Village of Somers
7511 12th Street
Somers, WI 53171

Village Plan Commission
Meeting Agenda
Monday, July 11, 2022
5:30 P.M.

1. Call to order

2. Pledge of Allegiance

3. Approve Minutes from June 13, 2022

4. Correspondence

5. Citizen Comments

6. **Conditional Use Permit:**

   Public Hearing and Action on Request by: Eclectic LLC, PO Box 78, Somers, WI 53171 (Owner), Justin Traughber, PO Box 78, Somers, WI 53171 (agent), **requesting a Conditional Use Permit** amendment to allow for outside amplified music in the B-2 Community Business Dist. on Tax Parcel # 82-4-222-162-0010, located in the NW ¼ of Section 16, T2N, R22E, Village of Somers. *(For information purposes only, this property is located at 8013 12th Street.)*

7. **Rezone:**

   Public Hearing and Action on Request by: Carol F Grohs Trust & Delmar R and Jeanne V Golbricht Trust, 10812 Burlington Rd, Kenosha WI 53144; Deborah K Kahana & John P Parmentier, 10610 Burlington Rd, Kenosha WI 53144-7448; Michael C Sarauer, 10524 Burlington Rd, Kenosha WI 53144 (owners), Joe Podge, Stream Realty, 226 N. Morgan St., Suite 500, Chicago, IL 60607 (Agent), **requests a rezoning from A-1 Agricultural Preservation Dist., A-2 General Agricultural Dist., R-2 Suburban Single-Family Residential Dist. & R-3 Urban Single-Family Residential Dist. to BP-1 Business Park Dist. & PUD Planned Unit Development Overlay Dist.**, on Tax Parcel #s 82-4-222-194-0101, 82-4-222-301-0050, 82-4-222-301-0040 & 82-4-222-301-0030, located in the SE ¼ of Section 19 and the NE ¼ of Section 30, T2N, R22E, Village of Somers. *(For information purposes only, this property is located at 10610 Burlington Road, 10812 Burlington Road, and 10524 Burlington Road.)*

8. **Site Plan & Exterior Fenestration Review:**

   Action on Request by: Carol F Grohs Trust & Delmar R and Jeanne V Golbricht Trust,

10812 Burlington Rd, Kenosha WI 53144; Deborah K Kahana & John P Parmentier, 10610 Burlington Rd, Kenosha WI 53144-7448; Michael C Sarauer, 10524 Burlington Rd, Kenosha WI 53144 (owners), Joe Podge, Stream Realty, 226 N. Morgan St., Suite 500, Chicago, IL 60607 (Agent), **requests approval of site plan and exterior fenestration** on Tax Parcel #s 82-4-222-194-0101, 82-4-222-301-0050, 82-4-222-301-0040 & 82-4-222-301-0030, located in the SE ¼ of Section 19 and the NE ¼ of Section 30, T2N, R22E, Village of Somers.

9. Adjourn

I hereby certify that as the designee of the chief elected official of the Village of Somers, I posted this notice of the July 11, 2022 Village Plan Commission Meeting in 1 public place & on the Village website.

Dated this 5th day of July 2022 Brandi Baker Clerk/Treasurer

Requests from person with disabilities who need assistance to participate in this meeting should be made to the Clerk's Office at 262-859-2822 with as much notice as possible. Notice is hereby given that members of the Plan Commission members may participate telephonically. Notice is hereby given that members of the Village & Town Board may be in attendance for the sole purpose of gathering information. A quorum may be present. However, no Board action will be taken.

ORIGINAL POST DATE: July 5, 2022

Village of Somers
Proceeding from the Village Plan Commission Meeting
June 13, 2022

1. **Call to Order**

   Chairman Stoner called the meeting to order at 5:30 p.m.

   Present: Chairman George Stoner, as well as Commissioners, Boxx, Lee, Fredrick, and Grimes. Commissioners Aiello and Gardinier had an excused absence.

   Staff Present in person: Administrator Jason Peters and Assistant to the Administrator Cassandra Bodenbach.

2. **Pledge of Allegiance**

   Chairman Stoner led everyone in stating the Pledge of Allegiance.

3. **Approve Minutes of May 9, 2022**

   Commissioner Boxx moved to approve to the Minutes from the May 9th Meeting. Seconded by Commissioner Lee. Motion carried. 5-0 vote.

4. **Correspondence**

   None.

5. **Citizen Comments**

   None.

6. **<u>Conditional Use Permit:</u>**

   Public Hearing and Action on Request by: JSPPF Holdings LLC, C/O Joseph G Smith, 7150 18th St, Kenosha WI 53144 (Owner); Amy K Smith, 7150 18th St, Kenosha WI 53144 (Agent), **requesting a Conditional Use Permit amendment to allow outside amplified music, live music and the projection of outdoor movies** in the B-2 Community Business Dist. on Tax Parcel #82-4-222-153-0225, located in the SW ¼ Section 15, T2 N, R22 E, Village of Somers. *(For informational purposes only, this property is located at 7150 18th Street).*

   Before the public hearing was opened, President Stoner expressed his concerns with live music being allowed with a conditional use permit as it states, "no public music outside."

   Public Hearing Opened at 5:34 p.m.

Amy Smith at 7150 18th Street, Kenosha, WI
Amy stated there are no immediate neighbors and the music is meant to be background noise not similar to a concert. She also said she does not want the music to become "obnoxious", but to keep it low-key and entertaining in response to President Stoner's mention of a subdivision going in on HWY 31 and CTH L. The music will be mostly during the day starting at 12-noon going to 9:00 p.m.

Public Hearing Closed at 5:39 p.m.

Commissioner Boxx moved to approve the CUP amendment to allow outside amplified music, live music and the projection of outdoor movies. Seconded by Fredrick.

Commission Discussion:

Commissioner Grimes expressed concerns that the traffic flow will increase, and Jerry Smith establishment does not have substantial/permanent bathroom structures.

There was comparison and discussion about Petrifying Springs' Biergarten.

Commissioner Boxx asked if the neighboring residents get notified before a public hearing. Administrator Peters confirmed that they do. To that point, Boxx agreed with Amy Smith that no one is very close and none of the notified people showed up to the meeting. He explained that the discussions on Hawthorne Hollow, J & M's Bar, and Somers House are all different issues that cannot be paralleled to this situation. Commissioner Boxx stated that Jerry Smith Farms is one of the few destinations in Somers we can be proud of and if the Plan Commission.

Commissioner Lee wished this had been done when the biergarten was approved but agreed that the establishment has a great reputation and sees no problem with the amendment. He asked if there was as issue in the future is there anything we can be done. He asked if there could be an annual assessment of the Conditional Use Permit. Administrator Peters stated that they need a cabaret license as well and this license is reviewed annually. To have an annual assessment would be difficult to keep track of, labor intensive for staff, create extra public hearings, and a new renewal process. If there was any sunset on the CUP, it should be farther out than a year.

Commissioner Fredrick said there is no better business for Somers to be represented by and there have never been any issues. He also agreed the neighbors are far enough away. The closest one is 3/8th or a quarter mile from the business and the treeline will absorb sound. Fredrick said Grimes' point about the bathrooms is valid, but they are seasonal not year-round. However, when development does start in the area, he believes the CUP should be checked to make sure there are no issues.

Commissioner Grimes wondered what would happen if after Jerry Smith Farms got the approval, if then residents would have issues. Boxx asked what would

happen if that were to occur. Administrator Peters explained that what we would tell residents is they were notified, something was published in the paper, and they did not come to the initial public hearing, therefore the point would be moot.

President Stoner said he would approve this if in two years there was a time stamp due to the subdivision going in.

President Stoner out forth an amended motion on the floor to approve the CUP amendment to allow outside amplified music, live music and the projection of outdoor movies with the stipulation they will be back in two years on November 1, 2024 for a review with no additional charge.

Commissioner Lee made the motion to amend the approval of the CUP amendment to allow outside amplified music, live music and the projection of outdoor movies with the stipulation they will be back in two years on November 1, 2024 for a review with no additional charge. Seconded by Commissioner Fredrick.

ROLL CALL: Boxx – aye, Grimes – aye, Lee – aye, Fredrick – aye, Stoner – aye.

Motion as amended passed 5-0 vote.

7. **Conceptual Approval:**

Discussion and Action on Request by: GRACE35 LLC, 8315 18th St, Kenosha, WI 53144 (Owner), William A. Morris, 5313 87th Pl., Pleasant Prairie, WI 53158 (Agent), **requesting a conceptual approval for a CBRF (Community-Based Residential Facility)** on Tax Parcel #82-4-222-161-0106, located in the NE 1/4 of Section 16, T2N, R22E, Village of Somers. Said conceptual approval is subject to formal approvals by the Village Board of a land use plan amendment, rezoning, overall site plans, building fenestration and stormwater management plan, as well as City of Kenosha airport site plan review and approval. *(For informational purposes only, this property is located at 1200 Village Center Drive).*

Commissioner Boxx made the motion to conceptually approve CBRF (Community-Based Residential Facility). Seconded by Lee.

Commission Discussion:

President Stoner started with saying how beautiful the building is and that the Village has never had any issues with their current establishment. Commissioner Fredrick agreed that it is a wonderful building and congratulated Mr. Morris, Architect on the project.

William Morris introduced Mr. Patel as one of the three partners and Engineer Mark with Neilson, Madsen, + Barber. Mr. Morris stated that due to the economy, decorative concrete block is outshining precast since no developer has the ability to get it. There is an 18% cost difference, less than precast. The goal with this neighboring building, is to give a “center feel” to the Village for the future. There is currently a dry pond, but this new building will have a wet pond.

Mr. Patel stated that it is similar to their current building with some updates inside of additional bathrooms, storage, maintenance room, and the finishes will be more contemporary.

President Stoner asked when this goes out to bid to try to use local contractors and subcontractors.

Mr. Patel and Mr. Morris stated they used local companies with the other establishment and plan to do the same with this development. They are looking to break ground in Spring of 2023.

Motion passed 5-0 vote.

8. Adjourn

Commissioner Boxx moved to adjourn at 6:25 p.m. Seconded by Lee.

Motion carried. 5-0 vote.

Drafted this 14th day of June 2022. These minutes are not official until approved by the Plan Commission. Submitted by Cassandra Bodenbach, Assistant to the Village Administrator

From: Jason Peters
To: Cassandra Bodenbach
Subject: FW: Outside Music at J&M Establishment
Date: Wednesday, June 22, 2022 10:32:47 AM
Attachments: image001.png

Correspondence for Planning Commission in July

Very truly yours,

Jason J. Peters, JD/MPA
Village/Town Administrator

Telephone: (262) 859-2822
Fax: (262) 859-2331
Email: jpeters@somers.org
Website: www.somers.org

Address:
7511 12th Street
P.O. Box 197
Somers, WI 53171

From: Gerald Smith <GSmith@somers.org>
Sent: Wednesday, June 22, 2022 10:24 AM
To: George Stoner <GStoner@somers.org>; Jason Peters <JPeters@somers.org>; Gregg Sinnen <GSinnen@somers.org>; Joe Smith <JSmith@somers.org>; Jackie Nelson <JNelson@somers.org>; Karl Ostby <KOstby@somers.org>; Jack Aupperle <JAupperle@somers.org>; Ben Harbach <BHarbach@somers.org>
Subject: Outside Music at J&M Establishment

FYI on Steve Lichter's concern on outside music at J&M Establishment.

Jerry Smith

From: Steve Lichter <salichter@wi.rr.com>
Sent: Tuesday, June 21, 2022 4:00 PM
To: Gerald Smith <GSmith@somers.org>
Subject: Re: manhole cover

Jerry I just got A letter from the town. The Tavern is looking for a permit to play amplified music outside in there dinning area I am NOT in FAVOR of that. Please respond

On Nov 5, 2021, at 7:56 AM, Gerald Smith <GSmith@somers.org> wrote:

Good Morning Steve,

Being that CTH E is Kenosha County jurisdiction, I've made them aware of the issue with the manhole and they are in the process of determining how to deal with it. Also, regarding the speed limit that is Kenosha County's road and you need to contact them with a request to alter the speed limit.

Best Regards,

Jerry Smith

From: salichter@wi.rr.com <salichter@wi.rr.com>
Sent: Monday, November 1, 2021 3:55 PM
To: Gerald Smith <GSmith@somers.org>
Subject: RE: manhole cover

-Any luck on fixing the man hole cover and what has to be done to reduce the speed limit to 25 MPH ----------

From: "Gerald Smith"
To: "salichter@wi.rr.com"
Cc:
Sent: Monday October 11 2021 2:52:31PM
Subject: RE: manhole cover

Hi Steve,

The manhole is for the CTH E storm water system and is jurisdiction of Kenosha County. After you and George talked I contacted Kenosha County and they are coming over to tar the cover down. Hopefully, that will help with the noise.

I will put another bug in their ear to get this done.

Thanks,

Jerry

From: salichter@wi.rr.com <salichter@wi.rr.com>
Sent: Monday, October 11, 2021 2:39 PM
To: Gerald Smith <GSmith@somers.org>
Subject: manhole cover

I am Steve Lichter at 8115 12th St the man hole cove is low and every time a truck goes over it
It sounds like a bomb going off . Can you do something about it ? 262-308-3737

COUNTY OF KENOSHA

Division of Planning & Development

Andy M. Buehler, Director
Division of Planning & Development
19600 75th Street, Suite 185-3
Bristol, WI 53104-9772
(262) 857-1895

TO: **Village of Somers Plan Commission**

FROM: **Luke Godshall, Kenosha County Planning & Development**

RPT DATE: **06-30-22**

MTG DATE: **07-11-22**

APPLN DATE: **05-26-22**

PROJECT/SITE INFO:

1. Petitioner/Agent: Justin Traughber, J&M's Bar & Grill
2. Property Owner: Eclectic LLC
3. Location/Address: 8013 12th ST.
4. Tax key Number(s): 82-4-222-162-0010
5. Area: 0.41 acres
6. Existing Zoning: B-2 Community Business District
7. Proposed Zoning: B-2 Community Business District
8. Future Land Use: Mixed Use

OVERVIEW:
The Petitioner is requesting approval to amend their previously approved Conditional Use Permit, to allow for outdoor music.

PLANNER COMMENTS:
The submitted application is intended to amend the Conditional Use Permit that was previously approved by the Board in 2021 for an outdoor dining and recreational area (copy of recorded CUP attached). The approval of that CUP contained a condition (condition #8) which specifically prohibited outside amplified music speakers or live music on the property. The Petitioner now wishes to amend the previously approved CUP to have such outside music.

The Petitioner's narrative included with the submitted CUP application indicates they would like to provide live music/bands and other entertainment utilizing the exterior patio area. The narrative goes on to state that music levels will be appropriate so as to allow customers to conversate, and that music speakers would be directed southwards and away from the nearest residential neighbor (located approximately 150 feet to the west of the exterior patio area).

The Petitioner's intent is for outside music to conclude by 9pm.

STAFF RECOMMENDATION:
Should the Plan Commission choose to recommend approval of this application, staff would recommend the following conditions:

Andy M. Buehler, Director
Division of Planning & Development
19600 75th Street, Suite 185-3
Bristol, WI 53104-9772
(262) 857-1895

1. Subject to receiving any required licenses/permits (i.e. cabaret license) from the Village of Somers regarding the use of outside amplified music speakers.
2. Subject to the information and site plan contained in the submitted conditional use permit application dated May 26, 2022.
3. Hours of operation may be limited to prevent disturbance to abutting property owners, and final approved hours shall be determined by the Board and incorporated into the recorded Conditional Use Permit and any licenses issued by the Village of Somers.
4. All other conditions contained in the previously approved Conditional Use Permit (effective date September 13, 2021 and recorded in the Kenosha County Register of Deeds on September 20, 2021) shall remain in effect.
5. It is the responsibility of the applicant to assure and guarantee that the above conditions are fully complied with. This includes, but is not necessarily limited to, meeting conditions established herein, providing any applicable letters of credit, providing and following approved plans, obtaining permits prior to construction, making improvements, participating in coordination meetings with governmental officials, following established time frames, meeting deadlines, and providing additional information where deemed necessary. Any unauthorized deviation from the approved plans and conditions shall result in the issuance of a citation and/or applicable stop work order by the Village of Somers or other applicable agencies until the conditional use permit is brought back into compliance. Continued violation of the conditions as set forth herein shall result in a recommendation for revocation of the Conditional Use Permit.
6. Any substantial change or expansion of the submitted plan of operation, shall require the applicant to reapply for a Conditional Use Permit to the Village of Somers for its review and approval.
7. If property ownership and/or tenant shall happen to change then it shall be the responsibility of the person(s) that signed these conditions to notify new owner and/or tenant of all above stated conditions of approval.
8. It is the total responsibility of the petitioner to assure and guarantee that the above stated conditions are fully complied with. Any deviation from the approved plans and conditions shall result in the issuance of a citation and associated stop work order until the project is brought back into compliance. Continuance of the project shall result in a recommendation for revocation of the Conditional Use Permit
9. Subject to a Kenosha County zoning permit being issued for any proposed structures including principal buildings, signage, fences, accessory buildings, etc.

Attachment:

- Existing Conditional Use Permit, recorded 9-20-21 in the Kenosha County Register of Deeds

CONDITIONAL USE PERMIT

Document Number | Document Title

Document #: **1910738**
Date: **2021-09-20** Time: **12:22 PM** Pages: **6**
Fee: **$30.00** County: **KENOSHA** State: **WI**
REGISTER OF DEEDS: **JOELLYN M. STORZ**

Effective Date September 13, 2021

The Village Board of the Village of Somers, Kenosha County, Wisconsin, hereby grants to the owners of the above referenced parcel, described with more particularity on the legal description attached hereto and incorporated herein by reference, the right for the owner, its lessees, agents or representatives, to utilize the premises known as 8013 12th Street, Kenosha, Wisconsin 53144, to operate on outside dining/recreation area, subject to the following conditions

Recording Area

Name and Return Address

Davison Law Office, Ltd
1207 55th Street
Kenosha, WI 53140

82-4-222-162-0010

Parcel Identification Number (PIN)

1 This Conditional Use Permit is subject to the application of Eclectic, LLC, on file in the office of the Clerk/Treasurer for the Village of Somers and stamped received by the office of Planning and Development on June 23, 2021, including a survey, which indicates an approximately 3,900 sq ft outdoor dining and recreational area surrounded by 4 foot railing enclosure on the southeastern portion of the property directly south of the proposed building and shall affect the premises described on the attached Exhibit "A" which is incorporated herein by reference

2 The applicant shall comply with all parking requirements outlined in the Village of Somers General Zoning and Shoreland/Floodplain Zoning Ordinance

3 The name of the restaurant shall be "J & M's Bar and Grill" There shall be no other business conducted on the premises covered by this conditional use permit without the advance written consent of the Village and Amendment of this permit

4 There shall be no outside storage of any kind

5 Any expansion of the conditional use granted herein shall occur only following review by and the consent of the Village Board

6 Any new signage shall be in accordance with the aforementioned zoning ordinance

7 There shall be no storage of gasoline, other petrohyrdocarbons or any other material classified as hazardous at the site or in any building located thereon

8 There shall be no outside amplified music speakers or live music

9 Refuse containers shall be screened from view from public rights-of-way, adjacent properties or eating area. Screening for waste receptacle shall consist of a solid opaque fence of similar color and materials of main building, or masonry, and shall be a minimum of six (6) feet and maximum of eight (8) feet tall Waste receptacles shall be enclosed on the fourth side with a gate to contain trash or other debris The gate side of the waste receptacle shall be oriented toward the parking lot facing Highway E and is required to be always closed except for servicing by the waste management contractor and site users Prior to the installation of such fencing, the owner shall submit to the Village for approval the description or sample of the fencing which is proposed to be installed Installation of the fencing shall be completed no later than December 31, 2021

10 Any change of the submitted plan of operation, change in use, and/or a proposed addition(s) to any existing principal building(s) or proposed new principal building(s), shall require the petitioner to reapply for a Conditional Use Permit to the Village Plan Commission for its review and approval

11 The undersigned shall fully cooperate with any law enforcement personnel performing inquiries or investigations Any substantial change or expansion of the submitted plan of operation (i e expansion of the proposed outside dining/recreation area) shall require the applicant to reapply for a Conditional Use Permit to the Village of Somers for its review and approval

12 There shall be no alcohol on any portion of the premises which is not licensed for alcohol consumption

13 The Village Building Inspector shall establish an occupancy permit based upon all of the available circumstances including, but not limited to, the overall space of the premises and such other factors as the Building Inspector may deem relevant

14 No person under the age of 21 shall be allowed to be in the alcohol licensed portion of the subject premises unless accompanied by their parent or by their spouse who is 21 years of age or older Security measures for the premises, if deemed necessary, to be approved by the Village Building Inspector and Kenosha County Sheriff's Department

15 The undersigned recognizes and acknowledges that the violation of this condition or the violation of the prohibition of alcohol on the outdoor dining/recreation portion of the premises shall, in and by itself, constitute grounds for the immediate revocation of this conditional use permit

16 The undersigned each recognize that in the event that a permit holder fails to comply with the conditions specified in this permit, the permit may be revoked by the Village Board upon ten (10) days notice to the permit holder(s) The permit holder(s) shall be entitled to a hearing before the Village Board on the question of revocation of the

conditional use permit and approval of the Village Board shall be required for the reinstatement of any conditional use permit

17 It is the responsibility of the petitioner to assure and guarantee that the above stated conditions are fully complied with If property ownership and/or tenant shall happen to change, then it shall be the responsibility of the person(s) that signed these conditions to notify the new owner and/or tenant of all above stated conditions of approval

18 The undersigned agrees to limit the hours of operations of the outdoor dining/recreation area of the premises from 11 00 a m until 9 00 p m

19 The area to be utilized for outdoor dining/recreation area shall be as depicted on the attached Exhibit "B" which is incorporated by reference This area shall be completely enclosed by a fence and shall be accessible only from the interior of the licensed premises Provisions shall be made for an emergency exit from the enclosed area, which access shall be kept closed at all times other than in an emergency The fencing enclosing this area as of the date of this permit complies with this requirement

20 It is the responsibility of the petitioner to assure and guarantee that the above stated conditions are fully complied with Any deviation from the approved plans and conditions shall result in the issuance of a citation

Dated at Somers, Wisconsin, this 13 day of September, 2021

OWNER
Eclectic, LLC

By _____
Printed Name Justin Traughber, its owner

STATE OF WISCONSIN)
) SS
COUNTY OF KENOSHA)

Personally came before me this 13th day of September, 2021, the above named Justin Traughber, on behalf of Eclectic, LLC, to me known to be the person who executed the foregoing instrument and acknowledged the same

MARY A. COLE NOTARY PUBLIC STATE OF WISCONSIN

_____
Printed Name Mary A Cole
Notary Public, Kenosha County, WI
My commission expires 6/11/22

TENANT

By _____
Printed Name Justin Traughber, as tenant

STATE OF Wisconsin)
) SS
COUNTY OF Kenosha)

Personally came before me this 13th day of September, 2021, the above named Justin Traughber, on behalf of Eclecte, LLC, to me known to be the person who executed the foregoing instrument and acknowledged the same

MARY A. COLE NOTARY PUBLIC STATE OF WISCONSIN

Mary A. Cole
Printed Name Mary A. Cole
Notary Public, Kenosha County, WI
My Commission expires 6/11/22

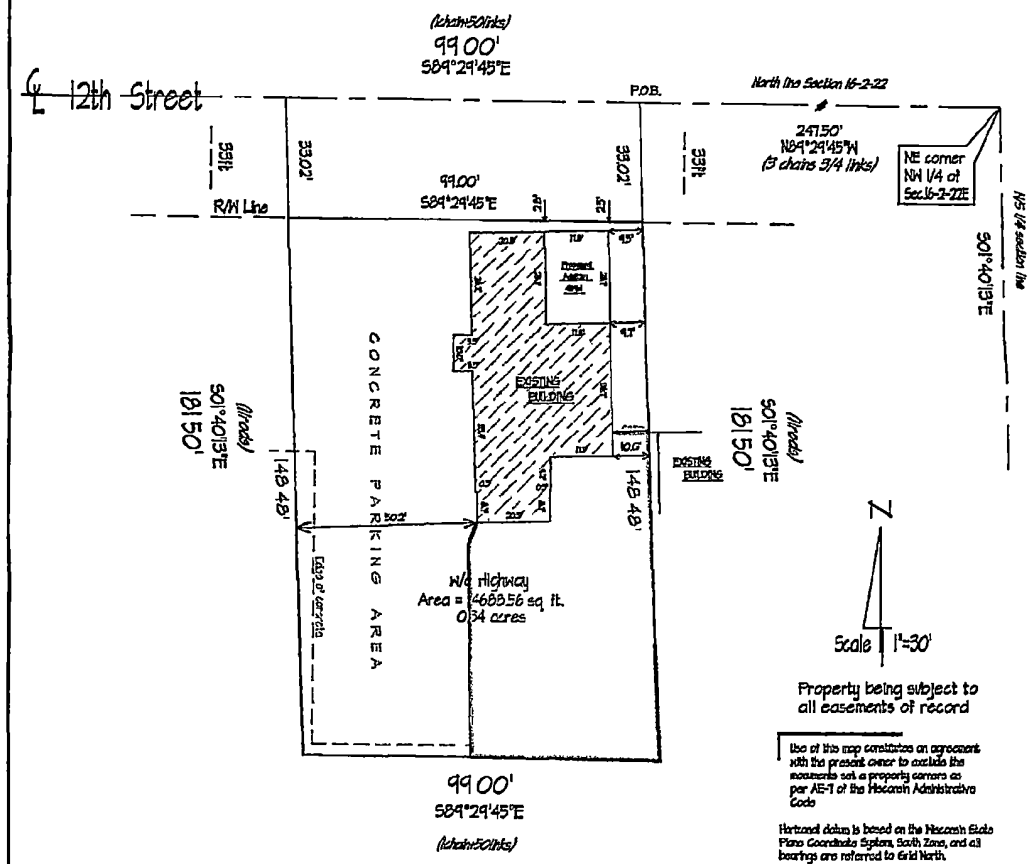
This instrument was drafted by

Attorney Jeffrey J Davison
DAVISON LAW OFFICE, LTD

LEGAL DESCRIPTION:

Part of Section 16, Town 2 North, Range 22 East of the Fourth Principal Meridian and described as Commencing in the center of the highway 3 chains and 3/4th of a link West of the 1/4 stake between Sections 9 and 16 in the Northwest corner of land now and formerly owned by Lafayette Cook, thence South along Cook's West line 11 rods, thence West 1 chain and 50 links, thence North 11 rods to the center of highway, thence East 1 chain and 50 links to the place of beginning, lying and being in the Village of Somers, County of Kenosha and State of Wisconsin

Tax Key No 82-4-222-162-0010



Property being subject to all easements of record

Use of this map constitutes an agreement with the present owner to exclude the monuments set a property corners as per AE-7 of the Wisconsin Administrative Code

Horizontal datum is based on the Wisconsin State Plane Coordinate System, South Zone, and all bearings are referred to Grid North.

PLAT OF SURVEY OF

Part of the NE 1/4 of the NW 1/4 of Section 16, Town 2 North, 22 East being more particularly described as follows Commencing in the Center of the highway between section 9 and 16 at the NW corner of land now formerly owned by Lafayette Cook, thence South along Cook's west line 11 rods, thence west 1 chain and 50 links, thence north 11 rods to the center of highway, thence east 1 chain and 50 links to the place of beginning Said land lying and being in the Village of Somers, Kenosha County, State of Wisconsin
REF Doc 1149567, Vol 1365 pg 562

Propberty is presenty zoned B-2

WISCONSIN
MICHAEL R KOTLAREK
S-1677
WAUKESHA WI.
LAND SURVEYOR

This survey is correct to the best of my knowledge and belief
October 25, 2016

BENCHMARK LAND SURVEY TECHNOLOGY
Full Land Surveying Services
5117 - 52nd Street, Kenosha WI, 53144 (262)658-1686
N80W28952 Kaesus Rd, Hartland, WI 53029

Present Owner: Eclectic LLC
Survey Address 6013 - 12th Street
Somers, WI 53171

Parcel ID# 82-4-222-162-0010

VILLAGE OF SOMERS
Department of Planning & Development

May 2015

RECEIVED

MAY 26 2022

Kenosha County
Planning and Development

CONDITIONAL USE PERMIT APPLICATION

(a) Property Owner's Name: JtM's Bar + Grill (Eclectic LLC)

Print Name: Justin Traughber Signature: [signature]

Mailing Address: PO Box 78

City: Somers State: WI Zip: 53171

Phone Number: 262 989 8259 E-mail (optional): Justin8259@gmail.com

Note: Unless the property owner's signature can be obtained in the above space, a letter of agent status signed by the legal property owner must be submitted if you are a tenant, leaseholder, or authorized agent representing the legal owner, allowing you to act on their behalf.

(b) Agent's Name (if applicable):

Print Name: Justin Traughber Signature: [signature]

Business Name: JtM's Bar + Grill

Mailing Address: PO Box 78

City: Somers State: WI Zip: 53171

Phone Number: 262 989 8259 E-mail (optional): Justin.8259@gmail.com

(c) Architect's Name (if applicable):

Print Name: _____ Signature: _____

Business Name: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____ E-mail (optional): _____

(d) Engineer's Name (if applicable):

Print Name: _____ Signature: _____

Business Name: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____ E-mail (optional): _____

(e) Tax key number(s) of subject site:

82-4-222-162-0010

Address of the subject site:

8013 12th St. Kenosha, WI 53144

(f) Plan of Operation (or attach separate plan of operation)

Type of structure:

Bar and Grill. Outdoor patio area with seating, fenced (enclosed) area and grass area currently operating under existing C.U.P.

Proposed operation or use of the structure or site:

See Attachment: Cabaret License Application which identifies the Operating Plan, Security Plan and Site Map.

Number of employees (by shift): 2-7 depending on the event/need

Hours of Operation: 11:00 am to 2:30 am. Outdoor entertainment from 11:00am to 9pm

Any outdoor entertainment? If so, please explain: Yes, small bands and outdoor/indoor entertainment

Any outdoor storage? If so, please explain: One small plastic shed to house landscaping equipment

Zoning district of the property: B-2 Community Business District

(g) Attach a plat of survey prepared by a professional land surveyor or site plan drawn to scale and approved by the Kenosha County Department of Planning & Development showing all of the information required under section 12.05-1(h)3 for a zoning permit. In addition, the plat of survey or site plan layout shall show the location, elevation and use of any abutting lands and the location and foundation elevations of structures within 50 feet of the subject site; soil mapping unit lines; ordinary high water mark, historic high water marks and floodlands on or within 50 feet of the subject premises, existing and proposed gravel, asphalt and concrete surfaces, existing and proposed signage, existing and proposed buildings, and existing and proposed landscaping.

For conditional use permit applications that are made within shoreland and floodland areas, such description shall also include information that is necessary for the Village Plan Commission to determine whether the proposed development will hamper flood flows, impair floodplain storage capacity, or cause danger to human, animal or aquatic life. This additional information may include plans, certified by a registered professional engineer or professional surveyor, showing existing and proposed elevations or contours of the ground; fill or storage elevation; basement and first floor elevations of structures; size, location, and spatial arrangement of all existing and proposed structures on the site; location and elevation of streets water supply and sanitary facilities; aerial photographs, and photographs showing existing surrounding land uses and vegetation upstream and downstream; soil types and any other pertinent information required by either the Village of Somers Planning & Development office, Village Plan Commission or Village Board:

(h) The Kenosha County Department of Planning & Development may ask for additional information.

(i) The fee specified in Section 12.05-8 of this ordinance.

Request for Conditional Use Permit (payable to "Kenosha County") $1,350.00

(For other fees see the Fee Schedule)

Justin Traughber
J&M's Bar & Grill (Eclectic LLC)
262-989-8259
Justin8259@gmail.com

Cabaret License Application

The following application is being submitted to amendment the current Conditional Use Permit to include a Cabaret License, located at J&M's Bar & Grill, 8013 12th St. Kenosha, WI 53144. Myself, Justin Traughber (owner) D.O.B. 08/25/1990 and Megan Strandell (co-owner) D.O.B. 04/01/1991 hold managerial capacity of the establishment.

Operating Plan –

To provide live music/bands and other entertainment utilizing the inside interior bar area (capacity 72 people), back dining room (capacity 40 people) of the building and the exterior rear patio area. Majority of events will be held outdoors on the patio and entertainment will be provided during our normal operating time of 11am to 9pm, as identified under the Conditional Use Permit. Limited to the patio space, music levels will be appropriate to ensure that our customers can conversate and not be uncomfortable with over-loud music. Music can be played in the far east corner of the patio, adjacent to the east commercial building. To help with sound mitigation, speakers and other equipment will be pointed in the direction of the south vacant lot behind the patio; away from the only surrounding residential neighbor. Scheduling the music to conclude earlier than 9pm, will allow an appropriate time for all outdoor activities to end and our patrons to move inside so that the patio can be close by 9pm. For indoor entertainment, small bands/solo artists may play after 9pm; where again music levels will be held at an acceptable level to ensure no disruption to the community.

Parking will be available in the traditional parking lot, the south vacant lot (permission already given by owner), the east neighbor's parking lot (permission already given by owner), Neumiller Woods Park across the street and the available parking spaces on 12th Street.

Security Plan –

Consistent with our normal operation, customers, and history, we do not anticipate any issues where additional security personnel (aside from myself and employees) will be necessary. If there are any unruly patrons, fights, or inexcusable disturbances, they will be asked to leave, escorted from the establishment and if necessary, authorities will be notified immediately. Any over intoxicated patron will be offered a SafeRide and/or Uber/Lyft, sponsored and paid for by the Kenosha Tavern League, to ensure a safe ride home.

Majority of our regular customers are over the legal drinking age, however consistent with our normal day-to-day business, any patron that appears to be under the legal drinking age will be ID'd as appropriate to ensure no false identification and/or underage drinking.

Site Map –

Please see attachment for the highlighted area of the outdoor patio. All indoor entertainment will utilize the bar and dining room space (if applicable).

Thank you for your review and consideration of this license,

Justin Traughber

Kenosha County

KENOSHA COUNTY WISCONSIN
Established 1850

N
W E
S

1 inch = 100 feet

THIS MAP IS NEITHER A LEGALLY RECORDED MAP NOR A SURVEY AND IS NOT INTENDED TO BE USED AS ONE. THIS DRAWING IS A COMPILATION OF RECORDS, DATA AND INFORMATION LOCATED IN VARIOUS STATE, COUNTY AND MUNICIPAL OFFICES AND OTHER SOURCES AFFECTING THE AREA SHOWN AND IS TO BE USED FOR REFERENCE PURPOSES ONLY. KENOSHA COUNTY IS NOT RESPONSIBLE FOR ANY INNACURACIES HEREIN CONTAINED. IF DISCREPANCIES ARE FOUND, PLEASE CONTACT KENOSHA COUNTY.

Source: Kenosha County Department of Planning and Development

Search

Search by Address:

House #:

Street:

Search Address

Search by Parcel #:

Parcel #: 82-4-222-162-0010

Example:
Village: 37-4-121-053-0405
City: 12-223-31-438-001

Search Parcel

Layers

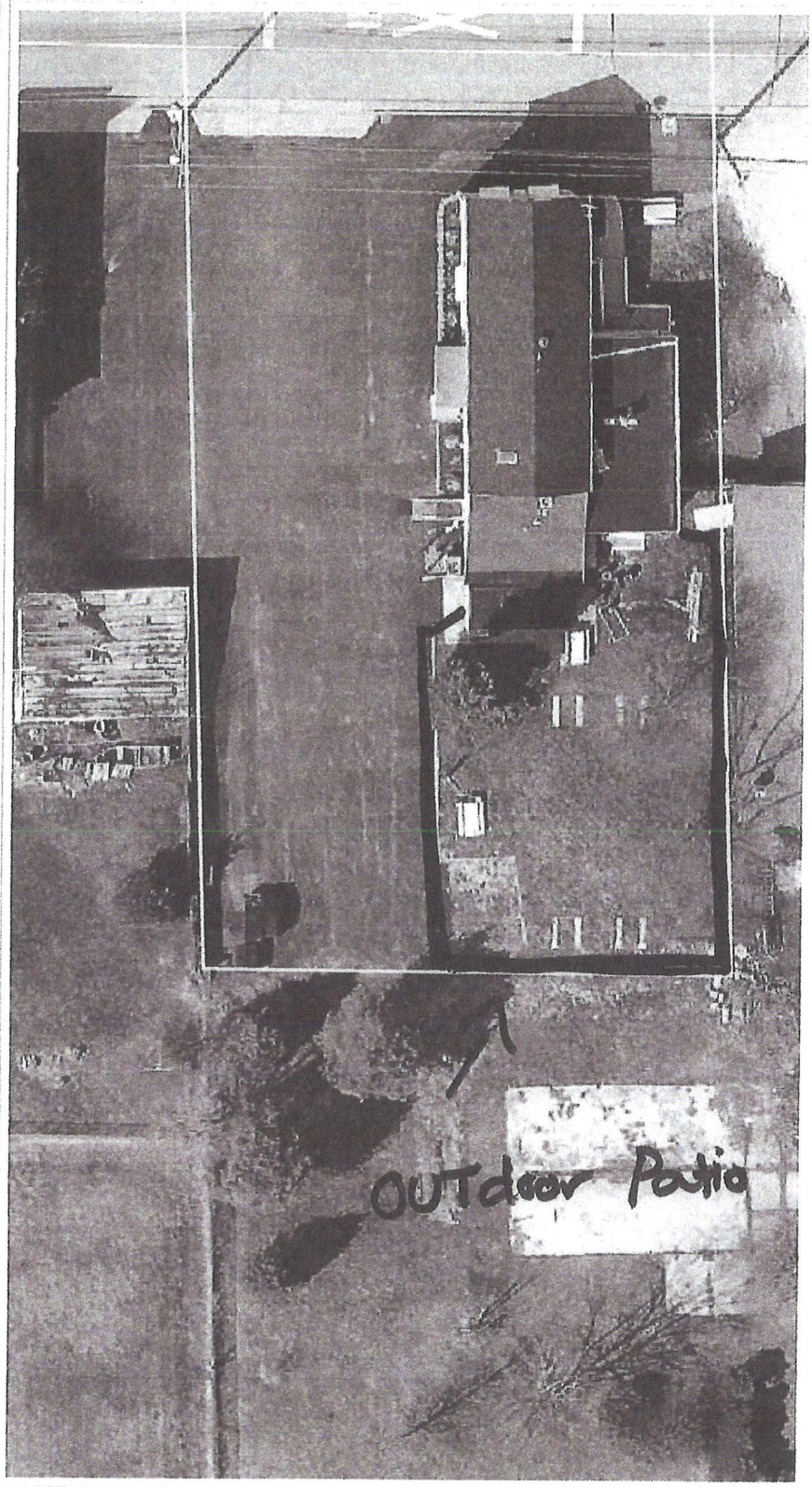
Advanced Tools

Graphics

Buffer

Legend

Results



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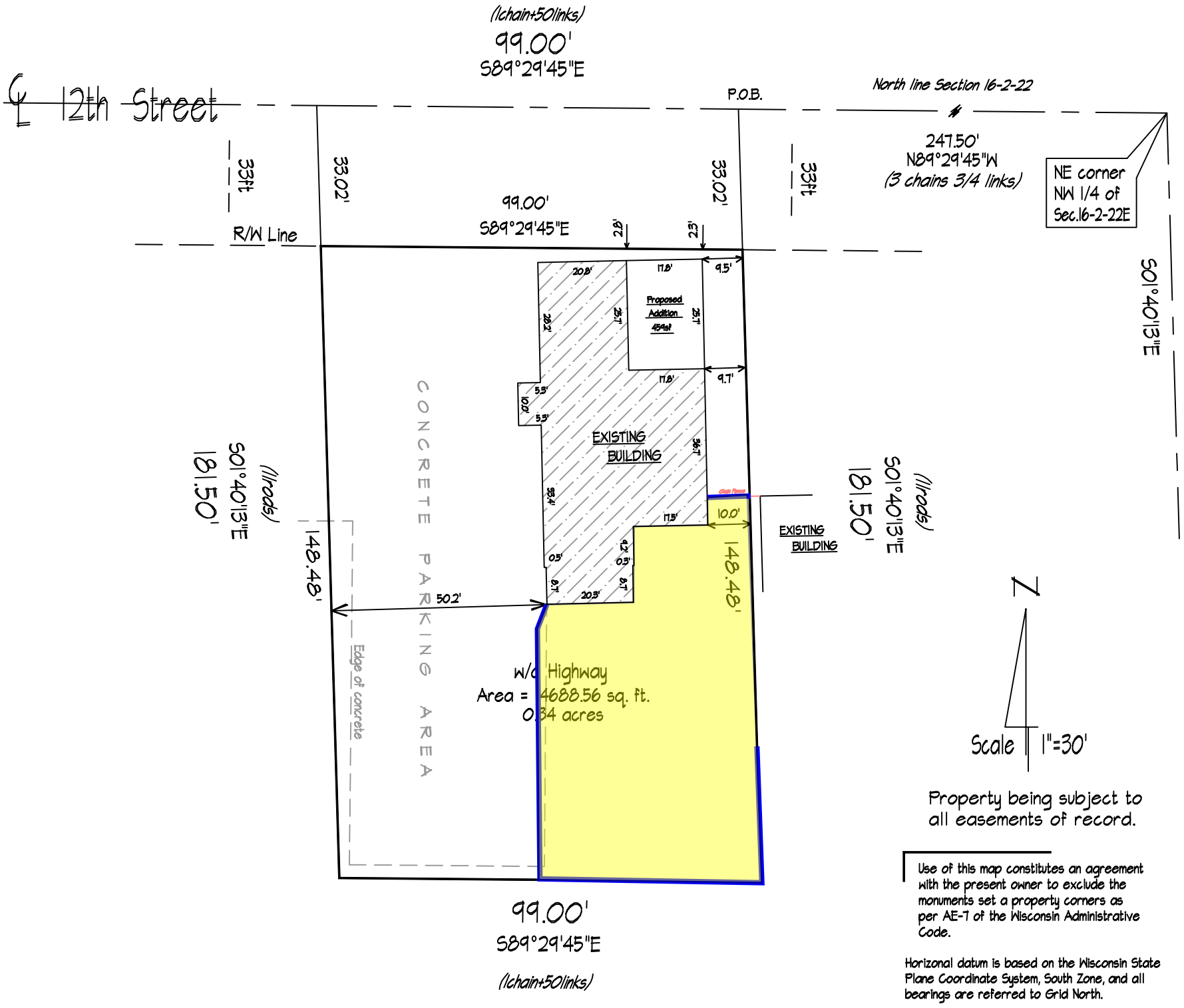
04/12/2022



Property being subject to all easements of record.

Use of this map constitutes an agreement with the present owner to exclude the monuments set a property corners as per AE-7 of the Wisconsin Administrative Code.

Horizonal datum is based on the Wisconsin State Plane Coordinate System, South Zone, and all bearings are referred to Grid North.

PLAT OF SURVEY OF.....

Part of the NE 1/4 of the NW 1/4 of Section 16, Town 2 North, 22 East being more particularly described as follows: Commencing in the Center of the highway between section 9 and 16 at the NW corner of land now formerly owned by Lafayette Cook; thence South along Cook's west line 11 rods; thence west 1 chain and 50 links; thence north 11 rods to the center of highway; thence east 1 chain and 50 links to the place of beginning. Said land lying and being in the Village of Somers, Kenosha County, State of Wisconsin.
REF: Doc. 1749567; Vol 1365 pg 562

Propberty is presenty zoned B-2

WISCONSIN
MICHAEL R. KOTLAREK
S-1677
WAUKESHA WI.
LAND SURVEYOR

This survey is correct to the best of my knowledge and belief.
October 25, 2016

BENCHMARK LAND SURVEY TECHNOLOGY
Full Land Surveying Services
3717 - 52nd Street, Kenosha, WI, 53144 (262)658-1686
N80W28352 Keesus Rd, Hartland, WI, 53029

Present Owner: Eclectic LLC
Survey Address: 8013 - 12th Street
Somers, WI. 53171

Parcel ID# 82-4-222-162-0010

CONDITIONAL USE PERMIT

Document Number | Document Title

Document #: **1910738**
Date: **2021-09-20** Time: **12:22 PM** Pages: **6**
Fee: **$30.00** County: **KENOSHA** State: **WI**
REGISTER OF DEEDS: **JOELLYN M. STORZ**

Effective Date September 13, 2021

The Village Board of the Village of Somers, Kenosha County, Wisconsin, hereby grants to the owners of the above referenced parcel, described with more particularity on the legal description attached hereto and incorporated herein by reference, the right for the owner, its lessees, agents or representatives, to utilize the premises known as 8013 12th Street, Kenosha, Wisconsin 53144, to operate on outside dining/recreation area, subject to the following conditions

Recording Area

Name and Return Address

Davison Law Office, Ltd
1207 55th Street
Kenosha, WI 53140

82-4-222-162-0010

Parcel Identification Number (PIN)

1 This Conditional Use Permit is subject to the application of Eclectic, LLC, on file in the office of the Clerk/Treasurer for the Village of Somers and stamped received by the office of Planning and Development on June 23, 2021, including a survey, which indicates an approximately 3,900 sq ft outdoor dining and recreational area surrounded by 4 foot railing enclosure on the southeastern portion of the property directly south of the proposed building and shall affect the premises described on the attached Exhibit "A" which is incorporated herein by reference

2 The applicant shall comply with all parking requirements outlined in the Village of Somers General Zoning and Shoreland/Floodplain Zoning Ordinance

3 The name of the restaurant shall be "J & M's Bar and Grill" There shall be no other business conducted on the premises covered by this conditional use permit without the advance written consent of the Village and Amendment of this permit

4 There shall be no outside storage of any kind

5 Any expansion of the conditional use granted herein shall occur only following review by and the consent of the Village Board

6 Any new signage shall be in accordance with the aforementioned zoning ordinance

7 There shall be no storage of gasoline, other petrohyrdocarbons or any other material classified as hazardous at the site or in any building located thereon

8 There shall be no outside amplified music speakers or live music

9 Refuse containers shall be screened from view from public rights-of-way, adjacent properties or eating area. Screening for waste receptacle shall consist of a solid opaque fence of similar color and materials of main building, or masonry, and shall be a minimum of six (6) feet and maximum of eight (8) feet tall Waste receptacles shall be enclosed on the fourth side with a gate to contain trash or other debris The gate side of the waste receptacle shall be oriented toward the parking lot facing Highway E and is required to be always closed except for servicing by the waste management contractor and site users Prior to the installation of such fencing, the owner shall submit to the Village for approval the description or sample of the fencing which is proposed to be installed Installation of the fencing shall be completed no later than December 31, 2021

10 Any change of the submitted plan of operation, change in use, and/or a proposed addition(s) to any existing principal building(s) or proposed new principal building(s), shall require the petitioner to reapply for a Conditional Use Permit to the Village Plan Commission for its review and approval

11 The undersigned shall fully cooperate with any law enforcement personnel performing inquiries or investigations Any substantial change or expansion of the submitted plan of operation (i e expansion of the proposed outside dining/recreation area) shall require the applicant to reapply for a Conditional Use Permit to the Village of Somers for its review and approval

12 There shall be no alcohol on any portion of the premises which is not licensed for alcohol consumption

13 The Village Building Inspector shall establish an occupancy permit based upon all of the available circumstances including, but not limited to, the overall space of the premises and such other factors as the Building Inspector may deem relevant

14 No person under the age of 21 shall be allowed to be in the alcohol licensed portion of the subject premises unless accompanied by their parent or by their spouse who is 21 years of age or older Security measures for the premises, if deemed necessary, to be approved by the Village Building Inspector and Kenosha County Sheriff's Department

15 The undersigned recognizes and acknowledges that the violation of this condition or the violation of the prohibition of alcohol on the outdoor dining/recreation portion of the premises shall, in and by itself, constitute grounds for the immediate revocation of this conditional use permit

16 The undersigned each recognize that in the event that a permit holder fails to comply with the conditions specified in this permit, the permit may be revoked by the Village Board upon ten (10) days notice to the permit holder(s) The permit holder(s) shall be entitled to a hearing before the Village Board on the question of revocation of the

conditional use permit and approval of the Village Board shall be required for the reinstatement of any conditional use permit

17 It is the responsibility of the petitioner to assure and guarantee that the above stated conditions are fully complied with If property ownership and/or tenant shall happen to change, then it shall be the responsibility of the person(s) that signed these conditions to notify the new owner and/or tenant of all above stated conditions of approval

18 The undersigned agrees to limit the hours of operations of the outdoor dining/recreation area of the premises from 11 00 a m until 9 00 p m

19 The area to be utilized for outdoor dining/recreation area shall be as depicted on the attached Exhibit "B" which is incorporated by reference This area shall be completely enclosed by a fence and shall be accessible only from the interior of the licensed premises Provisions shall be made for an emergency exit from the enclosed area, which access shall be kept closed at all times other than in an emergency The fencing enclosing this area as of the date of this permit complies with this requirement

20 It is the responsibility of the petitioner to assure and guarantee that the above stated conditions are fully complied with Any deviation from the approved plans and conditions shall result in the issuance of a citation

Dated at Somers, Wisconsin, this 13 day of September, 2021

OWNER
Eclectic, LLC

By _____
Printed Name Justin Traughber, its owner

STATE OF WISCONSIN)
) SS
COUNTY OF KENOSHA)

Personally came before me this 13th day of September, 2021, the above named Justin Traughber, on behalf of Eclectic, LLC, to me known to be the person who executed the foregoing instrument and acknowledged the same

MARY A. COLE NOTARY PUBLIC STATE OF WISCONSIN

Mary A Cole
Printed Name Mary A Cole
Notary Public, Kenosha County, WI
My commission expires 6/11/22

TENANT

By _____
Printed Name Justin Traughber, as tenant

STATE OF Wisconsin)
) SS
COUNTY OF Kenosha)

Personally came before me this 13th day of September, 2021, the above named Justin Traughber, on behalf of Eclecte, LLC, to me known to be the person who executed the foregoing instrument and acknowledged the same

MARY A. COLE NOTARY PUBLIC STATE OF WISCONSIN

_____
Printed Name Mary A. Cole
Notary Public, Kenosha County, WI
My Commission expires 6/11/22

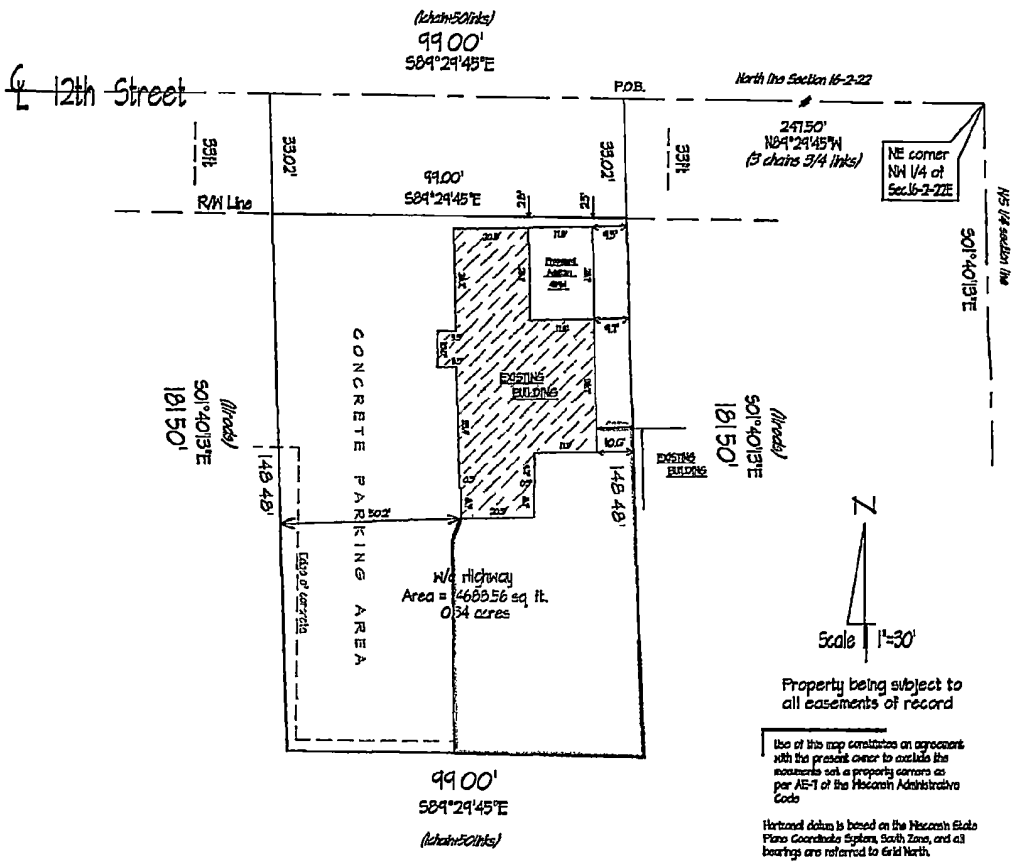
This instrument was drafted by

Attorney Jeffrey J Davison
DAVISON LAW OFFICE, LTD

LEGAL DESCRIPTION:

Part of Section 16, Town 2 North, Range 22 East of the Fourth Principal Meridian and described as Commencing in the center of the highway 3 chains and 3/4th of a link West of the 1/4 stake between Sections 9 and 16 in the Northwest corner of land now and formerly owned by Lafayette Cook, thence South along Cook's West line 11 rods, thence West 1 chain and 50 links, thence North 11 rods to the center of highway, thence East 1 chain and 50 links to the place of beginning, lying and being in the Village of Somers, County of Kenosha and State of Wisconsin

Tax Key No 82-4-222-162-0010



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REF Doc 1149567, Vol 1365 pg 562

Propberty is presenty zoned B-2

WISCONSIN
MICHAEL R
KOTLAREK
S-1677
WAUKESHA
WI.
LAND SURVEYOR

This survey is correct to the best of my knowledge and belief
October 25, 2016

BENCHMARK LAND SURVEY TECHNOLOGY
Full Land Surveying Services
5117 - 52nd Street, Kenosha WI, 53144 (262)658-1686
N80W28952 Koesus Rd, Hartland, WI 53029

Present Owner: Eclectic LLC
Survey Address 6013 - 12th Street
Somers, WI 53171

Parcel ID# 82-4-222-162-0010

COUNTY OF KENOSHA

Division of Planning & Development

Andy M. Buehler, Director
Division of Planning & Development
19600 75th Street, Suite 185-3
Bristol, WI 53104-9772
(262) 857-1895

TO: **Village of Somers Plan Commission**

FROM: **Luke Godshall, Senior Land Use Planner**

RPT DATE: **6-30-22**

MTG DATE: **7-11-22**

APPLN DATE: **5-26-22 (revised plans submitted 6-1-22)**

RE: **Stream Industrial Development**

PROJECT/SITE INFO:

1.	Petitioner/Agent:	Joe Podge, Stream Realty
2.	Property Owner(s):	Carol F Grohs Trust/Delmar R and Jeanne V Golbricht Trust Deborah K Kahana & John P Parmentier Michael C Sarauer
3.	Location/Address:	10524, 10610, 10812 Burlington Rd.
4.	Tax key Number(s):	82-4-222-194-0101, 82-4-222-301-0030, 82-4-222-301-0040, 82-4-222-301-0050
5.	Area:	approximately 90 acres
6.	Existing Zoning:	A-1 Agricultural Preservation Dist., A-2 General Agricultural Dist., R-2 Suburban Single-Family Residential Dist., R-3 Urban Single-Family Residential Dist.
7.	Proposed Zoning:	BP-1 Business Park Dist., PUD Planned Unit Development Overlay Dist.
8.	Existing Land Use:	Business/Industrial Park, Other Conservancy Land to be Preserved, Secondary Environmental Corridor
9.	Proposed Land Use:	no change proposed

PROJECT OVERVIEW:

The Petitioner proposes a phased development of the above-referenced parcels with a total of three industrial warehouse buildings of 612,252 sf (phase 1), 154,800 sf and 167,700 sf. with associated parking, loading, stormwater management, landscaping, and lighting. The Petitioner is requesting approval of a rezoning into the BP-1 Business Park District w/ PUD Planned Unit Development Overlay District, as well as approval of the overall site plan & building fenestration.

Because the project site consists of four (4) separate tax parcel numbers, a combination of the parcels will need to occur prior to commencing construction. This can be done by Certified Survey Map (CSM), or through the recording a parcel combination affidavit with the Kenosha County Register of Deeds. The preferred method would be to combine by CSM, which can also be used to dedicate the proposed public road.

This project will require approval from the City of Kenosha for an Airport Site Plan review, as the property is located within a City of Kenosha air zone airport overlay.

PLANNER COMMENTS:

The Petitioner has submitted comprehensive plans for this project including overall site plans, parking, landscaping, site lighting and building/architectural plans. Based on review of these plans, the project has been

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Division of Planning & Development
19600 75th Street, Suite 185-3
Bristol, WI 53104-9772
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designed to meet the requirements of the Village zoning ordinance, with the exception of two deviations the Petitioner has requested as part of a PUD overlay (discussed below).

BUILDING PLANS:
The Petitioner proposes to construct a 612,252 sf industrial warehouse building of 46.5 feet in height on the southern end of the site as part of the first phase of the development. A future phase of the project would consist of two smaller buildings of 154,800 sf and 167,700 sf (each at 42.5 feet in height) on the northern end of the site. Buildings in the BP-1 district are permitted up to 60 feet in height. Based on a review of the submitted plans, the proposed buildings conform to the Village zoning ordinance in terms of required setbacks and height.

PUD:
The Petitioner is requesting a PUD Planned Unit Developer Overlay District for this project. While most other elements of the project conform to zoning ordinance requirements, in their submitted narrative the Petitioner has indicated they are seeking the two (2) deviations from the following sections of the Village ordinance:

ZN 3.06(2)(d) – to allow the loading area dimensions for design vehicles WB-50 and above to have the following dimensions:

- Dock Angle (a) = 90 degrees (90 degrees minimum required by ordinance)
- Clearance in Feet (D) = 55-60 (55 feet minimum required by ordinance)
- Apron Space in Feet (A) = 70-75 (77 feet minimum required by ordinance)
- Total Offset in Feet (T) = 130 (132 feet minimum required by ordinance)

ZN 3.06(3)(g) – to allow private driveways to be up to seventy (70) feet in width at the property line to account for turning radius of pavements and curbs (maximum of 35 feet allowed by ordinance).

These requests are similar to those made for the Darby Farms South and Becknell Industrial projects.

PARKING:
The submitted plans indicate a total of 685 automobile parking spaces being provided for the 3 buildings. This provides for 1 space per 1365 sq. ft, which exceeds the zoning ordinance requirement of providing 1 space per 2,000 square feet for a warehousing/distribution center use. Automobile parking spaces are shown meet the minimum size requirement (9'x18'), drive aisles between parking spaces are at least 24' in width, and all paved parking and drive areas meet the required 20' setback from street rights-of-way. An additional 168 spaces sized 12'x55' are provided for trucks (108 for Building 1, 16 for Building 2 and 44 for Building 3).

ACCESS:
Access into the site is proposed via two access points onto CTH S (Burlington Road). The eastern access is proposed as an 80-foot public road that would run north along the east lot line terminating at the northern end of the project site. The western access onto CTH S is a private entrance/exit drive (non-public road).

Per Kenosha County Division of Highways review of the submitted plans, the proposed access points onto CTH S are situated along an access restricted area of the highway and will be limited to right-in/right-out access only.

LANDSCAPING:
The submitted landscaping plan (dated March 17, 2022 by Pinnacle Engineering Group) indicates a wide variety of deciduous, evergreen and ornamental trees, shrubs, ornamental grasses and perennials to be installed

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throughout the site. The site will contain approximately 70% open space[1], well above the minimum 25% open space that is required by ordinance within the BP-1 zoning district.

It should be noted that several residential properties lie to the east of the proposed development site. A strong emphasis should be made on ensuring that the view of the 56 dock doors and 54 truck parking stalls on the east side of Building 1 are effectively shielded/screened from view of these residential properties through the use of landscaping, berms and grading. It does appear by looking at the submitted grading plan that the dock doors will be situated at an elevation of 719.5', which is approximately anywhere between 7-18 feet lower than the highest elevations on the properties to the east of Building 1. It may be useful for the Petitioner to provide a visual rendering depicting what the view of the east side of Building 1 would look like as viewed from the eastern properties.

PHOTOMETRICS:
The submitted site photometrics plan (dated March 23, 2022 by Enterprise Lighting & Control) indicates compliance with Village ordinance standards. The photometrics plan indicates that light intensity will does not exceed 0.5 footcandles at all property lines and that all proposed pole-mounted and building-mounted lighting fixtures are proposed to be full cut-off type fixtures.

STAFF RECOMMENDATION:
Should the Plan Commission choose to recommend approval of this project, staff would recommend the following conditions:

1. That the PUD approval include the following deviations from Village zoning ordinance standards:
   a. ZN 3.06(2)(d) – to allow the loading area dimensions for design vehicles WB-50 and above to have the following dimensions:

      Dock Angle (a) = 90 degrees (90 degrees minimum required by ordinance)
      Clearance in Feet (D) = 55-60 (55 feet minimum required by ordinance)
      Apron Space in Feet (A) = 70-75 (77 feet minimum required by ordinance)
      Total Offset in Feet (T) = 130 (132 feet minimum required by ordinance)

   b. ZN 3.06(3)(g) – to allow private driveways to be up to seventy (70) feet in width at the property line to account for turning radius of pavements and curbs (maximum of 35 feet allowed by ordinance).
2. Subject to a Certified Survey Map being submitted, approved and recorded to combine the existing four (4) individual tax parcel numbers (or to reconfigure into individual Lots for the proposed buildings) and to dedicate the proposed public street to the Village of Somers.
3. Subject to the east-facing dock doors and truck parking associated with Building 1 being screened/shielded from view of residential properties located to the east of the project site.
4. Subject to obtaining necessary approvals/permits from the Kenosha County Division of Highways for the construction of proposed access points onto CTH S (Burlington Road).

[1] *Under the Village of Somers zoning ordinance, "Open Space" is defined as: "That ground area and the space above which is unimpeded from the ground to the sky by any main structure except that the area may be used for landscaping, recreational purposes such as for swimming, shuffleboard, tennis, etc. Parking lots and storage areas for vehicles and material shall be considered as open space."*

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5. Subject to receiving City of Kenosha airport site plan review approval.
6. Subject to receiving any necessary stormwater plan approval by the Village of Somers engineer.
7. Subject to the implementation of a Development Agreement between the Petitioner and the Village of Somers.

Petition for Rezoning & PUD

The applicant is hereby requesting approval of a Planned Unit Development Overlay District for approximately 85 acres, comprised of 4 parcels, located along the Highway S, generally known as Burlington Road, east of the East Frontage Road along the Kilbourn Road Ditch. The underlying zoning is currently A-1, A-2, R-2, and R-3 and it is being requested to be rezoned with the PUD to BP-1. The BP-1 zoning is consistent with the adopted future land use plan. Intended development is industrial warehouse facilities with targeting users being those types of allowable uses in BP-1 district.

The PUD overlay is being requested to support a multiphase development approach for the property. Phase 1 of the project will include the immediate development of the southern industrial facility along with construction of a public road. The remaining north acreage will be developed in the future under the guidelines of the pending development agreement and current Village of Somers zoning and building codes at the time of development. The PUD will also allow for individual parcels to be created as needed under future CSMs and site plan reviews.

For reference, the initial development is planned to include an approximate 600,000 SF speculative industrial warehouse & distribution facility on the south with a proposed public road and utilities on the east with a new intersection with Highway S at the southeast corner of the plan. The enclosed master site plan for the 85 acres depicts the current planned layout, with 2 future buildings on the north. This is one possible layout for that property as the buildings could be combined for a single secondary building. The PUD will provide for the requirements and guidance for the future development whether it follows this plan or changes later.

Market conditions, specific user needs, and other factors will drive the timing and final layout of the future phase development. Extension of utilities, stormwater management, traffic control and other infrastructure plans are considered and described in more details in the submitted plans for Phase 1 of the project.

Items pertinent to the Village Zoning Ordinance, Section ZN 4.08(2)(h)1 PUD Overlay District associated with this project are outlined below coinciding with the zoning sections.

a. Industrial PUD area proposed is 85 acres. All Phases open space, outside of building and impervious surface improvements, are proposed meet or exceed the required 25% minimum open space requirement.
b. The total estimated value of the development under full built conditions is $80,000,000 to $110,0000 depending on the final interior buildouts.
c. A park association will be established to provide for the maintenance and upkeep of improvements associated with the development as needed for common areas, shared utilities, shared private drives and any shared drainage and stormwater.
d. Deviations from the village standards are limited for the development as the intent it to comply with the underlying BP-1 zoning and other current Village building and zoning codes, other than those items outlined below.
    1. It is requested to allow loading area for WB-50 and above in Section ZN 3.06(2)(d) to be as follows for dimensions noted in the Loading Standards table.
        - Dock Angle (a) = 90 degrees
        - Clearance in Feet (D) = 55-60

- Apron Space in Feet (A) = 70-75
- Total Offset in Feet (T) = 130

2. It is requested to allow private drive ways to be forty (40) feet in width on the sites, with widths up to seventy (70) feet in width at the property line when accounting for turning radius of pavements and curbs. (Section ZN 3.06(3)(g))

e. The expected date of commencement for Phase 1 is Spring of 2023. Phase 2 construction is expected to start within 3 to 5 years following PUD approval and Development Agreement execution.

f. No modifications to the floodplain protection and wetland protection measures of the ordinance are requested.

A concept color overall development site plan has been provided, as well as our full engineered civil site plans for review and consideration of this request.

VILLAGE OF SOMERS
Department of Planning & Development

VILLAGE OF SOMERS REZONING PROCEDURES

☐ **1.** Contact the Kenosha County Department of Planning & Development and check with staff to determine if your proposed zoning change meets the requirements of the Multi-Jurisdictional Comprehensive Plan for Kenosha County: 2035, Village of Somers General Zoning and Shoreland/Floodplain Zoning Ordinance and the Village of Somers Land Division and Platting Control Ordinance. Note: If the proposed rezoning is part of a proposed land division see the Certified Survey Map Information and Procedures.

☐ **2.** Contact the Kenosha County Department of Planning & Development and schedule a pre-conference meeting, which is required for all rezoning requests.

Meeting Date: 11/23/2021

☐ **3.** Contact the Village of Somers to determine if your rezoning petition requires concept review by the Village Plan Commission. If so, contact the Village of Somers clerk to schedule a concept meeting with the Village Plan Commission.

Meeting Date: 11/23/2021

☐ **4.** Complete and submit to the Kenosha County Department of Planning & Development the Village of Somers Rezoning Application by the filing deadline.

Filing Deadline: 05/26/2022

☐ **5.** Upon submission you will be given two copies of the date-stamped application. Submit 10 copies of the date-stamped application to the Village of Somers clerk for placement on the agendas of the Village of Somers Plan Commission and the Village of Somers Board and keep one for your records.

☐ **7.** Attend the Village Plan Commission and the Village Board meetings. **NOTE:** You must attend or the Village will not be able to act on your request. At these meetings you will be asked to brief the committee on your request.

Village Plan Commission meeting date (tentative): 07/11/2022

Village Board meeting date (tentative): 07/26/22 & 08/10/2022

☐ **8.** Village clerk will provide written notice of final action to property owner/applicant.

IMPORTANT TELEPHONE NUMBERS

Kenosha County Center
Department of Public Works & Development Services
19600 - 75th Street, Suite 185-3
Bristol, Wisconsin 53104-9772

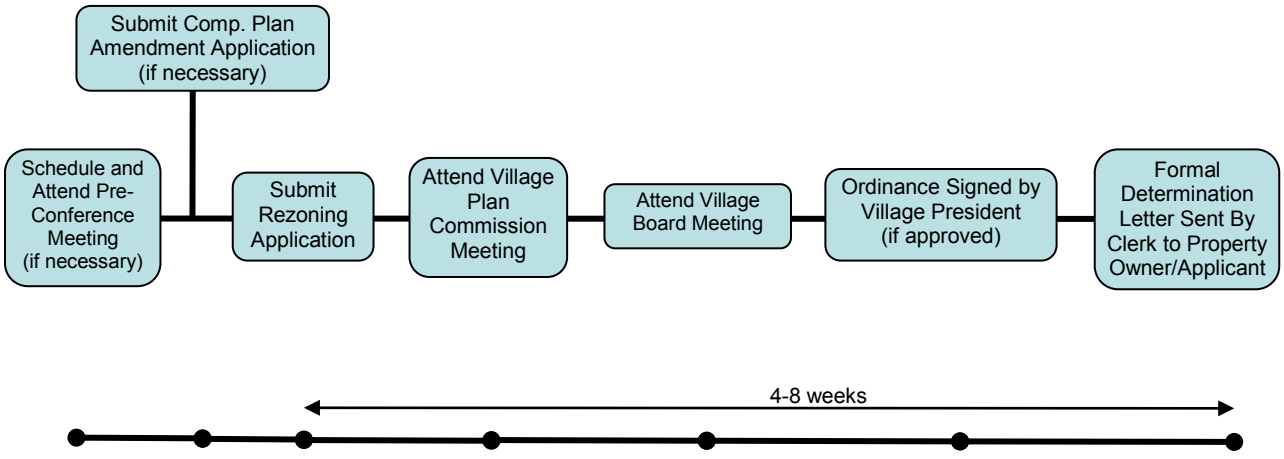
Division of Planning & Development (including Sanitation & Land Conservation) **857-1895**
Facsimile # 857-1920

Public Works Division of Highways 857-1870

Administration Building
Division of Land Information 653-2622

Village of Somers 859-2822
Wisconsin Department of Natural Resources - Sturtevant Office 884-2300
Wisconsin Department of Transportation - Waukesha Office 548-8722

Rezoning Procedure Timeline



For Reference Purposes

VILLAGE OF SOMERS
Department of Planning and Development

REZONING APPLICATION

(a) Property Owner's Name:
See Letter of Agent Status

Print Name: _____ Signature: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____ E-mail (optional): _____

Note: Unless the property owner's signature can be obtained in the above space, a letter of agent status **signed** by the legal property owner **must** be submitted if you are a tenant, leaseholder, or authorized agent representing the legal owner, allowing you to act on their behalf.

(b) Agent's Name (if applicable):

Print Name: Joe Podge Signature: _____

Business Name: Stream Realty

Mailing Address: 226 N. Morgan Street Suite 500

City: Chicago State: IL Zip: 60607

Phone Number: 773-355-9520 E-mail (optional): joe.podge@streamrealty.com

(c) Tax key number(s) of property to be rezoned:

82-4-222-301-0050 82-2-222-301-0040

82-4-222-194-0101

82-4-222-301-0030

Property Address of property to be rezoned:
10812, 10610 & 10524 Burlington Rd

(d) Proposed use (a statement of the type, extent, area, etc. of any development project):

Proposed Industrial Park - Class A Grade features.

(e) Check the box next to any and all of the **existing** zoning district classifications present on the subject property:

☑ A-1 Agricultural Preservation District	☐ B-1 Neighborhood Business District
☑ A-2 General Agricultural District	☐ B-2 Community Business District
☐ A-3 Agricultural Related Manufacturing, Warehousing and Marketing District	☐ B-3 Highway Business District
☐ A-4 Agricultural Land Holding District	☐ B-4 Planned Business District
☐ AE-1 Agricultural Equestrian Cluster Single-Family District	☐ B-5 Wholesale Trade and Warehousing District
☐ R-1 Rural Residential District	☐ BP-1 Business Park District
☑ R-2 Suburban Single-Family Residential District	☐ B-94 Interstate Highway 94 Special Use Business District
☑ R-3 Urban Single-Family Residential District	☐ M-1 Limited Manufacturing District
☐ R-4 Urban Single-Family Residential District	☐ M-2 Heavy Manufacturing District
☐ R-4.5 Urban Single-Family Residential District	☐ M-3 Mineral Extraction District
☐ R-5 Urban Single-Family Residential District	☐ M-4 Sanitary Landfill and Hazardous Waste Disposal District
☐ R-6 Urban Single-Family Residential District	☐ I-1 Institutional District
☐ R-7 Suburban Two-Family and Three-Family Residential District	☐ PR-1 Park-Recreational District
☐ R-8 Urban Two-Family Residential District	☐ C-1 Lowland Resource Conservancy District
☐ R-9 Multiple-Family Residential District	☐ C-2 Upland Resource Conservancy District
☐ R-10 Multiple-Family Residential District	☐ FPO Floodplain Overlay District
☐ R-11 Multiple-Family Residential District	☐ PUD Planned Unit Development Overlay District
☐ R-12 Mobile Home/Manufactured Home Park-Subdivision District	☐ AO Airport Overlay District
	☐ RC Rural Cluster Development Overlay District

(f) Check the box next to any and all of the **proposed** zoning district classifications proposed for the subject property:

☐ A-1 Agricultural Preservation District	☐ B-1 Neighborhood Business District
☐ A-2 General Agricultural District	☐ B-2 Community Business District
☐ A-3 Agricultural Related Manufacturing, Warehousing and Marketing District	☐ B-3 Highway Business District
☐ A-4 Agricultural Land Holding District	☐ B-4 Planned Business District
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☐ R-3 Urban Single-Family Residential District	☐ M-1 Limited Manufacturing District
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☐ R-10 Multiple-Family Residential District	☐ FPO Floodplain Overlay District
☐ R-11 Multiple-Family Residential District	☑ PUD Planned Unit Development Overlay District
☐ R-12 Mobile Home/Manufactured Home Park-Subdivision District	☐ AO Airport Overlay District
	RC Rural Cluster Development Overlay District

(g) Your request must be consistent with the existing planned land use category as shown on Map 65 of the adopted "Multi-Jurisdictional Comprehensive Plan for Kenosha County: 2035".

The existing planned land use category for the subject property is:

☐ Farmland Protection	☐ Governmental and Institutional
☐ General Agricultural and Open Land	☐ Park and Recreational
☐ Rural-Density Residential	☐ Street and Highway Right-of-Way
☐ Agricultural and Rural Density Residential	☐ Other Transportation, Communication, and Utility
☐ Suburban-Density Residential	☐ Extractive
☐ Medium-Density Residential	☐ Landfill
☐ High-Density Residential	☐ Primary Environmental Corridor
☐ Mixed Use	☐ Secondary Environmental Corridor
☐ Commercial	☐ Isolated Natural Resource Area
☐ Office/Professional Services	☐ Other Conservancy Land to be Preserved
☑ Industrial	☐ Nonfarmed Wetland
☑ Business/Industrial Park	☐ Surface Water

(h) Attach a plot plan or survey plat of property to be rezoned (showing location, dimensions, zoning of adjacent properties, existing uses and buildings of adjacent properties, floodways and floodplains)—drawn to scale.

(i) The Village of Somers Department of Planning and Development may ask for additional information.

(j) The name of the County Supervisor of the district wherein the property is located (District Map):

Supervisory District Number: 19 County Board Supervisor: Sandra Beth

(k) The fee specified in Section 12.05-8 of this ordinance.

Request for Rezoning Petition (payable to "Kenosha County").....$1,450.00

(For other fees see the Fee Schedule)

Note: Agricultural Use Conversion Charge

The use value assessment system values agricultural land based on the income that would be generated from its rental for agricultural use rather than its fair market value. When a person converts agricultural land to a non-agricultural use (e.g. residential or commercial development), that person may owe a conversion charge. To obtain more information about the use value law or conversion charge, contact the Wisconsin Department of Revenue's Equalization Section at 608-266-2149 or visit http://www.revenue.wi.gov/faqs/slf/useassmt.html.

Note that the act of rezoning property from an agricultural zoning district to a non-agricultural zoning district does not necessarily trigger the agricultural use conversion charge. It is when the use of the property changes from agricultural that the conversion charge is assessed.

VILLAGE OF SOMERS
Department of Planning & Development

VILLAGE OF SOMERS REZONING PROCEDURES

☐ **1.** Contact the Kenosha County Department of Planning & Development and check with staff to determine if your proposed zoning change meets the requirements of the Multi-Jurisdictional Comprehensive Plan for Kenosha County: 2035, Village of Somers General Zoning and Shoreland/Floodplain Zoning Ordinance and the Village of Somers Land Division and Platting Control Ordinance. Note: If the proposed rezoning is part of a proposed land division see the Certified Survey Map Information and Procedures.

☐ **2.** Contact the Kenosha County Department of Planning & Development and schedule a pre-conference meeting, which is required for all rezoning requests.

Meeting Date: 11/23/2021

☐ **3.** Contact the Village of Somers to determine if your rezoning petition requires concept review by the Village Plan Commission. If so, contact the Village of Somers clerk to schedule a concept meeting with the Village Plan Commission.

Meeting Date: 11/23/2021

☐ **4.** Complete and submit to the Kenosha County Department of Planning & Development the Village of Somers Rezoning Application by the filing deadline.

Filing Deadline: 05/26/2022

☐ **5.** Upon submission you will be given two copies of the date-stamped application. Submit 10 copies of the date-stamped application to the Village of Somers clerk for placement on the agendas of the Village of Somers Plan Commission and the Village of Somers Board and keep one for your records.

☐ **7.** Attend the Village Plan Commission and the Village Board meetings. **NOTE:** You must attend or the Village will not be able to act on your request. At these meetings you will be asked to brief the committee on your request.

Village Plan Commission meeting date (tentative): 07/11/2022

Village Board meeting date (tentative): 07/26/22 & 08/10/2022

☐ **8.** Village clerk will provide written notice of final action to property owner/applicant.

IMPORTANT TELEPHONE NUMBERS

Kenosha County Center
Department of Public Works & Development Services
19600 - 75th Street, Suite 185-3
Bristol, Wisconsin 53104-9772

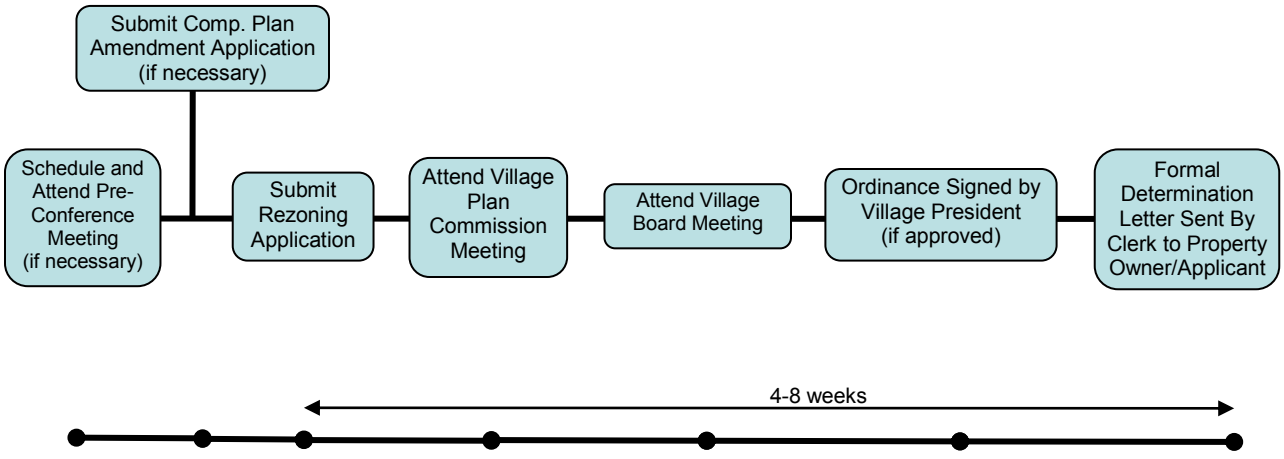
Division of Planning & Development (including Sanitation & Land Conservation) **857-1895**
Facsimile # 857-1920

Public Works Division of Highways 857-1870

Administration Building
Division of Land Information 653-2622

Village of Somers 859-2822
Wisconsin Department of Natural Resources - Sturtevant Office 884-2300
Wisconsin Department of Transportation - Waukesha Office 548-8722

Rezoning Procedure Timeline



For Reference Purposes

VILLAGE OF SOMERS
Department of Planning and Development

REZONING APPLICATION

(a) Property Owner's Name:
See Letter of Agent Status

Print Name: _____ Signature: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____ E-mail (optional): _____

Note: Unless the property owner's signature can be obtained in the above space, a letter of agent status **signed** by the legal property owner **must** be submitted if you are a tenant, leaseholder, or authorized agent representing the legal owner, allowing you to act on their behalf.

(b) Agent's Name (if applicable):

Print Name: Joe Podge Signature: _____

Business Name: Stream Realty

Mailing Address: 226 N. Morgan Street Suite 500

City: Chicago State: IL Zip: 60607

Phone Number: 773-355-9520 E-mail (optional): joe.podge@streamrealty.com

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(d) Proposed use (a statement of the type, extent, area, etc. of any development project):

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(e) Check the box next to any and all of the **existing** zoning district classifications present on the subject property:

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☐ R-1 Rural Residential District	☐ BP-1 Business Park District
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Request for Rezoning Petition (payable to "Kenosha County").....$1,450.00

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TAX KEY
#82-4-222-191-0200
UNPLATTED LANDS
OWNER: DARBY
LANE FARMS

TAX KEY
#82-4-222-192-0300
UNPLATTED LANDS
OWNER: DARBY
LANE FARMS

TAX KEY
#82-4-222-202-0301
UNPLATTED LANDS
OWNER: KENOSHA
FARM LLC

UNPLATTED LANDS
TAX KEY
#82-4-222-203-0210
OWNER: GITZLAFF

UNPLATTED LANDS
TAX KEY
#82-4-222-203-0200
OWNER: GITZLAFF

UNPLATTED LANDS
TAX KEY
#82-4-222-203-0302
OWNER: LANDGRAF

UNPLATTED LANDS
TAX KEY
#82-4-222-203-0311
OWNER: WISNEFSKI

TAX KEY
#82-4-222-203-0321
UNPLATTED LANDS
OWNER: HAWKINS

TAX KEY
#82-4-222-203-0325
UNPLATTED LANDS
OWNER: ANDERSON

TAX KEY
#82-4-222-193-0100
UNPLATTED LANDS
OWNER: KWIK TRIP INC

TAX KEY
#82-4-222-194-0200
UNPLATTED LANDS
OWNER: SOMERS HIGHLAND
INDUSTRIAL, LLC

TAX KEY
#82-4-222-193-0105
UNPLATTED LANDS
OWNER:
JAWORSKI

TAX KEY
#82-4-222-193-0110
UNPLATTED LANDS
OWNER:
MENAREK

TAX KEY
#82-4-222-194-0250
UNPLATTED LANDS
OWNER: DARBY
LANE FARMS

UNPLATTED
LANDS
TAX KEY #
82-4-222
-301-0015
OWNER:
ZIERZ

Parcel #:	82-4-222-194-0101
Acres:	83.07
Muni:	181
Name:	CAROL F GROSS TRUST
Address:	BURLINGTON RD
Info:	Property Inquiry
	Zoom to Feature

Parcel #:	82-4-222-301-0930
Acres:	1.58
Muni:	182
Name:	CAROL F GROSS TRUST
Address:	10511 BURLINGTON RD
Info:	Property Inquiry
	Zoom to Feature

Parcel #:	82-4-222-301-0940
Acres:	4.95
Muni:	182
Name:	DEBORAH K KAHANA
Address:	10610 BURLINGTON RD
Info:	Property Inquiry
	Zoom to Feature

Parcel #:	82-4-222-301-9830
Acres:	0.86
Muni:	182
Name:	MICHAEL C SARAUER
Address:	10514 BURLINGTON RD
Info:	Property Inquiry
	Zoom to Feature

VILLAGE OF SOMERS
TOWN OF SOMERS
CITY OF KENOSHA

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 400' 800'

3/17/2022 8:04 PM

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SOMERS BUSINESS PARK | PROPOSED ZONING MAP

03/17/2022

PINNACLE ENGINEERING GROUP
20725 WATERTOWN ROAD | SUITE 100 | BROOKFIELD, WI 53186 | WWW.PINNACLE-ENGR.COM |

PLAN | DESIGN | DELIVER **PEG JOB#** 2360.00

REZONE TO PUD

TAX KEY #82-4-222-191-0200 UNPLATTED LANDS OWNER: DARBY LANE FARMS

TAX KEY #82-4-222-192-0300 UNPLATTED LANDS OWNER: DARBY LANE FARMS

TAX KEY #82-4-222-202-0301 UNPLATTED LANDS OWNER: KENOSHA FARM LLC

TAX KEY #82-4-222-193-0100 UNPLATTED LANDS OWNER: KWIK TRIP INC

TAX KEY #82-4-222-194-0200 UNPLATTED LANDS OWNER: SOMERS HIGHLAND INDUSTRIAL, LLC

TAX KEY #82-4-222-193-0105 UNPLATTED LANDS OWNER: JAWORSKI

TAX KEY #82-4-222-193-0110 UNPLATTED LANDS OWNER: MENAREK

TAX KEY #82-4-222-194-0250 UNPLATTED LANDS OWNER: DARBY LANE FARMS

UNPLATTED LANDS TAX KEY #82-4-222-203-0210 OWNER: GITZLAFF

UNPLATTED LANDS TAX KEY #82-4-222-203-0200 OWNER: GITZLAFF

UNPLATTED LANDS TAX KEY #82-4-222-203-0302 OWNER: LANDGRAF

UNPLATTED LANDS TAX KEY #82-4-222-203-0311 OWNER: WISNEFSKI

TAX KEY #82-4-222-203-0321 UNPLATTED LANDS OWNER: HAWKINS

TAX KEY #82-4-222-203-0325 UNPLATTED LANDS OWNER: ANDERSON

UNPLATTED LANDS TAX KEY # 82-4-222 -301-0015 OWNER: ZIERZ

Parcel #:	82-4-222-194-0101
Acres:	83.07
Mmi:	183
Name:	CAROL F GROSS TRUST
Address:	BURLINGTON RD
Info:	Property Inquiry; Zoom to Feature

Parcel #:	82-4-222-301-0930
Acres:	1.58
Mmi:	182
Name:	CAROL F GROSS TRUST
Address:	10511 BURLINGTON RD
Info:	Property Inquiry; Zoom to Feature

Parcel #:	82-4-222-301-0940
Acres:	4.95
Mmi:	182
Name:	DEBORAH K KAHANA
Address:	10610 BURLINGTON RD
Info:	Property Inquiry; Zoom to Feature

Parcel #:	82-4-222-301-0630
Acres:	0.96
Mmi:	182
Name:	MICHAEL C SARAUER
Address:	10654 BURLINGTON RD
Info:	Property Inquiry; Zoom to Feature

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 400' 800'

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SOMERS BUSINESS PARK | PROPOSED ZONING MAP

03/17/2022

PINNACLE ENGINEERING GROUP

20725 WATERTOWN ROAD | SUITE 100 | BROOKFIELD, WI 53186 | WWW.PINNACLE-ENGR.COM |

PLAN | DESIGN | DELIVER **PEG JOB#** 2360.00

VILLAGE OF SOMERS
Department of Planning and Development

VILLAGE OF SOMERS SITE PLAN REVIEW PROCEDURES

1. Contact the Kenosha County Department of Planning & Development and check with staff to determine if your proposed zoning change meets the requirements of the Multi-Jurisdictional Comprehensive Plan for Kenosha County: 2035, Village of Somers General Zoning and Shoreland/Floodplain Zoning Ordinance and the Village of Somers Land Division and Platting Control Ordinance.

2. Contact the Kenosha County Department of Planning & Development and schedule a pre-conference meeting, which is required for all site plan review requests.

Meeting Date: 11/23/2021

3. Contact the Village of Somers to determine if your site plan review application requires concept review by the Village Plan Commission. If so, contact the Village of Somers clerk to schedule a concept meeting with the Village Plan Commission.

Meeting Date: 11/23/2021

4. Complete and submit to the Kenosha County Department of Planning & Development the Village of Somers Site Plan Review Application by the filing deadline.

Filing Deadline: 05/26/2022

5. Upon submission you will be given two copies of the date-stamped application. Submit a copy of the date-stamped application to the Village of Somers clerk for placement on the agendas of the Village of Somers Plan Commission and the Village of Somers Board. Keep the other copy for your records.

7. Attend the Village Plan Commission and the Village Board meetings. **NOTE:** You must attend or the Village will not be able to act on your request. At these meetings you will be asked to brief the committee on your request.

Village Plan Commission meeting date (tentative): 07/11/2022

Village Board meeting date (tentative): 07/26/22 & 08/10/2022

8. Village clerk will provide written notice of final action to property owner/applicant.

SITE PLAN REVIEW CHECKLIST

Owner: See letter of Agent Status Date _____

Mailing Address: _____ Phone # _____

_____ Phone # _____

Agent: Stream Realty - Joe Podge Phone # 773-355-9520

Mailing Address: 226 N Morgan Avenue Ste 500 Phone # _____

Chicago, IL 60607

Architect/Engineer: Pinnacle Engr Group - Adam Artz Phone # 262-754-8888

Mailing Address: 20725 Watertown Rd St 100 Phone # _____

Brookfiled, WI 53186

Tax Parcel Number(s): _____ Acreage of Project: _____

Existing Zoning: A-1,A-2, R-2, R-3 Proposed Zoning: PUD BP-1(Multple Phase)

Conditional Use Permit: _____

_____

Description of Project: (include the following when applicable):

Description of project: Multiple Industrial Buildings & Public Road

_____

Size of existing building(s): minor residential

Size of new building(s) and/or addition(s): 3 bldgs - totaling ~1,000,000sf

Number of current and projected full-time and part-time employees, number of shifts: _____

Projections - 1employee per 1,000/sf = ~800

Number of proposed units: _____ Description of units: _____

Density: _____

☑ Plat of Survey Submitted: ☐ Covenants and Restrictions Submitted

A. BUILDING PLANS SUBMITTED? (BUILDING APPEARANCE)

- ☑ No building shall be permitted the design or exterior appearance of which is of such unorthodox or abnormal character in relation to its surroundings as to be unsightly or offensive to generally accepted taste and community standards.

- ☑ No building shall be permitted the design or exterior appearance of which is so identical with those adjoining as to create excessive monotony or drabness.

- ☑ No building shall be permitted where any exposed facade is not constructed or faced with a finished material which is aesthetically compatible with the other facades and presents an attractive appearance to the public and to surrounding properties.

- ☑ Building Scale and Mass. The relative proportion of a building to its neighboring buildings, to pedestrians and observers, or to other existing buildings shall be maintained or enhanced when new buildings are built or when existing buildings are remodeled or altered.

- ☑ Building Rooflines and Roof Shapes. The visual continuity of roofs and their contributing elements (parapet walls, coping, and cornices) shall be maintained in building development and redevelopment.

- ☑ Since the selection of building colors has a significant impact upon the public and neighboring properties, color shall be selected in general harmony with existing neighborhood buildings.

- ☑ No building or sign shall be permitted to be sited on the property in a manner which would unnecessarily destroy or substantially damage the natural beauty of the area, particularly insofar as it would adversely affect values incident to ownership of land in that area, or which would unnecessarily have an adverse effect on the beauty and general enjoyment of existing structures on adjoining properties.

- ☑ The facade of all buildings which face upon a street right-of-way shall be finished with an aesthetically pleasing material. A minimum of 50 percent of a facade facing an existing or future street shall be finished with a combination of brick, decorative masonry material, decorative pre-cast concrete panels, decorative glass panels, wood, or decorative metal or vinyl siding. Such finished material shall extend for a distance of at least 10 feet along the sides of the structure. All buildings on corner lots shall have the required finished facade facing each street.

B. SITE PLAN SUBMITTED?

- ☑ Building locations shall maintain required setbacks from property lines and road rights-of-way.

- ☑ Buildings and uses shall provide for safe traffic circulation and safe driveway locations.

- ☑ Buildings and uses shall be provided with adequate public services as approved by the appropriate utility.

☑ Buildings and uses shall provide adequate parking and loading areas. No loading dock or overhead doors shall face upon a street right-of-way without approval of the zoning administrator.

☐ Parking areas shall maintain required setbacks and parking spaces shall be of minimum required size (10' x 20'). Aisle widths within parking lots shall be a minimum of 24' between the ends of the parking spaces.

☑ Each parking space shall be on the same lot or parcel as the principal use, and all parking lots shall have the same zoning district as the principal use. Parking spaces and driveways shall be a minimum of 20 feet from the established highway right-of-way and a minimum of 10 feet from all rear and side lot lines. Curbs or barriers shall be installed so as to prevent vehicles from extending beyond designated parking or driving areas.

☑ Parking areas for five or more vehicles adjoining a residential use, shall be screened from such use by a solid wall, fence, evergreen planting of equivalent visual density or other effective means, and built and maintained at a minimum height of four feet at the time of planting or installation.

☑ Adequate access to a public or private roadway shall be provided for each parking space. For all non-residential properties, driveways for vehicular ingress and egress shall be a minimum of 10 feet in width and not exceed 35 feet in width at the property line.

☑ All off-street parking of more than five vehicles shall be graded and surfaced with asphalt or concrete.

C. LANDSCAPING AND LIGHTING PLAN SUBMITTED?

☑ Buildings and uses shall make appropriate use of open spaces. The zoning administrator or Village Board may require appropriate landscaping and planting screens. A landscaping maintenance program, together with appropriate assurances, shall be submitted.

☑ Dumpsters and other trash receptacles shall be fenced and/or screened from view from street rights-of-way and adjacent residential uses.

☑ Exterior lighting used for parking lots, recreation facilities, product display, and security shall not spill-over on operators of motor vehicles, pedestrians, and/or adjacent residential property (cut-off type luminaries only).

Appropriate buffers shall be provided between dissimilar uses.

D. SEWER VERIFICATION/SANITATION EVALUATION OR APPLICATION SUBMITTED?

E. UTILITY PLANS SUBMITTED?

F. STORMWATER DRAINAGE AND EROSION CONTROL PLAN SUBMITTED?

☑ Appropriate erosion control and stormwater management measures shall be utilized in all new development. Buildings and uses shall maintain existing topography, drainage patterns, and vegetative cover insofar as is practical. The zoning administrator or Village Board may require that drainage easements be executed.

IMPORTANT TELEPHONE NUMBERS

Kenosha County Center
Department of Planning & Development
19600 - 75th Street, Post Office, Suite 185-3
Bristol, Wisconsin 53104-9772

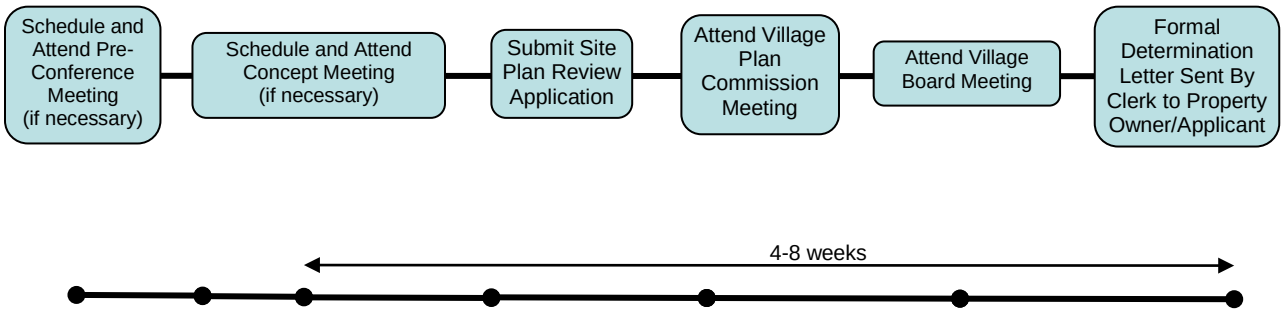
Division of County Development (including Sanitation & Land Conservation)..... **857-1895**
Facsimile #..... 857-1920

Public Works Division of Highways 857-1870

Administration Building
Division of Land Information..... 653-2622

Village of Somers 859-2822
Wisconsin Department of Natural Resources - Sturtevant Office 884-2300
Wisconsin Department of Transportation - Waukesha Office 548-8722

Site Plan Review Procedure Timeline



For Reference Purposes

VILLAGE OF SOMERS
Department of Planning and Development

VILLAGE OF SOMERS SITE PLAN REVIEW PROCEDURES

1. Contact the Kenosha County Department of Planning & Development and check with staff to determine if your proposed zoning change meets the requirements of the Multi-Jurisdictional Comprehensive Plan for Kenosha County: 2035, Village of Somers General Zoning and Shoreland/Floodplain Zoning Ordinance and the Village of Somers Land Division and Platting Control Ordinance.

2. Contact the Kenosha County Department of Planning & Development and schedule a pre-conference meeting, which is required for all site plan review requests.

Meeting Date: 11/23/2021

3. Contact the Village of Somers to determine if your site plan review application requires concept review by the Village Plan Commission. If so, contact the Village of Somers clerk to schedule a concept meeting with the Village Plan Commission.

Meeting Date: 11/23/2021

4. Complete and submit to the Kenosha County Department of Planning & Development the Village of Somers Site Plan Review Application by the filing deadline.

Filing Deadline: 05/26/2022

5. Upon submission you will be given two copies of the date-stamped application. Submit a copy of the date-stamped application to the Village of Somers clerk for placement on the agendas of the Village of Somers Plan Commission and the Village of Somers Board. Keep the other copy for your records.

7. Attend the Village Plan Commission and the Village Board meetings. **NOTE:** You must attend or the Village will not be able to act on your request. At these meetings you will be asked to brief the committee on your request.

Village Plan Commission meeting date (tentative): 07/11/2022

Village Board meeting date (tentative): 07/26/22 & 08/10/2022

8. Village clerk will provide written notice of final action to property owner/applicant.

SITE PLAN REVIEW CHECKLIST

Owner: See letter of Agent Status Date _____

Mailing Address: _____ Phone # _____

_____ Phone # _____

Agent: Stream Realty - Joe Podge Phone # 773-355-9520

Mailing Address: 226 N Morgan Avenue Ste 500 Phone # _____

Chicago, IL 60607

Architect/Engineer: Pinnacle Engr Group - Adam Artz Phone # 262-754-8888

Mailing Address: 20725 Watertown Rd St 100 Phone # _____

Brookfiled, WI 53186

Tax Parcel Number(s): _____ Acreage of Project: _____

Existing Zoning: A-1,A-2, R-2, R-3 Proposed Zoning: PUD BP-1(Multple Phase)

Conditional Use Permit: _____

_____

Description of Project: (include the following when applicable):

Description of project: Multiple Industrial Buildings & Public Road

_____

Size of existing building(s): minor residential

Size of new building(s) and/or addition(s): 3 bldgs - totaling ~1,000,000sf

Number of current and projected full-time and part-time employees, number of shifts: _____

Projections - 1employee per 1,000/sf = ~800

Number of proposed units: _____ Description of units: _____

Density: _____

☑ Plat of Survey Submitted: ☐ Covenants and Restrictions Submitted

A. BUILDING PLANS SUBMITTED? (BUILDING APPEARANCE)

- ☑ No building shall be permitted the design or exterior appearance of which is of such unorthodox or abnormal character in relation to its surroundings as to be unsightly or offensive to generally accepted taste and community standards.

- ☑ No building shall be permitted the design or exterior appearance of which is so identical with those adjoining as to create excessive monotony or drabness.

- ☑ No building shall be permitted where any exposed facade is not constructed or faced with a finished material which is aesthetically compatible with the other facades and presents an attractive appearance to the public and to surrounding properties.

- ☑ Building Scale and Mass. The relative proportion of a building to its neighboring buildings, to pedestrians and observers, or to other existing buildings shall be maintained or enhanced when new buildings are built or when existing buildings are remodeled or altered.

- ☑ Building Rooflines and Roof Shapes. The visual continuity of roofs and their contributing elements (parapet walls, coping, and cornices) shall be maintained in building development and redevelopment.

- ☑ Since the selection of building colors has a significant impact upon the public and neighboring properties, color shall be selected in general harmony with existing neighborhood buildings.

- ☑ No building or sign shall be permitted to be sited on the property in a manner which would unnecessarily destroy or substantially damage the natural beauty of the area, particularly insofar as it would adversely affect values incident to ownership of land in that area, or which would unnecessarily have an adverse effect on the beauty and general enjoyment of existing structures on adjoining properties.

- ☑ The facade of all buildings which face upon a street right-of-way shall be finished with an aesthetically pleasing material. A minimum of 50 percent of a facade facing an existing or future street shall be finished with a combination of brick, decorative masonry material, decorative pre-cast concrete panels, decorative glass panels, wood, or decorative metal or vinyl siding. Such finished material shall extend for a distance of at least 10 feet along the sides of the structure. All buildings on corner lots shall have the required finished facade facing each street.

B. SITE PLAN SUBMITTED?

- ☑ Building locations shall maintain required setbacks from property lines and road rights-of-way.

- ☑ Buildings and uses shall provide for safe traffic circulation and safe driveway locations.

- ☑ Buildings and uses shall be provided with adequate public services as approved by the appropriate utility.

☑ Buildings and uses shall provide adequate parking and loading areas. No loading dock or overhead doors shall face upon a street right-of-way without approval of the zoning administrator.

☐ Parking areas shall maintain required setbacks and parking spaces shall be of minimum required size (10' x 20'). Aisle widths within parking lots shall be a minimum of 24' between the ends of the parking spaces.

☑ Each parking space shall be on the same lot or parcel as the principal use, and all parking lots shall have the same zoning district as the principal use. Parking spaces and driveways shall be a minimum of 20 feet from the established highway right-of-way and a minimum of 10 feet from all rear and side lot lines. Curbs or barriers shall be installed so as to prevent vehicles from extending beyond designated parking or driving areas.

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Wisconsin Department of Natural Resources - Sturtevant Office 884-2300
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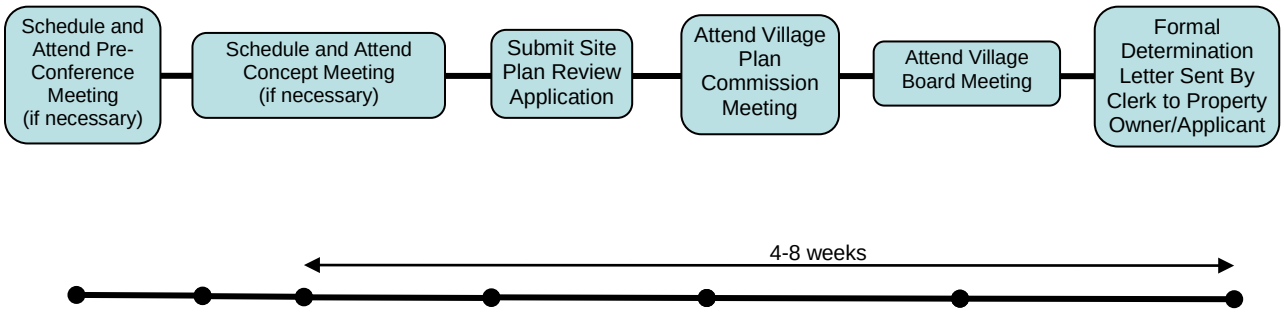
Site Plan Review Procedure Timeline



For Reference Purposes

2021 PLZ Gachs Stream Realty CTH S
TID #3

Established 1843
Somers
VILLAGE & TOWN
www.somers.org
P.O. Box 197, Somers, WI 53171 • PH: (262) 859-2822 • FAX: (262) 859-2331

PRE-DEVELOPMENT AGREEMENT FOR ALL DEVELOMENT IN THE VILLAGE OF SOMERS, KENOSHA COUNTY WISCONSIN

THIS AGREEMENT is entered into between the Village of Somers, a Wisconsin municipal corporation, hereinafter called the "Village of Somers", and Stream Reality Acquisition ("Developer") to develop lands within the Village of Somers which is described with more particularity on the attached Exhibit "A".

WHEREAS, the person(s) above-named wish to subdivide and/or commence development of the above lands within the Village of Somers and to obtain Village of Somers approval of this division/development in accordance with applicable state laws and Village of Somers ordinances; and

WHEREAS, the Village of Somers with its consultants agrees to review the Development Proposals, Preliminary Sketches and Plans, Preliminary Plat or Certified Survey Map of the Developer in accordance with law and desires to have such review made without unreasonable expense to Village of Somers' taxpayers.

PART A
PAYMENT FOR REVIEW SERVICES

The Developer agrees to pay and/or reimburse the Village of Somers for all administrative and consulting costs incurred by the Village of Somers prior to any formal approval by the Village of Somers for processing, studying and reviewing of any development Proposals, Preliminary Plat or Certified Survey Map including without limitation, legal, engineering service or other consultants as required by the Village of Somers in connection with this review. In addition, the Developer has been provided with a copy of the Village of Somers Ordinances with hourly rates paid by the Developer for Village staff time on their behalf.

The Developer understands the legal and/or engineering consultants retained by the Village of Somers are acting exclusively on behalf of the Village of Somers and not the Developer. Developer understands that it shall be invoiced for any of the preceding expenses on a monthly basis and that invoices are due within thirty (30) days and shall carry an annual percentage rate of 1½% per month on the unpaid balance.

PART B
GUARANTEE OF PAYMENT

The undersigned Developer agrees to guarantee reimbursement of the Village of Somers for administrative costs described in Part A by depositing with the Village Clerk a (cash deposit) (cashier's check)(irrevocable letter of credit) in the name of the Village of Somers in the principal sum of $ 20,000.00, which includes the sum of $ 20,000.00 to cover the cost of unanticipated contingencies.

If at any time monies in the account, including earned interest, or the principal amount of the irrevocable letter of credit are insufficient to pay expenses incurred by the Village of Somers for administrative costs, Developers agrees to deposit required additional amounts within fifteen (15) days of written demand by the Village Clerk or the Proposal, Plat or Survey shall be rejected.

PART C
TERMINATION OF GUARANTEE

Sixty (60) days after completion of review or in the case of development, completion of development, evidenced by resolution of the Village Board approving, conditionally approving or rejecting the Development Proposals, Preliminary Plat or Certified Survey Map, the Village of Somers agrees to refund to the Developer any monies remaining in the deposit account, including any interest earned thereon; or, if guarantee is made in the form of an irrevocable letter of credit, to give a written release, sufficient to terminate the guarantees of such letter less, in either case, any of amounts owing for administrative costs described in Part A.

IN WITNESS WHEREOF, the parties have executed this Agreement on the

12 day of December, 2021.

VILLAGE OF SOMERS

By: _____
President

Attest: Mary A. Cole
Timothy Kitzman, Clerk/Treasurer
Mary Ann Cole

DEVELOPER

John Cannon Green

Digitally signed by John Cannon Green
Date: 2021.12.14 14:45:53 -06'00'

(Signature of Developer)

By: Cannon Green / Attorney-in-Fact

Stream Realty Acquisition, LLC
(Printed Name of Developer)

Established 1843
Somers
VILLAGE & TOWN
www.somers.org
P.O. Box 197, Somers, WI 53171 • PH: (262) 859-2822 • FAX: (262) 859-2331

ADMINISTRATIVE FEE
GENERAL CONSULTATION WITH DEVELOPERS FEE
ORDINANCE NO 18:30, (K)

18.30(S) Prior to the filing of an application seeking the approval of a preliminary plat, certified survey map, condominium plat, planned unit development, multi-dwelling plan or conditional use permit, Village staff may meet with the developer to generally discuss the concepts relating to the proposed development. For purposes of this subsection, Village staff shall include one or more of the following: Village administrator, Village Finance Manager, Village Clerk/Treasurer, Public Works Superintendent, and Village Building Inspector. Village staff shall not include paid consultants such as the Village Engineers, Village Planners or Village Attorneys. The first consultation by Village staff with the developer shall be free, provided that such consultation is not longer than two (2) hours. Thereafter, a fifty ($50.00) Dollars per hour fee shall be imposed for each member of the Village staff who shall meet with the developer or the developer's agents or representatives, including consultants. The Village Administrator shall establish the timing and details of such payments, taking into consideration the particular details of the types of issues, which may be encountered with the proposed development.

Effective Date: May 20, 2015

Developer: Stream Realty Acquisition, LLC

Project: Stream - Burlington Road

Topic(s) Discussed: _____

_____

_____

Billing Hours: _____

Amount Due: _____

_____ _____

William A. Morris
Village Administrator

Developer

Somers
VILLAGE & TOWN
www.somers.org
PO Box 197 Somers, WI 53171 • PH (262) 859-2622 • FAX (262) 859-2331

OWNER'S AUTHORIZATION

December 15, 2021

To: Village of Somers Plan Commission & Village Board of Trustees

RE: Property Address(es): 10812 Burlington Road
Parcel ID(s): 82-4-222-194-0101 & 82-4-222-301-0050

Be advised that the above referenced property is currently owned by the Carol F. Grohs Trust & Delmar R. & Jeanne V. Goldbricht Trust. As the owners of the above referenced Property, we give permission for Stream Realty Acquisitions, to submit on our behalf, all necessary applications and related documentation for approval of REZONING, SITE PLAN and OTHER PERMITS associated with the development of the property from the Village of Somers, Kenosha, County, Wisconsin. Furthermore, Stream Realty Acquisitions, is authorized to act on our behalf, at meetings with Village Staff, Plan Commission, Village Board Work Sessions, and Village Board Meetings.

Thank you,

Carol F. Grohs — 12-22-21

Signature — Date

Carol F. Grohs, Trustee

Printed Name

Delmar R Goldbricht — 12-22-21

Signature — Date

Delmar R. Goldbricht, Trustee

Printed Name

Jeanne V. Goldbricht — 12-22-21

Signature — Date

Jeanne V. Goldbricht, Trustee

Printed Name

Contact Information:
Name: Jeanne Goldbricht & Attorney J. Michael McTernan
Phone: 262.654.8700

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

ONSITE CIVIL ENGINEERING INFRASTRUCTURE PLANS

FOR

SOMERS BUSINESS PARK

SOMERS, WI

PLANS PREPARED
FOR
STREAM INDUSTRIAL DEVELOPMENT SERVICES
226 N. MORGAN STREET, SUITE 500
CHICAGO, IL 60607

PROJECT TEAM CONTACTS

CIVIL ENGINEER:
ADAM ARTZ, P.E.,
PINNACLE ENGINEERING GROUP
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
Adam.Artz@pinnacle-engr.com

TODD MUELLER, P.E.,
PINNACLE ENGINEERING GROUP
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
Todd.Mueller@pinnacle-engr.com

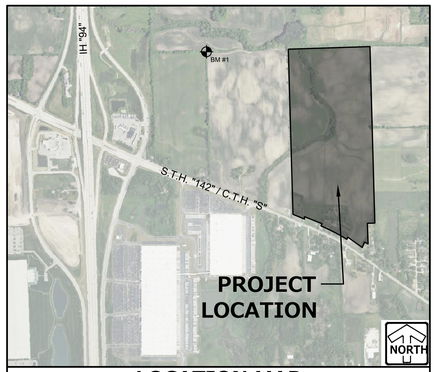
SURVEYOR:
JOHN KONOPACKI, P.L.S.
PINNACLE ENGINEERING GROUP
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
John.Konopacki@pinnacle-engr.com

ARCHITECT:
ERIC ORTEGA
PARTNERS IN DESIGN
2610 LAKE COOK ROAD
RIVERWOODS, ILLINOIS 60015
(847) 940-0300
ERICO@PIDARCHITECTS.COM

APPLICANT:
JOE PODGE
STREAM INDUSTRIAL DEVELOPMENT SERVICES
226 N. MORGAN STREET, SUITE 500
CHICAGO, IL 60607
(773)-355-9520
JOE.PODGE@STREAMREALITY.COM

INDEX OF SHEETS

C-1	COVER SHEET
C-2	EXISTING CONDITIONS & DEMOLITION PLAN
C-3 - C-6	SITE DIMENSIONAL & PAVING PLAN
C-7 - C-10	GRADING PLAN
C-11 - C-14	UTILITY PLAN
C-15 - C-18	EROSION CONTROL PLAN
C-19 - C-22	CONSTRUCTION DETAILS
L-1 - L-11	LANDSCAPE PLAN



LOCATION MAP
SCALE: 1" = 1000'

REQUIRED SUBMITTALS FOR APPROVAL

1. ASPHALT PAVEMENTS
2. CONCRETE PAVEMENTS (EXTERIOR)
3. STONE BASE COURSE
4. TRENCH BACKFILL
5. PIPE BEDDING
6. TIE BARS
7. DOWEL BARS
8. DOWEL BAR BASKETS

REQUIRED SUBMITTALS FOR RECORDS

1. WATER MAIN PIPE FITTINGS
2. SANITARY SEWER
3. STORM SEWER
4. LIME MIX DESIGN (IF APPLICABLE)

LEGEND

	EXISTING	PROPOSED
SANITARY SEWER MANHOLE	◎	◉
STORM SEWER MANHOLE	◎	◉
STORM SEWER AREA DRAIN		▮
STORM SEWER INLET (ROUND CASTING)	○	●
STORM SEWER INLET (RECTANGULAR CASTING)	□	■
PRECAST FLARED END SECTION	◁	◀
CONCRETE HEADWALL	⊂	⊂
AIR RELEASE ASSEMBLY	⊗	⊕
VALVE BOX	⊞	◪
FIRE HYDRANT	⋖	◀
BUFFALO BOX	⊙	●
CLEANOUT	⊡	▣
SANITARY SEWER	▷	▶
FORCE MAIN		
STORM SEWER	⊃	⊃
DRAIN TILE	⋑	⋑
WATER MAIN	W	W
UTILITY CROSSING		⊗
LIGHTING		
ELECTRICAL CABLE	E	E
OVERHEAD WIRES	OHW	OHW
CAUTION EXISTING UTILITIES NEARBY		CAUTION
ELECTRICAL TRANSFORMER OR PEDESTAL	E	◪
POWER POLE	○	●
POWER POLE WITH LIGHT		
STREET SIGN		▶
GAS MAIN	G	G
TELEPHONE LINE	T	T
CONTOUR	749	749
SPOT ELEVATION	×(750.00)	✖750.00
WETLANDS		
FLOODWAY		
FLOODPLAIN		
HIGH WATER LEVEL (HWL)		
NORMAL WATER LEVEL (NWL)		
DIRECTION OF SURFACE FLOW		
DITCH OR SWALE		
DIVERSION SWALE		
OVERFLOW RELIEF ROUTING		
TREE WITH TRUNK SIZE	6"	
SOIL BORING	B-8	B-1
TOPSOIL PROBE	B-8	B-1
FENCE LINE, TEMPORARY SILT	SF	SF
FENCE LINE, WIRE	○	○
FENCE LINE, CHAIN LINK OR IRON	□	□
FENCE LINE, WOOD OR PLASTIC	×	×
CONCRETE SIDEWALK		
CURB AND GUTTER		
DEPRESSED CURB		
REVERSE PITCH CURB & GUTTER		
EASEMENT LINE		

ABBREVIATIONS

BL	BASE LINE	NWL	NORMAL WATER LEVEL
C	LONG CHORD OF CURVE	PC	POINT OF CURVATURE
C & G	CURB AND GUTTER	PT	POINT OF TANGENCY
CB	CATCH BASIN	PVI	POINT OF VERTICAL INTERSECTION
CL	CENTERLINE	R	RADIUS
D	DEGREE OF CURVE	ROW	RIGHT-OF-WAY
EP	EDGE OF PAVEMENT	SAN	SANITARY SEWER
FF	FINISHED FLOOR	ST	STORM SEWER
FG	FINISHED GRADE	T	TANGENCY OF CURVE
FL	FLOW LINE	TB	TOP OF BANK
FP	FLOODPLAIN	TC	TOP OF CURB
FR	FRAME	TF	TOP OF FOUNDATION
FW	FLOODWAY	TP	TOP OF PIPE
HWL	HIGH WATER LEVEL	TS	TOP OF SIDEWALK
INV	INVERT	TW	TOP OF WALK
L	LENGTH OF CURVE	WM	WATER MAIN
MH	MANHOLE	△	INTERSECTION ANGLE

BENCHMARKS

BENCHMARK 1: REFERENCE BENCHMARK: CONCRETE MONUMENT WITH BRASS CAP AT THE NORTHWEST CORNER OF THE SOUTHEAST 1/4 SECTION 19, TOWN 2 NORTH, RANGE 22 EAST, ELEVATION = 710.95.

VERTICAL DATUM: NAVD88
HORIZONTAL DATUM: WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE NAD83

GENERAL NOTES

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. A GEOTECHNICAL REPORT FOR THE PROJECT SITE IS NOT AVAILABLE AT THIS TIME. THE DATA ON SUB-SURFACE SOIL CONDITIONS IS NOT INTENDED AS A REPRESENTATION OR WARRANTY OF THE CONTINUITY OF SUCH CONDITIONS BETWEEN BORINGS OR INDICATED SAMPLING LOCATIONS. IT SHALL BE EXPRESSLY UNDERSTOOD THAT OWNER WILL NOT BE RESPONSIBLE FOR ANY INTERPRETATIONS OR CONCLUSIONS DRAWN THERE FROM BY THE CONTRACTOR. DATA IS MADE AVAILABLE FOR THE CONVENIENCE OF THE CONTRACTOR. 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 LEARNED 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 ITS OWN COMPUTATIONS AND IN NO SUCH INSTANCE RELY 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 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, 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.
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, ENGINEER, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.

DIGGERS HOTLINE
Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

EXPIRATION DATE: JULY 31, 2022

PINNACLE ENGINEERING GROUP, LLC
ENGINEER'S LIMITATION

PINNACLE ENGINEERING GROUP, LLC AND THEIR CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE DELIVERABLES HEREIN BEYOND A REASONABLE DILIGENCE. IF ANY MISTAKES, OMISSIONS, OR DISCREPANCIES ARE FOUND TO EXIST WITHIN THE DELIVERABLES, THE ENGINEER SHALL BE PROMPTLY NOTIFIED PRIOR TO BID SO THAT HE MAY HAVE THE OPPORTUNITY TO TAKE WHATEVER STEPS NECESSARY TO RESOLVE THEM. FAILURE TO PROMPTLY NOTIFY THE ENGINEER OF SUCH CONDITIONS SHALL ABSOLVE THE ENGINEER FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH FAILURE. ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT TO THE ENGINEER, OR IN CONTRADICTION TO THE ENGINEER'S DELIVERABLES OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE ENGINEER BUT OF THE PARTIES RESPONSIBLE FOR TAKING SUCH ACTION.

FURTHERMORE, PINNACLE ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR CONSTRUCTION SAFETY OR THE MEANS AND METHODS OF CONSTRUCTION.

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE NATIONWIDE

SOMERS BUSINESS PARK
SOMERS, WI

COVER SHEET

REVISIONS

PEG JOB No. 2360.00-WI
PEG PM ARA
START DATE 03/17/22
SCALE N.T.S.

SHEET
C-1
OF
C-22

COVER SHEET

© 2020 2021

DESIGNED - TDM
DRAFTED - EP
REVIEWED - ARA

Z:\PROJECTS\2021\2360.00-WI\CAD\SHEETS\BLDG I\2360.00 BLDG I COVER SHEET.DWG

www.pinnacle-engr.com

THESE PLANS ARE THE PROPERTY OF PINNACLE ENGINEERING GROUP AND SHOULD NOT BE USED IN WHOLE OR IN PART IN ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP

www.pinnacle-engr.com

KILBOURN ROAD DITCH (DES PLAINES RIVER)

BURLINGTON ROAD "S" COUNTY TRUNK HIGHWAY "S"

PARCEL II

EXISTING BUILDING

EXISTING GARAGE

SEE ENLARGED VIEW FOR DETAILS

MONUMENTED WEST LINE OF THE EAST 1/2 OF THE SE 1/4 SEC. 19, T2N, R22E

S01°53'28"E WEST LINE OF THE EAST 1/2 OF THE NE 1/4 SEC. 30, T2N, R22E

EAST LINE OF THE SE 1/4 SEC. 19, T2N, R22E S01°31'50"E 2659.96'

SOUTH LINE OF THE SE 1/4 SEC. 19, T2N, R22E S88°29'49"W 2653.58'

NORTH LINE OF THE NE 1/4 SEC. 30, T2N, R22E N3°6'W

SE CORNER, SE 1/4 SEC. 19, T2N, R22E (FOUND CONC. MON. W/ BRASS CAP) NAD83 (WISCONSIN STATE PLANE CO-ORDINATE SYSTEM, SOUTH ZONE) N:224,366.82 E:2,524,366.92

SE CORNER, NE 1/4 SEC. 19, T2N, R22E (FOUND CONC. MON. W/ BRASS CAP) NAD83 (WISCONSIN STATE PLANE CO-ORDINATE SYSTEM, SOUTH ZONE) N:226,997.15 E:2,524,367.19

FOUND 1-1/2" IRON PIPE 0.4' SOUTH OF SECTION LINE

SET 1" IRON PIPE 0.4' SOUTH OF SECTION LINE

EARTH LINE OF SHORE PER M.S.M. NO. 2278

SHORE OF LAKE MICHIGAN

REFERENCE BENCHMARK (WISCONSIN STATE PLANE CO-ORDINATE SYSTEM, SOUTH ZONE) ELEV.710.95 (NAVD88)

METAL FENCE POST ON PROPERTY LINE

METAL FENCE POST ON PROPERTY LINE

100 YEAR FLOOD PLAIN

APPROXIMATE ORDINARY HIGH WATER MARK EL. 710.1

EDGE OF WATER EL=710.2

EDGE OF WATER EL=709.2

EDGE OF WATER EL=709.2

BRUSH LINE

WETLAND

DRAIN TILE INV. 709.2

DRAIN TILE INV. 709.2

DRAIN TILE INV. 709.2

DRAIN TILE INV. 709.2

CONCRETE CURB & GUTTER

ASPHALT PAVEMENT

CONCRETE SIDEWALK

CONCRETE FLOOR

GARAGE FLOOR EL=718.9

EMPORARY EASEMENT PER DOC. 1864486

TEMPORARY CONSTRUCTION EASEMENT PER DOC. 1864486

TEMPORARY CONSTRUCTION EASEMENT PER DOC. 1864486

40' PERMANENT UTILITY EASEMENT PER DOC. 1863393

20' TEMPORARY CONSTRUCTION EASEMENT DOC. 1863393

20'

40'

EXISTING CONDITIONS SURVEY PROVIDED BY PINNACLE ENGINEERING GROUP. ALTHOUGH PEG HAS NO REASON TO BELIEVE THE SURVEY IS INACCURATE, PEG MAKES NO WARRANTS THAT EXISTING INFORMATION CONTAINED WITHIN THESE PLANS IS ALL-INCLUSIVE OR ACCURATE. CONTRACTOR SHALL UNDERTAKE NECESSARY EFFORTS TO VERIFY THE EXISTING CONDITIONS PRIOR TO THE START OF MATERIAL PROCUREMENT AND CONSTRUCTION EFFORTS/ACTIVITIES.

EXISTING CONDITIONS SURVEY:

CONTRACTOR RESPONSIBILITY:

THE INFORMATION SHOWN ON THIS DRAWING CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. IF ADDITIONAL UTILITIES ARE KNOWN TO EXIST IN THE PROPERTY, THE OWNER WILL PROVIDE EXISTING PLANS OF OTHER UTILITIES SERVING THE SITE AND THE BUILDING THAT OTHERWISE CANNOT BE LOCATED BY A VISUAL OBSERVATION OF THE PROPERTY OR OF WHICH THE SURVEYOR WOULD HAVE NO KNOWLEDGE.

DEMOLITION LEGEND

- REMOVE EXISTING UNDERGROUND UTILITIES
- REMOVE EXISTING TREE
- REMOVE EXISTING UTILITY
- REMOVE EXISTING TREES
- REMOVE EXISTING BUILDING
- REMOVE EXISTING PAVEMENT

LEGEND OF SYMBOLS & ABBREVIATIONS

- SANITARY MANHOLE
- STORM MANHOLE
- STORM INLET
- CLEANOUT
- CATCH BASIN
- WELL
- HYDRANT
- WATER VALVE
- DOWN SPOUT
- SPRINKLER VALVE
- STANDPIPE
- WATER MANHOLE
- FLOOD LIGHT
- LIGHT POLE
- TRAFFIC SIGNAL
- UTILITY POLE
- GUY WIRE
- CONIFER TREE
- DECIDUOUS TREE
- BUSH
- FIBER OPTIC MARKER
- FIBER OPTIC MANHOLE/VAULT
- TELEPHONE PEDESTAL
- TELEPHONE MANHOLE/VAULT
- TELEPHONE MARKER
- TRANSFORMER
- ELECTRIC METER/PEDESTAL
- ELECTRIC MANHOLE/VAULT
- CABLE TV RISER/BOX
- CABLE TV MANHOLE/VAULT
- GAS VALVE
- GAS METER
- GAS MARKER
- AIR CONDITIONING UNIT
- VENT
- DIRECTIONAL ARROW
- HANDICAP STALL
- WETLAND SYMBOL
- SIGN
- MAIL BOX
- SANITARY SEWER
- STORM SEWER
- WATER MAIN
- FIBER OPTIC LINE
- TELEPHONE LINE
- ELECTRIC LINE
- OVERHEAD WIRES
- CABLE TELEVISION
- GAS MAIN
- WETLANDS
- TREE LINE
- NO ACCESS

ENLARGED VIEW

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 50' 100'

REMOVE EXISTING TREES

EXISTING WELL TO BE ABANDONED

REMOVE EXISTING BUILDINGS

REMOVE 962 SF OF CONCRETE DRIVEWAY

REMOVED 27 LF OF CURB AND GUTTER

REMOVE EXISTING GAS, ELECTRIC, SEPTIC STRUCTURES, AND MAILBOX

REMOVE 813 SF OF GRAVEL DRIVEWAY

REMOVE 340 SF OF CONCRETE DRIVEWAY

REMOVE EXISTING CULVERT AND END SECTIONS

OVER HEAD WIRES AND UTILITY POLES TO BE REMOVED BY OTHERS

REMOVE 125 LF OF CURB & GUTTER

REMOVE 789 SF OF CONCRETE SIDEWALK

REMOVE 447 LF OF EXISTING FENCE

OVER HEAD WIRES TO BE REMOVED BY OTHERS

REMOVED EXISTING MAILBOX

OVER HEAD WIRES TO BE REMOVED BY OTHERS

REMOVE 182 SF OF CONCRETE DRIVEWAY

REMOVE 25 LF OF CURB & GUTTER

UTILITY POLES TO BE REMOVED BY OTHERS

REMOVE 70 LF OF CURB & GUTTER

REMOVE 70 LF OF CURB & GUTTER

OVER HEAD WIRES TO BE REMOVED BY OTHERS

REMOVE 1060 SF OF CONCRETE DRIVEWAY

REMOVE 1083 SF OF CONCRETE SIDEWALK

UTILITY POLE TO BE REMOVED BY OTHERS

SURVEYED PROPERTY 3,690,433 SQ. FT. 84.7207 ACRES

(PART OF) PARCEL I

UNPLATTED LANDS TAX KEY # 82-4-222-301-0015 OWNER: ZIERZ

EXISTING BUILDINGS

EXCEPTION PER DOC. 711027

UNPLATTED LANDS TAX KEY # 82-4-222-301-0000 OWNER: KOSMAN

UNPLATTED LANDS TAX KEY # 82-4-222-301-0325 OWNER: ANDERSON

UNPLATTED LANDS TAX KEY # 82-4-222-203-0321 OWNER: HAWKINS

UNPLATTED LANDS TAX KEY # 82-4-222-203-0302 OWNER: LANGSRAF

UNPLATTED LANDS TAX KEY # 82-4-222-203-0000 OWNER: GITZLAFF

UNPLATTED LANDS TAX KEY # 82-4-222-203-0210 OWNER: GITZLAFF

UNPLATTED LANDS TAX KEY # 82-4-222-194-0101 OWNER: LANGSRAF

UNPLATTED LANDS TAX KEY # 82-4-222-194-0200 OWNER: KENOSHA FARM LLC

UNPLATTED LANDS TAX KEY # 82-4-222-301-0000 (REMNANT) OWNER: HANNAH S.S.M. NO. 2278

UNPLATTED LANDS TAX KEY # 82-4-222-301-0000 OWNER: HANNAH

UNPLATTED LANDS TAX KEY # 82-4-222-194-0101 OWNER: LANGSRAF

UNPLATTED LANDS TAX KEY # 82-4-222-194-0200 OWNER: LANE FARMS

UNPLATTED LANDS TAX KEY # 82-4-222-301-0000 OWNER: LANE FARMS

UNPLATTED LANDS TAX KEY # 82-4-222-194-0200 OWNER: LANE FARMS

UNNAMED TRIBUTARY TO LAKE MICHIGAN

CORRIDOR FOR ENVIRONMENTAL PROTECTION PER SOUTHEAST WISCONSIN REGIONAL PLANNING COMMISSION ENVIRONMENTAL CORRIDORS

REVIEWED: ABA

DESIGNED: TDM

DRAFTED: EP

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

SOMERS BUSINESS PARK

SOMERS, WI

EXISTING CONDITIONS & DEMOLITION PLAN

REVISIONS

PROJ. NO. 2360.00-WI
DES. BY ABA
DRN. BY
CHK. BY
START DATE 03/17/22
SCALE 1" = 100'

SHEET C-2 OF C-22

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EXISTING CONDITIONS & DEMOLITION PLAN

Z:\PROJECTS\2021\2360.00-WI\CAD\SHEETS\BLDG I\2360.00 BLDG I EXISTING CONDITION & DEMOLITION PLAN.DWG

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NOTES

1. ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB OR BUILDING FOUNDATION UNLESS NOTED OTHERWISE. ALL UTILITY DIMENSIONS ARE TO OUTSIDE OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED. ALL PAVING DIMENSIONS ARE TO FACE OF CURB OR TO EDGE OF PAVEMENT; THE SETBACK FROM PARKING LOTS, MANEUVERING LANES AND FIRE ACCESS LANES, ARE MEASURED FROM THE FACE OF CURB TO THE PROPERTY LINE.
2. ALL PROPOSED CURB AND GUTTER SHALL BE 18" STANDARD CURB AND GUTTER (SEE DETAIL). UNLESS OTHERWISE NOTED. CURB AND GUTTER DRAINING AWAY FROM THE FACE OF CURB IS NOTED AS REVERSE CURB AND GUTTER.
3. ALL RADII ARE MEASURED TO FACE OF CURB UNLESS NOTED OTHERWISE.
4. BUILDING DIMENSIONS AND ADJACENT PARKING AND UTILITY LAYOUT HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL CONTACT DIGGERS HOTLINE (1-800-242-8511) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
6. IMPROVEMENTS ADJACENT TO BUILDING IF SHOWN SUCH AS TRUCK DOCK, RETAINING WALLS, SIDEWALKS, CURBING, FENCES, CANOPIES, RAMPS, HANDICAP ACCESS, PLANTERS, DUMPSTERS, AND TRANSFORMERS ETC. HAVE BEEN SHOWN FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS, SPECIFICATIONS, AND DETAILS.
7. REFER TO ELECTRICAL PLANS FOR LIGHTING LOCATIONS, SPECIFICATIONS, AND DETAILS.
8. SEE ADDITIONAL NOTES AND DETAILS ON SITE DIMENSIONAL PLANS AND CONSTRUCTION DETAILS.
9. ALL PAVING SHALL CONFORM TO STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION AND APPLICABLE VILLAGE OF SOMERS ORDINANCES, AND SPECIFICATIONS CONTAINED WITHIN THIS PLAN SET.
10. CONTRACTOR SHALL CONSULT STRIPING COLOR WITH OWNER PRIOR TO CONSTRUCTION.
11. PROVIDE CONTRACTOR GRADE ACRYLIC, STRIPING PAINT FOR NEW ASPHALT OR COATED ASPHALT. 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 MANUFACTURER'S SPECIFICATION, WHICHEVER IS GREATER.
12. THOROUGHLY CLEAN SURFACES FREE OF DIRT, SAND, GRAVEL, OIL AND OTHER FOREIGN MATTER. CONTRACTOR RESPONSIBLE TO INSPECT EXISTING 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.
13. 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.
14. 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.
15. PROTECT ADJACENT CURBS, WALKS, FENCES, AND OTHER ITEMS FROM RECEIVING PAINT.
16. BARRICADE MARKED AREAS DURING INSTALLATION AND UNTIL THE MARKING PAINT IS DRIED AND READY FOR TRAFFIC.
17. 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, LATEST EDITION. HEREAFTER, THIS PUBLICATION WILL BE REFERRED TO AS THE 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 OF MOISTURE. CONSTRUCT ASPHALTIC CONCRETE SURFACE COURSE WHEN ATMOSPHERIC TEMPERATURE IS ABOVE 40° (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.

    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.

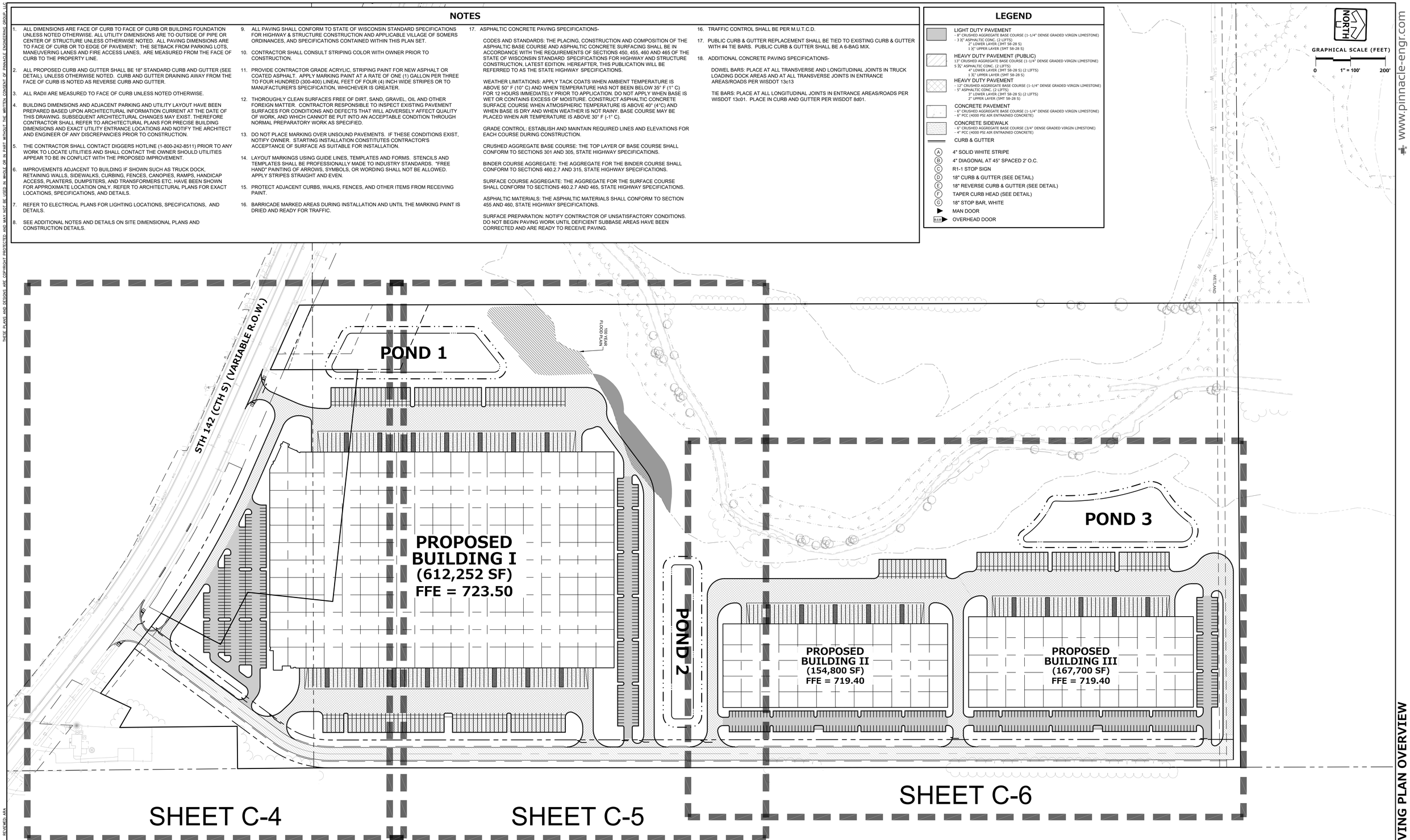
    SURFACE PREPARATION: NOTIFY CONTRACTOR OF UNSATISFACTORY CONDITIONS. DO NOT BEGIN PAVING WORK UNTIL DEFICIENT SUBBASE AREAS HAVE BEEN CORRECTED AND ARE READY TO RECEIVE PAVING.
16. TRAFFIC CONTROL SHALL BE PER M.U.T.C.D.
17. PUBLIC CURB & GUTTER REPLACEMENT SHALL BE TIED TO EXISTING CURB & GUTTER WITH #4 TIE BARS. PUBLIC CURB & GUTTER SHALL BE A 6-BAG MIX.
18. ADDITIONAL CONCRETE PAVING SPECIFICATIONS-

    DOWEL BARS: PLACE AT ALL TRANSVERSE AND LONGITUDINAL JOINTS IN TRUCK LOADING DOCK AREAS AND AT ALL TRANSVERSE JOINTS IN ENTRANCE AREAS/ROADS PER WISDOT 13c13

    TIE BARS: PLACE AT ALL LONGITUDINAL JOINTS IN ENTRANCE AREAS/ROADS PER WISDOT 13c01. PLACE IN CURB AND GUTTER PER WISDOT 8d01.

LEGEND

- LIGHT DUTY PAVEMENT
  - 8" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
  - 3 ½" ASPHALTIC CONC. (2 LIFTS)
    - 2" LOWER LAYER (3MT 58-28 S)
    - 1 ½" UPPER LAYER (5MT 58-28 S)
- HEAVY DUTY PAVEMENT (PUBLIC)
  - 13" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
  - 5 ¾" ASPHALTIC CONC. (2 LIFTS)
    - 4" LOWER LAYER (3MT 58-28 S) (2 LIFTS)
    - 1 ¾" UPPER LAYER (5MT 58-28 S)
- HEAVY DUTY PAVEMENT
  - 12" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
  - 5" ASPHALTIC CONC. (2 LIFTS)
    - 3" LOWER LAYER (3MT 58-28 S) (2 LIFTS)
    - 2" UPPER LAYER (5MT 58-28 S)
- CONCRETE PAVEMENT
  - 6" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
  - 6" PCC (4000 PSI AIR ENTRAINED CONCRETE)
- CONCRETE SIDEWALK
  - 6" CRUSHED AGGREGATE BASE COURSE (3/4" DENSE GRADED VIRGIN LIMESTONE)
  - 4" PCC (4000 PSI AIR ENTRAINED CONCRETE)
- CURB & GUTTER
- (A) 4" SOLID WHITE STRIPE
- (B) 4" DIAGONAL AT 45° SPACED 2' O.C.
- (C) R1-1 STOP SIGN
- (D) 18" CURB & GUTTER (SEE DETAIL)
- (E) 18" REVERSE CURB & GUTTER (SEE DETAIL)
- (F) TAPER CURB HEAD (SEE DETAIL)
- (G) 18" STOP BAR, WHITE
- MAN DOOR
- 9'x10' OVERHEAD DOOR



NO DISTURBANCE OF THE EXISTING WETLAND AREAS ARE ALLOWED PRIOR TO THE APPROVAL OF A WETLAND FILL PERMIT

ALL WORK WITHIN PUBLIC R.O.W. SHALL CONFORM TO WISCONSIN DOT, KENOSHA COUNTY AND VILLAGE OF SOMERS STANDARDS

REVIEWED: ABA
DESIGNED: TDM
DRAFTED: EP

PINNACLE ENGINEERING GROUP
PLAN | DESIGN | DELIVER
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ENGINEERING | NATURAL RESOURCES | SURVEYING
WISCONSIN OFFICE: 20725 WATERTOWN ROAD, SUITE 100 BROOKFIELD, WI 53186 (262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

SOMERS BUSINESS PARK

SOMERS, WI

SITE DIMENSIONAL & PAVING PLAN OVERVIEW

REVISIONS

PEG JOB No. 2360.00-WI
PEG PM: ABA
START DATE: 03/17/22
SCALE: 1" = 100'

SHEET C-3 OF C-22

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SITE DIMENSIONAL & PAVING PLAN OVERVIEW

Z:\PROJECTS\2021\2360.00-WI\CAD\SHEETS\BLDG I\2360.00 BLDG I SITE DIMENSIONAL & PAVING PLAN.DWG

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MATCHLINE SEE SHEET C-5

PROPOSED BUILDING I
(612,252 SF)
FFE = 723.50

POND 1
NWL=709.00
HWL=713.90

STH 142 (CTH S) (VARIABLE R.O.W.)

PROPERTY LINE

TEMPORARY LIMITED EASEMENT

PROPOSED RIGHT-OF-WAY

EXISTING RIGHT-OF-WAY

25.0' LF OF 30" CURB AND GUTTER

32.1' LF OF 30" CURB AND GUTTER

3' GRAVEL SHOULDER (TYP.)

DETECTABLE WARNING FIELD (TYP.)

80' R.O.W.

GRAPHICAL SCALE (FEET)
0 1" = 40' 80'

NORTH

www.pinnacle-engr.com

LEGEND

- LIGHT DUTY PAVEMENT
  - 8" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
  - 3 ½" ASPHALTIC CONC. (2 LIFTS)
    - 2" LOWER LAYER (3MT 58-28 S)
    - 1 ½" UPPER LAYER (5MT 58-28 S)
- HEAVY DUTY PAVEMENT (PUBLIC)
  - 13" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
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  - 4" PCC (4000 PSI AIR ENTRAINED CONCRETE)
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- (A) 4" SOLID WHITE STRIPE
- (B) 4" DIAGONAL AT 45° SPACED 2' O.C.
- (C) R1-1 STOP SIGN
- (D) 18" CURB & GUTTER (SEE DETAIL)
- (E) 18" REVERSE CURB & GUTTER (SEE DETAIL)
- (F) TAPER CURB HEAD (SEE DETAIL)
- (G) 18" STOP BAR, WHITE
- MAN DOOR
- O.H.D. OVERHEAD DOOR

REVIEWED: ARA
DESIGNED: TDM
DRAFTED: EP

PLAN | DESIGN | DELIVER
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PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

SOMERS BUSINESS PARK

SOMERS, WI

SITE DIMENSIONAL & PAVING PLAN

REVISIONS

PEG JOB No. 2360
PEG PM: ____
START DATE: 05/24/2021
SCALE: ____

C-4 of C-22

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SITE DIMENSIONAL & PAVING PLAN

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LEGEND

- LIGHT DUTY PAVEMENT
  - 8" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
  - 3 ½" ASPHALTIC CONC. (2 LIFTS)
    - 2" LOWER LAYER (3MT 58-28 S)
    - 1 ½" UPPER LAYER (5MT 58-28 S)
- HEAVY DUTY PAVEMENT (PUBLIC)
  - 13" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
  - 5 ½" ASPHALTIC CONC. (2 LIFTS)
    - 4" LOWER LAYER (3MT 58-28 S) (2 LIFTS)
    - 1 ½" UPPER LAYER (5MT 58-28 S)
- HEAVY DUTY PAVEMENT
  - 12" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
  - 5" ASPHALTIC CONC. (2 LIFTS)
    - 3" LOWER LAYER (3MT 58-28 S) (2 LIFTS)
    - 2" UPPER LAYER (5MT 58-28 S)
- CONCRETE PAVEMENT
  - 6" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
  - 6" PCC (4000 PSI AIR ENTRAINED CONCRETE)
- CONCRETE SIDEWALK
  - 6" CRUSHED AGGREGATE BASE COURSE (3/4" DENSE GRADED VIRGIN LIMESTONE)
  - 4" PCC (4000 PSI AIR ENTRAINED CONCRETE)
- CURB & GUTTER

(A) 4" SOLID WHITE STRIPE
(B) 4" DIAGONAL AT 45° SPACED 2' O.C.
(C) R1-1 STOP SIGN
(D) 18" CURB & GUTTER (SEE DETAIL)
(E) 18" REVERSE CURB & GUTTER (SEE DETAIL)
(F) TAPER CURB HEAD (SEE DETAIL)
(G) 18" STOP BAR, WHITE
MAN DOOR
8'x 8' OVERHEAD DOOR

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 40' 80'

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MATCHLINE SEE SHEET C-6

POND 2
NWL=710.50 I HWL=716.48

FLOODPLAIN IMPACT AREA

100 YEAR FLOOD PLAIN

COMPENSATORY FLOODPLAIN STORAGE

POND 1
NWL=709.00
HWL=713.90

PROPERTY LINE

PROPOSED BUILDING I
(612,252 SF)
FFE = 723.50

PROPOSED PUMPER PAD

3' GRAVEL SHOULDER (TYP.)

MATCHLINE SEE SHEET C-4

REVIEWED: ARA
DESIGNED: TDM
DRAFTED: EP

PLAN I DESIGN I DELIVER
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SITE DIMENSIONAL & PAVING PLAN

REVISIONS

PEG JOB No. 2360.00-WI
PEG PM: ARA
START DATE: 03/17/22
SCALE: 1" = 40'

SHEET
C-5
of
C-22

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SITE DIMENSIONAL & PAVING PLAN

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LEGEND

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  - 8" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
  - 3 ½" ASPHALTIC CONC. (2 LIFTS)
    - 2" LOWER LAYER (3MT 58-28 S)
    - 1 ½" UPPER LAYER (5MT 58-28 S)
- HEAVY DUTY PAVEMENT (PUBLIC)
  - 13" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED VIRGIN LIMESTONE)
  - 5 ½" ASPHALTIC CONC. (2 LIFTS)
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(A) 4" SOLID WHITE STRIPE
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(F) TAPER CURB HEAD (SEE DETAIL)
(G) 18" STOP BAR, WHITE
MAN DOOR
8'x8' OVERHEAD DOOR

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 40' 80'

20' TEMPORARY CONSTRUCTION EASEMENT 20.0'
PERMANENT SANITARY SEWER EASEMENT 40.0'

POND 3
NWL=707.50
HWL=711.30

MATCHLINE SEE SHEET C-5

PROPOSED BUILDING II
(154,800 SF)
FFE = 719.40

PROPOSED BUILDING III
(167,700 SF)
FFE = 719.40

PROPOSED PUMPER PAD
PROPOSED PUMPER PAD

60.0' R.O.W.
3.0' GRAVEL SHOULDER (TYP.)

PROPERTY LINE

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REVIEWED: ARA
DESIGNED: TGM
DRAFTED: EP

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SITE DIMENSIONAL & PAVING PLAN

REVISIONS

PEC JOB No. 2360.00-WI
PEC PM ARA
START DATE 03/17/22
SCALE 1" = 40'

SHEET C-6 OF C-22

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SITE DIMENSIONAL & PAVING PLAN

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LEGEND

- STORM SEWER MANHOLE
- STORM SEWER INLET
- PROPOSED CONCRETE END SECTION
- PROPOSED CONTOUR
- PROPOSED TOPSOIL CONTOUR
- SPOT ELEVATION
- DIRECTION OF SURFACE FLOW
- OVERFLOW RELIEF ROUTING

GRADING NOTES

1. CONTRACTOR SHALL VERIFY ALL GRADES, ENSURE ALL AREAS DRAIN PROPERLY AND REPORT ANY DISCREPANCIES TO PINNACLE ENGINEERING GROUP PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.
2. ALL EXISTING CONTOURS REPRESENT EXISTING SURFACE GRADES UNLESS OTHERWISE NOTED. ALL PROPOSED GRADES SHOWN ARE FINISH SURFACE GRADES UNLESS OTHERWISE NOTED.
3. SPOT ELEVATIONS REPRESENT THE GRADE ALONG THE FLOW LINE UNLESS OTHERWISE NOTED.
4. ALL EXCAVATIONS AND MATERIAL PLACEMENT SHALL BE COMPLETED TO DESIGN ELEVATIONS AS DEPICTED IN THE PLANS.

   CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATION(S) OF ALL GRADING QUANTITIES. WHILE PEG ATTEMPTS TO PROVIDE A COST-EFFECTIVE APPROACH TO BALANCE EARTHWORK, GRADING DESIGN IS BASED ON MANY FACTORS, INCLUDING SAFETY, AESTHETICS, AND COMMON ENGINEERING STANDARD OF CARE, THEREFORE NO GUARANTEE CAN BE MADE FOR A BALANCED SITE.

   THE CONTRACTOR MAY SOLICIT APPROVAL FROM ENGINEER/OWNER TO ADJUST FINAL GRADES FROM DESIGN GRADES TO PROVIDE AN OVERALL SITE BALANCE AS A RESULT OF FIELD CONDITIONS.
5. GRADING ACTIVITIES SHALL BE IN A MANNER TO ALLOW POSITIVE DRAINAGE ACROSS DISTURBED SOILS, WHICH MAY INCLUDE EXCAVATION OF TEMPORARY DITCHES TO PREVENT PONDING, AND IF NECESSARY PUMPING TO ALLEVIATE PONDING. CONTRACTOR SHALL PREVENT SURFACE WATER FROM ENTERING INTO EXCAVATIONS. IN NO WAY SHALL OWNER BE RESPONSIBLE FOR REMEDIATION OF UNSUITABLE SOILS CREATED/ORIGINATED AS A RESULT OF IMPROPER SITE GRADING OR SEQUENCING. CONTRACTOR SHALL SEQUENCE GRADING ACTIVITIES TO LIMIT EXPOSURE OF DISTURBED SOILS IN ACCORDANCE WITH THE APPROVED STORMWATER POLLUTION PREVENTION PLAN.
6. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF ALL PAVEMENT BEARING SURFACES IN ACCORDANCE WITH PART 2 OF THE STATE STANDARDS. THE CONTRACTOR SHALL NOTIFY ENGINEER/OWNER IF PROPER COMPACTION CANNOT BE OBTAINED. THE PROJECT'S GEOTECHNICAL CONSULTANT SHALL DETERMINE WHICH IN-SITU SOILS ARE TO BE CONSIDERED UNSUITABLE SOILS. THE ENGINEER/OWNER AND GEOTECHNICAL TESTING CONSULTANT WILL DETERMINE IF REMEDIAL MEASURES WILL BE NECESSARY.
7. IN THE EVENT THAT ANY MOISTURE-DENSITY TEST(S) FAIL TO MEET SPECIFICATION REQUIREMENTS, THE CONTRACTOR SHALL PERFORM CORRECTIVE WORK AS NECESSARY TO BRING THE MATERIAL INTO COMPLIANCE AND RETEST THE FAILED AREA AT NO COST TO THE OWNER.
8. WITH THE AUTHORIZATION OF THE ENGINEER/OWNER, MATERIAL THAT IS TOO WET TO PERMIT PROPER COMPACTION MAY BE SPREAD ON FILL AREAS IN AN EFFORT TO DRY. CONTRACTOR SHALL CLEARLY FIELD MARK THE EXTERIOR LIMITS OF SPREAD MATERIAL WITH PAINTED LATH AND SUBMIT A PLAN TO THE ENGINEER/OWNER THAT IDENTIFIES THE LIMITS. UNDER NO CONDITION SHALL THE SPREAD MATERIAL DEPTH EXCEED THE MOST RESTRICTIVE OF: THE EFFECTIVE TREATMENT DEPTH OF MACHINERY THAT WILL BE USED TO TURN OVER THE SPREAD MATERIAL; OR THE MAXIMUM COMPACTION LIFT DEPTH.
9. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER/OWNER IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION.
10. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ADEQUATE AND SAFE TEMPORARY SHORING, BRACING, RETENTION STRUCTURES, AND EXCAVATIONS.
11. THE SITE SHALL BE COMPLETED TO WITHIN 0.10-FT (+/-) OF THE PROPOSED GRADES AS INDICATED WITHIN THE PLANS PRIOR TO PLACEMENT OF TOPSOIL OR AGGREGATE BASE. CONTRACTOR IS ENCOURAGED TO SEQUENCE CONSTRUCTION SUCH THAT THE SITE IS DIVIDED INTO SMALLER AREAS TO ALLOW STABILIZATION OF DISTURBED SOILS IMMEDIATELY UPON COMPLETION OF INDIVIDUAL SMALLER AREAS.
12. CONTRACTOR SHALL CONTACT "DIGGER'S HOTLINE" FOR LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES AND SHALL BE RESPONSIBLE FOR PROTECTING SAID UTILITIES FROM ANY DAMAGE DURING CONSTRUCTION.
13. CONTRACTOR SHALL PROTECT INLETS AND ADJACENT PROPERTIES WITH SILT FENCING OR APPROVED EROSION CONTROL METHODS UNTIL CONSTRUCTION IS COMPLETED. CONTRACTOR SHALL PLACE SILT FENCING AT DOWN SLOPE SIDE OF GRADING LIMITS.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING FACILITIES OR UTILITIES. ANY DAMAGE SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE EXPENSE OF THE CONTRACTOR.
15. WORK WITHIN ANY ROADWAY RIGHT-OF-WAY SHALL BE COORDINATED WITH THE APPROPRIATE MUNICIPAL OFFICIAL PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FEES. GRADING WITHIN RIGHT-OF-WAY IS SUBJECT TO APPROVAL BY SAID OFFICIALS. RESTORATION OF RIGHT-OF-WAY IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF GRADING. RESTORATION SHALL INCLUDE ALL ITEMS NECESSARY TO RESTORE RIGHT-OF-WAY IN-KIND INCLUDING LANDSCAPING.
16. CONTRACTOR SHALL COMPLY WITH ALL THE VILLAGE OF SOMERS CONSTRUCTION STANDARDS/ORDINANCES FOR WORK WITHIN THE RIGHT-OF-WAY.
17. LANDSCAPE AND TURF AREAS SHALL HAVE A MINIMUM OF 6-INCH TOPSOIL REPLACEMENT.
18. SURVEY BENCHMARKS AND MAPPING HAVE BEEN PROVIDED BY PINNACLE ENGINEERING GROUP. IN NO WAY DOES PEG WARRANT THE BASEMAP IS ALL-INCLUSIVE OR REPRESENTATIVE OF ACTUAL CONDITIONS. CONTRACTOR SHALL PROVIDE CHECKS AS NECESSARY TO VERIFY THE BASEMAP CONTENT AND ACCURACY.

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 100' 200'

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STH 142 (CTH S) (VARIABLE R.O.W.)

POND 1

POND 2

POND 3

PROPOSED BUILDING I (612,252 SF) FFE = 723.50

PROPOSED BUILDING II (154,800 SF) FFE = 719.40

PROPOSED BUILDING III (167,700 SF) FFE = 719.40

100 YEAR FLOOD PLAIN

WETLAND

SHEET C-8

SHEET C-9

SHEET C-10

NO DISTURBANCE OF THE EXISTING WETLAND AREAS ARE ALLOWED PRIOR TO THE APPROVAL OF A WETLAND FILL PERMIT

ALL WORK WITHIN PUBLIC R.O.W. SHALL CONFORM TO WISCONSIN DOT, KENOSHA COUNTY AND VILLAGE OF SOMERS STANDARDS

REVIEWED: ABA
DESIGNED: TDM
DRAFTED: EP

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CHICAGO | MILWAUKEE : NATIONWIDE

SOMERS BUSINESS PARK

SOMERS, WI

GRADING PLAN OVERVIEW

REVISIONS

PEG JOB No: 2360.00-WI
PEG PM: ABA
START DATE: 03/17/22
SCALE: 1" = 100'

SHEET C-7 of C-22

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MATCHLINE SEE SHEET C-9

PROPOSED BUILDING I
(612,252 SF)
FFE = 723.50

POND 1
NWL=709.00
HWL=713.90

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

STH 142 (CTH S) (VARIABLE R.O.W.)

60.0' R.O.W.

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 40' 80'

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LEGEND

- STORM SEWER MANHOLE
- STORM SEWER INLET
- PROPOSED CONCRETE END SECTION
- PROPOSED CONTOUR
- PROPOSED TOPSOIL CONTOUR
- SPOT ELEVATION
- DIRECTION OF SURFACE FLOW
- OVERFLOW RELIEF ROUTING

DRAWN: EP
DESIGNED: TCM
REVIEWED: ABA

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GRADING PLAN

REVISIONS

PES JOB No. 2360.00-WI
PES PM ABA
START DATE 03/17/22
SCALE 1" = 40'

SHEET
C-8
OF
C-22

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GRADING PLAN

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LEGEND

- STORM SEWER MANHOLE
- STORM SEWER INLET
- PROPOSED CONCRETE END SECTION
- 749 PROPOSED CONTOUR
- 749 PROPOSED TOPSOIL CONTOUR
- 750.00 SPOT ELEVATION
- DIRECTION OF SURFACE FLOW
- OVERFLOW RELIEF ROUTING

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 40' 80'

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MATCHLINE SEE SHEET C-10

POND 2
NWL=710.50 I HWL=716.48

20.0' WIDE SPILLWAY

FLOODPLAIN IMPACT AREA

RETAINING WALL

PROPERTY LINE

100 YEAR FLOOD PLAIN

COMPENSATORY FLOODPLAIN STORAGE

50.0' WIDE SPILLWAY

POND 1
NWL=709.00
HWL=713.90

PROPOSED BUILDING I
(612,252 SF)
FFE = 723.50

60.0' R.O.W.

PROPERTY LINE

MATCHLINE SEE SHEET C-8

REVIEWED: ARA
DESIGNED: TDM
DRAFTED: JP

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GRADING PLAN

REVISIONS

PEG JOB No. 2360.00-WI
PEG PM: ARA
START DATE: 03/17/22
SCALE: 1" = 40'

SHEET C-9 OF C-22

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GRADING PLAN

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LEGEND

- STORM SEWER MANHOLE
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- OVERFLOW RELIEF ROUTING

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 40' 80'

20' TEMPORARY CONSTRUCTION EASEMENT 20.0'

PERMANENT SANITARY SEWER EASEMENT 40.0'

POND 3
NWL=707.50
HWL=711.30

50.0' WIDE SPILLWAY

RETAINING WALL

MATCHLINE SEE SHEET C-9

PROPOSED BUILDING II
(154,800 SF)
FFE = 719.40

PROPOSED BUILDING III
(167,700 SF)
FFE = 719.40

80.0' R.O.W.

PROPERTY LINE

PROPERTY LINE

RETAINING WALL

REVIEWED: ABA
DESIGNED: TDM
DRAFTED: EP

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GRADING PLAN

REVISIONS

PEG JOB No. 2360.00-WI
PEG PM: ABA
START DATE: 03/17/22
SCALE: 1" = 40'

SHEET C-10 OF C-22

GRADING PLAN

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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 SOMERS SPECIAL PROVISIONS AND WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES SPS 382.

4. 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.

5. 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.

6. 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 AND NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS.

7. ALL NEW ON-SITE SANITARY, STORM AND WATER UTILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE PROPERTY OWNER.

8. THE CONTRACTOR SHALL CONTACT THE VILLAGE OF SOMERS PUBLIC WORKS DEPARTMENT 48-HOURS IN ADVANCE OF SANITARY, WATER AND STORM CONNECTIONS TO THE CITY-OWNED SYSTEM TO SCHEDULE INSPECTIONS.

9. ROUTING OF GAS, ELECTRIC AND TELEPHONE SERVICES ARE SHOWN ON THE ARCHITECTURAL PLANS AND SUBJECT TO CHANGE BASED UPON FINAL REVIEW AND APPROVAL BY RESPECTIVE UTILITY COMPANIES AND OWNER. CONTRACTOR SHALL CONTACT EACH UTILITY COMPANY AND COORDINATE FINAL LOCATIONS FOR ALL UTILITY SERVICES PRIOR TO START OF CONSTRUCTION.

10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROPER AUTHORITIES FOR ANY REQUIRED PERMITS, AUTHORIZATIONS, TRAFFIC CONTROL AND ANY PERMIT FEES REQUIRED.

11. 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.

12. THE CONTRACTOR IS RESPONSIBLE FOR THE SIZE, TYPE AND NUMBER OF WATER MAIN BENDS, HORIZONTAL AND VERTICAL, REQUIRED TO COMPLETE CONSTRUCTION. COST FOR BENDS, HORIZONTAL AND VERTICAL, SHALL BE INCIDENTAL AND INCLUDED IN THE OVERALL COST OF THE CONTRACT.

13. STORM SEWER SPECIFICATIONS -

PIPE - REINFORCED CONCRETE PIPE (RCP) SHALL MEET THE REQUIREMENTS OF ASTM CLASS C-76 WITH RUBBER GASKET JOINTS CONFORMING TO ASTM C-443. STRENGTH CLASSIFICATIONS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

HEIGHT OF COVER (FEET):	0-2	2-3	3-6	6-15	15-25	25+
MINIMUM CONCRETE PIPE CLASSIFICATION:	IV	III	II	III	IV	
ENGINEER TO SPECIFY						

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. IF HDPE PIPE IS USED FOR POND OUTFALLS, A MINIMUM OF THREE (3) SECTIONS (2 STRAPS) SHALL BE STRAPPED TOGETHER.

INLETS - INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FILE NO. 25 OF THE "STANDARD SPECIFICATIONS" WITH A 1'-8" X 2'-6" MAXIMUM OPENING. SEE DETAILS ON SHEET C-20 FOR CASTINGS. STRUCTURE SHOP DRAWINGS SHALL BE SUBMITTED TO PINNACLE ENGINEERING GROUP FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURING AND INSTALLATION.

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" AND ALL VILLAGE OF SOMERS SPECIFICATIONS.

MANHOLE FRAMES AND COVERS - SEE DETAILS ON SHEET C-20 FOR CASTINGS.

IF HDPE PIPE IS USED FOR POND OUTFALLS, A MINIMUM OF THREE (3) SECTIONS (2 STRAPS) SHALL BE STRAPPED TOGETHER.

16. WATER MAIN SPECIFICATIONS -

PIPE - WATER MAIN SHALL BE DUCTILE IRON PIPE MEETING THE REQUIREMENTS OF AWWA STANDARD C-900, CLASS 150, SDR-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-509, CHAPTER 8.27.0 OF THE "STANDARD SPECIFICATIONS" - GATE VALVES AND VALVE BOXES SHALL CONFORM TO LOCAL PLUMBING ORDINANCES.

HYDRANTS - HYDRANTS SHALL CONFORM TO THE SPECIFICATIONS OF THE VILLAGE OF SOMERS AND IN ACCORDANCE WITH FILE 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 26-INCHES.

BEDDING AND COVER MATERIAL - PIPE BEDDING AND COVER MATERIAL SHALL BE 3/8" CRUSHED LIMESTONE CHIPS CONFORMING TO CHAPTER 8.42.2 OF THE "STANDARD SPECIFICATIONS" AND THE VILLAGE OF SOMERS STANDARD SPECIFICATIONS.

BACKFILL - BACKFILL MATERIAL AND INSTALLATION SHALL BE 3/8" CRUSHED LIMESTONE CHIPS AND SHALL BE IN ACCORDANCE WITH CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS" AND ALL VILLAGE OF SOMERS SPECIFICATIONS. GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 4 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".

17. SANITARY SEWER SPECIFICATIONS -

PIPE - SANITARY SEWER PIPE MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) MEETING REQUIREMENTS OF ASTM D 3034, SDR-26, WITH INTEGRAL BELL TYPE FLEXIBLE ELASTOMERIC JOINTS, MEETING THE REQUIREMENTS OF ASTM D-3212 AND ALL VILLAGE OF SOMERS SPECIFICATIONS. ALL PROPOSED PUBLIC SANITARY SEWER SHALL BE PVC SDR-26 PIPE.

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

BACKFILL - BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS" AND ALL VILLAGE OF SOMERS SPECIFICATIONS. GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 4 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."

MANHOLES - MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH FILE NOS. 12, 13 AND 15 OF THE "STANDARD SPECIFICATIONS" AND ALL SPECIAL PROVISIONS OF THE VILLAGE OF SOMERS. STRUCTURE SHOP DRAWINGS SHALL BE SUBMITTED TO PINNACLE ENGINEERING GROUP FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURING AND INSTALLATION.

MANHOLE FRAMES AND COVERS - SEE DETAILS ON SHEET C-20 FOR CASTINGS.

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

19. TRACER WIRE SHALL BE INSTALLED ON ALL NEW SANITARY LATERALS AND WATERMAINS. TRACER WIRE SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THESE CODE SECTIONS AS PER 182.0715(2R) OF THE STATUTES AND AS ALL VILLAGE OF SOMERS SPECIFICATIONS. THE TRACER WIRE FOR THE SANITARY SEWER LATERAL SHALL BE CONTINUOUS AND SHALL BE EXTENDED ABOVE GRADE VIA A 4-INCH PVC PIPE WITH SCREW-ON CAP ADJACENT TO THE PROPOSED TERMINATION POINT OF THE LATERAL FOR THE PROPOSED BUILDING.

20. SEE UTILITY PLANS AND CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

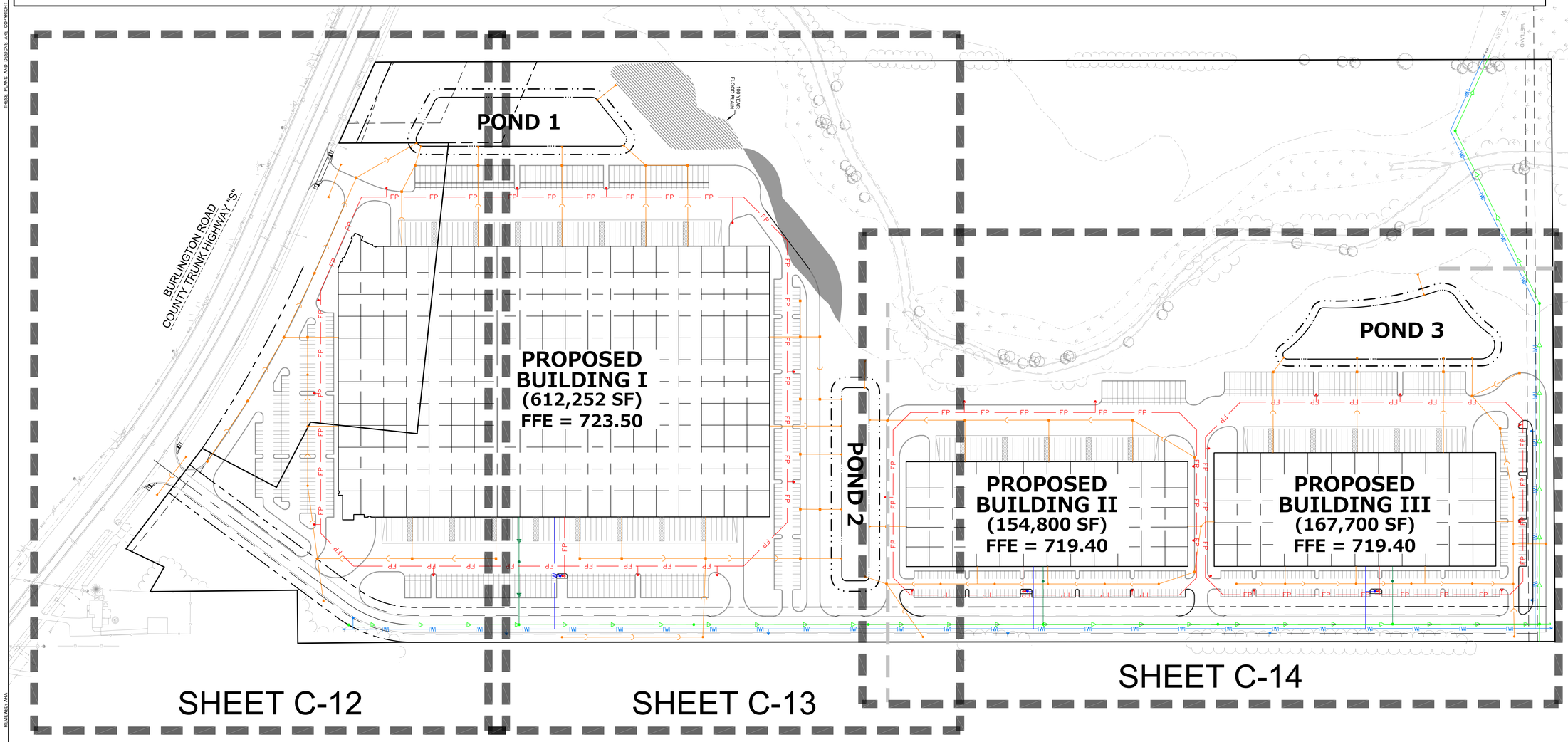
NORTH

GRAPHICAL SCALE (FEET)

0 1" = 100' 200'

LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM SEWER INLET (ROUND CASTING)
- STORM SEWER INLET (RECTANGULAR CASTING)
- PRECAST CONCRETE FLARED END SECTION
- CLEANOUT
- VALVE BOX
- FIRE HYDRANT
- STORM SEWER
- SANITARY SEWER - PRIVATE
- SANITARY SEWER - PUBLIC
- W — WATERMAIN - PRIVATE
- W — WATERMAIN - PUBLIC
- FP — FIRE PROTECTION



NO DISTURBANCE OF THE EXISTING WETLAND AREAS ARE ALLOWED PRIOR TO THE APPROVAL OF A WETLAND FILL PERMIT

ALL WORK WITHIN PUBLIC R.O.W. SHALL CONFORM TO WISCONSIN DOT, KENOSHA COUNTY AND VILLAGE OF SOMERS STANDARDS

LOOP AND FIRE DEPARTMENT CONNECTION SHOWN FOR CONCEPTUAL HYDRANT SPACING ONLY. THIS PLAN SHALL NOT BE USED FOR FIRE PROTECTION SYSTEM AND SYSTEM CONSTRUCTION. FINAL DESIGN AND SIZING SHALL BE BY FIRE PROTECTION ENGINEER.

REVIEWED: ABA
DESIGNED: TDM
DRAFTED: EP

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

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WISCONSIN OFFICE:
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BROOKFIELD, WI 53186
(262) 754-8888
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SOMERS BUSINESS PARK

SOMERS, WI

UTILITY PLAN OVERVIEW

REVISIONS

PEG JOB No. 2360.00-WI
PEG PM ABA
START DATE 03/17/22
SCALE 1" = 100'

SHEET C-11 OF C-22

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UTILITY PLAN OVERVIEW

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MATCHLINE SEE SHEET C-13

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 40' 80'

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POND 1
NWL=709.00
HWL=713.90

PROPOSED BUILDING I
(612,252 SF)
FFE = 723.50

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

STH 142 (CTH S) (VARIABLE R.O.W.)

80.0' R.O.W.

3+00
2+00
1+00
0+00

LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM SEWER INLET (ROUND CASTING)
- STORM SEWER INLET (RECTANGULAR CASTING)
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- SANITARY SEWER - PRIVATE
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- W — WATERMAIN - PRIVATE
- (W) — WATERMAIN - PUBLIC
- FP — FIRE PROTECTION

DESIGNED - TDM
DRAFTED - EP
REVIEWED - ARA

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SOMERS, WI

UTILITY PLAN

REVISIONS

PEG JOB No. 2360.00-WI
PEG PM ARA
START DATE 03/17/22
SCALE 1" = 40'

SHEET
C-12
of
C-22

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UTILITY PLAN

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LEGEND

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- SANITARY SEWER - PUBLIC
- WATERMAIN - PRIVATE
- WATERMAIN - PUBLIC
- FIRE PROTECTION

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 40' 80'

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MATCHLINE SEE SHEET C-14

POND 2
NWL=710.50 I HWL=716.48

FLOODPLAIN IMPACT AREA

100 YEAR FLOOD PLAIN

PROPERTY LINE

COMPENSATORY FLOODPLAIN STORAGE

POND 1
NWL=709.00
HWL=713.90

PROPOSED BUILDING I
(612,252 SF)
FFE = 723.50

80.0' R.O.W.

14+00 13+00 12+00 11+00 10+00 9+00 8+00 7+00 6+00 5+00 4+00

MATCHLINE SEE SHEET C-12

REVIEWED: ARA
DESIGNED: TDM
DRAFTED: JP

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SOMERS, WI

UTILITY PLAN

REVISIONS

PEG 308 to 2360.00-WI
PEG PM ARA
START DATE 09/17/22
SCALE 1" = 40'

SHEET C-13 & C-22

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UTILITY PLAN

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LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM SEWER INLET (ROUND CASTING)
- STORM SEWER INLET (RECTANGULAR CASTING)
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- SANITARY SEWER - PRIVATE
- SANITARY SEWER - PUBLIC
- WATERMAIN - PRIVATE
- WATERMAIN - PUBLIC
- FIRE PROTECTION

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 40' 80'

0+00 1+00 2+00 3+00 4+00 5+00

MATCHLINE

ENLARGED VIEW

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 40' 80'

MATCHLINE SEE ENLARGED VIEW

20' TEMPORARY CONSTRUCTION EASEMENT

PERMANENT SANITARY SEWER EASEMENT 40.0'

POND 3
NWL=707.50
HWL=711.30

PROPOSED BUILDING II
(154,800 SF)
FFE = 719.40

PROPOSED BUILDING III
(167,700 SF)
FFE = 719.40

MATCHLINE SEE SHEET C-13

80.0' R.O.W.

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00 27+92 14+88.00

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UTILITY PLAN

REVISIONS

PEG 308 No. 2360.00-WI
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START DATE: 09/17/22
SCALE: 1" = 40'

SHEET C-14 & C-22

UTILITY PLAN

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LEGEND

- PROPOSED CONTOUR
- SF — SILT FENCE
- STRAW WATTLE
- STRAW WATTLE - DITCH CHECK
- STRAW WATTLE - CULVERT PIPE CHECK
- INLET PROTECTION
- RIPRAP
- CONSTRUCTION ENTRANCE
- HYDROSEED (PER MANUFACTURER SPECIFICATIONS)
- EROSION CONTROL BLANKET

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN EPA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT ("WPDES" PERMIT NO. WI-S067831-4) FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL TECHNICAL STANDARDS AND PROVISIONS IN EFFECT AT THE TIME OF CONSTRUCTION. 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. ALL NECESSARY PERMITS MUST BE OBTAINED FROM THE VILLAGE AND OTHER LOCAL, STATE, AND FEDERAL AGENCIES PRIOR TO PERFORMING ANY EARTHWORK OR WORK IN THE VILLAGE RIGHT-OF-WAY.
2. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL CONTROL MEASURES AS DIRECTED BY OWNER/ENGINEER OR GOVERNING AGENCIES SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
3. MODIFICATIONS TO THE APPROVED SWPPP IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMP'S. ALL MODIFICATIONS MUST BE APPROVED BY OWNER/ENGINEER/GOVERNING AGENCY 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 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 IMMEDIATELY AND AS REQUESTED BY THE GOVERNING AGENCIES.
7. ALL EXISTING STORM SEWER FACILITIES THAT WILL COLLECT RUNOFF FROM DISTURBED AREAS SHALL BE PROTECTED TO TO PREVENT SEDIMENT DEPOSITION WITHIN STORM SEWER SYSTEMS. INLET PROTECTION SHALL BE IMMEDIATELY FITTED AT THE INLET OF ALL INSTALLED STORM SEWER AND SILT FENCE SHALL BE IMMEDIATELY FITTED AT ALL INSTALLED CULVERT INLETS . ALL INLETS, STRUCTURES, PIPES, AND SWALES SHALL BE KEPT CLEAN AND FREE OF SEDIMENTATION AND DEBRIS.
8. EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, WATER MAIN, ETC.) OUTSIDE OF THE PERIMETER CONTROLS 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 WATERCOURSES AND WETLANDS SHALL BE PROTECTED WITH SILT FENCE TO PREVENT ANY DIRECT DISCHARGE FROM DISTURBED SOILS.
11. 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.
12. 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.
13. EROSION CONTROL MEASURES TEMPORARILY REMOVED FOR UNAVOIDABLE CONSTRUCTION ACTIVITIES SHALL BE IN WORKING ORDER IMMEDIATELY FOLLOWING COMPLETION OF SUCH ACTIVITIES OR PRIOR TO THE COMPLETION OF EACH WORK DAY, WHICH EVER OCCURS FIRST.
14. 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.
15. PUMPS MAY BE USED AS BYPASS DEVICES. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS. PUMP DISCHARGE SHALL BE DIRECTED INTO AN APPROVED FILTER BAG OR APPROVED SETTLING DEVICE.
16. 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. ALL DISTURBED AREAS THAT WILL NOT BE WORKED FOR A PERIOD OF FOURTEEN (14) DAYS REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH TECHNICAL STANDARDS.
17. ALL DISTURBED SLOPES EXCEEDING 4:1, SHALL BE STABILIZED WITH NORTH AMERICAN GREEN S75BN EROSION MATTING (OR APPROVED EQUAL) AND ALL CHANNELS 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.
18. 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.
19. 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.
20. 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 OF THE GENERAL PERMIT. CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
21. NO EQUIPMENT IS TO BE PLACED OR STORED IN ANY ROAD RIGHT-OF-WAYS WITHOUT PROPER APPROVAL FROM THE VILLAGE.
22. SEE ADDITIONAL DETAILS AND NOTES ON SITE STABILIZATION AND CONSTRUCTION DETAILS.

NORTH

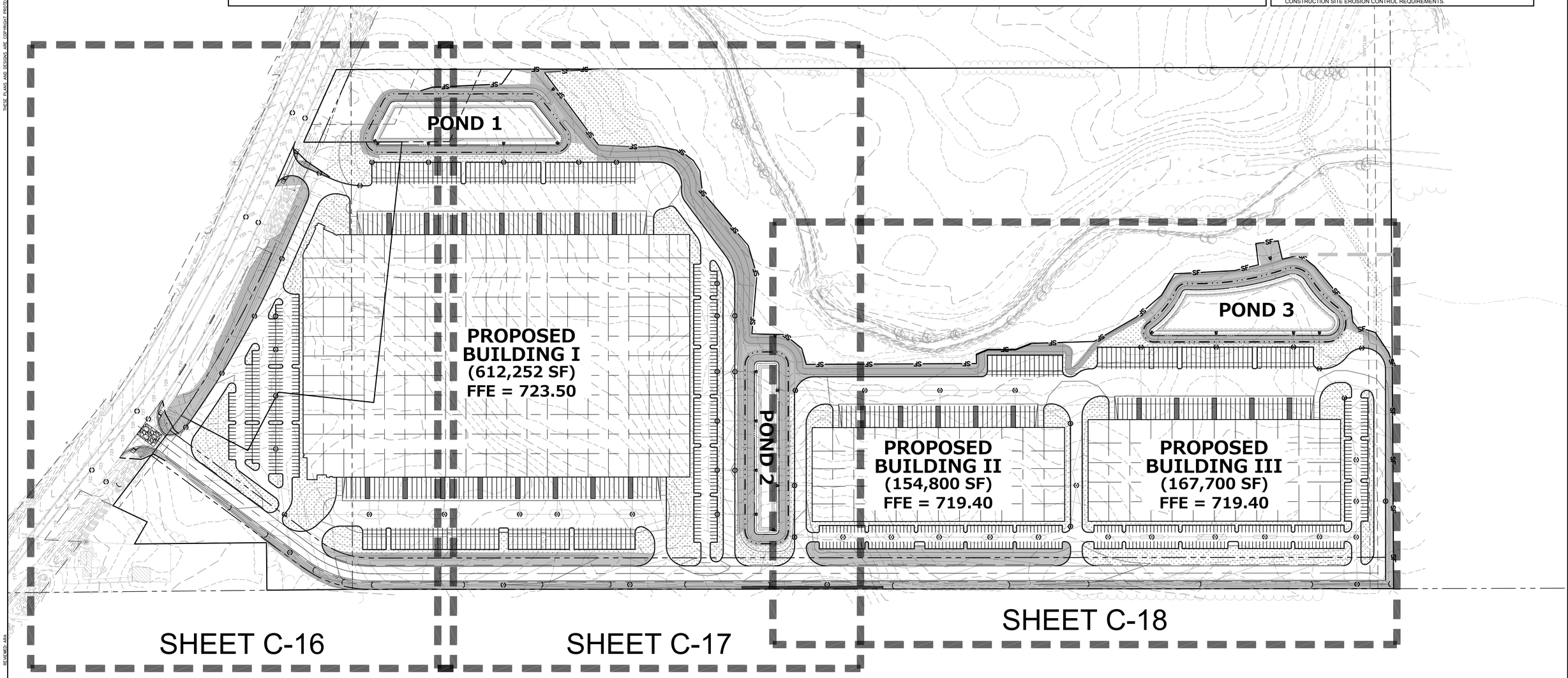
GRAPHICAL SCALE (FEET)

0 — 1" = 100' — 200'

CONSTRUCTION SITE SEQUENCING

1. INSTALL PERIMETER SILT FENCE, INLET PROTECTION AND TEMPORARY CONSTRUCTION ENTRANCE.
2. STRIP AND STOCKPILE TOPSOIL, INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE.
3. CONDUCT ROUGH GRADING EFFORTS AND INSTALL CHECK DAMS AND SEDIMENT TRAPS/BASINS AS NEEDED.
4. GRADE SITE, INSTALL, MONITOR, AND MAINTAIN EROSION CONTROL DOWN SLOPE OF DISTURBED AREAS & INSTALL TRACK MAT PER PLANS AND DNR/NOI REQUIREMENTS. ALL TRACKING TO BE CLEANED UP IMMEDIATELY.
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. PLACE TOPSOIL AND IMMEDIATELY STABILIZE DISTURBED AREAS WITH EROSION CONTROLS.
8. EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.

   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.



NO DISTURBANCE OF THE EXISTING WETLAND AREAS ARE ALLOWED PRIOR TO THE APPROVAL OF A WETLAND FILL PERMIT

ALL WORK WITHIN PUBLIC R.O.W. SHALL CONFORM TO WISCONSIN DOT, KENOSHA COUNTY AND VILLAGE OF SOMERS STANDARDS

REVIEWED: ARA
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WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

SOMERS BUSINESS PARK

SOMERS, WI

EROSION CONTROL PLAN OVERVIEW

REVISIONS

PEC JOB No: 2360.00-WI
PEC PM: ARA
START DATE: 03/17/22
SCALE: 1" = 100'

SHEET C-15 OF C-22

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EROSION CONTROL PLAN OVERVIEW

www.pinnacle-engr.com

Z:\PROJECTS\2021\2360.00-WI\CAD\SHEETS\BLDG I\2360.00 BLDG I EROSION CONTROL PLAN.DWG

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MATCHLINE SEE SHEET C-17

PROPOSED BUILDING I
(612,252 SF)
FFE = 723.50

POND 1
NWL=709.00
HWL=713.90

PROPERTY LINE

STH 142 (CTH S) (VARIABLE R.O.W.)

90' R.O.W.

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 40' 80'

www.pinnacle-engr.com

LEGEND

- PROPOSED CONTOUR
- SILT FENCE
- STRAW WATTLE
- STRAW WATTLE - DITCH CHECK
- STRAW WATTLE - CULVERT PIPE CHECK
- INLET PROTECTION
- RIPRAP
- CONSTRUCTION ENTRANCE
- HYDROSEED (PER MANUFACTURER SPECIFICATIONS)
- EROSION CONTROL BLANKET

REVIEWED: ABA
DESIGNED: TDM
DRAFTED: EP

PLAN I DESIGN I DELIVER
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EROSION CONTROL PLAN

REVISIONS

PEG JOB No. 2360.00-WI
PEG PM: ABA
START DATE: 03/17/22
SCALE: 1" = 40'

SHEET
C-16
of
C-22

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EROSION CONTROL PLAN

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LEGEND

- PROPOSED CONTOUR
- SF — SILT FENCE
- STRAW WATTLE
- STRAW WATTLE - DITCH CHECK
- STRAW WATTLE - CULVERT PIPE CHECK
- INLET PROTECTION
- RIPRAP
- CONSTRUCTION ENTRANCE
- HYDROSEED (PER MANUFACTURER SPECIFICATIONS)
- EROSION CONTROL BLANKET

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 40' 80'

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MATCHLINE SEE SHEET C-18

POND 2
NWL=710.50 I HWL=716.48

COMPENSATORY FLOODPLAIN STORAGE

POND 1
NWL=709.00
HWL=713.90

PROPOSED BUILDING I
(612,252 SF)
FFE = 723.50

PROPERTY LINE

80.0' R.O.W.

PROPERTY LINE

MATCHLINE SEE SHEET C-16

DRAFTED BY: RKW/MTD: ARA DESIGNED: TDM

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SOMERS BUSINESS PARK

SOMERS, WI

EROSION CONTROL PLAN

REVISIONS

PEC JOB No 2360.00-WI
PEC PM ARA
START DATE 03/17/22
SCALE 1" = 40'

SHEET
C-17
of
C-22

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EROSION CONTROL PLAN

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LEGEND

- PROPOSED CONTOUR
- SF — SILT FENCE
- STRAW WATTLE
- STRAW WATTLE - DITCH CHECK
- STRAW WATTLE - CULVERT PIPE CHECK
- INLET PROTECTION
- RIPRAP
- CONSTRUCTION ENTRANCE
- HYDROSEED (PER MANUFACTURER SPECIFICATIONS)
- EROSION CONTROL BLANKET

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 40' 80'

MATCHLINE

ENLARGED VIEW

MATCHLINE SEE SHEET C-17

MATCHLINE SEE ENLARGED VIEW

20' TEMPORARY CONSTRUCTION EASEMENT — 20.0'

PERMANENT SANITARY SEWER EASEMENT — 40.0'

POND 3
NWL=707.50
HWL=711.30

PROPOSED BUILDING II
(154,800 SF)
FFE = 719.40

PROPOSED BUILDING III
(167,700 SF)
FFE = 719.40

80.0' R.O.W.

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

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REVIEWED - ABA

DESIGNED - TDM

DRAFTED - EP

PLAN | DESIGN | DELIVER
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PEG JOB No. 2360.00-WI
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SHEET C-18 & C-22

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1.0 POTENTIAL POLLUTANT SOURCES

GIVEN THE PROPOSED ACTIVITY ON THE PROJECT SITE, THE PRIMARY POTENTIAL POLLUTANT SOURCE ASSOCIATED WITH THIS CONSTRUCTION PROJECT IS SOIL EROSION AND TRANSPORTATION. REFER TO SECTION 4 OF THIS PLAN. ADDITIONAL POTENTIAL SOURCES OF POLLUTION MAY INCLUDE: FUEL TANKS, WASTE CONTAINERS, OIL OR OTHER PETROLEUM PRODUCTS, DETERGENTS, PAINTS, CONSTRUCTION DEBRIS, SANITARY STATIONS, FERTILIZERS, AND DUST; REFER TO SECTION 6 OF THIS PLAN.

2.0 EROSION AND SEDIMENT CONTROL IMPLEMENTATION

THE FOLLOWING ARE DESCRIPTIONS OF THE EROSION AND SEDIMENT CONTROL PRACTICES THAT SHALL BE IMPLEMENTED DURING CONSTRUCTION OF THIS PROJECT. IN ADDITION TO THESE MEASURES, CONTRACTOR SHALL DISTURB ONLY AREAS NECESSARY TO COMPLETE THE CONSTRUCTION PROJECT. ALL PRACTICES SHALL BE CONDUCTED IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES (BMP).

2.1 CONSTRUCTION AND EROSION CONTROL SEQUENCING

CONSTRUCTION SEQUENCING WILL BE UTILIZED AS A MEANS OF CONTROLLING EROSION AND LIMITING SEDIMENT TRANSPORT. SEQUENCING AS LISTED BELOW IS GENERAL IN NATURE AND MAY VARY DEPENDING ON WEATHER CONDITIONS AND/OR PHASING OF CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A DETAILED SITE SEQUENCING PLAN TO OWNER FOR APPROVAL AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM 6 AS NEEDED TO COMPLETE CONSTRUCTION ONLY IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL REQUIREMENTS.

1. INSTALL TEMPORARY CONSTRUCTION ENTRANCES, INLET PROTECTION ON EXISTING STORM SEWER AND CULVERT INLET LOCATIONS, AND PERIMETER SILT FENCING.
2. INSTALL SILT FENCING ALONG THE PERIMETER OF PROPOSED TOPSOIL STOCKPILE LOCATIONS, THE FIRST TOPSOIL DEPOSITED WITHIN THE STOCKPILE LIMITS SHALL BE PLACED TO CREATE TEMPORARY BERMING ALONG THE SILT FENCE TO PREVENT DIRECT STORMWATER RUNOFF AGAINST SILT FENCING. CONTRACTOR SHALL LIMIT LAND DISTURBING ACTIVITIES ASSOCIATED WITH TEMPORARY BERMING TO A MINIMUM.
3. STRIP TOPSOIL WITHIN THE LIMITS OF THE SEDIMENT TRAPS THAT WILL BE USED FOR TEMPORARY SEDIMENT CONTROL. STRIPPED TOPSOIL SHALL BE PLACED TO CONSTRUCT DIVERSION BERMING OR PLACED WITHIN THE STOCKPILE LIMITS.
4. STRIP TOPSOIL ALONG THE REMAINDER OF DIVERSION BERMING AND IMMEDIATELY PLACE TOPSOIL TO CREATE THE BERMING. MASS TOPSOIL STRIPPING SHALL NOT OCCUR UNTIL ALL DOWNSTREAM SEDIMENT CONTROLS ARE IN PLACE.
5. CONDUCT ROUGH GRADING OPERATIONS AND UTILITY PIPING INSTALLATION. DRAIN TILE SHALL NOT BE INSTALLED UNTIL UPLAND AREAS CONTRIBUTING STORMWATER RUNOFF ARE STABILIZED. DITCH CHECKS SHALL BE INSTALLED WITHIN DRAINAGE DITCHES IMMEDIATELY FOLLOWING CREATION OF DITCHES AND INLET PROTECTION SHALL BE INSTALLED TO PROTECT ANY STORM SEWER OR CULVERTS THAT WILL FUNCTION DURING CONSTRUCTION.
6. FINE GRADE SUB-GRADE SOILS WITHIN PAVEMENT AND BUILDING LIMITS, PLACE STONE BASE MATERIAL AS SOON AS POSSIBLE FOLLOWING COMPLETION OF FINE GRADING EFFORTS.
7. FINE GRADE REMAINING DISTURBED AREAS, PLACE SALVAGED TOPSOIL, EROSION BLANKETS/MATTING, AND SEED/MULCH AS SOON AS POSSIBLE FOLLOWING COMPLETION OF FINE GRADING EFFORTS.
8. EROSION CONTROLS SHALL NOT BE REMOVED UNTIL SITE IS FULLY STABILIZED OR 70% VEGETATIVE COVER IS ESTABLISHED. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF SILT FENCE, TEMPORARY FENCING/PRETECTION, DITCH CHECKS, AND OTHER TEMPORARY CONTROLS, AND RESTORATION PRACTICES AS NECESSARY, TO THE SATISFACTION OF THE OWNER.

2.2 STABILIZATION PRACTICES

THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR, WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, AND WHEN STABILIZATION MEASURES ARE INITIATED, SHALL BE RECORDED ON THE STABILIZATION SCHEDULE FOR MAJOR GRADING ACTIVITIES.

STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. NO MORE THAN SEVEN (7) DAYS SHALL PASS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS PERMANENTLY CEASED UNLESS:

THE INITIATION OF STABILIZATION MEASURES BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASE IS PRECLUDED BY SNOW COVER, IN THAT EVENT, STABILIZATION MEASURE SHALL BE INITIATED AS SOON AS PRACTICABLE.

CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN FOURTEEN (14) DAYS FROM WHEN ACTIVITIES CEASED, (I.E. THE TOTAL TIME PERIOD THAT THE CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN FOURTEEN (14) DAYS), IN THAT EVENT, STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED. SEE THE SOIL PROTECTION CHART PRESENTED IN THE CONSTRUCTION DOCUMENTS FOR RATES OF PERMANENT AND TEMPORARY VEGETATION.

STABILIZATION MEASURES SHALL BE DETERMINED BASED ON SITE CONDITIONS AT THE TIME CONSTRUCTION ACTIVITY HAS CEASED, INCLUDING BUT NOT LIMITED TO WEATHER CONDITIONS AND LENGTH OF TIME MEASURE MUST BE EFFECTIVE, THE FOLLOWING ARE ACCEPTABLE STABILIZATION MEASURES.

PERMANENT SEEDING; IN ACCORDANCE WITH APPROVED LANDSCAPING PLAN
TEMPORARY SEEDING MAY CONSIST OF SPRING OATS (100LBS/ACRE) AND/OR WHEAT OR CEREAL RYE (150LBS/ACRE)
HYDRO-MULCHING WITH A TACKIFIER
GEOTEXTILE EROSION MATTING
SODDING

2.3 STRUCTURAL PRACTICES

THE FOLLOWING ARE DESCRIPTIONS OF STRUCTURAL PRACTICES TO BE IMPLEMENTED TO DIVERT FLOWS FROM EXPOSED SOILS, STORE FLOWS, OR OTHERWISE LIMIT THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE INCLUDING THE PROPOSED AND EXISTING WETLAND AREAS. SUCH PRACTICES COULD INCLUDE SILT FENCE, PROTECTION FENCE, CONSTRUCTION ENTRANCE, DITCH CHECK, EROSION CONTROL MATTING, DIVERSION BERM/SWALE, SEDIMENT TRAP, LEVEL SPREADER, INLET PROTECTION, OUTLET PROTECTION, AND TEMPORARY OR PERMANENT SEDIMENT BASIN. THE FOLLOWING STRUCTURAL PRACTICES ARE TO BE UTILIZED DURING THIS PROJECT.

SILT FENCE SHALL BE PLACED DOWN SLOPE OF DISTURBED AREAS OF THE CONSTRUCTION SITE AND AROUND THE PERIMETER OF THE TOPSOIL STOCKPILE. THIS INCLUDES PROTECTION OF EXISTING WETLAND AREAS TO BE MAINTAINED. SILT FENCE MAY ALSO BE USED AS A TEMPORARY CONTROL DEVICE WHERE SEDIMENTATION RUNOFF IS DISCOVERED.

CONSTRUCTION ENTRANCE SHALL BE INSTALLED TO REDUCE SOIL EROSION POLLUTANTS FROM LEAVING THE SITE DURING CONSTRUCTION ACTIVITIES. IF THE CRUSHED STONE DOES NOT ADEQUATELY REMOVE MUD FROM VEHICLE TIRES, THEY SHALL BE HOSED OFF BEFORE ENTERING A PAVED ROADWAY. ANY SOIL DEPOSITED ON THE PUBLIC PAVED ROAD WAY SHALL BE REMOVED IMMEDIATELY.

DITCH CHECK (STRAW WATTLES) SHALL BE INSTALLED IN DRAINAGE CHANNELS AS NEEDED.

EROSION CONTROL MATTING SHALL BE PLACED ON AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 3H:1V, BEFORE VEGETATION IS ESTABLISHED.

DIVERSION BERM/SWALE SHALL BE CONSTRUCTED TO DIVERT RUNOFF AROUND THE SITE AND TO DIVERT RUNOFF FROM THE DISTURBED AREA TO A SEDIMENT TRAP OR OTHER CONTROL. BERMS/SWALES SHALL BE STABILIZED WITH EQUIPMENT TRACKING AND TEMPORARY SEEDING.

SEDIMENT TRAPS/BASIN SHALL BE CONSTRUCTED TO COLLECT RUNOFF AND RUNOFF FROM SITE DIVERSION BERMS/SWALES.

INLET PROTECTION SHALL BE INSTALLED AT STORMWATER DRAINAGE INLETS TO REDUCE SEDIMENT WITHIN STORM SEWER CONVEYANCE FEATURES.

OUTLET SCOUR PROTECTION SHALL BE INSTALLED AT STORMWATER DRAINAGE OUTLETS TO DIFFUSE FLOWS.

3.0 ADDITIONAL PRACTICES

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:

COVERING 30% OR MORE OF THE SOIL SURFACE WITH A NON-ERODIBLE MATERIAL.

ROUGHENING (EQUIPMENT TRACKING) THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND. RIDGES SHALL BE AT LEAST SIX (6) INCHES IN HEIGHT.

FREQUENT WATERING OF EXCAVATION AND FILL AREAS.

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.

4.0 EROSION AND SEDIMENT STRUCTURAL PRACTICE MAINTENANCE

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 WATTLES) - 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.

SEDIMENT TRAP - REMOVE AND DISPOSE OF THE ACCUMULATED SEDIMENT WHEN IT HAS REACHED THE SEDIMENT STORAGE ELEVATION.

INLET PROTECTION - CLEAN, REPAIR OR REPLACE FILTER FABRIC AND/OR STONE WHEN CONTROL MEASURE IS CLOGGED, INLET FILTER BAGS SHALL BE REPLACED ONCE ONE-HALF FULL OF SEDIMENT.

OUTLET PROTECTION - CLEAN, REPAIR OR REPLACE FILTER FABRIC, TURF REINFORCEMENT MATTING AND/OR STONE WHEN CONTROL MEASURE IS ONE-HALF FULL OF SEDIMENT.

SEDIMENT BASIN - AT THE END OF CONSTRUCTION, CONTRACTOR SHALL REMOVE AND DISPOSE OF THE ACCUMULATED SEDIMENT AND RESTORE BASIN AREA TO INTENDED POST-CONSTRUCTION DESIGN GRADES.

5.0 INSPECTION

INSPECTIONS SHALL BE COMPLETED WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A RAINFALL EVENT THAT IS ONE-HALF INCH OR GREATER OR EQUIVALENT SNOWFALL, OR AT A MINIMUM ONCE EVERY SEVEN (7) CALENDAR DAYS. INSPECTIONS SHALL BE UNDERTAKEN BY QUALIFIED PERSONNEL PROVIDED BY THE CONTRACTOR, AND SHALL INCLUDE: DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. A STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT SHALL BE COMPLETED AND ADDED TO THE SWPPP. RAINFALL SHALL BE RECORDED ON THE SWPPP RAINFALL LOG. CONTRACTOR SHALL IMMEDIATELY ARRANGE FOR REPAIR OR REPLACEMENT OF ANY DAMAGED OR DEFICIENT CONTROL MEASURES OBSERVED DURING THE INSPECTION.

QUALIFIED PERSONNEL MEANS A PERSON KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICES OF EROSION AND SEDIMENT CONTROL MEASURES, SUCH AS A LICENSED PROFESSIONAL ENGINEER, A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL, A CERTIFIED EROSION SEDIMENT OR STORMWATER INSPECTOR, OR OTHER TRAINED INDIVIDUAL.

6.0 SPILL PREVENTION

6.1 GENERAL MATERIAL MANAGEMENT PRACTICES

THE GOOD HOUSEKEEPING PRACTICES LISTED BELOW SHALL BE FOLLOWED THROUGHOUT THE CONSTRUCTION PROJECT.

1. CONTRACTOR SHALL STORE ONLY ENOUGH PRODUCTS REQUIRED TO COMPLETE THIS PROJECT.
2. ALL MATERIAL SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR ORIGINAL CONTAINERS CONTAINING MANUFACTURER'S LABEL.
3. MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
4. MATERIALS REQUIRED TO HAVE A MATERIAL SAFETY DATA SHEET (MSDS) SHALL HAVE A COPY STORED IN THE PROJECT'S MSDS DATABASE.

6.2 SPILL CONTROL PRACTICES

THE PRACTICES LISTED BELOW SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP.

1. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE MAINTAINED ONSITE.
2. IMMEDIATELY UPON DISCOVERY, ALL SPILLS SHALL BE CLEANED UP ACCORDING TO THE MANUFACTURERS' RECOMMENDED METHODS.
3. PERSONNEL CLEANING UP A SPILL SHALL USE PERSONAL PROTECTIVE EQUIPMENT.
4. IMMEDIATELY UPON DISCOVERY, SPILLS OF TOXIC OR HAZARDOUS MATERIALS SHALL BE REPORTED TO THE OWNER AND GENERAL CONTRACTOR.
5. NOTIFICATION AND REPORTING TO THE APPROPRIATE FEDERAL, STATE, AND LOCAL GOVERNMENT AGENCIES SHALL BE MADE AS REQUIRED.

GENERAL INFORMATION:

THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN DEVELOPED TO FULFILL ONE OF THE REQUIREMENTS OF THE GENERAL ENVIRONMENTAL PROTECTION AGENCY (EPA) NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (WISCONSIN POLLUTION DISCHARGE ELIMINATION SYSTEM "WPDES" PERMIT) FOR THE DISCHARGE OF STORMWATER ASSOCIATED WITH CONSTRUCTION PROJECTS DISTURBING ONE ACRE OR MORE. THE OWNER AND CONTRACTORS SHALL COMPLY WITH ALL REQUIREMENTS OF THE WPDES FOR ALL SUCH CONSTRUCTION PROJECTS. THE STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY FROM THIS SITE ARE SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF THE PERMITS,

THE EXECUTED OWNER CERTIFICATION AND THE CONTRACTOR CERTIFICATIONS SHALL BE KEPT ONSITE WITH THE APPROVED PLANS.

SWPPP AVAILABILITY:

THE OWNER SHALL RETAIN A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF THE PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

KEEPING PLANS CURRENT:

THE CONTRACTOR SHALL AMEND THE PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE PLAN OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SITE ACTIVITY. IN ADDITION, THE THE PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR THAT WILL IMPLEMENT A MEASURE OF THE PLAN. AMENDMENTS TO THE PLAN MAY BE REQUIRED BY THE MUNICIPALITY, OWNER, OR OTHER REVIEWING AGENCY. COPIES OF THE AMENDMENTS SHALL BE KEPT ONSITE AS PART OF THE SWPPP.

RETENTION OF RECORDS:

THE OWNER SHALL RETAIN COPIES OF THIS AND ALL REPORTS AND NOTICES REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT. FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE PERMIT COVERAGE EXPIRES OR IS TERMINATED. THIS PERIOD MAY BE EXTENDED BY THE REQUEST OF THE AGENCY AT ANY TIME. IN ADDITION, THE OWNER SHALL RETAIN A COPY OF THE PLAN REQUIRED BY THIS PERMIT AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

A NOTICE OF INTENT (NOI) APPLICATION MUST BE COMPLETED AND INCORPORATED INTO THE SWPPP.

WPDES NOTICE OF TERMINATION GUIDANCE:

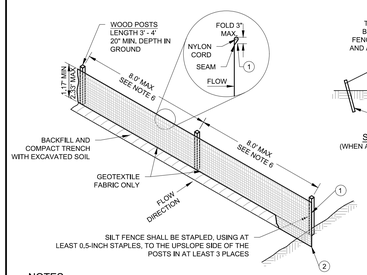
WHEN A SITE HAS BEEN FINALLY STABILIZED AND ALL STORMWATER DISCHARGES FROM CONSTRUCTION SITES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED, THE OWNER OF THE FACILITY MUST SUBMIT A COMPLETED NOTICE OF TERMINATION THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT. CONTRACTOR SHALL SUBMIT A COMPLETED NOTICE OF TERMINATION TO OWNER FOR EXECUTION PRIOR TO THEIR FINAL PAY APPLICATION REQUEST.

CONTROL MEASURE GROUP	CONTROL MEASURE	CONTROL MEASURE CHARACTERISTICS
VEGETATIVE SOIL COVER	TEMPORARY SEEDING	PROVIDES QUICK TEMPORARY COVER TO CONTROL EROSION WHEN PERMANENT SEEDING IS NOT DESIRED OR TIME OF YEAR IS INAPPROPRIATE.
	PERMANENT SEEDING	PROVIDES PERMANENT VEGETATIVE COVER TO CONTROL EROSION, FILTERS SEDIMENT FROM WATER, MAY BE PART OF FINAL LANDSCAPE PLAN.
NON VEGETATIVE SOIL COVER	AGGREGATE COVER	PROVIDES TEMPORARY COVER ON ROADS AND PARKING LOTS AND AREAS WHERE VEGETATION CANNOT BE ESTABLISHED. PREVENTS MUD FROM BEING PICKED UP AND TRANSPORTED OFF-SITE.
	PAVING	PROVIDES PERMANENT COVER ON PARKING LOTS AND ROADS OR OTHER AREAS WHERE VEGETATION CANNOT BE ESTABLISHED.
DIVERSIONS	DIVERSION BERM / SWALE	DIVERTS RUNOFF TO A SEDIMENT TRAP OR OTHER CONTROL.
ENCLOSED DRAINAGE	STORM SEWER	CONVEYS SEDIMENT LADEN WATER TO A SEDIMENT BASIN.
OUTLETS	APRON ENDWALL OR RIPRAP	PROTECTS DOWNSTREAM CHANNEL FROM HIGH VELOCITY OF FLOW DISCHARGING FROM STRUCTURE.
SEDIMENT BASINS	TEMPORARY SEDIMENT TRAP	CONSTRUCTED TO REMOVE SILTATION FROM RUNOFF FROM SITE DIVERSION BERMS/SWALES AND IN OVERLAND FLOOD ROUTE. CAN BE CONVERTED TO PERMANENT SEDIMENT BASIN.
SEDIMENT FILTERS	SILT FENCE	PLACED DOWN SLOPE OF DISTURBED AREA TO KEEP RUNOFF CONTAINED ON-SITE.
	INLET PROTECTION	INSTALLED IN OPEN GRATE STRUCTURES TO COLLECT SEDIMENT.
	STRAW WATTLES	PLACED IN DRAINAGE CHANNELS TO FILTER SEDIMENT FROM RUNOFF.
MUD AND DUST CONTROL	CONSTRUCTION ENTRANCE	REDUCES SOIL EROSION POLLUTANTS BEING TRANSPORTED OFF-SITE.
	STREET SWEEPING	REDUCES POLLUTANTS TRACKED FROM CONSTRUCTION SITE.
	DUST CONTROL	PREVENTS DUST FROM LEAVING CONSTRUCTION SITE.

STABILIZATION EFFECTIVENESS (TIME OF YEAR)

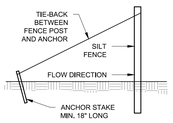
STABILIZATION TYPE	STABILIZATION UTILIZATION PERIODS											
	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING			A	★	★	★	★	★	★			
DORMANT SEEDING	B										B	
TEMPORARY SEEDING			C	★	★	★	D	★	★			
SODDING			E	★	★	★	★	★	★			

A. KENTUCKY BLUEGRASS 90 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 30 LBS/ACRE.
B. KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 45 LBS/ACRE + 2 TONS STRAW MULCH/ACRE.
C. SPRING OATS 100 LBS/ACRE.
D. WHEAT OR CEREAL RYE 150 LBS/ACRE.
E. SOD.
F. STRAW MULCH 2 TONS/ACRE.
* IRRIGATION/WATERING REQUIRED TO SUPPORT ESTABLISHMENT AS NEEDED.

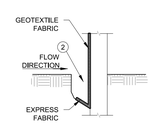


NOTES:

1. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE TABLE 1 OR 2, CLASS I WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.
2. 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.
3. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
4. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1.125-INCHES x 1.125-INCHES OF DRIED OAK OR HICKORY.
5. SILT FENCE TO EXTEND ABOVE THE TOP OF PIPE, WHERE APPLICABLE.
6. POST SPACING SHALL BE SELECTED BASED ON GEOTEXTILE FABRIC (8-FEET FOR WOVEN AND 3-FEET FOR NON-WOVEN).

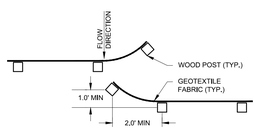


SILT FENCE TIE BACK
(WHEN ADDITIONAL SUPPORT REQUIRED)

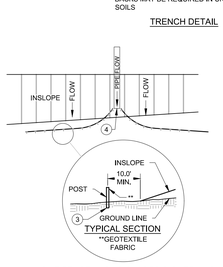


NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

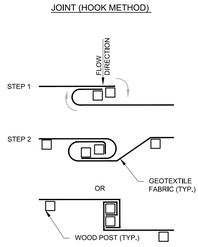
TRENCH DETAIL



JOINT (HOOK METHOD)



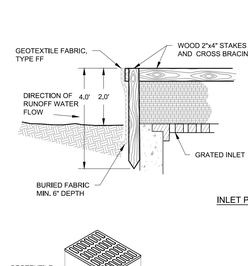
SILT FENCE ALONG SLOPES & OUTFALLS



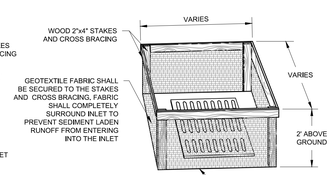
JOINT (TWIST METHOD)

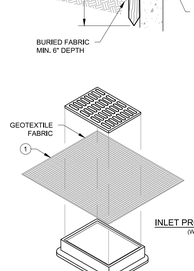
SILT FENCE

#1004 04/2021



INLET PROTECTION - TYPE "A"



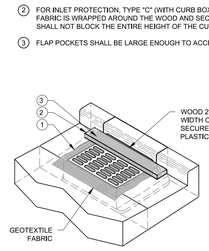


INLET PROTECTION - TYPE "B"
(WITHOUT CURB BOX)

TYPE "B" & "C" 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)

NOTES:

1. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE TABLE 1 OR 2, CLASS I, WITH AN EOS OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.
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.

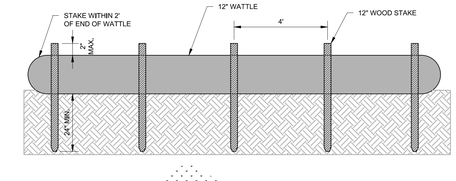
(1) FINISHED SIZE, INCLUDING FLAP POCKET WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

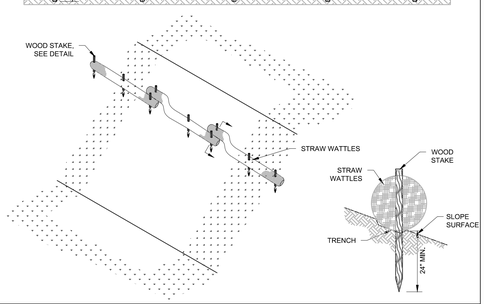
(2) FOR INLET PROTECTION, TYPE "C" (WITH CURB BOX), AN ADDITIONAL 18 INCHES OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

(3) FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2x4.

INLET PROTECTION

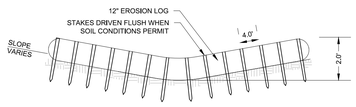
#104 04/2021





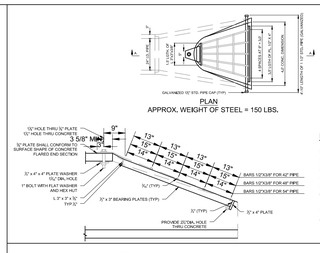
STRAW WATTLE

#137 06/2016



STRAW WATTLE DITCH CHECK

#138 05/2016



NOTES:

1. GRATING DETAILS SHOWN ARE INTENDED FOR USE WITH PARTICULAR SIZES OF PRECAST REINFORCED CONCRETE FLARED END SECTION AS SHOWN ON IDOT STANDARDS.
2. STRUCTURAL STEEL SHAPES AND PLATES SHALL BE IN ACCORDAN

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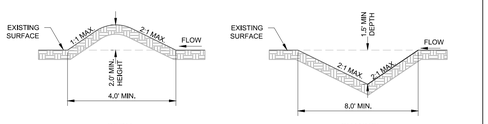
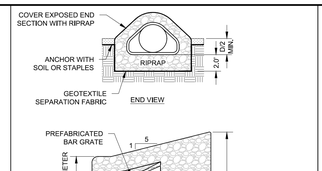


NOTES:

1. DIVERSION MAY REQUIRE AREAS OF BERM AND OTHER AREAS OF CHANNEL TO PROVIDE SUFFICIENT PERIMETER PROTECTION.
2. DIVERSION BERM VERSUS CHANNEL PRACTICES SHALL BE SELECTED SUCH TO PREVENT PONDING (E.G. - POSITIVE DRAINAGE SHALL BE MAINTAINED).
3. FOR DIVERSIONS THAT ARE TO SERVE LONGER THAN 30 DAYS, THE SIDE SLOPES INCLUDING THE RIDGE, AND THE DOWN SLOPE SIDE OF THE DIVERSION SHALL BE STABILIZED AS SOON AS THEY CONSTRUCTED BY EQUIPMENT TRACKING AND TEMPORARY SEEDING, FOR DIVERSIONS SERVING LESS THAN 30 DAYS, THE DOWN SLOPE SIDE OF THE DIVERSION SHALL BE STABILIZED AS SOON AS CONSTRUCTED BY EQUIPMENT TRACKING AND TEMPORARY SEEDING .
4. DIVERSIONS SHALL BE PROTECTED FROM DAMAGE BY CONSTRUCTION ACTIVITIES, AT ALL POINTS WHERE DIVERSION BERMS OR CHANNELS WILL BE CROSSED BY CONSTRUCTION EQUIPMENT, THE DIVERSION SHALL BE SHAPED APPROPRIATELY AND/OR TEMPORARY CULVERTS OF ADEQUATE CAPACITY MAYBE ADDED AT CROSSINGS.
5. AT MINIMUM, INSTALL ONE DITCH CHECK (SEE DETAIL) FOR EVERY 2 VERTICAL FEET OF DROP.
6. DIVERSIONS 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, MAINTENANCE SHALL BE COMPLETED AS SOON AS POSSIBLE WITH CONSIDERATION TO SITE CONDITIONS. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE DIVERSION BERM.

DIVERSION BERM / CHANNEL

#1704 10-15-13

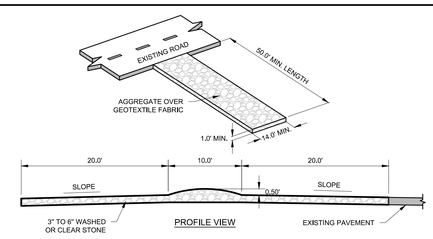


NOTES:

1. RIP RAP AND GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS FOR STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

RIP RAP AT END SECTIONS

#1704 10-15-13

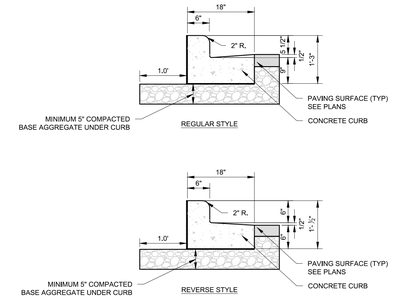


NOTES:

1. ALL TRACKING PAD MATERIALS AND INSTALLATION SHALL BE IN CONFORMANCE WITH WI DNR TECHNICAL STANDARD 1057.
2. TRACKING PADS SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE SITE. CONTRACTOR SHALL VERIFY LOCATION WITH OWNER.
3. THE AGGREGATE FOR TRACKING PADS SHALL BE 3 TO 6 INCH CLEAR OR WASHED STONE. ALL MATERIALS TO BE RETAINED ON A 3-INCH SIEVE
4. 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 GEOTEXTILE FABRIC WHICH MEETS MATERIAL SPECIFICATION 592 GEOTEXTILE, TABLE 1 OR 2, CLASS I, II OR IV, TO PREVENT MIGRATION OF UNDERLYING SOILS INTO THE STONE LAYER.
5. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT, MINIMUM WIDTH IS 14 FEET FOR ONE-WAY TRAFFIC AND 20 FEET FOR TWO-WAY TRAFFIC, WITH AN ADDITIONAL INCREASE OF 4 FEET FOR TRAILER TRAFFIC, THE TRACKING PAD SHALL BE A MINIMUM 50-FEET LONG.
6. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, AT THE END OF EACH WORKING DAY.
7. 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.
8. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED BY SCRAPING OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.

CONSTRUCTION ENTRANCE

#1704 10-15-13

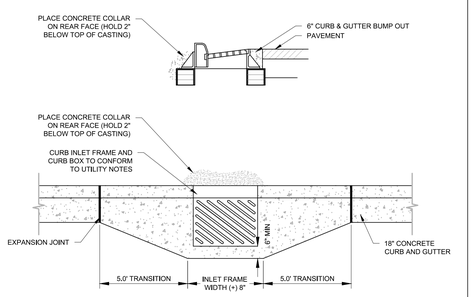


NOTES:

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 JOINTS FILLER SHALL BE A ONE PIECE FIBERBOARD 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.
4. REVERSE STYLE CURB LOCATIONS ARE NOTED ON THE PLANS.

18" VERTICAL FACE CURB

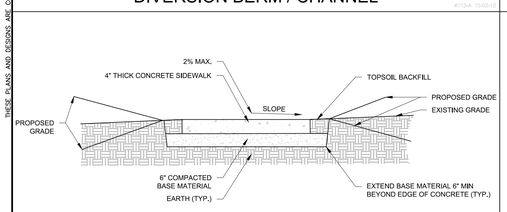
#6004R 10-15-13



NOTE : CURB CONTRACTOR TO VERIFY POSITION AND ELEVATION OF FRAME AND GRATE PRIOR TO POUR. IF NOT CORRECT, FIVE (5) FOOT TRANSITION AREA TO BE LEFT UNPOURED UNTIL SITUATION IS CORRECTED BY CONTRACTOR.

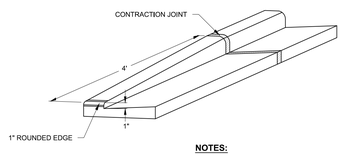
CURB AND GUTTER BUMP OUT

#600 10-15-13



CONCRETE SIDEWALK

#607 10-15-13

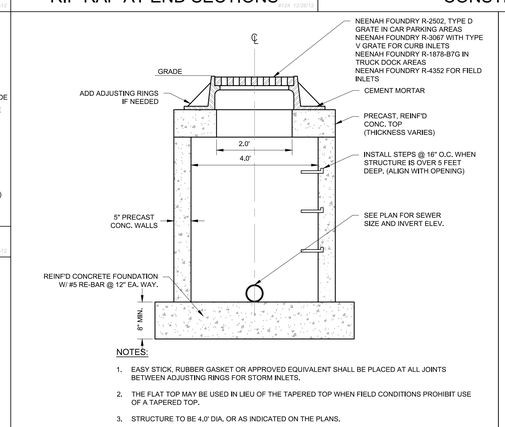


NOTES:

1. CONTRACTION JOINTS SHALL BE PLACED EVERY 10 FEET
2. EXPANSION JOINTS (3/4" EXPANSION FIBER MATERIAL) SHALL BE PLACED EVERY 300 FEET AND AT EVERY PC/PT AND 3 FEET FROM STRUCTURES

TAPER CURB HEAD

#603 10-15-13

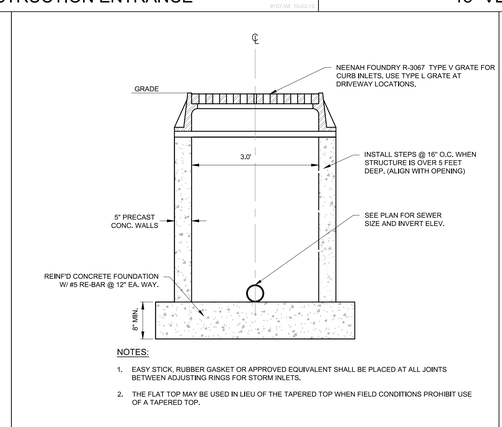


NOTES:

1. EASY STICK, RUBBER GASKET OR APPROVED EQUIVALENT SHALL BE PLACED AT ALL JOINTS BETWEEN ADJUSTING RINGS FOR STORM INLETS.
2. THE FLAT TOP MAY BE USED IN LIEU OF THE TAPERED TOP WHEN FIELD CONDITIONS PROHIBIT USE OF A TAPERED TOP.
3. STRUCTURE TO BE 4.0' DIA, OR AS INDICATED ON THE PLANS.

INLET

#603 10-15-13

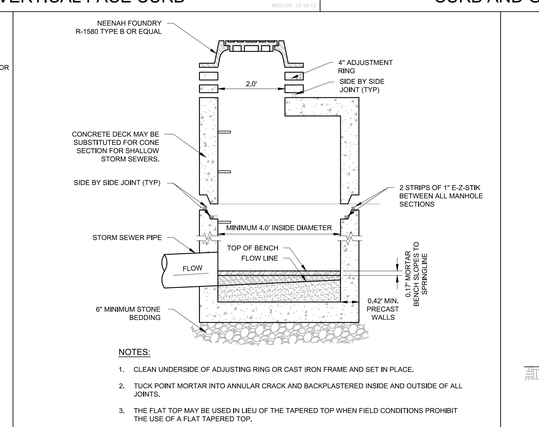


NOTES:

1. EASY STICK, RUBBER GASKET OR APPROVED EQUIVALENT SHALL BE PLACED AT ALL JOINTS BETWEEN ADJUSTING RINGS FOR STORM INLETS.
2. THE FLAT TOP MAY BE USED IN LIEU OF THE TAPERED TOP WHEN FIELD CONDITIONS PROHIBIT USE OF A TAPERED TOP.

2' x 3' INLET

#604 10-15-13

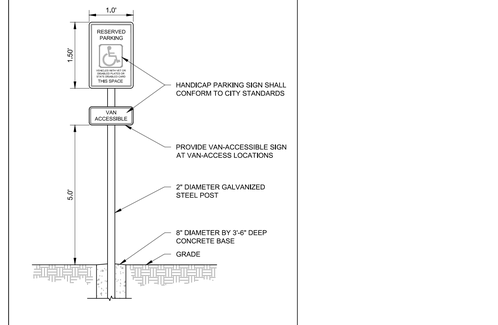


NOTES:

1. CLEAN UNDERSIDE OF ADJUSTING RING OR CAST IRON FRAME AND SET IN PLACE.
2. TUCK POINT MORTAR INTO ANNULAR CRACK AND BACKPLASTERED INSIDE AND OUTSIDE OF ALL JOINTS.
3. THE FLAT TOP MAY BE USED IN LIEU OF THE TAPERED TOP WHEN FIELD CONDITIONS PROHIBIT THE USE OF A FLAT TAPERED TOP.
4. MANHOLE CONSTRUCTION TO MEET REQUIREMENTS OF ASTM C478.
5. ECCENTRIC CONE SECTION OF MANHOLE TO BE SET OUTSIDE OF VEHICULAR WHEEL PATH NEAR ℄ OF ROADWAY.

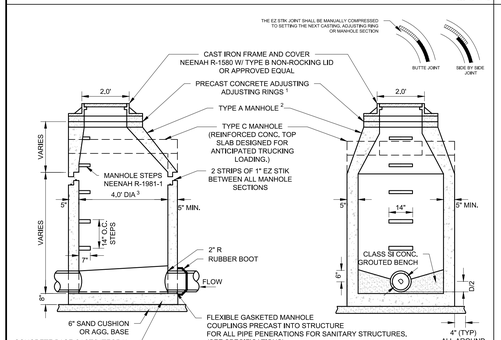
STORM SEWER MANHOLE

#701 04/20/15



ADA SIGN

#706 10-15-13

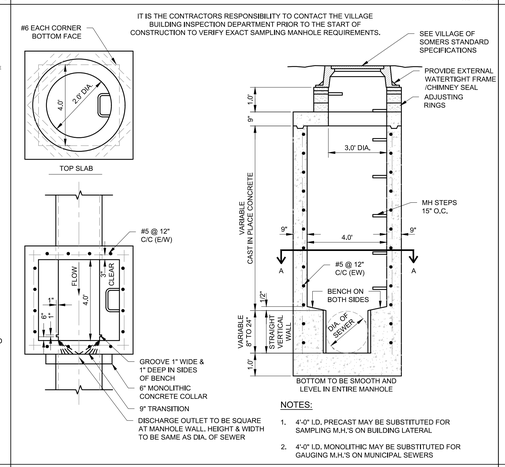


NOTES:

1. 1" EZ STIKE BETWEEN ALL ADJUSTMENT RINGS, BETWEEN TOP ADJUSTMENT RINGS AND FRAME, USE INTERNAL ADAPTOR SEAL RING. ALL JOINTS MUST BE BACKPLASTERED INSIDE AND OUT.
2. THE FLAT TOP MAYBE USED IN LIEU OF THE TAPERED TOP WHEN FIELD CONDITIONS PROHIBIT THE USE OF A TAPERED TOP.
3. STRUCTURE TO BE 4' -0" DIA UNLESS OTHERWISE INDICATED ON THE PLANS.

SANITARY MANHOLE

#602 10-15-13

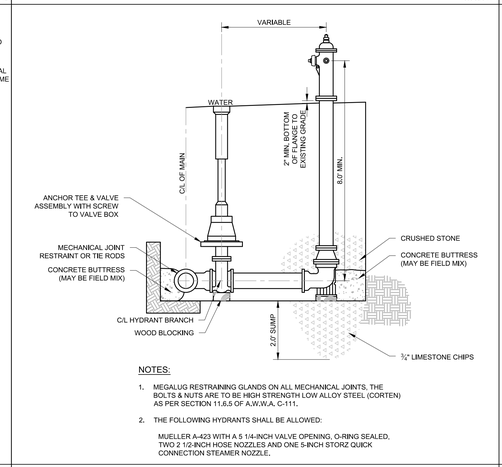


NOTES:

1. 4'-0" I.D. PRECAST MAY BE SUBSTITUTED FOR SAMPLING M.H.'S ON BUILDING LATERAL
2. 4'-0" I.D. MONOLITHIC MAY BE SUBSTITUTED FOR GAUGING M.H.'S ON MUNICIPAL SEWERS

SAMPLING AND GAUGING MANHOLE

#603 10-15-13



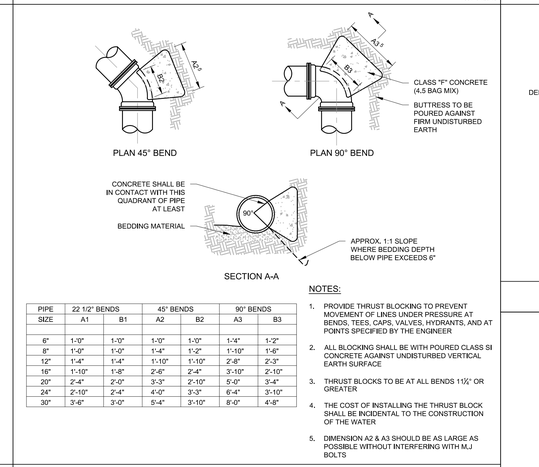
NOTES:

1. MEGALUG RESTRAINING GLANDS ON ALL MECHANICAL JOINTS. THE BOLTS & NUTS ARE TO BE HIGH STRENGTH LOW ALLOY STEEL (CORTEN) AS PER SECTION 11,6,5 OF A.W.W.A. C-111.
2. THE FOLLOWING HYDRANTS SHALL BE ALLOWED:

   MUELLER A-423 WITH A 5 1/4-INCH VALVE OPENING, O-RING SEALED, TWO 2 1/2-INCH HOSE NOZZLES AND ONE 5-INCH STORZ QUICK CONNECTON STEAMER NOZZLE.

FIRE HYDRANT

#601 10-15-13



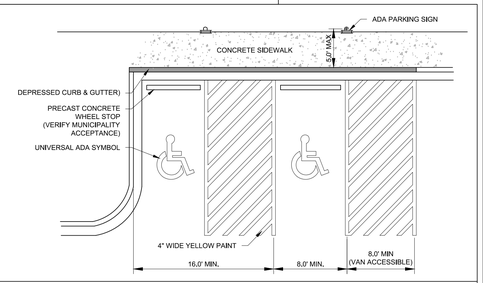
PIPE SIZE	22 1/2° BENDS A1	22 1/2° BENDS B1	45° BENDS A2	45° BENDS B2	90° BENDS A3	90° BENDS B3
6"	1'-0"	1'-0"	1'-0"	1'-0"	1'-4"	1'-2"
8"	1'-0"	1'-0"	1'-4"	1'-2"	1'-10"	1'-6"
12"	1'-4"	1'-4"	1'-10"	1'-10"	2'-8"	2'-3"
16"	1'-10"	1'-8"	2'-6"	2'-4"	3'-10"	2'-10"
20"	2'-4"	2'-0"	3'-3"	2'-10"	5'-0"	3'-4"
24"	2'-10"	2'-4"	4'-0"	3'-3"	6'-4"	3'-10"
30"	3'-6"	3'-0"	5'-4"	3'-10"	8'-0"	4'-8"

NOTES:

1. PROVIDE THRUST BLOCKING TO PREVENT MOVEMENT OF LINES UNDER PRESSURE AT BENDS, TEES, CAPS, VALVES, HYDRANTS, AND AT POINTS SPECIFIED BY THE ENGINEER
2. ALL BLOCKING SHALL BE WITH POURED CLASS SI CONCRETE AGAINST UNDISTURBED VERTICAL EARTH SURFACE
3. THRUST BLOCKS TO BE AT ALL BENDS 11¼° OR GREATER
4. THE COST OF INSTALLING THE THRUST BLOCK SHALL BE INCIDENTAL TO THE CONSTRUCTION OF THE WATER
5. DIMENSION A2 & A3 SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH M.J BOLTS

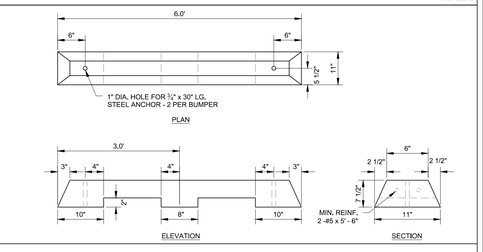
THRUST BLOCK

#602 10-15-13



ADA PARKING STRIPING

#711 2/4/15



CONCRETE WHEEL STOP

#602 5/14/15

REVIEWED: ARA

DESIGNED: TDM

DRAFTED: EP

PLAN | DESIGN | DELIVER
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PINNACLE ENGINEERING GROUP
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WISCONSIN OFFICE:
20725 WATERTOWN ROAD
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

SOMERS BUSINESS PARK

SOMERS, WI

CONSTRUCTION DETAILS

REVISIONS

PEG JOB No. 2360.00-WI
PEG PM: ARA
START DATE: 03/17/22
SCALE: N.T.S.

SHEET
C-20
of
C-22

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CONSTRUCTION DETAILS

Z:\PROJECTS\2021\2360.00-WI\CAD\SHEETS\BLDG I\2360.00-WI BLDG I CONSTRUCTION DETAILS.DWG

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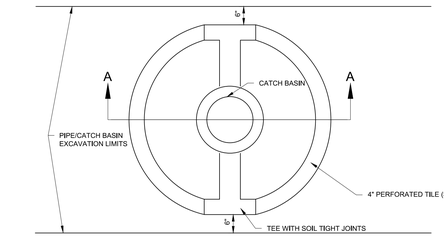
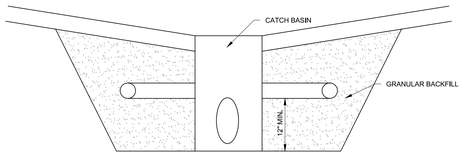
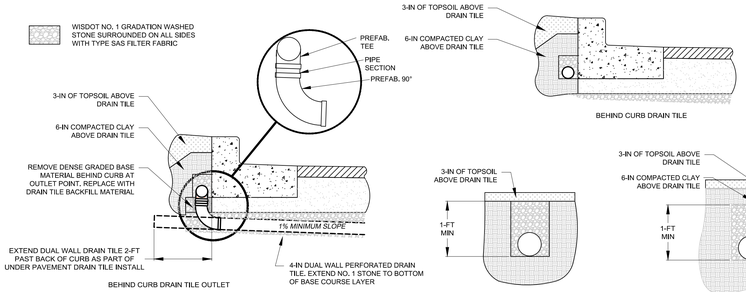


PLAN VIEW



SECTION A-A

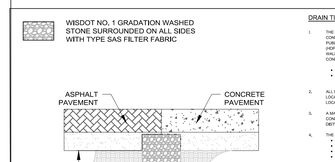
INLET - UNDERDRAIN



DRAIN TILE GENERAL SPECIFICATIONS

1. THE DRAIN TILE CONDUIT AND FITTINGS SHALL MEET STRENGTH AND DURABILITY REQUIREMENTS FOR THE SITE. ALL CONDUITS AND FITTINGS SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF THE APPROPRIATE SPECIFICATIONS PUBLISHED BY THE AMERICAN SOCIETY FOR TESTING AND MATERIALS, CORRUGATED HIGH DENSITY POLYETHYLENE (HDPE) CONDUIT AND FITTINGS SHALL MEET THE REQUIREMENTS OF ASTM M252, CONDUIT TYPE SINGLE WALL OR DUAL WALL CONDUIT AT LOCATIONS SPECIFIED FOR SINGLE WALL CONDUIT AT THE SOLE EXPENSE OF THE CONTRACTOR.
   - SINGLE WALL CONDUIT SHALL BE TYPE CP WITH CLASS B PERFORATION PATTERN.
   - DUAL WALL CONDUIT SHALL BE TYPE SP WITH A SMOOTH INTERIOR THAT CARRIES A MAXIMUM MANNING'S 'N' VALUE OF 0.012 WITH CLASS B PERFORATION PATTERN.
2. ALL DRAIN TILE CONSTRUCTION MUST BE PROVIDED WITH TRACER WIRE OR OTHER APPROVED METHODS IN ORDER TO BE LOCATED IN ACCORD WITH 182.0175(2M) OF THE STATUTES, CONTRACTOR SHALL PROVIDE THE ENGINEER NOTICE OF LOCATION METHOD PRIOR TO THE START OF CONSTRUCTION.
3. A MAXIMUM TRENCH WIDTH OF 24"I SHALL BE MAINTAINED FOR ALL DRAIN TILE INSTALLATION WITH THE EXCEPTION OF CONNECTION POINTS TO THE EXISTING STORM SEWER SYSTEM IN WHICH CASE THE CONTRACTOR SHALL LIMIT DISTURBANCE AS POSSIBLE.
4. THE MINIMUM DEPTH OF COVER (FINISH GRADE TO TOP PIPE) SHALL BE:
   - CONCRETE PAVED AREAS = 2.0-FT
   - ASPHALT PAVED AREAS = 2.0-FT
   - BEHIND CURB = 0.5-FT
   - OTHER LANDSCAPED/GRASS/PERVIOUS AREAS = 2.0-FT
5. CONNECTION TO THE EXISTING STORM SEWER SYSTEM SHALL ACHIEVED BY CORING THE EXISTING REINFORCED CONCRETE STORM SEWER STRUCTURES OR PIPING TO THE DIAMETER NECESSARY TO ACCOMMODATE A PERMANENT CONNECTION. ALL CONNECTIONS TO THE EXISTING REINFORCED CONCRETE STORM SEWER SHALL BE ACHIEVED BY THE USE OF KORAGENAL CONNECTORS, OR EQUAL.
6. FOR TRENCH INSTALLATIONS OF CORRUGATED PLASTIC CONDUIT (OTHER THAN BEHIND CURB LOCATIONS), THE FOLLOWING BEDDING METHODS ARE REQUIRED:
   - A STONE BEDDING LAYER, AT LEAST 3 IN, THICK, USING A CLEAR STONE SHALL BE INSTALLED TO PROVIDE CONDUIT SUPPORT.
   - COMPACT BEDDING MATERIAL BESIDE AND TO THE UPPER (TOP) LIMITS OF BASE COURSE IN PAVED AREAS OR TOP OF CLAY (BOTTOM OF TOPSOIL LAYER) ABOVE THE CONDUIT.
7. ANY HARD OBJECTS LARGER THAN 1.5 IN. IN DIAMETER EXPOSED WITHIN THE TRENCH BOTTOM OR WALLS SHALL BE REMOVED TO PREVENT UNDUE STRESSES ON THE CONDUIT AND FITTINGS.
8. PRE MANUFACTURED FITTINGS (SUCH AS: WYES, TEES, BENDS, CAPS, ETC.) OF THE SAME MATERIAL AS THE CONDUIT SHALL BE USED AT ALL CONNECTIONS AND DEFLECTIONS GREATER THAN 22.5 DEGREES.
9. IF NOT CONNECTED TO A STRUCTURE, THE UPPER END OF EACH SUBSURFACE DRAIN TILE SHALL BE CAPPED WITH A TIGHT-FITTING EXTERNAL CAP OF THE SAME MATERIAL AS THE CONDUIT.
10. AT ALL TIMES THE DRAIN TILE SYSTEM SHALL BE KEPT CLEAN AND PROTECTED AGAINST UNDERMINING OF THE CAPACITY OF THE CONDUIT AND DAMAGE DURING CONSTRUCTION. TYPICAL CAPACITY UNDERMINING INCLUDES ENTRY OF CONSTRUCTION MATERIALS, TRASH, AND RODENTS INTO THE CONDUIT.

DRAINTILE



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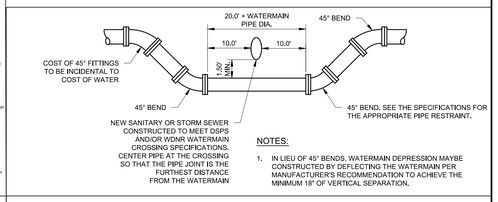
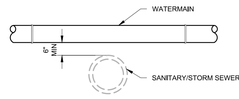
LOADING DOCK DRAINTILE



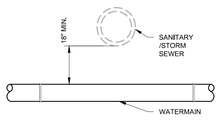
NOTES:

1. IN LIEU OF 45° BENDS, WATERMAIN DEPRESSION MAYBE CONSTRUCTED BY DEFLECTING THE WATERMAIN PER MANUFACTURERS RECOMMENDATION TO ACHIEVE THE MINIMUM 18" OF VERTICAL SEPARATION.

WATER MAIN DEPRESSION



WATER MAIN OVER SANITARY/STORM SEWER



SANITARY/STORM SEWER OVER WATER MAIN

NOTES:

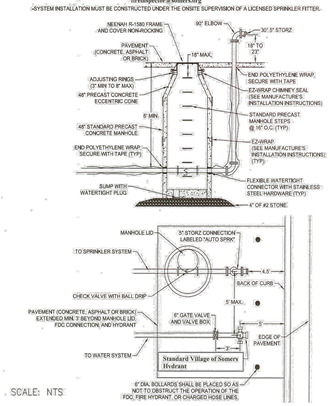
1. AT CROSSING, ONE FULL 18 FOOT LENGTH OF WATERMAIN SHALL BE CENTERED ON THE SEWER, MAINTAIN A MINIMUM HORIZONTAL SEPARATION OF 8 FEET.

WATER MAIN SEPARATION

SOMERS FIRE & RESCUE

Fire Inspector
Lt Joe Scruggs
P.O. Box 197
Somers, WI 53171
(262)-620-3285
firedepector@somers.org

-SYSTEM INSTALLATION MUST BE CONSTRUCTED UNDER THE ONSITE SUPERVISION OF A LICENSED SPRINKLER FITTER.



SCALE: NTS

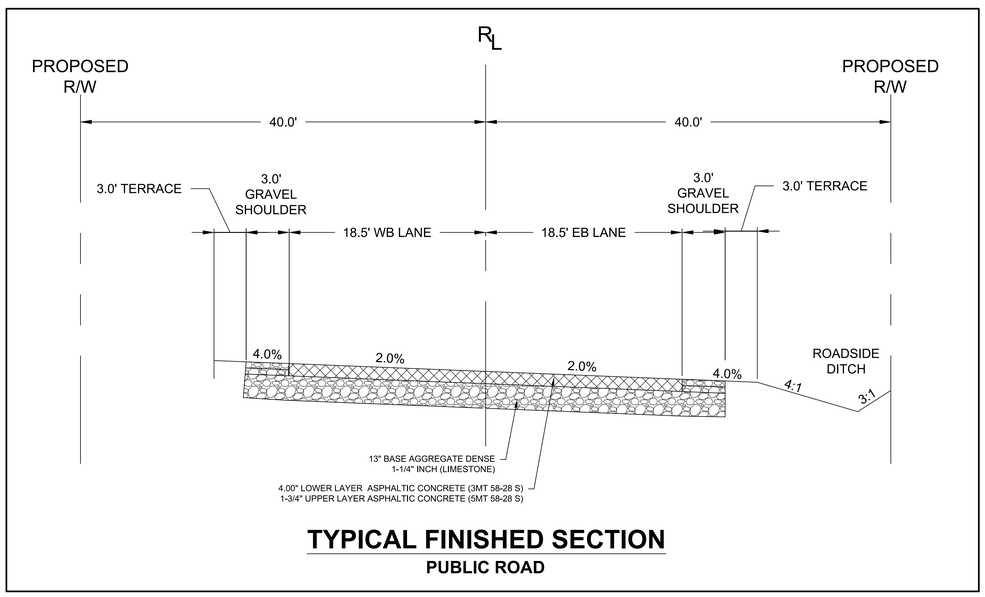
SOMERS FIRE & RESCUE

Fire Inspector
Capt Joe Scruggs
P.O. Box 197
Somers, WI 53171
(262)-620-3285
jscruggs@somers.org

VILLAGE OF SOMERS HYDRANT COLOR QUICK-SHEET

All hydrants shall be Mueller Super Centurion A-423 with two 2-1/2" NST nozzle outlets and one factory installed 5" Storz connection and cap. The entire hydrant shall be painted except the Storz connection. The hydrant shall be one of the following three colors;	
RED Hydrants that are non-pressurized or referred to as at "city" pressure and are in the right of way, managed by the municipality.	Existing hydrants to re-paint using Mueller Red (Sherwin-Williams KEM400 F75RH1). New factory Hydrants using Mueller Red (Sherwin-Williams Polane F63YL15).
BLUE Hydrants that are on private property and are non-pressurized or referred to as at "city" pressure. These are maintained by the property or tenant owner.	Existing hydrants to re-paint using Mueller Blue (Sherman Williams Blue Chip SW6959). New factory Hydrants using Mueller Blue (Sherwin-Williams Polane F63BRXL9667).
YELLOW Hydrants that are pressurized, typically behind a fire pump on a fire loop. These are maintained by the property or tenant owner.	Existing hydrants to re-paint using Mueller Yellow (Sherwin-Williams KEM400 F75YH1). New factory Hydrants using Mueller Yellow (Sherwin-Williams Polane F63YL14).
For Village standard detail specifications on hydrants see: Somers Water Utility & Somers Fire Ch 16 at somers.org	

rev 10/2019



TYPICAL FINISHED SECTION

PUBLIC ROAD

www.pinnacle-engr.com

REVIEWED- ARA
DESIGNED- TDM
DRAFTED- EP

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BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE I NATIONWIDE

SOMERS BUSINESS PARK

SOMERS, WI

CONSTRUCTION DETAILS

REVISIONS

PEG JOB No. 2360.00-WI
PEG PM: ARA
START DATE: 09/17/22
SCALE: N.T.S.

SHEET C-21 & C-22

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CONSTRUCTION DETAILS

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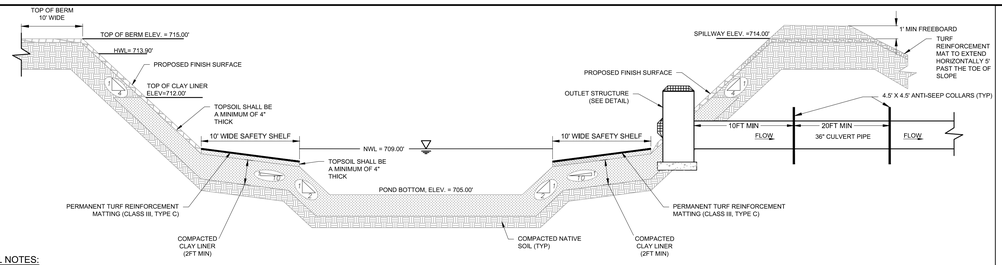
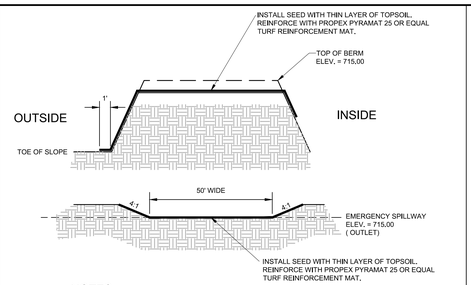


GENERAL NOTES:

1. ALL CONSTRUCTION SHALL MEET THE SPECIFICATIONS OF "WDNR WET DETENTION BASIN TECHNICAL STANDARD 1001".
2. ALL WORK TO BE CONDUCTED IN CONFORMANCE WITH THE STORM WATER MANAGEMENT PLAN FOR THE PROJECT SITE AS APPROVED BY THE REGULATORY ENGINEER OF RECORD.
3. RCP PIPING & INSTALLATION WITHIN THE BASIN SHALL HAVE RUBBER GASKETS
4. OWNER OR CONTRACTOR MUST CONSULT LANDSCAPE ARCHITECT OR ECOLOGICAL PLANNING AGENCY FOR APPROPRIATE PLANTS AND PLANTING CONFIGURATIONS.
5. 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 IN-PLACE AT THE POND SIDE SLOPES OR OTHER ONSITE MEDIUM STIFF TO STIFF CLAYS MAY BE USED AT THE DISCRETION OF THE GEOTECHNICAL ENGINEER OF RECORD.
6. FOR CONSTRUCTED EMBANKMENTS WHERE THE PERMANENT POOL IS PONDED 3-FEET 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 2-FEET DEEP AND 8-FEET WIDE WITH A SIDE SLOPE OF 1:1 OR FLATTER.

POND 1 CROSS SECTION

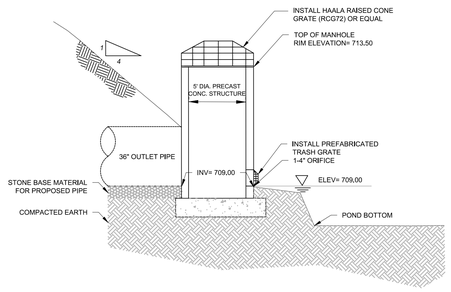
#503A 06-27-22



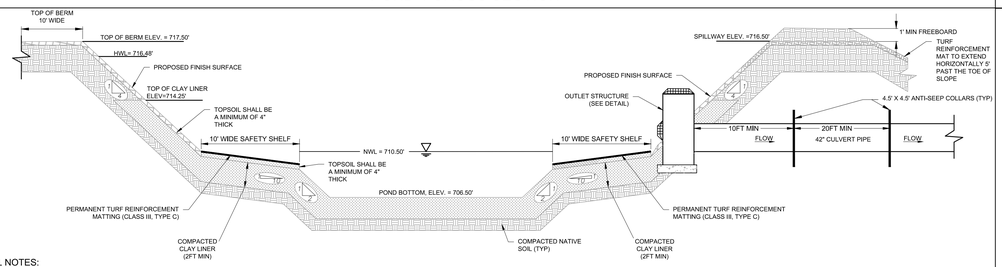
NOTES:

1. TURF REINFORCEMENT MAT MUST COVER ENTIRE BOTTOM OF CHUTE AND EXTEND TO THE TOP OF BERM AND EXTEND DOWN THE OUTSIDE FACE OF THE BERM.

POND 1 EMERGENCY SPILLWAY DETAIL



POND 1 OUTLET STRUCTURE



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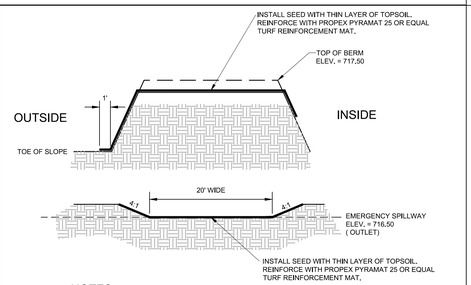
POND 2 CROSS SECTION

#503A 06-27-22



NOTES:

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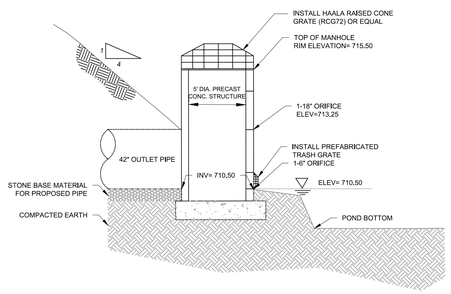
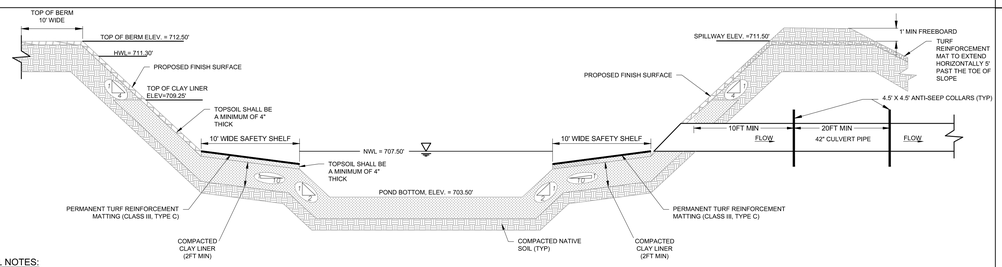
POND 2 EMERGENCY SPILLWAY DETAIL



POND 2 OUTLET STRUCTURE



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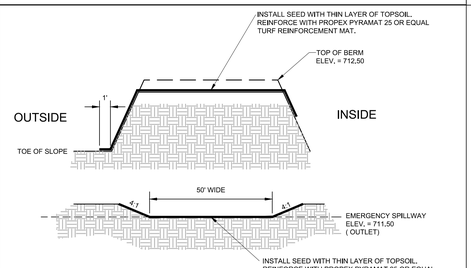
POND 3 CROSS SECTION

#503A 06-27-22



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POND 3 EMERGENCY SPILLWAY DETAIL

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CONSTRUCTION DETAILS

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DRAFTED: EP
DESIGNED: TDM
REVIEWED: ARA

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C-22

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CONCEPT PLANT SCHEDULE

TREES	COMMON NAME	SIZE	QTY
CANOPY TREE			56
Acer saccharum `Flax Mill Majesty`	Flax Mill Majesty Maple	2" Cal.	
Celtis occidentalis `Prairie Pride`	Prairie Pride Hackberry	2" Cal.	
Corylus colurna	Turkish Filbert	2" Cal.	
Gymnocladus dioica	Kentucky Coffee Tree	2" Cal.	
Quercus x schuetti	Swamp Bur Oak	2" Cal.	
Tilia tomentosa `Sterling`	Sterling Silver Linden	2" Cal.	
STREET TREE			86
Acer freemanii `Autumn Fantasy`	Autumn Fantasy Maple	2" Cal.	
Acer rubrum `Red Sunset`	Red Sunset Maple	2" Cal.	
Gleditsia triacanthos inermis `Shademaster`	Shademaster Locust	2" Cal.	
Gymnocladus dioica	Kentucky Coffee Tree	2" Cal.	
Quercus x schuetti	Swamp Bur Oak	2" Cal.	
Tilia tomentosa `Sterling`	Sterling Silver Linden	2" Cal.	
EVERGREEN TREE			65
Abies concolor	White Fir	5` Ht.	
Picea glauca `Densata`	Black Hills Spruce	5` Ht.	
Pinus strobus	White Pine	5` Ht.	
Pinus sylvestris	Scotch Pine	5` Ht.	
ORNAMENTAL TREE			14
Aesculus x arnoldiana `Autumn Splendor`	Autumn Splendor Buckeye	1.5" Cal.	
Amelanchier x grandiflora `Autumn Brilliance`	Autumn Brilliance Serviceberry	1.5" Cal.	
Crataegus crus-galli inermis	Thornless Cockspur Hawthorn	1.5" Cal.	
Maackia amurensis	Amur Maackia	1.5" Cal.	
Malus x `Prairie Maid`	Prairie Maid Crabapple	1.5" Cal.	
Malus x `Sugar Tyme`	Sugar Tyme Crabapple	1.5" Cal.	
Syringa reticulata `Ivory Silk`	Ivory Silk Tree Lilac	1.5" Cal.	

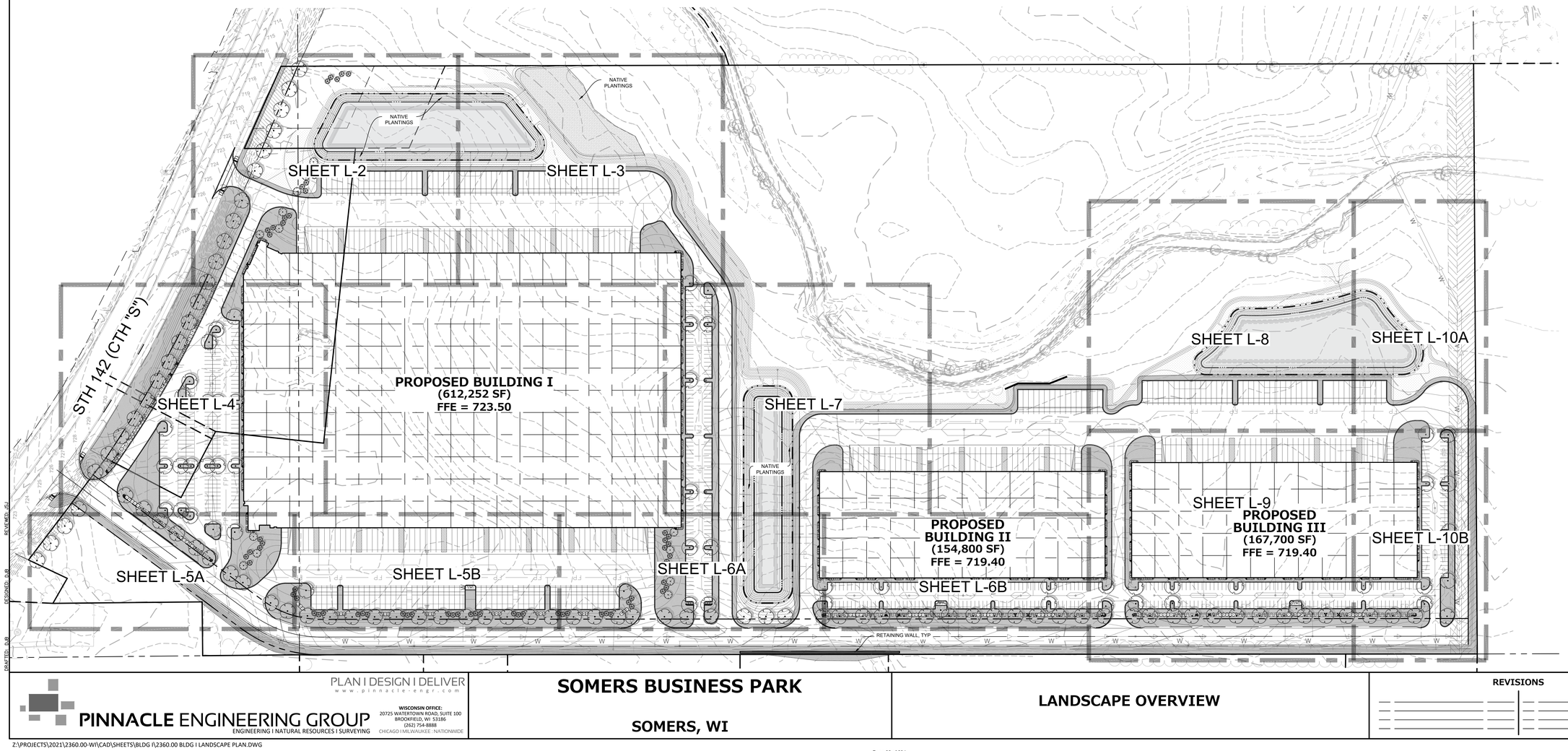
SHRUBS	COMMON NAME	SIZE	QTY
LARGE DECIDUOUS SHRUB			89
Cephalanthus occidentalis `Ping Pong`	Ping Pong Buttonbush	3 gal.	
Physocarpus opulifolius `Center Glow`	Center Glow Ninebark	3 gal.	
Viburnum prunifolium `Blackhaw`	Blackhaw Viburnum	3 gal.	
MEDIUM EVERGREEN SHRUB			520
Juniperus chinensis `Pfitzeriana Kallays`	Kallay Compact Juniper	3 gal.	
Juniperus chinensis `Sea Green`	Sea Green Juniper	3 gal.	
Juniperus virginiana `Grey Owl`	Eastern Redcedar Juniper	3 gal.	
Picea abies `Pumila`	Pumila Spruce	3 gal.	
Taxus x media `Densiformis`	Dense Yew	3 gal.	
Taxus x media `Tauntonii`	Tauton Yew	3 gal.	
MEDIUM DECIDUOUS SHRUB			140
Aronia melanocarpa `Elata`	Glossy Black Chokeberry	3 gal.	
Hydrangea p `Vanilla Strawberry`	Vanilla Strawberry Hydrangea	3 gal.	
Ilex verticillata `Jim Dandy`	Jim Dandy Winterberry	3 gal.	
Ilex verticillata `Red Sprite`	Red Sprite Winterberry	3 gal.	
Rosa rugosa `Purple Pavement`	Purple Pavement Rugosa Rose	2 gal.	
Sambucus nigra `Black Lace`	Black Lace Elderberry	3 gal.	
Syringa meyeri `Palibin`	Dwarf Korean Lilac	3 gal.	
SMALL DECIDUOUS SHRUB			356
Cornus stolonifera `Arctic Fire`	Arctic Fire Dogwood	2 gal.	
Diervilla lonicera	Dwarf Bush Honeysuckle	2 gal.	
Diervilla sessilifolia `Cool Splash`	Cool Splash Dwarf Honeysuckle	2 gal.	
Hydrangea paniculata `Bobo`	Bobo Hydrangea	2 gal.	
Spiraea japonica `Anthony Waterer`	Anthony Waterer Spiraea	2 gal.	
Spiraea japonica `Magic Carpet`	Magic Carpet Spirea	2 gal.	
ORNAMENTAL GRASS			265
Andropogon gerardii `Dancing Wind`	Dancing Wind Big Blue Stem	1 gal.	
Calamagrostis x a `Karl Foerster`	Karl Foerster Reed Grass	1 gal.	
Calamagrostis x a `Overdam`	Overdam Reed Grass	1 gal.	
Deschampsia cespitosa	Tufted Hair Grass	1 gal.	
Eragrostis spectabilis	Purple Love Grass	1 gal.	
Hystrix patula	Bottlebrush Grass	1 gal.	
Miscanthus sinensis `Oktoberfest`	Oktoberfest Miscanthus	1 gal.	
Panicum virgatum `Northwind`	Northwind Switch Grass	1 gal.	
Sporobolus heterolepis `Tara`	Prairie Dropseed	1 gal.	

PERENNIALS	COMMON NAME	SIZE	SPACING	QTY
				590 sf
Amsonia c `Halfway to Arkansas`	Halfway to Arkansas Blue-star	4.5" cont.	5% @ 28" o.c.	
Aruncus dioicus	Goatsbeard	4.5" cont.	5% @ 40" o.c.	
Astilbe chinensis `Vision in Red`	Vision in Red Astilbe	4.5" cont.	5% @ 18" o.c.	
Calamintha nepeta	Calamint	4.5" cont.	5% @ 16" o.c.	
Coreopsis verticillata `Zagreb`	Zagreb Coreopsis	4.5" cont.	5% @ 16" o.c.	
Echinacea purpurea `Magnus Superior`	Magnus Superior Coneflower	4.5" Cont.	5% @ 18" o.c.	
Helenium autumnale 'Ruby Tuesday'	Ruby Tuesday Helen's Flower	4.5" cont.	5% @ 18" o.c.	
Hemerocallis `Stella De Oro`	Stella De Oro Daylily	4.5" Cont.	5% @ 20" o.c.	
Hemerocallis `Summer Wine`	Summer Wine Daylily	4.5" Cont.	5% @ 24" o.c.	
Heuchera m `Palace Purple`	Palace Purple Coral Bells	4.5" Cont.	5% @ 18" o.c.	
Hosta x `Big Daddy`	Big Daddy Hosta	4.5" cont.	5% @ 60" o.c.	
Hosta x `Frances Williams`	Frances Williams Hosta	4.5" cont.	5% @ 50" o.c.	
Hosta x `Gold Standard`	Gold Standard Hosta	4.5" cont.	5% @ 50" o.c.	
Hosta x `Patriot`	Patriot Hosta	4.5" cont.	5% @ 36" o.c.	
Hosta x `Sum & Substance`	Sum & Substance Hosta	4.5" cont.	5% @ 50" o.c.	
Leucanthemum x `Becky`	Becky Shasta Daisy	4.5" Cont.	5% @ 15" o.c.	
Nepeta x `Walker`s Low`	Walker`s Low Catmint	4.5" Cont.	5% @ 28" o.c.	
Rudbeckia f `Viette`s Little Suzy`	Viette`s Little Suzy Showy Coneflower	4.5" Cont.	5% @ 12" o.c.	
Salvia nemorosa `May Night`	May Night Sage	4.5" Cont.	5% @ 18" o.c.	
Sedum `Autumn Joy`	Autumn Joy Sedum	4.5" Cont.	5% @ 24" o.c.	

GROUND COVERS

BOTANICAL NAME	COMMON NAME	QTY
TURF		403,195 sf
REINDERS CADET 70/30 FESCUE/BLUE SEED		
NOW MOW TURF		143,365 sf
REINDERS NO MOW TURF SEED		
NATIVE PLANTINGS		93,727 sf
AGRECOL RAINWATER RENEWAL SEED MIX		

LANDSCAPE IMPROVEMENT TABLE	REQUIRED	PROVIDED
OPEN YARD 742,602 SQ FT		
• TREE 1/1000 SQ FT	743	207
• or ORNAMENTAL TREES 2/1000 SQ FT	-	7=(14)
• or SHRUBS 2/1000 SQ FT	-	552=(1105)
* NOTE: UNDISTURBED LANDS AND PONDS ARE NOT COUNTED IN OPEN YARD CALCULATIONS	TOTAL	766
FOUNDATION PLANTINGS 6,820 FT		
• ORNAMENTAL TREE (OR 2 SHRUBS) 1/20 FT	T= 341 (or S=682)	S=700
STREET TREES 4,175 ft		
• TREES 1/50 FT	84	86
PARKING SCREENING/BUFFERS 3,040 FT		
• TREES 1/25 FT	122	38
• or ORNAMENTAL TREES 2/25 FT	-	-
• or SHRUBS 4/25 FT	-	104=(417)
	TOTAL	142



DRAFTED: DJB
DESIGNED: DJB
REVIEWED: JSJ

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CHICAGO I MILWAUKEE - NATIONWIDE

SOMERS BUSINESS PARK

SOMERS, WI

LANDSCAPE OVERVIEW

REVISIONS

PES JOB No. 2360.00-WI | PES PM: AIA | START DATE: 03/17/22 | SCALE: 1"=100'

SHEET L-1 OF L-11

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LANDSCAPE OVERVIEW

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BLEND TURF THROUGH LINE OF DISTURBANCE

NATIVE PLANTINGS

PROPOSED CONTOUR MINOR, TYP.

PROPOSED CONTOUR MAJOR, TYP.

NO MOW TURF

TURF

SHEET L-2
SHEET L-3

EXISTING CONTOUR MAJOR, TYP.

EXISTING CONTOUR MINOR, TYP.

SHEET L-2
SHEET L-4

CONCEPT PLANT KEY

CANOPY TREE
Acer saccharum `Flax Mill Majesty` / Flax Mill Majesty Maple
Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
Corylus colurna / Turkish Filbert
Gymnocladus dioica / Kentucky Coffee Tree
Quercus x schuetti / Swamp Bur Oak
Tilia tomentosa `Sterling` / Sterling Silver Linden

STREET TREES
Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple
Acer rubrum `Red Sunset` / Red Sunset Maple
Gleditsia triacanthos inermis `Shademaster` / Shademaster Locust
Gymnocladus dioica / Kentucky Coffee Tree
Quercus x schuetti / Swamp Bur Oak
Tilia tomentosa `Sterling` / Sterling Silver Linden

EVERGREEN TREE
Abies concolor / White Fir
Picea glauca `Densata` / Black Hills Spruce
Pinus strobus / White Pine
Pinus sylvestris / Scotch Pine

ORNAMENTAL TREE
Aesculus x arnoldiana `Autumn Splendor` / Autumn Splendor Buckeye
Amelanchier x grandiflora `Autumn Brilliance` / Autumn Brilliance Serviceberry
Crataegus crus-galli inermis / Thornless Cockspur Hawthorn
Maackia amurensis / Amur Maackia
Malus x `Prairie Maid` / Prairie Maid Crabapple
Malus x `Sugar Tyme` / Sugar Tyme Crabapple
Syringa reticulata `Ivory Silk` / Ivory Silk Tree Lilac

LARGE DECIDUOUS SHRUB
-

MEDIUM EVERGREEN SHRUB
-

MEDIUM DECIDUOUS SHRUB
-

SMALL DECIDUOUS SHRUB
-

ORNAMENTAL GRASS
Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem

PERENNIALS
Amsonia c `Halfway to Arkansas` / Halfway to Arkansas Blue-star
Aruncus dioicus / Goatsbeard
Astilbe chinensis `Vision in Red` / Vision in Red Astilbe
Calamintha nepeta / Calamint
Coreopsis verticillata `Zagreb` / Zagreb Coreopsis
Echinacea purpurea `Magnus Superior` / Magnus Superior Coneflower
Helenium autumnale 'Ruby Tuesday' / Ruby Tuesday Helen's Flower
Hemerocallis `Stella De Oro` / Stella De Oro Daylily
Hemerocallis `Summer Wine` / Summer Wine Daylily
Heuchera m `Palace Purple` / Palace Purple Coral Bells
Hosta x `Big Daddy` / Big Daddy Hosta
Hosta x `Frances Williams` / Frances Williams Hosta
Hosta x `Gold Standard` / Gold Standard Hosta
Hosta x `Patriot` / Patriot Hosta
Hosta x `Sum & Substance` / Sum & Substance Hosta
Leucanthemum x `Becky` / Becky Shasta Daisy
Nepeta x `Walker`s Low` / Walker`s Low Catmint
Rudbeckia f `Viette`s Little Suzy` / Viette`s Little Suzy Showy Coneflower
Salvia nemorosa `May Night` / May Night Sage
Sedum `Autumn Joy` / Autumn Joy Sedum

TURF

NOW MOW TURF

NATIVE PLANTINGS

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 20' 40'

REVIEWED: JSJ
DESIGNED: DJB
DRAFTED: DJB

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SOMERS BUSINESS PARK

SOMERS, WI

LANDSCAPE ENLARGEMENT

REVISIONS

PEG JOB No. 2360.00-WI
PEG PM ABA
START DATE 03/17/22
SCALE 1"=20'

SHEET L-2 OF L-11

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BLEND TURF THROUGH LINE OF DISTURBANCE

NATIVE PLANTINGS

NATIVE PLANTINGS

NATIVE PLANTINGS

NO MOW TURF

BLEND TURF THROUGH LINE OF DISTURBANCE

TURF

NO MOW TURF

SHEET L-2
SHEET L-3

SHEET L-3
SHEET L-7

CONCEPT PLANT KEY

CANOPY TREE
Acer saccharum `Flax Mill Majesty` / Flax Mill Majesty Maple
Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
Corylus colurna / Turkish Filbert
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Quercus x schuetti / Swamp Bur Oak
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Quercus x schuetti / Swamp Bur Oak
Tilia tomentosa `Sterling` / Sterling Silver Linden

EVERGREEN TREE
Abies concolor / White Fir
Picea glauca `Densata` / Black Hills Spruce
Pinus strobus / White Pine
Pinus sylvestris / Scotch Pine

ORNAMENTAL TREE
Aesculus x arnoldiana `Autumn Splendor` / Autumn Splendor Buckeye
Amelanchier x grandiflora `Autumn Brilliance` / Autumn Brilliance Serviceberry
Crataegus crus-galli inermis / Thornless Cockspur Hawthorn
Maackia amurensis / Amur Maackia
Malus x `Prairie Maid` / Prairie Maid Crabapple
Malus x `Sugar Tyme` / Sugar Tyme Crabapple
Syringa reticulata `Ivory Silk` / Ivory Silk Tree Lilac

LARGE DECIDUOUS SHRUB
-

MEDIUM EVERGREEN SHRUB
-

MEDIUM DECIDUOUS SHRUB
-

SMALL DECIDUOUS SHRUB
-

ORNAMENTAL GRASS
Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem

PERENNIALS
Amsonia c `Halfway to Arkansas` / Halfway to Arkansas Blue-star
Aruncus dioicus / Goatsbeard
Astilbe chinensis `Vision in Red` / Vision in Red Astilbe
Calamintha nepeta / Calamint
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Salvia nemorosa `May Night` / May Night Sage
Sedum `Autumn Joy` / Autumn Joy Sedum

TURF

NOW MOW TURF

NATIVE PLANTINGS

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 20' 40'

REVIEWED: JGJ
DESIGNED: JJB
DRAFTED: JJB

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LANDSCAPE ENLARGEMENT

REVISIONS

PEC JOB No: 2360.00-WI
PEC PM: ARA
START DATE: 03/17/22
SCALE: 1" =20'

SHEET
L-3
OF
L-11

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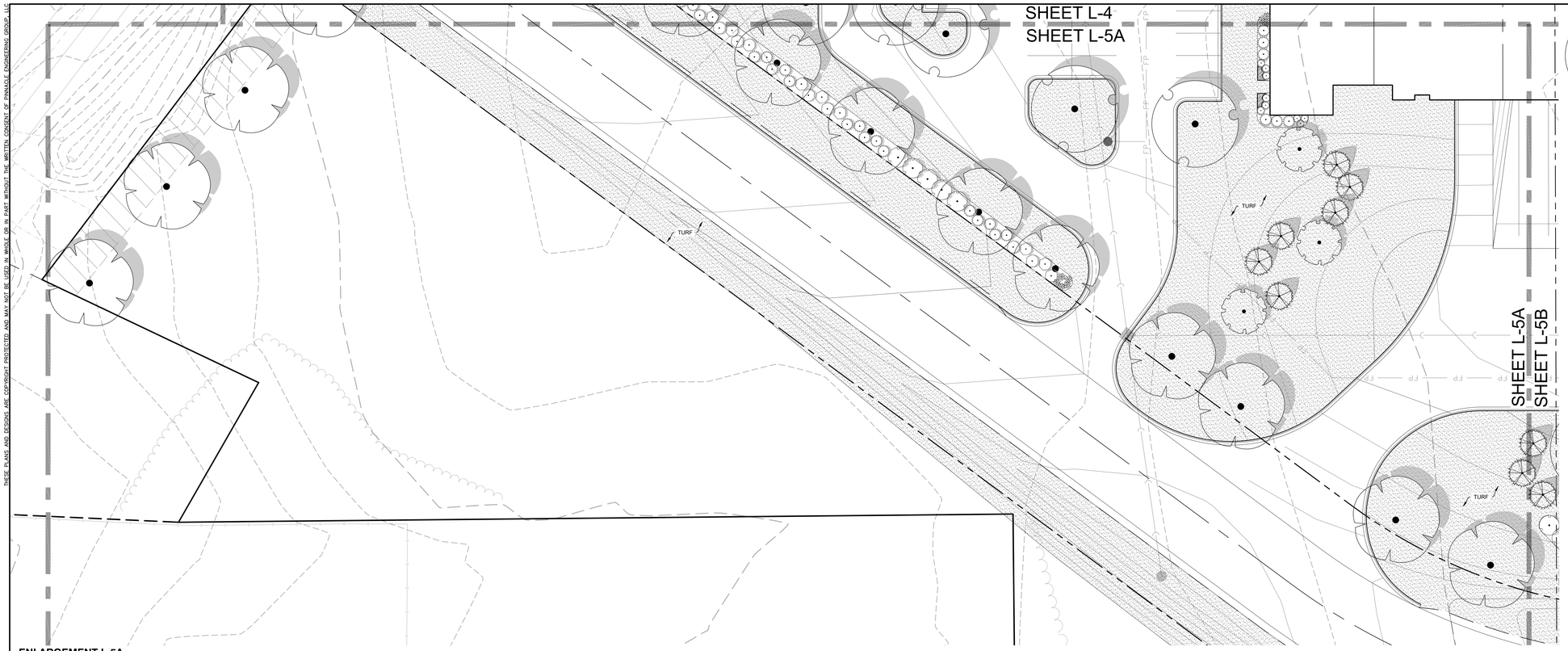
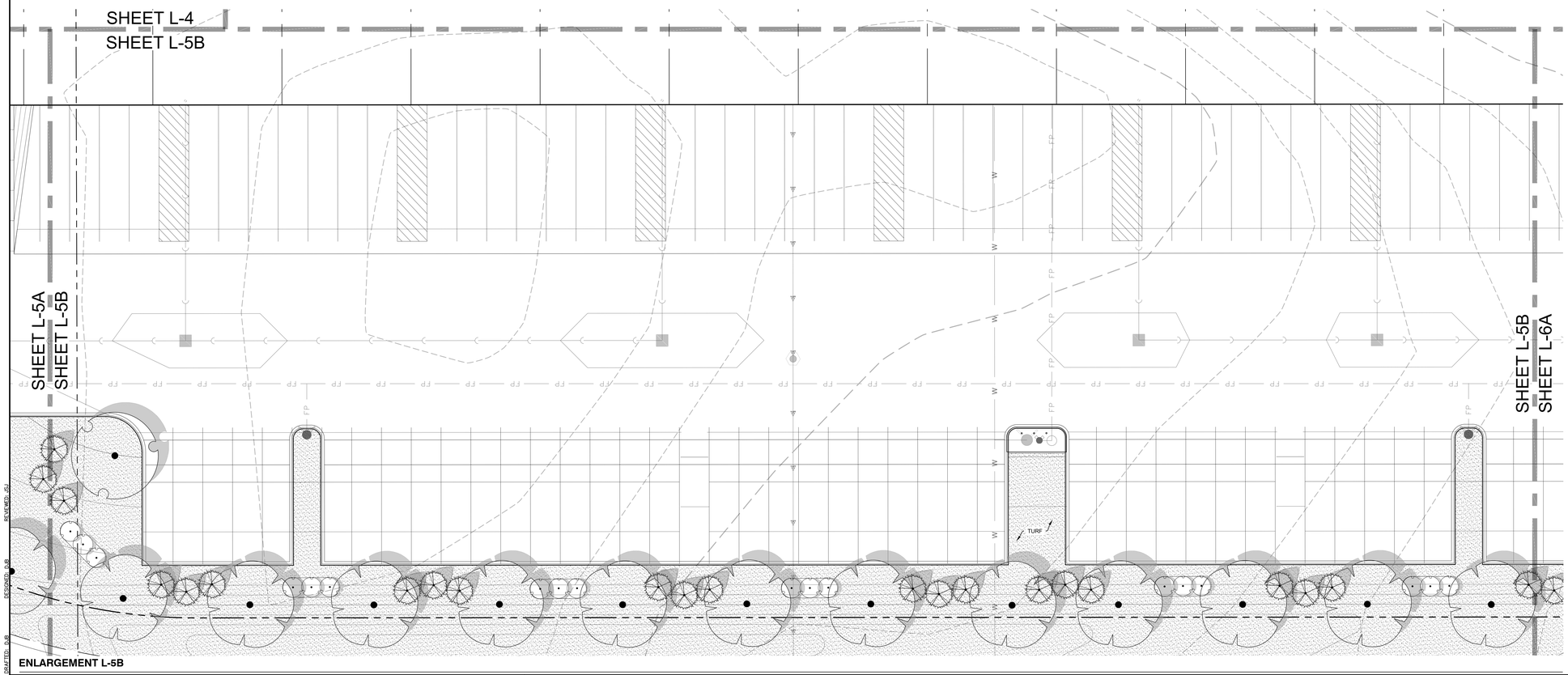


ENLARGEMENT L-5A



ENLARGEMENT L-5B

CONCEPT PLANT KEY

CANOPY TREE
Acer saccharum `Flax Mill Majesty` / Flax Mill Majesty Maple
Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
Corylus columa / Turkish Filbert
Gymnocladus dioica / Kentucky Coffee Tree
Quercus x schuetti / Swamp Bur Oak
Tilia tomentosa `Sterling` / Sterling Silver Linden

STREET TREES
Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple
Acer rubrum `Red Sunset` / Red Sunset Maple
Gleditsia triacanthos inermis `Shademaster` / Shademaster Locust
Gymnocladus dioica / Kentucky Coffee Tree
Quercus x schuetti / Swamp Bur Oak
Tilia tomentosa `Sterling` / Sterling Silver Linden

EVERGREEN TREE
Abies concolor / White Fir
Picea glauca `Densata` / Black Hills Spruce
Pinus strobus / White Pine
Pinus sylvestris / Scotch Pine

ORNAMENTAL TREE
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Amelanchier x grandiflora `Autumn Brilliance` / Autumn Brilliance Serviceberry
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Malus x `Sugar Tyme` / Sugar Tyme Crabapple
Syringa reticulata `Ivory Silk` / Ivory Silk Tree Lilac

LARGE DECIDUOUS SHRUB
-

MEDIUM EVERGREEN SHRUB
-

MEDIUM DECIDUOUS SHRUB
-

SMALL DECIDUOUS SHRUB
-

ORNAMENTAL GRASS
Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem

PERENNIALS
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Salvia nemorosa `May Night` / May Night Sage
Sedum `Autumn Joy` / Autumn Joy Sedum

TURF

NOW MOW TURF

NATIVE PLANTINGS

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 20' 40'

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DESIGNED: JLB
DRAFTED: JLB

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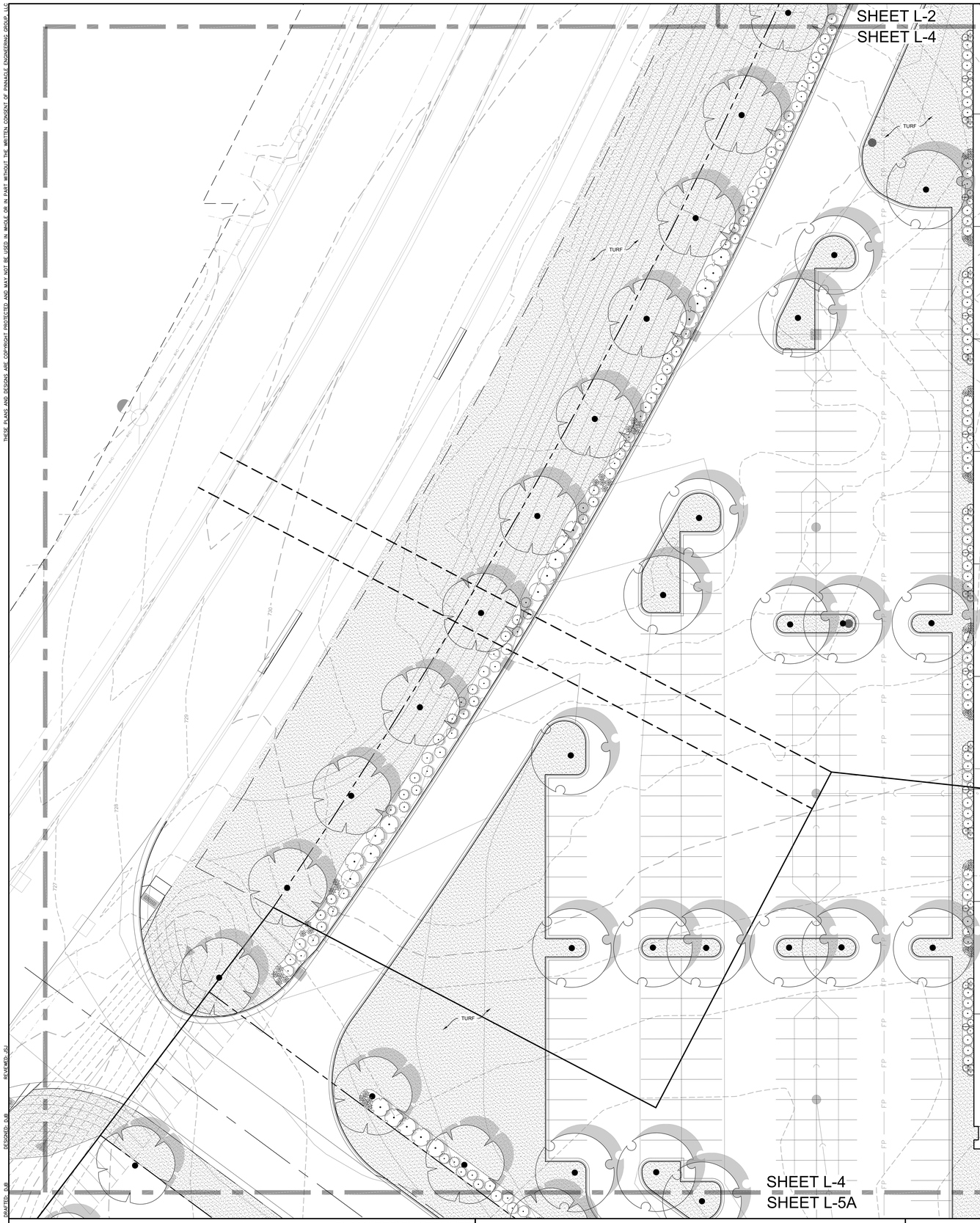
SHEET L-2
SHEET L-4



SHEET L-4
SHEET L-5A

CONCEPT PLANT KEY

CANOPY TREE
Acer saccharum `Flax Mill Majesty` / Flax Mill Majesty Maple
Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
Corylus columa / Turkish Filbert
Gymnocladus dioica / Kentucky Coffee Tree
Quercus x schuetti / Swamp Bur Oak
Tilia tomentosa `Sterling` / Sterling Silver Linden

STREET TREES
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Acer rubrum `Red Sunset` / Red Sunset Maple
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Gymnocladus dioica / Kentucky Coffee Tree
Quercus x schuetti / Swamp Bur Oak
Tilia tomentosa `Sterling` / Sterling Silver Linden

EVERGREEN TREE
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Picea glauca `Densata` / Black Hills Spruce
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ORNAMENTAL TREE
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Amelanchier x grandiflora `Autumn Brilliance` / Autumn Brilliance Serviceberry
Crataegus crus-galli inermis / Thornless Cockspur Hawthorn
Maackia amurensis / Amur Maackia
Malus x `Prairie Maid` / Prairie Maid Crabapple
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Syringa reticulata `Ivory Silk` / Ivory Silk Tree Lilac

LARGE DECIDUOUS SHRUB
-

MEDIUM EVERGREEN SHRUB
-

MEDIUM DECIDUOUS SHRUB
-

SMALL DECIDUOUS SHRUB
-

ORNAMENTAL GRASS
Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem

PERENNIALS
Amsonia c `Halfway to Arkansas` / Halfway to Arkansas Blue-star
Aruncus dioicus / Goatsbeard
Astilbe chinensis `Vision in Red` / Vision in Red Astilbe
Calamintha nepeta / Calamint
Coreopsis verticillata `Zagreb` / Zagreb Coreopsis
Echinacea purpurea `Magnus Superior` / Magnus Superior Coneflower
Helenium autumnale 'Ruby Tuesday' / Ruby Tuesday Helen's Flower
Hemerocallis `Stella De Oro` / Stella De Oro Daylily
Hemerocallis `Summer Wine` / Summer Wine Daylily
Heuchera m `Palace Purple` / Palace Purple Coral Bells
Hosta x `Big Daddy` / Big Daddy Hosta
Hosta x `Frances Williams` / Frances Williams Hosta
Hosta x `Gold Standard` / Gold Standard Hosta
Hosta x `Patriot` / Patriot Hosta
Hosta x `Sum & Substance` / Sum & Substance Hosta
Leucanthemum x `Becky` / Becky Shasta Daisy
Nepeta x `Walker`s Low` / Walker`s Low Catmint
Rudbeckia f `Viette`s Little Suzy` / Viette`s Little Suzy Showy Coneflower
Salvia nemorosa `May Night` / May Night Sage
Sedum `Autumn Joy` / Autumn Joy Sedum

TURF

NOW MOW TURF

NATIVE PLANTINGS

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 20' 40'

www.pinnacle-engr.com

LANDSCAPE ENLARGEMENT

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REVIEWED: JSJ
DESIGNED: AJB
DRAFTED: AJB

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(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

SOMERS BUSINESS PARK

SOMERS, WI

LANDSCAPE ENLARGEMENT

REVISIONS

PEG JOB No. 2360.00-WI
PEG PM ABA
START DATE 03/17/22
SCALE 1"=20'

SHEET L-4 OF L-11

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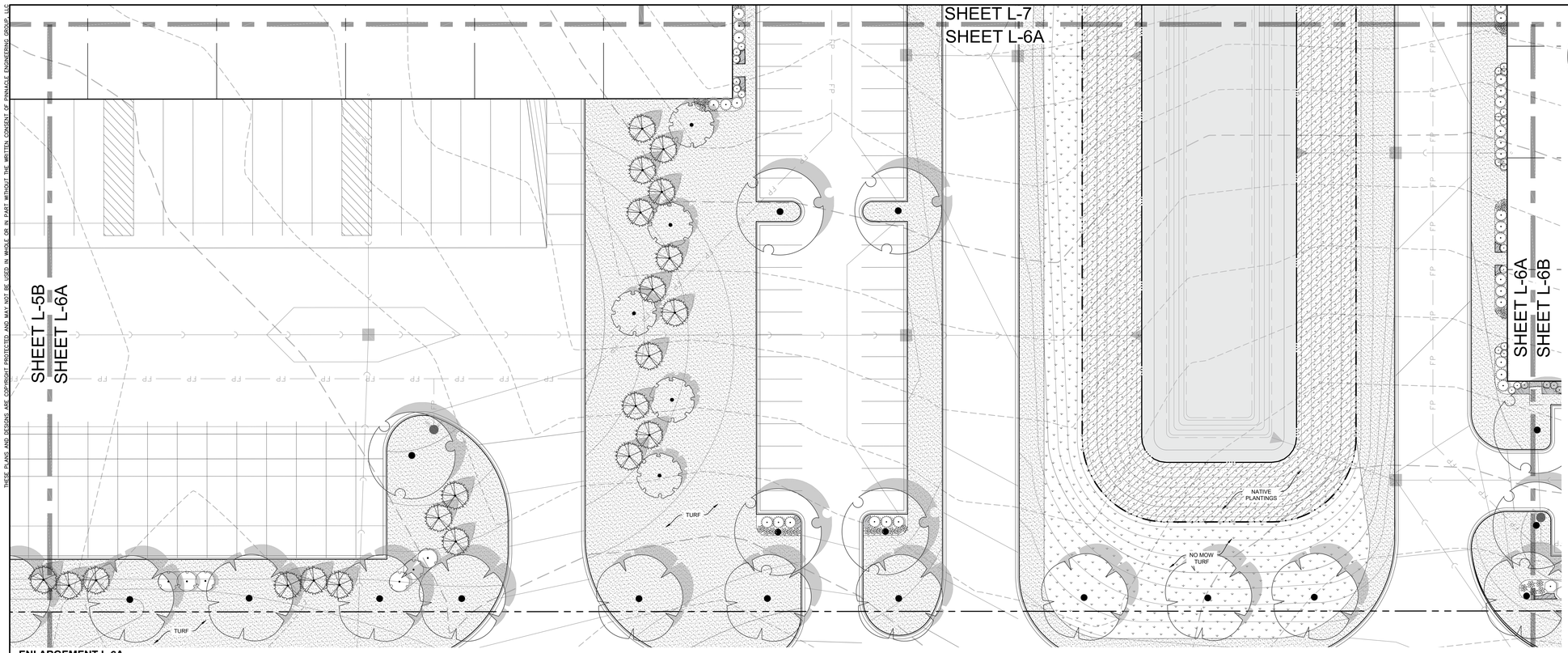

ENLARGEMENT L-6A

ENLARGEMENT L-6B

CONCEPT PLANT KEY

CANOPY TREE
Acer saccharum `Flax Mill Majesty` / Flax Mill Majesty Maple
Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
Corylus columa / Turkish Filbert
Gymnocladus dioica / Kentucky Coffee Tree
Quercus x schuetti / Swamp Bur Oak
Tilia tomentosa `Sterling` / Sterling Silver Linden

STREET TREES
Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple
Acer rubrum `Red Sunset` / Red Sunset Maple
Gleditsia triacanthos inermis `Shademaster` / Shademaster Locust
Gymnocladus dioica / Kentucky Coffee Tree
Quercus x schuetti / Swamp Bur Oak
Tilia tomentosa `Sterling` / Sterling Silver Linden

EVERGREEN TREE
Abies concolor / White Fir
Picea glauca `Densata` / Black Hills Spruce
Pinus strobus / White Pine
Pinus sylvestris / Scotch Pine

ORNAMENTAL TREE
Aesculus x arnoldiana `Autumn Splendor` / Autumn Splendor Buckeye
Amelanchier x grandiflora `Autumn Brilliance` / Autumn Brilliance Serviceberry
Crataegus crus-galli inermis / Thornless Cockspur Hawthorn
Maackia amurensis / Amur Maackia
Malus x `Prairie Maid` / Prairie Maid Crabapple
Malus x `Sugar Tyme` / Sugar Tyme Crabapple
Syringa reticulata `Ivory Silk` / Ivory Silk Tree Lilac

LARGE DECIDUOUS SHRUB
-

MEDIUM EVERGREEN SHRUB
-

MEDIUM DECIDUOUS SHRUB
-

SMALL DECIDUOUS SHRUB
-

ORNAMENTAL GRASS
Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem

PERENNIALS
Amsonia c `Halfway to Arkansas` / Halfway to Arkansas Blue-star
Aruncus dioicus / Goatsbeard
Astilbe chinensis `Vision in Red` / Vision in Red Astilbe
Calamintha nepeta / Calamint
Coreopsis verticillata `Zagreb` / Zagreb Coreopsis
Echinacea purpurea `Magnus Superior` / Magnus Superior Coneflower
Helenium autumnale 'Ruby Tuesday' / Ruby Tuesday Helen's Flower
Hemerocallis `Stella De Oro` / Stella De Oro Daylily
Hemerocallis `Summer Wine` / Summer Wine Daylily
Heuchera m `Palace Purple` / Palace Purple Coral Bells
Hosta x `Big Daddy` / Big Daddy Hosta
Hosta x `Frances Williams` / Frances Williams Hosta
Hosta x `Gold Standard` / Gold Standard Hosta
Hosta x `Patriot` / Patriot Hosta
Hosta x `Sum & Substance` / Sum & Substance Hosta
Leucanthemum x `Becky` / Becky Shasta Daisy
Nepeta x `Walker`s Low` / Walker`s Low Catmint
Rudbeckia f `Viette`s Little Suzy` / Viette`s Little Suzy Showy Coneflower
Salvia nemorosa `May Night` / May Night Sage
Sedum `Autumn Joy` / Autumn Joy Sedum

TURF

NOW MOW TURF

NATIVE PLANTINGS

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 20' 40'

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LANDSCAPE ENLARGEMENT

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CHICAGO I MILWAUKEE : NATIONWIDE

SOMERS BUSINESS PARK

SOMERS, WI

LANDSCAPE ENLARGEMENT

REVISIONS

PEG JOB No 2360.00-WI
PEG PM ARA
START DATE 03/17/22
SCALE 1" = 20'

SHEET
L-6
OF
L-11

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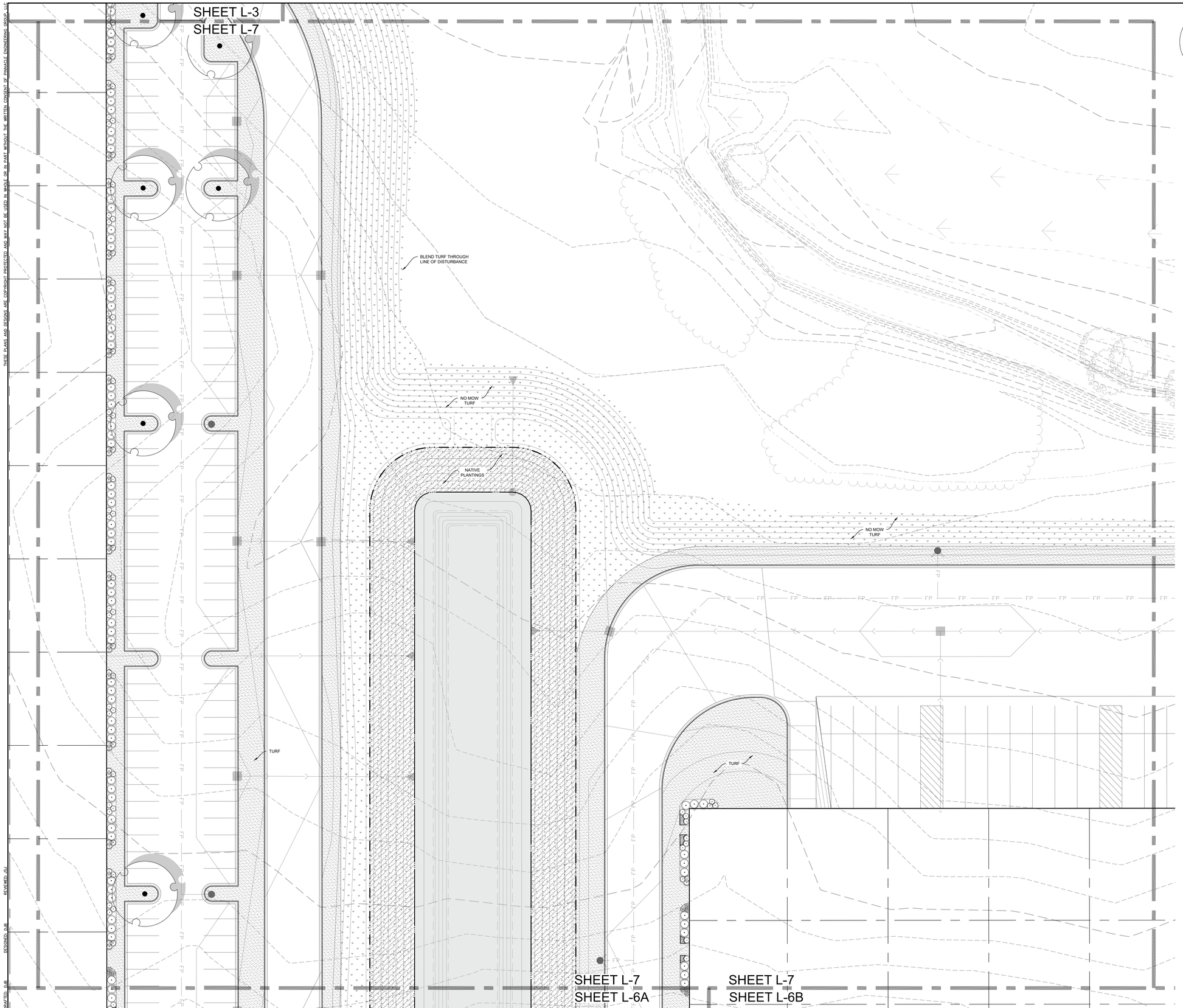

CONCEPT PLANT KEY

CANOPY TREE
Acer saccharum `Flax Mill Majesty` / Flax Mill Majesty Maple
Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
Corylus columa / Turkish Filbert
Gymnocladus dioica / Kentucky Coffee Tree
Quercus x schuetti / Swamp Bur Oak
Tilia tomentosa `Sterling` / Sterling Silver Linden

STREET TREES
Acer freemanii `Autumn Fantasy` / Autumn Fantasy Maple
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Gleditsia triacanthos inermis `Shademaster` / Shademaster Locust
Gymnocladus dioica / Kentucky Coffee Tree
Quercus x schuetti / Swamp Bur Oak
Tilia tomentosa `Sterling` / Sterling Silver Linden

EVERGREEN TREE
Abies concolor / White Fir
Picea glauca `Densata` / Black Hills Spruce
Pinus strobus / White Pine
Pinus sylvestris / Scotch Pine

ORNAMENTAL TREE
Aesculus x arnoldiana `Autumn Splendor` / Autumn Splendor Buckeye
Amelanchier x grandiflora `Autumn Brilliance` / Autumn Brilliance Serviceberry
Crataegus crus-galli inermis / Thornless Cockspur Hawthorn
Maackia amurensis / Amur Maackia
Malus x `Prairie Maid` / Prairie Maid Crabapple
Malus x `Sugar Tyme` / Sugar Tyme Crabapple
Syringa reticulata `Ivory Silk` / Ivory Silk Tree Lilac

LARGE DECIDUOUS SHRUB
-

MEDIUM EVERGREEN SHRUB
-

MEDIUM DECIDUOUS SHRUB
-

SMALL DECIDUOUS SHRUB
-

ORNAMENTAL GRASS
Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem

PERENNIALS
Amsonia c `Halfway to Arkansas` / Halfway to Arkansas Blue-star
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TURF

NOW MOW TURF

NATIVE PLANTINGS

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 20' 40'

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LANDSCAPE ENLARGEMENT

DESIGNED - AJB
DRAWN - AJB
REVIEWED - ASJ

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REVISIONS

PEG JOB No 2360.00-WI
PEG PM ARA
START DATE 03/17/22
SCALE 1" = 20'

SHEET L-7 OF L-11

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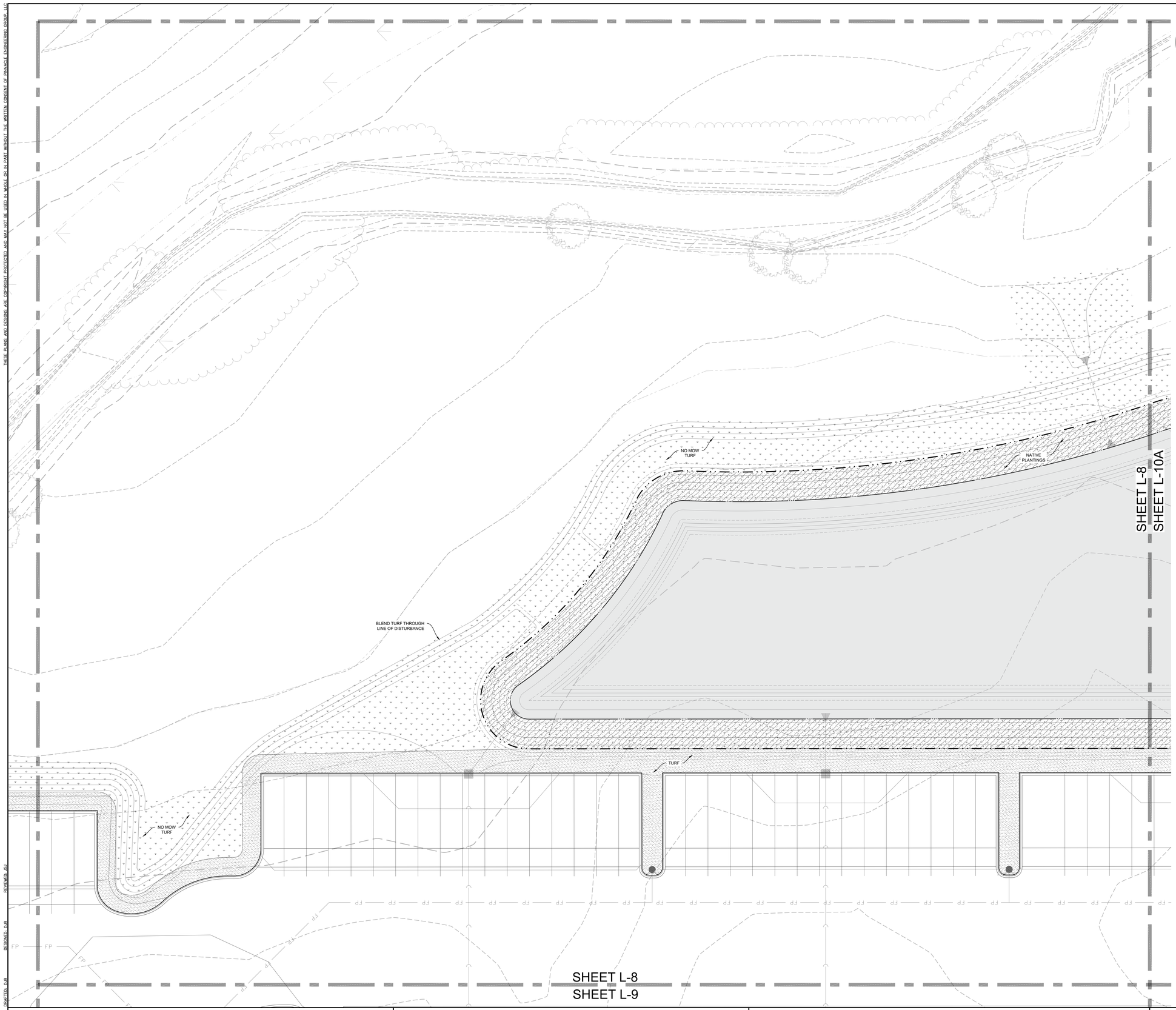

CONCEPT PLANT KEY

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EVERGREEN TREE
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ORNAMENTAL TREE
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Maackia amurensis / Amur Maackia
Malus x `Prairie Maid` / Prairie Maid Crabapple
Malus x `Sugar Tyme` / Sugar Tyme Crabapple
Syringa reticulata `Ivory Silk` / Ivory Silk Tree Lilac

LARGE DECIDUOUS SHRUB
-

MEDIUM EVERGREEN SHRUB
-

MEDIUM DECIDUOUS SHRUB
-

SMALL DECIDUOUS SHRUB
-

ORNAMENTAL GRASS
Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem

PERENNIALS
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Rudbeckia f `Viette`s Little Suzy` / Viette`s Little Suzy Showy Coneflower
Salvia nemorosa `May Night` / May Night Sage
Sedum `Autumn Joy` / Autumn Joy Sedum

TURF

NOW MOW TURF

NATIVE PLANTINGS

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 20' 40'

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LANDSCAPE ENLARGEMENT

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DESIGNED: RJB
DRAFTED: RJB
REVIEWED: JSJ

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SOMERS BUSINESS PARK

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LANDSCAPE ENLARGEMENT

REVISIONS

PEG JOB No. 2360.00-WI
PEG PM: ARA
START DATE: 03/17/22
SCALE: 1" = 20'

SHEET L-8 OF L-11

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SHEET L-8
SHEET L-9

SHEET L-6B
SHEET L-9

SHEET L-9
SHEET L-10B

TURF

BLEND TURF THROUGH
LINE OF DISTURBANCE

CONCEPT PLANT KEY

CANOPY TREE
Acer saccharum `Flax Mill Majesty` / Flax Mill Majesty Maple
Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
Corylus columa / Turkish Filbert
Gymnocladus dioica / Kentucky Coffee Tree
Quercus x schuetti / Swamp Bur Oak
Tilia tomentosa `Sterling` / Sterling Silver Linden

STREET TREES
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Acer rubrum `Red Sunset` / Red Sunset Maple
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Gymnocladus dioica / Kentucky Coffee Tree
Quercus x schuetti / Swamp Bur Oak
Tilia tomentosa `Sterling` / Sterling Silver Linden

EVERGREEN TREE
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Pinus strobus / White Pine
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ORNAMENTAL TREE
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Maackia amurensis / Amur Maackia
Malus x `Prairie Maid` / Prairie Maid Crabapple
Malus x `Sugar Tyme` / Sugar Tyme Crabapple
Syringa reticulata `Ivory Silk` / Ivory Silk Tree Lilac

LARGE DECIDUOUS SHRUB
-

MEDIUM EVERGREEN SHRUB
-

MEDIUM DECIDUOUS SHRUB
-

SMALL DECIDUOUS SHRUB
-

ORNAMENTAL GRASS
Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem

PERENNIALS
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Aruncus dioicus / Goatsbeard
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Hemerocallis `Summer Wine` / Summer Wine Daylily
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Hosta x `Big Daddy` / Big Daddy Hosta
Hosta x `Frances Williams` / Frances Williams Hosta
Hosta x `Gold Standard` / Gold Standard Hosta
Hosta x `Patriot` / Patriot Hosta
Hosta x `Sum & Substance` / Sum & Substance Hosta
Leucanthemum x `Becky` / Becky Shasta Daisy
Nepeta x `Walker`s Low` / Walker`s Low Catmint
Rudbeckia f `Viette`s Little Suzy` / Viette`s Little Suzy Showy Coneflower
Salvia nemorosa `May Night` / May Night Sage
Sedum `Autumn Joy` / Autumn Joy Sedum

TURF

NOW MOW TURF

NATIVE PLANTINGS

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 20' 40'

REVIEWED: JSJ
DESIGNED: JLB
DRAFTED: JLB

PLAN I DESIGN I DELIVER
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LANDSCAPE ENLARGEMENT

REVISIONS

PEC JOB No: 2360.00-WI
PEC PM: ABA
START DATE: 03/17/22
SCALE: 1" = 20'

SHEET
L-9
OF
L-11

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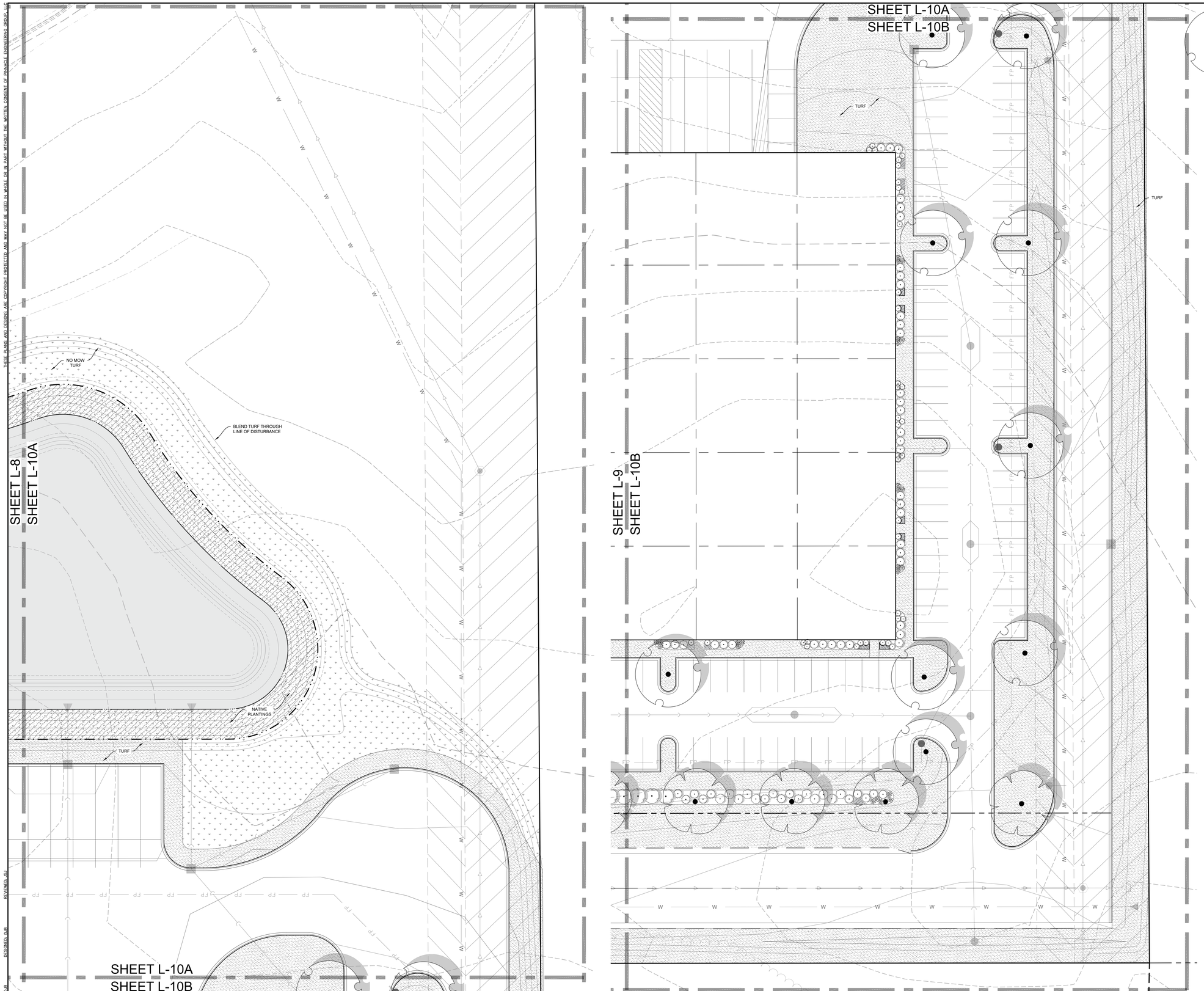

ENLARGEMENT L-10A

ENLARGEMENT L-10B

CONCEPT PLANT KEY

CANOPY TREE
Acer saccharum `Flax Mill Majesty` / Flax Mill Majesty Maple
Celtis occidentalis `Prairie Pride` / Prairie Pride Hackberry
Corylus columa / Turkish Filbert
Gymnocladus dioica / Kentucky Coffee Tree
Quercus x schuetti / Swamp Bur Oak
Tilia tomentosa `Sterling` / Sterling Silver Linden

STREET TREES
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EVERGREEN TREE
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ORNAMENTAL TREE
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LARGE DECIDUOUS SHRUB
-

MEDIUM EVERGREEN SHRUB
-

MEDIUM DECIDUOUS SHRUB
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SMALL DECIDUOUS SHRUB
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ORNAMENTAL GRASS
Andropogon gerardii `Dancing Wind` / Dancing Wind Big Blue Stem

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Sedum `Autumn Joy` / Autumn Joy Sedum

TURF

NOW MOW TURF

NATIVE PLANTINGS

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 20' 40'

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SOMERS, WI

LANDSCAPE ENLARGEMENT

REVISIONS

PEC JOB No 2360.00-WI
PEC PM ARA
START DATE 03/17/22
SCALE 1"=20'

SHEET L-10 of L-11

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GENERAL PLANTING NOTES

1. THE LAYOUT OF ALL PLANTING BEDS AND INDIVIDUAL TREES AND SHRUBS SHALL BE STAKED BY THE CONTRACTOR IN ADVANCE OF INSTALLATION. FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE LOCATIONS AS SCALED FROM THE PLANS. AN APPROVED REPRESENTATIVE WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR AND MAKE MINOR ADJUSTMENTS AS NECESSARY. BED LAYOUT SHALL ALSO INCLUDE PERENNIAL GROUPINGS BY SPECIES.
2. THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY DETERMINING THE PLANT MATERIAL QUANTITIES REQUIRED BY THE LANDSCAPE PLANS. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.
3. NO PLANT MATERIAL OR PLANT SIZE SUBSTITUTIONS WILL BE ACCEPTED WITHOUT APPROVAL BY THE LANDSCAPE ARCHITECT. ANY CHANGES SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO INSTALLATION.
4. ALL BNB STOCK SHALL BE NURSERY GROWN IN A CLAY LOAM SOIL FOR A MINIMUM OF THREE GROWING SEASONS WITHIN 200 MILES OF PROJECT LOCATION, IN A ZONE COMPATIBLE WITH USDA HARDINESS ZONE 5A. SEED SHALL BE PROVIDED FROM A NURSERY (WITHIN 200 MILES) WITH A SIMILAR PLANT HARDINESS ZONE AS PROJECT LOCATION. EXISTING SOIL SHALL BE AMENDED PER SOIL ANALYSIS REPORT TO ENSURE A PROPER GROWING MEDIUM IS ACHIEVED.
5. ALL PLANT MATERIAL SHALL COMPLY WITH STANDARDS DESCRIBED IN AMERICAN STANDARD OF NURSERY STOCK - Z60.1 ANSI. LANDSCAPE ARCHITECT OR OWNERS AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND POTENTIALLY REJECT ANY PLANT MATERIAL DEEMED TO NOT MEET THE REQUIRED STANDARDS.
6. ALL STOCK SHALL BE FREE OF DISEASES AND HARMFUL INSECTS, DAMAGE, DISORDERS AND DEFORMITIES.
7. TREES SHALL HAVE SINGLE, STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. MUTLI-STEM TREES SHALL HAVE 3-4 STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. HEIGHT-TO-CALIPER RATIOS SHALL BE CONSISTENT WITH THE LATEST EDITION OF ANSI Z60.1.
8. ROOT SYSTEMS SHALL BE LARGE ENOUGH TO ALLOW FOR FULL RECOVERY OF THE TREE, AND SHALL CONFORM TO STANDARDS AS THEY APPEAR IN THE MOST CURRENT REVISION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD OF NURSERY STOCK ANSI Z60.1.
9. BNB TREES SHALL BE DUG WITH A BALL OF SOIL, NOT SOFT BALLED OR POTTED AND SHALL BE FIRM IN THEIR ROOTBALL. ROOT BALL SHALL BE WRAPPED (WITH BIODEGRADABLE MATERIAL). THE TREE ROOT FLARE, OR COLLAR, SHALL BE AT OR WITHIN THE TOP THREE INCHES OF GRADE.
10. ALL SPRING TREES MUST BE FRESHLY DUG IN THE MOST RECENT SPRING.
11. ALL AUTUMN TREES MUST BE FRESHLY DUG IN THE MOST RECENT AUTUMN.
12. TREES SHALL BE ALIVE, HEALTHY AND APPROPRIATELY MOIST, AT TIME OF DELIVERY. TREES SHALL BE SUBJECT TO INSPECTION FOR CONFORMITY TO SPECIFICATION REQUIREMENTS AND APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE. THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY TREES THAT DO NOT MEET THE SPECIFICATIONS OR THAT HAVE BEEN DAMAGED DURING SHIPMENT. THE LANDSCAPE INSTALLER MUST RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT FOR ANY SUBSTITUTIONS OR ALTERATIONS.
13. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH PLANTING DETAILS.
14. ALL PLANTING BEDS SHALL HAVE A MINIMUM 10" DEPTH OF PREPARED SOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 10" OF SOIL. REFER TO SOIL PLACEMENT NOTES.
15. WHILE PLANTING TREES AND SHRUBS, BACKFILL $\frac{2}{3}$ OF PLANTING HOLE AND WATER TREE THOROUGHLY BEFORE INSTALLING THE REMAINDER OF SOIL MIXTURE. AFTER ALL SOIL HAS BEEN PLACED INTO THE PLANTING HOLE WATER THOROUGHLY AGAIN.
16. THE CONTRACTOR MUST LABEL ALL TREES WITH THE COMMON AND BOTANICAL NAMES PRIOR TO FINAL INSPECTION.
17. OAK TREES SHALL BE TREATED FOR TWO-LINE CHESTNUT BORER BOTH AT THE TIME OF INSTALLATION AND DURING THE SECOND GROWING SEASON.
18. ALL PLANTING BEDS SHALL BE MULCHED WITH 3" DEEP SHREDDED HARDWOOD MULCH, AND ALL TREES PLANTED IN TURF AREAS SHALL RECEIVE A 3" DEEP SHREDDED HARDWOOD MULCHED RING AS SHOWN IN PLANTING DETAILS.
19. ALL PLANTING BEDS AND TREE RINGS SHALL HAVE A 4" DEEP TRENCHED BED EDGE CREATED BY EITHER A FLAT LANDSCAPE SPADE OR MECHANICAL EDGER. BED EDGES ARE TO BE CUT CLEAN AND SMOOTH AS SHOWN ON LANDSCAPE PLANS WITH A CLEAN DEFINITION BETWEEN TURF AND PLANTING AREAS.
20. ALL TURF SEED AREAS SHALL RECEIVE A MINIMUM OF 6" DEPTH OF TOPSOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 6" OF SOIL AS INDICATED IN THE SOIL PLACEMENT NOTES. REQUIRED AMENDMENTS SHALL BE DETERMINED BASED ON A SOIL ANALYSIS TO BE PERFORMED. ALL TOPSOIL AMENDMENT SHALL BE AGED WEED FREE MANURE OR CLASS 1 ORGANIC MATTER.
21. FOR LAWN SEEDING, APPLY A STARTER FERTILIZER AND SEED UNIFORMLY AT THE RATE RECOMMENDED BY MANUFACTURER, AND PROVIDE A MULCH COVERING THAT IS SUITABLE TO PROMOTE SEED GERMINATION AND TURF ESTABLISHMENT. CONTRACTOR TO PROVIDE FERTILIZER, SEED, AND MULCH SPECIFICATIONS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. EROSION CONTROL MEASURES ARE TO BE INSTALLED IN THOSE AREAS REQUIRING STABILIZATION (SWALES, SLOPES EXCEEDING 1:3, AND THOSE LOCATIONS INDICATED IN CIVIL DRAWINGS).
22. THE CONTRACTOR TO ENSURE A SMOOTH, UNIFORM QUALITY TURF IS ACHIEVED WITH NO BARE SPOTS LARGER THAN 6" X 6". ANY BARE SPOTS LARGER THAN 6" X6" AT THE END OF ESTABLISHMENT PERIOD SHALL BE RESEEDED AT THE CONTRACTORS EXPENSE TO OBTAIN A DENSE, UNIFORM LAWN.
23. ALL FINISH GRADING AND LAWN AREAS TO BE INSTALLED BY LANDSCAPE CONTRACTOR.
24. ALL DISTURBED AREAS WITHIN THE PROJECT SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
25. ALL DISTURBED AREAS OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE OWNER.
26. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, INCLUDING ANY IRRIGATION LINES, PRIOR TO DIGGING. CONSULT DIGGERS HOTLINE.
27. TREES SHALL BE INSTALLED NO CLOSER THAN:
    - -10 FEET FROM ANY FIRE HYDRANT
    - - 7 FEET FROM STORM SEWER, SANITARY SEWER LATERALS, DRIVEWAYS, AND WATER SERVICE
28. THE CONTRACTOR SHALL ENSURE THAT SOIL CONDITIONS AND COMPACTION ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AROUND THE CONSTRUCTION SITE. UNDESIRABLE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER SURFACE AND SUBSURFACE DRAINAGE IN ALL AREAS
29. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, AND LICENSES NECESSARY FOR THE INSTALLATION OF THIS PLAN.
30. THE CONTRACTOR IS TO REVIEW ALL SITE ENGINEERING DOCUMENTS PRIOR TO INSTALLATION. ANY CONFLICTS MUST BE REPORTED TO THE LANDSCAPE ARCHITECT. THESE LANDSCAPE DRAWINGS ARE FOR THE INSTALLATION OF PLANT MATERIALS ONLY UNLESS OTHERWISE STATED.
31. THE CONTRACTOR SHALL PROVIDE WATERING AND MAINTENANCE SERVICES FOR A PERIOD OF 60 DAYS TO ENSURE VEGETATIVE ESTABLISHMENT. UPON COMPLETION OF THE PROJECT, CONTRACTOR SHALL SUPPLY THE OWNER IN WRITING WITH ONGOING WATERING AND MAINTENANCE INSTRUCTIONS.
32. PLANT MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM TIME OF OWNER ACCEPTANCE. ONLY ONE REPLACEMENT PER PLANT WILL BE REQUIRED DURING THE WARRANTY PERIOD EXCEPT IN THE EVENT OF FAILURE TO COMPLY WITH THE SPECIFIED REQUIREMENTS.
33. THE CONTRACTOR IS RESPONSIBLE TO CONDUCT A FINAL WALK THROUGH WITH THE LANDSCAPE ARCHITECT AND OR OWNERS REPRESENTATIVE TO ANSWER QUESTIONS, PROVIDE INSTRUCTIONS, AND ENSURE THAT PROJECT REQUIREMENTS HAVE BEEN MET.

SOIL PLACEMENT NOTES

1. LOOSEN SUBGRADE TO A MINIMUM DEPTH INDICATED IN PLANTING NOTES USING A CULTI-MULCHER OR SIMILAR EQUIPMENT, AND REMOVE STONES MEASURING OVER 1-1/2 INCHES IN ANY DIMENSION, STICKS, RUBBISH AND OTHER EXTRANEOUS MATTER. AREAS ADJACENT TO WALKS AND PAVEMENT SHALL BE FREE OF EXCESS STONE AND PAVING MATERIALS SO AS TO PROVIDE AN UNINTERRUPTED CROSS SECTION OF SOIL. INTERNAL PARKING ISLANDS SHALL BE LOOSENED TO A DEPTH OF 30".
2. THOROUGHLY BLEND PLANTING SOIL MIX FOR PLANTING BED AREAS. (1 PART EXISTING SOIL, 1 PART TOPSOIL, 1 PART ORGANIC SOIL AMENDMENT, 2.9 POUNDS PER CUBIC YARD OF 4-4-4 ANALYSIS SLOW-RELEASE FERTILIZER)
3. TREE AND SHRUB HOLES SHALL BE FILLED WITH A PREPARED PLANTING MIXTURE OF 1 PART TOPSOIL, 2 PARTS PLANTING SOIL MIX.
4. SPREAD SOIL AND SOIL AMENDMENTS TO DEPTH INDICATED ON DRAWINGS, BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. (FINISH GRADE OF PLANTING BEDS SHALL BE 3" BELOW ALL ADJACENT SURFACES. FINISH GRADE OF TURF SEEDING AREAS SHALL BE 1" BELOW ALL ADJACENT HARD SURFACES, WALKS, AND CURBS.)
5. PLACE APPROXIMATELY 1/2 OF TOTAL AMOUNT OF SOIL REQUIRED. WORK INTO TOP OF LOOSENED SUBGRADE TO CREATE A TRANSITION LAYER, THEN PLACE REMAINDER OF THE SOIL. SOIL TRANSITION LAYER SHALL BE TILLED TO A MINIMUM DEPTH OF 6" BELOW THE DEPTH OF NEWLY PLACED SOIL. PARKING LOT ISLANDS SHALL BE CROWNED TO A HEIGHT OF 6" TO PROVIDE PROPER DRAINAGE UNLESS OTHERWISE NOTED.
6. DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
7. FINISH GRADING: GRADE SOIL TO A SMOOTH, UNIFORM SURFACE PLANE WITH A LOOSE, UNIFORMLY FINE TEXTURE.
8. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES.
9. RESTORE PLANTING BEDS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.

NATIVE PLANTINGS AND PRAIRIE

SPECIFICATIONS FOR HAND BROADCASTING:

SEEDING SHALL BE CONDUCTED IN LATE FALL (SEPTEMBER 1- SOIL FREEZE) SO THAT SEEDS MAY LIE DORMANT DURING THE WINTER, ALLOWING FOR STRATIFICATION, OR SPRING (MARCH 1-JUNE 1) TO ALLOW A COMPLETE GROWING SEASON TO BECOME ESTABLISHED.

PRIOR TO SEEDING: ALL WEEDS AND EXISTING VEGETATION SHALL BE REMOVED. EXISTING VEGETATION SHALL BE TREATED WITH GLYPHOPHATE OR SIMILAR HERBICIDE BY A LICENSED PROFESSIONAL. TREATMENT SHALL OCCUR A MINIMUM OF 10 DAYS PRIOR TO SEEDING/PLANTING. VEGETATION STILL ALIVE AFTER INITIAL HERBICIDE TREATMENT SHALL BE TREATED A SECOND TIME PRIOR TO TILLING INTO THE SOIL.TREATED VEGETATION SHALL BE TILLED INTO THE SOIL NO EARLIER THAN 1 DAY PRIOR TO SEEDING.

A. PREPARATION OF SOIL PRIOR TO SEEDING
1. REFER TO CIVIL PLANS FOR SOIL MIX. (OR) INCORPORATE SOIL ADDITIVES CONSISTING OF TWO INCHES OF COMPOST MIXED INTO TWO INCHES OF TOPSOIL. THE SOIL MIX SHOULD BE INCORPORATED INTO THE SOIL USING A ROTARY DEVICE WITH CAPABILITY OF REACHING TO 12" BELOW THE SURFACE. COMPOST SHALL MEET WDNR SPECIFICATION S100 - COMPOST.
2. ALL FOREIGN MATERIALS LARGER THAN 1-INCH SHALL BE REMOVED FROM THE SOIL PRIOR TO SEEDING OR PLANTING.
3. AREA SHOULD BE FREE FROM UNSIGHTLY VARIATIONS, RIDGES, AND DEPRESSIONS.
4. AVOID DRIVING OVER THE SPECIFIED AREA WITH MACHINERY.

B. COVER CROP
1. ANNUAL RYE SHALL BE SPREAD AT A DENSITY OF 20 POUNDS PER ACRE DURING THE PLANTING OR SEEDING OF THE NATIVE PLANT SPECIES TO STABILIZE THE SOIL AND REDUCE THE GROWTH OF UNWANTED VEGETATION. THIS ANNUAL GRASS GROWS RAPIDLY WITHOUT COMPETING WITH THE WILDFLOWERS AND GRASSES THAT ARE PLANTED IN THE TARGET AREAS.
2. WINTER WHEAT OR PERENNIAL RYE SHALL NOT BE USED AS A COVER CROP. THESE GRASSES MAY OUT COMPETE PRAIRIE SEEDLINGS, LEADING TO A REDUCTION IN THE SUCCESS OF THE PLANTINGS.

C. SEED MIX: MIX ALL PRAIRIE SEED WITH VERMICULITE ACCORDING TO AGRECOL RECOMMENDATIONS AND INSTALLATION GUIDELINES.
1. BROADCAST HALF THE SEED OVER THE ENTIRE SITE OR TARGET AREA.
2. BROADCAST THE OTHER HALF OF SEED PERPENDICULAR TO THE DIRECTION THAT THE FIRST HALF OF THE SEED WAS BROADCAST.
3. COVER SEED WITH ¼ -INCH TO ½-INCH OF SOIL (USE ANY EXCESS SOIL FROM THE SITE) WITH RAKE OR DRAG.
4. ROLL SITE TO ENSURE FIRM SEED-TO-GROUND CONTACT.
5. KEEP SEED CONSTANTLY WET THROUGH GERMINATION PERIOD. GENERALLY 3 WEEKS.

ALL SEEDING SHALL BE COVERED WITH 1-INCH OF CLEAN, NON-INVASIVE STRAW (NO MARSH HAY, OR REED CANARY GRASS) WITHOUT SEEDS, WITHIN SEVEN DAYS. WHEAT, RYE, OATS, OR BARLEY ARE ACCEPTABLE FORMS OF STRAW. THOSE AREAS OF SLOPES STEEPER THAN 8:1 (EIGHT FEET HORIZONTAL TO ONE FOOT VERTICAL) SHALL BE PLANTED NO LATER THAN OCTOBER 1 AND STAKED WITH AN EROSION CONTROL BLANKET TO PREVENT EROSION.

NATIVE PLANTINGS MAINTENANCE:

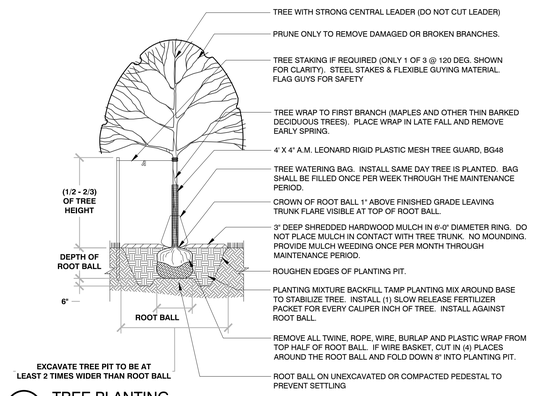
WEED SUPPRESSION MEASURES:

1st YEAR - PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS. THIS SHOULD OCCUR APPROXIMATELY EVERY MONTH OF THE GROWING SEASON AFTER NATIVE PLANTINGS HAVE BEEN ROUGH GRADED.

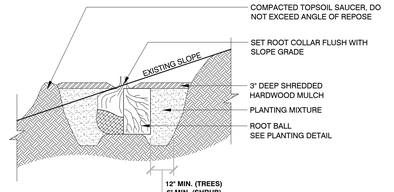
2nd YEAR - IN MAY/JUNE MOW NATIVE PLANTINGS AT 6" HEIGHT TO SUPPRESS THE WEEDS. PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS. HAVE PROFESSIONAL ASSESS PLANTINGS. REPEAT MOWING NATIVE PLANTINGS AND SPOT-SPRAY IN EARLY JULY.

3rd YEAR - IN MAY/JUNE MOW NATIVE PLANTINGS AT 8" HEIGHT TO SUPPRESS THE WEEDS. PERFORM SPOT SPRAY WITH HERBICIDE TO SUPPRESS WEEDS.

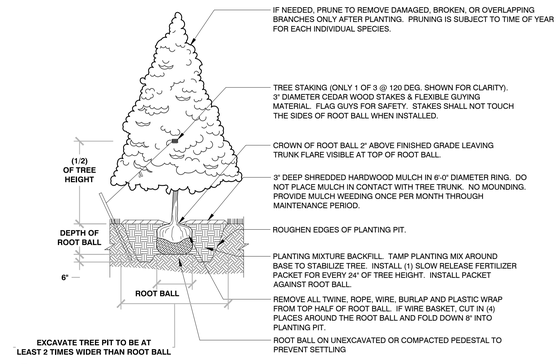
4th YEAR - IN MAY PERFORM A PRESCRIBED BURN. IN JUNE HAVE A QUALIFIED PROFESSIONAL ASSESS PLANTINGS. IF A PRESCRIBED BURN CAN NOT BE UTILIZED, NATIVE PLANTINGS SHALL BE CUT TO THE GROUND AND ALL CUT MATERIAL SHALL BE REMOVED AND DISPOSED OF OFF SITE.



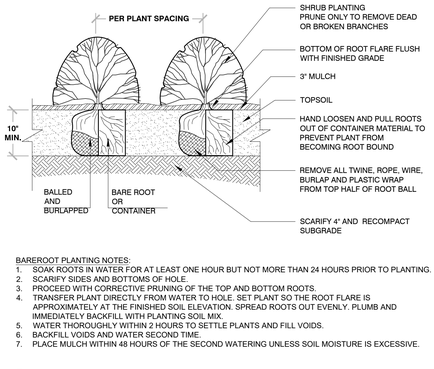
1 TREE PLANTING
1/4" = 1'-0" 329343-01



2 TREE PLANTING ON SLOPE
3/8" = 1'-0" 329343-02

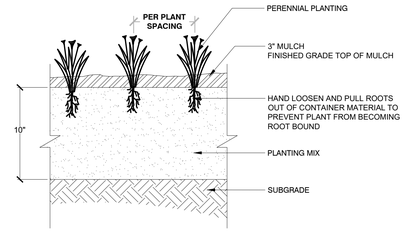


3 EVERGREEN TREE PLANTING
1/4" = 1'-0" 329343-03

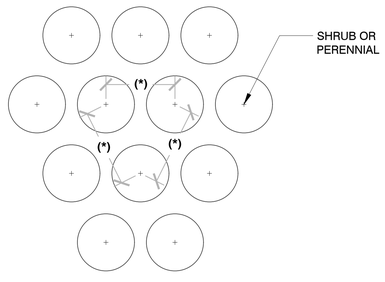


BAREROOT PLANTING NOTES:
1. SOAK ROOTS IN WATER FOR AT LEAST ONE HOUR BUT NOT MORE THAN 24 HOURS PRIOR TO PLANTING.
2. SCARIFY SIDES AND BOTTOMS OF HOLE.
3. PROCEED WITH CORRECTIVE PRUNING OF THE TOP AND BOTTOM ROOTS.
4. TRANSFER PLANT DIRECTLY FROM WATER TO HOLE. SET PLANT SO THE ROOT FLARE IS APPROXIMATELY AT THE FINISHED SOIL ELEVATION. SPREAD ROOTS OUT EVENLY. PLUMB AND IMMEDIATELY BACKFILL WITH PLANTING SOIL MIX.
5. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
6. BACKFILL VOIDS AND WATER SECOND TIME.
7. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

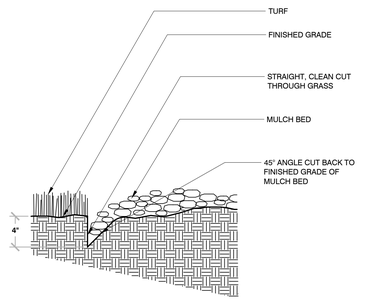
4 SHRUB PLANTING
1/2" = 1'-0" 329333-02



5 PERENNIAL PLANTING
1" = 1'-0" 3293-01



6 PLANT SPACING
3/4" = 1'-0" 3293-02



7 TRENCHED BED EDGE
3/4" = 1'-0" 3293-03

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DRAFTED: DJB
DESIGNED: DJB
REVIEWED: JSJ

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PINNACLE ENGINEERING GROUP
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CHICAGO I MILWAUKEE . NATIONWIDE

SOMERS BUSINESS PARK

SOMERS, WI

LANDSCAPE NOTES AND DETAILS

REVISIONS

PEC JOB No. 2360.00-WI
PEC PM AEA
START DATE 03/17/22
SCALE N.T.S.

SHEET L-11 OF L-11

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LANDSCAPE NOTES AND DETAILS

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SOMERS BUSINESS PARK

BURLINGTON ROAD
SOMERS, WISCONSIN

PROJECT DATA

APPLICABLE CODES:
INTERNATIONAL BUILDING CODE - 2015 AS MODIFIED BY THE WISCONSIN ENROLLED COMMERCIAL BUILDING CODE IN CHAPTERS SPS 362.

BUILDING CLASSIFICATION:
FACTORY-INDUSTRIAL:
F-1 (MODERATE HAZARD)
STORAGE:
S-1 (MODERATE HAZARD)

CONSTRUCTION CLASSIFICATION:
TYPE II-B - UNPROTECTED W/ AUTOMATIC SPRINKLER SYSTEM

BUILDING AREA:

BUILDING 1:	612,251 SF
BUILDING 2:	154,800 SF
BUILDING 3:	167,700 SF

GENERAL NOTES

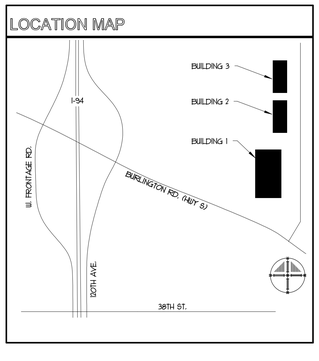
1. DO NOT SCALE DRAWINGS.
2. CONTRACTOR SHALL FIELD VERIFY AND BECOME THOROUGHLY FAMILIAR WITH ALL CONDITIONS AND DIMENSIONS.
3. EACH CONTRACTOR SHALL REVIEW COMPLETE PLANS FOR RELATED WORK.
4. ALL WORK SHALL BE IN COMPLIANCE WITH STATE AND LOCAL CODES FOR RESPECTIVE TRADES.

SHEET INDEX

GENERAL
T1.0 TITLE SHEET

ARCHITECTURAL
A3.1 BUILDING 1 FLOOR PLAN
A3.2 BUILDING 2 FLOOR PLAN
A3.3 BUILDING 3 FLOOR PLAN
A4.1 BUILDING 1 ELEVATIONS
A4.2 BUILDING 2 ELEVATIONS
A4.3 BUILDING 3 ELEVATIONS

LOCATION MAP



STREAM

CLIENT:
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OR ERIC ORTEGA

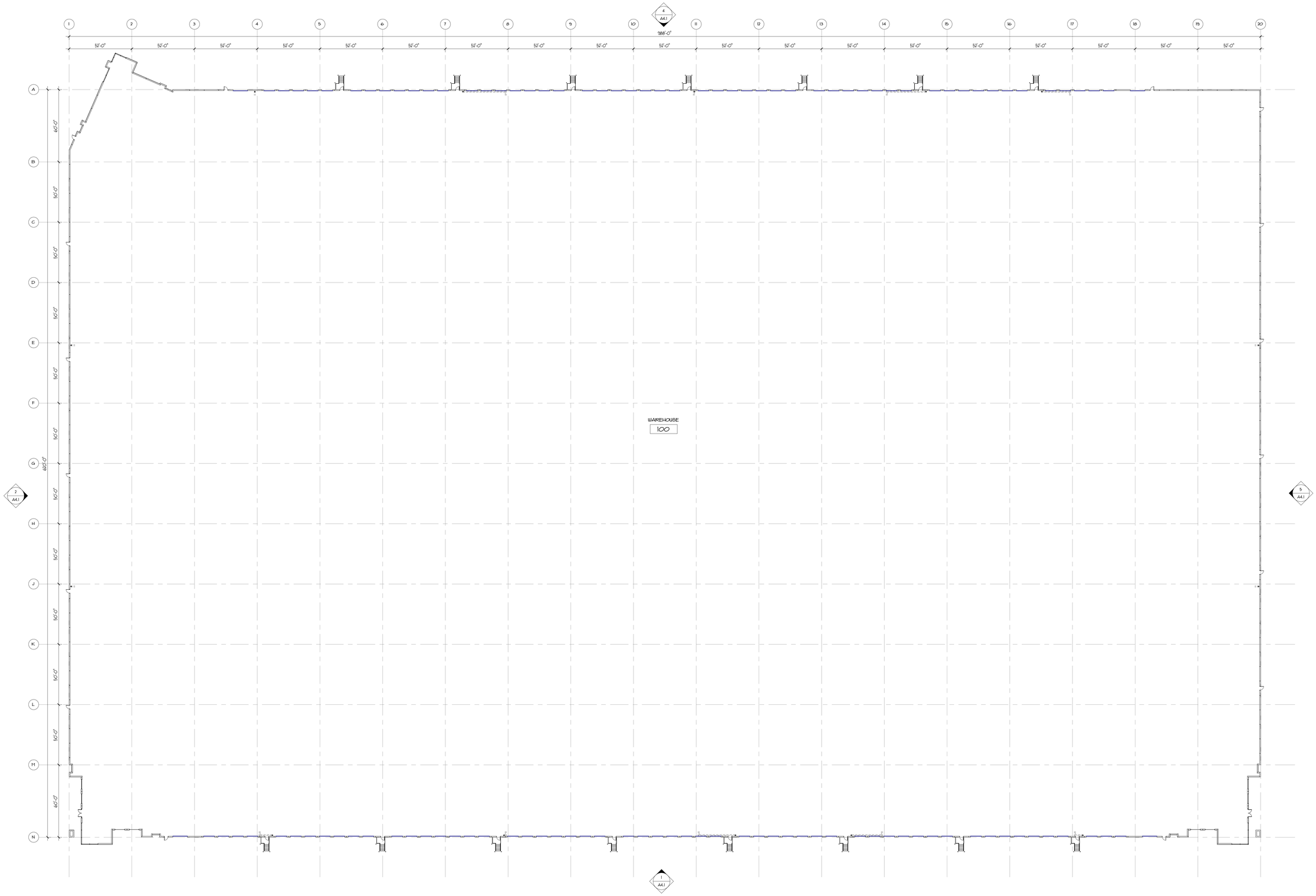
PINNACLE ENGINEERING GROUP LLC

CIVIL ENGINEER:
PINNACLE ENGINEERING GROUP
S850 W. BLUEMOUND ROAD, SUITE 210
BROOKFIELD, WI 53005
PHONE: 262.754.8888
ATTN: TODD G. MUELLER, P.E.

Partners in Design ARCHITECTS

SOMERS BUSINESS PARK
PROJECT NUMBER:980.22.017

SITE PLAN SUBMITTAL
ISSUE DATE: 03.17.22



1 / A3.1 OVERALL FLOOR PLAN

1" = 30'-0"

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REVISIONS

SOMERS BUSINESS PARK - BUILDING 1

Somers, Wisconsin

BUILDING 1 FLOOR PLAN

2610 Lake Cook Road
Suite 280
Riverwoods, IL 60015
Ph.: (847)940-0300

Partners in Design ARCHITECTS

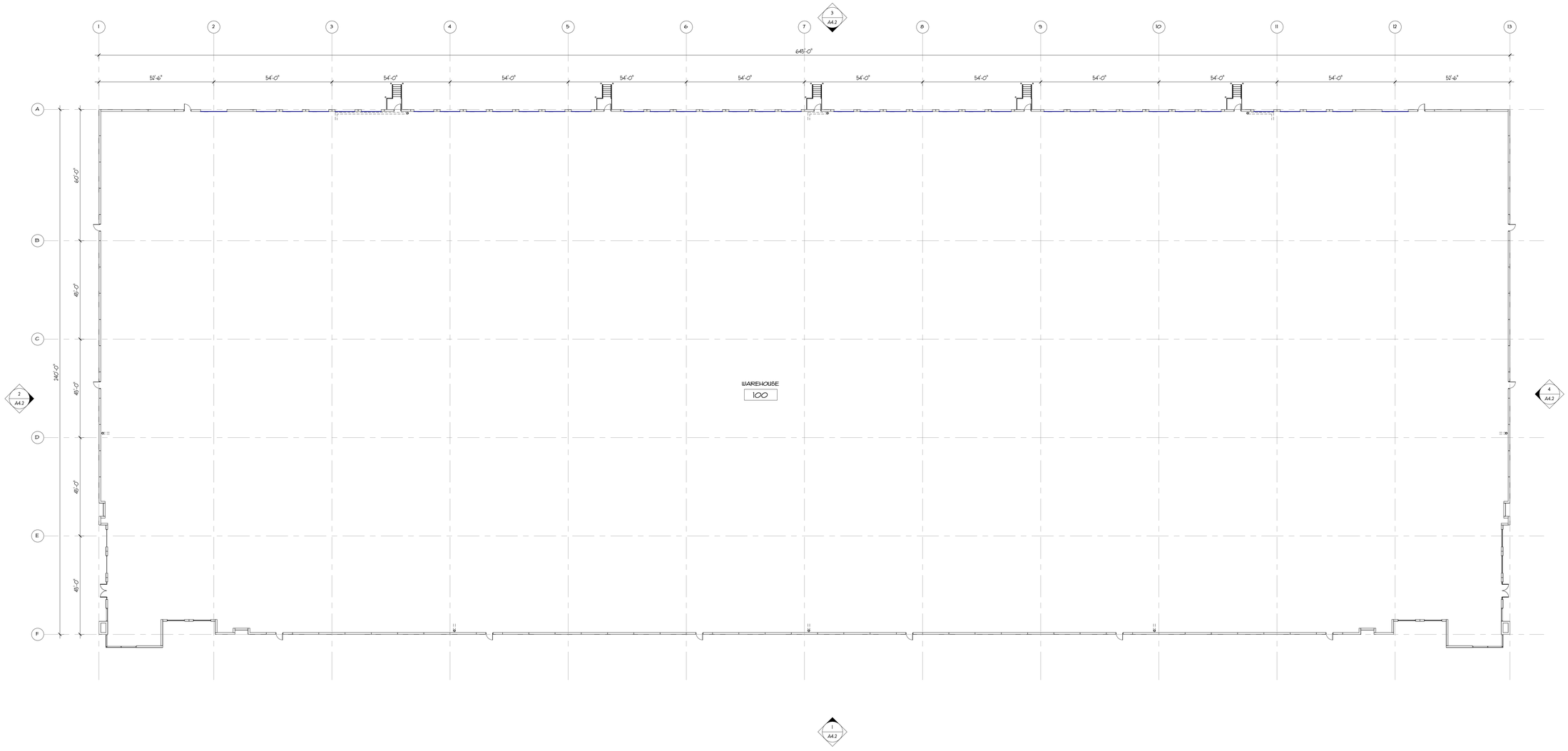
PROJECT NO.: 980.22.017

DRAWN BY: EEO

CHECKED BY: WHB

DATE: 03.17.22

SHEET NO.: A3.1



1 OVERALL FLOOR PLAN
A3.2 1" = 20'-0"

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REVISIONS

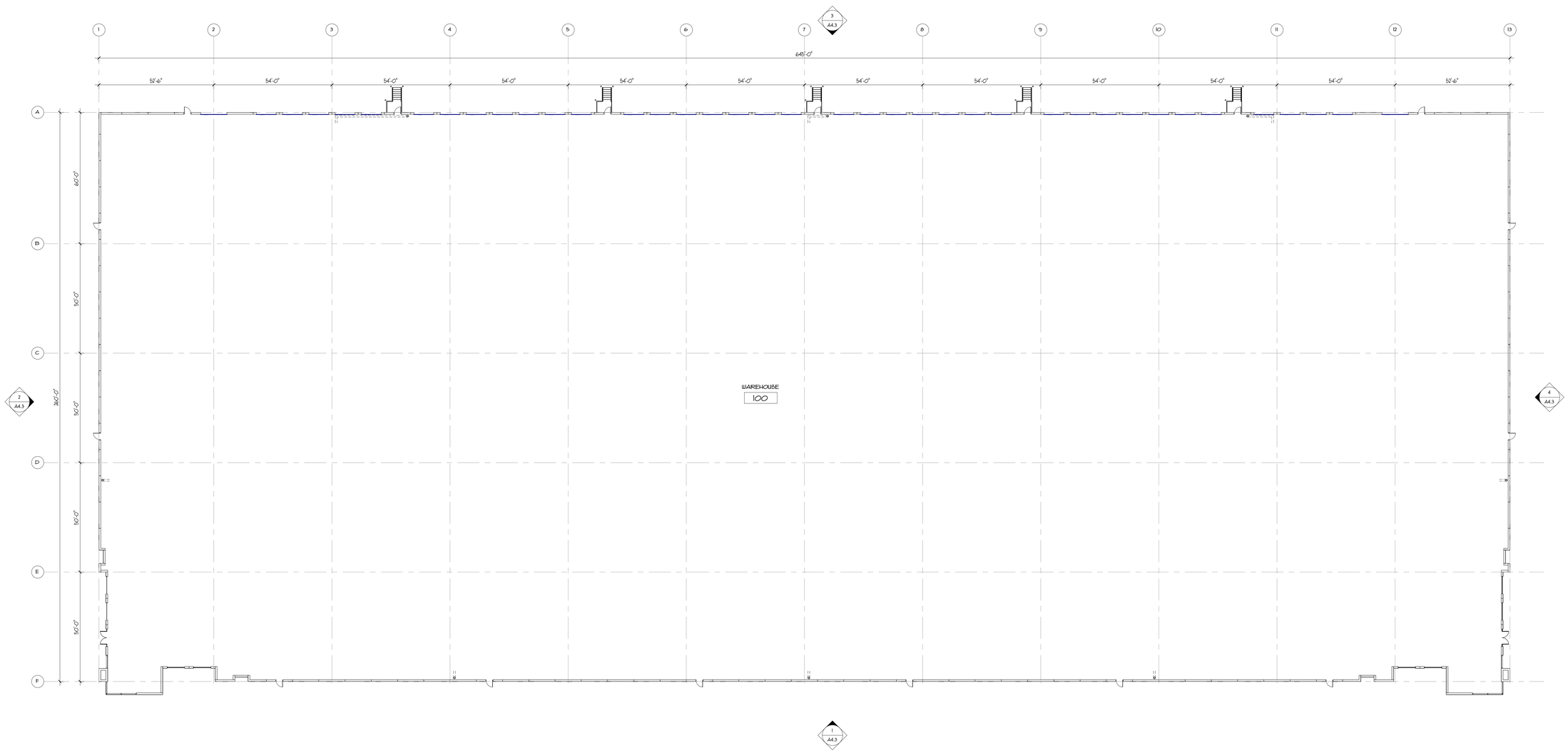
SOMERS BUSINESS PARK - BUILDING 2
Somers, Wisconsin

BUILDING 2 FLOOR PLAN

2610 Lake Cook Road
Suite 280
Riverwoods, IL 60015
Ph.: (847)940-0300

Partners in Design ARCHITECTS

PROJECT NO.: 980.22.017
DRAWN BY: EEO
CHECKED BY: LMB
DATE: 03.17.22
SHEET NO.: A3.2



1 A3.3 OVERALL FLOOR PLAN
1" = 20'-0"

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REVISIONS

SOMERS BUSINESS PARK - BUILDING 3

Somers, Wisconsin

BUILDING 3 FLOOR PLAN

2610 Lake Cook Road
Suite 280
Riverwoods, IL 60015
Ph.: (847)940-0300

Partners in Design ARCHITECTS

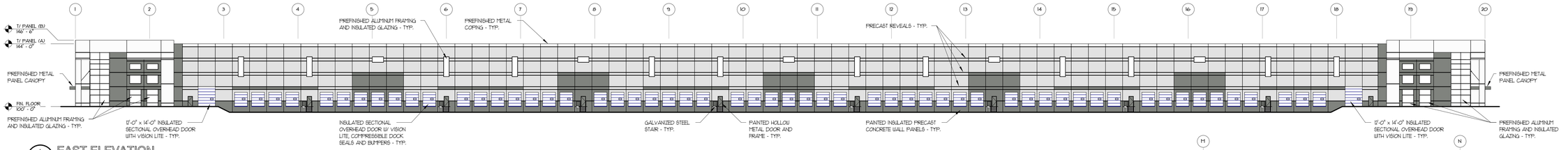
PROJECT NO.: 980.22.017

DRAWN BY: EEO

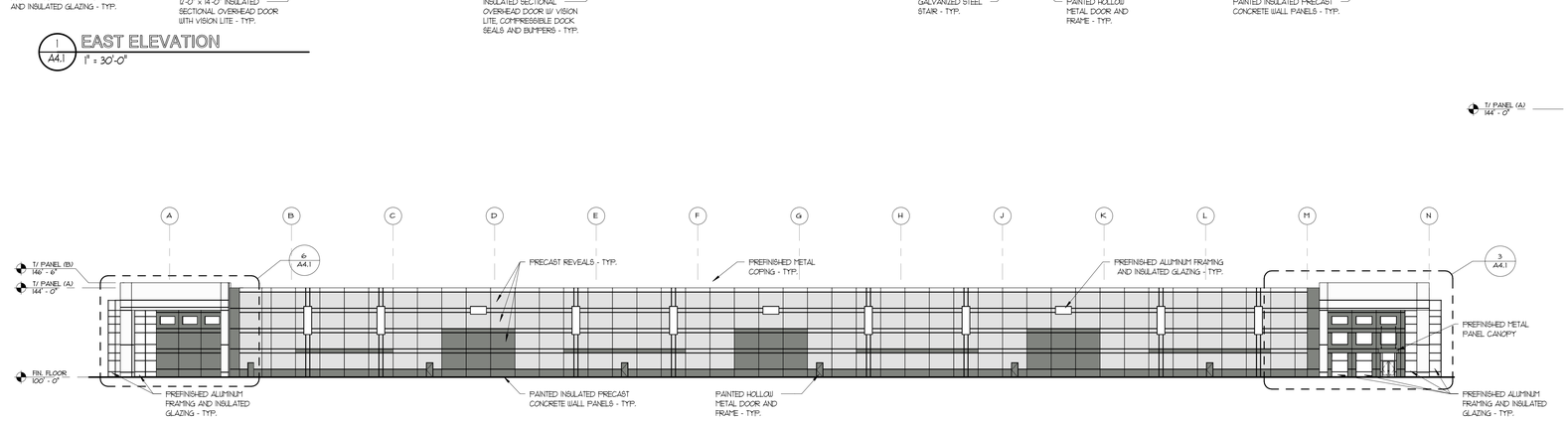
CHECKED BY: WHB

DATE: 03.17.22

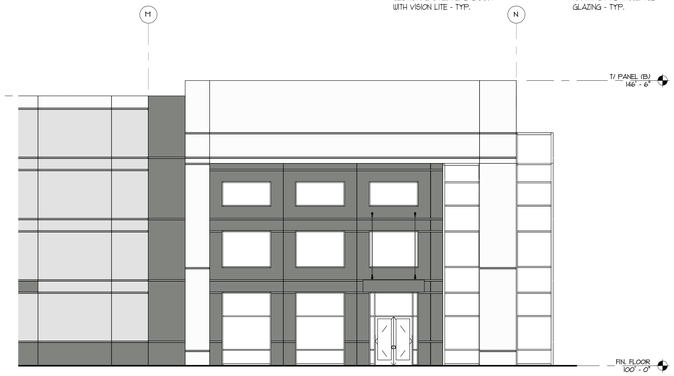
SHEET NO.: A3.3



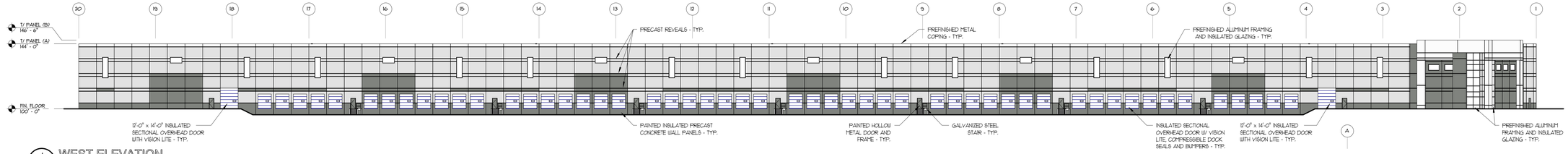
1 A4.1 EAST ELEVATION
1" = 30'-0"



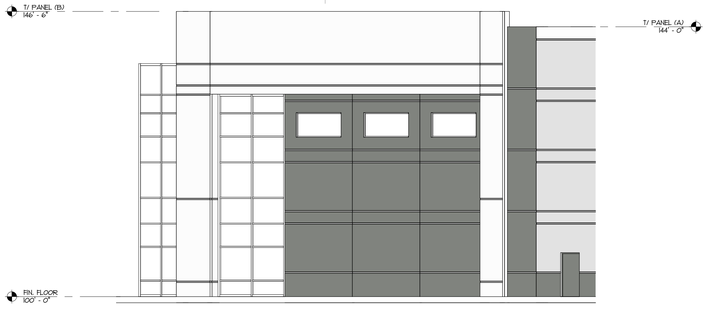
2 A4.1 SOUTH ELEVATION
1" = 30'-0"



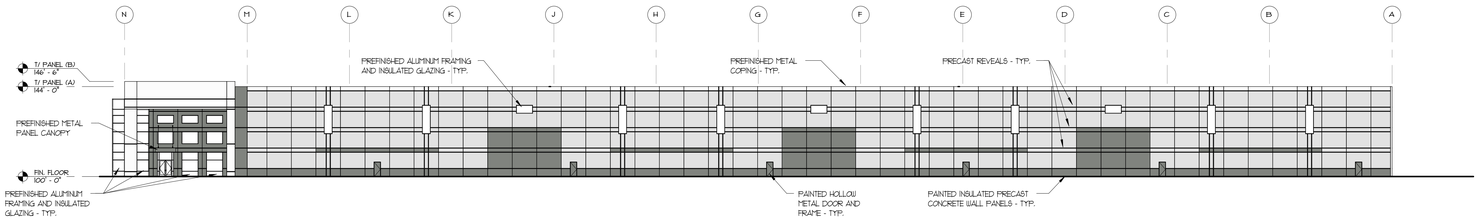
3 A4.1 ENLARGED ELEVATION
1" = 10'-0"



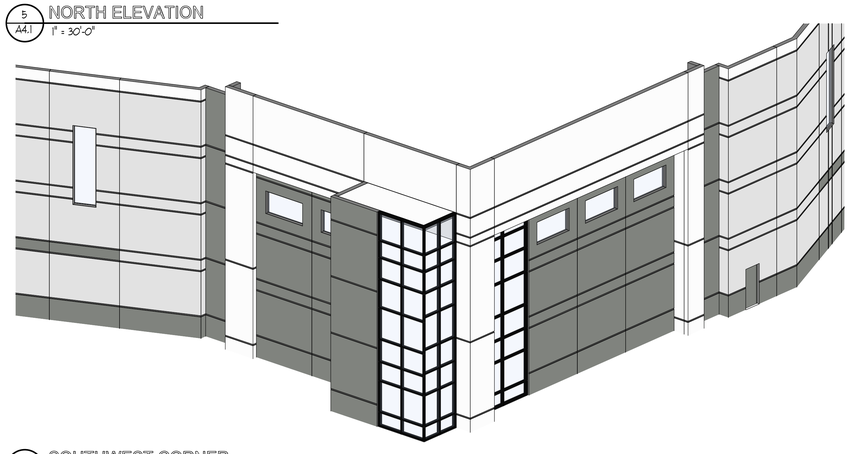
4 A4.1 WEST ELEVATION
1" = 30'-0"



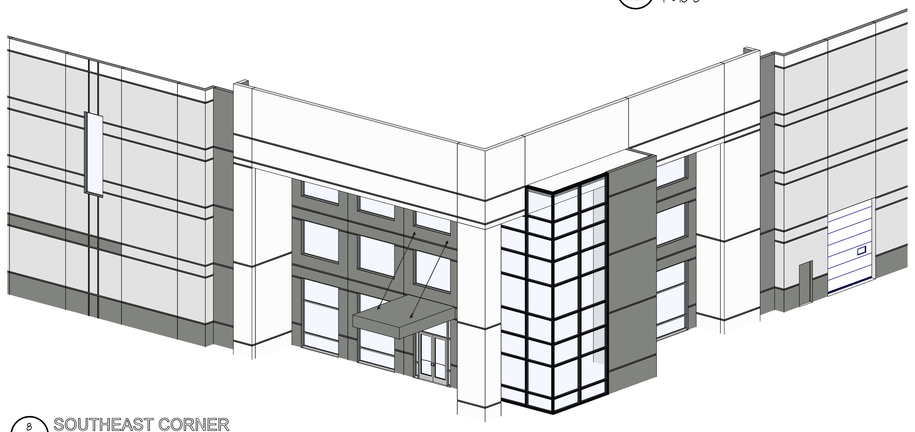
6 A4.1 ENLARGED ELEVATION
1" = 10'-0"



5 A4.1 NORTH ELEVATION
1" = 30'-0"



7 A4.1 SOUTHWEST CORNER



8 A4.1 SOUTHEAST CORNER

COLOR LEGEND:

- FIELD COLOR 1: SHERWIN WILLIAMS T.B.D.
- ACCENT AND METAL COPING COLOR 2: SHERWIN WILLIAMS T.B.D.
- ACCENT COLOR 3: SHERWIN WILLIAMS T.B.D.

*COLORS ON ELEVATIONS ARE REPRESENTATIVE OF LIGHTS AND DARKS ONLY.

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REVISIONS

SOMERS BUSINESS PARK - BUILDING 1

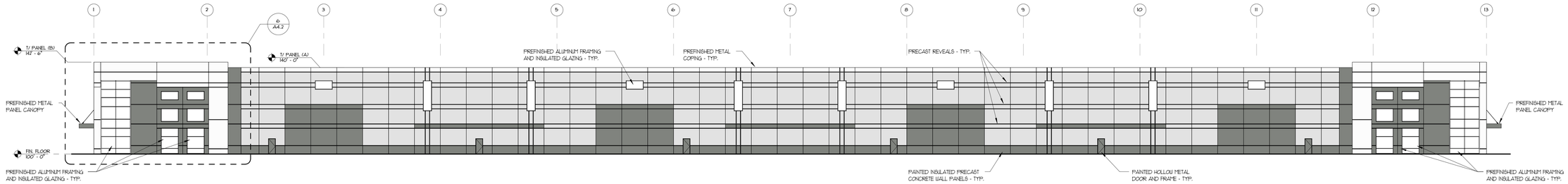
Somers, Wisconsin

BUILDING 1 ELEVATIONS

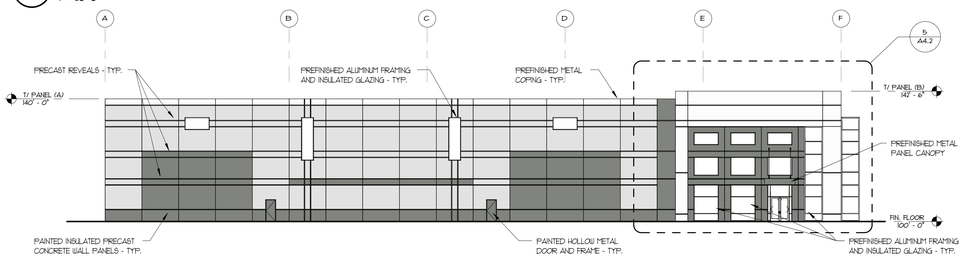
2610 Lake Cook Road
Suite 280
Riverwoods, IL 60015
Ph.: (847)940-0300

Partners in Design ARCHITECTS

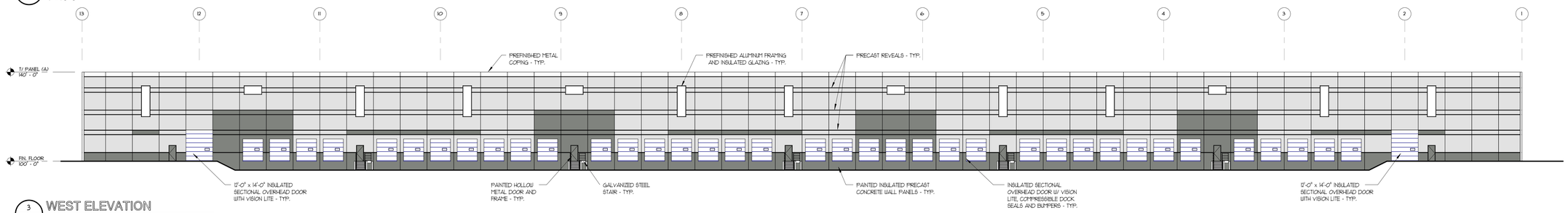
PROJECT NO.: 980.22.017
DRAWN BY: EEO
CHECKED BY: WHB
DATE: 03.17.22
SHEET NO.: A4.1



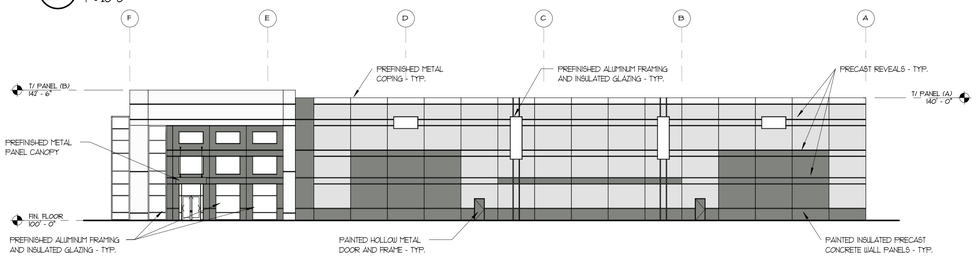
1 A4.2 **EAST ELEVATION**
1" = 20'-0"



2 A4.2 **SOUTH ELEVATION**
1" = 20'-0"



3 A4.2 **WEST ELEVATION**
1" = 20'-0"

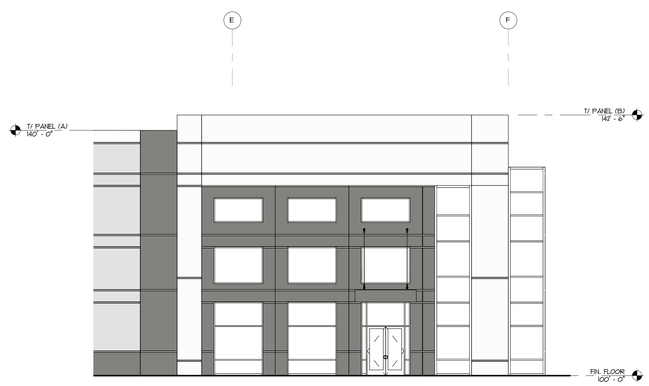


4 A4.2 **NORTH ELEVATION**
1" = 20'-0"

COLOR LEGEND:

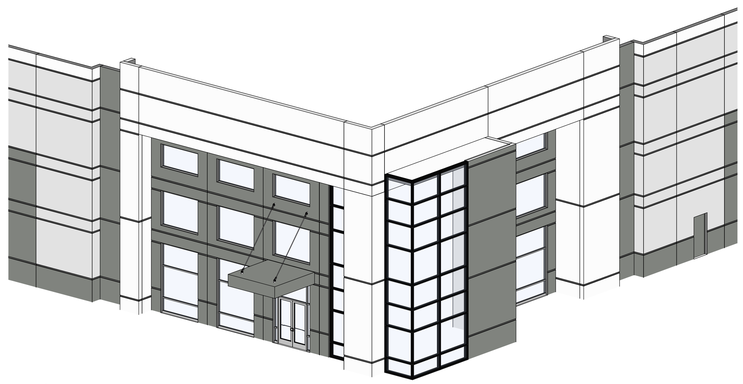
- FIELD COLOR 1:
  SHERWIN WILLIAMS
  T.B.D.
- ACCENT AND METAL COPING COLOR 2:
  SHERWIN WILLIAMS
  T.B.D.
- ACCENT COLOR 3:
  SHERWIN WILLIAMS
  T.B.D.

*COLORS ON ELEVATIONS ARE REPRESENTATIVE OF LIGHTS AND DARKS ONLY.



5 A4.2 **ENLARGED ELEVATION**
1" = 10'-0"

6 A4.2 **ENLARGED ELEVATION**
1" = 10'-0"



7 A4.2 **SOUTHEAST CORNER**

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REVISIONS

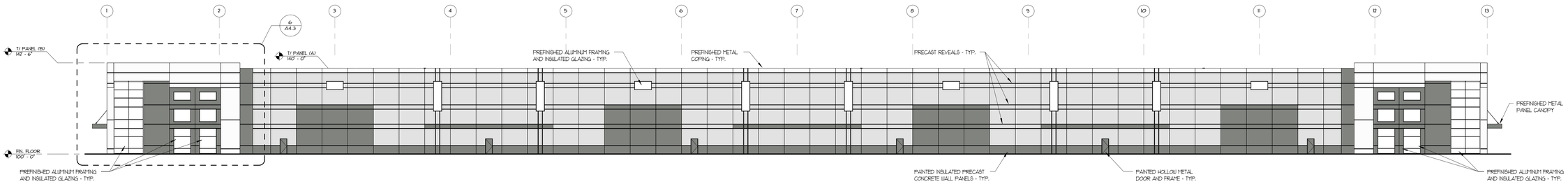
SOMERS BUSINESS PARK - BUILDING 2
Somers, Wisconsin

BUILDING 2 ELEVATIONS

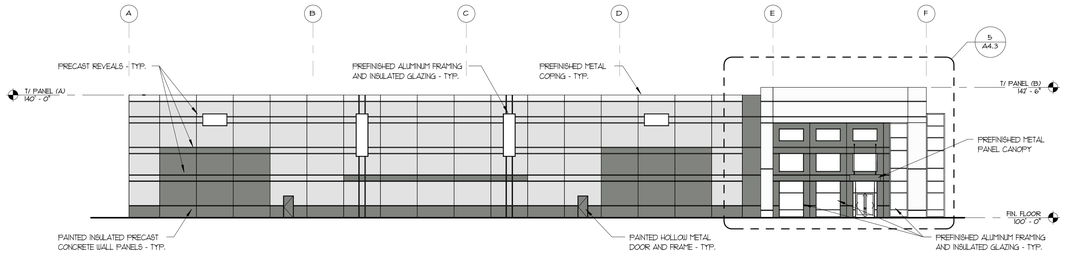
2610 Lake Cook Road
Suite 280
Riverwoods, IL 60015
Ph.: (847)940-0300

Partners in Design ARCHITECTS

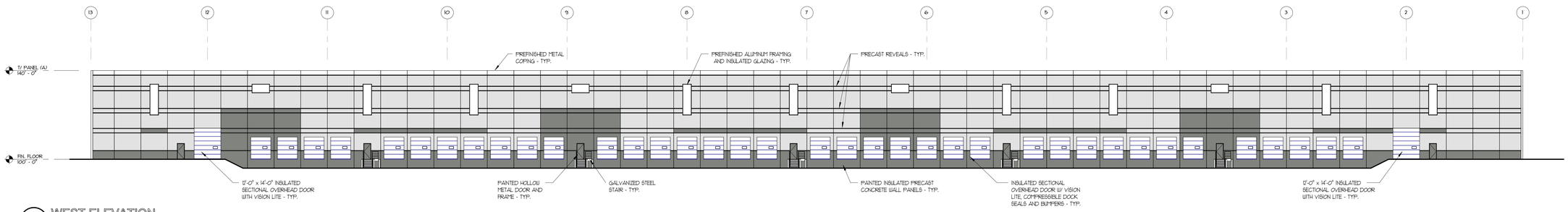
PROJECT NO.: 980.22.017
DRAWN BY: EEO
CHECKED BY: LHB
DATE: 03.17.22
SHEET NO.: A4.2



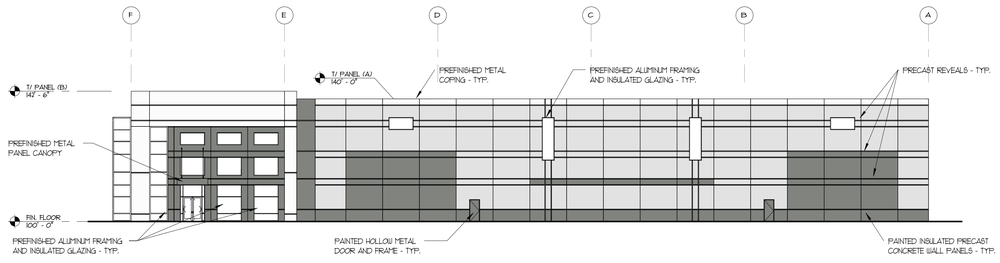
1 A4.3 **EAST ELEVATION**
1" = 20'-0"



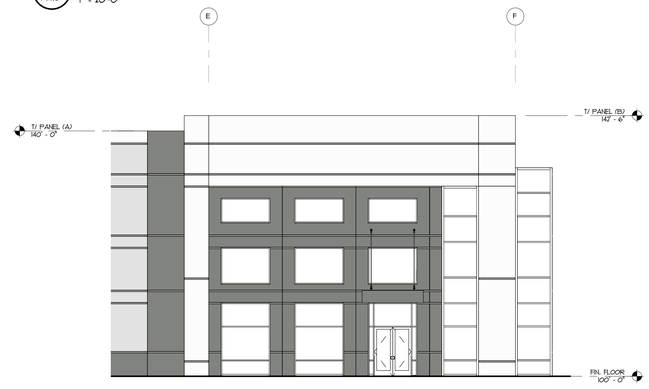
2 A4.3 **SOUTH ELEVATION**
1" = 20'-0"



3 A4.3 **WEST ELEVATION**
1" = 20'-0"

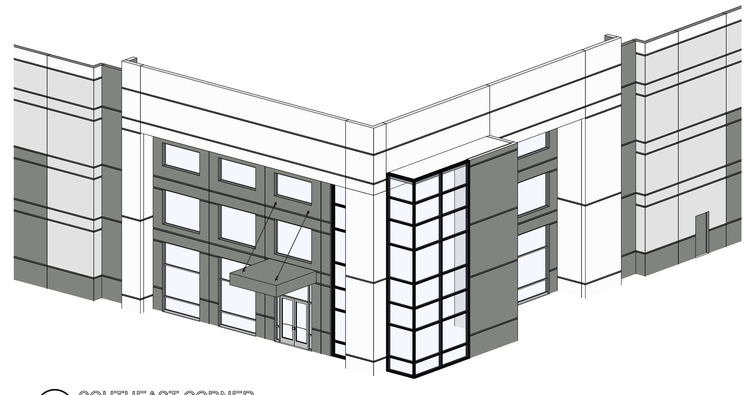


4 A4.3 **NORTH ELEVATION**
1" = 20'-0"



5 A4.3 **ENLARGED ELEVATION**
1" = 10'-0"

6 A4.3 **ENLARGED ELEVATION**
1" = 10'-0"



7 A4.3 **SOUTHEAST CORNER**

COLOR LEGEND:

- FIELD COLOR 1: SHERWIN WILLIAMS T.B.D.
- ACCENT AND METAL COPING COLOR 2: SHERWIN WILLIAMS T.B.D.
- ACCENT COLOR 3: SHERWIN WILLIAMS T.B.D.

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REVISIONS

SOMERS BUSINESS PARK - BUILDING 3

Somers, Wisconsin

BUILDING 3 ELEVATIONS

2610 Lake Cook Road
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Ph.: (847)940-0300

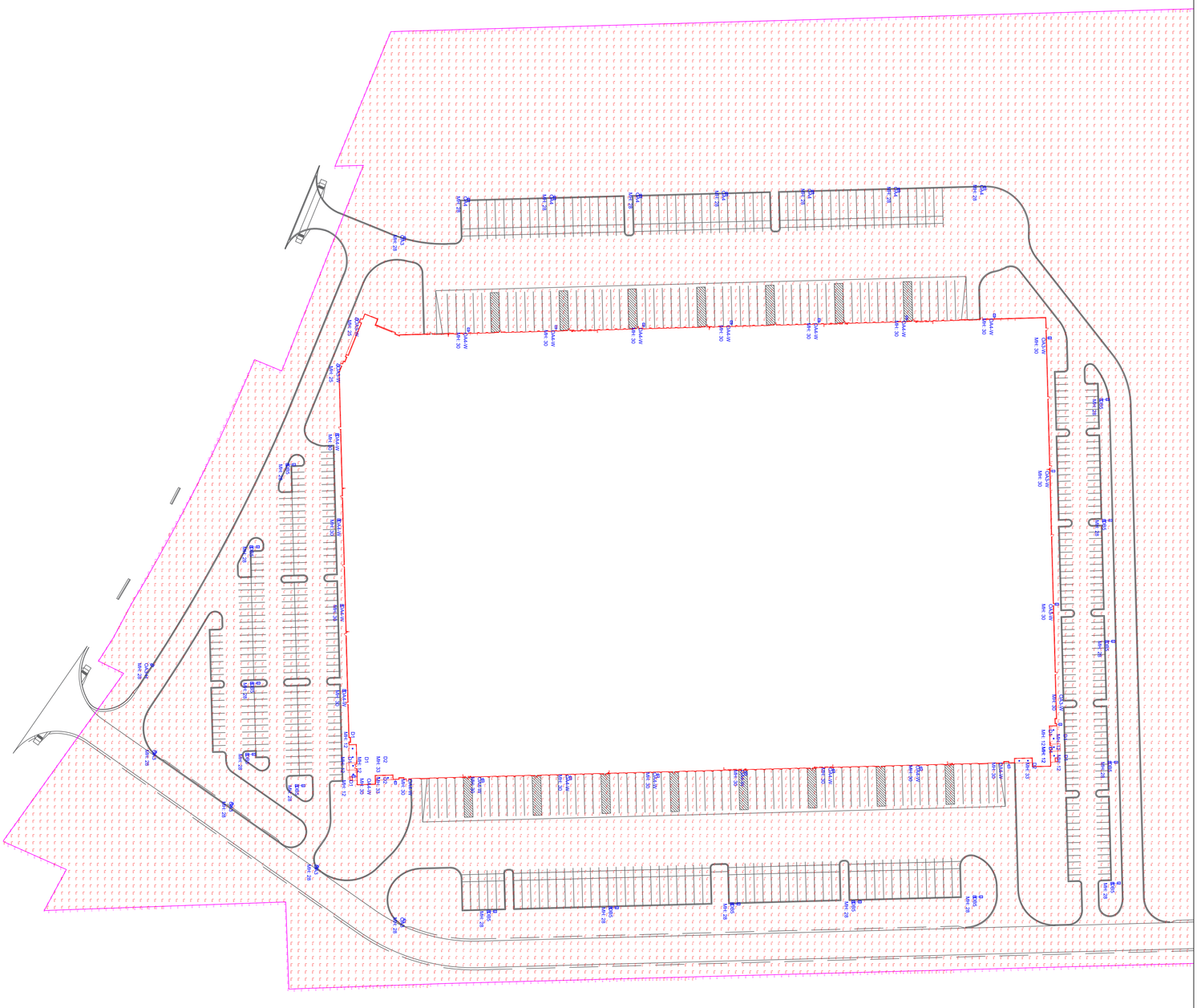
Partners in Design ARCHITECTS

PROJECT NO.: 980.22.017

DRAWN BY: EEO | CHECKED BY: WHB

DATE: 03.17.22

SHEET NO.: A4.3



SOMERS BUSINESS PARK	DRAWN BY : AD	REVISIONS	#	DATE	COMMENTS
SOMERS, WISCONSIN	DATE : MAR 23, 2022				
LIGHTING LAYOUT	SCALE : 1" =80'- 0"				

ENTERPRISE Lighting & Control

Luminaire Schedule								
Qty	Label	Arrangement	LLF	MFR	Description	Lum. Watts	Total Watts	Lum. Lumens
25	D1	SINGLE	0.950	LITHONIA	LDN6 xx/10 L06AR LSS	10.44	261	953
12	D2	SINGLE	0.950	LITHONIA	LDN6 xx/40 L06AR LSS	44.26	531.12	4019
6	OA3	SINGLE	0.950	LITHONIA	DSX1 LED P9 xxK T3M MVOLT- 25FT POLE 3 FT BASE	241	1446	26789
1	OA3-H	SINGLE	0.950	LITHONIA	DSX1 LED P9 xxK T3M MVOLT HS- 25FT POLE 3 FT BASE	241	241	21709
18	OA3-W	SINGLE	0.950	LITHONIA	DSX1 LED P9 xxK T3M MVOLT- WBA	241	4338	26789
19	OA4	SINGLE	0.950	LITHONIA	DSX1 LED P9 xxK TFTM MVOLT- 25FT POLE 3 FT BASE	241	4579	27577
34	OA4-W	SINGLE	0.950	LITHONIA	DSX1 LED P9 xxK TFTM MVOLT- WBA	241	8194	27577
3	OA5	SINGLE	0.950	LITHONIA	DSX1 LED P9 xxK T5W MVOLT- 25FT POLE 3FT BASE	241	723	28442
23	OB5	BACK-BACK	0.950	LITHONIA	DSX1 LED P9 xxK T5W MVOLT- 25FT POLE 3FT BASE	241	11086	28442

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PROP LINE	Illuminance	Fc	0.17	0.49	0.00	N.A.	N.A.
BUILDING 1 PARKING AND DRIVES	Illuminance	Fc	2.13	7.0	0.4	5.33	17.50
BUILDING 2 PARKING AND DRIVES	Illuminance	Fc	2.35	6.3	0.6	3.92	10.50
BUILDING 3 PARKING AND DRIVES	Illuminance	Fc	2.05	5.8	0.3	6.83	19.33

ENTERPRISE
Lighting & Control

#	DATE	COMMENTS

REVISIONS

DRAWN BY : AD

DATE : MAR 23, 2022

SCALE : 1" =80'- 0"

SOMERS BUSINESS PARK

SOMERS, WISCONSIN

LIGHTING LAYOUT

Date: Mar 23, 2022

Enterprise Lighting, LTD.
2007 Pewaukee Rd.
Waukesha WI 53188
Phone: (262) 953-2700
Fax: (262) 953-2710

Job Name
Somers Business Park - Buildings 1, 2, & 3 - Site Lighting
ELL22-111942

Bid Date
Mar 23, 2022

Submittal Date
Mar 23, 2022

Enterprise Lighting Ltd
Manufacturers' Representative

Transmittal

Enterprise Lighting, LTD.
2007 Pewaukee Rd.
Waukesha WI 53188
Phone: (262) 953-2700
From: Bonnie Bartlein

Project **Somers Business Park - Buildings 1, 2, & 3 - Site Lighting**
Quote# ELL22-111942
Location
Contact:

ATTACHED WE ARE SENDING YOU 1 COPY OF THE FOLLOWING ITEM:

- ☒ Drawings
- ☐ Prints
- ☐ Plans
- ☐ Specifications
- ☐ Information
- ☐ Submittals

Other:

THESE ARE TRANSMITTED FOR:

- ☐ Prior Approval
- ☒ Approval
- ☐ Approval as Submitted
- ☐ Approval as Noted
- ☐ Resubmittal for Approval
- ☐ Corrections
- ☐ Your Use
- ☐ Review and Comment
- ☐ Record

Bids due on:
Other:

Type	MFG	Part
D1	Acuity Downlighting	LDN6 XX/10 LO6AR LSS MVOLT GZ10
D2	Acuity Downlighting	LDN6 XX/40 LO6AR LSS MVOLT GZ10
OA3	Lithonia Exterior	DSX1 LED P9 XXK T3M MVOLT SPA FINISH
OA3	Lithonia Exterior	SSS 25 4C DM19AS FINISH
OA3-H	Lithonia Exterior	DSX1 LED P9 XXK T3M MVOLT SPA HS FINISH
OA3-H	Lithonia Exterior	SSS 25 4C DM19AS FINISH
OA3-W	Lithonia Exterior	DSX1 LED P9 XXK T3M MVOLT WBA FINISH
OA4	Lithonia Exterior	DSX1 LED P9 XXK TFTM MVOLT SPA FINISH
OA4	Lithonia Exterior	SSS 25 4C DM19AS FINISH
OA4-W	Lithonia Exterior	DSX1 LED P9 XXK TFTM MVOLT WBA FINISH
OA5	Lithonia Exterior	DSX1 LED P9 XXK T5W MVOLT SPA FINISH
OA5	Lithonia Exterior	SSS 25 4C DM19AS FINISH
OB5	Lithonia Exterior	DSX1 LED P9 XXK T5W MVOLT SPA FINISH
OB5	Lithonia Exterior	SSS 25 4C DM28AS FINISH

LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

LDN6

6" Open and WallWash LED
Non-IC
New Construction Downlight

FEATURES & SPECIFICATIONS

INTENDED USE — Typical applications include corridors, lobbies, conference rooms and private offices.

CONSTRUCTION — Galvanized steel mounting/plaster frame; galvanized steel junction box with bottom-hinged access covers and spring latches. Reflectors are retained by torsion springs.
Vertically adjustable mounting brackets with commercial bar hangers provide 3-3/4" total adjustment.
Two combination ½"-3/4" and four ½" knockouts for straight-through conduit runs. Capacity: 8 (4 in, 4 out). No. 12 AWG conductors, rated for 90°C.
Accommodates 12"-24" joist spacing.
Passive cooling thermal management for 25°C standard; high ambient (40°C) option available. Light engine and drivers are accessible from above or below ceiling.
Max ceiling thickness 1-1/2".

OPTICS — LEDs are binned to a 3-step SDCM; 80 CRI minimum. 90 CRI optional.
LED light source concealed with diffusing optical lens.
General illumination lighting with 1.0 S/MH and 55° cutoff to source and source image.
Self-flanged anodized reflectors in specular, semi-specular, or matte diffuse finishes. Also available in white and black painted reflectors.

ELECTRICAL — Multi-volt (120-277V, 50/60Hz) 0-10V dimming drivers mounted to junction box, 10% or 1% minimum dimming level available.
0-10V dimming fixture requires two (2) additional low-voltage wires to be pulled.
70% lumen maintenance at 60,000 hours.

LISTINGS — Certified to US and Canadian safety standards. Wet location standard (covered ceiling). IP55 rated. ENERGY STAR® certified product.

BUY AMERICAN — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. 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.

A+ Capable options indicated by this color background.

Buy American · battery pack · ENERGY STAR · A+ CAPABLE

ORDERING INFORMATION

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

Example: LDN6 35/15 LO6AR LSS MVOLT EZ10

LDN6	XX? = Specify						
Series	**Color temperature**	**Lumens[1]**		**Aperture/Trim Color**		**Finish**	**Voltage**
LDN6 6" round	27/ 2700K	05 500 lumens	25 2500 lumens	LO6 Downlight	AR Clear	LSS Semi-specular	MVOLT Multi-volt
	30/ 3000K	07 750 lumens	30 3000 lumens	LW6 Wallwash	WR[2] White	LD Matte diffuse	120 120V
	35/ 3500K	10 1000 lumens	40 4000 lumens		BR[2] Black	LS Specular	277 277V
	40/ 4000K	15 1500 lumens	50 5000 lumens				347[3] 347V
	50/ 5000K	20 2000 lumens					

Driver		Options		Options	
GZ10	0-10V driver dims to 10%	SF[4]	Single fuse	N80[8]	nLight™ Lumen Compensation
GZ1	0-10V driver dims to 1%	TRW[5]	White painted flange	JOT[13]	Wireless room control with "Just One Touch" pairing
D10	Minimum dimming 10% driver for use with JOT	TRBL[5]	Black painted flange	NPS80EZ[7]	nLight® dimming pack controls 0-10V eldoLED drivers (EZ10, EZ1).
D1	Minimum dimming 1% driver for use with JOT	EL[6]	Emergency battery pack with integral test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS	NPS80EZER[7]	nLight® dimming pack controls 0-10V eldoLED drivers (EZ10, EZ1). ER controls fixtures on emergency circuit.
EZ10	0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 10%	ELR[6]	Emergency battery pack with remote test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS	HAO[11]	High ambient option
EZ1	0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 1%	ELSD[6]	Emergency battery pack with self-diagnostics, integral test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS	CP[12]	Chicago Plenum
EDAB	eldoLED DALI SOLDRIVE dim to dark	ELRSD[6]	Emergency battery pack with self-diagnostics, remote test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS	RRL__	RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Available only in RRLA, RRLB, RRLAE, and RRLC12S. Refer to RRL spec sheet on www.acuitybrands.com for the RELOC product specifications.
		E10WCP[6]	Emergency battery pack, 10W Constant Power with integral test switch. Certified in CA Title 20 MAEDB	NLTAIR2[9,10]	nLight® Air enabled
		E10WCPR[6]	Emergency battery pack, 10W Constant Power with remote test switch. Certified in CA Title 20 MAEDB	NLTAIRER2[9,10]	nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit, not available with battery pack options
		NPP16D[7]	nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1).	NLTAIREM2[9,10]	nLight® AIR Dimming Pack Wireless Controls. UL924 Emergency Operation, via power interrupt detection. Available with battery pack options.
		NPP16DER[7]	nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1). ER controls fixtures on emergency circuit.	BAA	Buy America(n) Act Compliant
				90CRI	High CRI (90+)

Accessories: *Order as separate catalog number.*

PS1055CP	FMC Power Sentry batterypack, T20 compliant, field installable, 10w constant power
EAC ISSM 375	Compact interruptible emergency AC power system
EAC ISSM 125	Compact interruptible emergency AC power system
GRA68 JZ	Oversized trim ring with 8" outside diameter
SCA6	Sloped Ceiling Adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA6 10D

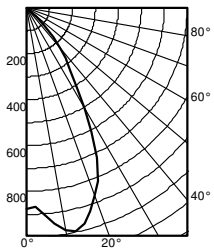
Notes
1 Overall height varies based on lumen package; refer to dimensional chart on page 3.
2 Not available with finishes.
3 Not available with emergency options.
4 Must specify voltage 120V or 277V.
5 Available with clear (AR) reflector only.
6 12.5" of plenum depth or top access required for battery pack maintenance.
7 Specify voltage. ER for use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
8 Fixture begins at 80% light level. Must be specified with NPS80EZ or NPS80EZ ER. Only available with EZ10 and EZ1 drivers.
9 Not available with CP, NPS80EZ, NPS80EZER, NPP16D, NPP16DER or N80 options.
10 NLTAIR2, NLTAIRER2 and NLTAIREM2 not recommended for metal ceiling installations.
11 Fixture height is 6.5" for all lumen packages with HAO.
12 Must specify voltage for 3000lm and above. 5000lm with marked spacing 24 L x 24 W x 14 H. Not available with emergency battery pack option.
13 Must specify D10 or D1 driver. Not available with nLight options. Not available with CP. Not recommended for metal ceiling installation. Not for use with emergency backup power systems other than battery packs.

LDN6

PHOTOMETRY

Distribution Curve | **Distribution Data** | **Output Data** | **Coefficient of Utilization** | **Illuminance Data at 30" Above Floor for a Single Luminaire**

LDN6 35/10 LO6AR, input watts: 10.44, delivered lumens: 987.10, LM/W = 94.54, spacing criterion at 0= 1.02, test no. ISF 30716P262.



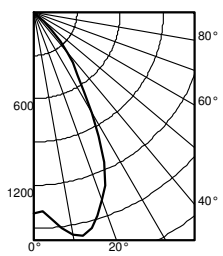
	Ave	Lumens
0	876	
5	905	89
15	971	269
25	720	322
35	330	214
45	110	87
55	1	4
65	1	1
75	0	0
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	680.7	69.0
0° - 40°	895.0	90.7
0° - 60°	986.0	99.9
0° - 90°	987.0	100.0
90° - 120°	0.0	0.0
90° - 130°	0.0	0.0
90° - 150°	0.0	0.0
90° - 180°	0.0	0.0
0° - 180°	987.0	*100.0
*Efficiency		

pf / pc / pw	80% 50%	80% 30%	80% 10%	70% 50%	70% 30%	70% 10%	50% 50%	50% 30%	50% 10%
0	119	119	119	116	116	116	111	111	111
1	111	108	106	109	106	104	104	103	101
2	103	99	95	101	97	94	98	95	92
3	96	91	87	94	90	86	92	88	85
4	89	84	79	88	83	79	86	81	78
5	83	77	73	82	77	73	81	76	72
6	78	72	68	77	72	67	76	71	67
7	73	67	63	73	67	63	71	66	62
8	69	63	59	68	62	58	67	62	58
9	65	59	55	64	59	55	63	58	54
10	61	55	51	61	55	51	60	55	51

Mounting Height	Inital FC Center Beam	50% beam - 54.5° Diameter	50% beam - 54.5° FC	10% beam - 82.2° Diameter	10% beam - 82.2° FC
8.0	29.0	5.7	14.5	9.6	2.9
10.0	15.6	7.7	7.8	13.1	1.6
12.0	9.7	9.8	4.9	16.6	1.0
14.0	6.6	11.8	3.3	20.1	0.7
16.0	4.8	13.9	2.4	23.6	0.5

LDN6 35/15 LO6AR, input watts: 17.52, delivered lumens: 1572.9, LM/W = 89.77, spacing criterion at 0= 1.02, test no. ISF 30716P265.



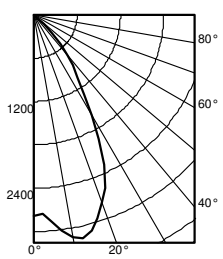
	Ave	Lumens
0	1396	
5	1442	142
15	1547	429
25	1147	514
35	526	342
45	176	139
55	2	6
65	1	1
75	1	1
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	1084.6	69.0
0° - 40°	1426.2	90.7
0° - 60°	1571.3	99.9
0° - 90°	1572.9	100.0
90° - 120°	0.0	0.0
90° - 130°	0.0	0.0
90° - 150°	0.0	0.0
90° - 180°	0.0	0.0
0° - 180°	1572.9	*100.0
*Efficiency		

pf / pc / pw	80% 50%	80% 30%	80% 10%	70% 50%	70% 30%	70% 10%	50% 50%	50% 30%	50% 10%
0	119	119	119	116	116	116	111	111	111
1	111	108	106	109	106	104	104	103	101
2	103	99	95	101	97	94	98	95	92
3	96	91	87	94	90	86	92	88	85
4	89	84	79	88	83	79	86	81	78
5	83	77	73	82	77	73	81	76	72
6	78	72	68	77	72	67	76	71	67
7	73	67	63	73	67	63	71	66	62
8	69	63	59	68	62	58	67	62	58
9	65	59	55	64	59	55	63	58	54
10	61	55	51	61	55	51	60	55	51

Mounting Height	Inital FC Center Beam	50% beam - 54.5° Diameter	50% beam - 54.5° FC	10% beam - 82.2° Diameter	10% beam - 82.2° FC
8.0	46.2	5.7	23.1	9.6	4.6
10.0	24.8	7.7	12.4	13.1	2.5
12.0	15.5	9.8	7.7	16.6	1.5
14.0	10.6	11.8	5.3	20.1	1.1
16.0	7.7	13.9	3.8	23.6	0.8

LDN6 35/30 LO6AR, input watts: 34.75, delivered lumens: 3138.5, LM/W = 90.31, spacing criterion at 0= 1.02, test no. ISF 30716P274.



	Ave	Lumens
0	2786	
5	2877	284
15	3087	855
25	2289	1025
35	1049	682
45	350	277
55	5	12
65	2	2
75	1	1
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	2164.3	69.0
0° - 40°	2845.9	90.7
0° - 60°	3135.3	99.9
0° - 90°	3138.5	100.0
90° - 120°	0.0	0.0
90° - 130°	0.0	0.0
90° - 150°	0.0	0.0
90° - 180°	0.0	0.0
0° - 180°	3138.5	*100.0
*Efficiency		

pf / pc / pw	80% 50%	80% 30%	80% 10%	70% 50%	70% 30%	70% 10%	50% 50%	50% 30%	50% 10%
0	119	119	119	116	116	116	111	111	111
1	111	108	106	109	106	104	104	103	101
2	103	99	95	101	97	94	98	95	92
3	96	91	87	94	90	86	92	88	85
4	89	84	79	88	83	79	86	81	78
5	83	77	73	82	77	73	81	76	72
6	78	72	68	77	72	67	76	71	67
7	73	67	63	73	67	63	71	66	62
8	69	63	59	68	62	58	67	62	58
9	65	59	55	64	59	55	63	58	54
10	61	55	51	61	55	51	60	55	51

Mounting Height	Inital FC Center Beam	50% beam - 54.5° Diameter	50% beam - 54.5° FC	10% beam - 82.2° Diameter	10% beam - 82.2° FC
8.0	92.1	5.7	46.1	9.6	9.2
10.0	49.5	7.7	24.8	13.1	5.0
12.0	30.9	9.8	15.4	16.6	3.1
14.0	21.1	11.8	10.5	20.1	2.1
16.0	15.3	13.9	7.6	23.6	1.5

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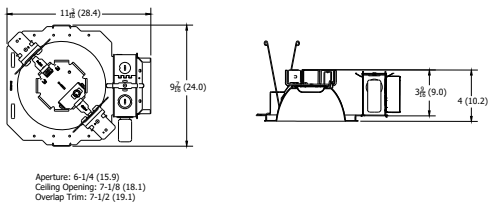
LDN6

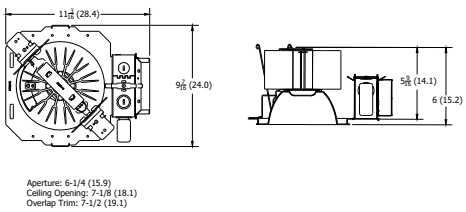
* All dimensions are inches (centimeters) unless otherwise noted.

LDN6 500 - 1500 LUMENS



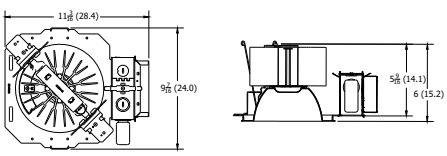
Aperture: 6-1/4 (15.9)
Ceiling Opening: 7-1/8 (18.1)
Overlap Trim: 7-1/2 (19.1)

LDN6 2000 - 3000 LUMENS



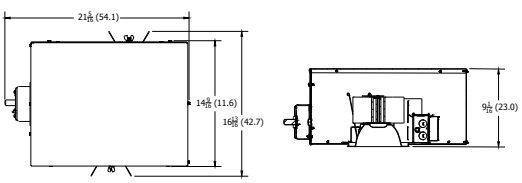
Aperture: 6-1/4 (15.9)
Ceiling Opening: 7-1/8 (18.1)
Overlap Trim: 7-1/2 (19.1)

LDN6 4000 - 5000 LUMENS



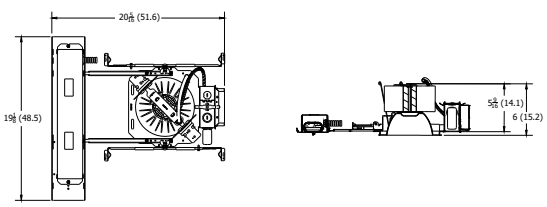
Marked Spacing: 24 x 24 x 10
Aperture: 6-1/4 (15.9)
Ceiling Opening: 7-1/8 (18.1)
Overlap Trim: 7-1/2 (19.1)

LDN6 CP



Aperture: 6-1/4 (15.9)
Ceiling Opening: 7-1/8 (18.1)
Overlap Trim: 7-1/2 (19.1)

LDN6 EL



Marked Spacing above 3000 Lumens: 24 x 24 x 10
Aperture: 6-1/4 (15.9)
Ceiling Opening: 7-1/8 (18.1)
Overlap Trim: 7-1/2 (19.1)

LDN6			
Nominal Lumens	**Lumens**	**Wattage**	**Lm/W**
500	527.9	5.8	90.5
750	758.1	8.9	85.1
1000	950.1	10.4	91.0
1500	1514	17.5	86.4
2000	2006	22.5	89.1
2500	2504	28.3	88.6
3000	3021	34.8	86.9
4000	4008	44.3	90.6
5000	4975	57.7	86.3

HOW TO ESTIMATE DELIVERED LUMENS IN EMERGENCY MODE

Use the formula below to estimate the delivered lumens in emergency mode

Delivered Lumens = 1.25 x P x LPW

P = Ouput power of emergency driver. P = 10W for PS1055CP

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.
The LPW rating is also available at Designlight Consortium.

LUMEN OUTPUT MULTIPLIERS - FINISH			
	Clear (AR)	**White (WR)**	**Black (BR)**
Specular (LS)	1.0	N/A	N/A
Semi-specular (LSS)	0.950	N/A	N/A
Matte diffuse (LD)	0.85	N/A	N/A
Painted	N/A	0.87	0.73

LUMEN OUTPUT MULTIPLIERS - CCT					
	2700K	**3000K**	**3500K**	**4000K**	**5000K**
80CRI	0.950	0.966	1.000	1.025	1.101

Notes

- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- CRI: 80 typical.

DOWNLIGHTING: One Lithonia Way Conyers, GA 30012 Phone: 800-705-SERV (7378) www.lithonia.com

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LDN6

ADDITIONAL DATA

JOT
JUST ONE TOUCH

The Sensor Switch JOT enabled solution offers a wireless, app-free approach to single room lighting control. JOT enabled products use Bluetooth® Low Energy (BLE) technology to enable wireless dimming and switching.

Diagram

LDN6 Series

Sensor Switch
WSXA JOT

1. **Power:** Install JOT enabled fixtures and controls as instructed.
2. **Pair:** Insert the pairing tool into the pinhole on the wall switch; press and hold any button for 6 seconds.
3. **Play:** Once paired, each fixture will individually dim down to 10% brightness. All products will be fully functional.

COMPATIBLE 0-10V WALL-MOUNT DIMMERS		
MANUFACTURER	PART NO.	POWER BOOSTER AVAILABLE
Lutron®	Diva® DVTV	
	Diva® DVSCTV	
	Nova T® NTFTV	
	Nova® NFTV	
Leviton®	AWSMT-7DW	CN100
	AWSMG-7DW	PE300
	AMRMG-7DW	
	Leviton Centura Fluorescent Control System	
	IllumaTech® IP7 Series	
Synergy®	ISD BC	RDMFC
	SLD LPCS	
	Digital Equinox (DEQ BC)	
Douglas Lighting Controls	WPC-5721	
Entertainment Technology	Tap Glide TG600FAM120 (120V)	
	Tap Glide Heatsink TGH1500FAM120 (120V)	
	Oasis 0A2000FAMU	
Honeywell	EL7315A1019	EL7305A1010 (optional)
	EL7315A1009	
HUNT Dimming	Preset slide: PS-010-IV and PS-010-WH	
	Preset slide: PS-010-3W-IV and PS-010-3W-WH	
	Preset slide, controls FD-010: PS-IFC-010-IV and PS-IFC-010-WH-120/277V	
	Preset slide, controls FD-010: PS-IFC-010-3W-IV and PS-IFC-010-3W-WH-120/277V	
	Remote mounted unit: FD-010	
Lehigh Electronic Products	Solitaire	PBX
PDM Electrical Products	WPC-5721	
Starfield Controls	TR61 with DALI interface port	RT03 DALInet Router
WattStopper®	LS-4 used with LCD-101 and LCD-103	

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details

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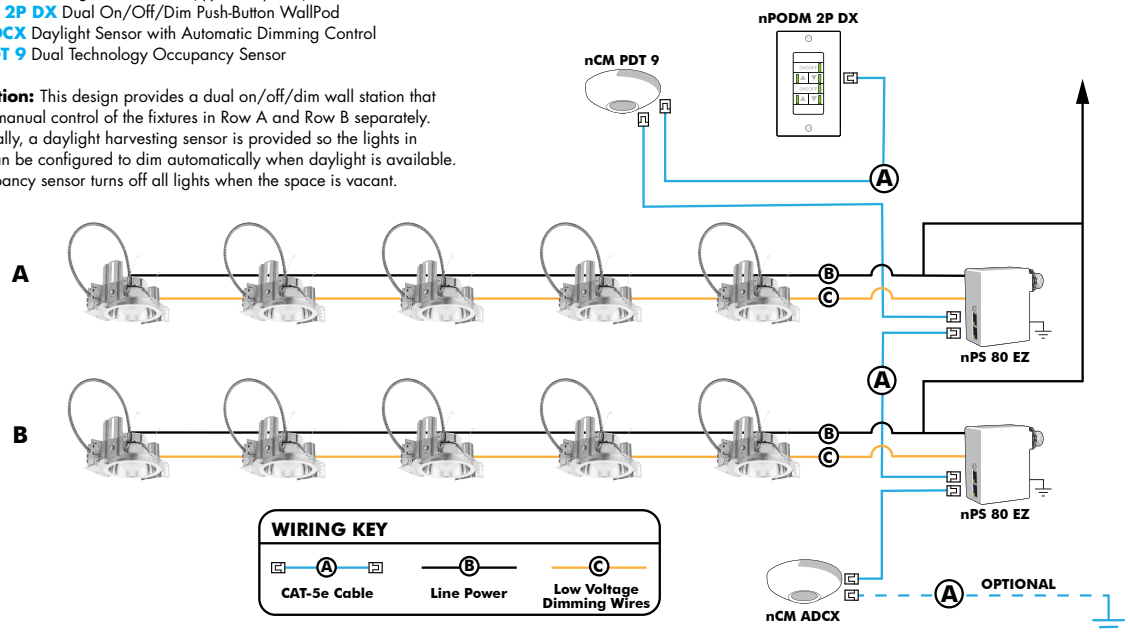
LDN6

EXAMPLE
Group Fixture Control*
*Appiication diagram applies for fixtures with eldoLED drivers only.

nPS 80 EZ Dimming/Control Pack (qty: 2 required)
nPODM 2P DX Dual On/Off/Dim Push-Button WallPod
nCM ADCX Daylight Sensor with Automatic Dimming Control
nCM PDT 9 Dual Technology Occupancy Sensor

Description: This design provides a dual on/off/dim wall station that enables manual control of the fixtures in Row A and Row B separately. Additionally, a daylight harvesting sensor is provided so the lights in Row B can be configured to dim automatically when daylight is available. An occupancy sensor turns off all lights when the space is vacant.



Choose Wall Controls

nLight offers multiple styles of wall controls - each with varying features and user experience.

Push-Button Wallpod
Traditional tactile buttons and LED user feedback

Graphic Wallpod
Full color touch screen provides a sophisticated look and feel

nLight® Wired Controls Accessories:			
Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlight for complete listing of nLight controls.			
WallPod Stations	**Model number**	**Occupancy sensors**	**Model Number**
On/Off	nPODM (Color)	Small motion 360°, ceiling (PIR/dual Tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPOD DX (Color)	Large motion 360°, ceiling (PIR/dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX (Color)	Wide View (PIR/dual tech)	nWV 16 / nWV PDT 16
Photocell controls	**Model Number**	Wall Switch w/ Raise/Lower (PIR/dual tech)	nWSX LV DX / nWSX PDT LV DX
Dimming	nCM ADCX	**Cat-5 cables (plenum rated)**	**Model Number**
		10', CAT5 10FT	CAT5 10FT J1
		15, CAT5 15FT	CAT5 15FT J1

nLight® AIR Control Accessories: *Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlightair.*	
Wall switches	**Model number**
On/Off single pole	rPODB [color]
On/Off two pole	rPODB 2P [color]
On/Off & raise/lower single pole	rPODB DX [color]
On/Off & raise/lower two pole	rPODB 2P DX [color]
On/Off & raise/lower single pole	rPODBZ DX WH[1]

Notes
1 Can only be ordered with the RES7Z zone control sensor version.

nLight AIR

nLight AIR is the ideal solution for retrofit or new construction spaces where adding communication is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each Lithonia LDN Luminaire. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.

Simple as 1,2,3

1. Install the nLight® AIR fixtures with embedded smart sensor
2. Install the wireless battery-powered wall switch
3. With CLAIRITY app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome

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LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

LDN6

6" Open and WallWash LED
Non-IC
New Construction Downlight

FEATURES & SPECIFICATIONS

INTENDED USE — Typical applications include corridors, lobbies, conference rooms and private offices.
CONSTRUCTION — Galvanized steel mounting/plaster frame; galvanized steel junction box with bottom-hinged access covers and spring latches. Reflectors are retained by torsion springs.
Vertically adjustable mounting brackets with commercial bar hangers provide 3-3/4" total adjustment.
Two combination ½"-3/4" and four ½" knockouts for straight-through conduit runs. Capacity: 8 (4 in, 4 out). No. 12 AWG conductors, rated for 90°C.
Accommodates 12"-24" joist spacing.
Passive cooling thermal management for 25°C standard; high ambient (40°C) option available. Light engine and drivers are accessible from above or below ceiling.
Max ceiling thickness 1-1/2".
OPTICS — LEDs are binned to a 3-step SDCM; 80 CRI minimum. 90 CRI optional.
LED light source concealed with diffusing optical lens.
General illumination lighting with 1.0 S/MH and 55° cutoff to source and source image.
Self-flanged anodized reflectors in specular, semi-specular, or matte diffuse finishes. Also available in white and black painted reflectors.
ELECTRICAL — Multi-volt (120-277V, 50/60Hz) 0-10V dimming drivers mounted to junction box, 10% or 1% minimum dimming level available.
0-10V dimming fixture requires two (2) additional low-voltage wires to be pulled.
70% lumen maintenance at 60,000 hours.
LISTINGS — Certified to US and Canadian safety standards. Wet location standard (covered ceiling). IP55 rated. ENERGY STAR® certified product.
BUY AMERICAN — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. 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.

A+ Capable options indicated by this color background.

Buy American
battery pack
ENERGY STAR

ORDERING INFORMATION

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

Example: LDN6 35/15 LO6AR LSS MVOLT EZ10

LDN6	XX? = Specify						
Series	**Color temperature**	**Lumens**[1]		**Aperture/Trim Color**		**Finish**	**Voltage**
LDN6 6" round	27/ 2700K	05 500 lumens	25 2500 lumens	LO6 Downlight	AR Clear	LSS Semi-specular	MVOLT Multi-volt
	30/ 3000K	07 750 lumens	30 3000 lumens	LW6 Wallwash	WR[2] White	LD Matte diffuse	120 120V
	35/ 3500K	10 1000 lumens	40 4000 lumens		BR[2] Black	LS Specular	277 277V
	40/ 4000K	15 1500 lumens	50 5000 lumens				347[3] 347V
	50/ 5000K	20 2000 lumens					

Driver		Options			
GZ10	0-10V driver dims to 10%	SF[4]	Single fuse	N80[8]	nLight™ Lumen Compensation
GZ1	0-10V driver dims to 1%	TRW[5]	White painted flange	JOT[13]	Wireless room control with "Just One Touch" pairing
D10	Minimum dimming 10% driver for use with JOT	TRBL[5]	Black painted flange	NPS80EZ[7]	nLight® dimming pack controls 0-10V eldoLED drivers (EZ10, EZ1).
D1	Minimum dimming 1% driver for use with JOT	EL[6]	Emergency battery pack with integral test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS	NPS80EZER[7]	nLight® dimming pack controls 0-10V eldoLED drivers (EZ10, EZ1). ER controls fixtures on emergency circuit.
EZ10	0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 10%	ELR[6]	Emergency battery pack with remote test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS	HAO[11]	High ambient option
EZ1	0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 1%	ELSD[6]	Emergency battery pack with self-diagnostics, integral test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS	CP[12]	Chicago Plenum
EDAB	eldoLED DALI SOLDRIVE dim to dark	ELRSD[6]	Emergency battery pack with self-diagnostics, remote test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS	RRL__	RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Available only in RRLA, RRLB, RRLAE, and RRLC12S. Refer to RRL spec sheet on www.acuitybrands.com for the RELOC product specifications.
		E10WCP[6]	Emergency battery pack, 10W Constant Power with integral test switch. Certified in CA Title 20 MAEDB	NLTAIR2[9,10]	nLight® Air enabled
		E10WCPR[6]	Emergency battery pack, 10W Constant Power with remote test switch. Certified in CA Title 20 MAEDB	NLTAIRER2[9,10]	nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit, not available with battery pack options
		NPP16D[7]	nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1).	NLTAIREM2[9,10]	nLight® AIR Dimming Pack Wireless Controls. UL924 Emergency Operation, via power interrupt detection. Available with battery pack options.
		NPP16DER[7]	nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1). ER controls fixtures on emergency circuit.	BAA	Buy America(n) Act Compliant
				90CRI	High CRI (90+)

Accessories: *Order as separate catalog number.*

PS1055CP	FMC Power Sentry batterypack, T20 compliant, field installable, 10w constant power
EAC ISSM 375	Compact interruptible emergency AC power system
EAC ISSM 125	Compact interruptible emergency AC power system
GRA68 JZ	Oversized trim ring with 8" outside diameter
SCA6	Sloped Ceiling Adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA6 10D

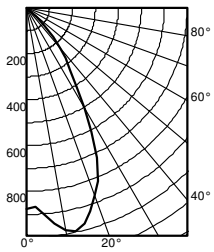
Notes
1 Overall height varies based on lumen package; refer to dimensional chart on page 3.
2 Not available with finishes.
3 Not available with emergency options.
4 Must specify voltage 120V or 277V.
5 Available with clear (AR) reflector only.
6 12.5" of plenum depth or top access required for battery pack maintenance.
7 Specify voltage. ER for use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
8 Fixture begins at 80% light level. Must be specified with NPS80EZ or NPS80EZ ER. Only available with EZ10 and EZ1 drivers.
9 Not available with CP, NPS80EZ, NPS80EZER, NPP16D, NPP16DER or N80 options.
10 NLTAIR2, NLTAIRER2 and NLTAIREM2 not recommended for metal ceiling installations.
11 Fixture height is 6.5" for all lumen packages with HAO.
12 Must specify voltage for 3000lm and above. 5000lm with marked spacing 24 L x 24 W x 14 H. Not available with emergency battery pack option.
13 Must specify D10 or D1 driver. Not available with nLight options. Not available with CP. Not recommended for metal ceiling installation. Not for use with emergency backup power systems other than battery packs.

LDN6

PHOTOMETRY

Distribution Curve | **Distribution Data** | **Output Data** | **Coefficient of Utilization** | **Illuminance Data at 30" Above Floor for a Single Luminaire**

LDN6 35/10 LO6AR, input watts: 10.44, delivered lumens: 987.10, LM/W = 94.54, spacing criterion at 0= 1.02, test no. ISF 30716P262.



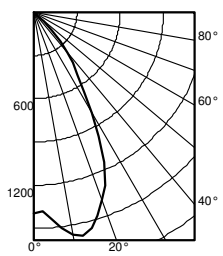
	Ave	Lumens
0	876	
5	905	89
15	971	269
25	720	322
35	330	214
45	110	87
55	1	4
65	1	1
75	0	0
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	680.7	69.0
0° - 40°	895.0	90.7
0° - 60°	986.0	99.9
0° - 90°	987.0	100.0
90° - 120°	0.0	0.0
90° - 130°	0.0	0.0
90° - 150°	0.0	0.0
90° - 180°	0.0	0.0
0° - 180°	987.0	*100.0
*Efficiency		

pf / pc / pw	80% 50%	80% 30%	80% 10%	70% 50%	70% 30%	70% 10%	50% 50%	50% 30%	50% 10%
0	119	119	119	116	116	116	111	111	111
1	111	108	106	109	106	104	104	103	101
2	103	99	95	101	97	94	98	95	92
3	96	91	87	94	90	86	92	88	85
4	89	84	79	88	83	79	86	81	78
5	83	77	73	82	77	73	81	76	72
6	78	72	68	77	72	67	76	71	67
7	73	67	63	73	67	63	71	66	62
8	69	63	59	68	62	58	67	62	58
9	65	59	55	64	59	55	63	58	54
10	61	55	51	61	55	51	60	55	51

Mounting Height	Inital FC Center Beam	50% beam - 54.5° Diameter	50% beam - 54.5° FC	10% beam - 82.2° Diameter	10% beam - 82.2° FC
8.0	29.0	5.7	14.5	9.6	2.9
10.0	15.6	7.7	7.8	13.1	1.6
12.0	9.7	9.8	4.9	16.6	1.0
14.0	6.6	11.8	3.3	20.1	0.7
16.0	4.8	13.9	2.4	23.6	0.5

LDN6 35/15 LO6AR, input watts: 17.52, delivered lumens: 1572.9, LM/W = 89.77, spacing criterion at 0= 1.02, test no. ISF 30716P265.



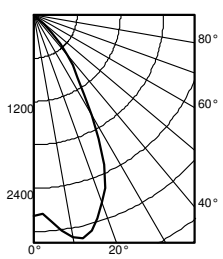
	Ave	Lumens
0	1396	
5	1442	142
15	1547	429
25	1147	514
35	526	342
45	176	139
55	2	6
65	1	1
75	1	1
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	1084.6	69.0
0° - 40°	1426.2	90.7
0° - 60°	1571.3	99.9
0° - 90°	1572.9	100.0
90° - 120°	0.0	0.0
90° - 130°	0.0	0.0
90° - 150°	0.0	0.0
90° - 180°	0.0	0.0
0° - 180°	1572.9	*100.0
*Efficiency		

pf / pc / pw	80% 50%	80% 30%	80% 10%	70% 50%	70% 30%	70% 10%	50% 50%	50% 30%	50% 10%
0	119	119	119	116	116	116	111	111	111
1	111	108	106	109	106	104	104	103	101
2	103	99	95	101	97	94	98	95	92
3	96	91	87	94	90	86	92	88	85
4	89	84	79	88	83	79	86	81	78
5	83	77	73	82	77	73	81	76	72
6	78	72	68	77	72	67	76	71	67
7	73	67	63	73	67	63	71	66	62
8	69	63	59	68	62	58	67	62	58
9	65	59	55	64	59	55	63	58	54
10	61	55	51	61	55	51	60	55	51

Mounting Height	Inital FC Center Beam	50% beam - 54.5° Diameter	50% beam - 54.5° FC	10% beam - 82.2° Diameter	10% beam - 82.2° FC
8.0	46.2	5.7	23.1	9.6	4.6
10.0	24.8	7.7	12.4	13.1	2.5
12.0	15.5	9.8	7.7	16.6	1.5
14.0	10.6	11.8	5.3	20.1	1.1
16.0	7.7	13.9	3.8	23.6	0.8

LDN6 35/30 LO6AR, input watts: 34.75, delivered lumens: 3138.5, LM/W = 90.31, spacing criterion at 0= 1.02, test no. ISF 30716P274.



	Ave	Lumens
0	2786	
5	2877	284
15	3087	855
25	2289	1025
35	1049	682
45	350	277
55	5	12
65	2	2
75	1	1
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	2164.3	69.0
0° - 40°	2845.9	90.7
0° - 60°	3135.3	99.9
0° - 90°	3138.5	100.0
90° - 120°	0.0	0.0
90° - 130°	0.0	0.0
90° - 150°	0.0	0.0
90° - 180°	0.0	0.0
0° - 180°	3138.5	*100.0
*Efficiency		

pf / pc / pw	80% 50%	80% 30%	80% 10%	70% 50%	70% 30%	70% 10%	50% 50%	50% 30%	50% 10%
0	119	119	119	116	116	116	111	111	111
1	111	108	106	109	106	104	104	103	101
2	103	99	95	101	97	94	98	95	92
3	96	91	87	94	90	86	92	88	85
4	89	84	79	88	83	79	86	81	78
5	83	77	73	82	77	73	81	76	72
6	78	72	68	77	72	67	76	71	67
7	73	67	63	73	67	63	71	66	62
8	69	63	59	68	62	58	67	62	58
9	65	59	55	64	59	55	63	58	54
10	61	55	51	61	55	51	60	55	51

Mounting Height	Inital FC Center Beam	50% beam - 54.5° Diameter	50% beam - 54.5° FC	10% beam - 82.2° Diameter	10% beam - 82.2° FC
8.0	92.1	5.7	46.1	9.6	9.2
10.0	49.5	7.7	24.8	13.1	5.0
12.0	30.9	9.8	15.4	16.6	3.1
14.0	21.1	11.8	10.5	20.1	2.1
16.0	15.3	13.9	7.6	23.6	1.5

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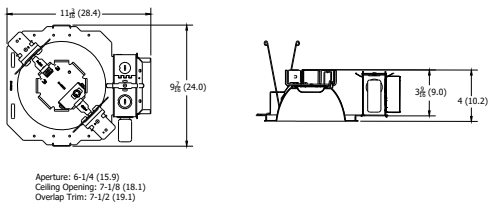
LDN6

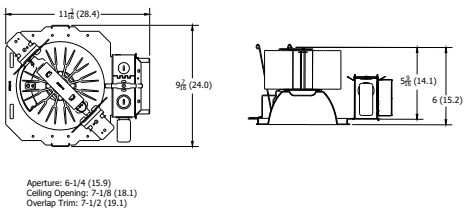
* All dimensions are inches (centimeters) unless otherwise noted.

LDN6 500 - 1500 LUMENS



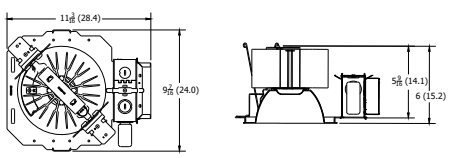
Aperture: 6-1/4 (15.9)
Ceiling Opening: 7-1/8 (18.1)
Overlap Trim: 7-1/2 (19.1)

LDN6 2000 - 3000 LUMENS



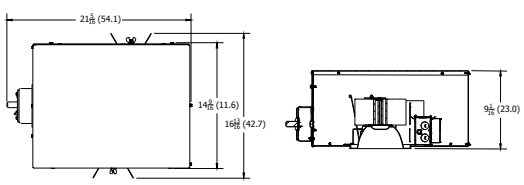
Aperture: 6-1/4 (15.9)
Ceiling Opening: 7-1/8 (18.1)
Overlap Trim: 7-1/2 (19.1)

LDN6 4000 - 5000 LUMENS



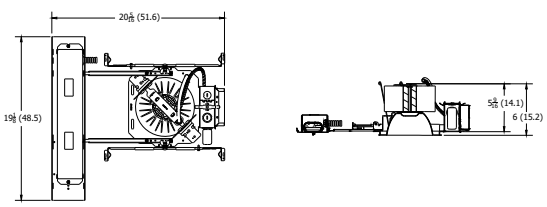
Marked Spacing: 24 x 24 x 10
Aperture: 6-1/4 (15.9)
Ceiling Opening: 7-1/8 (18.1)
Overlap Trim: 7-1/2 (19.1)

LDN6 CP



Aperture: 6-1/4 (15.9)
Ceiling Opening: 7-1/8 (18.1)
Overlap Trim: 7-1/2 (19.1)

LDN6 EL



Marked Spacing above 3000 Lumens: 24 x 24 x 10
Aperture: 6-1/4 (15.9)
Ceiling Opening: 7-1/8 (18.1)
Overlap Trim: 7-1/2 (19.1)

LDN6			
Nominal Lumens	**Lumens**	**Wattage**	**Lm/W**
500	527.9	5.8	90.5
750	758.1	8.9	85.1
1000	950.1	10.4	91.0
1500	1514	17.5	86.4
2000	2006	22.5	89.1
2500	2504	28.3	88.6
3000	3021	34.8	86.9
4000	4008	44.3	90.6
5000	4975	57.7	86.3

HOW TO ESTIMATE DELIVERED LUMENS IN EMERGENCY MODE

Use the formula below to estimate the delivered lumens in emergency mode

Delivered Lumens = 1.25 x P x LPW

P = Ouput power of emergency driver. P = 10W for PS1055CP

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.
The LPW rating is also available at Designlight Consortium.

LUMEN OUTPUT MULTIPLIERS - FINISH			
	Clear (AR)	**White (WR)**	**Black (BR)**
Specular (LS)	1.0	N/A	N/A
Semi-specular (LSS)	0.950	N/A	N/A
Matte diffuse (LD)	0.85	N/A	N/A
Painted	N/A	0.87	0.73

LUMEN OUTPUT MULTIPLIERS - CCT					
	2700K	**3000K**	**3500K**	**4000K**	**5000K**
80CRI	0.950	0.966	1.000	1.025	1.101

Notes

- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- CRI: 80 typical.

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LDN6

ADDITIONAL DATA

JOT
JUST ONE TOUCH

The Sensor Switch JOT enabled solution offers a wireless, app-free approach to single room lighting control. JOT enabled products use Bluetooth® Low Energy (BLE) technology to enable wireless dimming and switching.

Diagram

LDN6 Series

Sensor Switch
WSXA JOT

1. **Power:** Install JOT enabled fixtures and controls as instructed.
2. **Pair:** Insert the pairing tool into the pinhole on the wall switch; press and hold any button for 6 seconds.
3. **Play:** Once paired, each fixture will individually dim down to 10% brightness. All products will be fully functional.

COMPATIBLE 0-10V WALL-MOUNT DIMMERS		
MANUFACTURER	PART NO.	POWER BOOSTER AVAILABLE
Lutron®	Diva® DVTV	
	Diva® DVSCTV	
	Nova T® NTFTV	
	Nova® NFTV	
Leviton®	AWSMT-7DW	CN100
	AWSMG-7DW	PE300
	AMRMG-7DW	
	Leviton Centura Fluorescent Control System	
	IllumaTech® IP7 Series	
Synergy®	ISD BC	RDMFC
	SLD LPCS	
	Digital Equinox (DEQ BC)	
Douglas Lighting Controls	WPC-5721	
Entertainment Technology	Tap Glide TG600FAM120 (120V)	
	Tap Glide Heatsink TGH1500FAM120 (120V)	
	Oasis 0A2000FAMU	
Honeywell	EL7315A1019	EL7305A1010 (optional)
	EL7315A1009	
HUNT Dimming	Preset slide: PS-010-IV and PS-010-WH	
	Preset slide: PS-010-3W-IV and PS-010-3W-WH	
	Preset slide, controls FD-010: PS-IFC-010-IV and PS-IFC-010-WH-120/277V	
	Preset slide, controls FD-010: PS-IFC-010-3W-IV and PS-IFC-010-3W-WH-120/277V	
	Remote mounted unit: FD-010	
Lehigh Electronic Products	Solitaire	PBX
PDM Electrical Products	WPC-5721	
Starfield Controls	TR61 with DALI interface port	RT03 DALInet Router
WattStopper®	LS-4 used with LCD-101 and LCD-103	

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details

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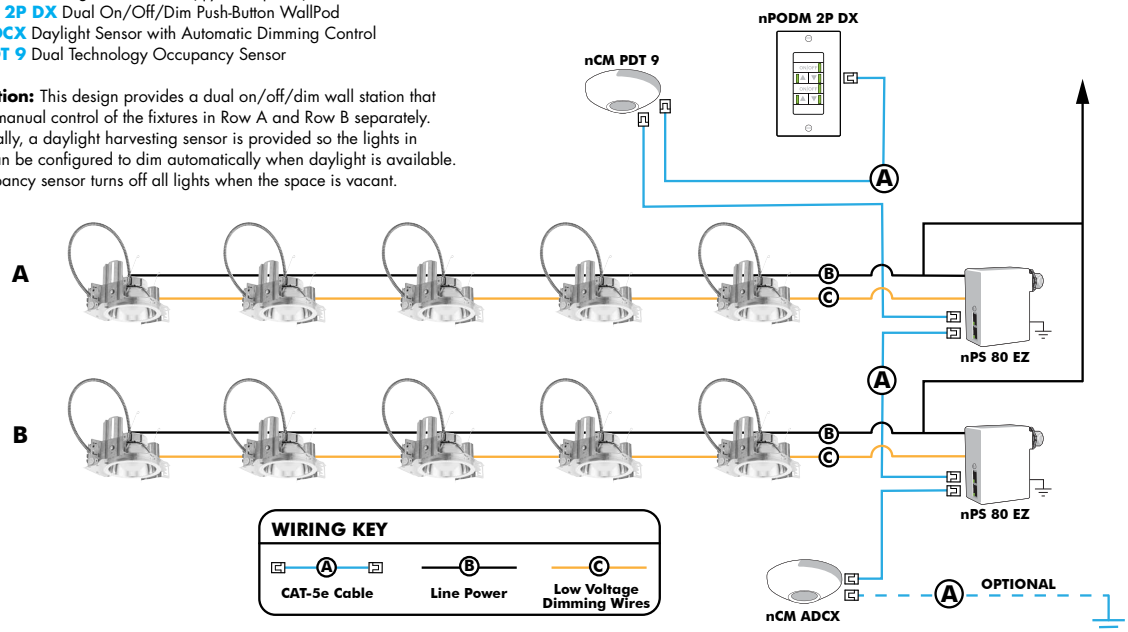
LDN6

EXAMPLE
Group Fixture Control*
*Application diagram applies for fixtures with eldoLED drivers only.

nPS 80 EZ Dimming/Control Pack (qty: 2 required)
nPODM 2P DX Dual On/Off/Dim Push-Button WallPod
nCM ADCX Daylight Sensor with Automatic Dimming Control
nCM PDT 9 Dual Technology Occupancy Sensor

Description: This design provides a dual on/off/dim wall station that enables manual control of the fixtures in Row A and Row B separately. Additionally, a daylight harvesting sensor is provided so the lights in Row B can be configured to dim automatically when daylight is available. An occupancy sensor turns off all lights when the space is vacant.



Choose Wall Controls

nLight offers multiple styles of wall controls - each with varying features and user experience.

Push-Button Wallpod
Traditional tactile buttons and LED user feedback

Graphic Wallpod
Full color touch screen provides a sophisticated look and feel

nLight® Wired Controls Accessories:			
Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlight for complete listing of nLight controls.			
WallPod Stations	**Model number**	**Occupancy sensors**	**Model Number**
On/Off	nPODM (Color)	Small motion 360°, ceiling (PIR/dual Tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPOD DX (Color)	Large motion 360°, ceiling (PIR/dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX (Color)	Wide View (PIR/dual tech)	nWV 16 / nWV PDT 16
Photocell controls	**Model Number**	Wall Switch w/ Raise/Lower (PIR/dual tech)	nWSX LV DX / nWSX PDT LV DX
Dimming	nCM ADCX	**Cat-5 cables (plenum rated)**	**Model Number**
		10', CAT5 10FT	CAT5 10FT J1
		15, CAT5 15FT	CAT5 15FT J1

nLight® AIR Control Accessories: *Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlightair.*	
Wall switches	**Model number**
On/Off single pole	rPODB [color]
On/Off two pole	rPODB 2P [color]
On/Off & raise/lower single pole	rPODB DX [color]
On/Off & raise/lower two pole	rPODB 2P DX [color]
On/Off & raise/lower single pole	rPODBZ DX WH[1]

Notes
1 Can only be ordered with the RES7Z zone control sensor version.

nLight AIR

nLight AIR is the ideal solution for retrofit or new construction spaces where adding communication is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each Lithonia LDN Luminaire. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.

Simple as 1,2,3

1. Install the nLight® AIR fixtures with embedded smart sensor
2. Install the wireless battery-powered wall switch
3. With CLAIRITY app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome

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D-Series Size 1
LED Area Luminaire

Buy American

Catalog Number

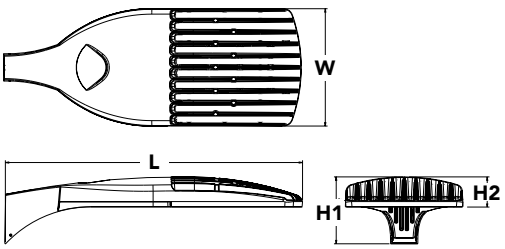
Notes

Type

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

Specifications

EPA:	1.01 ft² (0.09 m²)
Length:	33" (83.8 cm)
Width:	13" (33.0 cm)
Height H1:	7-1/2" (19.0 cm)
Height H2:	3-1/2"
Weight (max):	27 lbs (12.2 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

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

DSX1 LED — XXK = Specify

Series
DSX1 LED

LEDs
Forward optics
P1, P2, P3, P4[1], P5[1], P6[1], P7[1], P8, P9[1]
Rotated optics
P10[2], P11[2], P12[2], P13[1,2]

Color temperature
30K 3000 K
40K 4000 K
50K 5000 K

Distribution
T1S Type I short (Automotive)
T2S Type II short
T2M Type II medium
T3S Type III short
T3M Type III medium
T4M Type IV medium
TFTM Forward throw medium
T5VS Type V very short[3]
T5S Type V short[3]
T5M Type V medium[3]
T5W Type V wide[3]
BLC Backlight control[4]
LCCO Left corner cutoff[4]
RCCO Right corner cutoff[4]

Voltage
MVOLT[5]
XVOLT (277V-480V)[6,7,8]
120[9]
208[9]
240[9]
277[9]
347[9]
480[9]

Mounting
Shipped included
SPA Square pole mounting
RPA Round pole mounting[10]
WBA Wall bracket[3]
SPUMBA Square pole universal mounting adaptor[11]
RPUMBA Round pole universal mounting adaptor[9]
Shipped separately
KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[12]

FINISH = Specify

Control options
Shipped installed
NLTAIR2 nLight AIR generation 2 enabled[13]
PIRHN Network, high/low motion/ambient sensor[14]
PER NEMA twist-lock receptacle only (controls ordered separate)[15]
PER5 Five-pin receptacle only (controls ordered separate)[15,16]
PER7 Seven-pin receptacle only (controls ordered separate)[15,16]
DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[17]
DS Dual switching[18,19,20]
PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[20,21]
PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[20,21]
PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[20,21]
PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[20,21]
FAO Field adjustable output[20,21]

Other options
Shipped installed
HS House-side shield[23]
SF Single fuse (120, 277, 347V)[9]
DF Double fuse (208, 240, 480V)[9]
L90 Left rotated optics[2]
R90 Right rotated optics[2]
HA 50°C ambient operations[1]
BAA Buy America(n) Act Compliant
Shipped separately
BS Bird spikes[24]
EGS External glare shield

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.

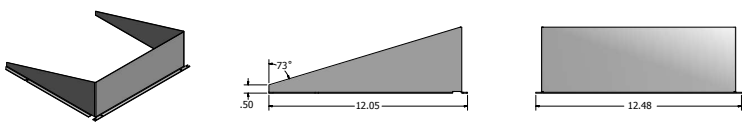
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [25]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [25]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [25]
DSHORT SBK U	Shorting cap [25]
DSX1HS 30C U	House-side shield for P1, P2, P3, P4 and P5 [23]
DSX1HS 40C U	House-side shield for P6 and P7 [23]
DSX1HS 60C U	House-side shield for P8, P9, P10, P11 and P12 [23]
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish) [26]
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) [12]
DSX1EGS (FINISH) U	External glare shield

For more control options, visit DTL and ROAM online.

NOTES
1 HA not available with P4, P5, P6, P7, P9 and P13.
2 P10, P11, P12 or P13 and rotated optics (L90, R90) only available together.
3 Any Type 5 distribution with photocell, is not available with WBA.
4 Not available with HS.
5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
6 XVOLT only suitable for use with P3, P5, P6, P7, P9 and P13.
7 XVOLT works with any voltage between 277V and 480V.
8 XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V.
9 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF.
10 Suitable for mounting to round poles between 3.5" and 12" diameter.
11 Universal mounting brackets intended for retrofit on existing, pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31. Only usable when pole's drill pattern is NOT Lithonia template #8
12 Must order fixture with SPA option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" diameter mast arm (not included).
13 Must be ordered with PIRHN. Sensor cover available only in dark bronze, black, white and natural aluminum colors.
14 Must be ordered with NLTAIR2. For more information on nLight Air 2 visit this link.
15 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting cap included.
16 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Node with integral dimming.
17 DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V, FAO.
18 Provides 50/50fixture operation via (2) independent drivers. Not available with PER, PER5, PER7, PIR or PIRH. Not available P1, P2, P3, P4 or P5.
19 Requires (2) separately switched circuits with isolated neutrol.
20 Reference Controls Option Default settings table on page 4.
21 Reference Motion Sensor table on page 4 to see functionality.
22 Not available with other dimming controls options.
23 Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
24 Must be ordered with fixture for factory pre-drilling.
25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Control Option Table on page 4.
26 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template #8.

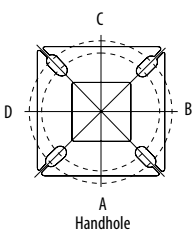
Options

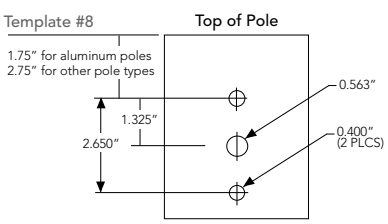
EGS - External Glare Shield



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

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 LED	1.013	2.025	1.945	3.038	2.850	3.749

	Drilling Template	Minimum Acceptable Outside Pole Dimension					
SPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
RPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
SPUMBA	#5	2-7/8"	3"	4"	4"	3.5"	4"
RPUMBA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"

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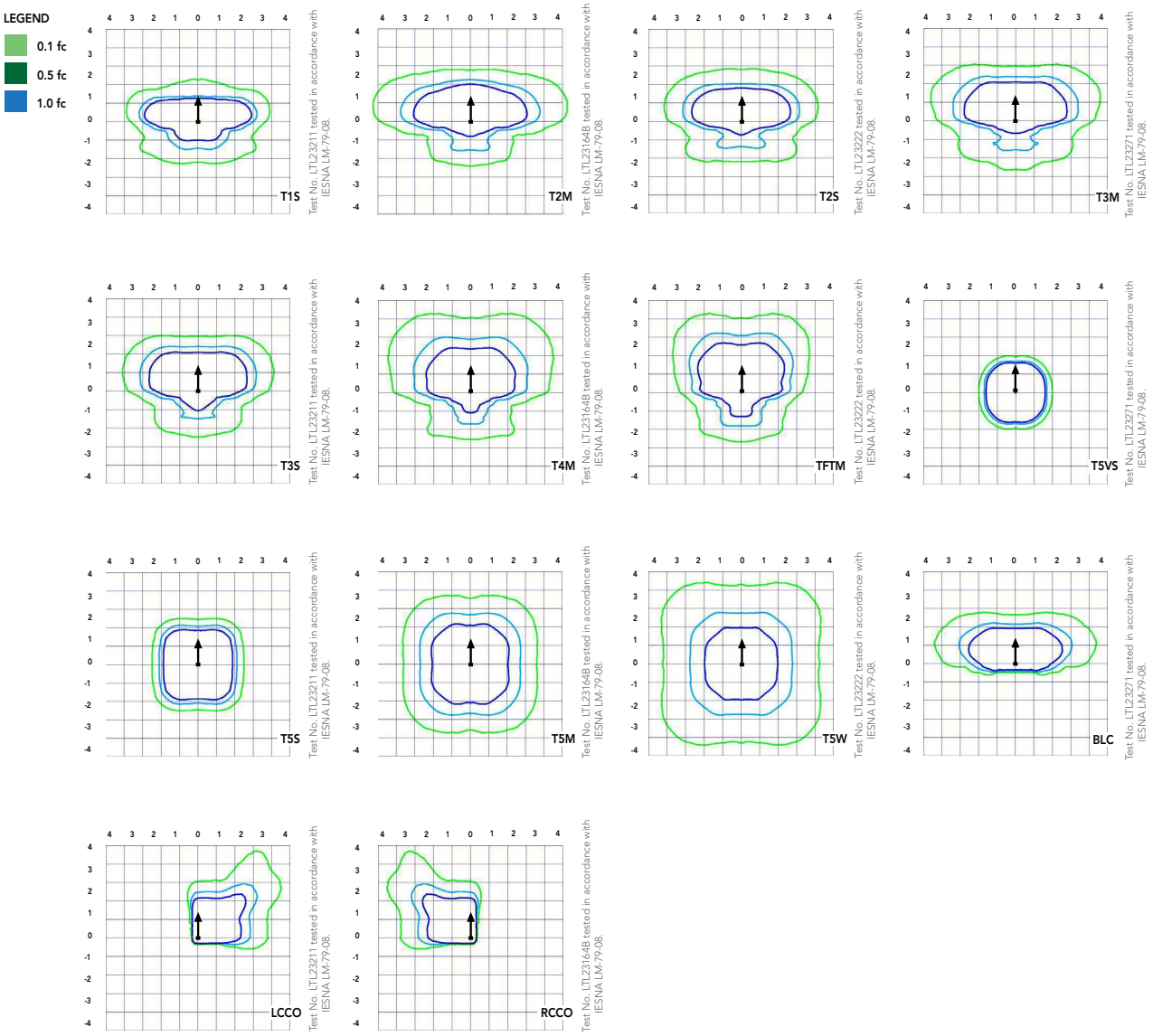
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 1 homepage.

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (25').



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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°F**	**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	0.96
50,000	0.92
100,000	0.85

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Phototcell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min
*for use when motion sensor is used as dusk to dawn control.						

Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A) 120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	30	530	54	0.45	0.26	0.23	0.19	0.10	0.12
	P2	30	700	70	0.59	0.34	0.30	0.25	0.20	0.16
	P3	30	1050	102	0.86	0.50	0.44	0.38	0.30	0.22
	P4	30	1250	125	1.06	0.60	0.52	0.46	0.37	0.27
	P5	30	1400	138	1.16	0.67	0.58	0.51	0.40	0.29
	P6	40	1250	163	1.36	0.78	0.68	0.59	0.47	0.34
	P7	40	1400	183	1.53	0.88	0.76	0.66	0.53	0.38
	P8	60	1050	207	1.74	0.98	0.87	0.76	0.64	0.49
	P9	60	1250	241	2.01	1.16	1.01	0.89	0.70	0.51
Rotated Optics (Requires L90 or R90)	P10	60	530	106	0.90	0.52	0.47	0.43	0.33	0.27
	P11	60	700	137	1.15	0.67	0.60	0.53	0.42	0.32
	P12	60	1050	207	1.74	0.99	0.87	0.76	0.60	0.46
	P13	60	1250	231	1.93	1.12	0.97	0.86	0.67	0.49

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	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 recepticle	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
PIR or PIRH	Motion sensors with integral photocell. PIR for 8-15' mounting; PIRH for 15-30' mounting	Luminaires dim when no occupancy is detected.	Acuity Controls SBGR	Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation.
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 rSDGR	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app.

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Performance Data

Lumen Output

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Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30	530	P1	54W	T1S	6,457	2	0	2	120	6,956	2	0	2	129	7,044	2	0	2	130
				T2S	6,450	2	0	2	119	6,949	2	0	2	129	7,037	2	0	2	130
				T2M	6,483	1	0	1	120	6,984	2	0	2	129	7,073	2	0	2	131
				T3S	6,279	2	0	2	116	6,764	2	0	2	125	6,850	2	0	2	127
				T3M	6,468	1	0	2	120	6,967	1	0	2	129	7,056	1	0	2	131
				T4M	6,327	1	0	2	117	6,816	1	0	2	126	6,902	1	0	2	128
				TFTM	6,464	1	0	2	120	6,963	1	0	2	129	7,051	1	0	2	131
				T5VS	6,722	2	0	0	124	7,242	3	0	0	134	7,334	3	0	0	136
				T5S	6,728	2	0	1	125	7,248	2	0	1	134	7,340	2	0	1	136
				T5M	6,711	3	0	1	124	7,229	3	0	1	134	7,321	3	0	2	136
				T5W	6,667	3	0	2	123	7,182	3	0	2	133	7,273	3	0	2	135
				BLC	5,299	1	0	1	98	5,709	1	0	2	106	5,781	1	0	2	107
				LCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
				RCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
30	700	P2	70W	T1S	8,249	2	0	2	118	8,886	2	0	2	127	8,999	2	0	2	129
				T2S	8,240	2	0	2	118	8,877	2	0	2	127	8,989	2	0	2	128
				T2M	8,283	2	0	2	118	8,923	2	0	2	127	9,036	2	0	2	129
				T3S	8,021	2	0	2	115	8,641	2	0	2	123	8,751	2	0	2	125
				T3M	8,263	2	0	2	118	8,901	2	0	2	127	9,014	2	0	2	129
				T4M	8,083	2	0	2	115	8,708	2	0	2	124	8,818	2	0	2	126
				TFTM	8,257	2	0	2	118	8,896	2	0	2	127	9,008	2	0	2	129
				T5VS	8,588	3	0	0	123	9,252	3	0	0	132	9,369	3	0	0	134
				T5S	8,595	3	0	1	123	9,259	3	0	1	132	9,376	3	0	1	134
				T5M	8,573	3	0	2	122	9,236	3	0	2	132	9,353	3	0	2	134
				T5W	8,517	3	0	2	122	9,175	4	0	2	131	9,291	4	0	2	133
				BLC	6,770	1	0	2	97	7,293	1	0	2	104	7,386	1	0	2	106
				LCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
				RCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
30	1050	P3	102W	T1S	11,661	2	0	2	114	12,562	3	0	3	123	12,721	3	0	3	125
				T2S	11,648	2	0	2	114	12,548	3	0	3	123	12,707	3	0	3	125
				T2M	11,708	2	0	2	115	12,613	2	0	2	124	12,773	2	0	2	125
				T3S	11,339	2	0	2	111	12,215	3	0	3	120	12,370	3	0	3	121
				T3M	11,680	2	0	2	115	12,582	2	0	2	123	12,742	2	0	2	125
				T4M	11,426	2	0	3	112	12,309	2	0	3	121	12,465	2	0	3	122
				TFTM	11,673	2	0	2	114	12,575	2	0	3	123	12,734	2	0	3	125
				T5VS	12,140	3	0	1	119	13,078	3	0	1	128	13,244	3	0	1	130
				T5S	12,150	3	0	1	119	13,089	3	0	1	128	13,254	3	0	1	130
				T5M	12,119	4	0	2	119	13,056	4	0	2	128	13,221	4	0	2	130
				T5W	12,040	4	0	3	118	12,970	4	0	3	127	13,134	4	0	3	129
				BLC	9,570	1	0	2	94	10,310	1	0	2	101	10,440	1	0	2	102
				LCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
				RCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
30	1250	P4	125W	T1S	13,435	3	0	3	107	14,473	3	0	3	116	14,657	3	0	3	117
				T2S	13,421	3	0	3	107	14,458	3	0	3	116	14,641	3	0	3	117
				T2M	13,490	2	0	2	108	14,532	3	0	3	116	14,716	3	0	3	118
				T3S	13,064	3	0	3	105	14,074	3	0	3	113	14,252	3	0	3	114
				T3M	13,457	2	0	2	108	14,497	2	0	2	116	14,681	2	0	2	117
				T4M	13,165	2	0	3	105	14,182	2	0	3	113	14,362	2	0	3	115
				TFTM	13,449	2	0	3	108	14,488	2	0	3	116	14,672	2	0	3	117
				T5VS	13,987	4	0	1	112	15,068	4	0	1	121	15,259	4	0	1	122
				T5S	13,999	3	0	1	112	15,080	3	0	1	121	15,271	3	0	1	122
				T5M	13,963	4	0	2	112	15,042	4	0	2	120	15,233	4	0	2	122
				T5W	13,872	4	0	3	111	14,944	4	0	3	120	15,133	4	0	3	121
				BLC	11,027	1	0	2	88	11,879	1	0	2	95	12,029	1	0	2	96
				LCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
				RCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
30	1400	P5	138W	T1S	14,679	3	0	3	106	15,814	3	0	3	115	16,014	3	0	3	116
				T2S	14,664	3	0	3	106	15,797	3	0	3	114	15,997	3	0	3	116
				T2M	14,739	3	0	3	107	15,878	3	0	3	115	16,079	3	0	3	117
				T3S	14,274	3	0	3	103	15,377	3	0	3	111	15,572	3	0	3	113
				T3M	14,704	2	0	3	107	15,840	3	0	3	115	16,040	3	0	3	116
				T4M	14,384	2	0	3	104	15,496	3	0	3	112	15,692	3	0	3	114
				TFTM	14,695	2	0	3	106	15,830	3	0	3	115	16,030	3	0	3	116
				T5VS	15,283	4	0	1	111	16,464	4	0	1	119	16,672	4	0	1	121
				T5S	15,295	3	0	1	111	16,477	4	0	1	119	16,686	4	0	1	121
				T5M	15,257	4	0	2	111	16,435	4	0	2	119	16,644	4	0	2	121
				T5W	15,157	4	0	3	110	16,328	4	0	3	118	16,534	4	0	3	120
				BLC	12,048	1	0	2	87	12,979	1	0	2	94	13,143	1	0	2	95
				LCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71
				RCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71

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Performance Data

Lumen Output

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

Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40	1250	P6	163W	T1S	17,654	3	0	3	108	19,018	3	0	3	117	19,259	3	0	3	118
				T2S	17,635	3	0	3	108	18,998	3	0	3	117	19,238	3	0	3	118
				T2M	17,726	3	0	3	109	19,096	3	0	3	117	19,337	3	0	3	119
				T3S	17,167	3	0	3	105	18,493	3	0	3	113	18,727	3	0	3	115
				T3M	17,683	3	0	3	108	19,049	3	0	3	117	19,290	3	0	3	118
				T4M	17,299	3	0	3	106	18,635	3	0	4	114	18,871	3	0	4	116
				TFTM	17,672	3	0	3	108	19,038	3	0	4	117	19,279	3	0	4	118
				T5VS	18,379	4	0	1	113	19,800	4	0	1	121	20,050	4	0	1	123
				T5S	18,394	4	0	2	113	19,816	4	0	2	122	20,066	4	0	2	123
				T5M	18,348	4	0	2	113	19,766	4	0	2	121	20,016	4	0	2	123
				T5W	18,228	5	0	3	112	19,636	5	0	3	120	19,885	5	0	3	122
				BLC	14,489	2	0	2	89	15,609	2	0	3	96	15,806	2	0	3	97
				LCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
				RCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
40	1400	P7	183W	T1S	19,227	3	0	3	105	20,712	3	0	3	113	20,975	3	0	3	115
				T2S	19,206	3	0	3	105	20,690	3	0	3	113	20,952	3	0	3	114
				T2M	19,305	3	0	3	105	20,797	3	0	3	114	21,060	3	0	3	115
				T3S	18,696	3	0	3	102	20,141	3	0	3	110	20,396	3	0	4	111
				T3M	19,258	3	0	3	105	20,746	3	0	3	113	21,009	3	0	3	115
				T4M	18,840	3	0	4	103	20,296	3	0	4	111	20,553	3	0	4	112
				TFTM	19,246	3	0	4	105	20,734	3	0	4	113	20,996	3	0	4	115
				T5VS	20,017	4	0	1	109	21,564	4	0	1	118	21,837	4	0	1	119
				T5S	20,033	4	0	2	109	21,581	4	0	2	118	21,854	4	0	2	119
				T5M	19,983	4	0	2	109	21,527	5	0	3	118	21,799	5	0	3	119
				T5W	19,852	5	0	3	108	21,386	5	0	3	117	21,656	5	0	3	118
				BLC	15,780	2	0	3	86	16,999	2	0	3	93	17,214	2	0	3	94
				LCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
				RCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
60	1050	P8	207W	T1S	22,490	3	0	3	109	24,228	3	0	3	117	24,535	3	0	3	119
				T2S	22,466	3	0	4	109	24,202	3	0	4	117	24,509	3	0	4	118
				T2M	22,582	3	0	3	109	24,327	3	0	3	118	24,635	3	0	3	119
				T3S	21,870	3	0	4	106	23,560	3	0	4	114	23,858	3	0	4	115
				T3M	22,527	3	0	4	109	24,268	3	0	4	117	24,575	3	0	4	119
				T4M	22,038	3	0	4	106	23,741	3	0	4	115	24,041	3	0	4	116
				TFTM	22,513	3	0	4	109	24,253	3	0	4	117	24,560	3	0	4	119
				T5VS	23,415	5	0	1	113	25,224	5	0	1	122	25,543	5	0	1	123
				T5S	23,434	4	0	2	113	25,244	4	0	2	122	25,564	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,221	5	0	4	112	25,016	5	0	4	121	25,332	5	0	4	122
				BLC	18,458	2	0	3	89	19,885	2	0	3	96	20,136	2	0	3	97
				LCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
60	1250	P9	241W	T1S	25,575	3	0	3	106	27,551	3	0	3	114	27,900	3	0	3	116
				T2S	25,548	3	0	4	106	27,522	3	0	4	114	27,871	3	0	4	116
				T2M	25,680	3	0	3	107	27,664	3	0	3	115	28,014	3	0	3	116
				T3S	24,870	3	0	4	103	26,791	3	0	4	111	27,130	3	0	4	113
				T3M	25,617	3	0	4	106	27,597	3	0	4	115	27,946	3	0	4	116
				T4M	25,061	3	0	4	104	26,997	3	0	4	112	27,339	3	0	4	113
				TFTM	25,602	3	0	4	106	27,580	3	0	4	114	27,929	3	0	4	116
				T5VS	26,626	5	0	1	110	28,684	5	0	1	119	29,047	5	0	1	121
				T5S	26,648	4	0	2	111	28,707	5	0	2	119	29,070	5	0	2	121
				T5M	26,581	5	0	3	110	28,635	5	0	3	119	28,997	5	0	3	120
				T5W	26,406	5	0	4	110	28,447	5	0	4	118	28,807	5	0	4	120
				BLC	20,990	2	0	3	87	22,612	2	0	3	94	22,898	2	0	3	95
				LCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71
				RCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71

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Performance Data

Lumen Output

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

Rotated Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60	530	**P10**	106W	T1S	13,042	3	0	3	123	14,050	3	0	3	133	14,228	3	0	3	134
				T2S	12,967	4	0	4	122	13,969	4	0	4	132	14,146	4	0	4	133
				T2M	13,201	3	0	3	125	14,221	3	0	3	134	14,401	3	0	3	136
				T3S	12,766	4	0	4	120	13,752	4	0	4	130	13,926	4	0	4	131
				T3M	13,193	4	0	4	124	14,213	4	0	4	134	14,393	4	0	4	136
				T4M	12,944	4	0	4	122	13,945	4	0	4	132	14,121	4	0	4	133
				TFTM	13,279	4	0	4	125	14,305	4	0	4	135	14,486	4	0	4	137
				T5VS	13,372	3	0	1	126	14,405	4	0	1	136	14,588	4	0	1	138
				T5S	13,260	3	0	1	125	14,284	3	0	1	135	14,465	3	0	1	136
				T5M	13,256	4	0	2	125	14,281	4	0	2	135	14,462	4	0	2	136
				T5W	13,137	4	0	3	124	14,153	4	0	3	134	14,332	4	0	3	135
				BLC	10,906	3	0	3	103	11,749	3	0	3	111	11,898	3	0	3	112
				LCCO	7,789	1	0	3	73	8,391	1	0	3	79	8,497	1	0	3	80
				RCCO	7,779	4	0	4	73	8,380	4	0	4	79	8,486	4	0	4	80
60	700	**P11**	137W	T1S	16,556	3	0	3	121	17,835	3	0	3	130	18,061	4	0	4	132
				T2S	16,461	4	0	4	120	17,733	4	0	4	129	17,957	4	0	4	131
				T2M	16,758	4	0	4	122	18,053	4	0	4	132	18,281	4	0	4	133
				T3S	16,205	4	0	4	118	17,457	4	0	4	127	17,678	4	0	4	129
				T3M	16,748	4	0	4	122	18,042	4	0	4	132	18,271	4	0	4	133
				T4M	16,432	4	0	4	120	17,702	4	0	4	129	17,926	4	0	4	131
				TFTM	16,857	4	0	4	123	18,159	4	0	4	133	18,389	4	0	4	134
				T5VS	16,975	4	0	1	124	18,287	4	0	1	133	18,518	4	0	1	135
				T5S	16,832	4	0	1	123	18,133	4	0	2	132	18,362	4	0	2	134
				T5M	16,828	4	0	2	123	18,128	4	0	2	132	18,358	4	0	2	134
				T5W	16,677	4	0	3	122	17,966	5	0	3	131	18,193	5	0	3	133
				BLC	13,845	3	0	3	101	14,915	3	0	3	109	15,103	3	0	3	110
				LCCO	9,888	1	0	3	72	10,652	2	0	3	78	10,787	2	0	3	79
				RCCO	9,875	4	0	4	72	10,638	4	0	4	78	10,773	4	0	4	79
60	1050	**P12**	207W	T1S	22,996	4	0	4	111	24,773	4	0	4	120	25,087	4	0	4	121
				T2S	22,864	4	0	4	110	24,631	5	0	5	119	24,943	5	0	5	120
				T2M	23,277	4	0	4	112	25,075	4	0	4	121	25,393	4	0	4	123
				T3S	22,509	4	0	4	109	24,248	5	0	5	117	24,555	5	0	5	119
				T3M	23,263	4	0	4	112	25,061	4	0	4	121	25,378	4	0	4	123
				T4M	22,824	5	0	5	110	24,588	5	0	5	119	24,899	5	0	5	120
				TFTM	23,414	5	0	5	113	25,223	5	0	5	122	25,543	5	0	5	123
				T5VS	23,579	5	0	1	114	25,401	5	0	1	123	25,722	5	0	1	124
				T5S	23,380	4	0	2	113	25,187	4	0	2	122	25,506	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,165	5	0	4	112	24,955	5	0	4	121	25,271	5	0	4	122
				BLC	19,231	4	0	4	93	20,717	4	0	4	100	20,979	4	0	4	101
				LCCO	13,734	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,716	4	0	4	66	14,776	4	0	4	71	14,963	4	0	4	72
60	1250	**P13**	231W	T1S	25,400	4	0	4	110	27,363	4	0	4	118	27,709	4	0	4	120
				T2S	25,254	5	0	5	109	27,205	5	0	5	118	27,550	5	0	5	119
				T2M	25,710	4	0	4	111	27,696	4	0	4	120	28,047	4	0	4	121
				T3S	24,862	5	0	5	108	26,783	5	0	5	116	27,122	5	0	5	117
				T3M	25,695	5	0	5	111	27,680	5	0	5	120	28,031	5	0	5	121
				T4M	25,210	5	0	5	109	27,158	5	0	5	118	27,502	5	0	5	119
				TFTM	25,861	5	0	5	112	27,860	5	0	5	121	28,212	5	0	5	122
				T5VS	26,043	5	0	1	113	28,056	5	0	1	121	28,411	5	0	1	123
				T5S	25,824	4	0	2	112	27,819	5	0	2	120	28,172	5	0	2	122
				T5M	25,818	5	0	3	112	27,813	5	0	3	120	28,165	5	0	3	122
				T5W	25,586	5	0	4	111	27,563	5	0	4	119	27,912	5	0	4	121
				BLC	21,241	4	0	4	92	22,882	4	0	4	99	23,172	4	0	4	100
				LCCO	15,170	2	0	4	66	16,342	2	0	4	71	16,549	2	0	4	72
				RCCO	15,150	5	0	5	66	16,321	5	0	5	71	16,527	5	0	5	72

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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 is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 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.

OPTICS
Precision-molded proprietary acrylic 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. 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 L85/100,000 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 sensors with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 30 feet.

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
Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). NEMA photocontrol receptacle are also available.

LISTINGS
UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40ºC minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

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.

BUY AMERICAN
Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/customer-support/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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LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

FEATURES & SPECIFICATIONS

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

CONSTRUCTION —

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

Pole Top: Options include tenon top, drilled for side mount fixture, tenon with drilling (includes extra handhole) and open top. Side drilled and open top poles include a removable top cap.

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

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

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

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

FINISH — Extra durable painted finish is coated with TGIC (Triglycidyl Isocyanurate) Polyester powder that meets 5A and 5B classifications of ASTM D3359. Powder-coat finishes include Dark Bronze, White, Black, and Natural Aluminum colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes.

BUY AMERICAN — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

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

WARRANTY — 1-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.
Specifications subject to change without notice.

Anchor Base Poles

SSS

SQUARE STRAIGHT STEEL

Buy American

SSS Square Straight Steel Poles

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

Example: SSS 20 5C DM19 DDBXD

SSS	25= 25ft					FINISH = Specify
Series	**Nominal fixture mounting height**	**Nominal shaft base size/wall thickness[2]**	**Mounting[3]**		**Options**	**Finish[13]**
SSS[1]	10'-39' (for 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.) See technical information table for complete ordering information.)	4C 4" 11g (.1196") 4G 4" 7g (.1793") 5C 5" 11g (.1196") 5G 5" 7g (.1793") 6G 6" 7g (.1793") See technical information table for complete ordering information.)	Tenon mounting PT Open top (includes top cap) T20 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D. (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS) T35 4" O.D. (3-1/2" NPS) KAC/KAD/KSE/KSF/KVR/KVF Drill mounting[4] DM19 1 at 90° DM28 2 at 180° DM28 PL 2 at 180° with one side plugged DM29 2 at 90° DM39 3 at 90° DM49 4 at 90° CSX/DSX/RSX/AERIS™/OMERO™/ HLA/KAX Drill mounting[4] DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM39AS 3 at 90° DM49AS 4 at 90° RAD drill mounting[4] DM19RAD 1 at 90° DM28RAD 2 at 180° DM29RAD 2 at 90° DM39RAD 3 at 90° DM49RAD 4 at 90° ESX Drill mounting[4] DM19ESX 1 at 90° DM28ESX 2 at 180° DM29ESX 2 at 90° DM39ESX 3 at 90° DM49ESX 4 at 90°	AERIS™ Suspend drill mounting[4,5] DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90° DM39AST_ 3 at 90° DM49AST_ 4 at 90° OMERO™ Suspend drill mounting[4,5] DM19MRT_ 1 at 90° DM28MRT_ 2 at 180° DM29MRT_ 2 at 90° DM39MRT_ 3 at 90° DM49MRT_ 4 at 90°	Shipped installed VD Vibration damper[6] HAxy Horizontal arm bracket (1 fixture)[7,8] FDLxy Festoon outlet less electrical[7,9] CPL12/xy 1/2" coupling[7] CPL34/xy 3/4" coupling[7] CPL1/xy 1" coupling[7] NPL12/xy 1/2" threaded nipple[7] NPL34/xy 3/4" threaded nipple[7] NPL1/xy 1" threaded nipple[7] EHHxy Extra handhole[7,10] NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) IC Interior coating[11] L/AB Less anchor bolts (Include when anchor bolts are not needed) TP Tamper resistant handhole cover fasteners UL UL listed with label (Includes NEC compliant cover) BAA Buy America(n) Act Compliant[12]	Super durable paint colors DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white Other finishes GALV Galvanized finish Architectural colors and special finishes Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes available.

NOTES:

1. Handhole covers (HHC), full base covers (FBC) and top caps (TC) shipped separately. No need to call out in nomenclature. For additional parts please order as replacements.
2. Wall thickness will be signified with a "C" (11 Gauge) or a "G" (7-Gauge) in nomenclature. "C" - 0.1196" | "G" - 0.1793".
3. PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20. The combination includes a required extra handhole.
4. Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
5. Insert "1" or "2" to designate fixture size; e.g. DM19AST2.
6. On 4" and 5" poles, VD cannot be installed if provisions (EHH, FDL, NPL, CPL) are located higher than 2/3 of the pole's total height.
   Example: Pole height is 25ft, A provision cannot be placed above 16ft.
7. Specify location and orientation when ordering option.
   For "x": Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-".
   Example: 5ft = 5 and 20ft 3in = 20-3
   For "y": Specify orientation from handhole (A,B,C,D) Refer to the Handhole Orientation diagram below.
   Example: 1/2" coupling at 5' 8", orientation C = CPL12/5-8C
8. Horizontal arm is 18" x 2-3/8" O.D. tenon standard, with radius curve providing 12" rise and 2-3/8" O.D. If ordering two horizontal arm at the same height, specify with HAxyy. Example: HA20BD.
9. FDL does not come with GFCI outlet or handhole cover. These must be supplied by contractor or electrician.
10. Combination of tenon-top and drill mount includes extra handhole. EHH includes cover.
11. Provides enhanced corrosion resistance.
12. Use when mill certifications are required.
13. Finish must be specified. Additional colors available; see Architectural Colors brochure linked here (Form No. 794.3).

Accessories: *Order as separate catalog number.*

PL DT20	Plugs for ESX drillings
PL DT8	Plugs for DMxxAS drillings

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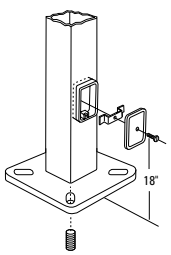
SSS Square Straight Steel Poles

TECHNICAL INFORMATION — EPA (ft^2) with 1.3 gust

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

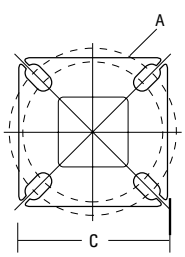
NOTE: * EPA values are based ASCE 7-93 wind map. For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

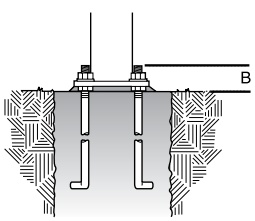
BASE DETAIL



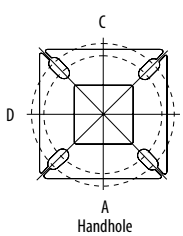
POLE DATA

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





HANDHOLE ORIENTATION



Default DM19 is on side B.

IMPORTANT INSTALLATION NOTES:

- **Do not** erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Lithonia Lighting is not responsible for the foundation design.
- Bolt circles have +/- 1/2" tolerance.

CAUTION: These specifications are intended for general purposes only. Lithonia Lighting reserves the right to change material or design, without prior notice, in a continuing effort to upgrade its products.

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D-Series Size 1
LED Area Luminaire

Buy American

Catalog Number

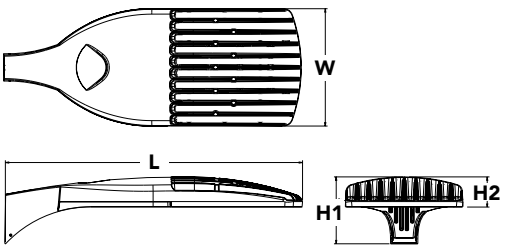
Notes

Type

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

Specifications

EPA:	1.01 ft² (0.09 m²)
Length:	33" (83.8 cm)
Width:	13" (33.0 cm)
Height H1:	7-1/2" (19.0 cm)
Height H2:	3-1/2"
Weight (max):	27 lbs (12.2 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

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

DSX1 LED — XXK = Specify

Series
DSX1 LED

LEDs
Forward optics
P1, P2, P3, P4[1], P5[1], P6[1], P7[1], P8, P9[1]
Rotated optics
P10[2], P11[2], P12[2], P13[1,2]

Color temperature
30K 3000 K
40K 4000 K
50K 5000 K

Distribution
T1S Type I short (Automotive)
T2S Type II short
T2M Type II medium
T3S Type III short
T3M Type III medium
T4M Type IV medium
TFTM Forward throw medium
T5VS Type V very short[3]
T5S Type V short[3]
T5M Type V medium[3]
T5W Type V wide[3]
BLC Backlight control[4]
LCCO Left corner cutoff[4]
RCCO Right corner cutoff[4]

Voltage
MVOLT[5]
XVOLT (277V-480V)[6,7,8]
120[9]
208[9]
240[9]
277[9]
347[9]
480[9]

Mounting
Shipped included
SPA Square pole mounting
RPA Round pole mounting[10]
WBA Wall bracket[3]
SPUMBA Square pole universal mounting adaptor[11]
RPUMBA Round pole universal mounting adaptor[9]
Shipped separately
KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[12]

FINISH = Specify

Control options
Shipped installed
NLTAIR2 nLight AIR generation 2 enabled[13]
PIRHN Network, high/low motion/ambient sensor[14]
PER NEMA twist-lock receptacle only (controls ordered separate)[15]
PER5 Five-pin receptacle only (controls ordered separate)[15,16]
PER7 Seven-pin receptacle only (controls ordered separate)[15,16]
DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[17]
DS Dual switching[18,19,20]
PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[20,21]
PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[20,21]
PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[20,21]
PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[20,21]
FAO Field adjustable output[20,21]

Other options
Shipped installed
HS House-side shield[23]
SF Single fuse (120, 277, 347V)[9]
DF Double fuse (208, 240, 480V)[9]
L90 Left rotated optics[2]
R90 Right rotated optics[2]
HA 50°C ambient operations[1]
BAA Buy America(n) Act Compliant
Shipped separately
BS Bird spikes[24]
EGS External glare shield

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.

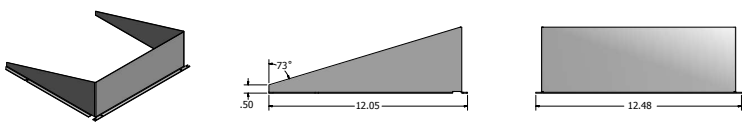
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [25]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [25]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [25]
DSHORT SBK U	Shorting cap [25]
DSX1HS 30C U	House-side shield for P1, P2, P3, P4 and P5 [23]
DSX1HS 40C U	House-side shield for P6 and P7 [23]
DSX1HS 60C U	House-side shield for P8, P9, P10, P11 and P12 [23]
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish) [26]
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) [12]
DSX1EGS (FINISH) U	External glare shield

For more control options, visit DTL and ROAM online.

NOTES
1 HA not available with P4, P5, P6, P7, P9 and P13.
2 P10, P11, P12 or P13 and rotated optics (L90, R90) only available together.
3 Any Type 5 distribution with photocell, is not available with WBA.
4 Not available with HS.
5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
6 XVOLT only suitable for use with P3, P5, P6, P7, P9 and P13.
7 XVOLT works with any voltage between 277V and 480V.
8 XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V.
9 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF.
10 Suitable for mounting to round poles between 3.5" and 12" diameter.
11 Universal mounting brackets intended for retrofit on existing, pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31. Only usable when pole's drill pattern is NOT Lithonia template #8
12 Must order fixture with SPA option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" diameter mast arm (not included).
13 Must be ordered with PIRHN. Sensor cover available only in dark bronze, black, white and natural aluminum colors.
14 Must be ordered with NLTAIR2. For more information on nLight Air 2 visit this link.
15 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting cap included.
16 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Node with integral dimming.
17 DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V, FAO.
18 Provides 50/50fixture operation via (2) independent drivers. Not available with PER, PER5, PER7, PIR or PIRH. Not available P1, P2, P3, P4 or P5.
19 Requires (2) separately switched circuits with isolated neutrol.
20 Reference Controls Option Default settings table on page 4.
21 Reference Motion Sensor table on page 4 to see functionality.
22 Not available with other dimming controls options.
23 Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
24 Must be ordered with fixture for factory pre-drilling.
25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Control Option Table on page 4.
26 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template #8.

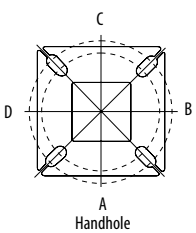
Options

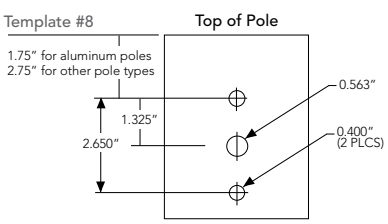
EGS - External Glare Shield



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

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 LED	1.013	2.025	1.945	3.038	2.850	3.749

	Drilling Template	Minimum Acceptable Outside Pole Dimension					
SPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
RPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
SPUMBA	#5	2-7/8"	3"	4"	4"	3.5"	4"
RPUMBA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"

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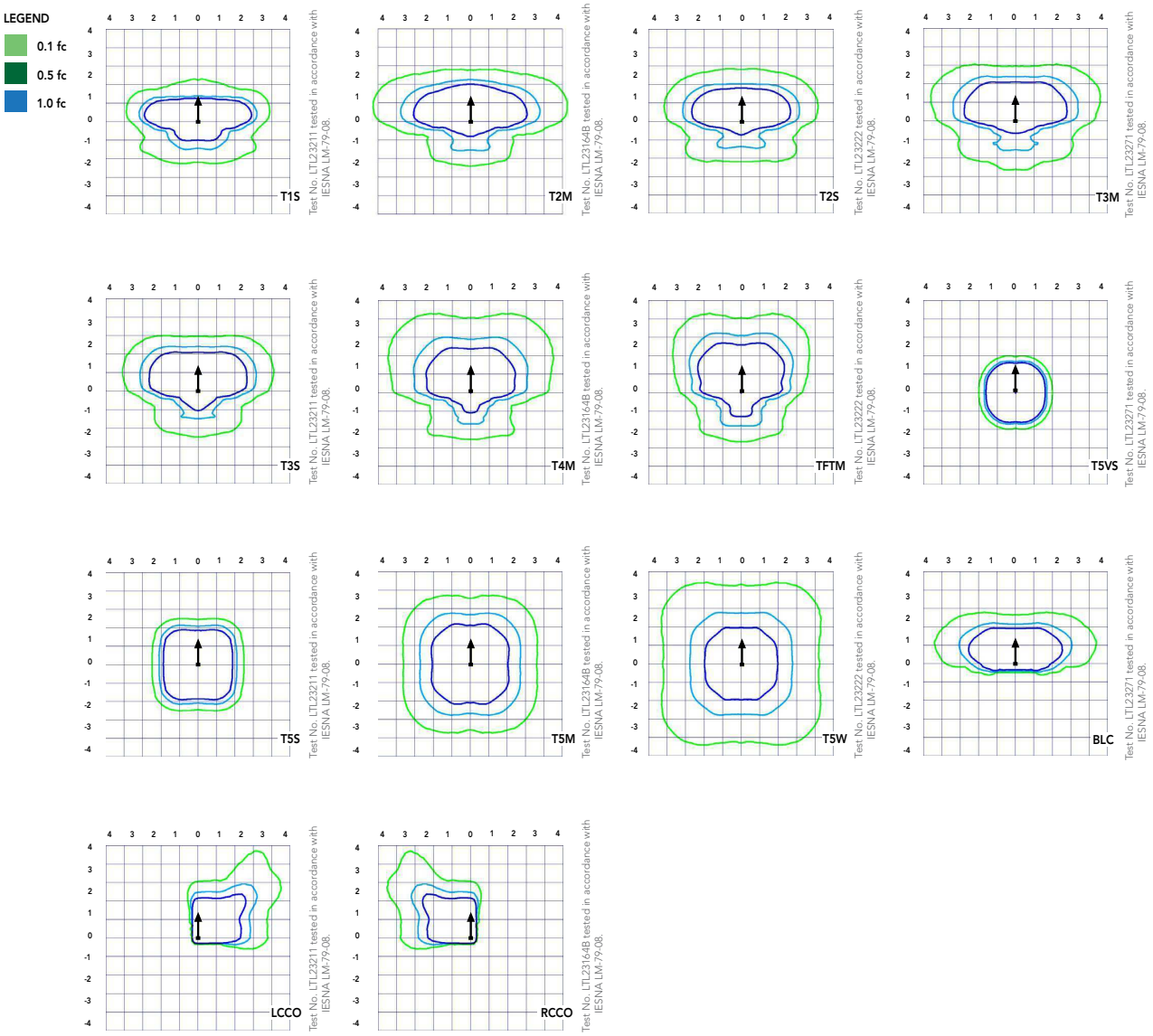
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 1 homepage.

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (25').



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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°F**	**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	0.96
50,000	0.92
100,000	0.85

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Phototcell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min
*for use when motion sensor is used as dusk to dawn control.						

Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A) 120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	30	530	54	0.45	0.26	0.23	0.19	0.10	0.12
	P2	30	700	70	0.59	0.34	0.30	0.25	0.20	0.16
	P3	30	1050	102	0.86	0.50	0.44	0.38	0.30	0.22
	P4	30	1250	125	1.06	0.60	0.52	0.46	0.37	0.27
	P5	30	1400	138	1.16	0.67	0.58	0.51	0.40	0.29
	P6	40	1250	163	1.36	0.78	0.68	0.59	0.47	0.34
	P7	40	1400	183	1.53	0.88	0.76	0.66	0.53	0.38
	P8	60	1050	207	1.74	0.98	0.87	0.76	0.64	0.49
	P9	60	1250	241	2.01	1.16	1.01	0.89	0.70	0.51
Rotated Optics (Requires L90 or R90)	P10	60	530	106	0.90	0.52	0.47	0.43	0.33	0.27
	P11	60	700	137	1.15	0.67	0.60	0.53	0.42	0.32
	P12	60	1050	207	1.74	0.99	0.87	0.76	0.60	0.46
	P13	60	1250	231	1.93	1.12	0.97	0.86	0.67	0.49

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	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 recepticle	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
PIR or PIRH	Motion sensors with integral photocell. PIR for 8-15' mounting; PIRH for 15-30' mounting	Luminaires dim when no occupancy is detected.	Acuity Controls SBGR	Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation.
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 rSDGR	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app.

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Performance Data

Lumen Output

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

Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30	530	P1	54W	T1S	6,457	2	0	2	120	6,956	2	0	2	129	7,044	2	0	2	130
				T2S	6,450	2	0	2	119	6,949	2	0	2	129	7,037	2	0	2	130
				T2M	6,483	1	0	1	120	6,984	2	0	2	129	7,073	2	0	2	131
				T3S	6,279	2	0	2	116	6,764	2	0	2	125	6,850	2	0	2	127
				T3M	6,468	1	0	2	120	6,967	1	0	2	129	7,056	1	0	2	131
				T4M	6,327	1	0	2	117	6,816	1	0	2	126	6,902	1	0	2	128
				TFTM	6,464	1	0	2	120	6,963	1	0	2	129	7,051	1	0	2	131
				T5VS	6,722	2	0	0	124	7,242	3	0	0	134	7,334	3	0	0	136
				T5S	6,728	2	0	1	125	7,248	2	0	1	134	7,340	2	0	1	136
				T5M	6,711	3	0	1	124	7,229	3	0	1	134	7,321	3	0	2	136
				T5W	6,667	3	0	2	123	7,182	3	0	2	133	7,273	3	0	2	135
				BLC	5,299	1	0	1	98	5,709	1	0	2	106	5,781	1	0	2	107
				LCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
				RCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
30	700	P2	70W	T1S	8,249	2	0	2	118	8,886	2	0	2	127	8,999	2	0	2	129
				T2S	8,240	2	0	2	118	8,877	2	0	2	127	8,989	2	0	2	128
				T2M	8,283	2	0	2	118	8,923	2	0	2	127	9,036	2	0	2	129
				T3S	8,021	2	0	2	115	8,641	2	0	2	123	8,751	2	0	2	125
				T3M	8,263	2	0	2	118	8,901	2	0	2	127	9,014	2	0	2	129
				T4M	8,083	2	0	2	115	8,708	2	0	2	124	8,818	2	0	2	126
				TFTM	8,257	2	0	2	118	8,896	2	0	2	127	9,008	2	0	2	129
				T5VS	8,588	3	0	0	123	9,252	3	0	0	132	9,369	3	0	0	134
				T5S	8,595	3	0	1	123	9,259	3	0	1	132	9,376	3	0	1	134
				T5M	8,573	3	0	2	122	9,236	3	0	2	132	9,353	3	0	2	134
				T5W	8,517	3	0	2	122	9,175	4	0	2	131	9,291	4	0	2	133
				BLC	6,770	1	0	2	97	7,293	1	0	2	104	7,386	1	0	2	106
				LCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
				RCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
30	1050	P3	102W	T1S	11,661	2	0	2	114	12,562	3	0	3	123	12,721	3	0	3	125
				T2S	11,648	2	0	2	114	12,548	3	0	3	123	12,707	3	0	3	125
				T2M	11,708	2	0	2	115	12,613	2	0	2	124	12,773	2	0	2	125
				T3S	11,339	2	0	2	111	12,215	3	0	3	120	12,370	3	0	3	121
				T3M	11,680	2	0	2	115	12,582	2	0	2	123	12,742	2	0	2	125
				T4M	11,426	2	0	3	112	12,309	2	0	3	121	12,465	2	0	3	122
				TFTM	11,673	2	0	2	114	12,575	2	0	3	123	12,734	2	0	3	125
				T5VS	12,140	3	0	1	119	13,078	3	0	1	128	13,244	3	0	1	130
				T5S	12,150	3	0	1	119	13,089	3	0	1	128	13,254	3	0	1	130
				T5M	12,119	4	0	2	119	13,056	4	0	2	128	13,221	4	0	2	130
				T5W	12,040	4	0	3	118	12,970	4	0	3	127	13,134	4	0	3	129
				BLC	9,570	1	0	2	94	10,310	1	0	2	101	10,440	1	0	2	102
				LCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
				RCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
30	1250	P4	125W	T1S	13,435	3	0	3	107	14,473	3	0	3	116	14,657	3	0	3	117
				T2S	13,421	3	0	3	107	14,458	3	0	3	116	14,641	3	0	3	117
				T2M	13,490	2	0	2	108	14,532	3	0	3	116	14,716	3	0	3	118
				T3S	13,064	3	0	3	105	14,074	3	0	3	113	14,252	3	0	3	114
				T3M	13,457	2	0	2	108	14,497	2	0	2	116	14,681	2	0	2	117
				T4M	13,165	2	0	3	105	14,182	2	0	3	113	14,362	2	0	3	115
				TFTM	13,449	2	0	3	108	14,488	2	0	3	116	14,672	2	0	3	117
				T5VS	13,987	4	0	1	112	15,068	4	0	1	121	15,259	4	0	1	122
				T5S	13,999	3	0	1	112	15,080	3	0	1	121	15,271	3	0	1	122
				T5M	13,963	4	0	2	112	15,042	4	0	2	120	15,233	4	0	2	122
				T5W	13,872	4	0	3	111	14,944	4	0	3	120	15,133	4	0	3	121
				BLC	11,027	1	0	2	88	11,879	1	0	2	95	12,029	1	0	2	96
				LCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
				RCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
30	1400	P5	138W	T1S	14,679	3	0	3	106	15,814	3	0	3	115	16,014	3	0	3	116
				T2S	14,664	3	0	3	106	15,797	3	0	3	114	15,997	3	0	3	116
				T2M	14,739	3	0	3	107	15,878	3	0	3	115	16,079	3	0	3	117
				T3S	14,274	3	0	3	103	15,377	3	0	3	111	15,572	3	0	3	113
				T3M	14,704	2	0	3	107	15,840	3	0	3	115	16,040	3	0	3	116
				T4M	14,384	2	0	3	104	15,496	3	0	3	112	15,692	3	0	3	114
				TFTM	14,695	2	0	3	106	15,830	3	0	3	115	16,030	3	0	3	116
				T5VS	15,283	4	0	1	111	16,464	4	0	1	119	16,672	4	0	1	121
				T5S	15,295	3	0	1	111	16,477	4	0	1	119	16,686	4	0	1	121
				T5M	15,257	4	0	2	111	16,435	4	0	2	119	16,644	4	0	2	121
				T5W	15,157	4	0	3	110	16,328	4	0	3	118	16,534	4	0	3	120
				BLC	12,048	1	0	2	87	12,979	1	0	2	94	13,143	1	0	2	95
				LCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71
				RCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71

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Performance Data

Lumen Output

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

Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40	1250	P6	163W	T1S	17,654	3	0	3	108	19,018	3	0	3	117	19,259	3	0	3	118
				T2S	17,635	3	0	3	108	18,998	3	0	3	117	19,238	3	0	3	118
				T2M	17,726	3	0	3	109	19,096	3	0	3	117	19,337	3	0	3	119
				T3S	17,167	3	0	3	105	18,493	3	0	3	113	18,727	3	0	3	115
				T3M	17,683	3	0	3	108	19,049	3	0	3	117	19,290	3	0	3	118
				T4M	17,299	3	0	3	106	18,635	3	0	4	114	18,871	3	0	4	116
				TFTM	17,672	3	0	3	108	19,038	3	0	4	117	19,279	3	0	4	118
				T5VS	18,379	4	0	1	113	19,800	4	0	1	121	20,050	4	0	1	123
				T5S	18,394	4	0	2	113	19,816	4	0	2	122	20,066	4	0	2	123
				T5M	18,348	4	0	2	113	19,766	4	0	2	121	20,016	4	0	2	123
				T5W	18,228	5	0	3	112	19,636	5	0	3	120	19,885	5	0	3	122
				BLC	14,489	2	0	2	89	15,609	2	0	3	96	15,806	2	0	3	97
				LCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
				RCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
40	1400	P7	183W	T1S	19,227	3	0	3	105	20,712	3	0	3	113	20,975	3	0	3	115
				T2S	19,206	3	0	3	105	20,690	3	0	3	113	20,952	3	0	3	114
				T2M	19,305	3	0	3	105	20,797	3	0	3	114	21,060	3	0	3	115
				T3S	18,696	3	0	3	102	20,141	3	0	3	110	20,396	3	0	4	111
				T3M	19,258	3	0	3	105	20,746	3	0	3	113	21,009	3	0	3	115
				T4M	18,840	3	0	4	103	20,296	3	0	4	111	20,553	3	0	4	112
				TFTM	19,246	3	0	4	105	20,734	3	0	4	113	20,996	3	0	4	115
				T5VS	20,017	4	0	1	109	21,564	4	0	1	118	21,837	4	0	1	119
				T5S	20,033	4	0	2	109	21,581	4	0	2	118	21,854	4	0	2	119
				T5M	19,983	4	0	2	109	21,527	5	0	3	118	21,799	5	0	3	119
				T5W	19,852	5	0	3	108	21,386	5	0	3	117	21,656	5	0	3	118
				BLC	15,780	2	0	3	86	16,999	2	0	3	93	17,214	2	0	3	94
				LCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
				RCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
60	1050	P8	207W	T1S	22,490	3	0	3	109	24,228	3	0	3	117	24,535	3	0	3	119
				T2S	22,466	3	0	4	109	24,202	3	0	4	117	24,509	3	0	4	118
				T2M	22,582	3	0	3	109	24,327	3	0	3	118	24,635	3	0	3	119
				T3S	21,870	3	0	4	106	23,560	3	0	4	114	23,858	3	0	4	115
				T3M	22,527	3	0	4	109	24,268	3	0	4	117	24,575	3	0	4	119
				T4M	22,038	3	0	4	106	23,741	3	0	4	115	24,041	3	0	4	116
				TFTM	22,513	3	0	4	109	24,253	3	0	4	117	24,560	3	0	4	119
				T5VS	23,415	5	0	1	113	25,224	5	0	1	122	25,543	5	0	1	123
				T5S	23,434	4	0	2	113	25,244	4	0	2	122	25,564	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,221	5	0	4	112	25,016	5	0	4	121	25,332	5	0	4	122
				BLC	18,458	2	0	3	89	19,885	2	0	3	96	20,136	2	0	3	97
				LCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
60	1250	P9	241W	T1S	25,575	3	0	3	106	27,551	3	0	3	114	27,900	3	0	3	116
				T2S	25,548	3	0	4	106	27,522	3	0	4	114	27,871	3	0	4	116
				T2M	25,680	3	0	3	107	27,664	3	0	3	115	28,014	3	0	3	116
				T3S	24,870	3	0	4	103	26,791	3	0	4	111	27,130	3	0	4	113
				T3M	25,617	3	0	4	106	27,597	3	0	4	115	27,946	3	0	4	116
				T4M	25,061	3	0	4	104	26,997	3	0	4	112	27,339	3	0	4	113
				TFTM	25,602	3	0	4	106	27,580	3	0	4	114	27,929	3	0	4	116
				T5VS	26,626	5	0	1	110	28,684	5	0	1	119	29,047	5	0	1	121
				T5S	26,648	4	0	2	111	28,707	5	0	2	119	29,070	5	0	2	121
				T5M	26,581	5	0	3	110	28,635	5	0	3	119	28,997	5	0	3	120
				T5W	26,406	5	0	4	110	28,447	5	0	4	118	28,807	5	0	4	120
				BLC	20,990	2	0	3	87	22,612	2	0	3	94	22,898	2	0	3	95
				LCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71
				RCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71

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Performance Data

Lumen Output

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

Rotated Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60	530	**P10**	106W	T1S	13,042	3	0	3	123	14,050	3	0	3	133	14,228	3	0	3	134
				T2S	12,967	4	0	4	122	13,969	4	0	4	132	14,146	4	0	4	133
				T2M	13,201	3	0	3	125	14,221	3	0	3	134	14,401	3	0	3	136
				T3S	12,766	4	0	4	120	13,752	4	0	4	130	13,926	4	0	4	131
				T3M	13,193	4	0	4	124	14,213	4	0	4	134	14,393	4	0	4	136
				T4M	12,944	4	0	4	122	13,945	4	0	4	132	14,121	4	0	4	133
				TFTM	13,279	4	0	4	125	14,305	4	0	4	135	14,486	4	0	4	137
				T5VS	13,372	3	0	1	126	14,405	4	0	1	136	14,588	4	0	1	138
				T5S	13,260	3	0	1	125	14,284	3	0	1	135	14,465	3	0	1	136
				T5M	13,256	4	0	2	125	14,281	4	0	2	135	14,462	4	0	2	136
				T5W	13,137	4	0	3	124	14,153	4	0	3	134	14,332	4	0	3	135
				BLC	10,906	3	0	3	103	11,749	3	0	3	111	11,898	3	0	3	112
				LCCO	7,789	1	0	3	73	8,391	1	0	3	79	8,497	1	0	3	80
				RCCO	7,779	4	0	4	73	8,380	4	0	4	79	8,486	4	0	4	80
60	700	**P11**	137W	T1S	16,556	3	0	3	121	17,835	3	0	3	130	18,061	4	0	4	132
				T2S	16,461	4	0	4	120	17,733	4	0	4	129	17,957	4	0	4	131
				T2M	16,758	4	0	4	122	18,053	4	0	4	132	18,281	4	0	4	133
				T3S	16,205	4	0	4	118	17,457	4	0	4	127	17,678	4	0	4	129
				T3M	16,748	4	0	4	122	18,042	4	0	4	132	18,271	4	0	4	133
				T4M	16,432	4	0	4	120	17,702	4	0	4	129	17,926	4	0	4	131
				TFTM	16,857	4	0	4	123	18,159	4	0	4	133	18,389	4	0	4	134
				T5VS	16,975	4	0	1	124	18,287	4	0	1	133	18,518	4	0	1	135
				T5S	16,832	4	0	1	123	18,133	4	0	2	132	18,362	4	0	2	134
				T5M	16,828	4	0	2	123	18,128	4	0	2	132	18,358	4	0	2	134
				T5W	16,677	4	0	3	122	17,966	5	0	3	131	18,193	5	0	3	133
				BLC	13,845	3	0	3	101	14,915	3	0	3	109	15,103	3	0	3	110
				LCCO	9,888	1	0	3	72	10,652	2	0	3	78	10,787	2	0	3	79
				RCCO	9,875	4	0	4	72	10,638	4	0	4	78	10,773	4	0	4	79
60	1050	**P12**	207W	T1S	22,996	4	0	4	111	24,773	4	0	4	120	25,087	4	0	4	121
				T2S	22,864	4	0	4	110	24,631	5	0	5	119	24,943	5	0	5	120
				T2M	23,277	4	0	4	112	25,075	4	0	4	121	25,393	4	0	4	123
				T3S	22,509	4	0	4	109	24,248	5	0	5	117	24,555	5	0	5	119
				T3M	23,263	4	0	4	112	25,061	4	0	4	121	25,378	4	0	4	123
				T4M	22,824	5	0	5	110	24,588	5	0	5	119	24,899	5	0	5	120
				TFTM	23,414	5	0	5	113	25,223	5	0	5	122	25,543	5	0	5	123
				T5VS	23,579	5	0	1	114	25,401	5	0	1	123	25,722	5	0	1	124
				T5S	23,380	4	0	2	113	25,187	4	0	2	122	25,506	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,165	5	0	4	112	24,955	5	0	4	121	25,271	5	0	4	122
				BLC	19,231	4	0	4	93	20,717	4	0	4	100	20,979	4	0	4	101
				LCCO	13,734	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,716	4	0	4	66	14,776	4	0	4	71	14,963	4	0	4	72
60	1250	**P13**	231W	T1S	25,400	4	0	4	110	27,363	4	0	4	118	27,709	4	0	4	120
				T2S	25,254	5	0	5	109	27,205	5	0	5	118	27,550	5	0	5	119
				T2M	25,710	4	0	4	111	27,696	4	0	4	120	28,047	4	0	4	121
				T3S	24,862	5	0	5	108	26,783	5	0	5	116	27,122	5	0	5	117
				T3M	25,695	5	0	5	111	27,680	5	0	5	120	28,031	5	0	5	121
				T4M	25,210	5	0	5	109	27,158	5	0	5	118	27,502	5	0	5	119
				TFTM	25,861	5	0	5	112	27,860	5	0	5	121	28,212	5	0	5	122
				T5VS	26,043	5	0	1	113	28,056	5	0	1	121	28,411	5	0	1	123
				T5S	25,824	4	0	2	112	27,819	5	0	2	120	28,172	5	0	2	122
				T5M	25,818	5	0	3	112	27,813	5	0	3	120	28,165	5	0	3	122
				T5W	25,586	5	0	4	111	27,563	5	0	4	119	27,912	5	0	4	121
				BLC	21,241	4	0	4	92	22,882	4	0	4	99	23,172	4	0	4	100
				LCCO	15,170	2	0	4	66	16,342	2	0	4	71	16,549	2	0	4	72
				RCCO	15,150	5	0	5	66	16,321	5	0	5	71	16,527	5	0	5	72

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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 is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 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.

OPTICS
Precision-molded proprietary acrylic 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. 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 L85/100,000 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 sensors with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 30 feet.

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
Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). NEMA photocontrol receptacle are also available.

LISTINGS
UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40ºC minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

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.

BUY AMERICAN
Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/customer-support/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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LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

Anchor Base Poles

SSS

SQUARE STRAIGHT STEEL

Buy American

FEATURES & SPECIFICATIONS

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

CONSTRUCTION —

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

Pole Top: Options include tenon top, drilled for side mount fixture, tenon with drilling (includes extra handhole) and open top. Side drilled and open top poles include a removable top cap.

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

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

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

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

FINISH — Extra durable painted finish is coated with TGIC (Triglycidyl Isocyanurate) Polyester powder that meets 5A and 5B classifications of ASTM D3359. Powder-coat finishes include Dark Bronze, White, Black, and Natural Aluminum colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes.

BUY AMERICAN — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

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

WARRANTY — 1-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.
Specifications subject to change without notice.

SSS Square Straight Steel Poles

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

Example: SSS 20 5C DM19 DDBXD

SSS	25= 25ft					FINISH = Specify
Series	**Nominal fixture mounting height**	**Nominal shaft base size/wall thickness[2]**	**Mounting[3]**		**Options**	**Finish[13]**
SSS[1]	10'-39' (for 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.) See technical information table for complete ordering information.)	4C 4" 11g (.1196") 4G 4" 7g (.1793") 5C 5" 11g (.1196") 5G 5" 7g (.1793") 6G 6" 7g (.1793") See technical information table for complete ordering information.)	Tenon mounting PT Open top (includes top cap) T20 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D. (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS) T35 4" O.D. (3-1/2" NPS) KAC/KAD/KSE/KSF/KVR/KVF Drill mounting[4] DM19 1 at 90° DM28 2 at 180° DM28 PL 2 at 180° with one side plugged DM29 2 at 90° DM39 3 at 90° DM49 4 at 90° CSX/DSX/RSX/AERIS™/OMERO™/ HLA/KAX Drill mounting[4] DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM39AS 3 at 90° DM49AS 4 at 90° RAD drill mounting[4] DM19RAD 1 at 90° DM28RAD 2 at 180° DM29RAD 2 at 90° DM39RAD 3 at 90° DM49RAD 4 at 90° ESX Drill mounting[4] DM19ESX 1 at 90° DM28ESX 2 at 180° DM29ESX 2 at 90° DM39ESX 3 at 90° DM49ESX 4 at 90°	AERIS™ Suspend drill mounting[4,5] DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90° DM39AST_ 3 at 90° DM49AST_ 4 at 90° OMERO™ Suspend drill mounting[4,5] DM19MRT_ 1 at 90° DM28MRT_ 2 at 180° DM29MRT_ 2 at 90° DM39MRT_ 3 at 90° DM49MRT_ 4 at 90°	Shipped installed VD Vibration damper[6] HAxy Horizontal arm bracket (1 fixture)[7,8] FDLxy Festoon outlet less electrical[7,9] CPL12/xy 1/2" coupling[7] CPL34/xy 3/4" coupling[7] CPL1/xy 1" coupling[7] NPL12/xy 1/2" threaded nipple[7] NPL34/xy 3/4" threaded nipple[7] NPL1/xy 1" threaded nipple[7] EHHxy Extra handhole[7,10] NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) IC Interior coating[11] L/AB Less anchor bolts (Include when anchor bolts are not needed) TP Tamper resistant handhole cover fasteners UL UL listed with label (Includes NEC compliant cover) BAA Buy America(n) Act Compliant[12]	Super durable paint colors DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white Other finishes GALV Galvanized finish Architectural colors and special finishes Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes available.

NOTES:

1. Handhole covers (HHC), full base covers (FBC) and top caps (TC) shipped separately. No need to call out in nomenclature. For additional parts please order as replacements.
2. Wall thickness will be signified with a "C" (11 Gauge) or a "G" (7-Gauge) in nomenclature. "C" - 0.1196" | "G" - 0.1793".
3. PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20. The combination includes a required extra handhole.
4. Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
5. Insert "1" or "2" to designate fixture size; e.g. DM19AST2.
6. On 4" and 5" poles, VD cannot be installed if provisions (EHH, FDL, NPL, CPL) are located higher than 2/3 of the pole's total height.
   Example: Pole height is 25ft, A provision cannot be placed above 16ft.
7. Specify location and orientation when ordering option.
   For "x": Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-".
   Example: 5ft = 5 and 20ft 3in = 20-3
   For "y": Specify orientation from handhole (A,B,C,D) Refer to the Handhole Orientation diagram below.
   Example: 1/2" coupling at 5' 8", orientation C = CPL12/5-8C
8. Horizontal arm is 18" x 2-3/8" O.D. tenon standard, with radius curve providing 12" rise and 2-3/8" O.D. If ordering two horizontal arm at the same height, specify with HAxyy. Example: HA20BD.
9. FDL does not come with GFCI outlet or handhole cover. These must be supplied by contractor or electrician.
10. Combination of tenon-top and drill mount includes extra handhole. EHH includes cover.
11. Provides enhanced corrosion resistance.
12. Use when mill certifications are required.
13. Finish must be specified. Additional colors available; see Architectural Colors brochure linked here (Form No. 794.3).

Accessories: *Order as separate catalog number.*

PL DT20	Plugs for ESX drillings
PL DT8	Plugs for DMxxAS drillings

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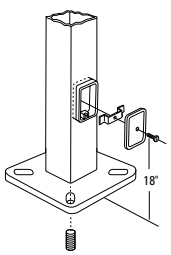
SSS Square Straight Steel Poles

TECHNICAL INFORMATION — EPA (ft^2) with 1.3 gust

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

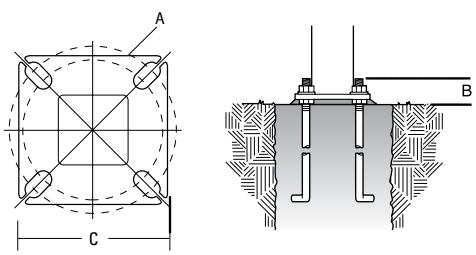
NOTE: * EPA values are based ASCE 7-93 wind map. For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

BASE DETAIL

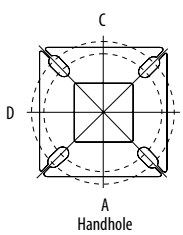


POLE DATA

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



HANDHOLE ORIENTATION



Default DM19 is on side B.

IMPORTANT INSTALLATION NOTES:

- **Do not** erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Lithonia Lighting is not responsible for the foundation design.
- Bolt circles have +/- 1/2" tolerance.

CAUTION: These specifications are intended for general purposes only. Lithonia Lighting reserves the right to change material or design, without prior notice, in a continuing effort to upgrade its products.

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D-Series Size 1
LED Area Luminaire

Buy American

Catalog Number

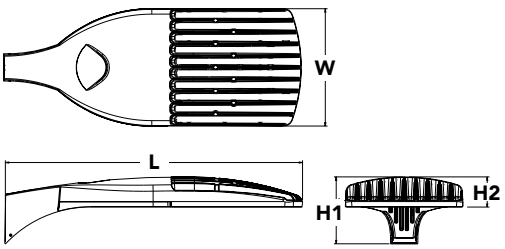
Notes

Type

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

Specifications

EPA:	1.01 ft² (0.09 m²)
Length:	33" (83.8 cm)
Width:	13" (33.0 cm)
Height H1:	7-1/2" (19.0 cm)
Height H2:	3-1/2"
Weight (max):	27 lbs (12.2 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

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

DSX1 LED — XXK = Specify

Series
DSX1 LED

LEDs
Forward optics
P1, P2, P3, P4[1], P5[1], P6[1], P7[1], P8, P9[1]
Rotated optics
P10[2], P11[2], P12[2], P13[1,2]

Color temperature
30K 3000 K
40K 4000 K
50K 5000 K

Distribution
T1S Type I short (Automotive)
T2S Type II short
T2M Type II medium
T3S Type III short
T3M Type III medium
T4M Type IV medium
TFTM Forward throw medium
T5VS Type V very short[3]
T5S Type V short[3]
T5M Type V medium[3]
T5W Type V wide[3]
BLC Backlight control[4]
LCCO Left corner cutoff[4]
RCCO Right corner cutoff[4]

Voltage
MVOLT[5]
XVOLT (277V-480V)[6,7,8]
120[9]
208[9]
240[9]
277[9]
347[9]
480[9]

Mounting
Shipped included
SPA Square pole mounting
RPA Round pole mounting[10]
WBA Wall bracket[3]
SPUMBA Square pole universal mounting adaptor[11]
RPUMBA Round pole universal mounting adaptor[9]
Shipped separately
KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[12]

FINISH = Specify

Control options
Shipped installed
NLTAIR2 nLight AIR generation 2 enabled[13]
PIRHN Network, high/low motion/ambient sensor[14]
PER NEMA twist-lock receptacle only (controls ordered separate)[15]
PER5 Five-pin receptacle only (controls ordered separate)[15,16]
PER7 Seven-pin receptacle only (controls ordered separate)[15,16]
DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[17]
DS Dual switching[18,19,20]
PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[20,21]
PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[20,21]
PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[20,21]
PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[20,21]
FAO Field adjustable output[20,21]

Other options
Shipped installed
HS House-side shield[23]
SF Single fuse (120, 277, 347V)[9]
DF Double fuse (208, 240, 480V)[9]
L90 Left rotated optics[2]
R90 Right rotated optics[2]
HA 50°C ambient operations[1]
BAA Buy America(n) Act Compliant
Shipped separately
BS Bird spikes[24]
EGS External glare shield

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.

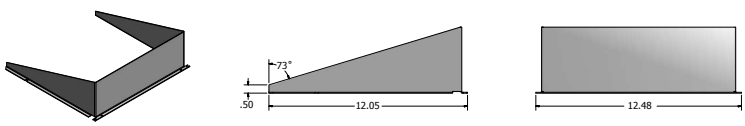
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [25]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [25]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [25]
DSHORT SBK U	Shorting cap [25]
DSX1HS 30C U	House-side shield for P1, P2, P3, P4 and P5 [23]
DSX1HS 40C U	House-side shield for P6 and P7 [23]
DSX1HS 60C U	House-side shield for P8, P9, P10, P11 and P12 [23]
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish) [26]
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) [12]
DSX1EGS (FINISH) U	External glare shield

For more control options, visit DTL and ROAM online.

NOTES
1 HA not available with P4, P5, P6, P7, P9 and P13.
2 P10, P11, P12 or P13 and rotated optics (L90, R90) only available together.
3 Any Type 5 distribution with photocell, is not available with WBA.
4 Not available with HS.
5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
6 XVOLT only suitable for use with P3, P5, P6, P7, P9 and P13.
7 XVOLT works with any voltage between 277V and 480V.
8 XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V.
9 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF.
10 Suitable for mounting to round poles between 3.5" and 12" diameter.
11 Universal mounting brackets intended for retrofit on existing, pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31. Only usable when pole's drill pattern is NOT Lithonia template #8
12 Must order fixture with SPA option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" diameter mast arm (not included).
13 Must be ordered with PIRHN. Sensor cover available only in dark bronze, black, white and natural aluminum colors.
14 Must be ordered with NLTAIR2. For more information on nLight Air 2 visit this link.
15 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting cap included.
16 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Node with integral dimming.
17 DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V, FAO.
18 Provides 50/50fixture operation via (2) independent drivers. Not available with PER, PER5, PER7, PIR or PIRH. Not available P1, P2, P3, P4 or P5.
19 Requires (2) separately switched circuits with isolated neutrol.
20 Reference Controls Option Default settings table on page 4.
21 Reference Motion Sensor table on page 4 to see functionality.
22 Not available with other dimming controls options.
23 Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
24 Must be ordered with fixture for factory pre-drilling.
25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Control Option Table on page 4.
26 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template #8.

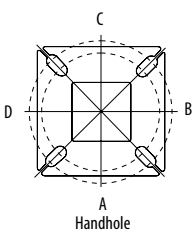
Options

EGS - External Glare Shield

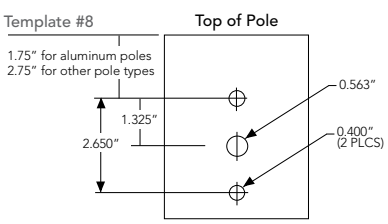


Drilling

HANDHOLE ORIENTATION



Template #8



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

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 LED	1.013	2.025	1.945	3.038	2.850	3.749

	Drilling Template	Minimum Acceptable Outside Pole Dimension					
SPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
RPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
SPUMBA	#5	2-7/8"	3"	4"	4"	3.5"	4"
RPUMBA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"

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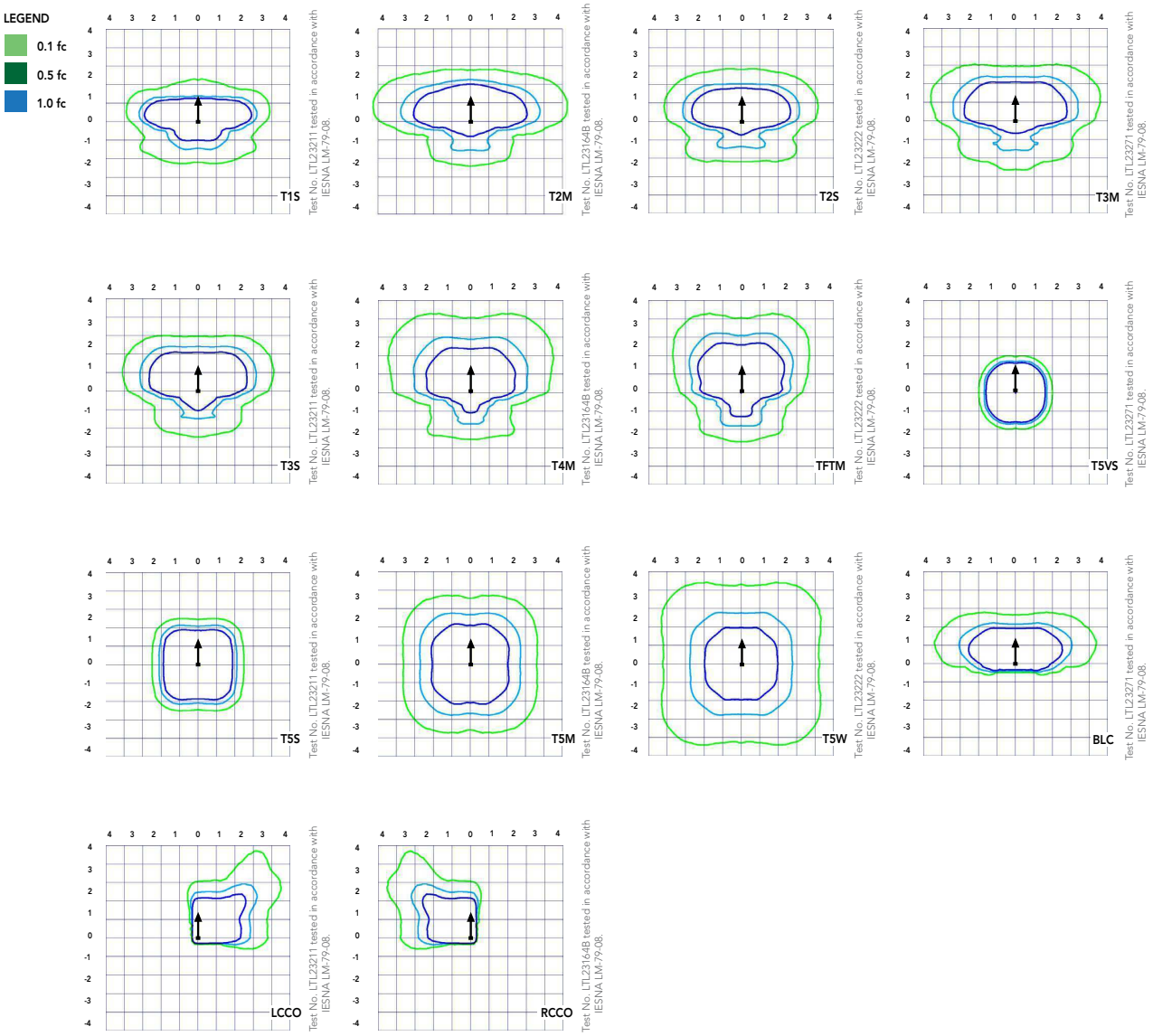
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 1 homepage.

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (25').



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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°F**	**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	0.96
50,000	0.92
100,000	0.85

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Phototcell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min
*for use when motion sensor is used as dusk to dawn control.						

Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A) 120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	30	530	54	0.45	0.26	0.23	0.19	0.10	0.12
	P2	30	700	70	0.59	0.34	0.30	0.25	0.20	0.16
	P3	30	1050	102	0.86	0.50	0.44	0.38	0.30	0.22
	P4	30	1250	125	1.06	0.60	0.52	0.46	0.37	0.27
	P5	30	1400	138	1.16	0.67	0.58	0.51	0.40	0.29
	P6	40	1250	163	1.36	0.78	0.68	0.59	0.47	0.34
	P7	40	1400	183	1.53	0.88	0.76	0.66	0.53	0.38
	P8	60	1050	207	1.74	0.98	0.87	0.76	0.64	0.49
	P9	60	1250	241	2.01	1.16	1.01	0.89	0.70	0.51
Rotated Optics (Requires L90 or R90)	P10	60	530	106	0.90	0.52	0.47	0.43	0.33	0.27
	P11	60	700	137	1.15	0.67	0.60	0.53	0.42	0.32
	P12	60	1050	207	1.74	0.99	0.87	0.76	0.60	0.46
	P13	60	1250	231	1.93	1.12	0.97	0.86	0.67	0.49

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	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 recepticle	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
PIR or PIRH	Motion sensors with integral photocell. PIR for 8-15' mounting; PIRH for 15-30' mounting	Luminaires dim when no occupancy is detected.	Acuity Controls SBGR	Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation.
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 rSDGR	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app.

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Performance Data

Lumen Output

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Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30	530	P1	54W	T1S	6,457	2	0	2	120	6,956	2	0	2	129	7,044	2	0	2	130
				T2S	6,450	2	0	2	119	6,949	2	0	2	129	7,037	2	0	2	130
				T2M	6,483	1	0	1	120	6,984	2	0	2	129	7,073	2	0	2	131
				T3S	6,279	2	0	2	116	6,764	2	0	2	125	6,850	2	0	2	127
				T3M	6,468	1	0	2	120	6,967	1	0	2	129	7,056	1	0	2	131
				T4M	6,327	1	0	2	117	6,816	1	0	2	126	6,902	1	0	2	128
				TFTM	6,464	1	0	2	120	6,963	1	0	2	129	7,051	1	0	2	131
				T5VS	6,722	2	0	0	124	7,242	3	0	0	134	7,334	3	0	0	136
				T5S	6,728	2	0	1	125	7,248	2	0	1	134	7,340	2	0	1	136
				T5M	6,711	3	0	1	124	7,229	3	0	1	134	7,321	3	0	2	136
				T5W	6,667	3	0	2	123	7,182	3	0	2	133	7,273	3	0	2	135
				BLC	5,299	1	0	1	98	5,709	1	0	2	106	5,781	1	0	2	107
				LCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
				RCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
30	700	P2	70W	T1S	8,249	2	0	2	118	8,886	2	0	2	127	8,999	2	0	2	129
				T2S	8,240	2	0	2	118	8,877	2	0	2	127	8,989	2	0	2	128
				T2M	8,283	2	0	2	118	8,923	2	0	2	127	9,036	2	0	2	129
				T3S	8,021	2	0	2	115	8,641	2	0	2	123	8,751	2	0	2	125
				T3M	8,263	2	0	2	118	8,901	2	0	2	127	9,014	2	0	2	129
				T4M	8,083	2	0	2	115	8,708	2	0	2	124	8,818	2	0	2	126
				TFTM	8,257	2	0	2	118	8,896	2	0	2	127	9,008	2	0	2	129
				T5VS	8,588	3	0	0	123	9,252	3	0	0	132	9,369	3	0	0	134
				T5S	8,595	3	0	1	123	9,259	3	0	1	132	9,376	3	0	1	134
				T5M	8,573	3	0	2	122	9,236	3	0	2	132	9,353	3	0	2	134
				T5W	8,517	3	0	2	122	9,175	4	0	2	131	9,291	4	0	2	133
				BLC	6,770	1	0	2	97	7,293	1	0	2	104	7,386	1	0	2	106
				LCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
				RCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
30	1050	P3	102W	T1S	11,661	2	0	2	114	12,562	3	0	3	123	12,721	3	0	3	125
				T2S	11,648	2	0	2	114	12,548	3	0	3	123	12,707	3	0	3	125
				T2M	11,708	2	0	2	115	12,613	2	0	2	124	12,773	2	0	2	125
				T3S	11,339	2	0	2	111	12,215	3	0	3	120	12,370	3	0	3	121
				T3M	11,680	2	0	2	115	12,582	2	0	2	123	12,742	2	0	2	125
				T4M	11,426	2	0	3	112	12,309	2	0	3	121	12,465	2	0	3	122
				TFTM	11,673	2	0	2	114	12,575	2	0	3	123	12,734	2	0	3	125
				T5VS	12,140	3	0	1	119	13,078	3	0	1	128	13,244	3	0	1	130
				T5S	12,150	3	0	1	119	13,089	3	0	1	128	13,254	3	0	1	130
				T5M	12,119	4	0	2	119	13,056	4	0	2	128	13,221	4	0	2	130
				T5W	12,040	4	0	3	118	12,970	4	0	3	127	13,134	4	0	3	129
				BLC	9,570	1	0	2	94	10,310	1	0	2	101	10,440	1	0	2	102
				LCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
				RCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
30	1250	P4	125W	T1S	13,435	3	0	3	107	14,473	3	0	3	116	14,657	3	0	3	117
				T2S	13,421	3	0	3	107	14,458	3	0	3	116	14,641	3	0	3	117
				T2M	13,490	2	0	2	108	14,532	3	0	3	116	14,716	3	0	3	118
				T3S	13,064	3	0	3	105	14,074	3	0	3	113	14,252	3	0	3	114
				T3M	13,457	2	0	2	108	14,497	2	0	2	116	14,681	2	0	2	117
				T4M	13,165	2	0	3	105	14,182	2	0	3	113	14,362	2	0	3	115
				TFTM	13,449	2	0	3	108	14,488	2	0	3	116	14,672	2	0	3	117
				T5VS	13,987	4	0	1	112	15,068	4	0	1	121	15,259	4	0	1	122
				T5S	13,999	3	0	1	112	15,080	3	0	1	121	15,271	3	0	1	122
				T5M	13,963	4	0	2	112	15,042	4	0	2	120	15,233	4	0	2	122
				T5W	13,872	4	0	3	111	14,944	4	0	3	120	15,133	4	0	3	121
				BLC	11,027	1	0	2	88	11,879	1	0	2	95	12,029	1	0	2	96
				LCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
				RCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
30	1400	P5	138W	T1S	14,679	3	0	3	106	15,814	3	0	3	115	16,014	3	0	3	116
				T2S	14,664	3	0	3	106	15,797	3	0	3	114	15,997	3	0	3	116
				T2M	14,739	3	0	3	107	15,878	3	0	3	115	16,079	3	0	3	117
				T3S	14,274	3	0	3	103	15,377	3	0	3	111	15,572	3	0	3	113
				T3M	14,704	2	0	3	107	15,840	3	0	3	115	16,040	3	0	3	116
				T4M	14,384	2	0	3	104	15,496	3	0	3	112	15,692	3	0	3	114
				TFTM	14,695	2	0	3	106	15,830	3	0	3	115	16,030	3	0	3	116
				T5VS	15,283	4	0	1	111	16,464	4	0	1	119	16,672	4	0	1	121
				T5S	15,295	3	0	1	111	16,477	4	0	1	119	16,686	4	0	1	121
				T5M	15,257	4	0	2	111	16,435	4	0	2	119	16,644	4	0	2	121
				T5W	15,157	4	0	3	110	16,328	4	0	3	118	16,534	4	0	3	120
				BLC	12,048	1	0	2	87	12,979	1	0	2	94	13,143	1	0	2	95
				LCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71
				RCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71

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Performance Data

Lumen Output

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Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40	1250	P6	163W	T1S	17,654	3	0	3	108	19,018	3	0	3	117	19,259	3	0	3	118
				T2S	17,635	3	0	3	108	18,998	3	0	3	117	19,238	3	0	3	118
				T2M	17,726	3	0	3	109	19,096	3	0	3	117	19,337	3	0	3	119
				T3S	17,167	3	0	3	105	18,493	3	0	3	113	18,727	3	0	3	115
				T3M	17,683	3	0	3	108	19,049	3	0	3	117	19,290	3	0	3	118
				T4M	17,299	3	0	3	106	18,635	3	0	4	114	18,871	3	0	4	116
				TFTM	17,672	3	0	3	108	19,038	3	0	4	117	19,279	3	0	4	118
				T5VS	18,379	4	0	1	113	19,800	4	0	1	121	20,050	4	0	1	123
				T5S	18,394	4	0	2	113	19,816	4	0	2	122	20,066	4	0	2	123
				T5M	18,348	4	0	2	113	19,766	4	0	2	121	20,016	4	0	2	123
				T5W	18,228	5	0	3	112	19,636	5	0	3	120	19,885	5	0	3	122
				BLC	14,489	2	0	2	89	15,609	2	0	3	96	15,806	2	0	3	97
				LCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
				RCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
40	1400	P7	183W	T1S	19,227	3	0	3	105	20,712	3	0	3	113	20,975	3	0	3	115
				T2S	19,206	3	0	3	105	20,690	3	0	3	113	20,952	3	0	3	114
				T2M	19,305	3	0	3	105	20,797	3	0	3	114	21,060	3	0	3	115
				T3S	18,696	3	0	3	102	20,141	3	0	3	110	20,396	3	0	4	111
				T3M	19,258	3	0	3	105	20,746	3	0	3	113	21,009	3	0	3	115
				T4M	18,840	3	0	4	103	20,296	3	0	4	111	20,553	3	0	4	112
				TFTM	19,246	3	0	4	105	20,734	3	0	4	113	20,996	3	0	4	115
				T5VS	20,017	4	0	1	109	21,564	4	0	1	118	21,837	4	0	1	119
				T5S	20,033	4	0	2	109	21,581	4	0	2	118	21,854	4	0	2	119
				T5M	19,983	4	0	2	109	21,527	5	0	3	118	21,799	5	0	3	119
				T5W	19,852	5	0	3	108	21,386	5	0	3	117	21,656	5	0	3	118
				BLC	15,780	2	0	3	86	16,999	2	0	3	93	17,214	2	0	3	94
				LCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
				RCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
60	1050	P8	207W	T1S	22,490	3	0	3	109	24,228	3	0	3	117	24,535	3	0	3	119
				T2S	22,466	3	0	4	109	24,202	3	0	4	117	24,509	3	0	4	118
				T2M	22,582	3	0	3	109	24,327	3	0	3	118	24,635	3	0	3	119
				T3S	21,870	3	0	4	106	23,560	3	0	4	114	23,858	3	0	4	115
				T3M	22,527	3	0	4	109	24,268	3	0	4	117	24,575	3	0	4	119
				T4M	22,038	3	0	4	106	23,741	3	0	4	115	24,041	3	0	4	116
				TFTM	22,513	3	0	4	109	24,253	3	0	4	117	24,560	3	0	4	119
				T5VS	23,415	5	0	1	113	25,224	5	0	1	122	25,543	5	0	1	123
				T5S	23,434	4	0	2	113	25,244	4	0	2	122	25,564	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,221	5	0	4	112	25,016	5	0	4	121	25,332	5	0	4	122
				BLC	18,458	2	0	3	89	19,885	2	0	3	96	20,136	2	0	3	97
				LCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
60	1250	P9	241W	T1S	25,575	3	0	3	106	27,551	3	0	3	114	27,900	3	0	3	116
				T2S	25,548	3	0	4	106	27,522	3	0	4	114	27,871	3	0	4	116
				T2M	25,680	3	0	3	107	27,664	3	0	3	115	28,014	3	0	3	116
				T3S	24,870	3	0	4	103	26,791	3	0	4	111	27,130	3	0	4	113
				T3M	25,617	3	0	4	106	27,597	3	0	4	115	27,946	3	0	4	116
				T4M	25,061	3	0	4	104	26,997	3	0	4	112	27,339	3	0	4	113
				TFTM	25,602	3	0	4	106	27,580	3	0	4	114	27,929	3	0	4	116
				T5VS	26,626	5	0	1	110	28,684	5	0	1	119	29,047	5	0	1	121
				T5S	26,648	4	0	2	111	28,707	5	0	2	119	29,070	5	0	2	121
				T5M	26,581	5	0	3	110	28,635	5	0	3	119	28,997	5	0	3	120
				T5W	26,406	5	0	4	110	28,447	5	0	4	118	28,807	5	0	4	120
				BLC	20,990	2	0	3	87	22,612	2	0	3	94	22,898	2	0	3	95
				LCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71
				RCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71

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Performance Data

Lumen Output

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Rotated Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60	530	**P10**	106W	T1S	13,042	3	0	3	123	14,050	3	0	3	133	14,228	3	0	3	134
				T2S	12,967	4	0	4	122	13,969	4	0	4	132	14,146	4	0	4	133
				T2M	13,201	3	0	3	125	14,221	3	0	3	134	14,401	3	0	3	136
				T3S	12,766	4	0	4	120	13,752	4	0	4	130	13,926	4	0	4	131
				T3M	13,193	4	0	4	124	14,213	4	0	4	134	14,393	4	0	4	136
				T4M	12,944	4	0	4	122	13,945	4	0	4	132	14,121	4	0	4	133
				TFTM	13,279	4	0	4	125	14,305	4	0	4	135	14,486	4	0	4	137
				T5VS	13,372	3	0	1	126	14,405	4	0	1	136	14,588	4	0	1	138
				T5S	13,260	3	0	1	125	14,284	3	0	1	135	14,465	3	0	1	136
				T5M	13,256	4	0	2	125	14,281	4	0	2	135	14,462	4	0	2	136
				T5W	13,137	4	0	3	124	14,153	4	0	3	134	14,332	4	0	3	135
				BLC	10,906	3	0	3	103	11,749	3	0	3	111	11,898	3	0	3	112
				LCCO	7,789	1	0	3	73	8,391	1	0	3	79	8,497	1	0	3	80
				RCCO	7,779	4	0	4	73	8,380	4	0	4	79	8,486	4	0	4	80
60	700	**P11**	137W	T1S	16,556	3	0	3	121	17,835	3	0	3	130	18,061	4	0	4	132
				T2S	16,461	4	0	4	120	17,733	4	0	4	129	17,957	4	0	4	131
				T2M	16,758	4	0	4	122	18,053	4	0	4	132	18,281	4	0	4	133
				T3S	16,205	4	0	4	118	17,457	4	0	4	127	17,678	4	0	4	129
				T3M	16,748	4	0	4	122	18,042	4	0	4	132	18,271	4	0	4	133
				T4M	16,432	4	0	4	120	17,702	4	0	4	129	17,926	4	0	4	131
				TFTM	16,857	4	0	4	123	18,159	4	0	4	133	18,389	4	0	4	134
				T5VS	16,975	4	0	1	124	18,287	4	0	1	133	18,518	4	0	1	135
				T5S	16,832	4	0	1	123	18,133	4	0	2	132	18,362	4	0	2	134
				T5M	16,828	4	0	2	123	18,128	4	0	2	132	18,358	4	0	2	134
				T5W	16,677	4	0	3	122	17,966	5	0	3	131	18,193	5	0	3	133
				BLC	13,845	3	0	3	101	14,915	3	0	3	109	15,103	3	0	3	110
				LCCO	9,888	1	0	3	72	10,652	2	0	3	78	10,787	2	0	3	79
				RCCO	9,875	4	0	4	72	10,638	4	0	4	78	10,773	4	0	4	79
60	1050	**P12**	207W	T1S	22,996	4	0	4	111	24,773	4	0	4	120	25,087	4	0	4	121
				T2S	22,864	4	0	4	110	24,631	5	0	5	119	24,943	5	0	5	120
				T2M	23,277	4	0	4	112	25,075	4	0	4	121	25,393	4	0	4	123
				T3S	22,509	4	0	4	109	24,248	5	0	5	117	24,555	5	0	5	119
				T3M	23,263	4	0	4	112	25,061	4	0	4	121	25,378	4	0	4	123
				T4M	22,824	5	0	5	110	24,588	5	0	5	119	24,899	5	0	5	120
				TFTM	23,414	5	0	5	113	25,223	5	0	5	122	25,543	5	0	5	123
				T5VS	23,579	5	0	1	114	25,401	5	0	1	123	25,722	5	0	1	124
				T5S	23,380	4	0	2	113	25,187	4	0	2	122	25,506	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,165	5	0	4	112	24,955	5	0	4	121	25,271	5	0	4	122
				BLC	19,231	4	0	4	93	20,717	4	0	4	100	20,979	4	0	4	101
				LCCO	13,734	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,716	4	0	4	66	14,776	4	0	4	71	14,963	4	0	4	72
60	1250	**P13**	231W	T1S	25,400	4	0	4	110	27,363	4	0	4	118	27,709	4	0	4	120
				T2S	25,254	5	0	5	109	27,205	5	0	5	118	27,550	5	0	5	119
				T2M	25,710	4	0	4	111	27,696	4	0	4	120	28,047	4	0	4	121
				T3S	24,862	5	0	5	108	26,783	5	0	5	116	27,122	5	0	5	117
				T3M	25,695	5	0	5	111	27,680	5	0	5	120	28,031	5	0	5	121
				T4M	25,210	5	0	5	109	27,158	5	0	5	118	27,502	5	0	5	119
				TFTM	25,861	5	0	5	112	27,860	5	0	5	121	28,212	5	0	5	122
				T5VS	26,043	5	0	1	113	28,056	5	0	1	121	28,411	5	0	1	123
				T5S	25,824	4	0	2	112	27,819	5	0	2	120	28,172	5	0	2	122
				T5M	25,818	5	0	3	112	27,813	5	0	3	120	28,165	5	0	3	122
				T5W	25,586	5	0	4	111	27,563	5	0	4	119	27,912	5	0	4	121
				BLC	21,241	4	0	4	92	22,882	4	0	4	99	23,172	4	0	4	100
				LCCO	15,170	2	0	4	66	16,342	2	0	4	71	16,549	2	0	4	72
				RCCO	15,150	5	0	5	66	16,321	5	0	5	71	16,527	5	0	5	72

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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 is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 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.

OPTICS
Precision-molded proprietary acrylic 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. 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 L85/100,000 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 sensors with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 30 feet.

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
Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). NEMA photocontrol receptacle are also available.

LISTINGS
UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40ºC minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

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.

BUY AMERICAN
Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/customer-support/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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D-Series Size 1
LED Area Luminaire

Buy American

Catalog Number

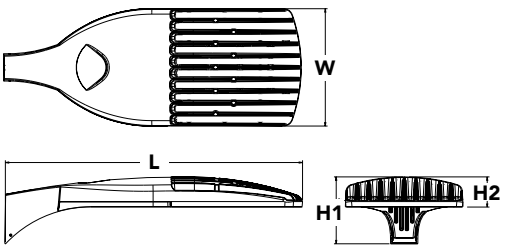
Notes

Type

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

Specifications

EPA:	1.01 ft² (0.09 m²)
Length:	33" (83.8 cm)
Width:	13" (33.0 cm)
Height H1:	7-1/2" (19.0 cm)
Height H2:	3-1/2"
Weight (max):	27 lbs (12.2 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

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

DSX1 LED — XXK = Specify

Series
DSX1 LED

LEDs
Forward optics
P1, P2, P3, P4[1], P5[1], P6[1], P7[1], P8, P9[1]
Rotated optics
P10[2], P11[2], P12[2], P13[1,2]

Color temperature
30K 3000 K
40K 4000 K
50K 5000 K

Distribution
T1S Type I short (Automotive)
T2S Type II short
T2M Type II medium
T3S Type III short
T3M Type III medium
T4M Type IV medium
TFTM Forward throw medium
T5VS Type V very short[3]
T5S Type V short[3]
T5M Type V medium[3]
T5W Type V wide[3]
BLC Backlight control[4]
LCCO Left corner cutoff[4]
RCCO Right corner cutoff[4]

Voltage
MVOLT[5]
XVOLT (277V-480V)[6,7,8]
120[9]
208[9]
240[9]
277[9]
347[9]
480[9]

Mounting
Shipped included
SPA Square pole mounting
RPA Round pole mounting[10]
WBA Wall bracket[3]
SPUMBA Square pole universal mounting adaptor[11]
RPUMBA Round pole universal mounting adaptor[9]
Shipped separately
KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[12]

FINISH = Specify

Control options
Shipped installed
NLTAIR2 nLight AIR generation 2 enabled[13]
PIRHN Network, high/low motion/ambient sensor[14]
PER NEMA twist-lock receptacle only (controls ordered separate)[15]
PER5 Five-pin receptacle only (controls ordered separate)[15,16]
PER7 Seven-pin receptacle only (controls ordered separate)[15,16]
DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[17]
DS Dual switching[18,19,20]
PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[20,21]
PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[20,21]
PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[20,21]
PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[20,21]
FAO Field adjustable output[20,21]

Other options
Shipped installed
HS House-side shield[23]
SF Single fuse (120, 277, 347V)[9]
DF Double fuse (208, 240, 480V)[9]
L90 Left rotated optics[2]
R90 Right rotated optics[2]
HA 50°C ambient operations[1]
BAA Buy America(n) Act Compliant
Shipped separately
BS Bird spikes[24]
EGS External glare shield

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.

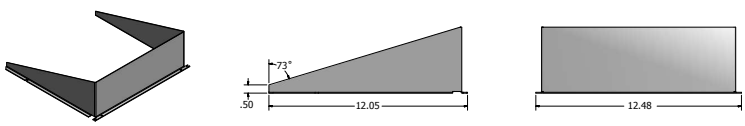
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [25]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [25]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [25]
DSHORT SBK U	Shorting cap [25]
DSX1HS 30C U	House-side shield for P1, P2, P3, P4 and P5 [23]
DSX1HS 40C U	House-side shield for P6 and P7 [23]
DSX1HS 60C U	House-side shield for P8, P9, P10, P11 and P12 [23]
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish) [26]
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) [12]
DSX1EGS (FINISH) U	External glare shield

For more control options, visit DTL and ROAM online.

NOTES
1 HA not available with P4, P5, P6, P7, P9 and P13.
2 P10, P11, P12 or P13 and rotated optics (L90, R90) only available together.
3 Any Type 5 distribution with photocell, is not available with WBA.
4 Not available with HS.
5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
6 XVOLT only suitable for use with P3, P5, P6, P7, P9 and P13.
7 XVOLT works with any voltage between 277V and 480V.
8 XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V.
9 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF.
10 Suitable for mounting to round poles between 3.5" and 12" diameter.
11 Universal mounting brackets intended for retrofit on existing, pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31. Only usable when pole's drill pattern is NOT Lithonia template #8
12 Must order fixture with SPA option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" diameter mast arm (not included).
13 Must be ordered with PIRHN. Sensor cover available only in dark bronze, black, white and natural aluminum colors.
14 Must be ordered with NLTAIR2. For more information on nLight Air 2 visit this link.
15 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting cap included.
16 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Node with integral dimming.
17 DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V, FAO.
18 Provides 50/50fixture operation via (2) independent drivers. Not available with PER, PER5, PER7, PIR or PIRH. Not available P1, P2, P3, P4 or P5.
19 Requires (2) separately switched circuits with isolated neutrol.
20 Reference Controls Option Default settings table on page 4.
21 Reference Motion Sensor table on page 4 to see functionality.
22 Not available with other dimming controls options.
23 Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
24 Must be ordered with fixture for factory pre-drilling.
25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Control Option Table on page 4.
26 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template #8.

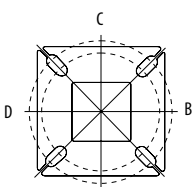
Options

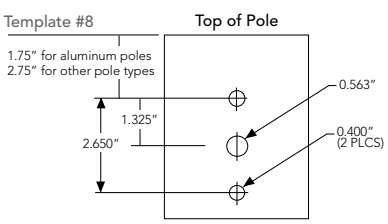
EGS - External Glare Shield



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

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 LED	1.013	2.025	1.945	3.038	2.850	3.749

	Drilling Template	Minimum Acceptable Outside Pole Dimension					
SPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
RPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
SPUMBA	#5	2-7/8"	3"	4"	4"	3.5"	4"
RPUMBA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"

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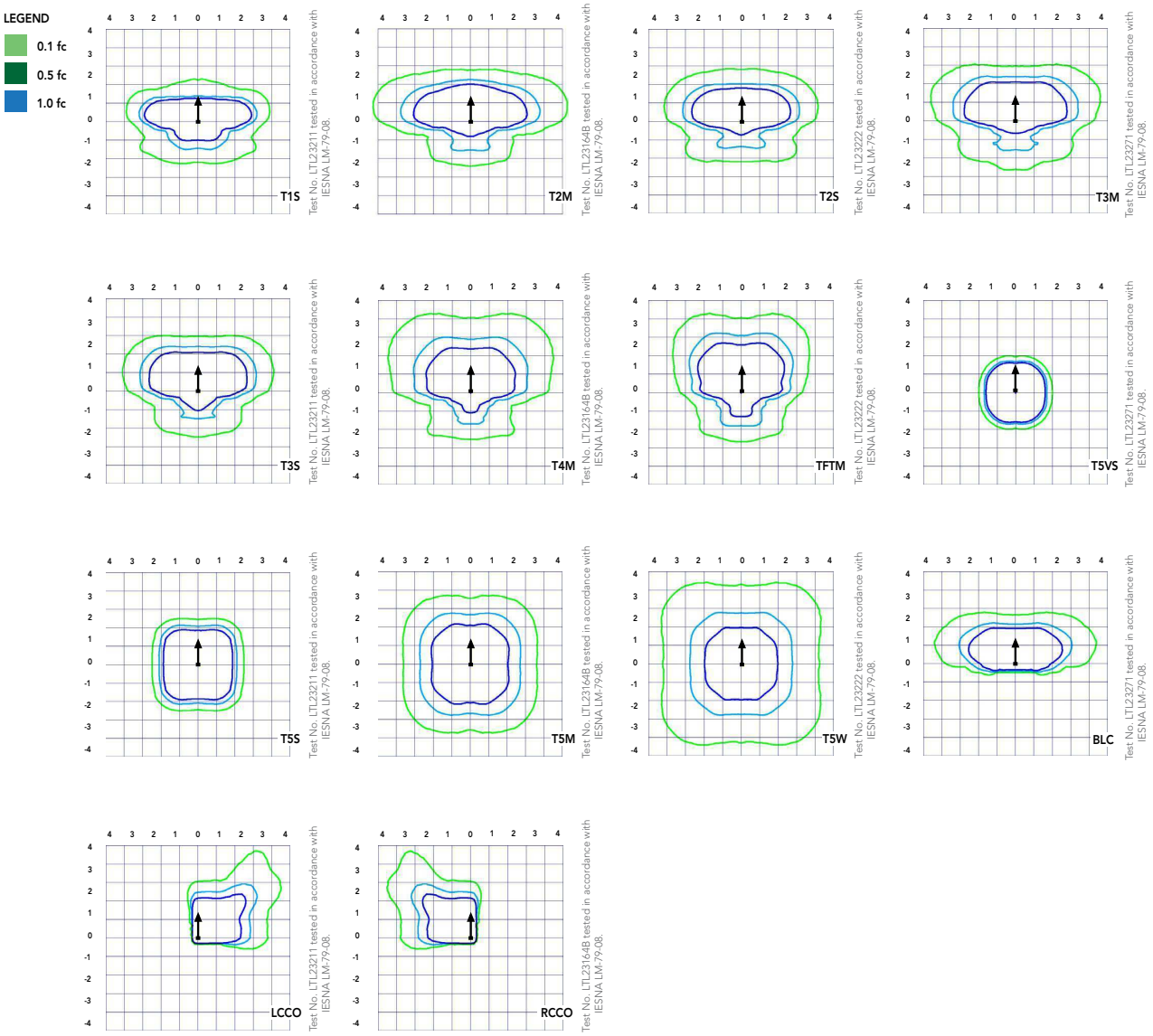
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 1 homepage.

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (25').



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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°F**	**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	0.96
50,000	0.92
100,000	0.85

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Phototcell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min
*for use when motion sensor is used as dusk to dawn control.						

Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A) 120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	30	530	54	0.45	0.26	0.23	0.19	0.10	0.12
	P2	30	700	70	0.59	0.34	0.30	0.25	0.20	0.16
	P3	30	1050	102	0.86	0.50	0.44	0.38	0.30	0.22
	P4	30	1250	125	1.06	0.60	0.52	0.46	0.37	0.27
	P5	30	1400	138	1.16	0.67	0.58	0.51	0.40	0.29
	P6	40	1250	163	1.36	0.78	0.68	0.59	0.47	0.34
	P7	40	1400	183	1.53	0.88	0.76	0.66	0.53	0.38
	P8	60	1050	207	1.74	0.98	0.87	0.76	0.64	0.49
	P9	60	1250	241	2.01	1.16	1.01	0.89	0.70	0.51
Rotated Optics (Requires L90 or R90)	P10	60	530	106	0.90	0.52	0.47	0.43	0.33	0.27
	P11	60	700	137	1.15	0.67	0.60	0.53	0.42	0.32
	P12	60	1050	207	1.74	0.99	0.87	0.76	0.60	0.46
	P13	60	1250	231	1.93	1.12	0.97	0.86	0.67	0.49

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	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 recepticle	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
PIR or PIRH	Motion sensors with integral photocell. PIR for 8-15' mounting; PIRH for 15-30' mounting	Luminaires dim when no occupancy is detected.	Acuity Controls SBGR	Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation.
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 rSDGR	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app.

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Performance Data

Lumen Output

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

Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30	530	P1	54W	T1S	6,457	2	0	2	120	6,956	2	0	2	129	7,044	2	0	2	130
				T2S	6,450	2	0	2	119	6,949	2	0	2	129	7,037	2	0	2	130
				T2M	6,483	1	0	1	120	6,984	2	0	2	129	7,073	2	0	2	131
				T3S	6,279	2	0	2	116	6,764	2	0	2	125	6,850	2	0	2	127
				T3M	6,468	1	0	2	120	6,967	1	0	2	129	7,056	1	0	2	131
				T4M	6,327	1	0	2	117	6,816	1	0	2	126	6,902	1	0	2	128
				TFTM	6,464	1	0	2	120	6,963	1	0	2	129	7,051	1	0	2	131
				T5VS	6,722	2	0	0	124	7,242	3	0	0	134	7,334	3	0	0	136
				T5S	6,728	2	0	1	125	7,248	2	0	1	134	7,340	2	0	1	136
				T5M	6,711	3	0	1	124	7,229	3	0	1	134	7,321	3	0	2	136
				T5W	6,667	3	0	2	123	7,182	3	0	2	133	7,273	3	0	2	135
				BLC	5,299	1	0	1	98	5,709	1	0	2	106	5,781	1	0	2	107
				LCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
				RCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
30	700	P2	70W	T1S	8,249	2	0	2	118	8,886	2	0	2	127	8,999	2	0	2	129
				T2S	8,240	2	0	2	118	8,877	2	0	2	127	8,989	2	0	2	128
				T2M	8,283	2	0	2	118	8,923	2	0	2	127	9,036	2	0	2	129
				T3S	8,021	2	0	2	115	8,641	2	0	2	123	8,751	2	0	2	125
				T3M	8,263	2	0	2	118	8,901	2	0	2	127	9,014	2	0	2	129
				T4M	8,083	2	0	2	115	8,708	2	0	2	124	8,818	2	0	2	126
				TFTM	8,257	2	0	2	118	8,896	2	0	2	127	9,008	2	0	2	129
				T5VS	8,588	3	0	0	123	9,252	3	0	0	132	9,369	3	0	0	134
				T5S	8,595	3	0	1	123	9,259	3	0	1	132	9,376	3	0	1	134
				T5M	8,573	3	0	2	122	9,236	3	0	2	132	9,353	3	0	2	134
				T5W	8,517	3	0	2	122	9,175	4	0	2	131	9,291	4	0	2	133
				BLC	6,770	1	0	2	97	7,293	1	0	2	104	7,386	1	0	2	106
				LCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
				RCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
30	1050	P3	102W	T1S	11,661	2	0	2	114	12,562	3	0	3	123	12,721	3	0	3	125
				T2S	11,648	2	0	2	114	12,548	3	0	3	123	12,707	3	0	3	125
				T2M	11,708	2	0	2	115	12,613	2	0	2	124	12,773	2	0	2	125
				T3S	11,339	2	0	2	111	12,215	3	0	3	120	12,370	3	0	3	121
				T3M	11,680	2	0	2	115	12,582	2	0	2	123	12,742	2	0	2	125
				T4M	11,426	2	0	3	112	12,309	2	0	3	121	12,465	2	0	3	122
				TFTM	11,673	2	0	2	114	12,575	2	0	3	123	12,734	2	0	3	125
				T5VS	12,140	3	0	1	119	13,078	3	0	1	128	13,244	3	0	1	130
				T5S	12,150	3	0	1	119	13,089	3	0	1	128	13,254	3	0	1	130
				T5M	12,119	4	0	2	119	13,056	4	0	2	128	13,221	4	0	2	130
				T5W	12,040	4	0	3	118	12,970	4	0	3	127	13,134	4	0	3	129
				BLC	9,570	1	0	2	94	10,310	1	0	2	101	10,440	1	0	2	102
				LCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
				RCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
30	1250	P4	125W	T1S	13,435	3	0	3	107	14,473	3	0	3	116	14,657	3	0	3	117
				T2S	13,421	3	0	3	107	14,458	3	0	3	116	14,641	3	0	3	117
				T2M	13,490	2	0	2	108	14,532	3	0	3	116	14,716	3	0	3	118
				T3S	13,064	3	0	3	105	14,074	3	0	3	113	14,252	3	0	3	114
				T3M	13,457	2	0	2	108	14,497	2	0	2	116	14,681	2	0	2	117
				T4M	13,165	2	0	3	105	14,182	2	0	3	113	14,362	2	0	3	115
				TFTM	13,449	2	0	3	108	14,488	2	0	3	116	14,672	2	0	3	117
				T5VS	13,987	4	0	1	112	15,068	4	0	1	121	15,259	4	0	1	122
				T5S	13,999	3	0	1	112	15,080	3	0	1	121	15,271	3	0	1	122
				T5M	13,963	4	0	2	112	15,042	4	0	2	120	15,233	4	0	2	122
				T5W	13,872	4	0	3	111	14,944	4	0	3	120	15,133	4	0	3	121
				BLC	11,027	1	0	2	88	11,879	1	0	2	95	12,029	1	0	2	96
				LCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
				RCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
30	1400	P5	138W	T1S	14,679	3	0	3	106	15,814	3	0	3	115	16,014	3	0	3	116
				T2S	14,664	3	0	3	106	15,797	3	0	3	114	15,997	3	0	3	116
				T2M	14,739	3	0	3	107	15,878	3	0	3	115	16,079	3	0	3	117
				T3S	14,274	3	0	3	103	15,377	3	0	3	111	15,572	3	0	3	113
				T3M	14,704	2	0	3	107	15,840	3	0	3	115	16,040	3	0	3	116
				T4M	14,384	2	0	3	104	15,496	3	0	3	112	15,692	3	0	3	114
				TFTM	14,695	2	0	3	106	15,830	3	0	3	115	16,030	3	0	3	116
				T5VS	15,283	4	0	1	111	16,464	4	0	1	119	16,672	4	0	1	121
				T5S	15,295	3	0	1	111	16,477	4	0	1	119	16,686	4	0	1	121
				T5M	15,257	4	0	2	111	16,435	4	0	2	119	16,644	4	0	2	121
				T5W	15,157	4	0	3	110	16,328	4	0	3	118	16,534	4	0	3	120
				BLC	12,048	1	0	2	87	12,979	1	0	2	94	13,143	1	0	2	95
				LCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71
				RCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71

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Performance Data

Lumen Output

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

Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40	1250	P6	163W	T1S	17,654	3	0	3	108	19,018	3	0	3	117	19,259	3	0	3	118
				T2S	17,635	3	0	3	108	18,998	3	0	3	117	19,238	3	0	3	118
				T2M	17,726	3	0	3	109	19,096	3	0	3	117	19,337	3	0	3	119
				T3S	17,167	3	0	3	105	18,493	3	0	3	113	18,727	3	0	3	115
				T3M	17,683	3	0	3	108	19,049	3	0	3	117	19,290	3	0	3	118
				T4M	17,299	3	0	3	106	18,635	3	0	4	114	18,871	3	0	4	116
				TFTM	17,672	3	0	3	108	19,038	3	0	4	117	19,279	3	0	4	118
				T5VS	18,379	4	0	1	113	19,800	4	0	1	121	20,050	4	0	1	123
				T5S	18,394	4	0	2	113	19,816	4	0	2	122	20,066	4	0	2	123
				T5M	18,348	4	0	2	113	19,766	4	0	2	121	20,016	4	0	2	123
				T5W	18,228	5	0	3	112	19,636	5	0	3	120	19,885	5	0	3	122
				BLC	14,489	2	0	2	89	15,609	2	0	3	96	15,806	2	0	3	97
				LCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
				RCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
40	1400	P7	183W	T1S	19,227	3	0	3	105	20,712	3	0	3	113	20,975	3	0	3	115
				T2S	19,206	3	0	3	105	20,690	3	0	3	113	20,952	3	0	3	114
				T2M	19,305	3	0	3	105	20,797	3	0	3	114	21,060	3	0	3	115
				T3S	18,696	3	0	3	102	20,141	3	0	3	110	20,396	3	0	4	111
				T3M	19,258	3	0	3	105	20,746	3	0	3	113	21,009	3	0	3	115
				T4M	18,840	3	0	4	103	20,296	3	0	4	111	20,553	3	0	4	112
				TFTM	19,246	3	0	4	105	20,734	3	0	4	113	20,996	3	0	4	115
				T5VS	20,017	4	0	1	109	21,564	4	0	1	118	21,837	4	0	1	119
				T5S	20,033	4	0	2	109	21,581	4	0	2	118	21,854	4	0	2	119
				T5M	19,983	4	0	2	109	21,527	5	0	3	118	21,799	5	0	3	119
				T5W	19,852	5	0	3	108	21,386	5	0	3	117	21,656	5	0	3	118
				BLC	15,780	2	0	3	86	16,999	2	0	3	93	17,214	2	0	3	94
				LCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
				RCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
60	1050	P8	207W	T1S	22,490	3	0	3	109	24,228	3	0	3	117	24,535	3	0	3	119
				T2S	22,466	3	0	4	109	24,202	3	0	4	117	24,509	3	0	4	118
				T2M	22,582	3	0	3	109	24,327	3	0	3	118	24,635	3	0	3	119
				T3S	21,870	3	0	4	106	23,560	3	0	4	114	23,858	3	0	4	115
				T3M	22,527	3	0	4	109	24,268	3	0	4	117	24,575	3	0	4	119
				T4M	22,038	3	0	4	106	23,741	3	0	4	115	24,041	3	0	4	116
				TFTM	22,513	3	0	4	109	24,253	3	0	4	117	24,560	3	0	4	119
				T5VS	23,415	5	0	1	113	25,224	5	0	1	122	25,543	5	0	1	123
				T5S	23,434	4	0	2	113	25,244	4	0	2	122	25,564	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,221	5	0	4	112	25,016	5	0	4	121	25,332	5	0	4	122
				BLC	18,458	2	0	3	89	19,885	2	0	3	96	20,136	2	0	3	97
				LCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
60	1250	P9	241W	T1S	25,575	3	0	3	106	27,551	3	0	3	114	27,900	3	0	3	116
				T2S	25,548	3	0	4	106	27,522	3	0	4	114	27,871	3	0	4	116
				T2M	25,680	3	0	3	107	27,664	3	0	3	115	28,014	3	0	3	116
				T3S	24,870	3	0	4	103	26,791	3	0	4	111	27,130	3	0	4	113
				T3M	25,617	3	0	4	106	27,597	3	0	4	115	27,946	3	0	4	116
				T4M	25,061	3	0	4	104	26,997	3	0	4	112	27,339	3	0	4	113
				TFTM	25,602	3	0	4	106	27,580	3	0	4	114	27,929	3	0	4	116
				T5VS	26,626	5	0	1	110	28,684	5	0	1	119	29,047	5	0	1	121
				T5S	26,648	4	0	2	111	28,707	5	0	2	119	29,070	5	0	2	121
				T5M	26,581	5	0	3	110	28,635	5	0	3	119	28,997	5	0	3	120
				T5W	26,406	5	0	4	110	28,447	5	0	4	118	28,807	5	0	4	120
				BLC	20,990	2	0	3	87	22,612	2	0	3	94	22,898	2	0	3	95
				LCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71
				RCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71

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Performance Data

Lumen Output

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Rotated Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60	530	**P10**	106W	T1S	13,042	3	0	3	123	14,050	3	0	3	133	14,228	3	0	3	134
				T2S	12,967	4	0	4	122	13,969	4	0	4	132	14,146	4	0	4	133
				T2M	13,201	3	0	3	125	14,221	3	0	3	134	14,401	3	0	3	136
				T3S	12,766	4	0	4	120	13,752	4	0	4	130	13,926	4	0	4	131
				T3M	13,193	4	0	4	124	14,213	4	0	4	134	14,393	4	0	4	136
				T4M	12,944	4	0	4	122	13,945	4	0	4	132	14,121	4	0	4	133
				TFTM	13,279	4	0	4	125	14,305	4	0	4	135	14,486	4	0	4	137
				T5VS	13,372	3	0	1	126	14,405	4	0	1	136	14,588	4	0	1	138
				T5S	13,260	3	0	1	125	14,284	3	0	1	135	14,465	3	0	1	136
				T5M	13,256	4	0	2	125	14,281	4	0	2	135	14,462	4	0	2	136
				T5W	13,137	4	0	3	124	14,153	4	0	3	134	14,332	4	0	3	135
				BLC	10,906	3	0	3	103	11,749	3	0	3	111	11,898	3	0	3	112
				LCCO	7,789	1	0	3	73	8,391	1	0	3	79	8,497	1	0	3	80
				RCCO	7,779	4	0	4	73	8,380	4	0	4	79	8,486	4	0	4	80
60	700	**P11**	137W	T1S	16,556	3	0	3	121	17,835	3	0	3	130	18,061	4	0	4	132
				T2S	16,461	4	0	4	120	17,733	4	0	4	129	17,957	4	0	4	131
				T2M	16,758	4	0	4	122	18,053	4	0	4	132	18,281	4	0	4	133
				T3S	16,205	4	0	4	118	17,457	4	0	4	127	17,678	4	0	4	129
				T3M	16,748	4	0	4	122	18,042	4	0	4	132	18,271	4	0	4	133
				T4M	16,432	4	0	4	120	17,702	4	0	4	129	17,926	4	0	4	131
				TFTM	16,857	4	0	4	123	18,159	4	0	4	133	18,389	4	0	4	134
				T5VS	16,975	4	0	1	124	18,287	4	0	1	133	18,518	4	0	1	135
				T5S	16,832	4	0	1	123	18,133	4	0	2	132	18,362	4	0	2	134
				T5M	16,828	4	0	2	123	18,128	4	0	2	132	18,358	4	0	2	134
				T5W	16,677	4	0	3	122	17,966	5	0	3	131	18,193	5	0	3	133
				BLC	13,845	3	0	3	101	14,915	3	0	3	109	15,103	3	0	3	110
				LCCO	9,888	1	0	3	72	10,652	2	0	3	78	10,787	2	0	3	79
				RCCO	9,875	4	0	4	72	10,638	4	0	4	78	10,773	4	0	4	79
60	1050	**P12**	207W	T1S	22,996	4	0	4	111	24,773	4	0	4	120	25,087	4	0	4	121
				T2S	22,864	4	0	4	110	24,631	5	0	5	119	24,943	5	0	5	120
				T2M	23,277	4	0	4	112	25,075	4	0	4	121	25,393	4	0	4	123
				T3S	22,509	4	0	4	109	24,248	5	0	5	117	24,555	5	0	5	119
				T3M	23,263	4	0	4	112	25,061	4	0	4	121	25,378	4	0	4	123
				T4M	22,824	5	0	5	110	24,588	5	0	5	119	24,899	5	0	5	120
				TFTM	23,414	5	0	5	113	25,223	5	0	5	122	25,543	5	0	5	123
				T5VS	23,579	5	0	1	114	25,401	5	0	1	123	25,722	5	0	1	124
				T5S	23,380	4	0	2	113	25,187	4	0	2	122	25,506	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,165	5	0	4	112	24,955	5	0	4	121	25,271	5	0	4	122
				BLC	19,231	4	0	4	93	20,717	4	0	4	100	20,979	4	0	4	101
				LCCO	13,734	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,716	4	0	4	66	14,776	4	0	4	71	14,963	4	0	4	72
60	1250	**P13**	231W	T1S	25,400	4	0	4	110	27,363	4	0	4	118	27,709	4	0	4	120
				T2S	25,254	5	0	5	109	27,205	5	0	5	118	27,550	5	0	5	119
				T2M	25,710	4	0	4	111	27,696	4	0	4	120	28,047	4	0	4	121
				T3S	24,862	5	0	5	108	26,783	5	0	5	116	27,122	5	0	5	117
				T3M	25,695	5	0	5	111	27,680	5	0	5	120	28,031	5	0	5	121
				T4M	25,210	5	0	5	109	27,158	5	0	5	118	27,502	5	0	5	119
				TFTM	25,861	5	0	5	112	27,860	5	0	5	121	28,212	5	0	5	122
				T5VS	26,043	5	0	1	113	28,056	5	0	1	121	28,411	5	0	1	123
				T5S	25,824	4	0	2	112	27,819	5	0	2	120	28,172	5	0	2	122
				T5M	25,818	5	0	3	112	27,813	5	0	3	120	28,165	5	0	3	122
				T5W	25,586	5	0	4	111	27,563	5	0	4	119	27,912	5	0	4	121
				BLC	21,241	4	0	4	92	22,882	4	0	4	99	23,172	4	0	4	100
				LCCO	15,170	2	0	4	66	16,342	2	0	4	71	16,549	2	0	4	72
				RCCO	15,150	5	0	5	66	16,321	5	0	5	71	16,527	5	0	5	72

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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 is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 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.

OPTICS
Precision-molded proprietary acrylic 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. 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 L85/100,000 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 sensors with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 30 feet.

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
Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). NEMA photocontrol receptacle are also available.

LISTINGS
UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40ºC minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

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.

BUY AMERICAN
Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/customer-support/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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LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

FEATURES & SPECIFICATIONS

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

CONSTRUCTION —

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

Pole Top: Options include tenon top, drilled for side mount fixture, tenon with drilling (includes extra handhole) and open top. Side drilled and open top poles include a removable top cap.

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

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

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

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

FINISH — Extra durable painted finish is coated with TGIC (Triglycidyl Isocyanurate) Polyester powder that meets 5A and 5B classifications of ASTM D3359. Powder-coat finishes include Dark Bronze, White, Black, and Natural Aluminum colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes.

BUY AMERICAN — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

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

WARRANTY — 1-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.
Specifications subject to change without notice.

Anchor Base Poles

SSS

SQUARE STRAIGHT STEEL

Buy American

SSS Square Straight Steel Poles

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

Example: SSS 20 5C DM19 DDBXD

SSS	25= 25ft					FINISH = Specify
Series	**Nominal fixture mounting height**	**Nominal shaft base size/wall thickness[2]**	**Mounting[3]**		**Options**	**Finish[13]**
SSS[1]	10'-39' (for 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.) See technical information table for complete ordering information.)	4C 4" 11g (.1196") 4G 4" 7g (.1793") 5C 5" 11g (.1196") 5G 5" 7g (.1793") 6G 6" 7g (.1793") See technical information table for complete ordering information.)	Tenon mounting PT Open top (includes top cap) T20 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D. (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS) T35 4" O.D. (3-1/2" NPS) KAC/KAD/KSE/KSF/KVR/KVF Drill mounting[4] DM19 1 at 90° DM28 2 at 180° DM28 PL 2 at 180° with one side plugged DM29 2 at 90° DM39 3 at 90° DM49 4 at 90° CSX/DSX/RSX/AERIS™/OMERO™/ HLA/KAX Drill mounting[4] DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM39AS 3 at 90° DM49AS 4 at 90° RAD drill mounting[4] DM19RAD 1 at 90° DM28RAD 2 at 180° DM29RAD 2 at 90° DM39RAD 3 at 90° DM49RAD 4 at 90° ESX Drill mounting[4] DM19ESX 1 at 90° DM28ESX 2 at 180° DM29ESX 2 at 90° DM39ESX 3 at 90° DM49ESX 4 at 90°	AERIS™ Suspend drill mounting[4,5] DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90° DM39AST_ 3 at 90° DM49AST_ 4 at 90° OMERO™ Suspend drill mounting[4,5] DM19MRT_ 1 at 90° DM28MRT_ 2 at 180° DM29MRT_ 2 at 90° DM39MRT_ 3 at 90° DM49MRT_ 4 at 90°	Shipped installed VD Vibration damper[6] HAxy Horizontal arm bracket (1 fixture)[7,8] FDLxy Festoon outlet less electrical[7,9] CPL12/xy 1/2" coupling[7] CPL34/xy 3/4" coupling[7] CPL1/xy 1" coupling[7] NPL12/xy 1/2" threaded nipple[7] NPL34/xy 3/4" threaded nipple[7] NPL1/xy 1" threaded nipple[7] EHHxy Extra handhole[7,10] NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) IC Interior coating[11] L/AB Less anchor bolts (Include when anchor bolts are not needed) TP Tamper resistant handhole cover fasteners UL UL listed with label (Includes NEC compliant cover) BAA Buy America(n) Act Compliant[12]	Super durable paint colors DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white Other finishes GALV Galvanized finish Architectural colors and special finishes Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes available.

NOTES:

1. Handhole covers (HHC), full base covers (FBC) and top caps (TC) shipped separately. No need to call out in nomenclature. For additional parts please order as replacements.
2. Wall thickness will be signified with a "C" (11 Gauge) or a "G" (7-Gauge) in nomenclature. "C" - 0.1196" | "G" - 0.1793".
3. PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20. The combination includes a required extra handhole.
4. Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
5. Insert "1" or "2" to designate fixture size; e.g. DM19AST2.
6. On 4" and 5" poles, VD cannot be installed if provisions (EHH, FDL, NPL, CPL) are located higher than 2/3 of the pole's total height.
   Example: Pole height is 25ft, A provision cannot be placed above 16ft.
7. Specify location and orientation when ordering option.
   For "x": Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-".
   Example: 5ft = 5 and 20ft 3in = 20-3
   For "y": Specify orientation from handhole (A,B,C,D) Refer to the Handhole Orientation diagram below.
   Example: 1/2" coupling at 5' 8", orientation C = CPL12/5-8C
8. Horizontal arm is 18" x 2-3/8" O.D. tenon standard, with radius curve providing 12" rise and 2-3/8" O.D. If ordering two horizontal arm at the same height, specify with HAxyy. Example: HA20BD.
9. FDL does not come with GFCI outlet or handhole cover. These must be supplied by contractor or electrician.
10. Combination of tenon-top and drill mount includes extra handhole. EHH includes cover.
11. Provides enhanced corrosion resistance.
12. Use when mill certifications are required.
13. Finish must be specified. Additional colors available; see Architectural Colors brochure linked here (Form No. 794.3).

Accessories: *Order as separate catalog number.*	
PL DT20	Plugs for ESX drillings
PL DT8	Plugs for DMxxAS drillings

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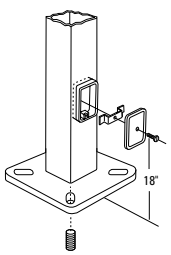
SSS Square Straight Steel Poles

TECHNICAL INFORMATION — EPA (ft^2) with 1.3 gust

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

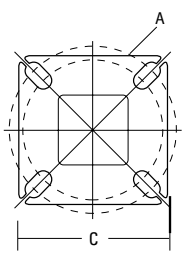
NOTE: * EPA values are based ASCE 7-93 wind map. For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

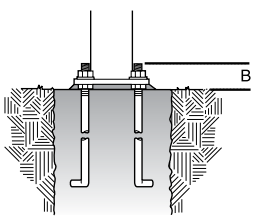
BASE DETAIL



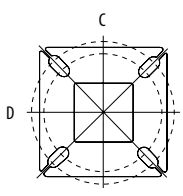
POLE DATA

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





HANDHOLE ORIENTATION



Default DM19 is on side B.

IMPORTANT INSTALLATION NOTES:

- **Do not** erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Lithonia Lighting is not responsible for the foundation design.
- Bolt circles have +/- 1/2" tolerance.

CAUTION: These specifications are intended for general purposes only. Lithonia Lighting reserves the right to change material or design, without prior notice, in a continuing effort to upgrade its products.

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D-Series Size 1

LED Area Luminaire

Buy American

Catalog Number

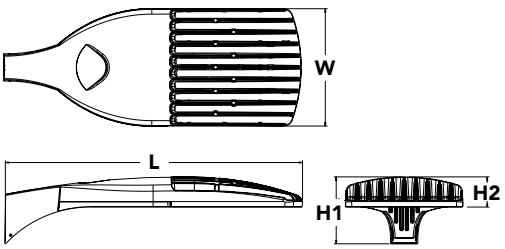
Notes

Type

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

Specifications

EPA:	1.01 ft² (0.09 m²)
Length:	33" (83.8 cm)
Width:	13" (33.0 cm)
Height H1:	7-1/2" (19.0 cm)
Height H2:	3-1/2"
Weight (max):	27 lbs (12.2 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

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

DSX1 LED — XXK = Specify

Series

DSX1 LED

LEDs

Forward optics

P1, P2, P3, P4[1], P5[1], P6[1], P7[1], P8, P9[1]

Rotated optics

P10[2], P11[2], P12[2], P13[1,2]

Color temperature

30K	3000 K
40K	4000 K
50K	5000 K

Distribution

T1S	Type I short (Automotive)
T2S	Type II short
T2M	Type II medium
T3S	Type III short
T3M	Type III medium
T4M	Type IV medium
TFTM	Forward throw medium
T5VS	Type V very short[3]
T5S	Type V short[3]
T5M	Type V medium[3]
T5W	Type V wide[3]
BLC	Backlight control[4]
LCCO	Left corner cutoff[4]
RCCO	Right corner cutoff[4]

Voltage

MVOLT[5]

XVOLT (277V-480V)[6,7,8]

120[9], 208[9], 240[9], 277[9], 347[9], 480[9]

Mounting

Shipped included

SPA	Square pole mounting
RPA	Round pole mounting[10]
WBA	Wall bracket[3]
SPUMBA	Square pole universal mounting adaptor[11]
RPUMBA	Round pole universal mounting adaptor[9]

Shipped separately

KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish)[12]

FINISH = Specify

Control options

Shipped installed

NLTAIR2	nLight AIR generation 2 enabled[13]
PIRHN	Network, high/low motion/ambient sensor[14]
PER	NEMA twist-lock receptacle only (controls ordered separate)[15]
PER5	Five-pin receptacle only (controls ordered separate)[15,16]
PER7	Seven-pin receptacle only (controls ordered separate)[15,16]
DMG	0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[17]
DS	Dual switching[18,19,20]
PIR	High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[20,21]
PIRH	High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[20,21]
PIR1FC3V	High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[20,21]
PIRH1FC3V	Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[20,21]
FAO	Field adjustable output[20,21]

Other options

Shipped installed

HS	House-side shield[23]
SF	Single fuse (120, 277, 347V)[9]
DF	Double fuse (208, 240, 480V)[9]
L90	Left rotated optics[2]
R90	Right rotated optics[2]
HA	50°C ambient operations[1]
BAA	Buy America(n) Act Compliant

Shipped separately

BS	Bird spikes[24]
EGS	External glare shield

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.

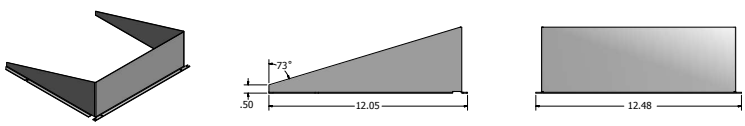
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [25]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [25]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [25]
DSHORT SBK U	Shorting cap [25]
DSX1HS 30C U	House-side shield for P1, P2, P3, P4 and P5 [23]
DSX1HS 40C U	House-side shield for P6 and P7 [23]
DSX1HS 60C U	House-side shield for P8, P9, P10, P11 and P12 [23]
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish) [26]
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) [12]
DSX1EGS (FINISH) U	External glare shield

For more control options, visit DTL and ROAM online.

NOTES
1 HA not available with P4, P5, P6, P7, P9 and P13.
2 P10, P11, P12 or P13 and rotated optics (L90, R90) only available together.
3 Any Type 5 distribution with photocell, is not available with WBA.
4 Not available with HS.
5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
6 XVOLT only suitable for use with P3, P5, P6, P7, P9 and P13.
7 XVOLT works with any voltage between 277V and 480V.
8 XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V.
9 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF.
10 Suitable for mounting to round poles between 3.5" and 12" diameter.
11 Universal mounting brackets intended for retrofit on existing, pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31. Only usable when pole's drill pattern is NOT Lithonia template #8
12 Must order fixture with SPA option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" diameter mast arm (not included).
13 Must be ordered with PIRHN. Sensor cover available only in dark bronze, black, white and natural aluminum colors.
14 Must be ordered with NLTAIR2. For more information on nLight Air 2 visit this link.
15 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting cap included.
16 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Node with integral dimming.
17 DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V, FAO.
18 Provides 50/50fixture operation via (2) independent drivers. Not available with PER, PER5, PER7, PIR or PIRH. Not available P1, P2, P3, P4 or P5.
19 Requires (2) separately switched circuits with isolated neutrol.
20 Reference Controls Option Default settings table on page 4.
21 Reference Motion Sensor table on page 4 to see functionality.
22 Not available with other dimming controls options.
23 Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
24 Must be ordered with fixture for factory pre-drilling.
25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Control Option Table on page 4.
26 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template #8.

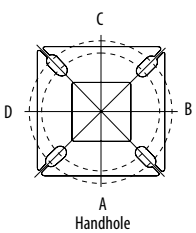
Options

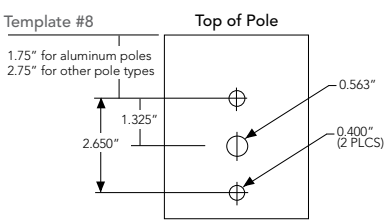
EGS - External Glare Shield



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

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 LED	1.013	2.025	1.945	3.038	2.850	3.749

	Drilling Template	Minimum Acceptable Outside Pole Dimension					
SPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
RPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
SPUMBA	#5	2-7/8"	3"	4"	4"	3.5"	4"
RPUMBA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"

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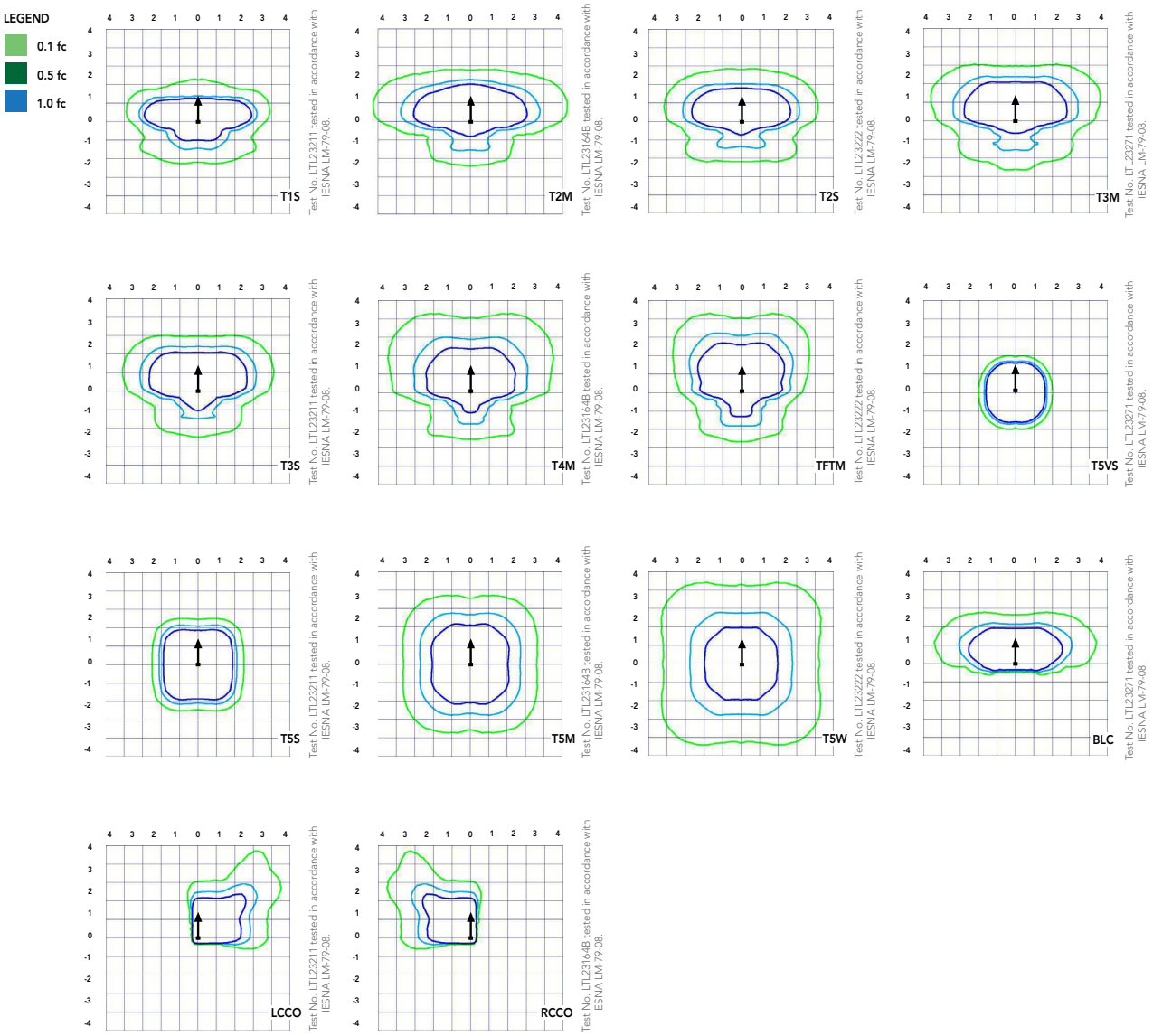
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 1 homepage.

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (25').



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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°F**	**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	0.96
50,000	0.92
100,000	0.85

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Phototcell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min
*for use when motion sensor is used as dusk to dawn control.						

Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A) 120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	30	530	54	0.45	0.26	0.23	0.19	0.10	0.12
	P2	30	700	70	0.59	0.34	0.30	0.25	0.20	0.16
	P3	30	1050	102	0.86	0.50	0.44	0.38	0.30	0.22
	P4	30	1250	125	1.06	0.60	0.52	0.46	0.37	0.27
	P5	30	1400	138	1.16	0.67	0.58	0.51	0.40	0.29
	P6	40	1250	163	1.36	0.78	0.68	0.59	0.47	0.34
	P7	40	1400	183	1.53	0.88	0.76	0.66	0.53	0.38
	P8	60	1050	207	1.74	0.98	0.87	0.76	0.64	0.49
	P9	60	1250	241	2.01	1.16	1.01	0.89	0.70	0.51
Rotated Optics (Requires L90 or R90)	P10	60	530	106	0.90	0.52	0.47	0.43	0.33	0.27
	P11	60	700	137	1.15	0.67	0.60	0.53	0.42	0.32
	P12	60	1050	207	1.74	0.99	0.87	0.76	0.60	0.46
	P13	60	1250	231	1.93	1.12	0.97	0.86	0.67	0.49

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	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 recepticle	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
PIR or PIRH	Motion sensors with integral photocell. PIR for 8-15' mounting; PIRH for 15-30' mounting	Luminaires dim when no occupancy is detected.	Acuity Controls SBGR	Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation.
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 rSDGR	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app.

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Performance Data

Lumen Output

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Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30	530	P1	54W	T1S	6,457	2	0	2	120	6,956	2	0	2	129	7,044	2	0	2	130
				T2S	6,450	2	0	2	119	6,949	2	0	2	129	7,037	2	0	2	130
				T2M	6,483	1	0	1	120	6,984	2	0	2	129	7,073	2	0	2	131
				T3S	6,279	2	0	2	116	6,764	2	0	2	125	6,850	2	0	2	127
				T3M	6,468	1	0	2	120	6,967	1	0	2	129	7,056	1	0	2	131
				T4M	6,327	1	0	2	117	6,816	1	0	2	126	6,902	1	0	2	128
				TFTM	6,464	1	0	2	120	6,963	1	0	2	129	7,051	1	0	2	131
				T5VS	6,722	2	0	0	124	7,242	3	0	0	134	7,334	3	0	0	136
				T5S	6,728	2	0	1	125	7,248	2	0	1	134	7,340	2	0	1	136
				T5M	6,711	3	0	1	124	7,229	3	0	1	134	7,321	3	0	2	136
				T5W	6,667	3	0	2	123	7,182	3	0	2	133	7,273	3	0	2	135
				BLC	5,299	1	0	1	98	5,709	1	0	2	106	5,781	1	0	2	107
				LCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
				RCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
30	700	P2	70W	T1S	8,249	2	0	2	118	8,886	2	0	2	127	8,999	2	0	2	129
				T2S	8,240	2	0	2	118	8,877	2	0	2	127	8,989	2	0	2	128
				T2M	8,283	2	0	2	118	8,923	2	0	2	127	9,036	2	0	2	129
				T3S	8,021	2	0	2	115	8,641	2	0	2	123	8,751	2	0	2	125
				T3M	8,263	2	0	2	118	8,901	2	0	2	127	9,014	2	0	2	129
				T4M	8,083	2	0	2	115	8,708	2	0	2	124	8,818	2	0	2	126
				TFTM	8,257	2	0	2	118	8,896	2	0	2	127	9,008	2	0	2	129
				T5VS	8,588	3	0	0	123	9,252	3	0	0	132	9,369	3	0	0	134
				T5S	8,595	3	0	1	123	9,259	3	0	1	132	9,376	3	0	1	134
				T5M	8,573	3	0	2	122	9,236	3	0	2	132	9,353	3	0	2	134
				T5W	8,517	3	0	2	122	9,175	4	0	2	131	9,291	4	0	2	133
				BLC	6,770	1	0	2	97	7,293	1	0	2	104	7,386	1	0	2	106
				LCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
				RCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
30	1050	P3	102W	T1S	11,661	2	0	2	114	12,562	3	0	3	123	12,721	3	0	3	125
				T2S	11,648	2	0	2	114	12,548	3	0	3	123	12,707	3	0	3	125
				T2M	11,708	2	0	2	115	12,613	2	0	2	124	12,773	2	0	2	125
				T3S	11,339	2	0	2	111	12,215	3	0	3	120	12,370	3	0	3	121
				T3M	11,680	2	0	2	115	12,582	2	0	2	123	12,742	2	0	2	125
				T4M	11,426	2	0	3	112	12,309	2	0	3	121	12,465	2	0	3	122
				TFTM	11,673	2	0	2	114	12,575	2	0	3	123	12,734	2	0	3	125
				T5VS	12,140	3	0	1	119	13,078	3	0	1	128	13,244	3	0	1	130
				T5S	12,150	3	0	1	119	13,089	3	0	1	128	13,254	3	0	1	130
				T5M	12,119	4	0	2	119	13,056	4	0	2	128	13,221	4	0	2	130
				T5W	12,040	4	0	3	118	12,970	4	0	3	127	13,134	4	0	3	129
				BLC	9,570	1	0	2	94	10,310	1	0	2	101	10,440	1	0	2	102
				LCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
				RCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
30	1250	P4	125W	T1S	13,435	3	0	3	107	14,473	3	0	3	116	14,657	3	0	3	117
				T2S	13,421	3	0	3	107	14,458	3	0	3	116	14,641	3	0	3	117
				T2M	13,490	2	0	2	108	14,532	3	0	3	116	14,716	3	0	3	118
				T3S	13,064	3	0	3	105	14,074	3	0	3	113	14,252	3	0	3	114
				T3M	13,457	2	0	2	108	14,497	2	0	2	116	14,681	2	0	2	117
				T4M	13,165	2	0	3	105	14,182	2	0	3	113	14,362	2	0	3	115
				TFTM	13,449	2	0	3	108	14,488	2	0	3	116	14,672	2	0	3	117
				T5VS	13,987	4	0	1	112	15,068	4	0	1	121	15,259	4	0	1	122
				T5S	13,999	3	0	1	112	15,080	3	0	1	121	15,271	3	0	1	122
				T5M	13,963	4	0	2	112	15,042	4	0	2	120	15,233	4	0	2	122
				T5W	13,872	4	0	3	111	14,944	4	0	3	120	15,133	4	0	3	121
				BLC	11,027	1	0	2	88	11,879	1	0	2	95	12,029	1	0	2	96
				LCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
				RCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
30	1400	P5	138W	T1S	14,679	3	0	3	106	15,814	3	0	3	115	16,014	3	0	3	116
				T2S	14,664	3	0	3	106	15,797	3	0	3	114	15,997	3	0	3	116
				T2M	14,739	3	0	3	107	15,878	3	0	3	115	16,079	3	0	3	117
				T3S	14,274	3	0	3	103	15,377	3	0	3	111	15,572	3	0	3	113
				T3M	14,704	2	0	3	107	15,840	3	0	3	115	16,040	3	0	3	116
				T4M	14,384	2	0	3	104	15,496	3	0	3	112	15,692	3	0	3	114
				TFTM	14,695	2	0	3	106	15,830	3	0	3	115	16,030	3	0	3	116
				T5VS	15,283	4	0	1	111	16,464	4	0	1	119	16,672	4	0	1	121
				T5S	15,295	3	0	1	111	16,477	4	0	1	119	16,686	4	0	1	121
				T5M	15,257	4	0	2	111	16,435	4	0	2	119	16,644	4	0	2	121
				T5W	15,157	4	0	3	110	16,328	4	0	3	118	16,534	4	0	3	120
				BLC	12,048	1	0	2	87	12,979	1	0	2	94	13,143	1	0	2	95
				LCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71
				RCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71

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Performance Data

Lumen Output

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

Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40	1250	P6	163W	T1S	17,654	3	0	3	108	19,018	3	0	3	117	19,259	3	0	3	118
				T2S	17,635	3	0	3	108	18,998	3	0	3	117	19,238	3	0	3	118
				T2M	17,726	3	0	3	109	19,096	3	0	3	117	19,337	3	0	3	119
				T3S	17,167	3	0	3	105	18,493	3	0	3	113	18,727	3	0	3	115
				T3M	17,683	3	0	3	108	19,049	3	0	3	117	19,290	3	0	3	118
				T4M	17,299	3	0	3	106	18,635	3	0	4	114	18,871	3	0	4	116
				TFTM	17,672	3	0	3	108	19,038	3	0	4	117	19,279	3	0	4	118
				T5VS	18,379	4	0	1	113	19,800	4	0	1	121	20,050	4	0	1	123
				T5S	18,394	4	0	2	113	19,816	4	0	2	122	20,066	4	0	2	123
				T5M	18,348	4	0	2	113	19,766	4	0	2	121	20,016	4	0	2	123
				T5W	18,228	5	0	3	112	19,636	5	0	3	120	19,885	5	0	3	122
				BLC	14,489	2	0	2	89	15,609	2	0	3	96	15,806	2	0	3	97
				LCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
				RCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
40	1400	P7	183W	T1S	19,227	3	0	3	105	20,712	3	0	3	113	20,975	3	0	3	115
				T2S	19,206	3	0	3	105	20,690	3	0	3	113	20,952	3	0	3	114
				T2M	19,305	3	0	3	105	20,797	3	0	3	114	21,060	3	0	3	115
				T3S	18,696	3	0	3	102	20,141	3	0	3	110	20,396	3	0	4	111
				T3M	19,258	3	0	3	105	20,746	3	0	3	113	21,009	3	0	3	115
				T4M	18,840	3	0	4	103	20,296	3	0	4	111	20,553	3	0	4	112
				TFTM	19,246	3	0	4	105	20,734	3	0	4	113	20,996	3	0	4	115
				T5VS	20,017	4	0	1	109	21,564	4	0	1	118	21,837	4	0	1	119
				T5S	20,033	4	0	2	109	21,581	4	0	2	118	21,854	4	0	2	119
				T5M	19,983	4	0	2	109	21,527	5	0	3	118	21,799	5	0	3	119
				T5W	19,852	5	0	3	108	21,386	5	0	3	117	21,656	5	0	3	118
				BLC	15,780	2	0	3	86	16,999	2	0	3	93	17,214	2	0	3	94
				LCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
				RCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
60	1050	P8	207W	T1S	22,490	3	0	3	109	24,228	3	0	3	117	24,535	3	0	3	119
				T2S	22,466	3	0	4	109	24,202	3	0	4	117	24,509	3	0	4	118
				T2M	22,582	3	0	3	109	24,327	3	0	3	118	24,635	3	0	3	119
				T3S	21,870	3	0	4	106	23,560	3	0	4	114	23,858	3	0	4	115
				T3M	22,527	3	0	4	109	24,268	3	0	4	117	24,575	3	0	4	119
				T4M	22,038	3	0	4	106	23,741	3	0	4	115	24,041	3	0	4	116
				TFTM	22,513	3	0	4	109	24,253	3	0	4	117	24,560	3	0	4	119
				T5VS	23,415	5	0	1	113	25,224	5	0	1	122	25,543	5	0	1	123
				T5S	23,434	4	0	2	113	25,244	4	0	2	122	25,564	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,221	5	0	4	112	25,016	5	0	4	121	25,332	5	0	4	122
				BLC	18,458	2	0	3	89	19,885	2	0	3	96	20,136	2	0	3	97
				LCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
60	1250	P9	241W	T1S	25,575	3	0	3	106	27,551	3	0	3	114	27,900	3	0	3	116
				T2S	25,548	3	0	4	106	27,522	3	0	4	114	27,871	3	0	4	116
				T2M	25,680	3	0	3	107	27,664	3	0	3	115	28,014	3	0	3	116
				T3S	24,870	3	0	4	103	26,791	3	0	4	111	27,130	3	0	4	113
				T3M	25,617	3	0	4	106	27,597	3	0	4	115	27,946	3	0	4	116
				T4M	25,061	3	0	4	104	26,997	3	0	4	112	27,339	3	0	4	113
				TFTM	25,602	3	0	4	106	27,580	3	0	4	114	27,929	3	0	4	116
				T5VS	26,626	5	0	1	110	28,684	5	0	1	119	29,047	5	0	1	121
				T5S	26,648	4	0	2	111	28,707	5	0	2	119	29,070	5	0	2	121
				T5M	26,581	5	0	3	110	28,635	5	0	3	119	28,997	5	0	3	120
				T5W	26,406	5	0	4	110	28,447	5	0	4	118	28,807	5	0	4	120
				BLC	20,990	2	0	3	87	22,612	2	0	3	94	22,898	2	0	3	95
				LCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71
				RCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71

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Performance Data

Lumen Output

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

Rotated Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60	530	**P10**	106W	T1S	13,042	3	0	3	123	14,050	3	0	3	133	14,228	3	0	3	134
				T2S	12,967	4	0	4	122	13,969	4	0	4	132	14,146	4	0	4	133
				T2M	13,201	3	0	3	125	14,221	3	0	3	134	14,401	3	0	3	136
				T3S	12,766	4	0	4	120	13,752	4	0	4	130	13,926	4	0	4	131
				T3M	13,193	4	0	4	124	14,213	4	0	4	134	14,393	4	0	4	136
				T4M	12,944	4	0	4	122	13,945	4	0	4	132	14,121	4	0	4	133
				TFTM	13,279	4	0	4	125	14,305	4	0	4	135	14,486	4	0	4	137
				T5VS	13,372	3	0	1	126	14,405	4	0	1	136	14,588	4	0	1	138
				T5S	13,260	3	0	1	125	14,284	3	0	1	135	14,465	3	0	1	136
				T5M	13,256	4	0	2	125	14,281	4	0	2	135	14,462	4	0	2	136
				T5W	13,137	4	0	3	124	14,153	4	0	3	134	14,332	4	0	3	135
				BLC	10,906	3	0	3	103	11,749	3	0	3	111	11,898	3	0	3	112
				LCCO	7,789	1	0	3	73	8,391	1	0	3	79	8,497	1	0	3	80
				RCCO	7,779	4	0	4	73	8,380	4	0	4	79	8,486	4	0	4	80
60	700	**P11**	137W	T1S	16,556	3	0	3	121	17,835	3	0	3	130	18,061	4	0	4	132
				T2S	16,461	4	0	4	120	17,733	4	0	4	129	17,957	4	0	4	131
				T2M	16,758	4	0	4	122	18,053	4	0	4	132	18,281	4	0	4	133
				T3S	16,205	4	0	4	118	17,457	4	0	4	127	17,678	4	0	4	129
				T3M	16,748	4	0	4	122	18,042	4	0	4	132	18,271	4	0	4	133
				T4M	16,432	4	0	4	120	17,702	4	0	4	129	17,926	4	0	4	131
				TFTM	16,857	4	0	4	123	18,159	4	0	4	133	18,389	4	0	4	134
				T5VS	16,975	4	0	1	124	18,287	4	0	1	133	18,518	4	0	1	135
				T5S	16,832	4	0	1	123	18,133	4	0	2	132	18,362	4	0	2	134
				T5M	16,828	4	0	2	123	18,128	4	0	2	132	18,358	4	0	2	134
				T5W	16,677	4	0	3	122	17,966	5	0	3	131	18,193	5	0	3	133
				BLC	13,845	3	0	3	101	14,915	3	0	3	109	15,103	3	0	3	110
				LCCO	9,888	1	0	3	72	10,652	2	0	3	78	10,787	2	0	3	79
				RCCO	9,875	4	0	4	72	10,638	4	0	4	78	10,773	4	0	4	79
60	1050	**P12**	207W	T1S	22,996	4	0	4	111	24,773	4	0	4	120	25,087	4	0	4	121
				T2S	22,864	4	0	4	110	24,631	5	0	5	119	24,943	5	0	5	120
				T2M	23,277	4	0	4	112	25,075	4	0	4	121	25,393	4	0	4	123
				T3S	22,509	4	0	4	109	24,248	5	0	5	117	24,555	5	0	5	119
				T3M	23,263	4	0	4	112	25,061	4	0	4	121	25,378	4	0	4	123
				T4M	22,824	5	0	5	110	24,588	5	0	5	119	24,899	5	0	5	120
				TFTM	23,414	5	0	5	113	25,223	5	0	5	122	25,543	5	0	5	123
				T5VS	23,579	5	0	1	114	25,401	5	0	1	123	25,722	5	0	1	124
				T5S	23,380	4	0	2	113	25,187	4	0	2	122	25,506	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,165	5	0	4	112	24,955	5	0	4	121	25,271	5	0	4	122
				BLC	19,231	4	0	4	93	20,717	4	0	4	100	20,979	4	0	4	101
				LCCO	13,734	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,716	4	0	4	66	14,776	4	0	4	71	14,963	4	0	4	72
60	1250	**P13**	231W	T1S	25,400	4	0	4	110	27,363	4	0	4	118	27,709	4	0	4	120
				T2S	25,254	5	0	5	109	27,205	5	0	5	118	27,550	5	0	5	119
				T2M	25,710	4	0	4	111	27,696	4	0	4	120	28,047	4	0	4	121
				T3S	24,862	5	0	5	108	26,783	5	0	5	116	27,122	5	0	5	117
				T3M	25,695	5	0	5	111	27,680	5	0	5	120	28,031	5	0	5	121
				T4M	25,210	5	0	5	109	27,158	5	0	5	118	27,502	5	0	5	119
				TFTM	25,861	5	0	5	112	27,860	5	0	5	121	28,212	5	0	5	122
				T5VS	26,043	5	0	1	113	28,056	5	0	1	121	28,411	5	0	1	123
				T5S	25,824	4	0	2	112	27,819	5	0	2	120	28,172	5	0	2	122
				T5M	25,818	5	0	3	112	27,813	5	0	3	120	28,165	5	0	3	122
				T5W	25,586	5	0	4	111	27,563	5	0	4	119	27,912	5	0	4	121
				BLC	21,241	4	0	4	92	22,882	4	0	4	99	23,172	4	0	4	100
				LCCO	15,170	2	0	4	66	16,342	2	0	4	71	16,549	2	0	4	72
				RCCO	15,150	5	0	5	66	16,321	5	0	5	71	16,527	5	0	5	72

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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 is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 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.

OPTICS
Precision-molded proprietary acrylic 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. 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 L85/100,000 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 sensors with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 30 feet.

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
Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). NEMA photocontrol receptacle are also available.

LISTINGS
UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40ºC minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

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.

BUY AMERICAN
Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/customer-support/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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D-Series Size 1
LED Area Luminaire

Buy American

Catalog Number

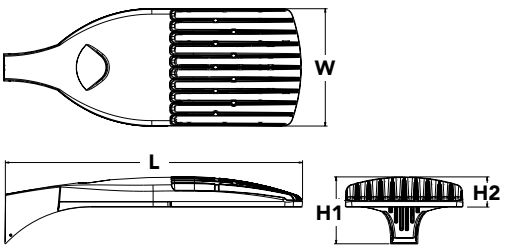
Notes

Type

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

Specifications

EPA:	1.01 ft² (0.09 m²)
Length:	33" (83.8 cm)
Width:	13" (33.0 cm)
Height H1:	7-1/2" (19.0 cm)
Height H2:	3-1/2"
Weight (max):	27 lbs (12.2 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

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

DSX1 LED		XXK = Specify			
Series	**LEDs**	**Color temperature**	**Distribution**	**Voltage**	**Mounting**
DSX1 LED	**Forward optics** P1 P4[1] P7[1] P2 P5[1] P8 P3 P6[1] P9[1] **Rotated optics** P10[2] P12[2] P11[2] P13[1,2]	30K 3000 K 40K 4000 K 50K 5000 K	T1S Type I short (Automotive) T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium T5VS Type V very short[3] T5S Type V short[3] T5M Type V medium[3] T5W Type V wide[3] BLC Backlight control[4] LCCO Left corner cutoff[4] RCCO Right corner cutoff[4]	MVOLT[5] XVOLT (277V-480V)[6,7,8] 120[9] 208[9] 240[9] 277[9] 347[9] 480[9]	**Shipped included** SPA Square pole mounting RPA Round pole mounting[10] WBA Wall bracket[3] SPUMBA Square pole universal mounting adaptor[11] RPUMBA Round pole universal mounting adaptor[9] **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[12]

		FINISH = Specify
Control options	**Other options**	**Finish** *(required)*

Shipped installed
- NLTAIR2 nLight AIR generation 2 enabled[13]
- PIRHN Network, high/low motion/ambient sensor[14]
- PER NEMA twist-lock receptacle only (controls ordered separate)[15]
- PER5 Five-pin receptacle only (controls ordered separate)[15,16]
- PER7 Seven-pin receptacle only (controls ordered separate)[15,16]
- DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[17]
- DS Dual switching[18,19,20]
- PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[20,21]
- PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[20,21]
- PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[20,21]
- PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[20,21]
- FAO Field adjustable output[20,21]

Shipped installed
- HS House-side shield[23]
- SF Single fuse (120, 277, 347V)[9]
- DF Double fuse (208, 240, 480V)[9]
- L90 Left rotated optics[2]
- R90 Right rotated optics[2]
- HA 50°C ambient operations[1]
- BAA Buy America(n) Act Compliant

Shipped separately
- BS Bird spikes[24]
- EGS External glare shield

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.

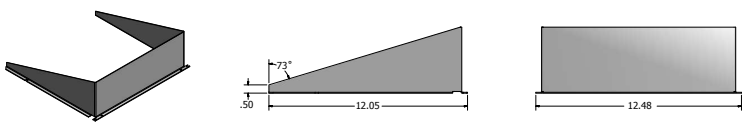
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [25]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [25]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [25]
DSHORT SBK U	Shorting cap [25]
DSX1HS 30C U	House-side shield for P1, P2, P3, P4 and P5 [23]
DSX1HS 40C U	House-side shield for P6 and P7 [23]
DSX1HS 60C U	House-side shield for P8, P9, P10, P11 and P12 [23]
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish) [26]
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) [12]
DSX1EGS (FINISH) U	External glare shield

For more control options, visit DTL and ROAM online.

NOTES
1 HA not available with P4, P5, P6, P7, P9 and P13.
2 P10, P11, P12 or P13 and rotated optics (L90, R90) only available together.
3 Any Type 5 distribution with photocell, is not available with WBA.
4 Not available with HS.
5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
6 XVOLT only suitable for use with P3, P5, P6, P7, P9 and P13.
7 XVOLT works with any voltage between 277V and 480V.
8 XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V.
9 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF.
10 Suitable for mounting to round poles between 3.5" and 12" diameter.
11 Universal mounting brackets intended for retrofit on existing, pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31. Only usable when pole's drill pattern is NOT Lithonia template #8
12 Must order fixture with SPA option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" diameter mast arm (not included).
13 Must be ordered with PIRHN. Sensor cover available only in dark bronze, black, white and natural aluminum colors.
14 Must be ordered with NLTAIR2. For more information on nLight Air 2 visit this link.
15 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting cap included.
16 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Node with integral dimming.
17 DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V, FAO.
18 Provides 50/50fixture operation via (2) independent drivers. Not available with PER, PER5, PER7, PIR or PIRH. Not available P1, P2, P3, P4 or P5.
19 Requires (2) separately switched circuits with isolated neutrol.
20 Reference Controls Option Default settings table on page 4.
21 Reference Motion Sensor table on page 4 to see functionality.
22 Not available with other dimming controls options.
23 Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
24 Must be ordered with fixture for factory pre-drilling.
25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Control Option Table on page 4.
26 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template #8.

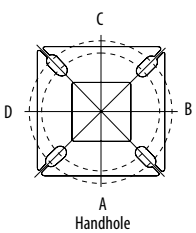
Options

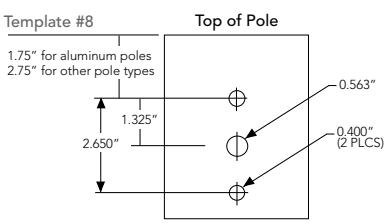
EGS - External Glare Shield



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

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 LED	1.013	2.025	1.945	3.038	2.850	3.749

	Drilling Template	Minimum Acceptable Outside Pole Dimension					
SPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
RPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
SPUMBA	#5	2-7/8"	3"	4"	4"	3.5"	4"
RPUMBA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"

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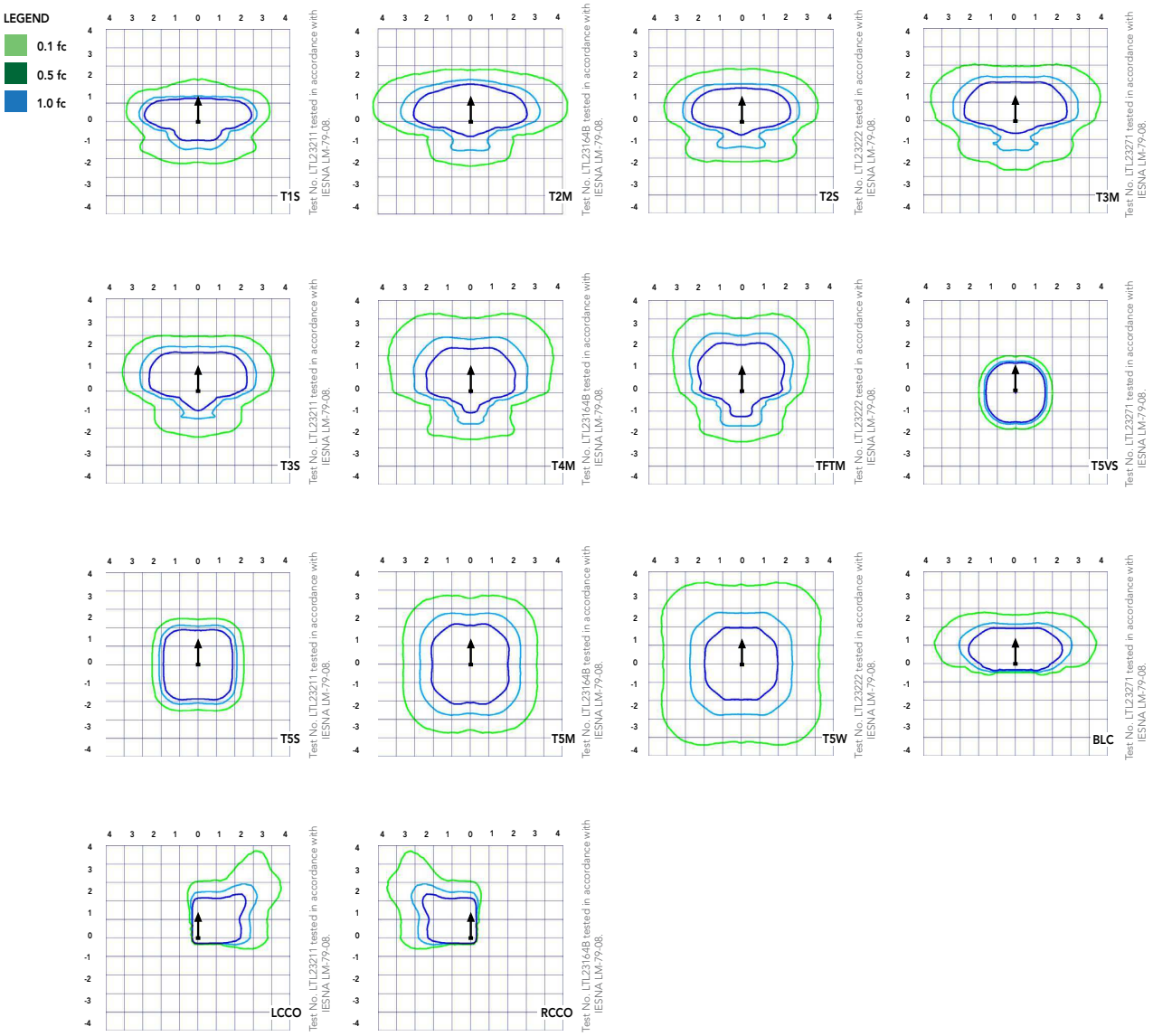
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 1 homepage.

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (25').



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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°F**	**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	0.96
50,000	0.92
100,000	0.85

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Phototcell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min
*for use when motion sensor is used as dusk to dawn control.						

Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A) 120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	30	530	54	0.45	0.26	0.23	0.19	0.10	0.12
	P2	30	700	70	0.59	0.34	0.30	0.25	0.20	0.16
	P3	30	1050	102	0.86	0.50	0.44	0.38	0.30	0.22
	P4	30	1250	125	1.06	0.60	0.52	0.46	0.37	0.27
	P5	30	1400	138	1.16	0.67	0.58	0.51	0.40	0.29
	P6	40	1250	163	1.36	0.78	0.68	0.59	0.47	0.34
	P7	40	1400	183	1.53	0.88	0.76	0.66	0.53	0.38
	P8	60	1050	207	1.74	0.98	0.87	0.76	0.64	0.49
	P9	60	1250	241	2.01	1.16	1.01	0.89	0.70	0.51
Rotated Optics (Requires L90 or R90)	P10	60	530	106	0.90	0.52	0.47	0.43	0.33	0.27
	P11	60	700	137	1.15	0.67	0.60	0.53	0.42	0.32
	P12	60	1050	207	1.74	0.99	0.87	0.76	0.60	0.46
	P13	60	1250	231	1.93	1.12	0.97	0.86	0.67	0.49

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	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 recepticle	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
PIR or PIRH	Motion sensors with integral photocell. PIR for 8-15' mounting; PIRH for 15-30' mounting	Luminaires dim when no occupancy is detected.	Acuity Controls SBGR	Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation.
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 rSDGR	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app.

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Performance Data

Lumen Output

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Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30	530	P1	54W	T1S	6,457	2	0	2	120	6,956	2	0	2	129	7,044	2	0	2	130
				T2S	6,450	2	0	2	119	6,949	2	0	2	129	7,037	2	0	2	130
				T2M	6,483	1	0	1	120	6,984	2	0	2	129	7,073	2	0	2	131
				T3S	6,279	2	0	2	116	6,764	2	0	2	125	6,850	2	0	2	127
				T3M	6,468	1	0	2	120	6,967	1	0	2	129	7,056	1	0	2	131
				T4M	6,327	1	0	2	117	6,816	1	0	2	126	6,902	1	0	2	128
				TFTM	6,464	1	0	2	120	6,963	1	0	2	129	7,051	1	0	2	131
				T5VS	6,722	2	0	0	124	7,242	3	0	0	134	7,334	3	0	0	136
				T5S	6,728	2	0	1	125	7,248	2	0	1	134	7,340	2	0	1	136
				T5M	6,711	3	0	1	124	7,229	3	0	1	134	7,321	3	0	2	136
				T5W	6,667	3	0	2	123	7,182	3	0	2	133	7,273	3	0	2	135
				BLC	5,299	1	0	1	98	5,709	1	0	2	106	5,781	1	0	2	107
				LCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
				RCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
30	700	P2	70W	T1S	8,249	2	0	2	118	8,886	2	0	2	127	8,999	2	0	2	129
				T2S	8,240	2	0	2	118	8,877	2	0	2	127	8,989	2	0	2	128
				T2M	8,283	2	0	2	118	8,923	2	0	2	127	9,036	2	0	2	129
				T3S	8,021	2	0	2	115	8,641	2	0	2	123	8,751	2	0	2	125
				T3M	8,263	2	0	2	118	8,901	2	0	2	127	9,014	2	0	2	129
				T4M	8,083	2	0	2	115	8,708	2	0	2	124	8,818	2	0	2	126
				TFTM	8,257	2	0	2	118	8,896	2	0	2	127	9,008	2	0	2	129
				T5VS	8,588	3	0	0	123	9,252	3	0	0	132	9,369	3	0	0	134
				T5S	8,595	3	0	1	123	9,259	3	0	1	132	9,376	3	0	1	134
				T5M	8,573	3	0	2	122	9,236	3	0	2	132	9,353	3	0	2	134
				T5W	8,517	3	0	2	122	9,175	4	0	2	131	9,291	4	0	2	133
				BLC	6,770	1	0	2	97	7,293	1	0	2	104	7,386	1	0	2	106
				LCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
				RCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
30	1050	P3	102W	T1S	11,661	2	0	2	114	12,562	3	0	3	123	12,721	3	0	3	125
				T2S	11,648	2	0	2	114	12,548	3	0	3	123	12,707	3	0	3	125
				T2M	11,708	2	0	2	115	12,613	2	0	2	124	12,773	2	0	2	125
				T3S	11,339	2	0	2	111	12,215	3	0	3	120	12,370	3	0	3	121
				T3M	11,680	2	0	2	115	12,582	2	0	2	123	12,742	2	0	2	125
				T4M	11,426	2	0	3	112	12,309	2	0	3	121	12,465	2	0	3	122
				TFTM	11,673	2	0	2	114	12,575	2	0	3	123	12,734	2	0	3	125
				T5VS	12,140	3	0	1	119	13,078	3	0	1	128	13,244	3	0	1	130
				T5S	12,150	3	0	1	119	13,089	3	0	1	128	13,254	3	0	1	130
				T5M	12,119	4	0	2	119	13,056	4	0	2	128	13,221	4	0	2	130
				T5W	12,040	4	0	3	118	12,970	4	0	3	127	13,134	4	0	3	129
				BLC	9,570	1	0	2	94	10,310	1	0	2	101	10,440	1	0	2	102
				LCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
				RCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
30	1250	P4	125W	T1S	13,435	3	0	3	107	14,473	3	0	3	116	14,657	3	0	3	117
				T2S	13,421	3	0	3	107	14,458	3	0	3	116	14,641	3	0	3	117
				T2M	13,490	2	0	2	108	14,532	3	0	3	116	14,716	3	0	3	118
				T3S	13,064	3	0	3	105	14,074	3	0	3	113	14,252	3	0	3	114
				T3M	13,457	2	0	2	108	14,497	2	0	2	116	14,681	2	0	2	117
				T4M	13,165	2	0	3	105	14,182	2	0	3	113	14,362	2	0	3	115
				TFTM	13,449	2	0	3	108	14,488	2	0	3	116	14,672	2	0	3	117
				T5VS	13,987	4	0	1	112	15,068	4	0	1	121	15,259	4	0	1	122
				T5S	13,999	3	0	1	112	15,080	3	0	1	121	15,271	3	0	1	122
				T5M	13,963	4	0	2	112	15,042	4	0	2	120	15,233	4	0	2	122
				T5W	13,872	4	0	3	111	14,944	4	0	3	120	15,133	4	0	3	121
				BLC	11,027	1	0	2	88	11,879	1	0	2	95	12,029	1	0	2	96
				LCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
				RCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
30	1400	P5	138W	T1S	14,679	3	0	3	106	15,814	3	0	3	115	16,014	3	0	3	116
				T2S	14,664	3	0	3	106	15,797	3	0	3	114	15,997	3	0	3	116
				T2M	14,739	3	0	3	107	15,878	3	0	3	115	16,079	3	0	3	117
				T3S	14,274	3	0	3	103	15,377	3	0	3	111	15,572	3	0	3	113
				T3M	14,704	2	0	3	107	15,840	3	0	3	115	16,040	3	0	3	116
				T4M	14,384	2	0	3	104	15,496	3	0	3	112	15,692	3	0	3	114
				TFTM	14,695	2	0	3	106	15,830	3	0	3	115	16,030	3	0	3	116
				T5VS	15,283	4	0	1	111	16,464	4	0	1	119	16,672	4	0	1	121
				T5S	15,295	3	0	1	111	16,477	4	0	1	119	16,686	4	0	1	121
				T5M	15,257	4	0	2	111	16,435	4	0	2	119	16,644	4	0	2	121
				T5W	15,157	4	0	3	110	16,328	4	0	3	118	16,534	4	0	3	120
				BLC	12,048	1	0	2	87	12,979	1	0	2	94	13,143	1	0	2	95
				LCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71
				RCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71

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Performance Data

Lumen Output

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Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40	1250	P6	163W	T1S	17,654	3	0	3	108	19,018	3	0	3	117	19,259	3	0	3	118
				T2S	17,635	3	0	3	108	18,998	3	0	3	117	19,238	3	0	3	118
				T2M	17,726	3	0	3	109	19,096	3	0	3	117	19,337	3	0	3	119
				T3S	17,167	3	0	3	105	18,493	3	0	3	113	18,727	3	0	3	115
				T3M	17,683	3	0	3	108	19,049	3	0	3	117	19,290	3	0	3	118
				T4M	17,299	3	0	3	106	18,635	3	0	4	114	18,871	3	0	4	116
				TFTM	17,672	3	0	3	108	19,038	3	0	4	117	19,279	3	0	4	118
				T5VS	18,379	4	0	1	113	19,800	4	0	1	121	20,050	4	0	1	123
				T5S	18,394	4	0	2	113	19,816	4	0	2	122	20,066	4	0	2	123
				T5M	18,348	4	0	2	113	19,766	4	0	2	121	20,016	4	0	2	123
				T5W	18,228	5	0	3	112	19,636	5	0	3	120	19,885	5	0	3	122
				BLC	14,489	2	0	2	89	15,609	2	0	3	96	15,806	2	0	3	97
				LCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
				RCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
40	1400	P7	183W	T1S	19,227	3	0	3	105	20,712	3	0	3	113	20,975	3	0	3	115
				T2S	19,206	3	0	3	105	20,690	3	0	3	113	20,952	3	0	3	114
				T2M	19,305	3	0	3	105	20,797	3	0	3	114	21,060	3	0	3	115
				T3S	18,696	3	0	3	102	20,141	3	0	3	110	20,396	3	0	4	111
				T3M	19,258	3	0	3	105	20,746	3	0	3	113	21,009	3	0	3	115
				T4M	18,840	3	0	4	103	20,296	3	0	4	111	20,553	3	0	4	112
				TFTM	19,246	3	0	4	105	20,734	3	0	4	113	20,996	3	0	4	115
				T5VS	20,017	4	0	1	109	21,564	4	0	1	118	21,837	4	0	1	119
				T5S	20,033	4	0	2	109	21,581	4	0	2	118	21,854	4	0	2	119
				T5M	19,983	4	0	2	109	21,527	5	0	3	118	21,799	5	0	3	119
				T5W	19,852	5	0	3	108	21,386	5	0	3	117	21,656	5	0	3	118
				BLC	15,780	2	0	3	86	16,999	2	0	3	93	17,214	2	0	3	94
				LCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
				RCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
60	1050	P8	207W	T1S	22,490	3	0	3	109	24,228	3	0	3	117	24,535	3	0	3	119
				T2S	22,466	3	0	4	109	24,202	3	0	4	117	24,509	3	0	4	118
				T2M	22,582	3	0	3	109	24,327	3	0	3	118	24,635	3	0	3	119
				T3S	21,870	3	0	4	106	23,560	3	0	4	114	23,858	3	0	4	115
				T3M	22,527	3	0	4	109	24,268	3	0	4	117	24,575	3	0	4	119
				T4M	22,038	3	0	4	106	23,741	3	0	4	115	24,041	3	0	4	116
				TFTM	22,513	3	0	4	109	24,253	3	0	4	117	24,560	3	0	4	119
				T5VS	23,415	5	0	1	113	25,224	5	0	1	122	25,543	5	0	1	123
				T5S	23,434	4	0	2	113	25,244	4	0	2	122	25,564	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,221	5	0	4	112	25,016	5	0	4	121	25,332	5	0	4	122
				BLC	18,458	2	0	3	89	19,885	2	0	3	96	20,136	2	0	3	97
				LCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
60	1250	P9	241W	T1S	25,575	3	0	3	106	27,551	3	0	3	114	27,900	3	0	3	116
				T2S	25,548	3	0	4	106	27,522	3	0	4	114	27,871	3	0	4	116
				T2M	25,680	3	0	3	107	27,664	3	0	3	115	28,014	3	0	3	116
				T3S	24,870	3	0	4	103	26,791	3	0	4	111	27,130	3	0	4	113
				T3M	25,617	3	0	4	106	27,597	3	0	4	115	27,946	3	0	4	116
				T4M	25,061	3	0	4	104	26,997	3	0	4	112	27,339	3	0	4	113
				TFTM	25,602	3	0	4	106	27,580	3	0	4	114	27,929	3	0	4	116
				T5VS	26,626	5	0	1	110	28,684	5	0	1	119	29,047	5	0	1	121
				T5S	26,648	4	0	2	111	28,707	5	0	2	119	29,070	5	0	2	121
				T5M	26,581	5	0	3	110	28,635	5	0	3	119	28,997	5	0	3	120
				T5W	26,406	5	0	4	110	28,447	5	0	4	118	28,807	5	0	4	120
				BLC	20,990	2	0	3	87	22,612	2	0	3	94	22,898	2	0	3	95
				LCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71
				RCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71

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Performance Data

Lumen Output

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Rotated Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60	530	P10	106W	T1S	13,042	3	0	3	123	14,050	3	0	3	133	14,228	3	0	3	134
				T2S	12,967	4	0	4	122	13,969	4	0	4	132	14,146	4	0	4	133
				T2M	13,201	3	0	3	125	14,221	3	0	3	134	14,401	3	0	3	136
				T3S	12,766	4	0	4	120	13,752	4	0	4	130	13,926	4	0	4	131
				T3M	13,193	4	0	4	124	14,213	4	0	4	134	14,393	4	0	4	136
				T4M	12,944	4	0	4	122	13,945	4	0	4	132	14,121	4	0	4	133
				TFTM	13,279	4	0	4	125	14,305	4	0	4	135	14,486	4	0	4	137
				T5VS	13,372	3	0	1	126	14,405	4	0	1	136	14,588	4	0	1	138
				T5S	13,260	3	0	1	125	14,284	3	0	1	135	14,465	3	0	1	136
				T5M	13,256	4	0	2	125	14,281	4	0	2	135	14,462	4	0	2	136
				T5W	13,137	4	0	3	124	14,153	4	0	3	134	14,332	4	0	3	135
				BLC	10,906	3	0	3	103	11,749	3	0	3	111	11,898	3	0	3	112
				LCCO	7,789	1	0	3	73	8,391	1	0	3	79	8,497	1	0	3	80
				RCCO	7,779	4	0	4	73	8,380	4	0	4	79	8,486	4	0	4	80
60	700	P11	137W	T1S	16,556	3	0	3	121	17,835	3	0	3	130	18,061	4	0	4	132
				T2S	16,461	4	0	4	120	17,733	4	0	4	129	17,957	4	0	4	131
				T2M	16,758	4	0	4	122	18,053	4	0	4	132	18,281	4	0	4	133
				T3S	16,205	4	0	4	118	17,457	4	0	4	127	17,678	4	0	4	129
				T3M	16,748	4	0	4	122	18,042	4	0	4	132	18,271	4	0	4	133
				T4M	16,432	4	0	4	120	17,702	4	0	4	129	17,926	4	0	4	131
				TFTM	16,857	4	0	4	123	18,159	4	0	4	133	18,389	4	0	4	134
				T5VS	16,975	4	0	1	124	18,287	4	0	1	133	18,518	4	0	1	135
				T5S	16,832	4	0	1	123	18,133	4	0	2	132	18,362	4	0	2	134
				T5M	16,828	4	0	2	123	18,128	4	0	2	132	18,358	4	0	2	134
				T5W	16,677	4	0	3	122	17,966	5	0	3	131	18,193	5	0	3	133
				BLC	13,845	3	0	3	101	14,915	3	0	3	109	15,103	3	0	3	110
				LCCO	9,888	1	0	3	72	10,652	2	0	3	78	10,787	2	0	3	79
				RCCO	9,875	4	0	4	72	10,638	4	0	4	78	10,773	4	0	4	79
60	1050	P12	207W	T1S	22,996	4	0	4	111	24,773	4	0	4	120	25,087	4	0	4	121
				T2S	22,864	4	0	4	110	24,631	5	0	5	119	24,943	5	0	5	120
				T2M	23,277	4	0	4	112	25,075	4	0	4	121	25,393	4	0	4	123
				T3S	22,509	4	0	4	109	24,248	5	0	5	117	24,555	5	0	5	119
				T3M	23,263	4	0	4	112	25,061	4	0	4	121	25,378	4	0	4	123
				T4M	22,824	5	0	5	110	24,588	5	0	5	119	24,899	5	0	5	120
				TFTM	23,414	5	0	5	113	25,223	5	0	5	122	25,543	5	0	5	123
				T5VS	23,579	5	0	1	114	25,401	5	0	1	123	25,722	5	0	1	124
				T5S	23,380	4	0	2	113	25,187	4	0	2	122	25,506	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,165	5	0	4	112	24,955	5	0	4	121	25,271	5	0	4	122
				BLC	19,231	4	0	4	93	20,717	4	0	4	100	20,979	4	0	4	101
				LCCO	13,734	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,716	4	0	4	66	14,776	4	0	4	71	14,963	4	0	4	72
60	1250	P13	231W	T1S	25,400	4	0	4	110	27,363	4	0	4	118	27,709	4	0	4	120
				T2S	25,254	5	0	5	109	27,205	5	0	5	118	27,550	5	0	5	119
				T2M	25,710	4	0	4	111	27,696	4	0	4	120	28,047	4	0	4	121
				T3S	24,862	5	0	5	108	26,783	5	0	5	116	27,122	5	0	5	117
				T3M	25,695	5	0	5	111	27,680	5	0	5	120	28,031	5	0	5	121
				T4M	25,210	5	0	5	109	27,158	5	0	5	118	27,502	5	0	5	119
				TFTM	25,861	5	0	5	112	27,860	5	0	5	121	28,212	5	0	5	122
				T5VS	26,043	5	0	1	113	28,056	5	0	1	121	28,411	5	0	1	123
				T5S	25,824	4	0	2	112	27,819	5	0	2	120	28,172	5	0	2	122
				T5M	25,818	5	0	3	112	27,813	5	0	3	120	28,165	5	0	3	122
				T5W	25,586	5	0	4	111	27,563	5	0	4	119	27,912	5	0	4	121
				BLC	21,241	4	0	4	92	22,882	4	0	4	99	23,172	4	0	4	100
				LCCO	15,170	2	0	4	66	16,342	2	0	4	71	16,549	2	0	4	72
				RCCO	15,150	5	0	5	66	16,321	5	0	5	71	16,527	5	0	5	72

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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 is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 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.

OPTICS
Precision-molded proprietary acrylic 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. 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 L85/100,000 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 sensors with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 30 feet.

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
Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). NEMA photocontrol receptacle are also available.

LISTINGS
UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40ºC minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

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.

BUY AMERICAN
Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/customer-support/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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LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

Anchor Base Poles

SSS

SQUARE STRAIGHT STEEL

Buy American

FEATURES & SPECIFICATIONS

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

CONSTRUCTION —

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

Pole Top: Options include tenon top, drilled for side mount fixture, tenon with drilling (includes extra handhole) and open top. Side drilled and open top poles include a removable top cap.

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

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

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

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

FINISH — Extra durable painted finish is coated with TGIC (Triglycidyl Isocyanurate) Polyester powder that meets 5A and 5B classifications of ASTM D3359. Powder-coat finishes include Dark Bronze, White, Black, and Natural Aluminum colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes.

BUY AMERICAN — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

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

WARRANTY — 1-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.
Specifications subject to change without notice.

SSS Square Straight Steel Poles

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

Example: SSS 20 5C DM19 DDBXD

SSS	25= 25ft					FINISH = Specify
Series	**Nominal fixture mounting height**	**Nominal shaft base size/wall thickness[2]**	**Mounting[3]**		**Options**	**Finish[13]**
SSS[1]	10'-39' (for 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.) See technical information table for complete ordering information.)	4C 4" 11g (.1196") 4G 4" 7g (.1793") 5C 5" 11g (.1196") 5G 5" 7g (.1793") 6G 6" 7g (.1793") See technical information table for complete ordering information.)	Tenon mounting PT Open top (includes top cap) T20 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D. (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS) T35 4" O.D. (3-1/2" NPS) KAC/KAD/KSE/KSF/KVR/KVF Drill mounting[4] DM19 1 at 90° DM28 2 at 180° DM28 PL 2 at 180° with one side plugged DM29 2 at 90° DM39 3 at 90° DM49 4 at 90° CSX/DSX/RSX/AERIS™/OMERO™/ HLA/KAX Drill mounting[4] DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM39AS 3 at 90° DM49AS 4 at 90° RAD drill mounting[4] DM19RAD 1 at 90° DM28RAD 2 at 180° DM29RAD 2 at 90° DM39RAD 3 at 90° DM49RAD 4 at 90° ESX Drill mounting[4] DM19ESX 1 at 90° DM28ESX 2 at 180° DM29ESX 2 at 90° DM39ESX 3 at 90° DM49ESX 4 at 90°	AERIS™ Suspend drill mounting[4,5] DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90° DM39AST_ 3 at 90° DM49AST_ 4 at 90° OMERO™ Suspend drill mounting[4,5] DM19MRT_ 1 at 90° DM28MRT_ 2 at 180° DM29MRT_ 2 at 90° DM39MRT_ 3 at 90° DM49MRT_ 4 at 90°	Shipped installed VD Vibration damper[6] HAxy Horizontal arm bracket (1 fixture)[7,8] FDLxy Festoon outlet less electrical[7,9] CPL12/xy 1/2" coupling[7] CPL34/xy 3/4" coupling[7] CPL1/xy 1" coupling[7] NPL12/xy 1/2" threaded nipple[7] NPL34/xy 3/4" threaded nipple[7] NPL1/xy 1" threaded nipple[7] EHHxy Extra handhole[7,10] NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) IC Interior coating[11] L/AB Less anchor bolts (Include when anchor bolts are not needed) TP Tamper resistant handhole cover fasteners UL UL listed with label (Includes NEC compliant cover) BAA Buy America(n) Act Compliant[12]	Super durable paint colors DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white Other finishes GALV Galvanized finish Architectural colors and special finishes Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes available.

NOTES:

1. Handhole covers (HHC), full base covers (FBC) and top caps (TC) shipped separately. No need to call out in nomenclature. For additional parts please order as replacements.
2. Wall thickness will be signified with a "C" (11 Gauge) or a "G" (7-Gauge) in nomenclature. "C" - 0.1196" | "G" - 0.1793".
3. PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20. The combination includes a required extra handhole.
4. Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
5. Insert "1" or "2" to designate fixture size; e.g. DM19AST2.
6. On 4" and 5" poles, VD cannot be installed if provisions (EHH, FDL, NPL, CPL) are located higher than 2/3 of the pole's total height.
   Example: Pole height is 25ft, A provision cannot be placed above 16ft.
7. Specify location and orientation when ordering option.
   For "x": Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-".
   Example: 5ft = 5 and 20ft 3in = 20-3
   For "y": Specify orientation from handhole (A,B,C,D) Refer to the Handhole Orientation diagram below.
   Example: 1/2" coupling at 5' 8", orientation C = CPL12/5-8C
8. Horizontal arm is 18" x 2-3/8" O.D. tenon standard, with radius curve providing 12" rise and 2-3/8" O.D. If ordering two horizontal arm at the same height, specify with HAxyy. Example: HA20BD.
9. FDL does not come with GFCI outlet or handhole cover. These must be supplied by contractor or electrician.
10. Combination of tenon-top and drill mount includes extra handhole. EHH includes cover.
11. Provides enhanced corrosion resistance.
12. Use when mill certifications are required.
13. Finish must be specified. Additional colors available; see Architectural Colors brochure linked here (Form No. 794.3).

Accessories: *Order as separate catalog number.*

PL DT20	Plugs for ESX drillings
PL DT8	Plugs for DMxxAS drillings

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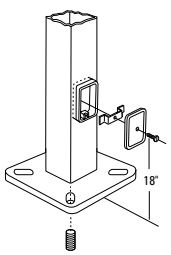
SSS Square Straight Steel Poles

TECHNICAL INFORMATION — EPA (ft^2) with 1.3 gust

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

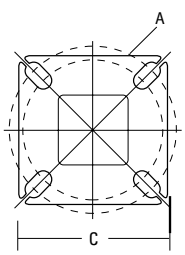
NOTE: * EPA values are based ASCE 7-93 wind map. For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

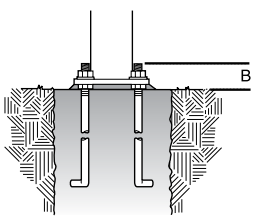
BASE DETAIL



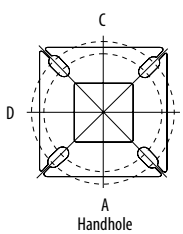
POLE DATA

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





HANDHOLE ORIENTATION



Default DM19 is on side B.

IMPORTANT INSTALLATION NOTES:

- **Do not** erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Lithonia Lighting is not responsible for the foundation design.
- Bolt circles have +/- 1/2" tolerance.

CAUTION: These specifications are intended for general purposes only. Lithonia Lighting reserves the right to change material or design, without prior notice, in a continuing effort to upgrade its products.

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D-Series Size 1
LED Area Luminaire

Buy American

Catalog Number

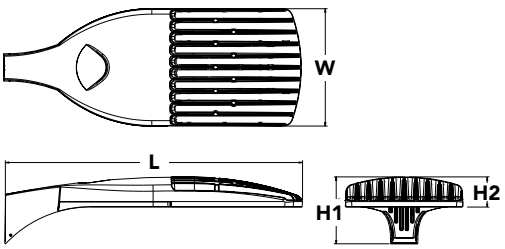
Notes

Type

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

Specifications

EPA:	1.01 ft² (0.09 m²)
Length:	33" (83.8 cm)
Width:	13" (33.0 cm)
Height H1:	7-1/2" (19.0 cm)
Height H2:	3-1/2"
Weight (max):	27 lbs (12.2 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

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

DSX1 LED		XXK = Specify			
Series	**LEDs**	**Color temperature**	**Distribution**	**Voltage**	**Mounting**
DSX1 LED	**Forward optics** P1 P4[1] P7[1] P2 P5[1] P8 P3 P6[1] P9[1] **Rotated optics** P10[2] P12[2] P11[2] P13[1,2]	30K 3000 K 40K 4000 K 50K 5000 K	T1S Type I short (Automotive) T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium T5VS Type V very short[3] T5S Type V short[3] T5M Type V medium[3] T5W Type V wide[3] BLC Backlight control[4] LCCO Left corner cutoff[4] RCCO Right corner cutoff[4]	MVOLT[5] XVOLT (277V-480V)[6,7,8] 120[9] 208[9] 240[9] 277[9] 347[9] 480[9]	**Shipped included** SPA Square pole mounting RPA Round pole mounting[10] WBA Wall bracket[3] SPUMBA Square pole universal mounting adaptor[11] RPUMBA Round pole universal mounting adaptor[9] **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[12]

FINISH = Specify

Control options		**Other options**	**Finish** *(required)*
Shipped installed		**Shipped installed**	
NLTAIR2	nLight AIR generation 2 enabled[13]	HS House-side shield[23]	DDBXD Dark bronze
PIRHN	Network, high/low motion/ambient sensor[14]	SF Single fuse (120, 277, 347V)[9]	DBLXD Black
PER	NEMA twist-lock receptacle only (controls ordered separate)[15]	DF Double fuse (208, 240, 480V)[9]	DNAXD Natural aluminum
PER5	Five-pin receptacle only (controls ordered separate)[15,16]	L90 Left rotated optics[2]	DWHXD White
PER7	Seven-pin receptacle only (controls ordered separate)[15,16]	R90 Right rotated optics[2]	DDBTXD Textured dark bronze
DMG	0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[17]	HA 50°C ambient operations[1]	DBLBXD Textured black
DS	Dual switching[18,19,20]	BAA Buy America(n) Act Compliant	DNATXD Textured natural aluminum
PIR	High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[20,21]	**Shipped separately**	DWHGXD Textured white
PIRH	High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[20,21]	BS Bird spikes[24]	
PIR1FC3V	High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[20,21]	EGS External glare shield	
PIRH1FC3V	Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[20,21]		
FAO	Field adjustable output[20,21]		

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Ordering Information

Accessories

Ordered and shipped separately.

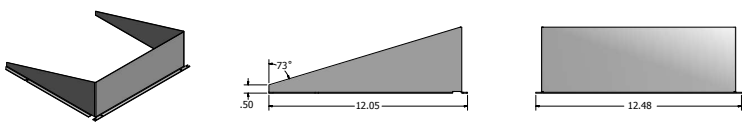
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [25]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [25]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [25]
DSHORT SBK U	Shorting cap [25]
DSX1HS 30C U	House-side shield for P1, P2, P3, P4 and P5 [23]
DSX1HS 40C U	House-side shield for P6 and P7 [23]
DSX1HS 60C U	House-side shield for P8, P9, P10, P11 and P12 [23]
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish) [26]
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) [12]
DSX1EGS (FINISH) U	External glare shield

For more control options, visit DTL and ROAM online.

NOTES
1 HA not available with P4, P5, P6, P7, P9 and P13.
2 P10, P11, P12 or P13 and rotated optics (L90, R90) only available together.
3 Any Type 5 distribution with photocell, is not available with WBA.
4 Not available with HS.
5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
6 XVOLT only suitable for use with P3, P5, P6, P7, P9 and P13.
7 XVOLT works with any voltage between 277V and 480V.
8 XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V.
9 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF.
10 Suitable for mounting to round poles between 3.5" and 12" diameter.
11 Universal mounting brackets intended for retrofit on existing, pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31. Only usable when pole's drill pattern is NOT Lithonia template #8
12 Must order fixture with SPA option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" diameter mast arm (not included).
13 Must be ordered with PIRHN. Sensor cover available only in dark bronze, black, white and natural aluminum colors.
14 Must be ordered with NLTAIR2. For more information on nLight Air 2 visit this link.
15 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting cap included.
16 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Node with integral dimming.
17 DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V, FAO.
18 Provides 50/50fixture operation via (2) independent drivers. Not available with PER, PER5, PER7, PIR or PIRH. Not available P1, P2, P3, P4 or P5.
19 Requires (2) separately switched circuits with isolated neutrol.
20 Reference Controls Option Default settings table on page 4.
21 Reference Motion Sensor table on page 4 to see functionality.
22 Not available with other dimming controls options.
23 Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
24 Must be ordered with fixture for factory pre-drilling.
25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Control Option Table on page 4.
26 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template #8.

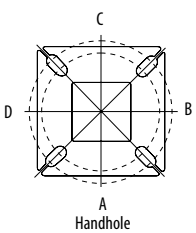
Options

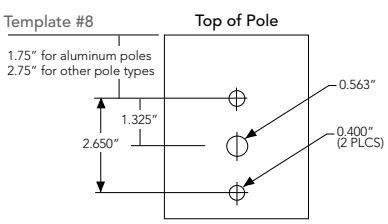
EGS - External Glare Shield



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

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 LED	1.013	2.025	1.945	3.038	2.850	3.749

	Drilling Template	Minimum Acceptable Outside Pole Dimension					
SPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
RPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
SPUMBA	#5	2-7/8"	3"	4"	4"	3.5"	4"
RPUMBA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"

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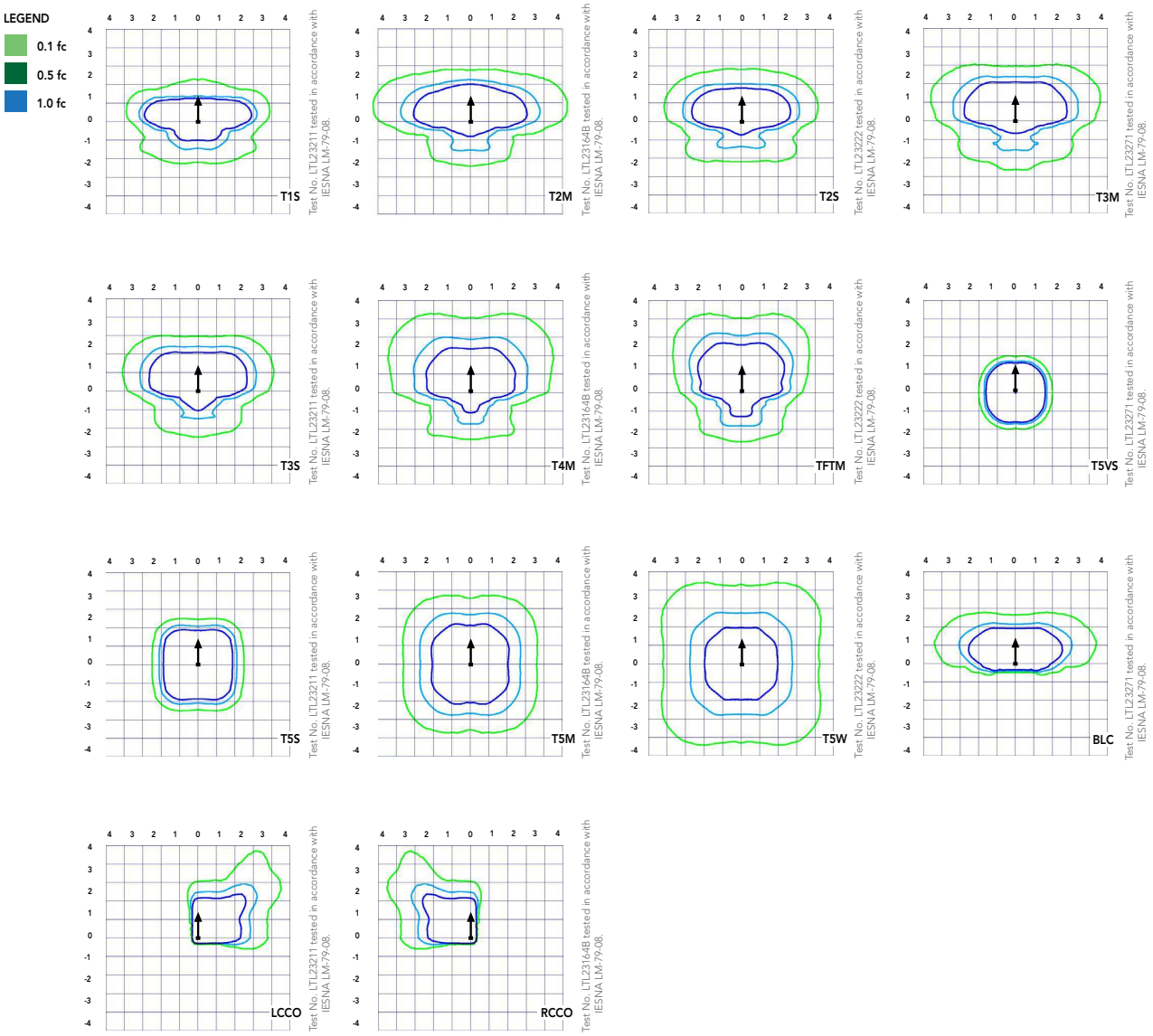
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 1 homepage.

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (25').



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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°F**	**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	0.96
50,000	0.92
100,000	0.85

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Phototcell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min
*for use when motion sensor is used as dusk to dawn control.						

Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A) 120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	30	530	54	0.45	0.26	0.23	0.19	0.10	0.12
	P2	30	700	70	0.59	0.34	0.30	0.25	0.20	0.16
	P3	30	1050	102	0.86	0.50	0.44	0.38	0.30	0.22
	P4	30	1250	125	1.06	0.60	0.52	0.46	0.37	0.27
	P5	30	1400	138	1.16	0.67	0.58	0.51	0.40	0.29
	P6	40	1250	163	1.36	0.78	0.68	0.59	0.47	0.34
	P7	40	1400	183	1.53	0.88	0.76	0.66	0.53	0.38
	P8	60	1050	207	1.74	0.98	0.87	0.76	0.64	0.49
	P9	60	1250	241	2.01	1.16	1.01	0.89	0.70	0.51
Rotated Optics (Requires L90 or R90)	P10	60	530	106	0.90	0.52	0.47	0.43	0.33	0.27
	P11	60	700	137	1.15	0.67	0.60	0.53	0.42	0.32
	P12	60	1050	207	1.74	0.99	0.87	0.76	0.60	0.46
	P13	60	1250	231	1.93	1.12	0.97	0.86	0.67	0.49

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	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 recepticle	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
PIR or PIRH	Motion sensors with integral photocell. PIR for 8-15' mounting; PIRH for 15-30' mounting	Luminaires dim when no occupancy is detected.	Acuity Controls SBGR	Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation.
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 rSDGR	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app.

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Performance Data

Lumen Output

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

Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30	530	P1	54W	T1S	6,457	2	0	2	120	6,956	2	0	2	129	7,044	2	0	2	130
				T2S	6,450	2	0	2	119	6,949	2	0	2	129	7,037	2	0	2	130
				T2M	6,483	1	0	1	120	6,984	2	0	2	129	7,073	2	0	2	131
				T3S	6,279	2	0	2	116	6,764	2	0	2	125	6,850	2	0	2	127
				T3M	6,468	1	0	2	120	6,967	1	0	2	129	7,056	1	0	2	131
				T4M	6,327	1	0	2	117	6,816	1	0	2	126	6,902	1	0	2	128
				TFTM	6,464	1	0	2	120	6,963	1	0	2	129	7,051	1	0	2	131
				T5VS	6,722	2	0	0	124	7,242	3	0	0	134	7,334	3	0	0	136
				T5S	6,728	2	0	1	125	7,248	2	0	1	134	7,340	2	0	1	136
				T5M	6,711	3	0	1	124	7,229	3	0	1	134	7,321	3	0	2	136
				T5W	6,667	3	0	2	123	7,182	3	0	2	133	7,273	3	0	2	135
				BLC	5,299	1	0	1	98	5,709	1	0	2	106	5,781	1	0	2	107
				LCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
				RCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
30	700	P2	70W	T1S	8,249	2	0	2	118	8,886	2	0	2	127	8,999	2	0	2	129
				T2S	8,240	2	0	2	118	8,877	2	0	2	127	8,989	2	0	2	128
				T2M	8,283	2	0	2	118	8,923	2	0	2	127	9,036	2	0	2	129
				T3S	8,021	2	0	2	115	8,641	2	0	2	123	8,751	2	0	2	125
				T3M	8,263	2	0	2	118	8,901	2	0	2	127	9,014	2	0	2	129
				T4M	8,083	2	0	2	115	8,708	2	0	2	124	8,818	2	0	2	126
				TFTM	8,257	2	0	2	118	8,896	2	0	2	127	9,008	2	0	2	129
				T5VS	8,588	3	0	0	123	9,252	3	0	0	132	9,369	3	0	0	134
				T5S	8,595	3	0	1	123	9,259	3	0	1	132	9,376	3	0	1	134
				T5M	8,573	3	0	2	122	9,236	3	0	2	132	9,353	3	0	2	134
				T5W	8,517	3	0	2	122	9,175	4	0	2	131	9,291	4	0	2	133
				BLC	6,770	1	0	2	97	7,293	1	0	2	104	7,386	1	0	2	106
				LCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
				RCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
30	1050	P3	102W	T1S	11,661	2	0	2	114	12,562	3	0	3	123	12,721	3	0	3	125
				T2S	11,648	2	0	2	114	12,548	3	0	3	123	12,707	3	0	3	125
				T2M	11,708	2	0	2	115	12,613	2	0	2	124	12,773	2	0	2	125
				T3S	11,339	2	0	2	111	12,215	3	0	3	120	12,370	3	0	3	121
				T3M	11,680	2	0	2	115	12,582	2	0	2	123	12,742	2	0	2	125
				T4M	11,426	2	0	3	112	12,309	2	0	3	121	12,465	2	0	3	122
				TFTM	11,673	2	0	2	114	12,575	2	0	3	123	12,734	2	0	3	125
				T5VS	12,140	3	0	1	119	13,078	3	0	1	128	13,244	3	0	1	130
				T5S	12,150	3	0	1	119	13,089	3	0	1	128	13,254	3	0	1	130
				T5M	12,119	4	0	2	119	13,056	4	0	2	128	13,221	4	0	2	130
				T5W	12,040	4	0	3	118	12,970	4	0	3	127	13,134	4	0	3	129
				BLC	9,570	1	0	2	94	10,310	1	0	2	101	10,440	1	0	2	102
				LCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
				RCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
30	1250	P4	125W	T1S	13,435	3	0	3	107	14,473	3	0	3	116	14,657	3	0	3	117
				T2S	13,421	3	0	3	107	14,458	3	0	3	116	14,641	3	0	3	117
				T2M	13,490	2	0	2	108	14,532	3	0	3	116	14,716	3	0	3	118
				T3S	13,064	3	0	3	105	14,074	3	0	3	113	14,252	3	0	3	114
				T3M	13,457	2	0	2	108	14,497	2	0	2	116	14,681	2	0	2	117
				T4M	13,165	2	0	3	105	14,182	2	0	3	113	14,362	2	0	3	115
				TFTM	13,449	2	0	3	108	14,488	2	0	3	116	14,672	2	0	3	117
				T5VS	13,987	4	0	1	112	15,068	4	0	1	121	15,259	4	0	1	122
				T5S	13,999	3	0	1	112	15,080	3	0	1	121	15,271	3	0	1	122
				T5M	13,963	4	0	2	112	15,042	4	0	2	120	15,233	4	0	2	122
				T5W	13,872	4	0	3	111	14,944	4	0	3	120	15,133	4	0	3	121
				BLC	11,027	1	0	2	88	11,879	1	0	2	95	12,029	1	0	2	96
				LCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
				RCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
30	1400	P5	138W	T1S	14,679	3	0	3	106	15,814	3	0	3	115	16,014	3	0	3	116
				T2S	14,664	3	0	3	106	15,797	3	0	3	114	15,997	3	0	3	116
				T2M	14,739	3	0	3	107	15,878	3	0	3	115	16,079	3	0	3	117
				T3S	14,274	3	0	3	103	15,377	3	0	3	111	15,572	3	0	3	113
				T3M	14,704	2	0	3	107	15,840	3	0	3	115	16,040	3	0	3	116
				T4M	14,384	2	0	3	104	15,496	3	0	3	112	15,692	3	0	3	114
				TFTM	14,695	2	0	3	106	15,830	3	0	3	115	16,030	3	0	3	116
				T5VS	15,283	4	0	1	111	16,464	4	0	1	119	16,672	4	0	1	121
				T5S	15,295	3	0	1	111	16,477	4	0	1	119	16,686	4	0	1	121
				T5M	15,257	4	0	2	111	16,435	4	0	2	119	16,644	4	0	2	121
				T5W	15,157	4	0	3	110	16,328	4	0	3	118	16,534	4	0	3	120
				BLC	12,048	1	0	2	87	12,979	1	0	2	94	13,143	1	0	2	95
				LCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71
				RCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71

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Performance Data

Lumen Output

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

Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40	1250	P6	163W	T1S	17,654	3	0	3	108	19,018	3	0	3	117	19,259	3	0	3	118
				T2S	17,635	3	0	3	108	18,998	3	0	3	117	19,238	3	0	3	118
				T2M	17,726	3	0	3	109	19,096	3	0	3	117	19,337	3	0	3	119
				T3S	17,167	3	0	3	105	18,493	3	0	3	113	18,727	3	0	3	115
				T3M	17,683	3	0	3	108	19,049	3	0	3	117	19,290	3	0	3	118
				T4M	17,299	3	0	3	106	18,635	3	0	4	114	18,871	3	0	4	116
				TFTM	17,672	3	0	3	108	19,038	3	0	4	117	19,279	3	0	4	118
				T5VS	18,379	4	0	1	113	19,800	4	0	1	121	20,050	4	0	1	123
				T5S	18,394	4	0	2	113	19,816	4	0	2	122	20,066	4	0	2	123
				T5M	18,348	4	0	2	113	19,766	4	0	2	121	20,016	4	0	2	123
				T5W	18,228	5	0	3	112	19,636	5	0	3	120	19,885	5	0	3	122
				BLC	14,489	2	0	2	89	15,609	2	0	3	96	15,806	2	0	3	97
				LCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
				RCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
40	1400	P7	183W	T1S	19,227	3	0	3	105	20,712	3	0	3	113	20,975	3	0	3	115
				T2S	19,206	3	0	3	105	20,690	3	0	3	113	20,952	3	0	3	114
				T2M	19,305	3	0	3	105	20,797	3	0	3	114	21,060	3	0	3	115
				T3S	18,696	3	0	3	102	20,141	3	0	3	110	20,396	3	0	4	111
				T3M	19,258	3	0	3	105	20,746	3	0	3	113	21,009	3	0	3	115
				T4M	18,840	3	0	4	103	20,296	3	0	4	111	20,553	3	0	4	112
				TFTM	19,246	3	0	4	105	20,734	3	0	4	113	20,996	3	0	4	115
				T5VS	20,017	4	0	1	109	21,564	4	0	1	118	21,837	4	0	1	119
				T5S	20,033	4	0	2	109	21,581	4	0	2	118	21,854	4	0	2	119
				T5M	19,983	4	0	2	109	21,527	5	0	3	118	21,799	5	0	3	119
				T5W	19,852	5	0	3	108	21,386	5	0	3	117	21,656	5	0	3	118
				BLC	15,780	2	0	3	86	16,999	2	0	3	93	17,214	2	0	3	94
				LCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
				RCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
60	1050	P8	207W	T1S	22,490	3	0	3	109	24,228	3	0	3	117	24,535	3	0	3	119
				T2S	22,466	3	0	4	109	24,202	3	0	4	117	24,509	3	0	4	118
				T2M	22,582	3	0	3	109	24,327	3	0	3	118	24,635	3	0	3	119
				T3S	21,870	3	0	4	106	23,560	3	0	4	114	23,858	3	0	4	115
				T3M	22,527	3	0	4	109	24,268	3	0	4	117	24,575	3	0	4	119
				T4M	22,038	3	0	4	106	23,741	3	0	4	115	24,041	3	0	4	116
				TFTM	22,513	3	0	4	109	24,253	3	0	4	117	24,560	3	0	4	119
				T5VS	23,415	5	0	1	113	25,224	5	0	1	122	25,543	5	0	1	123
				T5S	23,434	4	0	2	113	25,244	4	0	2	122	25,564	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,221	5	0	4	112	25,016	5	0	4	121	25,332	5	0	4	122
				BLC	18,458	2	0	3	89	19,885	2	0	3	96	20,136	2	0	3	97
				LCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
60	1250	P9	241W	T1S	25,575	3	0	3	106	27,551	3	0	3	114	27,900	3	0	3	116
				T2S	25,548	3	0	4	106	27,522	3	0	4	114	27,871	3	0	4	116
				T2M	25,680	3	0	3	107	27,664	3	0	3	115	28,014	3	0	3	116
				T3S	24,870	3	0	4	103	26,791	3	0	4	111	27,130	3	0	4	113
				T3M	25,617	3	0	4	106	27,597	3	0	4	115	27,946	3	0	4	116
				T4M	25,061	3	0	4	104	26,997	3	0	4	112	27,339	3	0	4	113
				TFTM	25,602	3	0	4	106	27,580	3	0	4	114	27,929	3	0	4	116
				T5VS	26,626	5	0	1	110	28,684	5	0	1	119	29,047	5	0	1	121
				T5S	26,648	4	0	2	111	28,707	5	0	2	119	29,070	5	0	2	121
				T5M	26,581	5	0	3	110	28,635	5	0	3	119	28,997	5	0	3	120
				T5W	26,406	5	0	4	110	28,447	5	0	4	118	28,807	5	0	4	120
				BLC	20,990	2	0	3	87	22,612	2	0	3	94	22,898	2	0	3	95
				LCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71
				RCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71

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Performance Data

Lumen Output

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

Rotated Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60	530	**P10**	106W	T1S	13,042	3	0	3	123	14,050	3	0	3	133	14,228	3	0	3	134
				T2S	12,967	4	0	4	122	13,969	4	0	4	132	14,146	4	0	4	133
				T2M	13,201	3	0	3	125	14,221	3	0	3	134	14,401	3	0	3	136
				T3S	12,766	4	0	4	120	13,752	4	0	4	130	13,926	4	0	4	131
				T3M	13,193	4	0	4	124	14,213	4	0	4	134	14,393	4	0	4	136
				T4M	12,944	4	0	4	122	13,945	4	0	4	132	14,121	4	0	4	133
				TFTM	13,279	4	0	4	125	14,305	4	0	4	135	14,486	4	0	4	137
				T5VS	13,372	3	0	1	126	14,405	4	0	1	136	14,588	4	0	1	138
				T5S	13,260	3	0	1	125	14,284	3	0	1	135	14,465	3	0	1	136
				T5M	13,256	4	0	2	125	14,281	4	0	2	135	14,462	4	0	2	136
				T5W	13,137	4	0	3	124	14,153	4	0	3	134	14,332	4	0	3	135
				BLC	10,906	3	0	3	103	11,749	3	0	3	111	11,898	3	0	3	112
				LCCO	7,789	1	0	3	73	8,391	1	0	3	79	8,497	1	0	3	80
				RCCO	7,779	4	0	4	73	8,380	4	0	4	79	8,486	4	0	4	80
60	700	**P11**	137W	T1S	16,556	3	0	3	121	17,835	3	0	3	130	18,061	4	0	4	132
				T2S	16,461	4	0	4	120	17,733	4	0	4	129	17,957	4	0	4	131
				T2M	16,758	4	0	4	122	18,053	4	0	4	132	18,281	4	0	4	133
				T3S	16,205	4	0	4	118	17,457	4	0	4	127	17,678	4	0	4	129
				T3M	16,748	4	0	4	122	18,042	4	0	4	132	18,271	4	0	4	133
				T4M	16,432	4	0	4	120	17,702	4	0	4	129	17,926	4	0	4	131
				TFTM	16,857	4	0	4	123	18,159	4	0	4	133	18,389	4	0	4	134
				T5VS	16,975	4	0	1	124	18,287	4	0	1	133	18,518	4	0	1	135
				T5S	16,832	4	0	1	123	18,133	4	0	2	132	18,362	4	0	2	134
				T5M	16,828	4	0	2	123	18,128	4	0	2	132	18,358	4	0	2	134
				T5W	16,677	4	0	3	122	17,966	5	0	3	131	18,193	5	0	3	133
				BLC	13,845	3	0	3	101	14,915	3	0	3	109	15,103	3	0	3	110
				LCCO	9,888	1	0	3	72	10,652	2	0	3	78	10,787	2	0	3	79
				RCCO	9,875	4	0	4	72	10,638	4	0	4	78	10,773	4	0	4	79
60	1050	**P12**	207W	T1S	22,996	4	0	4	111	24,773	4	0	4	120	25,087	4	0	4	121
				T2S	22,864	4	0	4	110	24,631	5	0	5	119	24,943	5	0	5	120
				T2M	23,277	4	0	4	112	25,075	4	0	4	121	25,393	4	0	4	123
				T3S	22,509	4	0	4	109	24,248	5	0	5	117	24,555	5	0	5	119
				T3M	23,263	4	0	4	112	25,061	4	0	4	121	25,378	4	0	4	123
				T4M	22,824	5	0	5	110	24,588	5	0	5	119	24,899	5	0	5	120
				TFTM	23,414	5	0	5	113	25,223	5	0	5	122	25,543	5	0	5	123
				T5VS	23,579	5	0	1	114	25,401	5	0	1	123	25,722	5	0	1	124
				T5S	23,380	4	0	2	113	25,187	4	0	2	122	25,506	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,165	5	0	4	112	24,955	5	0	4	121	25,271	5	0	4	122
				BLC	19,231	4	0	4	93	20,717	4	0	4	100	20,979	4	0	4	101
				LCCO	13,734	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,716	4	0	4	66	14,776	4	0	4	71	14,963	4	0	4	72
60	1250	**P13**	231W	T1S	25,400	4	0	4	110	27,363	4	0	4	118	27,709	4	0	4	120
				T2S	25,254	5	0	5	109	27,205	5	0	5	118	27,550	5	0	5	119
				T2M	25,710	4	0	4	111	27,696	4	0	4	120	28,047	4	0	4	121
				T3S	24,862	5	0	5	108	26,783	5	0	5	116	27,122	5	0	5	117
				T3M	25,695	5	0	5	111	27,680	5	0	5	120	28,031	5	0	5	121
				T4M	25,210	5	0	5	109	27,158	5	0	5	118	27,502	5	0	5	119
				TFTM	25,861	5	0	5	112	27,860	5	0	5	121	28,212	5	0	5	122
				T5VS	26,043	5	0	1	113	28,056	5	0	1	121	28,411	5	0	1	123
				T5S	25,824	4	0	2	112	27,819	5	0	2	120	28,172	5	0	2	122
				T5M	25,818	5	0	3	112	27,813	5	0	3	120	28,165	5	0	3	122
				T5W	25,586	5	0	4	111	27,563	5	0	4	119	27,912	5	0	4	121
				BLC	21,241	4	0	4	92	22,882	4	0	4	99	23,172	4	0	4	100
				LCCO	15,170	2	0	4	66	16,342	2	0	4	71	16,549	2	0	4	72
				RCCO	15,150	5	0	5	66	16,321	5	0	5	71	16,527	5	0	5	72

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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 is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 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.

OPTICS
Precision-molded proprietary acrylic 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. 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 L85/100,000 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 sensors with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 30 feet.

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
Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). NEMA photocontrol receptacle are also available.

LISTINGS
UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40ºC minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

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.

BUY AMERICAN
Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/customer-support/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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LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

FEATURES & SPECIFICATIONS

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

CONSTRUCTION —

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

Pole Top: Options include tenon top, drilled for side mount fixture, tenon with drilling (includes extra handhole) and open top. Side drilled and open top poles include a removable top cap.

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

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

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

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

FINISH — Extra durable painted finish is coated with TGIC (Triglycidyl Isocyanurate) Polyester powder that meets 5A and 5B classifications of ASTM D3359. Powder-coat finishes include Dark Bronze, White, Black, and Natural Aluminum colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes.

BUY AMERICAN — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

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

WARRANTY — 1-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.
Specifications subject to change without notice.

Anchor Base Poles

SSS

SQUARE STRAIGHT STEEL

Buy American

SSS Square Straight Steel Poles

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

Example: SSS 20 5C DM19 DDBXD

SSS	25= 25ft					FINISH = Specify
Series	**Nominal fixture mounting height**	**Nominal shaft base size/wall thickness[2]**	**Mounting[3]**		**Options**	**Finish[13]**
SSS[1]	10'-39' (for 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.) See technical information table for complete ordering information.)	4C 4" 11g (.1196") 4G 4" 7g (.1793") 5C 5" 11g (.1196") 5G 5" 7g (.1793") 6G 6" 7g (.1793") See technical information table for complete ordering information.)	Tenon mounting PT Open top (includes top cap) T20 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D. (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS) T35 4" O.D. (3-1/2" NPS) KAC/KAD/KSE/KSF/KVR/KVF Drill mounting[4] DM19 1 at 90° DM28 2 at 180° DM28 PL 2 at 180° with one side plugged DM29 2 at 90° DM39 3 at 90° DM49 4 at 90° CSX/DSX/RSX/AERIS™/OMERO™/ HLA/KAX Drill mounting[4] DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM39AS 3 at 90° DM49AS 4 at 90° RAD drill mounting[4] DM19RAD 1 at 90° DM28RAD 2 at 180° DM29RAD 2 at 90° DM39RAD 3 at 90° DM49RAD 4 at 90° ESX Drill mounting[4] DM19ESX 1 at 90° DM28ESX 2 at 180° DM29ESX 2 at 90° DM39ESX 3 at 90° DM49ESX 4 at 90°	AERIS™ Suspend drill mounting[4,5] DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90° DM39AST_ 3 at 90° DM49AST_ 4 at 90° OMERO™ Suspend drill mounting[4,5] DM19MRT_ 1 at 90° DM28MRT_ 2 at 180° DM29MRT_ 2 at 90° DM39MRT_ 3 at 90° DM49MRT_ 4 at 90°	Shipped installed VD Vibration damper[6] HAxy Horizontal arm bracket (1 fixture)[7,8] FDLxy Festoon outlet less electrical[7,9] CPL12/xy 1/2" coupling[7] CPL34/xy 3/4" coupling[7] CPL1/xy 1" coupling[7] NPL12/xy 1/2" threaded nipple[7] NPL34/xy 3/4" threaded nipple[7] NPL1/xy 1" threaded nipple[7] EHHxy Extra handhole[7,10] NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) IC Interior coating[11] L/AB Less anchor bolts (Include when anchor bolts are not needed) TP Tamper resistant handhole cover fasteners UL UL listed with label (Includes NEC compliant cover) BAA Buy America(n) Act Compliant[12]	Super durable paint colors DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white Other finishes GALV Galvanized finish Architectural colors and special finishes Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes available.

NOTES:

1. Handhole covers (HHC), full base covers (FBC) and top caps (TC) shipped separately. No need to call out in nomenclature. For additional parts please order as replacements.
2. Wall thickness will be signified with a "C" (11 Gauge) or a "G" (7-Gauge) in nomenclature. "C" - 0.1196" | "G" - 0.1793".
3. PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20. The combination includes a required extra handhole.
4. Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
5. Insert "1" or "2" to designate fixture size; e.g. DM19AST2.
6. On 4" and 5" poles, VD cannot be installed if provisions (EHH, FDL, NPL, CPL) are located higher than 2/3 of the pole's total height.
   Example: Pole height is 25ft, A provision cannot be placed above 16ft.
7. Specify location and orientation when ordering option.
   For "x": Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-".
   Example: 5ft = 5 and 20ft 3in = 20-3
   For "y": Specify orientation from handhole (A,B,C,D) Refer to the Handhole Orientation diagram below.
   Example: 1/2" coupling at 5' 8", orientation C = CPL12/5-8C
8. Horizontal arm is 18" x 2-3/8" O.D. tenon standard, with radius curve providing 12" rise and 2-3/8" O.D. If ordering two horizontal arm at the same height, specify with HAxyy. Example: HA20BD.
9. FDL does not come with GFCI outlet or handhole cover. These must be supplied by contractor or electrician.
10. Combination of tenon-top and drill mount includes extra handhole. EHH includes cover.
11. Provides enhanced corrosion resistance.
12. Use when mill certifications are required.
13. Finish must be specified. Additional colors available; see Architectural Colors brochure linked here (Form No. 794.3).

Accessories: *Order as separate catalog number.*	
PL DT20	Plugs for ESX drillings
PL DT8	Plugs for DMxxAS drillings

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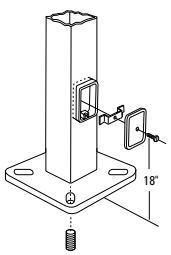
SSS Square Straight Steel Poles

TECHNICAL INFORMATION — EPA (ft^2) with 1.3 gust

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

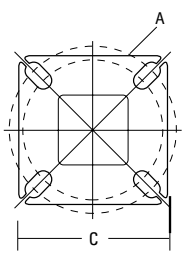
NOTE: * EPA values are based ASCE 7-93 wind map. For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

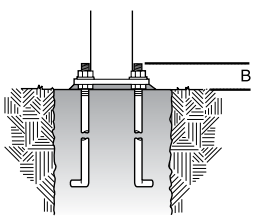
BASE DETAIL



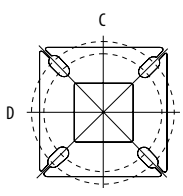
POLE DATA

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





HANDHOLE ORIENTATION



Default DM19 is on side B.

IMPORTANT INSTALLATION NOTES:

- **Do not** erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Lithonia Lighting is not responsible for the foundation design.
- Bolt circles have +/- 1/2" tolerance.

CAUTION: These specifications are intended for general purposes only. Lithonia Lighting reserves the right to change material or design, without prior notice, in a continuing effort to upgrade its products.

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To: Jason Peters – Village of Somers

From: Todd G. Mueller, P.E.

Date: May 26, 2022

Subject: Somers Business Center –Stormwater Memorandum

The following as a short summary detailing the Stormwater Management design intent for the Somers Business Center Development.

Introduction

The project site is generally located on the north side of CTH S (Burlington Road) just east of the Kilbourn Road Ditch within the Village of Somers, Kenosha County, WI. The site is approximately 90 acres in size and currently is utilized as agricultural and residential land. A location map that illustrates the tract of land is included as **Attachment 1**.

Stormwater Management

The proposed development consists of 3 industrial buildings. Building 1 is approximately 500,000 square feet, and buildings 2 and 3 are both around 160,000 square feet. The site includes facilities for truck dock accommodations and passenger car parking; satisfactory stormwater features will be provided to meet the Des Plaines River watershed requirements that apply to this development.

Under the post-development conditions, the on-site will be broken into three drainage areas which are conservatively assumed to have a curve number equal to 94 and a minimum time of concentration to give the developer the utmost flexibility in the site layout. Three of the drainage areas will drain into its own respective onsite ponds which are designed to detain the site runoff to meet SEWRPC Report 44 requirements and water quality requirements. The water level and release rates of the proposed ponds will each be controlled by outlet structures and spillways. There are small exterior areas of the site which consist of fill slopes and will be disregarded from further evaluation.

A considerable amount of offsite flow currently enters the site from the west along with some flow from the residential lot between the proposed driveways. These offsite flows have been divided into five sub-basins due to the five different points along the property line where water will enter the site. In the proposed condition, these offsite flows will be routed to the stormwater ponds via the proposed roadside ditch and/or accompanying storm sewer. Offsite area 1 will be routed to Pond 2, area 5 to Pond 1 and the remaining offsite areas will be routed to Pond 3.

Below are two tables summarizing the flows from the three proposed drainage basin, along with the flows from the offsite basins, respectively.

PROPOSED DRAINAGE DATA

Basin	Drainage Area (ac)	CN	2-year Discharge (cfs)	100-year Discharge (cfs)
TO POND 1	17.54	94	63.23	149.08
TO POND 2	23.97	94	86.41	203.73
TO POND 3	13.20	94	47.59	112.19
Total Drainage Area (Ac)	**54.71**	-	-	-

OFFSITE DRAINAGE DATA

Basin	Drainage Area (ac)	CN	2-year Discharge (cfs)	100-year Discharge (cfs)
OFFSITE 1	8.07	78	5.84	23.03
OFFSITE 2	7.21	78	6.34	24.85
OFFSITE 3	10.42	78	7.89	31.11
OFFSITE 4	11.30	78	9.00	35.44
OFFSITE 5	3.45	76	2.28	9.75
Total Drainage Area (Ac)	**40.45**	-	30.74	121.83

Design post-development release rates for the project have been calculated using the Des Plaines River Watershed standards of 0.04 cfs/acre and 0.30 cfs/acre for the respective 2-year and 100-year rainfall events for areas which will be developed. See **Attachment 3** for drainage area map.

ALLOWABLE DISCHARGE RATES

Area	Drainage Area (ac)	2-year Discharge (cfs)	100-year Discharge (cfs)
Onsite Basins*	54.71	2.19*	16.41*
Offsite Flows	40.45	30.74	121.83
Total	**231.08**	**32.93**	**138.24**

**Onsite Basins are subject to Des Plaines release rate calculations:*
(2-yr) 58.23 ac x 0.04 cfs/ac = 2.33 cfs
(100-yr) 58.23 ac x 0.30 cfs/ac = 17.47 cfs

The proposed site will be graded to maximize the area which drains to the proposed wet ponds, while adhering to the Village Standards. Site constraints, such as earthwork balance, were also taken into consideration.

The primary conveyance to the proposed wet detention ponds will be accomplished through onsite storm sewer, while flows more than the design capacity of the storm sewer will be routed along designed overland relief paths. The stormwater facilities and associated outlet structures for the proposed site will provide 80% or greater TSS removal and comply with discharge rate requirements of the Des Plaines River Watershed. A Post-Development Hydrology Exhibit and Modeling can be found in **Attachment 3 & 4**.

The following tables summarize how the proposed ponds will function in the proposed condition:

WET DETENTION POND SUMMARY

Pond	Peak Flow 2-Year (cfs)	Peak Flow 100-Year (cfs)	Normal Water Elev.	Peak W.S. Elev. 2-Year	Peak W.S. Elev. 100-Year	Spillway Elev.	Top of Berm Elev.
1	0.28	0.40	711.00	712.81	715.27	-	720.00
2	0.88	74.83	710.50	713.07	714.77	716.50	717.50
3	14.72	61.61	707.50	709.02	711.30	711.50	712.50

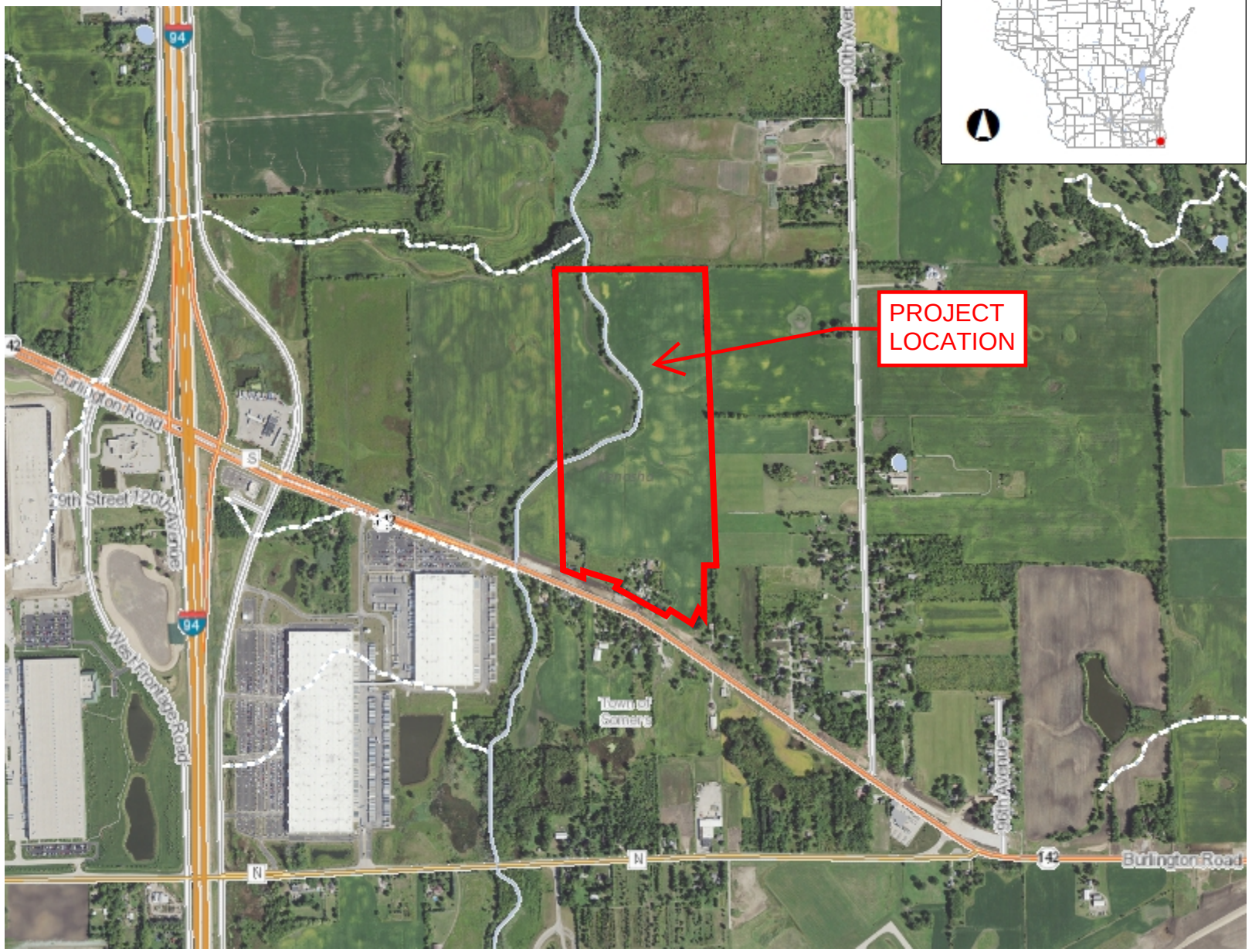
COMPARISON OF PROPOSED TO ALLOWABLE PEAK FLOWS

Location	Peak Flows 2-yr (cfs)	Peak Flows 100-yr (cfs)
TOTAL SITE DISCHARGE	15.52	122.76
ALLOWABLE	32.93	138.24
MEETS CODE (?)	YES	YES

Attachments

1. Location Map
2. Soils Map
3. Drainage Basin Exhibit
4. HydroCAD Model

Surface Water Data Viewer Map



Legend

- County Boundary
- Native American Lands
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water

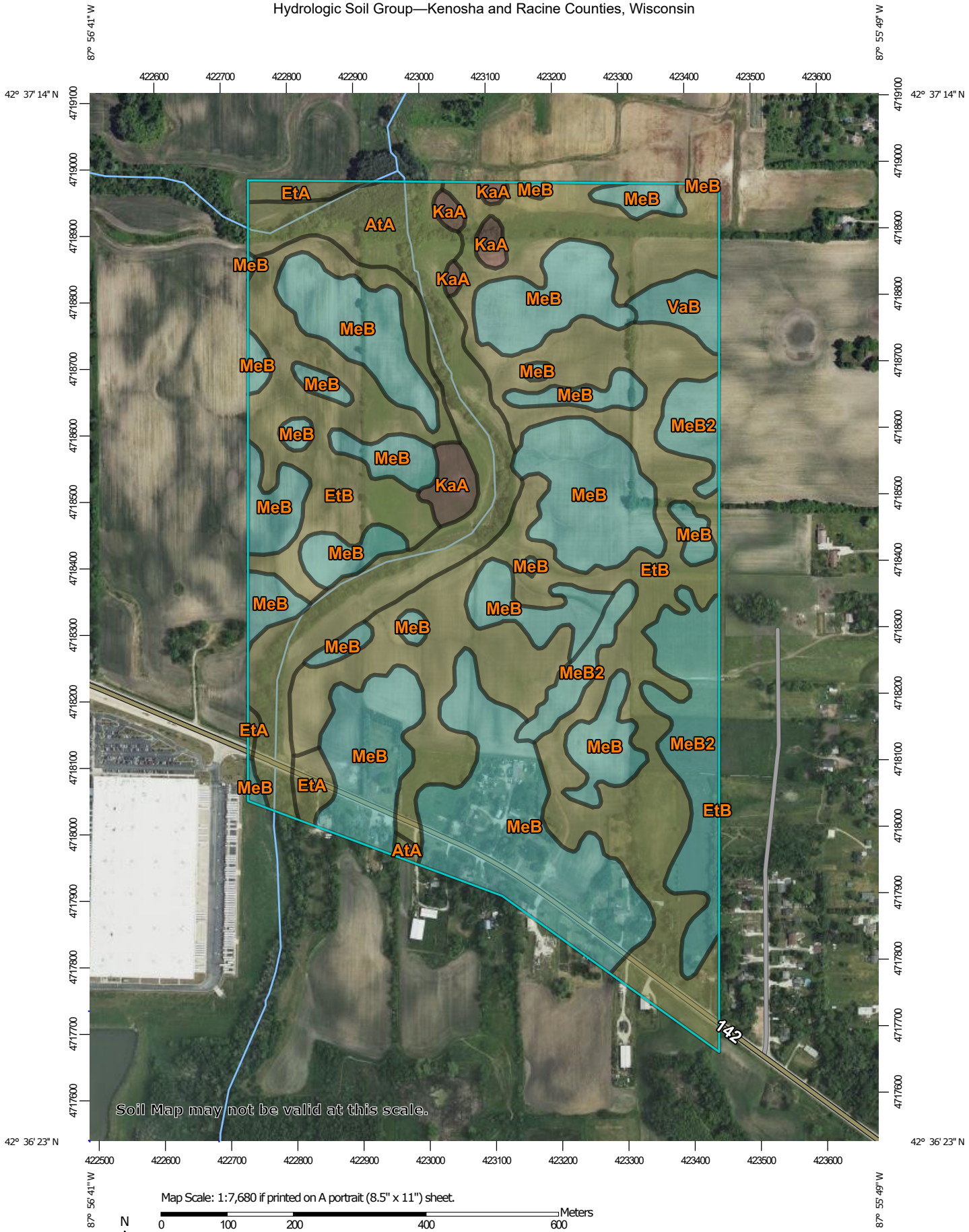
Notes

0.5 0 0.25 0.5 Miles

NAD_1983_HARN_Wisconsin_TM

1: 15,840

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: http://dnr.wi.gov/legal/


87° 56' 41" W
87° 55' 49" W
42° 37' 14" N
42° 36' 23" N
422600
422700
422800
422900
423000
423100
423200
423300
423400
423500
423600
4719100
4719000
4718900
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4718200
4718100
4718000
4717900
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EtA
AtA
KaA
MeB
MeB2
VaB
EtB
142
Soil Map may not be valid at this scale.
Map Scale: 1:7,680 if printed on A portrait (8.5" x 11") sheet.
N
Meters
0
100
200
400
600
Feet
0
350
700
1400
2100
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

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

Soil Rating Lines

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

Soil Rating Points

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

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Kenosha and Racine Counties, Wisconsin
Survey Area Data: Version 18, Sep 9, 2021

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

Date(s) aerial images were photographed: Jun 20, 2020—Jun 25, 2020

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AtA	Ashkum silty clay loam, 0 to 2 percent slopes	C/D	23.1	12.0%
EtA	Elliott silt loam, 0 to 2 percent slopes	C/D	2.8	1.4%
EtB	Elliott silty clay loam, 2 to 6 percent slopes	C/D	77.5	40.3%
KaA	Kane loam, 1 to 3 percent slopes	B/D	3.5	1.8%
MeB	Markham silt loam, 2 to 6 percent slopes	C	68.5	35.6%
MeB2	Markham silt loam, 2 to 6 percent slopes, eroded	C	14.4	7.5%
VaB	Varna silt loam, 2 to 6 percent slopes	C	2.5	1.3%
Totals for Area of Interest			**192.3**	**100.0%**

Description

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

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

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

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

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

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

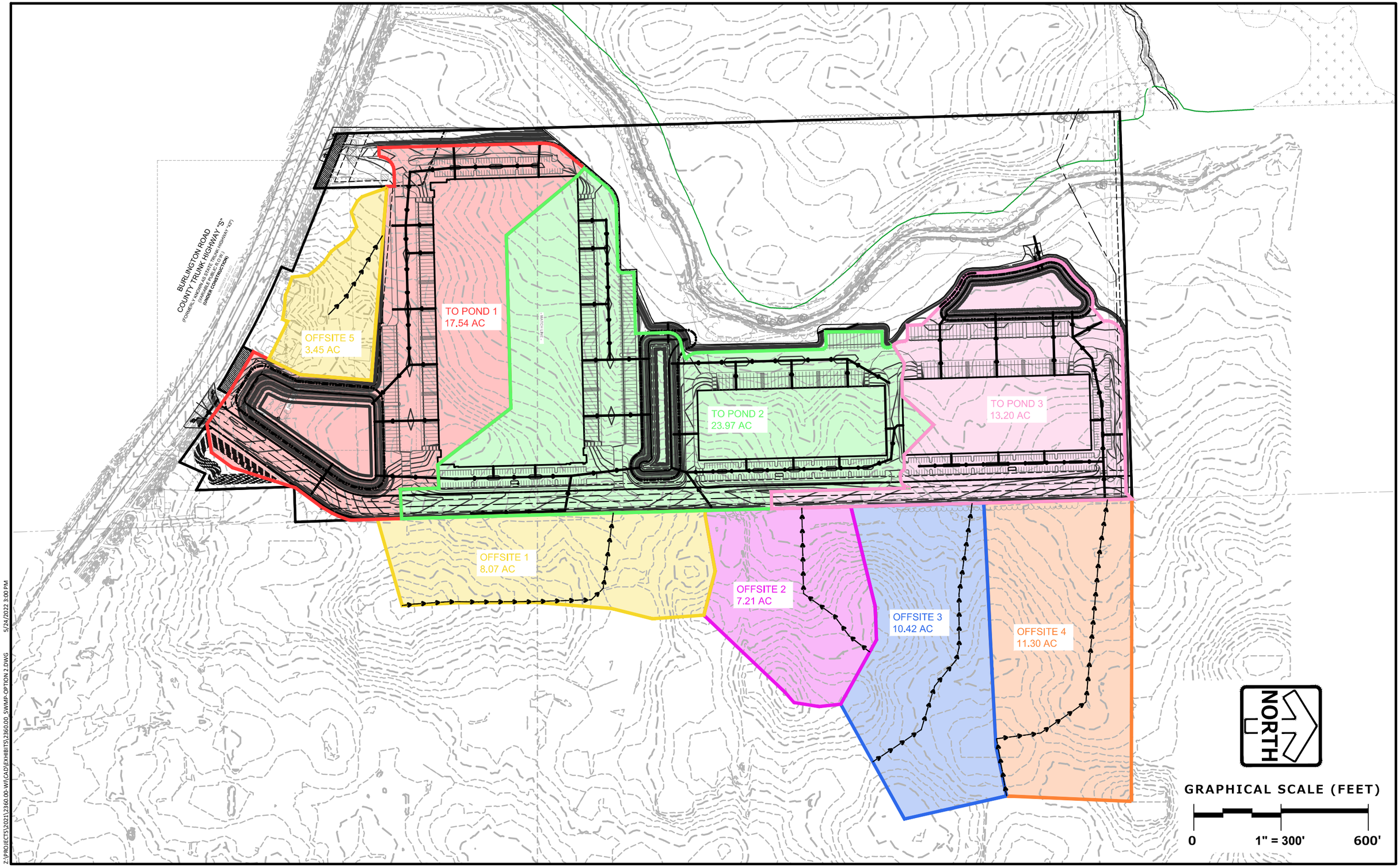
If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher



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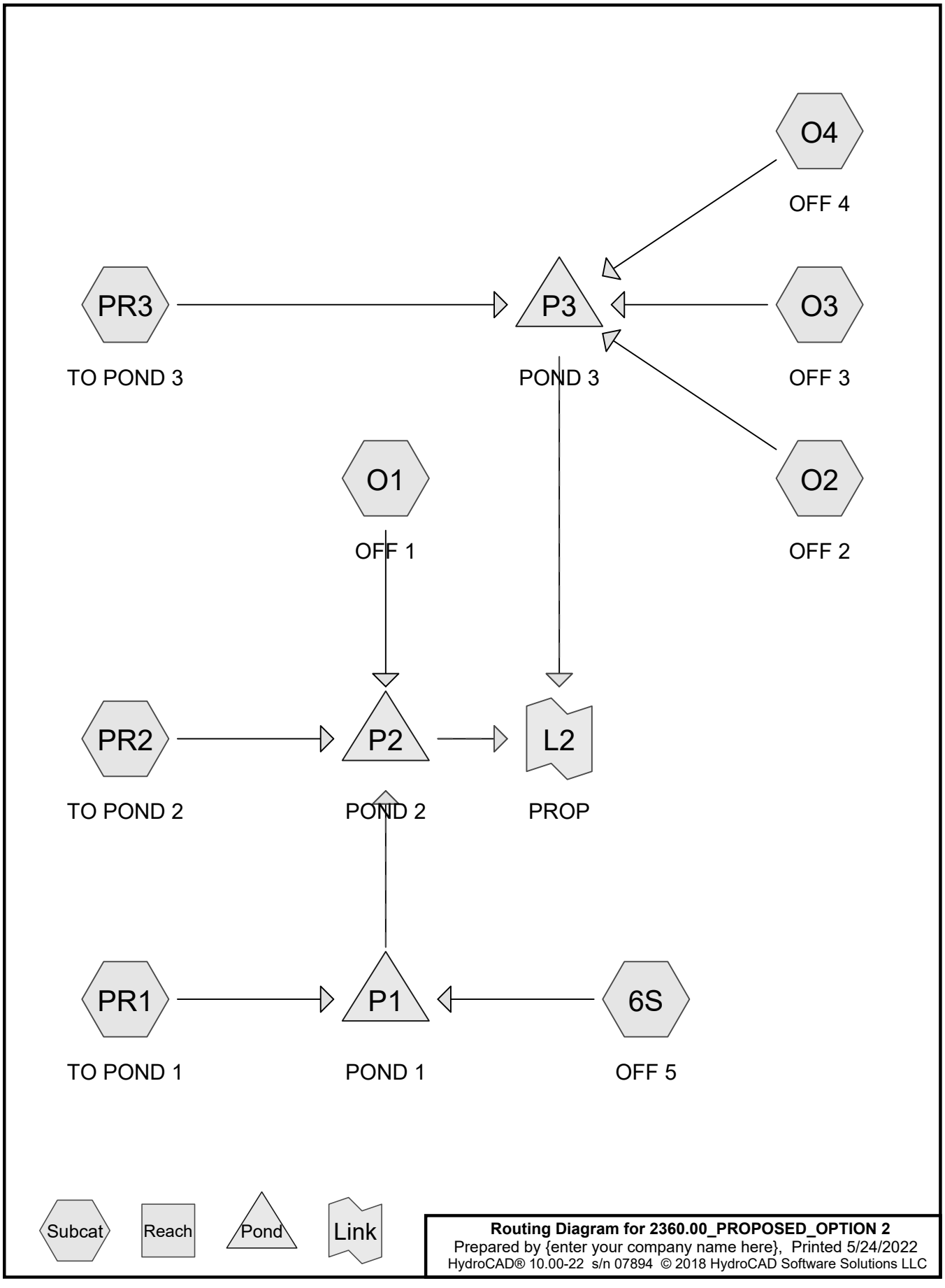
SOMERS BUSINESS PARK PROPOSED HYDROLOGY EXHIBIT

05/26/2022

PINNACLE ENGINEERING GROUP
20725 WATERTOWN ROAD | SUITE 100 | BROOKFIELD, WI 53186 | WWW.PINNACLE-ENGR.COM |

PLAN | DESIGN | DELIVER **PEG JOB#** 2360.00



Routing Diagram for 2360.00_PROPOSED_OPTION 2
Prepared by {enter your company name here}, Printed 5/24/2022
HydroCAD® 10.00-22 s/n 07894 © 2018 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
54.710	94	(PR1, PR2, PR3)
3.220	74	>75% Grass cover, Good, HSG C (6S)
37.008	78	CROPLAND C (O1, O2, O3, O4)
0.230	98	Paved parking, HSG C (6S)
95.168	**87**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
3.450	HSG C	6S
0.000	HSG D	
91.718	Other	O1, O2, O3, O4, PR1, PR2, PR3
95.168		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	54.710	54.710		PR1, PR2, PR3
0.000	0.000	3.220	0.000	0.000	3.220	>75% Grass cover, Good	6S
0.000	0.000	0.000	0.000	37.008	37.008	CROPLAND C	O1, O2, O3, O4
0.000	0.000	0.230	0.000	0.000	0.230	Paved parking	6S
0.000	**0.000**	**3.450**	**0.000**	**91.718**	**95.168**	**TOTAL AREA**	

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	P1	711.00	710.50	277.0	0.0018	0.013	12.0	0.0	0.0
2	P2	708.50	708.00	74.5	0.0067	0.013	42.0	0.0	0.0
3	P3	707.50	707.00	50.5	0.0099	0.013	42.0	0.0	0.0

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Sim-Route method - Pond routing by Sim-Route method

Subcatchment6S: OFF 5 Runoff Area=3.450 ac 6.67% Impervious Runoff Depth=0.82"
Flow Length=330' Tc=31.9 min CN=76 Runoff=2.28 cfs 0.235 af

SubcatchmentO1: OFF 1 Runoff Area=8.071 ac 0.00% Impervious Runoff Depth=0.92"
Flow Length=969' Tc=34.6 min CN=78 Runoff=5.84 cfs 0.619 af

SubcatchmentO2: OFF 2 Runoff Area=7.214 ac 0.00% Impervious Runoff Depth=0.92"
Flow Length=599' Tc=24.9 min CN=78 Runoff=6.34 cfs 0.553 af

SubcatchmentO3: OFF 3 Runoff Area=10.420 ac 0.00% Impervious Runoff Depth=0.92"
Flow Length=1,016' Tc=32.1 min CN=78 Runoff=7.89 cfs 0.799 af

SubcatchmentO4: OFF 4 Runoff Area=11.303 ac 0.00% Impervious Runoff Depth=0.92"
Flow Length=1,241' Tc=29.5 min CN=78 Runoff=9.00 cfs 0.867 af

SubcatchmentPR1: TO POND 1 Runoff Area=17.540 ac 0.00% Impervious Runoff Depth=2.06"
Tc=6.0 min CN=94 Runoff=63.23 cfs 3.012 af

SubcatchmentPR2: TO POND 2 Runoff Area=23.970 ac 0.00% Impervious Runoff Depth=2.06"
Tc=6.0 min CN=94 Runoff=86.41 cfs 4.117 af

SubcatchmentPR3: TO POND 3 Runoff Area=13.200 ac 0.00% Impervious Runoff Depth=2.06"
Tc=6.0 min CN=94 Runoff=47.59 cfs 2.267 af

Pond P1: POND 1 Peak Elev=712.81' Storage=140,839 cf Inflow=63.70 cfs 3.248 af
Outflow=0.28 cfs 0.819 af

Pond P2: POND 2 Peak Elev=713.07' Storage=172,820 cf Inflow=87.82 cfs 5.555 af
Primary=0.88 cfs 3.818 af Secondary=0.00 cfs 0.000 af Outflow=0.88 cfs 3.818 af

Pond P3: POND 3 Peak Elev=709.02' Storage=86,515 cf Inflow=54.06 cfs 4.487 af
Primary=14.72 cfs 4.441 af Secondary=0.00 cfs 0.000 af Outflow=14.72 cfs 4.441 af

Link L2: PROP Inflow=15.52 cfs 8.258 af
Primary=15.52 cfs 8.258 af

Total Runoff Area = 95.168 ac Runoff Volume = 12.470 af Average Runoff Depth = 1.57"
99.76% Pervious = 94.938 ac 0.24% Impervious = 0.230 ac

Summary for Subcatchment 6S: OFF 5

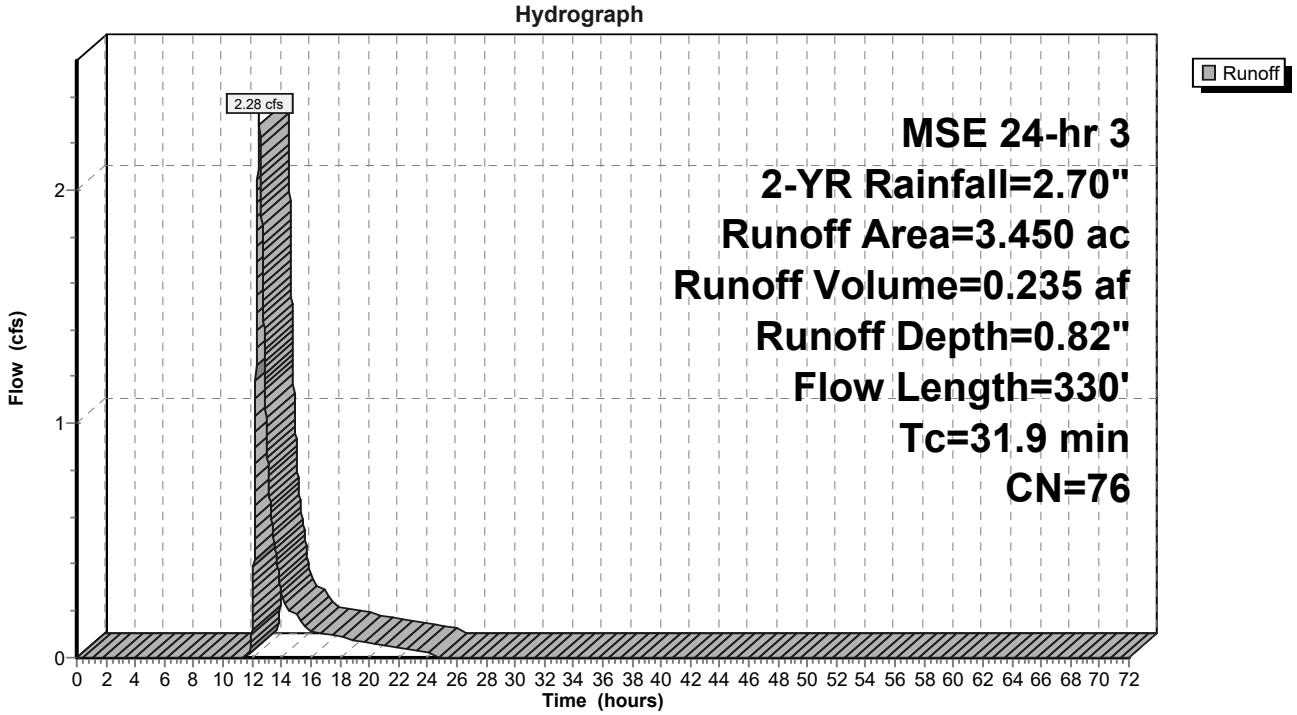
Runoff = 2.28 cfs @ 12.49 hrs, Volume= 0.235 af, Depth= 0.82"

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-YR Rainfall=2.70"

Area (ac)	CN	Description
3.220	74	>75% Grass cover, Good, HSG C
0.230	98	Paved parking, HSG C
3.450	76	Weighted Average
3.220		93.33% Pervious Area
0.230		6.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.8	85	0.0118	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
14.2	115	0.0330	0.13		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
0.9	130	0.0246	2.53		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
31.9	330	Total			

Subcatchment 6S: OFF 5



Summary for Subcatchment O1: OFF 1

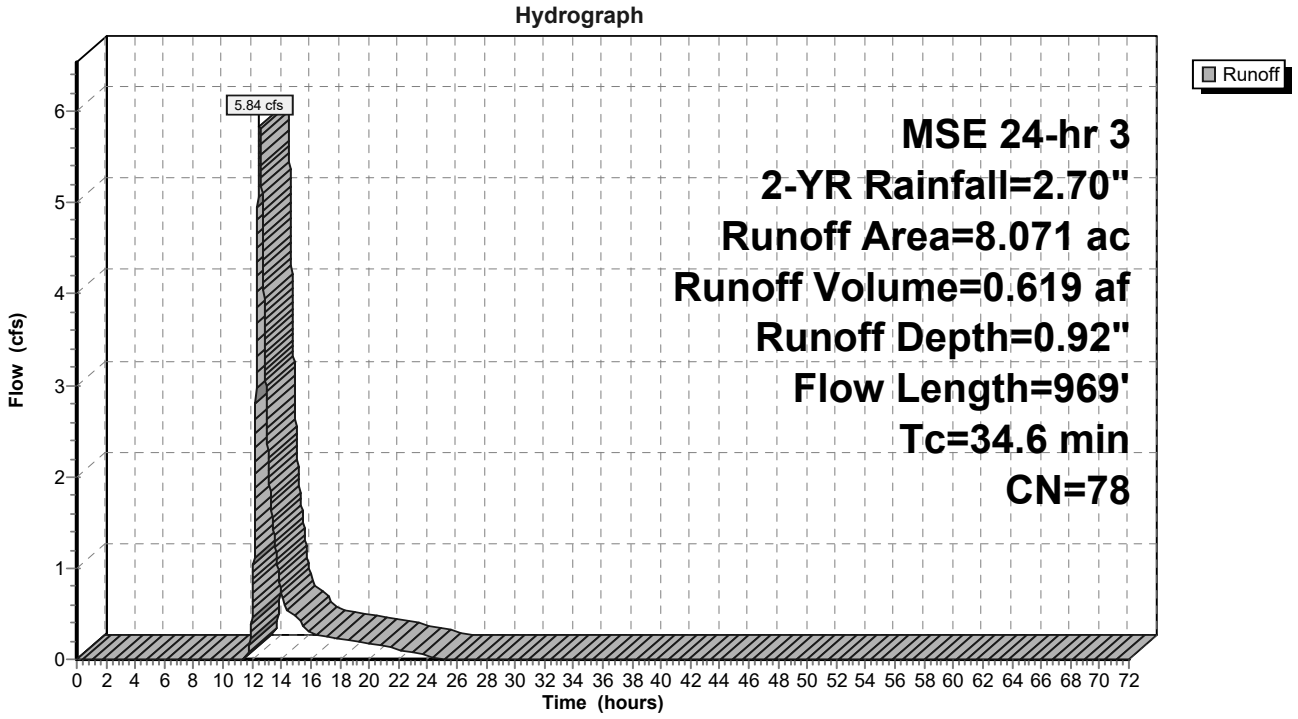
Runoff = 5.84 cfs @ 12.50 hrs, Volume= 0.619 af, Depth= 0.92"

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-YR Rainfall=2.70"

	Area (ac)	CN	Description
*	8.071	78	CROPLAND C
	8.071		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.1	200	0.0100	0.12		**Sheet Flow,** Cultivated: Residue>20% n= 0.170 P2= 2.70"
7.5	769	0.0112	1.70		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
34.6	969	Total			

Subcatchment O1: OFF 1



Summary for Subcatchment O2: OFF 2

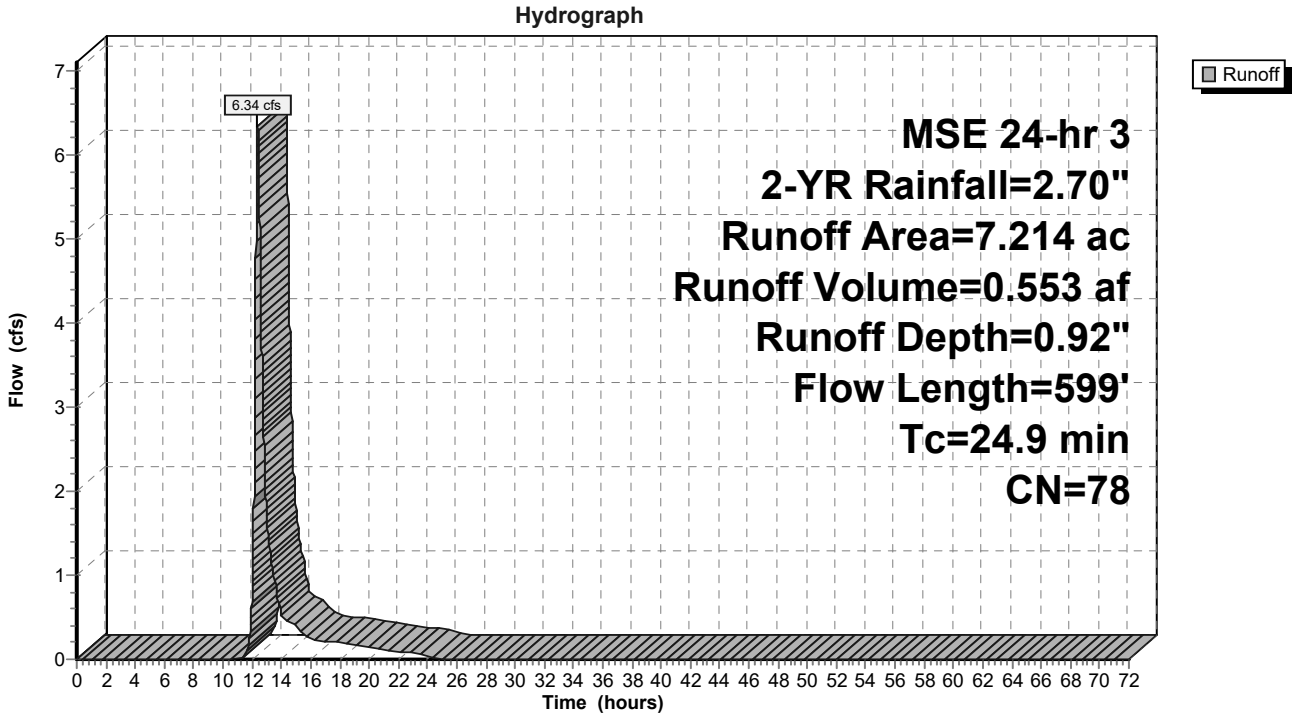
Runoff = 6.34 cfs @ 12.37 hrs, Volume= 0.553 af, Depth= 0.92"

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-YR Rainfall=2.70"

	Area (ac)	CN	Description
*	7.214	78	CROPLAND C
	7.214		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.3	200	0.0163	0.15		**Sheet Flow,** Cultivated: Residue>20% n= 0.170 P2= 2.70"
2.6	399	0.0250	2.55		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
24.9	599	Total			

Subcatchment O2: OFF 2



Summary for Subcatchment O3: OFF 3

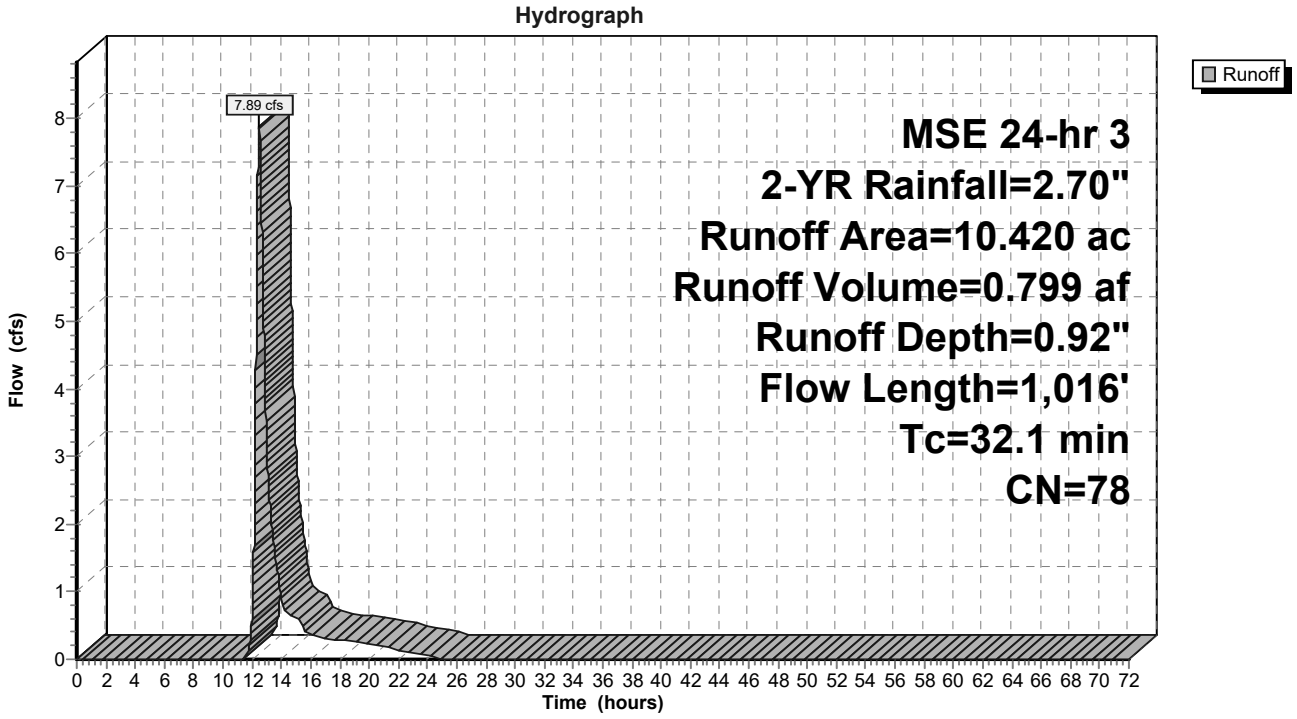
Runoff = 7.89 cfs @ 12.48 hrs, Volume= 0.799 af, Depth= 0.92"

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-YR Rainfall=2.70"

	Area (ac)	CN	Description
*	10.420	78	CROPLAND C
	10.420		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.7	200	0.0126	0.13		**Sheet Flow,** Cultivated: Residue>20% n= 0.170 P2= 2.70"
7.4	816	0.0131	1.84		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
32.1	1,016	Total			

Subcatchment O3: OFF 3



Summary for Subcatchment O4: OFF 4

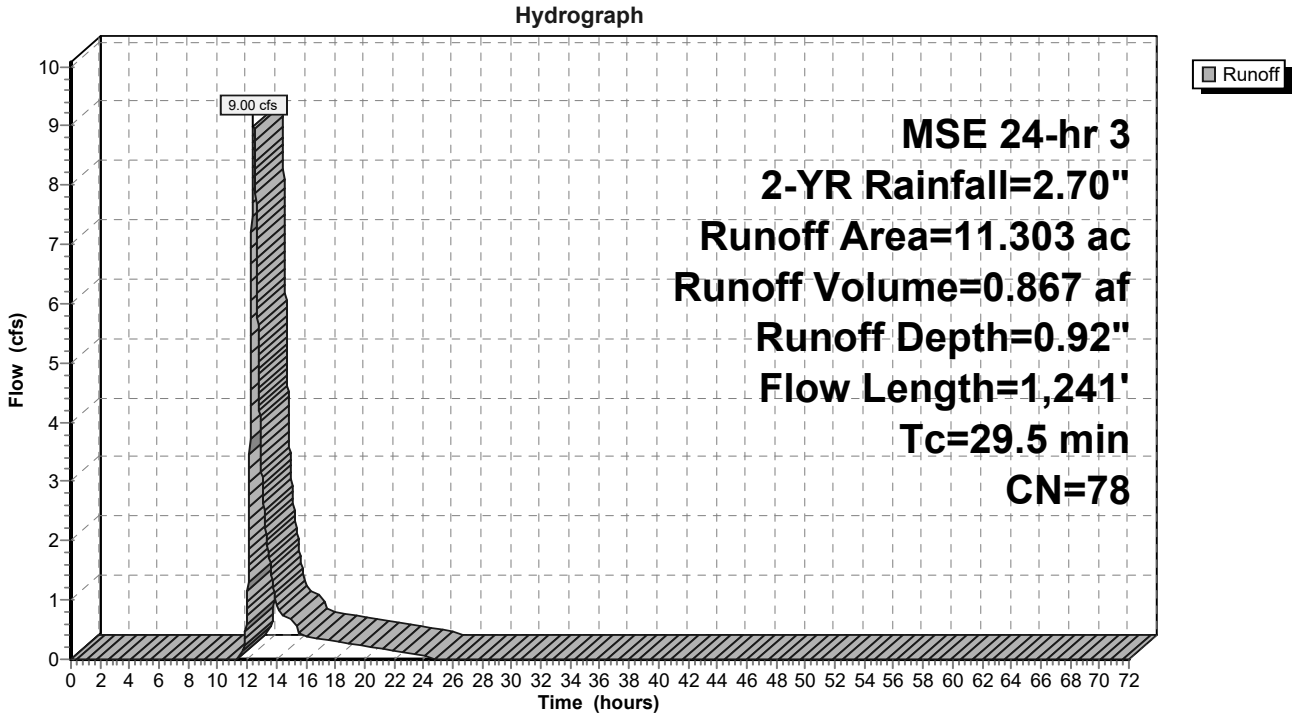
Runoff = 9.00 cfs @ 12.45 hrs, Volume= 0.867 af, Depth= 0.92"

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-YR Rainfall=2.70"

	Area (ac)	CN	Description
*	11.303	78	CROPLAND C
	11.303		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.1	200	0.0100	0.12		**Sheet Flow,** Cultivated: Residue>20% n= 0.170 P2= 2.70"
2.4	1,041	0.2022	7.24		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
29.5	1,241	Total			

Subcatchment O4: OFF 4



Summary for Subcatchment PR1: TO POND 1

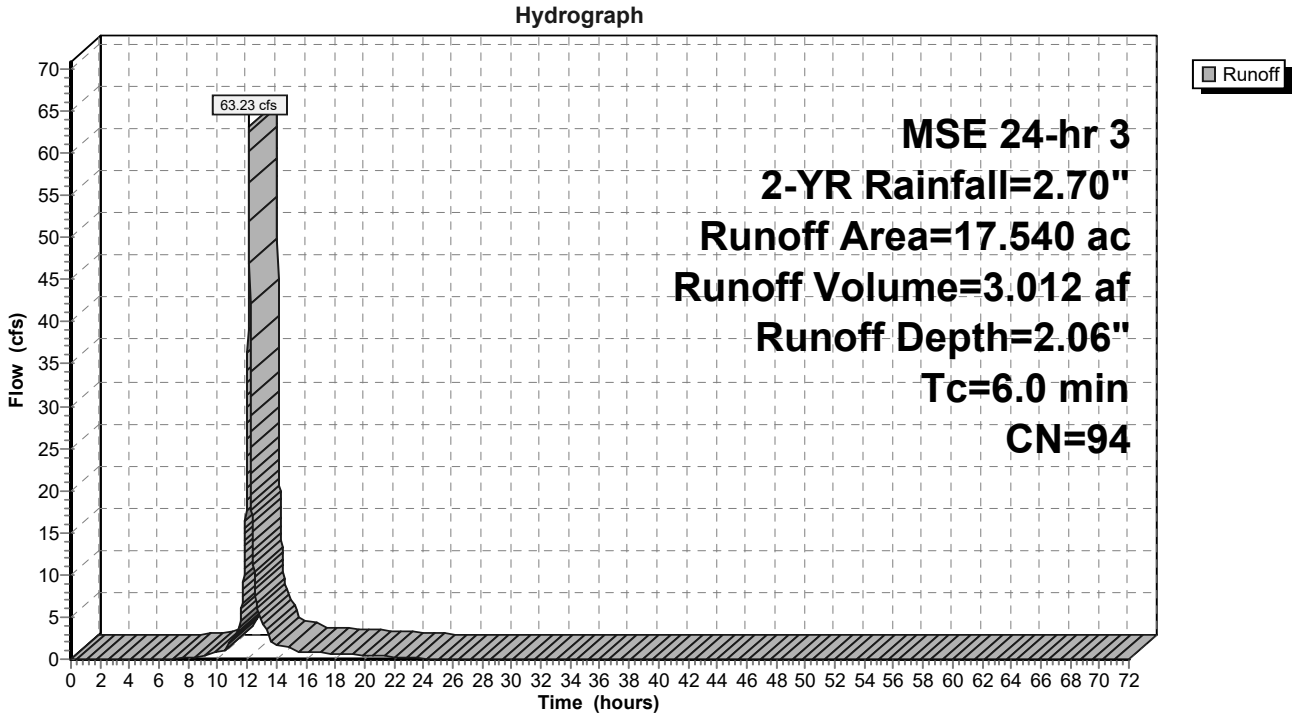
Runoff = 63.23 cfs @ 12.13 hrs, Volume= 3.012 af, Depth= 2.06"

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-YR Rainfall=2.70"

	Area (ac)	CN	Description
*	17.540	94	
	17.540		100.00% Pervious Area

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

Subcatchment PR1: TO POND 1



Summary for Subcatchment PR2: TO POND 2

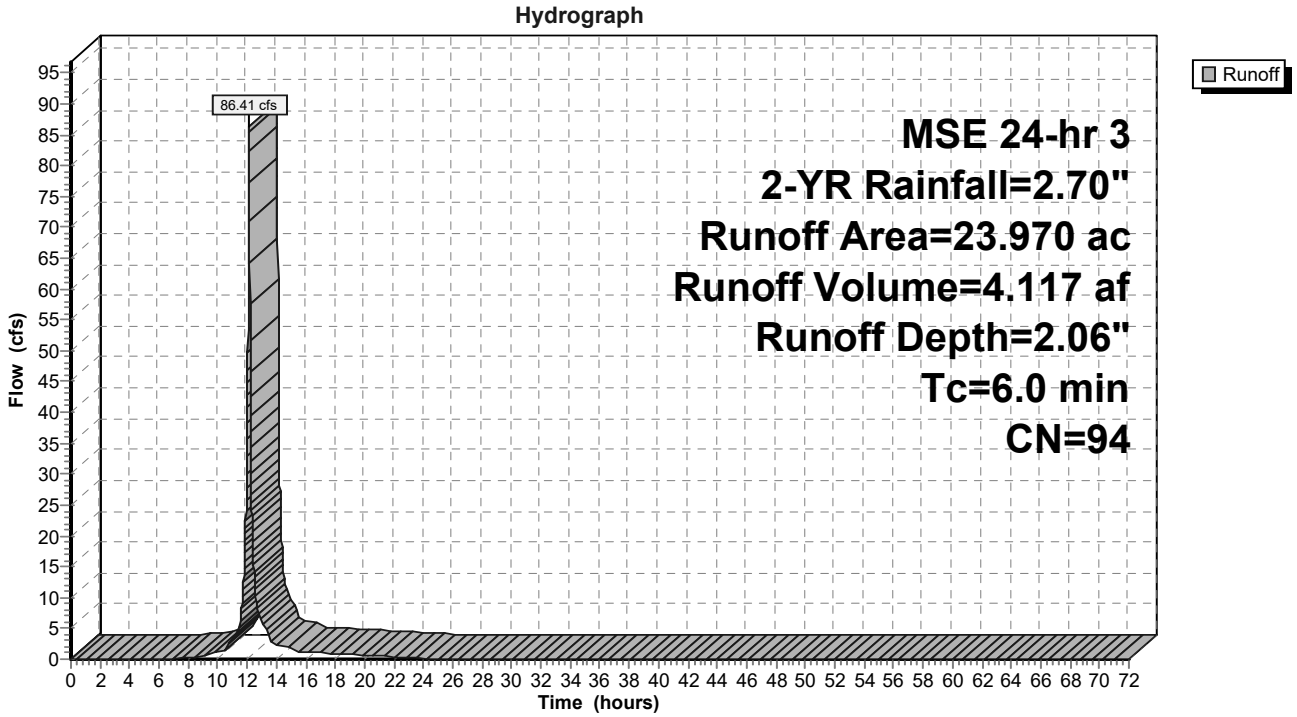
Runoff = 86.41 cfs @ 12.13 hrs, Volume= 4.117 af, Depth= 2.06"

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-YR Rainfall=2.70"

	Area (ac)	CN	Description
*	23.970	94	
	23.970		100.00% Pervious Area

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

Subcatchment PR2: TO POND 2



Summary for Subcatchment PR3: TO POND 3

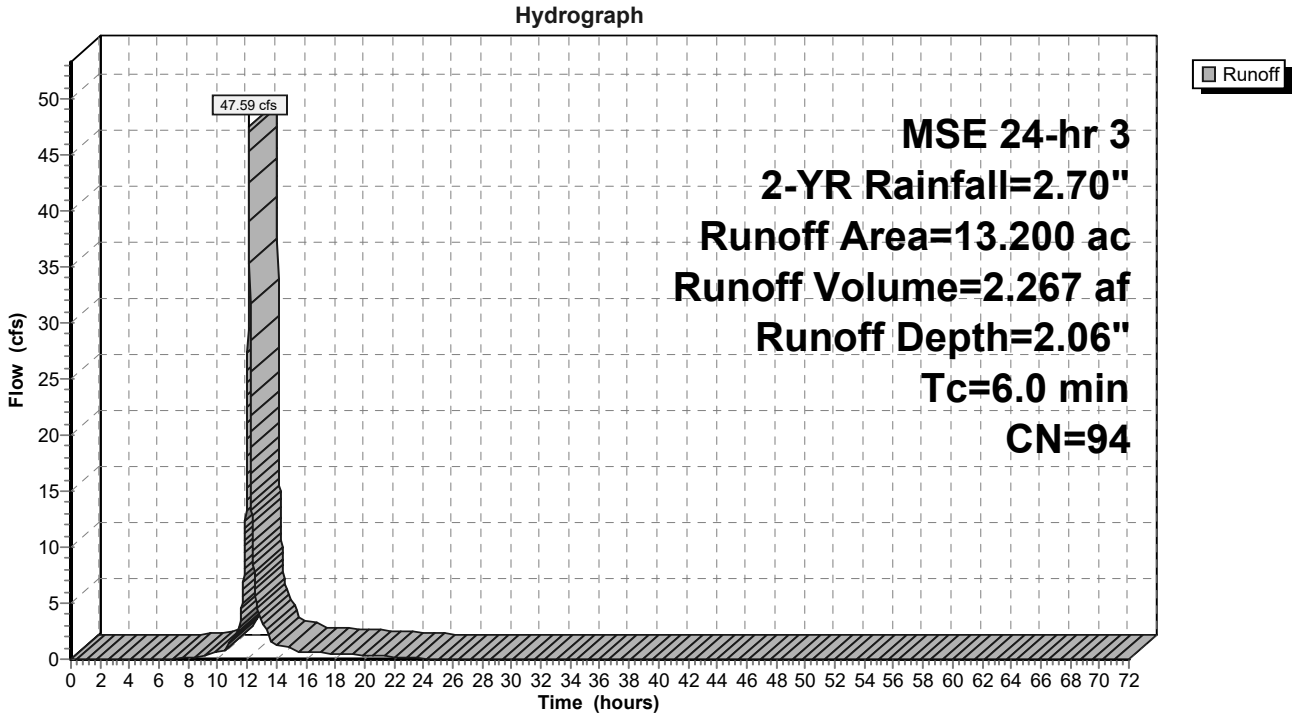
Runoff = 47.59 cfs @ 12.13 hrs, Volume= 2.267 af, Depth= 2.06"

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-YR Rainfall=2.70"

	Area (ac)	CN	Description
*	13.200	94	
	13.200		100.00% Pervious Area

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

Subcatchment PR3: TO POND 3



Summary for Pond P1: POND 1

Inflow Area = 20.990 ac, 1.10% Impervious, Inflow Depth = 1.86" for 2-YR event
Inflow = 63.70 cfs @ 12.13 hrs, Volume= 3.248 af
Outflow = 0.28 cfs @ 63.11 hrs, Volume= 0.819 af, Atten= 100%, Lag= 3,058.9 min
Primary = 0.28 cfs @ 63.11 hrs, Volume= 0.819 af

Routing by Sim-Route method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 712.81' @ 25.81 hrs Surf.Area= 81,967 sf Storage= 140,839 cf

Plug-Flow detention time= 2,445.1 min calculated for 0.819 af (25% of inflow)
Center-of-Mass det. time= 2,335.9 min (3,120.5 - 784.6)

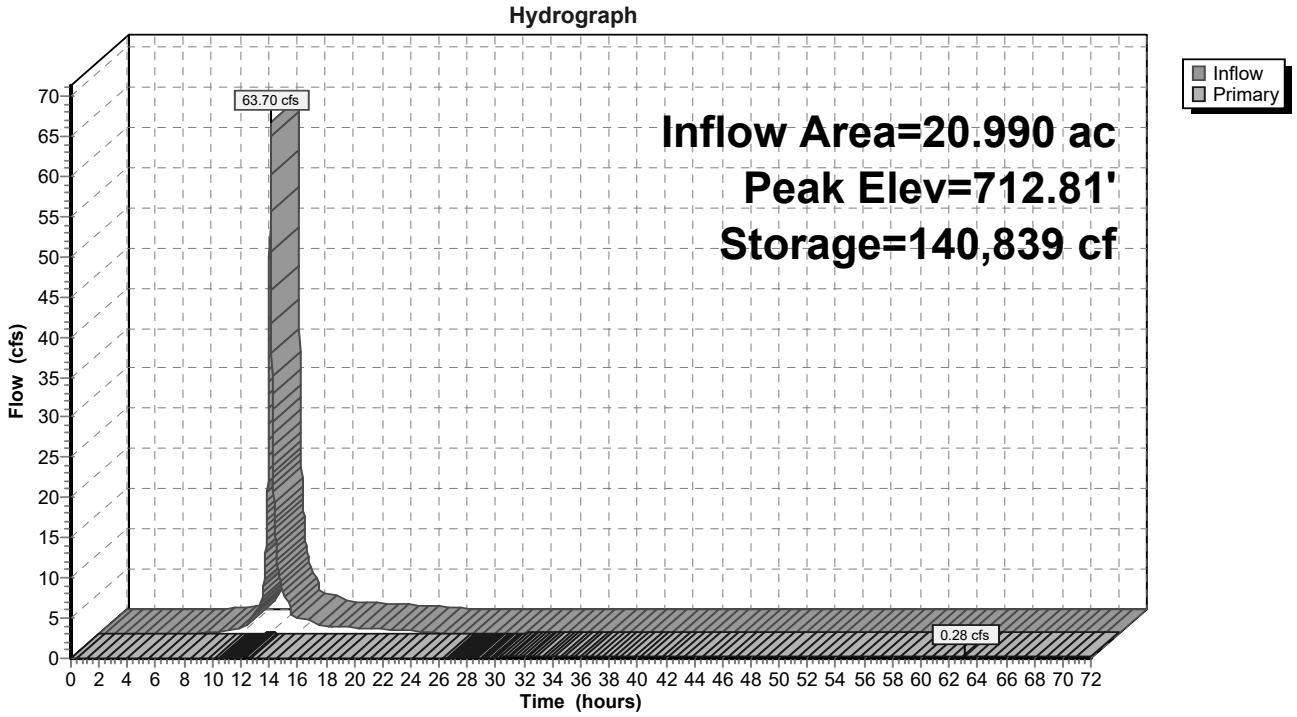
Volume	Invert	Avail.Storage	Storage Description
#1	711.00'	849,348 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
711.00	73,617	0	0
720.00	115,127	849,348	849,348

Device	Routing	Invert	Outlet Devices
#1	Primary	711.00'	**12.0" Round Culvert** L= 277.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 711.00' / 710.50' S= 0.0018 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	711.00'	**3.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	715.50'	**60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.28 cfs @ 63.11 hrs HW=712.49' TW=711.12' (Dynamic Tailwater)
↑**1=Culvert** (Passes 0.28 cfs of 1.96 cfs potential flow)
↑**2=Orifice/Grate** (Orifice Controls 0.28 cfs @ 5.62 fps)
3=Orifice/Grate (Controls 0.00 cfs)

Pond P1: POND 1



Summary for Pond P2: POND 2

[80] Warning: Exceeded Pond P1 by 0.38' @ 15.99 hrs (0.15 cfs 0.133 af)

Inflow Area =	53.031 ac,	0.43% Impervious,	Inflow Depth >	1.26" for 2-YR event
Inflow =	87.82 cfs @	12.13 hrs,	Volume=	5.555 af
Outflow =	0.88 cfs @	19.68 hrs,	Volume=	3.818 af, Atten= 99%, Lag= 453.2 min
Primary =	0.88 cfs @	19.68 hrs,	Volume=	3.818 af
Secondary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af

Routing by Sim-Route method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 713.07' @ 19.68 hrs Surf.Area= 48,305 sf Storage= 172,820 cf

Plug-Flow detention time= 1,665.6 min calculated for 3.818 af (69% of inflow)
Center-of-Mass det. time= 1,260.1 min (2,392.5 - 1,132.4)

Volume	Invert	Avail.Storage	Storage Description
#1	708.50'	431,708 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

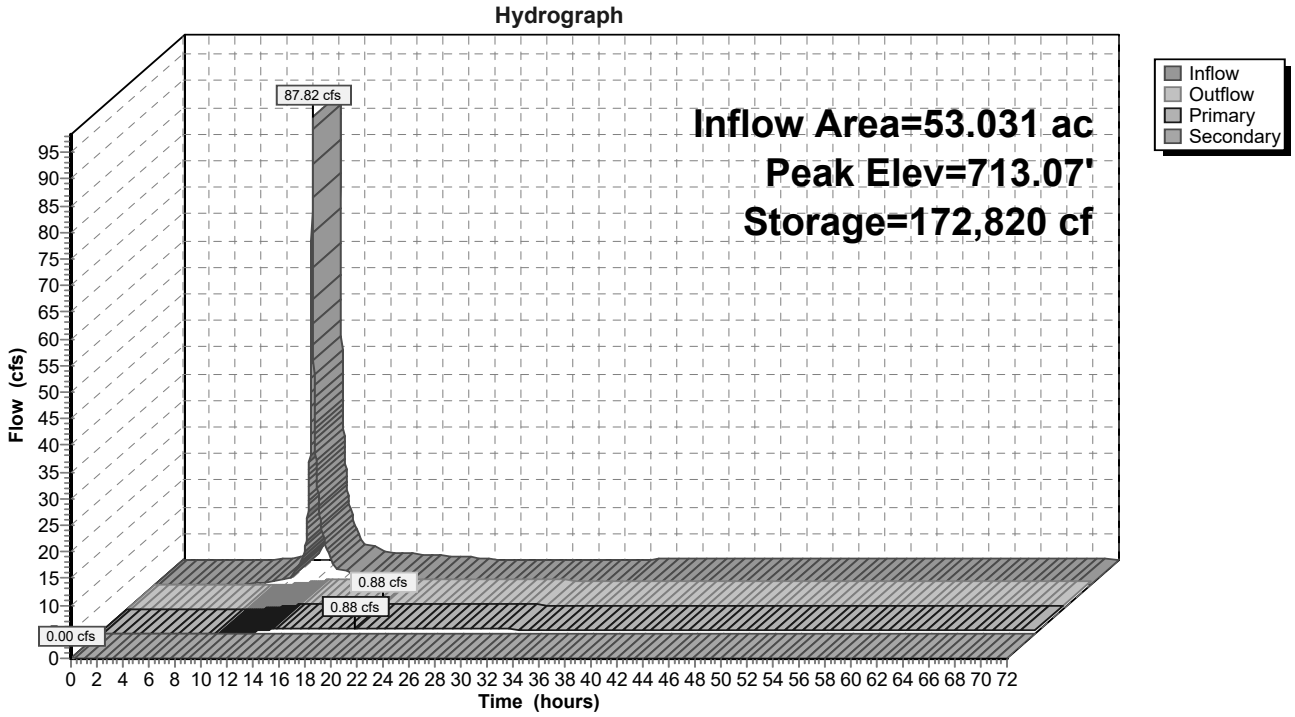
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
708.50	27,271	0	0
717.50	68,664	431,708	431,708

Device	Routing	Invert	Outlet Devices
#1	Primary	708.50'	**42.0" Round Culvert** L= 74.5' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 708.50' / 708.00' S= 0.0067 '/' Cc= 0.900 n= 0.013, Flow Area= 9.62 sf
#2	Device 1	708.50'	**4.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	713.50'	**60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	716.50'	**20.0' long x 17.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.88 cfs @ 19.68 hrs HW=713.07' TW=0.00' (Dynamic Tailwater)
└─**1=Culvert** (Passes 0.88 cfs of 71.64 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.88 cfs @ 10.11 fps)
  └─**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=708.50' TW=0.00' (Dynamic Tailwater)
└─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond P2: POND 2



Summary for Pond P3: POND 3

Inflow Area = 42.137 ac, 0.00% Impervious, Inflow Depth = 1.28" for 2-YR event
Inflow = 54.06 cfs @ 12.14 hrs, Volume= 4.487 af
Outflow = 14.72 cfs @ 12.85 hrs, Volume= 4.441 af, Atten= 73%, Lag= 42.9 min
Primary = 14.72 cfs @ 12.85 hrs, Volume= 4.441 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Sim-Route method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 709.02' @ 12.85 hrs Surf.Area= 60,347 sf Storage= 86,515 cf

Plug-Flow detention time= 184.9 min calculated for 4.441 af (99% of inflow)
Center-of-Mass det. time= 178.7 min (991.7 - 813.0)

Volume	Invert	Avail.Storage	Storage Description
#1	707.50'	324,683 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

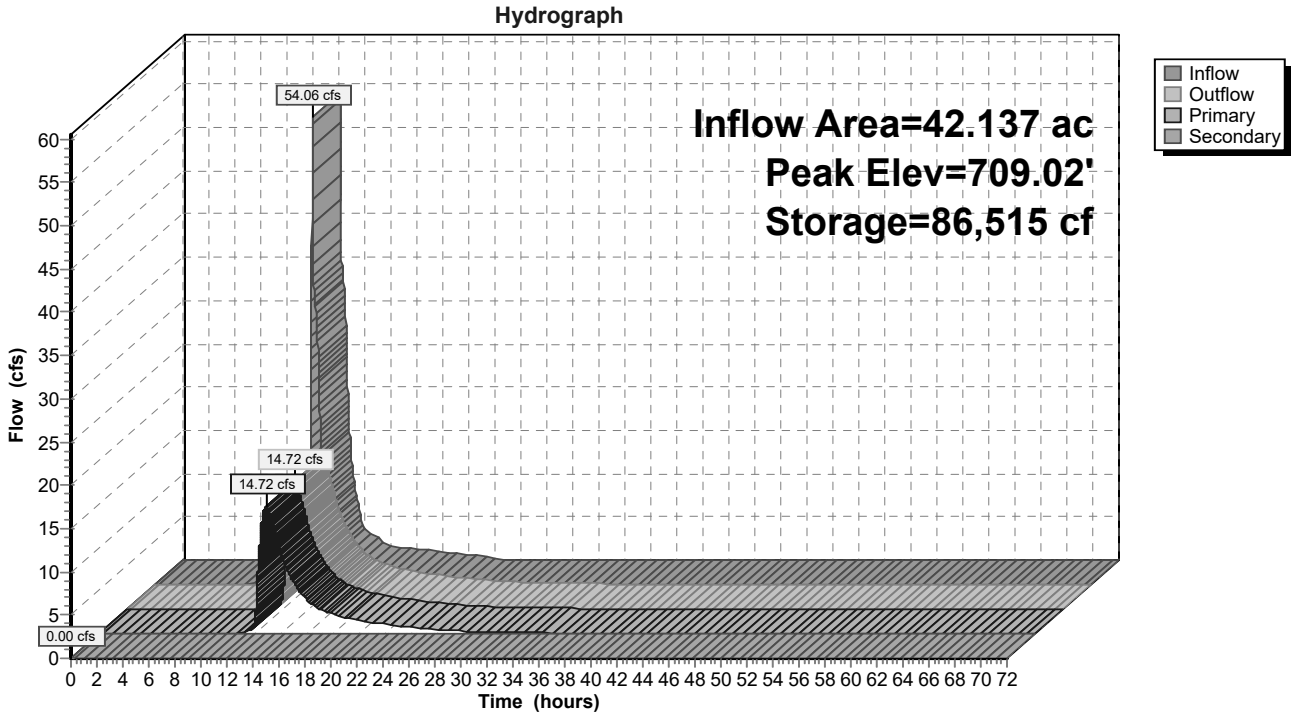
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
707.50	53,180	0	0
712.50	76,693	324,683	324,683

Device	Routing	Invert	Outlet Devices
#1	Primary	707.50'	**42.0" Round Culvert** L= 50.5' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 707.50' / 707.00' S= 0.0099 '/' Cc= 0.900 n= 0.013, Flow Area= 9.62 sf
#2	Secondary	711.50'	**50.0' long x 17.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=14.72 cfs @ 12.85 hrs HW=709.02' TW=0.00' (Dynamic Tailwater)
↑—**1=Culvert** (Barrel Controls 14.72 cfs @ 5.39 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=707.50' TW=0.00' (Dynamic Tailwater)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond P3: POND 3

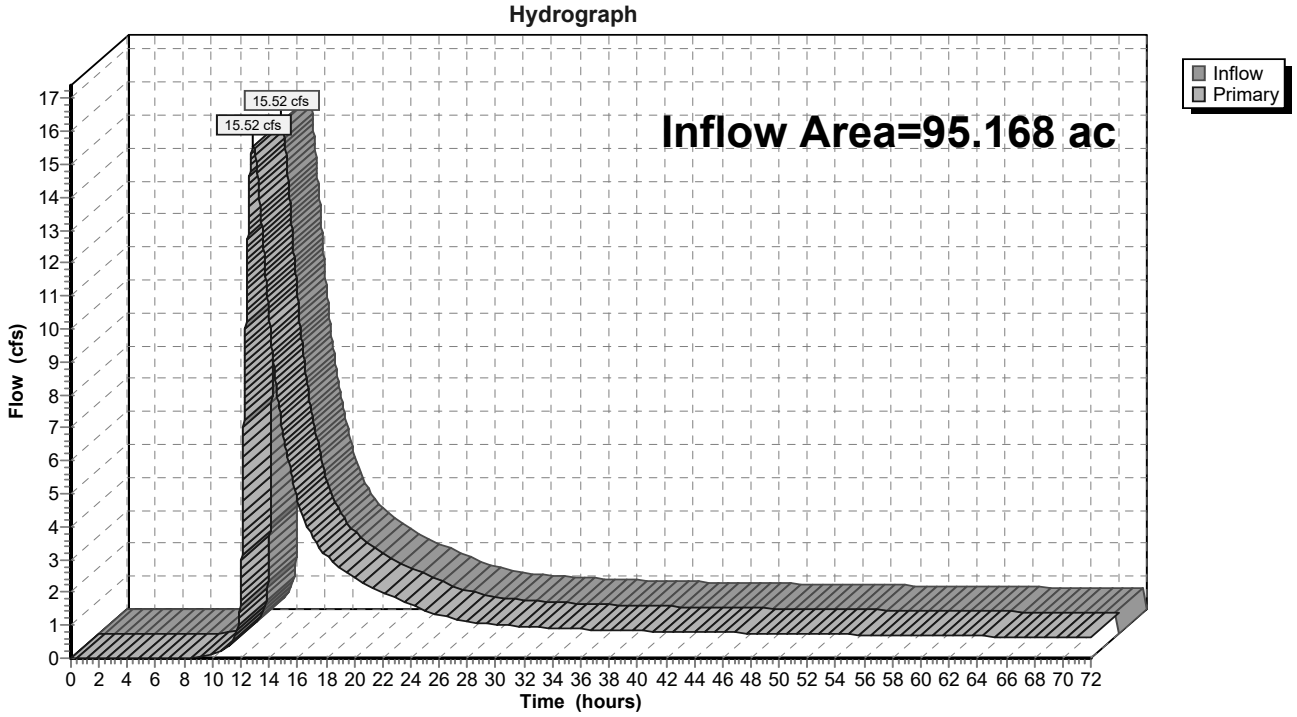


Summary for Link L2: PROP

Inflow Area = 95.168 ac, 0.24% Impervious, Inflow Depth > 1.04" for 2-YR event
Inflow = 15.52 cfs @ 12.85 hrs, Volume= 8.258 af
Primary = 15.52 cfs @ 12.86 hrs, Volume= 8.258 af, Atten= 0%, Lag= 0.6 min

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

Link L2: PROP



Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Sim-Route method - Pond routing by Sim-Route method

Subcatchment6S: OFF 5 Runoff Area=3.450 ac 6.67% Impervious Runoff Depth=3.26"
Flow Length=330' Tc=31.9 min CN=76 Runoff=9.75 cfs 0.937 af

SubcatchmentO1: OFF 1 Runoff Area=8.071 ac 0.00% Impervious Runoff Depth=3.46"
Flow Length=969' Tc=34.6 min CN=78 Runoff=23.03 cfs 2.324 af

SubcatchmentO2: OFF 2 Runoff Area=7.214 ac 0.00% Impervious Runoff Depth=3.46"
Flow Length=599' Tc=24.9 min CN=78 Runoff=24.85 cfs 2.077 af

SubcatchmentO3: OFF 3 Runoff Area=10.420 ac 0.00% Impervious Runoff Depth=3.46"
Flow Length=1,016' Tc=32.1 min CN=78 Runoff=31.11 cfs 3.001 af

SubcatchmentO4: OFF 4 Runoff Area=11.303 ac 0.00% Impervious Runoff Depth=3.46"
Flow Length=1,241' Tc=29.5 min CN=78 Runoff=35.44 cfs 3.255 af

SubcatchmentPR1: TO POND 1 Runoff Area=17.540 ac 0.00% Impervious Runoff Depth=5.16"
Tc=6.0 min CN=94 Runoff=149.08 cfs 7.539 af

SubcatchmentPR2: TO POND 2 Runoff Area=23.970 ac 0.00% Impervious Runoff Depth=5.16"
Tc=6.0 min CN=94 Runoff=203.73 cfs 10.303 af

SubcatchmentPR3: TO POND 3 Runoff Area=13.200 ac 0.00% Impervious Runoff Depth=5.16"
Tc=6.0 min CN=94 Runoff=112.19 cfs 5.674 af

Pond P1: POND 1 Peak Elev=715.27' Storage=356,598 cf Inflow=152.41 cfs 8.476 af
Outflow=0.40 cfs 1.720 af

Pond P2: POND 2 Peak Elev=714.77' Storage=261,571 cf Inflow=211.26 cfs 14.347 af
Primary=74.83 cfs 11.726 af Secondary=0.00 cfs 0.000 af Outflow=74.83 cfs 11.726 af

Pond P3: POND 3 Peak Elev=711.30' Storage=235,941 cf Inflow=148.60 cfs 14.007 af
Primary=61.61 cfs 13.959 af Secondary=0.00 cfs 0.000 af Outflow=61.61 cfs 13.959 af

Link L2: PROP Inflow=122.76 cfs 25.684 af
Primary=122.76 cfs 25.684 af

Total Runoff Area = 95.168 ac Runoff Volume = 35.110 af Average Runoff Depth = 4.43"
99.76% Pervious = 94.938 ac 0.24% Impervious = 0.230 ac

Summary for Subcatchment 6S: OFF 5

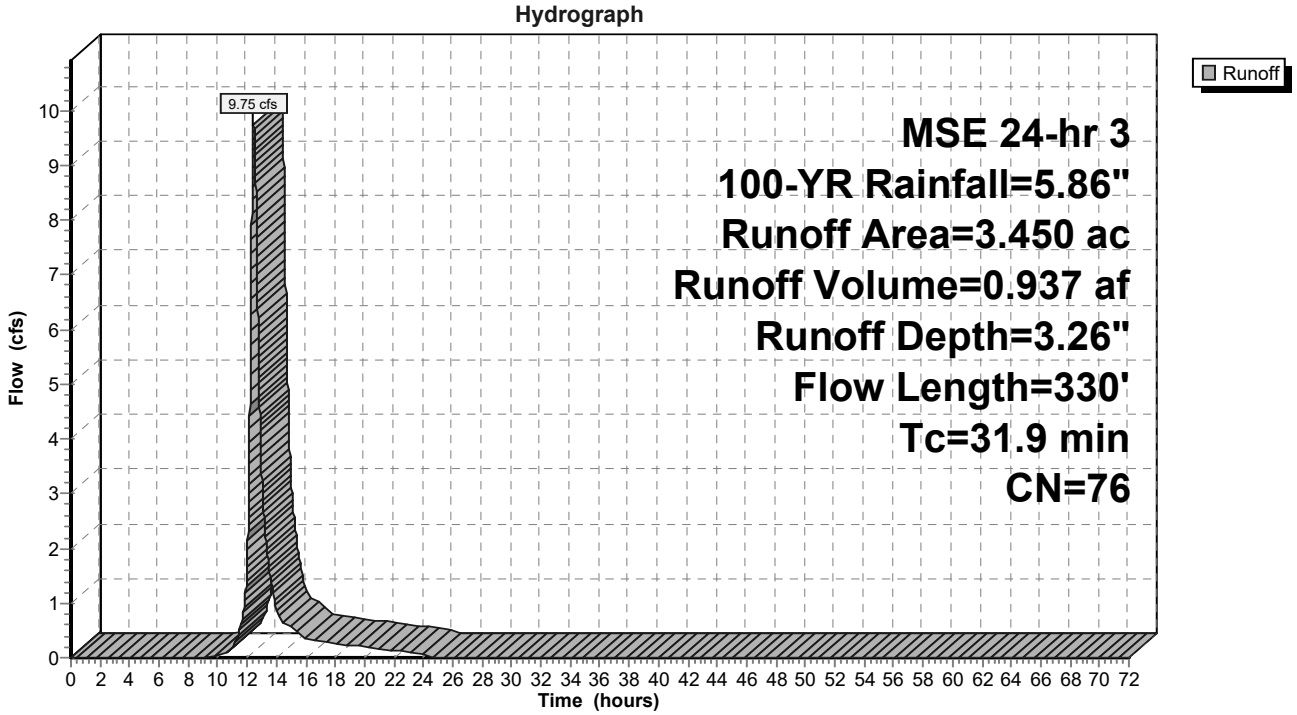
Runoff = 9.75 cfs @ 12.44 hrs, Volume= 0.937 af, Depth= 3.26"

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-YR Rainfall=5.86"

Area (ac)	CN	Description
3.220	74	>75% Grass cover, Good, HSG C
0.230	98	Paved parking, HSG C
3.450	76	Weighted Average
3.220		93.33% Pervious Area
0.230		6.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.8	85	0.0118	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
14.2	115	0.0330	0.13		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
0.9	130	0.0246	2.53		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
31.9	330	Total			

Subcatchment 6S: OFF 5



Summary for Subcatchment O1: OFF 1

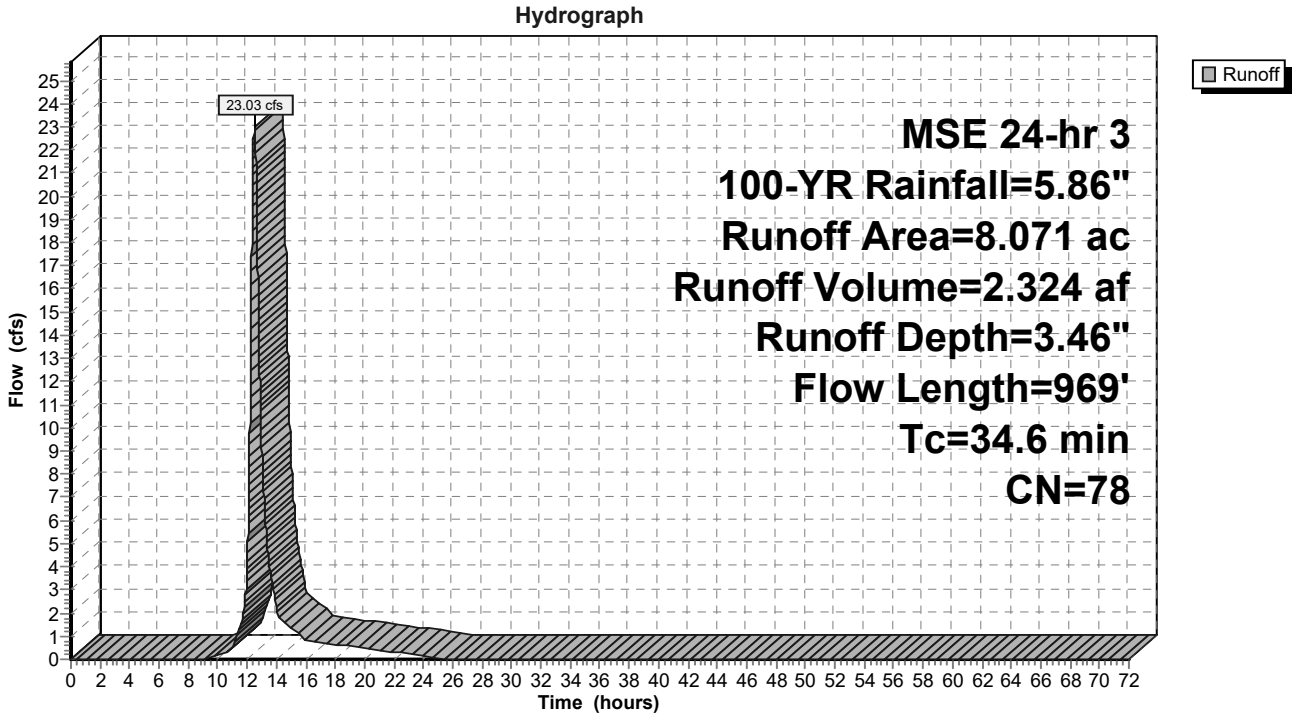
Runoff = 23.03 cfs @ 12.49 hrs, Volume= 2.324 af, Depth= 3.46"

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-YR Rainfall=5.86"

	Area (ac)	CN	Description
*	8.071	78	CROPLAND C
	8.071		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.1	200	0.0100	0.12		**Sheet Flow,** Cultivated: Residue>20% n= 0.170 P2= 2.70"
7.5	769	0.0112	1.70		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
34.6	969	Total			

Subcatchment O1: OFF 1



Summary for Subcatchment O2: OFF 2

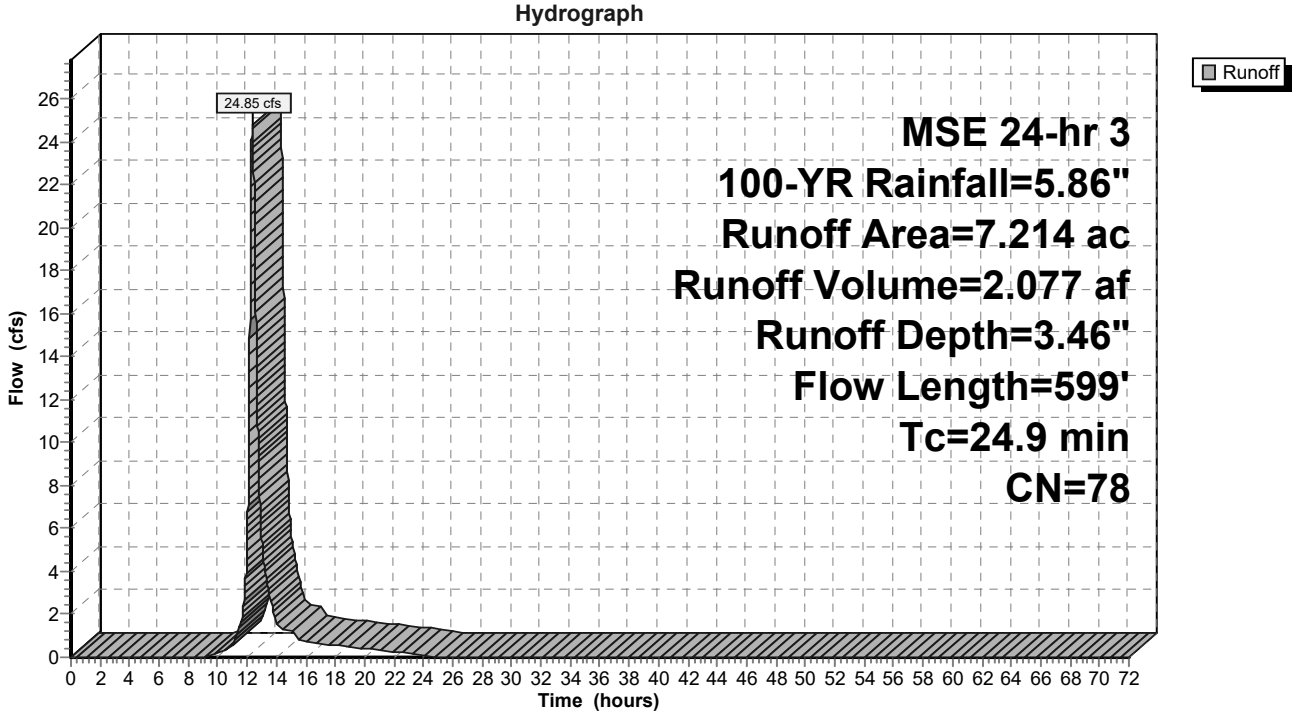
Runoff = 24.85 cfs @ 12.36 hrs, Volume= 2.077 af, Depth= 3.46"

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-YR Rainfall=5.86"

	Area (ac)	CN	Description
*	7.214	78	CROPLAND C
	7.214		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.3	200	0.0163	0.15		**Sheet Flow,** Cultivated: Residue>20% n= 0.170 P2= 2.70"
2.6	399	0.0250	2.55		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
24.9	599	Total			

Subcatchment O2: OFF 2



Summary for Subcatchment O3: OFF 3

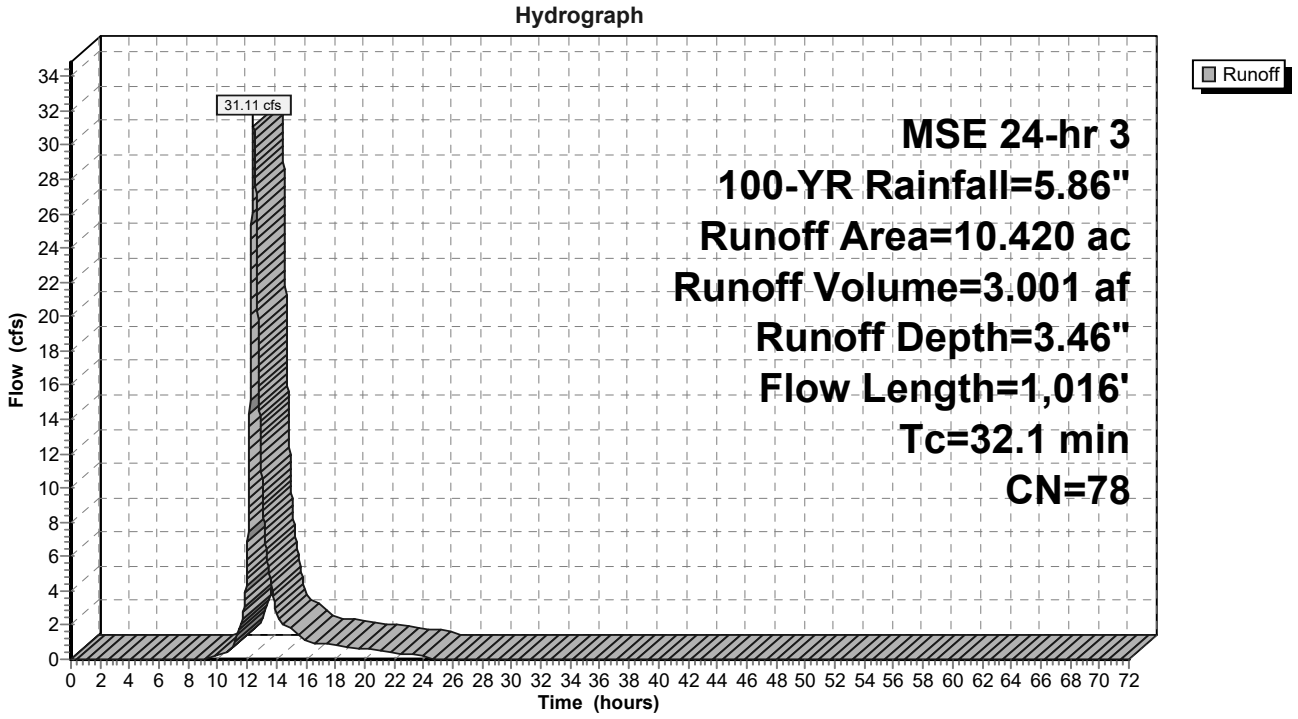
Runoff = 31.11 cfs @ 12.45 hrs, Volume= 3.001 af, Depth= 3.46"

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-YR Rainfall=5.86"

	Area (ac)	CN	Description
*	10.420	78	CROPLAND C
	10.420		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.7	200	0.0126	0.13		**Sheet Flow,** Cultivated: Residue>20% n= 0.170 P2= 2.70"
7.4	816	0.0131	1.84		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
32.1	1,016	Total			

Subcatchment O3: OFF 3



Summary for Subcatchment O4: OFF 4

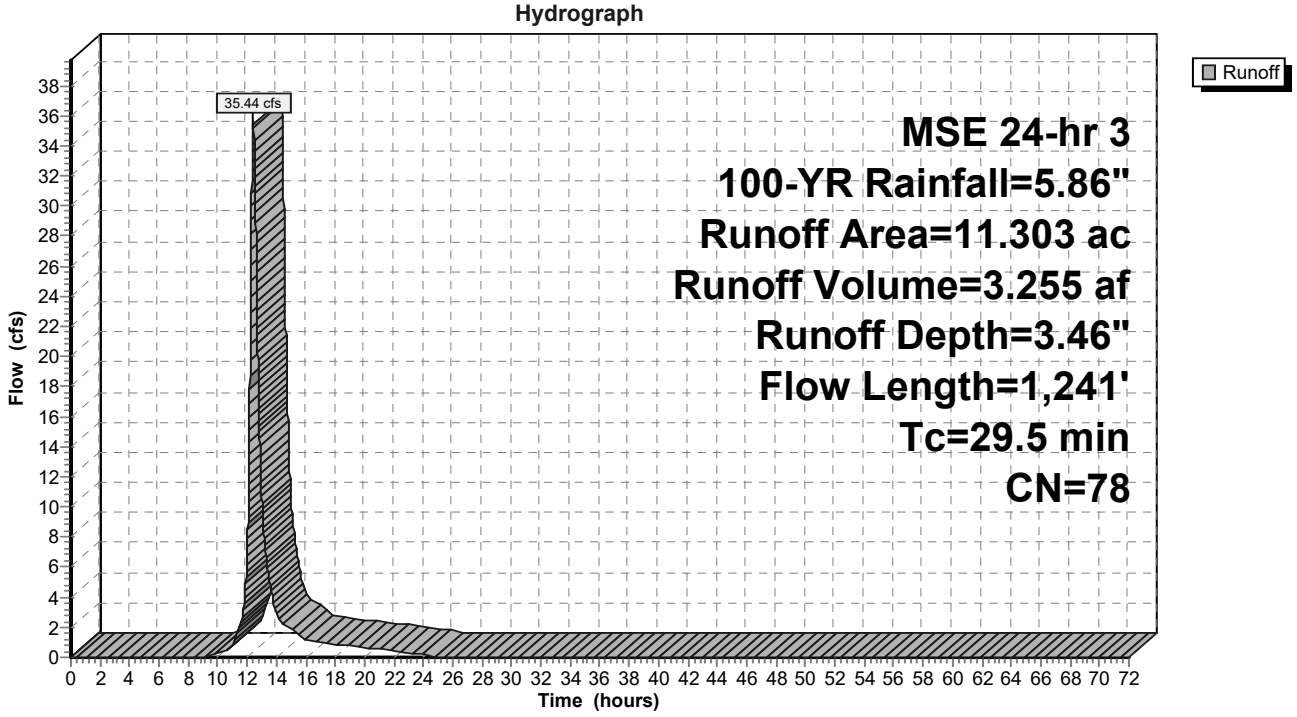
Runoff = 35.44 cfs @ 12.42 hrs, Volume= 3.255 af, Depth= 3.46"

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-YR Rainfall=5.86"

	Area (ac)	CN	Description
*	11.303	78	CROPLAND C
	11.303		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.1	200	0.0100	0.12		**Sheet Flow,** Cultivated: Residue>20% n= 0.170 P2= 2.70"
2.4	1,041	0.2022	7.24		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
29.5	1,241	Total			

Subcatchment O4: OFF 4



Summary for Subcatchment PR1: TO POND 1

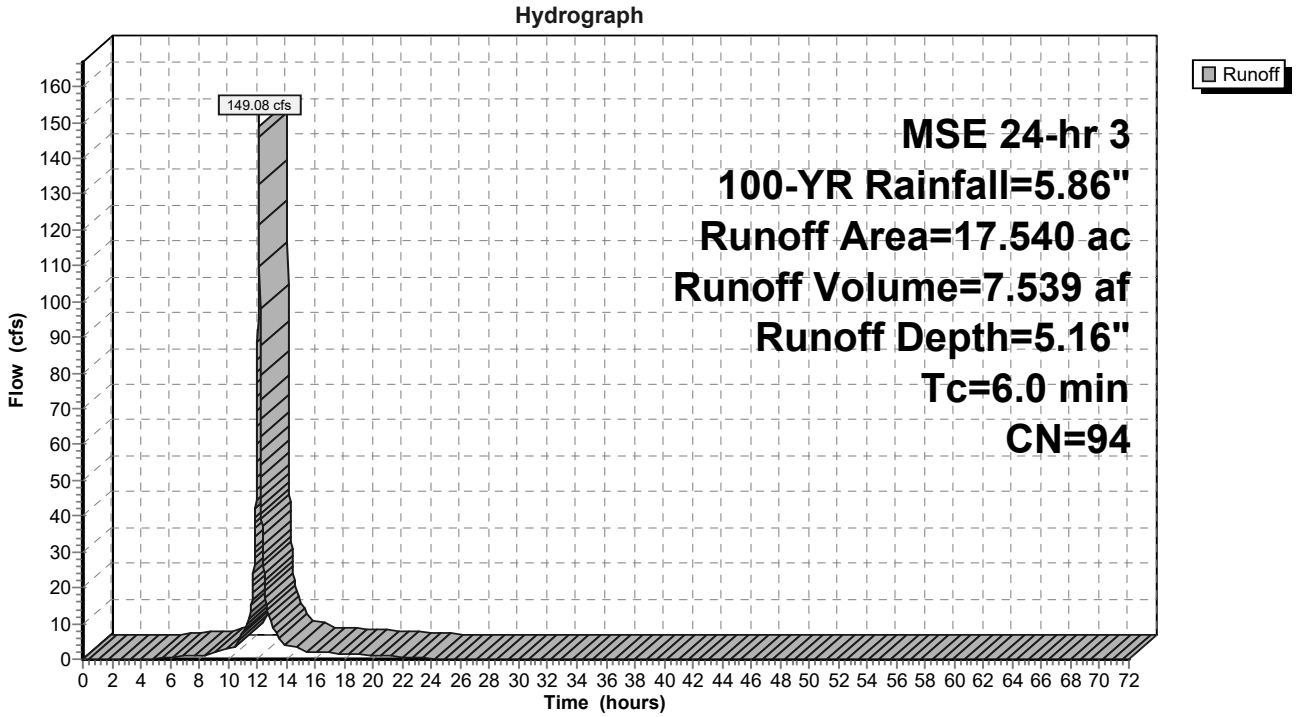
Runoff = 149.08 cfs @ 12.13 hrs, Volume= 7.539 af, Depth= 5.16"

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-YR Rainfall=5.86"

	Area (ac)	CN	Description
*	17.540	94	
	17.540		100.00% Pervious Area

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

Subcatchment PR1: TO POND 1



Summary for Subcatchment PR2: TO POND 2

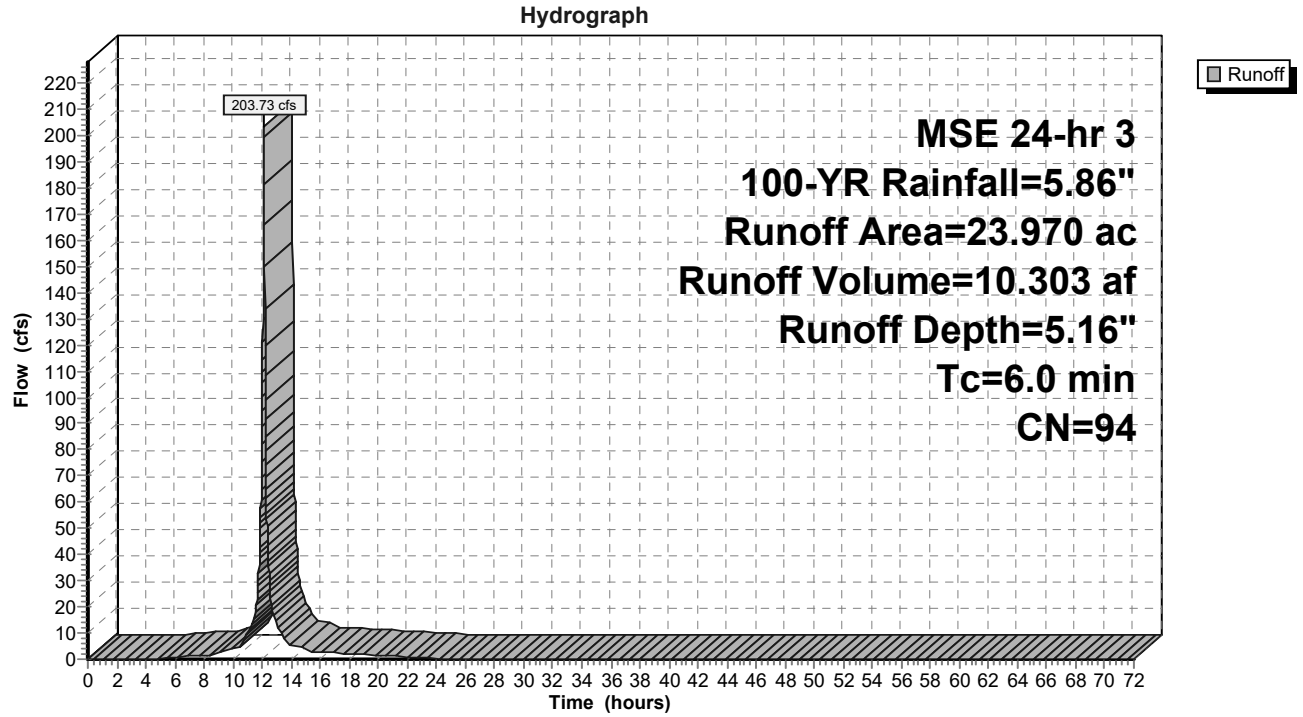
Runoff = 203.73 cfs @ 12.13 hrs, Volume= 10.303 af, Depth= 5.16"

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-YR Rainfall=5.86"

	Area (ac)	CN	Description
*	23.970	94	
	23.970		100.00% Pervious Area

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

Subcatchment PR2: TO POND 2



Summary for Subcatchment PR3: TO POND 3

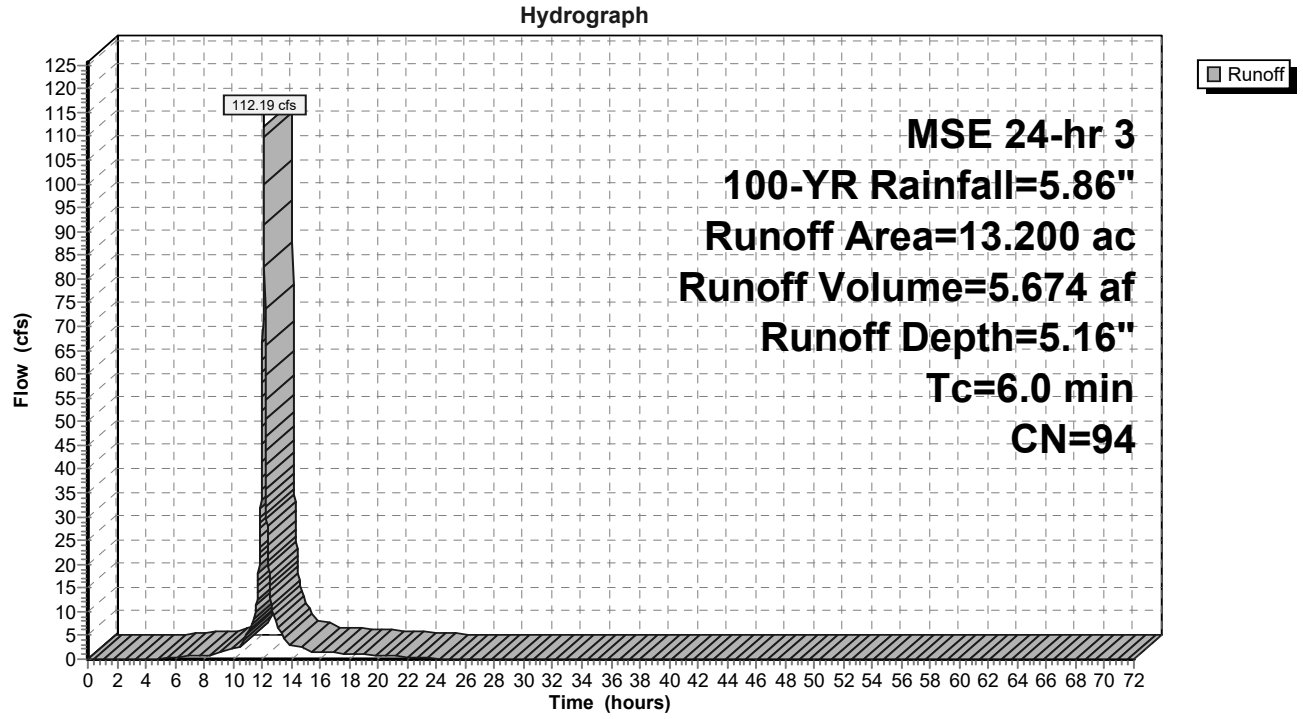
Runoff = 112.19 cfs @ 12.13 hrs, Volume= 5.674 af, Depth= 5.16"

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-YR Rainfall=5.86"

	Area (ac)	CN	Description
*	13.200	94	
	13.200		100.00% Pervious Area

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

Subcatchment PR3: TO POND 3



Summary for Pond P1: POND 1

Inflow Area = 20.990 ac, 1.10% Impervious, Inflow Depth = 4.85" for 100-YR event
Inflow = 152.41 cfs @ 12.13 hrs, Volume= 8.476 af
Outflow = 0.40 cfs @ 72.00 hrs, Volume= 1.720 af, Atten= 100%, Lag= 3,592.2 min
Primary = 0.40 cfs @ 72.00 hrs, Volume= 1.720 af

Routing by Sim-Route method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 715.27' @ 24.05 hrs Surf.Area= 93,321 sf Storage= 356,598 cf

Plug-Flow detention time= 2,003.4 min calculated for 1.720 af (20% of inflow)
Center-of-Mass det. time= 1,857.4 min (2,626.1 - 768.7)

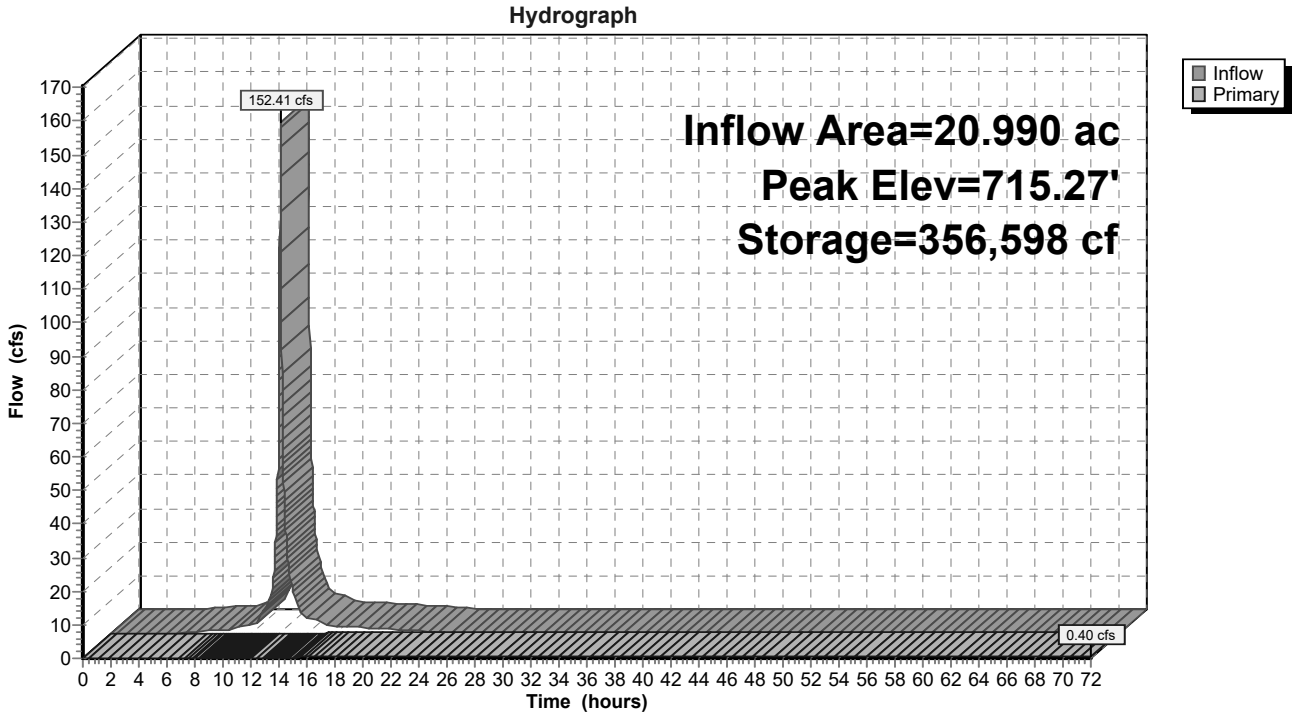
Volume	Invert	Avail.Storage	Storage Description
#1	711.00'	849,348 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
711.00	73,617	0	0
720.00	115,127	849,348	849,348

Device	Routing	Invert	Outlet Devices
#1	Primary	711.00'	**12.0" Round Culvert** L= 277.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 711.00' / 710.50' S= 0.0018 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	711.00'	**3.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	715.50'	**60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.44 cfs @ 72.00 hrs HW=714.59' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Passes 0.44 cfs of 3.47 cfs potential flow)
↑**2=Orifice/Grate** (Orifice Controls 0.44 cfs @ 8.97 fps)
3=Orifice/Grate (Controls 0.00 cfs)

Pond P1: POND 1



Summary for Pond P2: POND 2

[80] Warning: Exceeded Pond P1 by 1.24' @ 12.21 hrs (0.26 cfs 0.013 af)

Inflow Area =	53.031 ac,	0.43% Impervious,	Inflow Depth >	3.25"	for 100-YR event
Inflow =	211.26 cfs @	12.13 hrs,	Volume=	14.347 af	
Outflow =	74.83 cfs @	12.31 hrs,	Volume=	11.726 af,	Atten= 65%, Lag= 10.6 min
Primary =	74.83 cfs @	12.31 hrs,	Volume=	11.726 af	
Secondary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Sim-Route method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 714.77' @ 12.31 hrs Surf.Area= 56,123 sf Storage= 261,571 cf

Plug-Flow detention time= 672.8 min calculated for 11.726 af (82% of inflow)
Center-of-Mass det. time= 415.4 min (1,410.7 - 995.4)

Volume	Invert	Avail.Storage	Storage Description
#1	708.50'	431,708 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

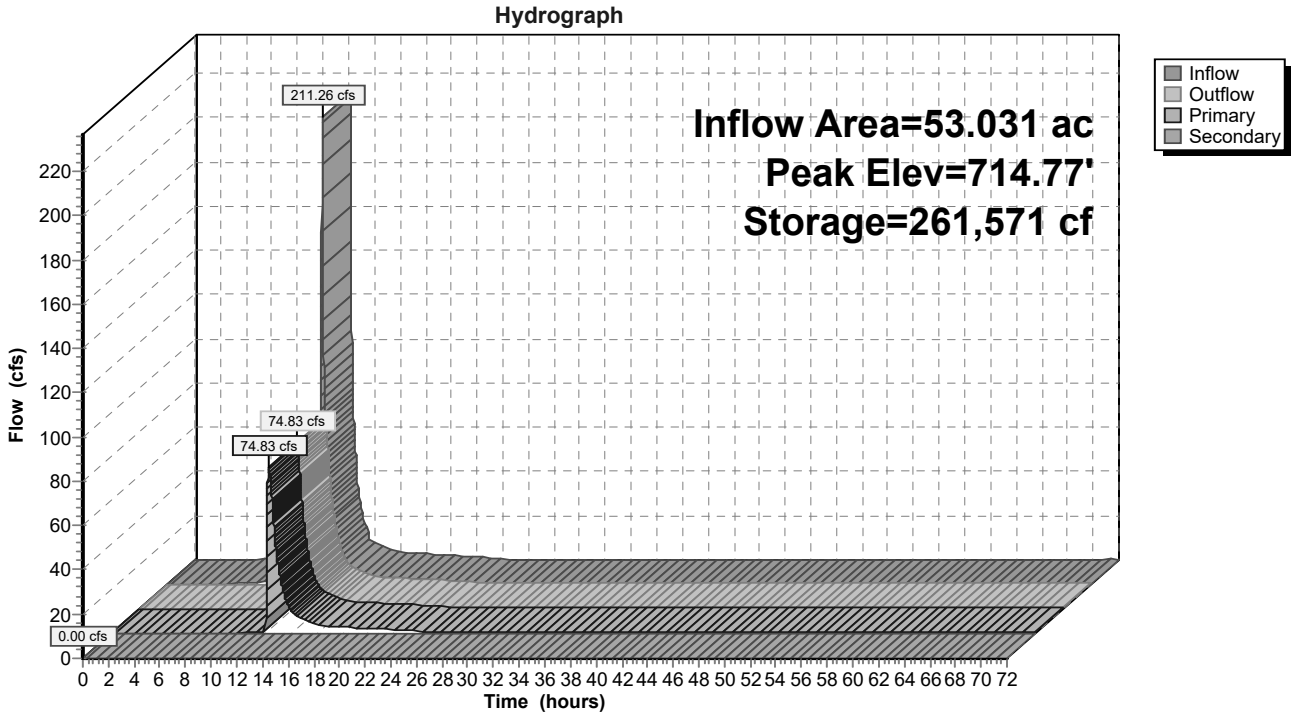
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
708.50	27,271	0	0
717.50	68,664	431,708	431,708

Device	Routing	Invert	Outlet Devices
#1	Primary	708.50'	**42.0" Round Culvert** L= 74.5' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 708.50' / 708.00' S= 0.0067 '/' Cc= 0.900 n= 0.013, Flow Area= 9.62 sf
#2	Device 1	708.50'	**4.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	713.50'	**60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	716.50'	**20.0' long x 17.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=74.81 cfs @ 12.31 hrs HW=714.77' TW=0.00' (Dynamic Tailwater)
└─**1=Culvert** (Passes 74.81 cfs of 98.52 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 1.04 cfs @ 11.90 fps)
  └─**3=Orifice/Grate** (Weir Controls 73.78 cfs @ 3.69 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=708.50' TW=0.00' (Dynamic Tailwater)
└─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond P2: POND 2



Summary for Pond P3: POND 3

Inflow Area = 42.137 ac, 0.00% Impervious, Inflow Depth = 3.99" for 100-YR event
Inflow = 148.60 cfs @ 12.14 hrs, Volume= 14.007 af
Outflow = 61.61 cfs @ 12.72 hrs, Volume= 13.959 af, Atten= 59%, Lag= 34.8 min
Primary = 61.61 cfs @ 12.72 hrs, Volume= 13.959 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Sim-Route method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 711.30' @ 12.72 hrs Surf.Area= 71,044 sf Storage= 235,941 cf

Plug-Flow detention time= 110.0 min calculated for 13.957 af (100% of inflow)
Center-of-Mass det. time= 108.2 min (904.5 - 796.3)

Volume	Invert	Avail.Storage	Storage Description
#1	707.50'	324,683 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

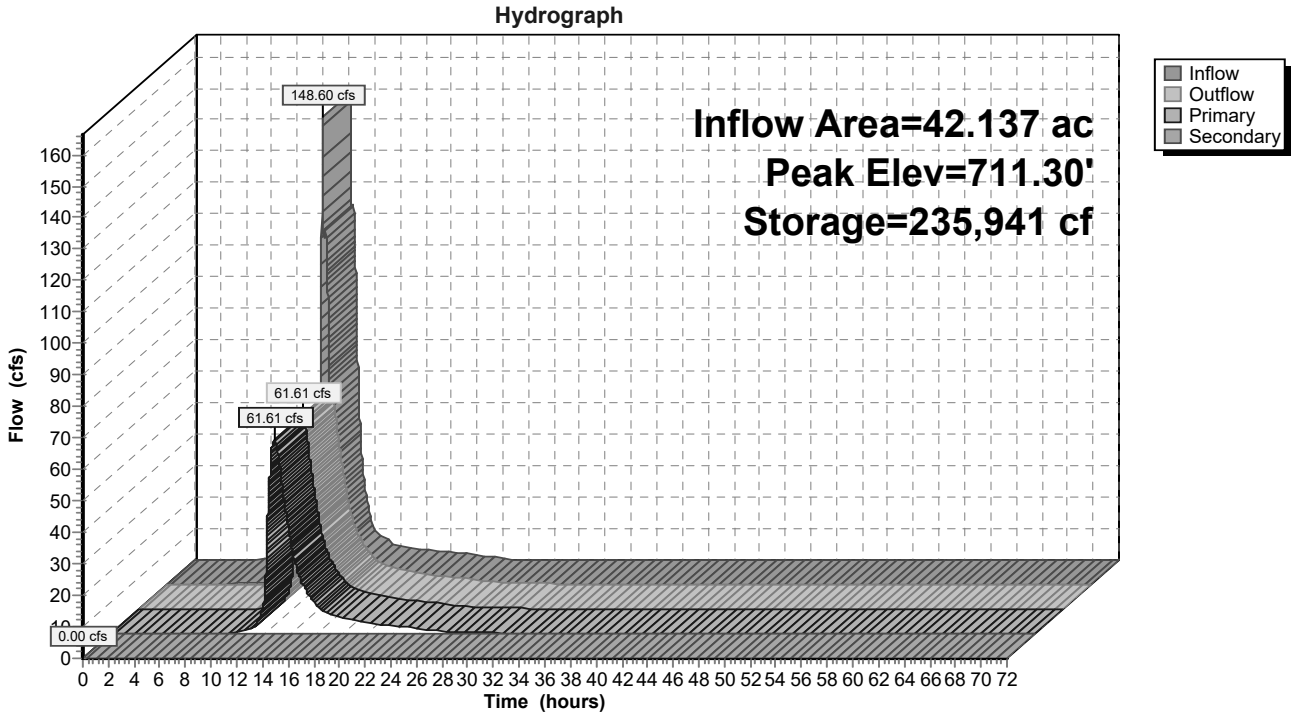
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
707.50	53,180	0	0
712.50	76,693	324,683	324,683

Device	Routing	Invert	Outlet Devices
#1	Primary	707.50'	**42.0" Round Culvert** L= 50.5' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 707.50' / 707.00' S= 0.0099 '/' Cc= 0.900 n= 0.013, Flow Area= 9.62 sf
#2	Secondary	711.50'	**50.0' long x 17.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=61.61 cfs @ 12.72 hrs HW=711.30' TW=0.00' (Dynamic Tailwater)
↑—**1=Culvert** (Barrel Controls 61.61 cfs @ 7.35 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=707.50' TW=0.00' (Dynamic Tailwater)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond P3: POND 3



Summary for Link L2: PROP

Inflow Area = 95.168 ac, 0.24% Impervious, Inflow Depth > 3.24" for 100-YR event
Inflow = 122.76 cfs @ 12.44 hrs, Volume= 25.684 af
Primary = 122.76 cfs @ 12.45 hrs, Volume= 25.684 af, Atten= 0%, Lag= 0.6 min

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

Link L2: PROP