearing along the common line between Lot 1 and Lot 2,
and the 612.59' total distance along the south line of Roberts Drive.

s. 236.20(2)(c) Where the exterior boundary lines show bearings or lengths that vary from those recorded in abutting plats or certified surveys there shall be the following note placed along the lines, "recorded as (show recorded bearing or length or both)."

Record bearings and distances from Field Park Subdivision, Ahren's Northside Subdivision and Maple Courts Condominium must be shown along abutting boundaries of this CSM.

s. 236.34(1m)(d) SURVEYOR'S CERTIFICATE:

The quarter-quarter references, section, town, range and municipality must be corrected in the first paragraph and the lot and subdivision reference added to match the description under the CSM header.
The municipality name must be corrected in the last sentence.
*Change "Park View Subdivision" to "**Field Park** Subdivision" in two places in the body of the legal description*.

Per Ch. 45 Land Division Ordinance, Village of Mukwonago:
§ 45-95. State plane coordinate system.
All distances and bearings shall be referenced to the Wisconsin Coordinate System, South Zone, and adjusted to the county and/or Village control survey.

Add the coordinate system reference to the Basis of Bearing.

General Comments:

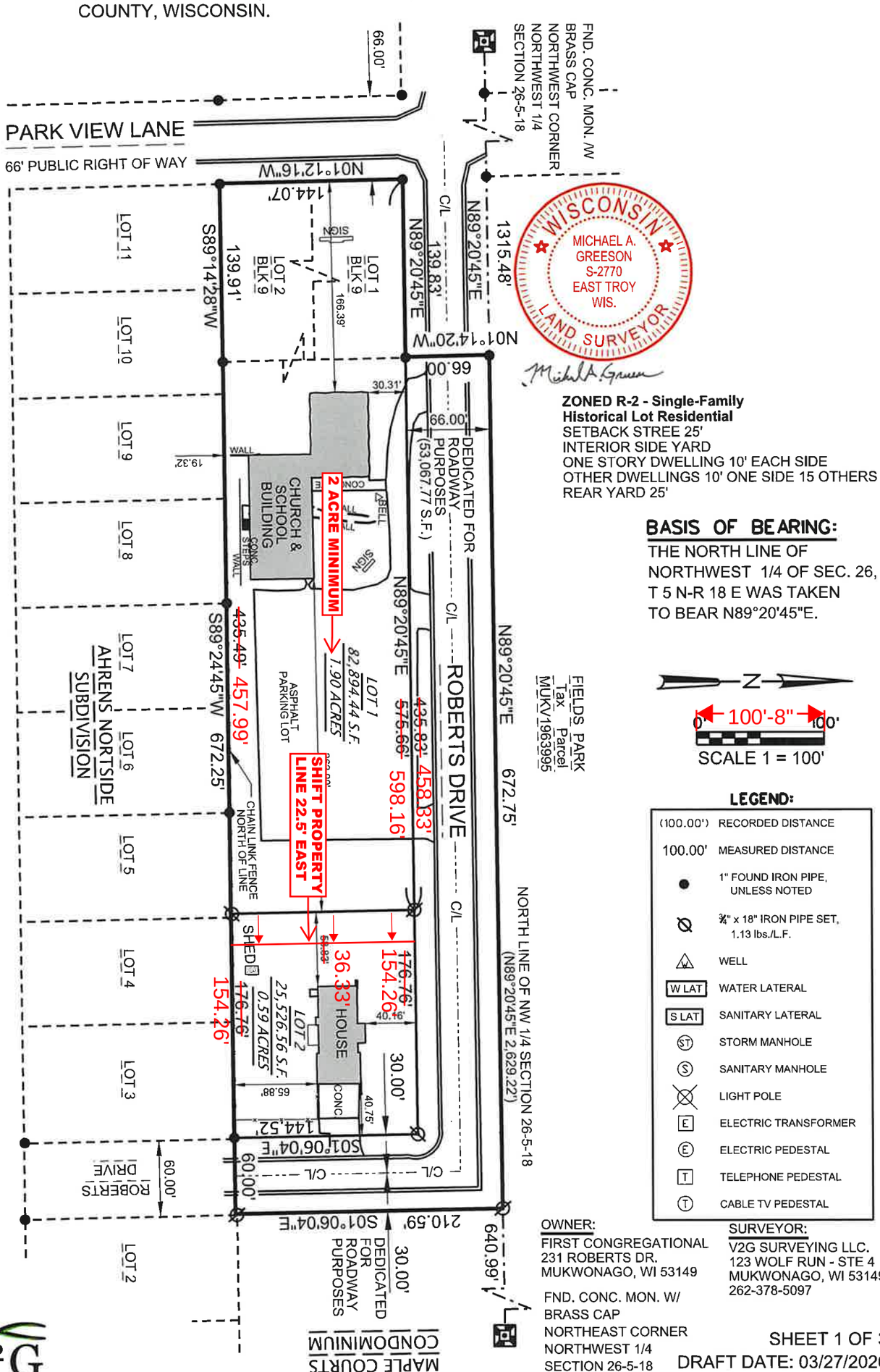
1) *Drafting Note: map text should be oriented to read with north at the top or to the top of the sheet. We recommend rotating text that reads upside-down by 180 degrees.*
2) *In the Zoning Note* SETBACK STREE**T** *has a typo*.
3) *The abutting plat name to the south should be* "AHRENS NORT**H**SIDE SUBDIVISION."

4) *The abutting land to the north should be* "Fiel**d** Park **Unplatted Lands**."
5) *The text in the Legend is too small to be clearly legible at 100%. On the final CSM, we recommend enlarging it*.
6) *Please review the name of the owner in all places it appears and use it consistently. Is it* Congretional *or* Congre**ga**tional?
7) *On the final CSM, the surveyor's signature below the Surveyor's Certificate must be an original signature, not typed*.
8) "Mukwonago" *is misspelled in the Village Plan Commission Approval Certificate*.
9) *We recommend re-wording the fourth paragraph of the Surveyor's Certificate to the following*: "That I have made said survey by the direction of Kay Rowntree, Council Moderator of First Congregational, owner of said lands.

PRELIMINARY

CERTIFIED SURVEY MAP NO. _____

LOTS 1 AND 2 OF BLOCK 9 FIELD PARK SUBDIVISION AND PART OF THE NORTHEAST1/4 AND NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 26, TOWNSHIP 5 NORTH, RANGE 18 EAST, VILLAGE OF MUKWONAGO, WAUKESHA COUNTY, WISCONSIN.



ZONED R-2 - Single-Family Historical Lot Residential
SETBACK STREE 25'
INTERIOR SIDE YARD
ONE STORY DWELLING 10' EACH SIDE
OTHER DWELLINGS 10' ONE SIDE 15 OTHERS
REAR YARD 25'

BASIS OF BEARING:
THE NORTH LINE OF NORTHWEST 1/4 OF SEC. 26, T 5 N-R 18 E WAS TAKEN TO BEAR N89°20'45"E.

N

0' 100'-8" 100'

SCALE 1 = 100'

LEGEND:

(100.00')	RECORDED DISTANCE
100.00'	MEASURED DISTANCE
●	1" FOUND IRON PIPE, UNLESS NOTED
⊘	¾" x 18" IRON PIPE SET, 1.13 lbs./L.F.
W	WELL
W LAT	WATER LATERAL
S LAT	SANITARY LATERAL
ST	STORM MANHOLE
S	SANITARY MANHOLE
	LIGHT POLE
E	ELECTRIC TRANSFORMER
E	ELECTRIC PEDESTAL
T	TELEPHONE PEDESTAL
T	CABLE TV PEDESTAL

OWNER:
FIRST CONGREGATIONAL
231 ROBERTS DR.
MUKWONAGO, WI 53149

FND. CONC. MON. W/ BRASS CAP
NORTHEAST CORNER
NORTHWEST 1/4
SECTION 26-5-18

SURVEYOR:
V2G SURVEYING LLC.
123 WOLF RUN - STE 4
MUKWONAGO, WI 53149
262-378-5097

V2G SURVEYING, LLC

INSTRUMENT DRAFTED BY MICHAEL A. GREESON P.L.S. 2770

SHEET 1 OF 3
DRAFT DATE: 03/27/2026
V2G JOB NO.: 2026-027

VILLAGE OF MUKWONAGO

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

Application Fee: Below

Date Submitted: JAN 14, 2026

FEES

(Please check one)

- ☐ Minor Site Plan (No Building): $160.00
- ☐ Major Site Plan; New Building/Addition (> 600 sq. ft.): $475.00 plus $.02 per sq. ft.
- ☐ Planned Unit Development (PUD) Review: $225.00 plus $50.00/unit
- ☒ Other (See Current Fee Schedule) CSM $220.00 (SURVEYOR SERVICE)

CONTACTS

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

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

GUIDELINES

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Deliver to:	Village Clerk's Office 440 River Crest Ct
Email to:	trutenbeck@villageofmukwonago.gov

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

APPLICANT *(Full Legal Name)*

Name: ROBERT BRANDEMUEHL
Company: FIRST CONGREGATIONAL CHURCH OF MUKWONAGO
Address: 231 ROBERTS DRIVE **City:** MUKWONAGO **State:** WI **Zip:** 53149
Daytime Phone: (262) 227-6629 **Fax:**
E-Mail: bandebeagles@wi.rr.com

APPLICANT IS REPRESENTED BY *(Full Legal Name)*

Name: _____

Company: _____

Address: _____ City: _____ State: ____ Zip: _____

Daytime Phone: _____ Fax: _____

E-Mail: _____

ARCHITECT

Name: _____

Company: _____

Address: _____ City: _____ State: ____ Zip: _____

Daytime Phone: _____ Fax: _____

E-Mail: _____

PROFESSIONAL ENGINEER

Name: _____

Company: _____

Address: _____ City: _____ State: ____ Zip: _____

Daytime Phone: _____ Fax: _____

E-Mail: _____

REGISTERED SURVEYOR

Name: _____

Company: _____

Address: _____ City: _____ State: ____ Zip: _____

Daytime Phone: _____ Fax: _____

E-Mail: _____

CONTRACTOR

Name: _____

Company: _____

Address: _____ City: _____ State: ____ Zip: _____

Daytime Phone: _____ Fax: _____

E-Mail: _____

PROPERTY INFORMATION

Property Owner (s) *(if different from applicant)*: _____

Address: 201 ROBERTS DRIVE **City:** MUKWONAGO **State:** WI **Zip:** 53149

Daytime Phone: 262-227-6629 **Fax:** _____

E-Mail: bandebeagles@wi.rr.com

Present Zoning: _____ **Tax Key No(s).:** 501C-3

Location/Address: 201 ROBERTS DRIVE

Present Use: WAS PASTOR HOME **Intended Use:** NEW OWNERS

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

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

Application:

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

Other Documents:

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

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

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1. All of the above statements and other information submitted as part of this application are true and correct to the best of his or her knowledge.
2. Affirms that no Village of Mukwonago elected or appointed official or employee has a proprietary interest in the above referenced property for which this applications being filed (except as stated below under "Exceptions").
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(The applicant's signature must be from a Managing Member if the business is an LLC, or from the President or Vice President if the business is a corporation. A signed applicant's authorization letter may be provided in lieu of the applicant's signature below, and a signed property owner's authorization letter may be provided in lieu of the property owner's signature[s] below. If more than one, all of the owners of the property must sign this Application).

Signature - Property Owner

PROPERTY & GROUNDS CHAIRMAN FCC OF MUKWONAGO

ROBERT BRANDEMOEHL

Name & Title (PRINT)

1-14-2026

Date

Signature - Applicant

Name & Title (PRINT)

Date

Signature - Property Owner

Name & Title (PRINT)

Date

Signature – Applicant's Representative

Name & Title (PRINT)

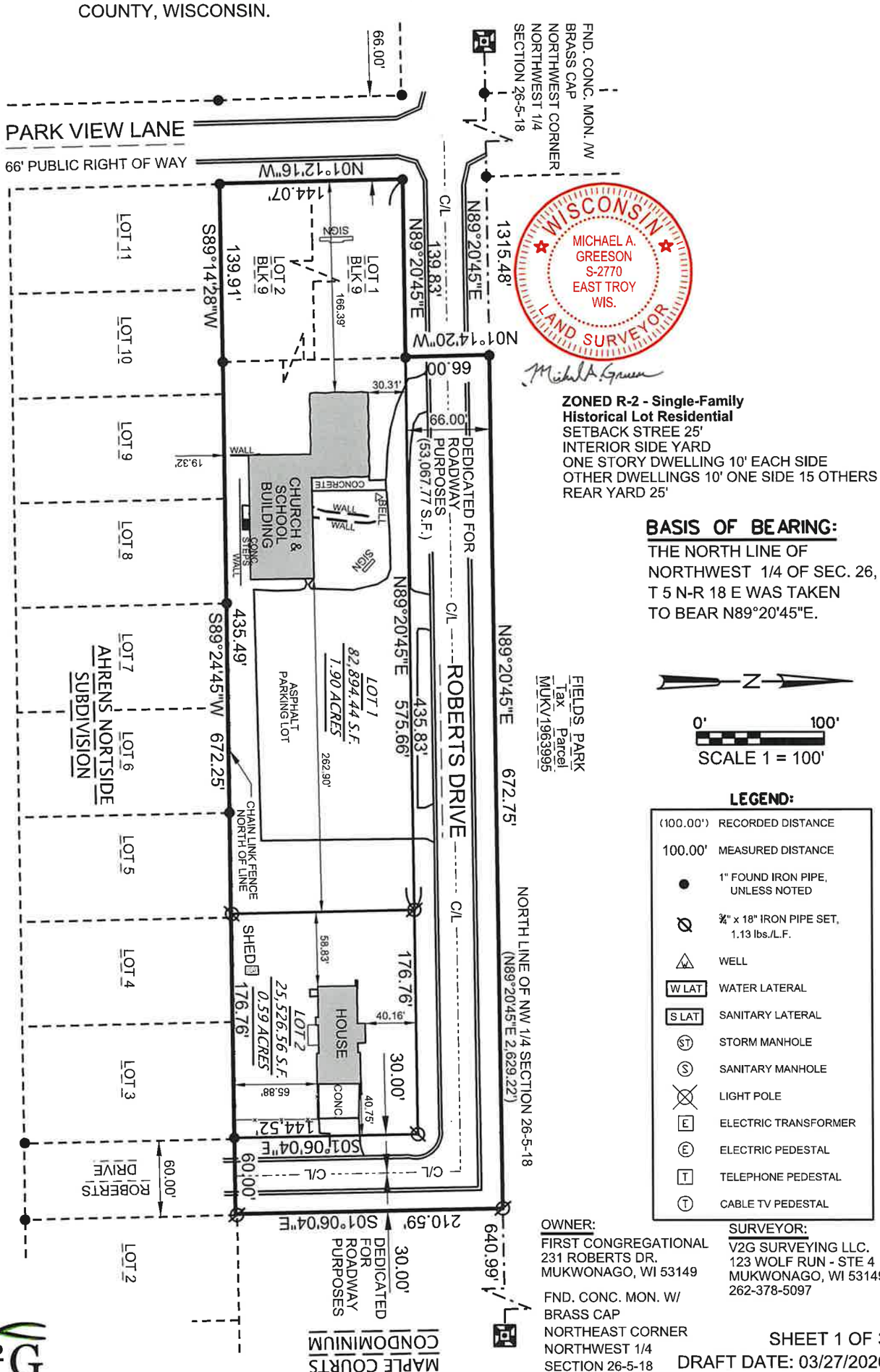
Date

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

PRELIMINARY

CERTIFIED SURVEY MAP NO. _____

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SETBACK STREE 25'
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THE NORTH LINE OF NORTHWEST 1/4 OF SEC. 26, T 5 N-R 18 E WAS TAKEN TO BEAR N89°20'45"E.

N

0' 100'

SCALE 1 = 100'

LEGEND:

(100.00')	RECORDED DISTANCE
100.00'	MEASURED DISTANCE
●	1" FOUND IRON PIPE, UNLESS NOTED
⊘	¾" x 18" IRON PIPE SET, 1.13 lbs./L.F.
W	WELL
W LAT	WATER LATERAL
S LAT	SANITARY LATERAL
ST	STORM MANHOLE
S	SANITARY MANHOLE
	LIGHT POLE
E	ELECTRIC TRANSFORMER
E	ELECTRIC PEDESTAL
T	TELEPHONE PEDESTAL
T	CABLE TV PEDESTAL

OWNER:
FIRST CONGREGATIONAL
231 ROBERTS DR.
MUKWONAGO, WI 53149

SURVEYOR:
V2G SURVEYING LLC.
123 WOLF RUN - STE 4
MUKWONAGO, WI 53149
262-378-5097

V2G SURVEYING, LLC

INSTRUMENT DRAFTED BY MICHAEL A. GREESON P.L.S. 2770

SHEET 1 OF 3
DRAFT DATE: 03/27/2026
V2G JOB NO.: 2026-027

CERTIFIED SURVEY MAP NO. _____

LOTS 1 AND 2 OF BLOCK 9 FIELD PARK SUBDIVISION AND PART OF THE NORTHEAST ¼ AND NORTHWEST ¼ OF THE NORTHWEST ¼ OF SECTION 26, TOWNSHIP 5 NORTH, RANGE 18 EAST, VILLAGE OF MUKWONAGO, WAUKESHA COUNTY, WISCONSIN.

SURVEYORS CERTIFICATE:

I, MICHAEL A. GREESON, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY: THAT I HAVE SURVEYED, PLATTED AND MAPPED A PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 SECTION 27, TOWNSHIP 5 NORTH, RANGE 19 EAST, VILLAGE OF VERNON, WAUKESHA COUNTY, WISCONSIN. DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF THE NORTHWEST 1/4 OF SECTION 26, TOWNSHIP 5 NORTH, RANGE 18 EAST; THENCE N89°20'45"E ALONG THE NORTH LINE OF SAID NORTHWEST 1/4, 1315.48' TO A FOUND 1" IRON PIPE SAID POINT BEING THE POINT OF BEGINNING; THENCE CONTINUING N89°20'45"E, 672.75' TO A POINT; THENCE S01°06'04"E, 210.59' TO A POINT ON THE NORTH LINE OF AHRENS NORTHSIDE SUBDIVISION; THENCE S89°18'45"W ALONG SAID NORTH LINE, 672.25' TO A FOUND 1" IRON PIPE; THENCE S89°14'28"W, 139.91' TO A FOUND 1" IRON PIPE ON THE EASTERLY RIGHT OF WAY FOR PARK VIEW LANE, SAID POINT BEING THE SOUTHWEST CORNER OF LOT 2 BLOCK 9 OF PARK VIEW SUBDIVISION; THENCE N01°12'16"W ALONG SAID EAST LINE, 144.07' TO THE NORTHWEST CORNER OF LOT 1 BLOCK 9 OF PARK VIEW SUBDIVISION; THENCE N89°20'45"E, 140.00' TO THE NORTHEAST CORNER OF SAID LOT 1 BLOCK 9; THENCE N01°14'20"W, 66.00' TO THE POINT OF BEGINNING.

SAID AREA DESCRIBED CONTAINS 161,488.80 S.F. OR 3.71 ACRES MORE OR LESS.

THAT I HAVE MADE SAID SURVEY BY THE DIRECTION FIRST CONGRETIONAL, KAY ROWNTREE, COUNCIL MODERATOR OF SAID LANDS.

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

THAT I HAVE FULLY COMPLIED WITH PROVISIONS OF S. 236.34 OF THE WISCONSIN STATUTES AND THE REQUIREMENTS OF THE ORDINANCES OF THE VILLAGE OF VERNON IN SURVEYING, DIVIDING AND MAPPING THE SAME.

Dated this 27 th day of MARCH, 2026.



Michael A. Greeson
Michael A. Greeson, P.L.S. # 2770

CORPORATE OWNER'S CERTIFICATE

FIRST CONGRETIONAL, A CORPORATION DULY ORGANIZED AND EXISTING UNDER AND BY VIRTUE OF THE LAWS OF THE STATE OF WISCONSIN, AS OWNER, DOES HEREBY CERTIFY THAT SAID CORPORATION CAUSED THE LAND DESCRIBED ON THIS PLAT TO BE SURVEYED, DIVIDED, MAPPED, AND DEDICATED AS REPRESENTED ON THIS PLAT. FIRST CONGRETIONAL, DOES FURTHER CERTIFY THAT THIS PLAT IS REQUIRED BY S.236.10 OR S.236.12 TO BE SUBMITTED TO THE FOLLOWING FOR APPROVAL OR OBJECTION: VILLAGE OF MUKWONAGO, WAUKESHA COUNTY.

IN WITNESS WHEREOF, THE SAID FIRST CONGRETIONAL HAS CAUSED THESE PRESENTS TO BE SIGNED BY KAY ROWNTREE, ITS COUNCIL MODERATOR, AND COUNTERSIGNED BY _____, ITS SECRETARY, AND ITS CORPORATE SEAL TO BE HEREUNTO AFFIXED ON THIS _____, DAY OF _____, 2026.

CORPORATE OWNER'S NOTARY CERTIFICATE

STATE OF WISCONSIN)
_____ COUNTY) SS

PERSONALLY CAME BEFORE ME THIS _____ DAY OF _____, 2026, _____, COUNCIL MODERATOR, AND _____, SECRETARY OF THE ABOVE NAMED CORPORATION, TO ME KNOWN TO BE THE PERSONS WHO EXECUTED THE FOREGOING INSTRUMENT, AND TO ME KNOWN TO BE SUCH COUNCIL MODERATOR AND SECRETARY OF SAID CORPORATION, AND ACKNOWLEDGED THAT THEY EXECUTED THE FOREGOING INSTRUMENT AS SUCH OFFICERS AS THE DEED OF SAID CORPORATION, BY ITS AUTHORITY.

(NOTARY SEAL) _____
NOTARY PUBLIC, _____, WISCONSIN
MY COMMISSION EXPIRES _____.

CERTIFIED SURVEY MAP NO. _____

LOTS 1 AND 2 OF BLOCK 9 FIELD PARK SUBDIVISION AND PART OF THE NORTHEAST¼ AND NORTHWEST ¼ OF THE NORTHWEST ¼ OF SECTION 26, TOWNSHIP 5 NORTH, RANGE 18 EAST, VILLAGE OF MUKWONAGO, WAUKESHA COUNTY, WISCONSIN.

VILLAGE PLAN COMMISSION APPROVAL

THIS LAND DIVISION IS HEREBY APPROVED BY THE VILLAGE OF MUKWONAOG PLAN COMMISSION

THIS____ DAY OF_____, 2026.

_____

Fred H. Winchowky, Village President

_____

Lana Kropf, Village Clerk/Treasurer

VILLAGE BOARD OF APPROVAL

THIS LAND DIVISION IS HEREBY APPROVED BY THE VILLAGE OF MUKWONAGO BOARD

THIS____ DAY OF_____, 2026.

_____

Fred H. Winchowky, Village President

_____

Lana Kropf, Village Clerk/Treasurer



V²G
SURVEYING, LLC

SHEET 3 OF 3
DRAFT DATE: 03/27/2026
V2G JOB NO.: 2026-011

INSTRUMENT DRAFTED BY MICHAEL A. GREESON P.L.S. 2770

VILLAGE OF MUKWONAGO
WAUKESHA AND WALWORTH COUNTIES

RESOLUTION NO. 2026-35

A RESOLUTION FOR A CSM REVIEW FOR THE FIRST CONGRESSIONAL CHURCH OF MUKWONAGO PROPERTY, LOCATED AT 231 ROBERTS DRIVE, PARCELS MUKV1974906, MUKV1963090, AND MUKV1963091

WHEREAS, pursuant to Section 45, Article IV of the Mukwonago Code of Ordinances, an application for a CSM Review has been submitted, which application was filed in the office of the Village Clerk, Village of Mukwonago, Wisconsin, and

WHEREAS, the application has been submitted by the First Congressional Church of Mukwonago, and

WHEREAS, the applicant is seeking approval of a CSM for the purpose of combining and separating existing parcels, and

WHEREAS, the proposed CSM conforms to the requirements of the Village of Mukwonago Zoning Code for the district in which the property resides, with the exception of the minimum property size which should be modified prior to signature and recording.

NOW, THEREFORE, BE IT RESOLVED by the Village Board of the Village of Mukwonago, Wisconsin hereby approves the CSM for the First Congressional Church of Mukwonago, based upon the plans submitted to the Village, subject to the conditions listed below:

1. The applicant shall revise the CSM per the staff comments enumerated in the staff report and resubmit for staff approval prior to signature and recording.
2. The CSM shall be recorded with the Waukesha County Register of Deeds within 30 days of its approval.

Passed and adopted by the Village of Mukwonago Village Board this 20th day of May, 2026.

VILLAGE OF MUKWONAGO

By: _____
Fred Winchowky, Village President

Attest: _____
Lana Kropf, Village Clerk