# **URBAN DESIGN COMMISSION APPLICATION**



City of Madison **Planning Division** Madison Municipal Building, Suite 017 215 Martin Luther King, Jr. Blvd. P.O. Box 2985 Madison, WI 53701-2985 (608) 266-4635



FOR OFFICE USE ONLY:	
Date Received10/6/25 12:00 p.m	
☑ ith itial Submittal	☐ Revised Submittal

Complete all sections of this application, including the desired meeting date and the action requested. If your project requires both UDC and Land Use application If you need an interpreter, translator, materials in alternate formats or other accommodations to access these forms, please call the Planning Division at (608) 266-4635.

Si necesita interprete, traductor, materiales en diferentes formatos, u otro tipo de ayuda para

acc			are also required to	acceder a estos formularios, por favor llame al (608) 266-4635.  Yog tias koj xav tau ib tug neeg txhais lus, tus neeg txhais ntawv, los sis xav tau cov ntaub ntawv ua lwm hom ntawv los sis lwm cov kev pab kom paub txog cov lus qhia no, thov hu rau Koog Npaj (Planning Division) (608) 266-4635.			
	oject Informatio		oject site): <u>4846 Tradewin<sub>ds</sub> r</u>	, kwy			
Titl	e: 4846 Tradewin	ds Pkwy Flex Bui	lding	_			
-	plication Type ( C meeting date r New developm Informational	equested <u>No</u>			ously-approved development Final Approval		
3. Pro	Project in an Ur Project in the Dr Mixed-Use Distri Project in the St Campus Institut District (EC) Planned Develo General D Specific Im	Planned Development (PD)  ☐ General Development Plan (GDP)			Comprehensive Design Review (CDR)  Modifications of Height, Area, and Setback  Sign Exceptions as noted in Sec. 31.043(3), MGO  er  Please specify		
Ap Stre Tele Pro Stre Tele Pro	plicant name eet address ephone pject contact per eet address ephone pperty owner (if	Ross Treichel 2501 Parment 608-836-7570 son (same as a		City Em- Cor City Em-	mpany Sketchworks Architecture, LLC  //State/Zip Middleton, WI 53562  ail rtreichel@sketchworksarch.com  mpany		
Street address Telephone				City/State/Zip			

### **URBAN DESIGN COMMISSION APPROVAL PROCESS**



### Introduction

The City of Madison's Urban Design Commission (UDC) has been created to:

- Encourage and promote high quality in the design of new buildings, developments, remodeling, and additions so as to maintain and improve the established standards of property values within the City.
- Foster civic pride in the beauty and nobler assets of the City, and in all other ways possible assure a functionally efficient and visually attractive City in the future.

### **Types of Approvals**

There are three types of requests considered by the UDC:

- <u>Informational Presentation</u>. A request for an Informational Presentation to the UDC may be requested prior to seeking any
  approvals to obtain early feedback and direction before undertaking detailed design efforts. Applicants should provide
  details on the context of the site, design concept, site and building plans, and other relevant information to help the UDC
  understand the proposal and provide feedback. (Does not apply to CDR's or Signage Modification requests)
- <u>Initial Approval</u>. Applicants may, at their discretion, request Initial Approval of a proposal by presenting preliminary design information. As part of their review, the Commission will provide feedback on the design information that should be addressed at Final Approval stage.
- <u>Final Approval</u>. Applicants may request Final Approval of a proposal by presenting all final project details. Recommendations or concerns expressed by the UDC in the Initial Approval must be addressed at this time.

### **Presentations to the Commission**

The Urban Design Commission meets virtually via Zoom, typically on the second and fourth Wednesdays of each month at 4:30 p.m. Applicant presentations are strongly encouraged, although not required. Prior to the meeting, each individual speaker is required to complete an online registration form to speak at the meeting. A link to complete the online registration will be provided by staff prior to the meeting. Please note that individual presentations will be limited to a **maximum of three (3) minutes**. The pooling of time may be utilized to provide one speaker more time to present, however the additional time will be based on the number of registrants from the applicant team, i.e. two (2) applicant registrants = six (6) minutes for one (1) speaker.

Primarily, the UDC is interested in the appearance and design quality of projects. Emphasis should be given to the site plan, landscape plan, lighting plan, building elevations, exterior building materials, color scheme, and graphics. Please note that presentation slides, in a PDF file format, are required to be submitted **the Friday before** the UDC meeting.

# **URBAN DESIGN DEVELOPMENT PLANS CHECKLIST**



The items listed below are minimum application requirements for the type of approval indicated. Please note that the UDC and/or staff may require additional information in order to have a complete understanding of the project.

1. Informa	itional Presentation		
	Locator Map	)	Requirements for All Plan Sheets
	Letter of Intent (If the project is within		1. Title block
	an Urban Design District, a summary of how the development proposal addresses		2. Sheet number
	the district criteria is required)	Providing additional information beyond these	3. North arrow
	Contextual site information, including	minimums may generate	4. Scale, both written and graphic
	photographs and layout of adjacent buildings/structures	a greater level of feedback	<ul><li>5. Date</li><li>6. Fully dimensioned plans, scaled</li></ul>
	Site Plan	from the Commission.	at 1"= 40' or larger
	Two-dimensional (2D) images of		** All plans must be legible, including
_	proposed buildings or structures.	J	the full-sized landscape and lighting plans (if required)
2. Initial A	pproval		
	Locator Map		)
	Letter of Intent (If the project is within a development proposal addresses the distri		ry of <u>how</u> the Providing additional
	Contextual site information, including photogr	aphs and layout of adjacent building	
	Site Plan showing location of existing and bike parking, and existing trees over 18" dia		minimums may
	Landscape Plan and Plant List (must be legi	ble)	generate a greater level of
	Building Elevations in <b>both</b> black & white ar and color callouts	nd color for all building sides, inclu	ding material feedback from the Commission.
	PD text and Letter of Intent (if applicable)		J
3. Final Ap	proval		
All the r	equirements of the Initial Approval (see abov	ve), <b>plus</b> :	
	Grading Plan		
	Lighting Plan, including fixture cut sheets a	nd photometrics plan (must be le	gible)
	Utility/HVAC equipment location and scree	ning details (with a rooftop plan i	f roof-mounted)
	Site Plan showing site amenities, fencing, tr	rash, bike parking, etc. (if applical	ole)
	PD text and Letter of Intent (if applicable)		
	Samples of the exterior building materials		
	Proposed sign areas and types (if applicable	e)	
4. Signage	Approval (Comprehensive Design Review (	CDR), Sign Modifications, and Sig	n Exceptions (per <u>Sec. 31.043(3)</u> )
	Locator Map		
	Letter of Intent (a summary of <u>how</u> the proposed		
	Contextual site information, including pho project site	tographs of existing signage bot	h on site and within proximity to the
	Site Plan showing the location of existing si driveways, and right-of-ways	gnage and proposed signage, dim	nensioned signage setbacks, sidewalks
	Proposed signage graphics (fully dimension		
	Perspective renderings (emphasis on pedes		,
	Illustration of the proposed signage that me	•	- ·
	Graphic of the proposed signage as it relate	es to what the <u>Ch. 31, MGO</u> would	d permit

### 5. Required Submittal Materials

### **☑** Application Form

• A completed application form is required for <u>each</u> UDC appearance. For projects also requiring Plan Commission approval, applicants must also have submitted an accepted application for Plan Commission consideration prior to obtaining any formal action (Initial or Final Approval) from the UDC.

### **☑** Letter of Intent

- If the project is within an Urban Design District, a summary of how the development proposal addresses the district criteria is required.
- For signage applications, a summary of how the proposed signage is consistent with the applicable Comprehensive Design Review (CDR) or Signage Modification review criteria is required.
- Development Plans (Refer to checklist on Page 4 for plan details)
- Filing Fee (Refer to Section 7 (below) for a list of application fees by request type)

### **☑** Electronic Submittal

- Complete electronic submittals <u>must</u> be received prior to the application deadline before an application will be scheduled for a UDC meeting. Late materials will not be accepted. All plans must be legible and scalable when reduced. Individual PDF files of each item submitted should be submitted via email to <u>UDCapplications@cityofmadison.com</u>. The email must include the project address, project name, and applicant name.
- Email Size Limits. Note that <u>an individual email cannot exceed 20MB</u> and <u>it is the responsibility of the applicant</u> to present files in a manner that can be accepted. Applicants who are unable to provide the materials electronically should contact the Planning Division at (608) 266-4635 for assistance.

### □ Notification to the District Alder

• Please provide an email to the District Alder notifying them that you are filing this UDC application. Please send this as early in the process as possible and provide a copy of that email with the submitted application.

### 6. Applicant Declarations

1.	Prior to submitting this application, the applicant is require This application was discussed with $\underline{}$ seeking discussion	1 1 1 7	n Commission staff
2.	The applicant attests that all required materials are included is not provided by the application deadline, the applicationsideration.		
Nar	me of applicant Ross Treichel	Relationship to property Architect	

### 7. Application Filing Fees

Fee payments are due by the submittal date. Payments received after the submittal deadline may result in the submittal being scheduled for the next application review cycle. Fees may be paid in-person, via US Mail, or City drop box. If mailed, please mail to: City of Madison Building Inspection, P.O. Box 2984, Madison, WI 53701-2984. The City's drop box is located outside the Municipal Building at 215 Martin Luther King, Jr. Blvd. on the E Doty Street side of the building. Please make checks payable to City Treasurer, and include a completed application form or cover letter indicating the project location and applicant information with all checks mailed or submitted via the City's drop box.

Please consult the schedule below for the appropriate fee for your request:

Authorizing signature of property owner \_\_\_\_\_

	,
V	Urban Design Districts: \$350 (per §33.24(6) MGO).
	Minor Alteration in the Downtown Core District (DC) or Urban Mixed-Use District (UMX): \$150 (per §33.24(6)(b) MGO)
	Comprehensive Design Review: \$500 (per §31.041(3)(d)(1)(a) MGO)
	Minor Alteration to a Comprehensive Sign Plan: \$100 (per §31.041(3)(d)(1)(c) MGO)
	All other sign requests to the Urban Design Commission, including, but not limited to: appeals from the decisions of the Zoning Administrator, requests for Sign Modifications

(of height, area, and setback), and additional sign code

approvals: \$300 (per §31.041(3)(d)(2) MGO)

A filing fee is not required for the following project applications if part of the combined application process involving both Urban Design Commission and Plan Commission:

Date

- Project in the Downtown Core District (DC), Urban Mixed-Use District (UMX), or Mixed-Use Center District (MXC)
- Project in the Suburban Employment Center District (SEC), Campus Institutional District (CI), or Employment Campus District (EC)
- Planned Development (PD): General Development Plan (GDP) and/or Specific Implementation Plan (SIP)
- Planned Multi-Use Site or Residential Building Complex



October 6, 2025

City of Madison Urban Design Commission 215 Martin Luther King Jr. Blvd P.O. Box 2985 Madison, WI 53701-2985

RE: UDC New development / Letter of Intent 4846

Tradewinds Pkwy (New Warehouse)

### **Dear Commission Members:**

On behalf of Tim Neitzel, Sketchworks Architecture is submitting this letter of intent and application for Initial and Final Review of a new 22,100 SF warehouse at 4846 Tradewinds Parkway. Included are the concept civil plans, architectural floor plans and building elevations.

The site is zoned Industrial Limited (IL), and the intended use is allowed under this zoning. All tenant plans or tenant conditional uses beyond the initial shell building will be submitted for review on a tenant-by-tenant basis and is not intended to be a part of this review. The site is also part of Urban Design District 1 and has been designed in accordance with those guidelines.



### **Existing conditions:**

The lot is a greenfield site on the north side of Tradewinds Parkway, east of Mainstay Suites Madison – Monona and west of a parking lot. Minimal natural vegetation exits, along with an existing public sidewalk.

### Proposed use:

This building is an industrial flex building with 43 standard parking stalls, 2 van accessible stalls, and 6 bike stalls. Two tenant spaces are planned, each with their own entrances, emergency exiting, with one recessed and one at-grade loading dock for each future tenant.

### **Urban Design District Guidelines:**

This building has been designed to follow the Urban Design District 1 guidelines, specific examples include:

- Landscaping: The landscaping has been selected to provide ample screening for the parking lots along Dairy Drive and Femrite, as well as to break up blank wall spaces.
- **Metal Panel:** Being a precast building, there will be no metal panel used as the exterior wall material on any façade.
- **Signage:** While not a part of this submittal, signage locations have been considered to provide the opportunity to maintain consistency with the district requirements and zoning regulations in the signage submittal.
- Rooftop Mechanicals: The rooftop mechanical equipment will be placed in a location where the building height and additional parapets will be tall enough to not require additional screening.

### **Design Attributes:**

The building was designed to meet the aesthetic requirements for a building in this neighborhood. The design borrows shapes and motifs from the neighboring buildings. Rooftop equipment will be screened within the taller parapets of the prominent front corner, and the trash enclosure will be screened using a cedar wood fence mounted on a steel frame.

The materials will be primarily painted precast concrete with steel and aluminum canopy structures, and ample glass on all sides of the building to provide natural light where it is both useful and desirable. To break up the rhythmic nature of precast concrete, care was given to provide intriguing paint patterns and colors along with clerestory windows.

### Site Planning:

The site has one entrance that will be shared with the neighboring lot. The adjacent owner has been integral in this planning process and there will be an shared access agreement in place for this new development. The site is also being developed with the best stormwater practices in mind.

### **Parking Lots/Loading Docks:**

The parking lots are designed with landscape islands and perimeter landscaping as required by City of Madison and UDD ordinances.



### **Building/Site Relationships:**

The building is located to optimize the site for the building function, vehicle parking is to the south of the building with loading docks and additional parking located on the north, non-street facing elevation. The landscaping has been selected to provide screening across each public rights-of-way, especially where it can be used to screen loading docks and parking lots.

### Lighting:

Lighting plans will be developed for future review. Pole lights are planned in the parking lot and loading dock areas. Traditional wall pack lights will be located above exit doors and loading docks.

### **Utilities and Equipment:**

The utilities servicing the building will be underground. There will be rooftop units for HVAC, but the height of the building combined with the parapet locations will be sufficient to conceal any typical mechanical equipment from the sidewalk and public streets.

In summary, the project will follow the general criteria listed below:

### **Zoning District:**

The property is currently zoned IL (Industrial Limited)

### **Project Schedule:**

The project construction schedule is as follows (estimated):

UDC Meeting: November 5, 2025 Start Construction: Spring 2026

### **Project Team:**

The key individuals and firms involved in this planning and design process include:

### **Building Owner:**

M.M.I., LLC 5301 Voges Road Madison, WI 53718 Contact: Lynn Thomas 608-733-6427

### Architect:

Sketchworks Architecture, LLC 2501 Parmenter Street, Suite 300A Middleton, WI 53562 Contact: Ross Treichel 608-836-7570



### Civil Engineering:

Snyder & Associates, Inc. 5010 Voges Road Madison, WI 53718 Contact: Scott Anderson, PE

608-838-0444

### General Contractor:

Newcomb Construction Company, Inc. 999 Fourier Drive, #102 Madison, WI 53717 Contact: Brett Newcomb 608-833-5220

Thank you for your time and consideration, and please feel free to contact us with any questions you may have regarding this request.

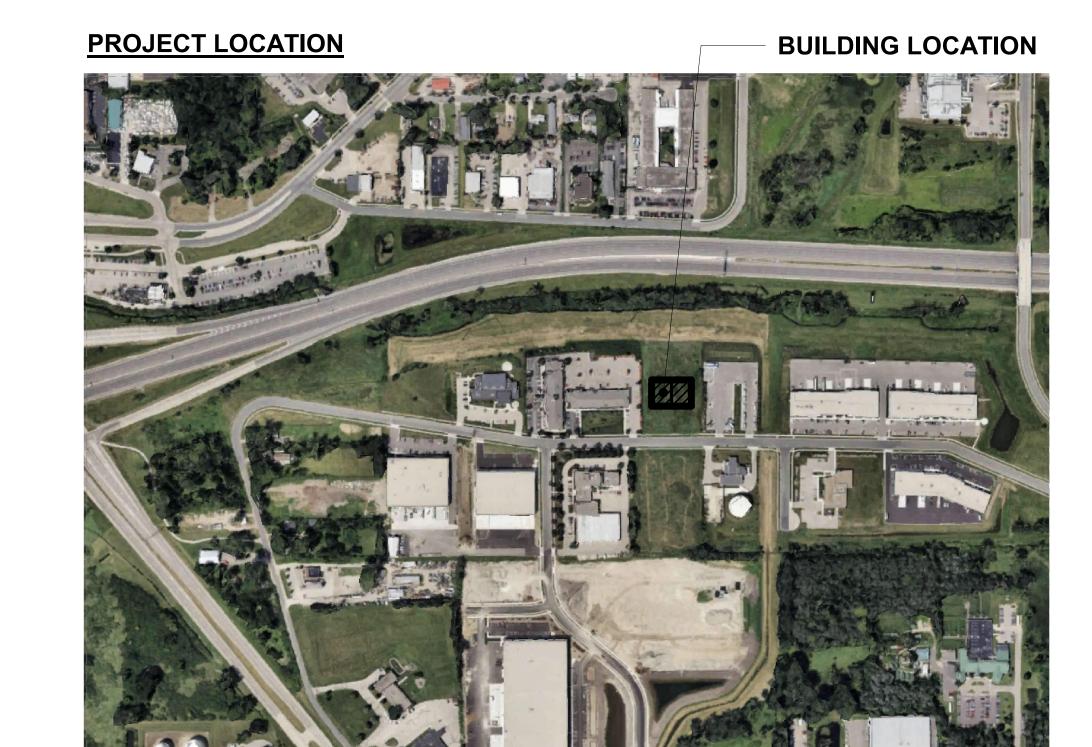
Respectfully,

Ross Treichel

Sketchworks Architecture, LLC

	- SHEET IND	EX -	
SHEET		REVIS	SIONS
NUMBER	SHEET NAME	MARK	DATE
GENERAL			
G101	COVER SHEET		
G102	CONTEXT		
CIVIL			
C100	TITLE SHEET		
C200	EXISTING SITE PLAN		
C300	SITE PLAN		
C400	GRADING PLAN		
C401	EROSION CONTROL PLAN		
C402	UTILITY PLAN		
C500	EROSION CONTROL DETAILS		
C501	MISC. DETAILS		
SITE LIGH	TING		
ES101	PHOTOMETRIC SITE PLAN		
LANDSCAF	PE		
L100	LANDSCAPE NOTES		
L101	LANDSCAPE DETAILS		
L200	PLANTING PLAN		
4 D O L HT E O			
ARCHITEC <sup>®</sup>	<u></u>		
A101	FLOOR PLAN		
A103	ROOF PLAN		
A201	EXTERIOR ELEVATIONS		
A202	EXTERIOR ELEVATIONS		
A203	EXTERIOR ELEVATIONS - COLOR		
A204	EXTERIOR ELEVATIONS - COLOR		





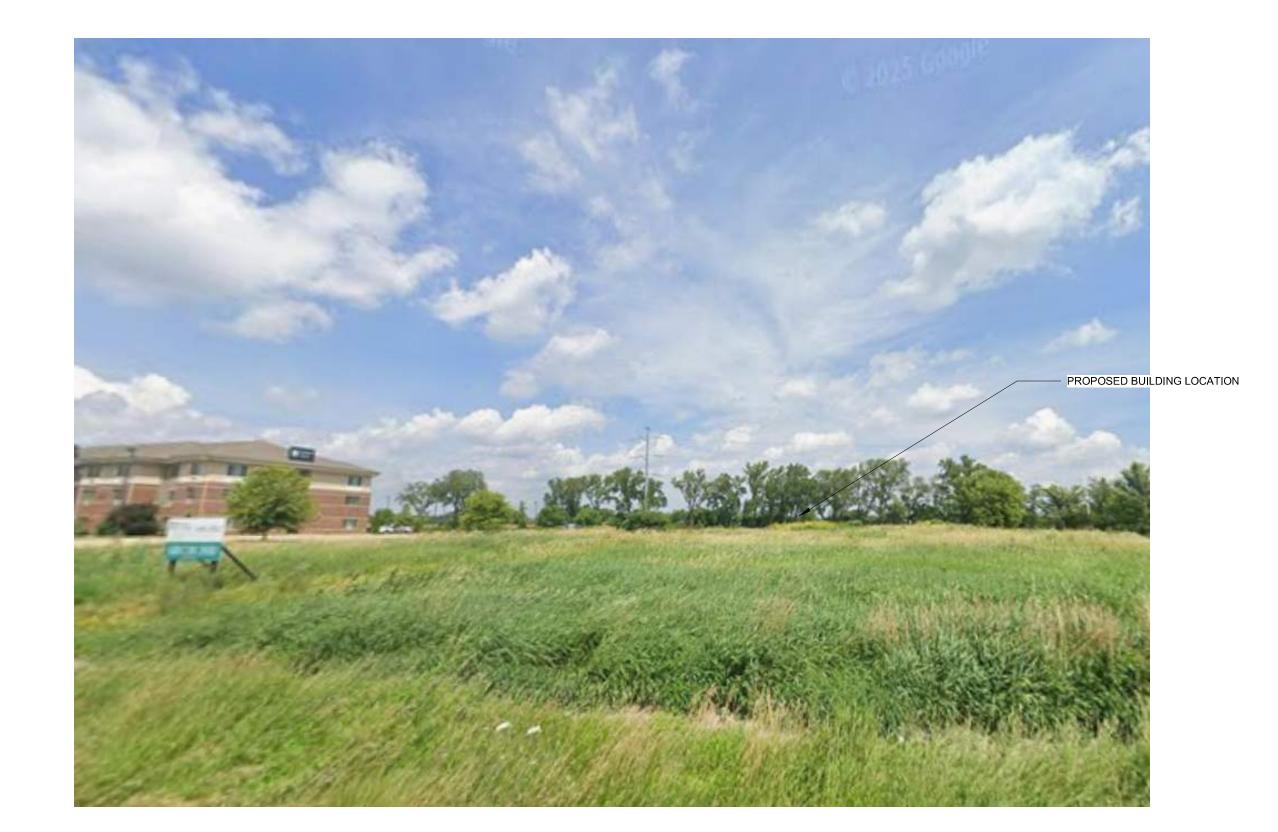




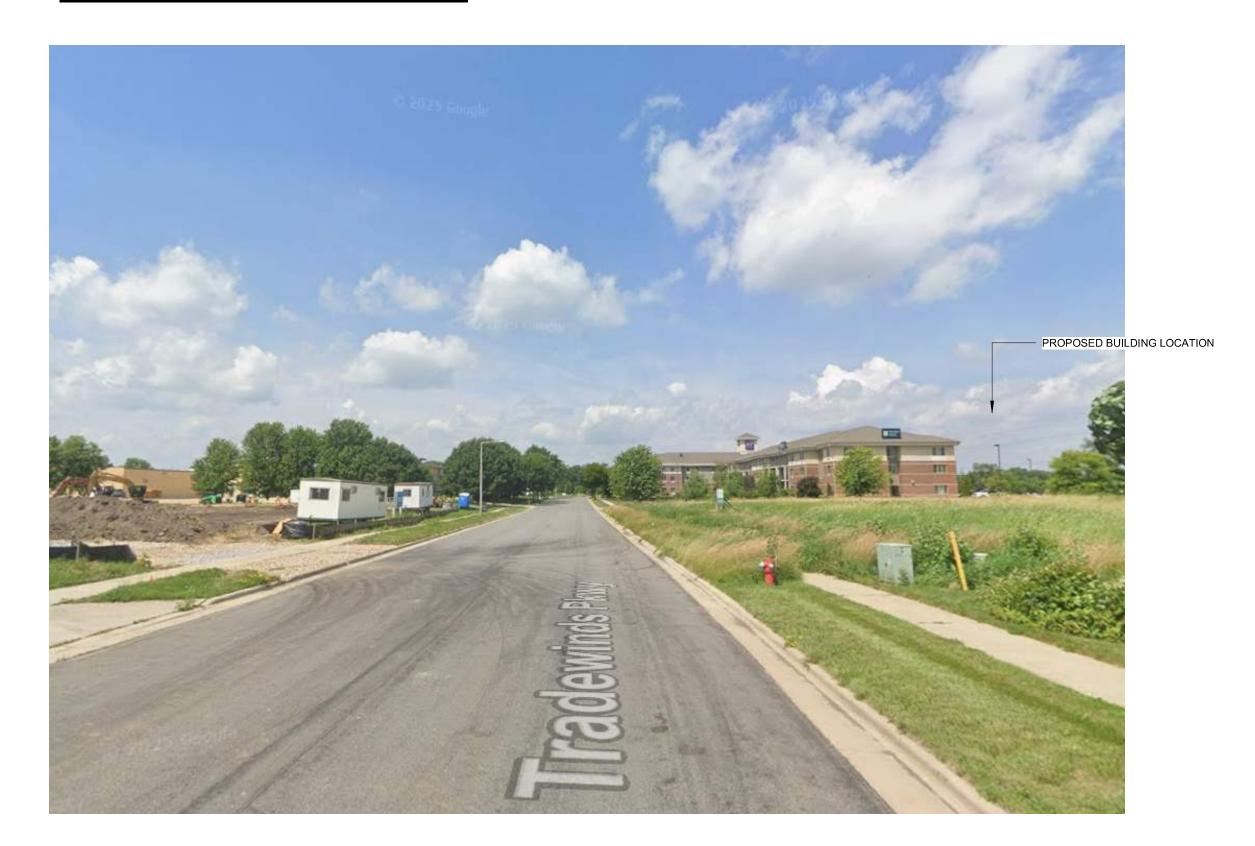
PARKING LOT ADJACENT TO PROPOSED BUILDING - EAST SIDE



**BUILDING ADJACENT TO PROPOSED BUILDING - WEST SIDE** 



FRONT OF PROPOSED BUILDING



**TRADEWINDS PRWY - LOOKING WEST** 

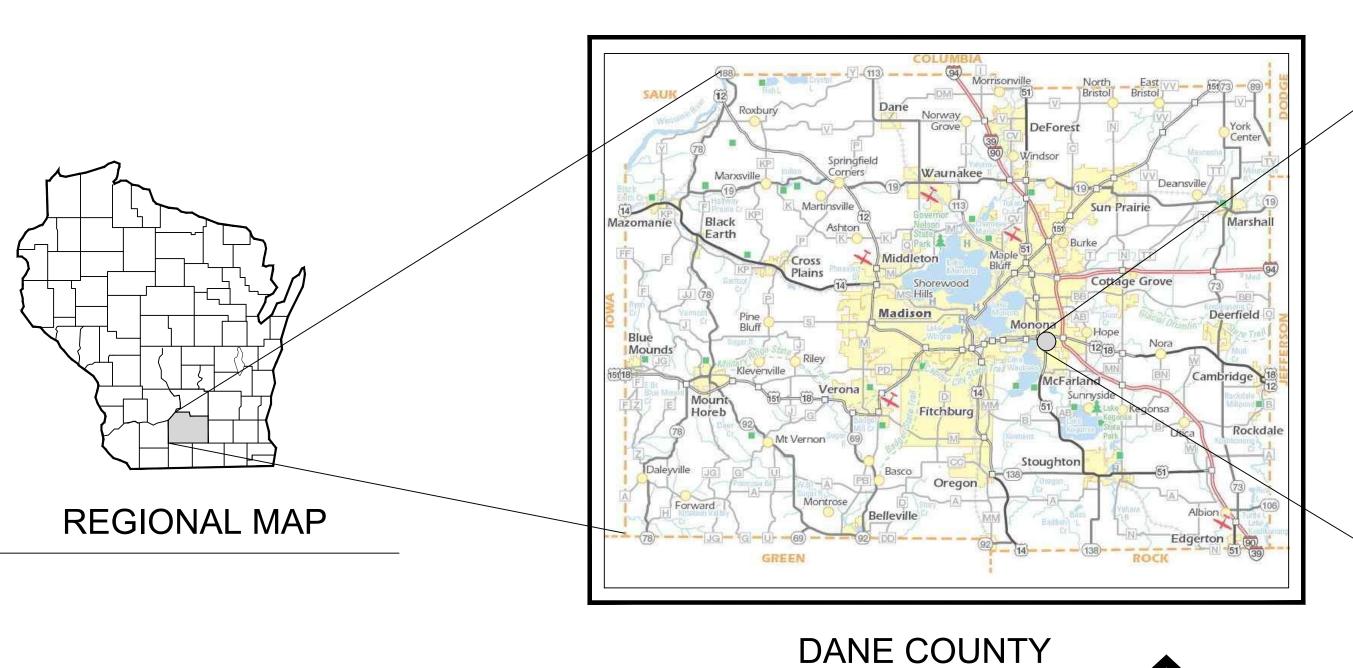
# TRADEWINDS FLEX BUILDING

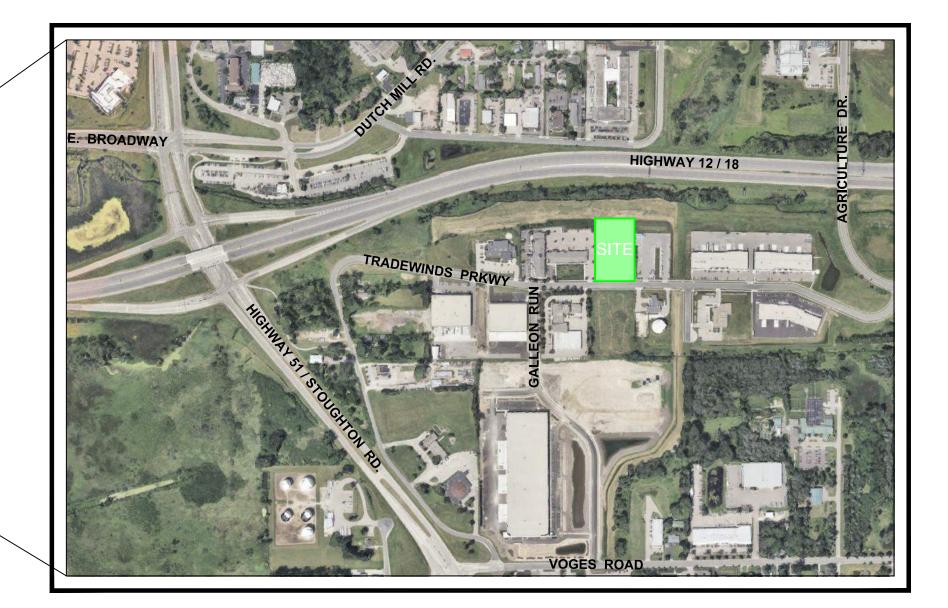
PROPOSED BUILDING LOCATION



# 4846 TRADEWINDS PARKWAY

SECTION 27, TOWNSHIP 7N, RANGE 10E





# SITE LOCATION MAP

ADISON,

N

CITY OF MADISON, DANE COUNTY, WISCONSIN



NOTICE BEFORE YOU EXCAVATE

BENCHMARK

FROM SOUTHEAST CORNER LOOKING NORTHWEST

## BENCHMARK

FIRE HYDRANT TOP NUT - LOCATED NEAR SOUTH EAST PROPERTY CORNER ELEV. = 862.52

# SITE ADDRESS: 4846 TRADEWINDS PARKWAY MADISON, WI 53718

# OWNER / DEVELOPER:

M.M.I. L.L.C. 5301 VOGES ROAD MADISON, WI 53718 (608) 257-2600

ENGINEER, SURVEYOR, & LANDSCAPE ARCHITECT

SNYDER & ASSOCIATES SCOTT ANDERSON 5010 VOGES ROAD MADISON, WI 53718 (608) 838-0444 EXT 3238

Sheet Index					
Sheet Number	Sheet Title				
C 100	TITLE SHEET				
C 200	EXISTING SITE PLAN				
C 300	SITE PLAN				
C 400	GRADING PLAN				
C 401	EROSION CONTROL PLAN				
C 402	UTILITY PLAN				
C 500	EROSION CONTROL DETAILS				
C 501	MISC. DETAILS				
L 100	LANDSCAPE NOTES				
L 101	LANDSCAPE DETAILS				
L 200	PLANTING PLAN				

# CAUTION:

CERTAIN UNDERGROUND UTILITIES HAVE BEEN LOCATED ON THE PLANS. THESE LOCATIONS SHALL NOT BE TAKEN AS CONCLUSIVE. VERIFICATION TO THE SATISFACTION OF THE CONTRACTOR OF ALL UNDERGROUND UTILITES, WHETHER SHOWN ON THE DRAWING OR NOT, SHALL BE ASSUMED AS A CONDITION OF THE CONTRACT. FOR EXACT LOCATION CONTACT DIGGERS HOTLINE 1-800-242-8511

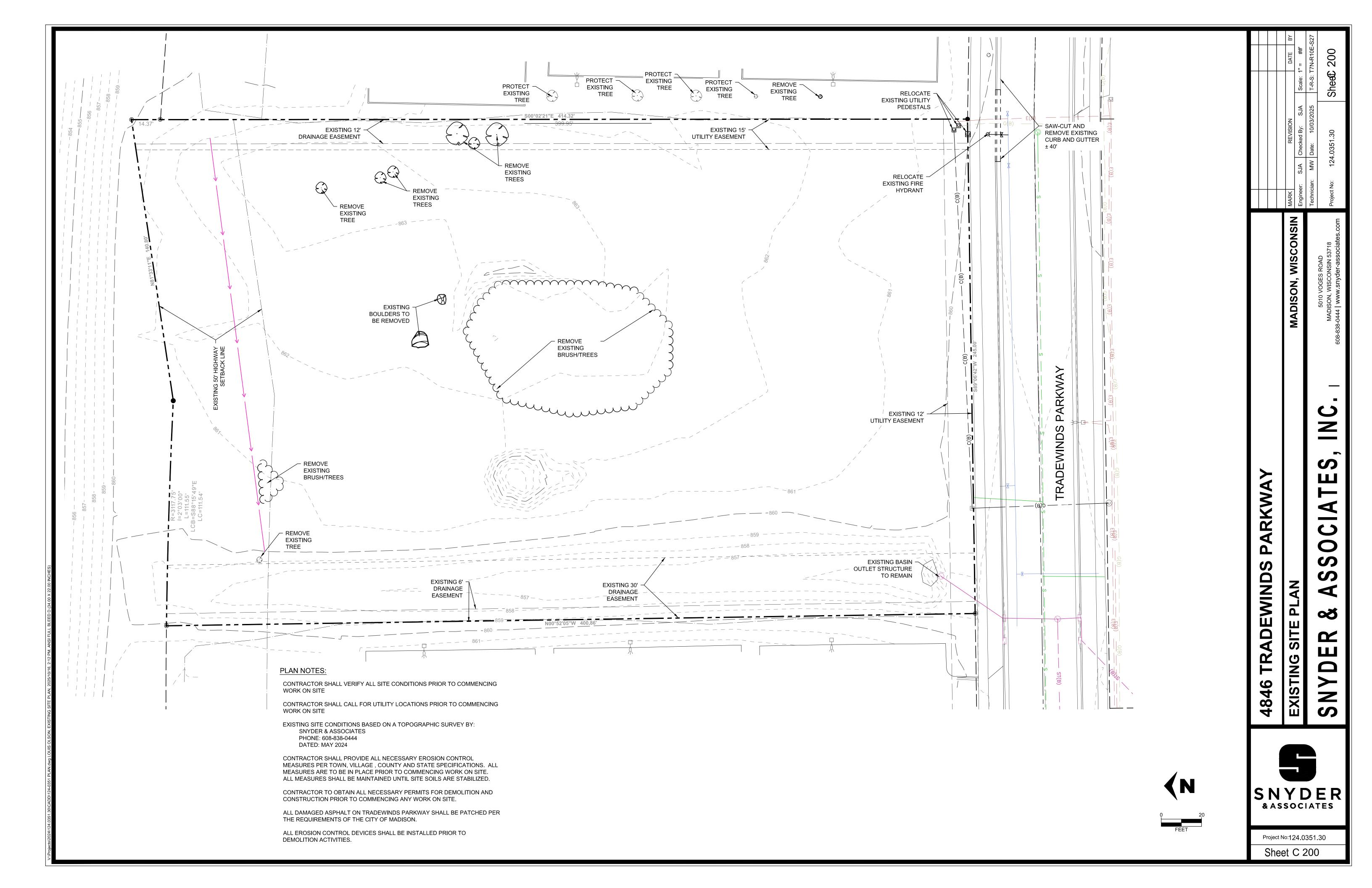
0 S ADEWIND SHEET SNYDER

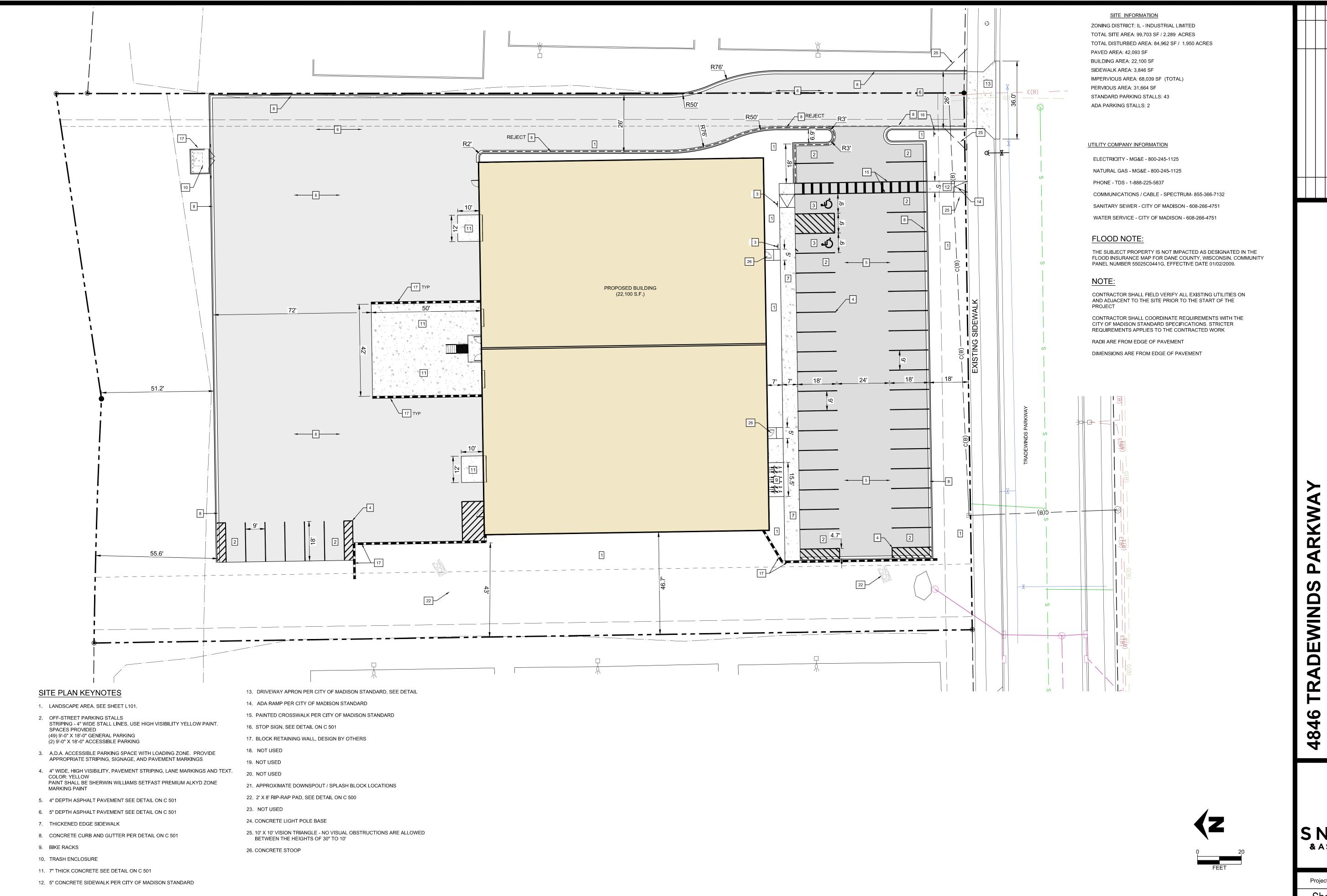
jects\2024\124.0351.30\CADD\124-0351 PLAN

Sheet C 100

& ASSOCIATES

Project No:124.0351.30





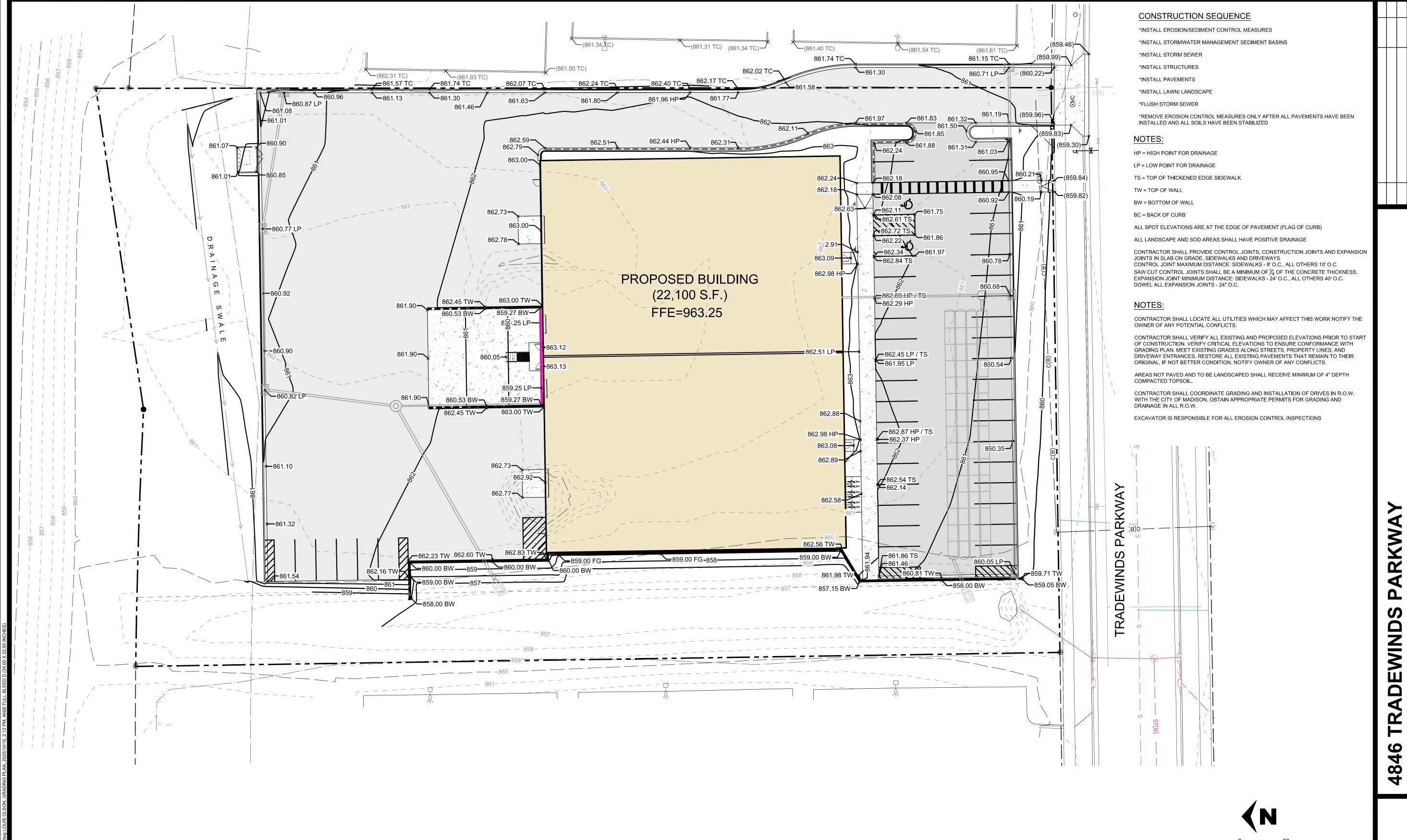


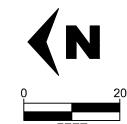
Project No:124.0351.30

WISCONSIN

MADISON,

Sheet C 300





## NOTE FOR GRADING CONTRACTOR:

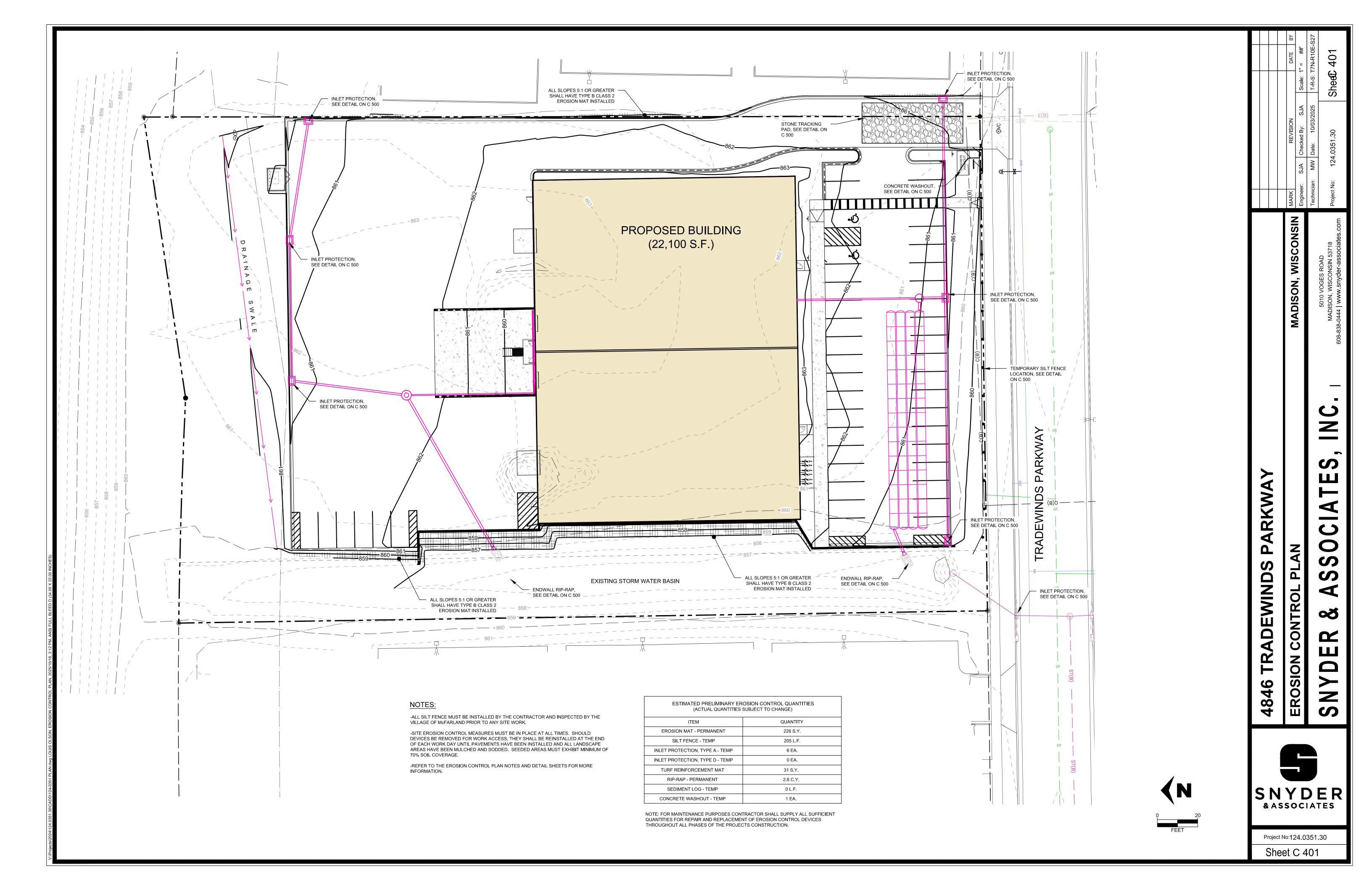
ANY PROPERTY IRONS THAT ARE DISTURBED IN THE GRADING PROCESS SHALL BE RESET BY A LICENSED LAND SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.

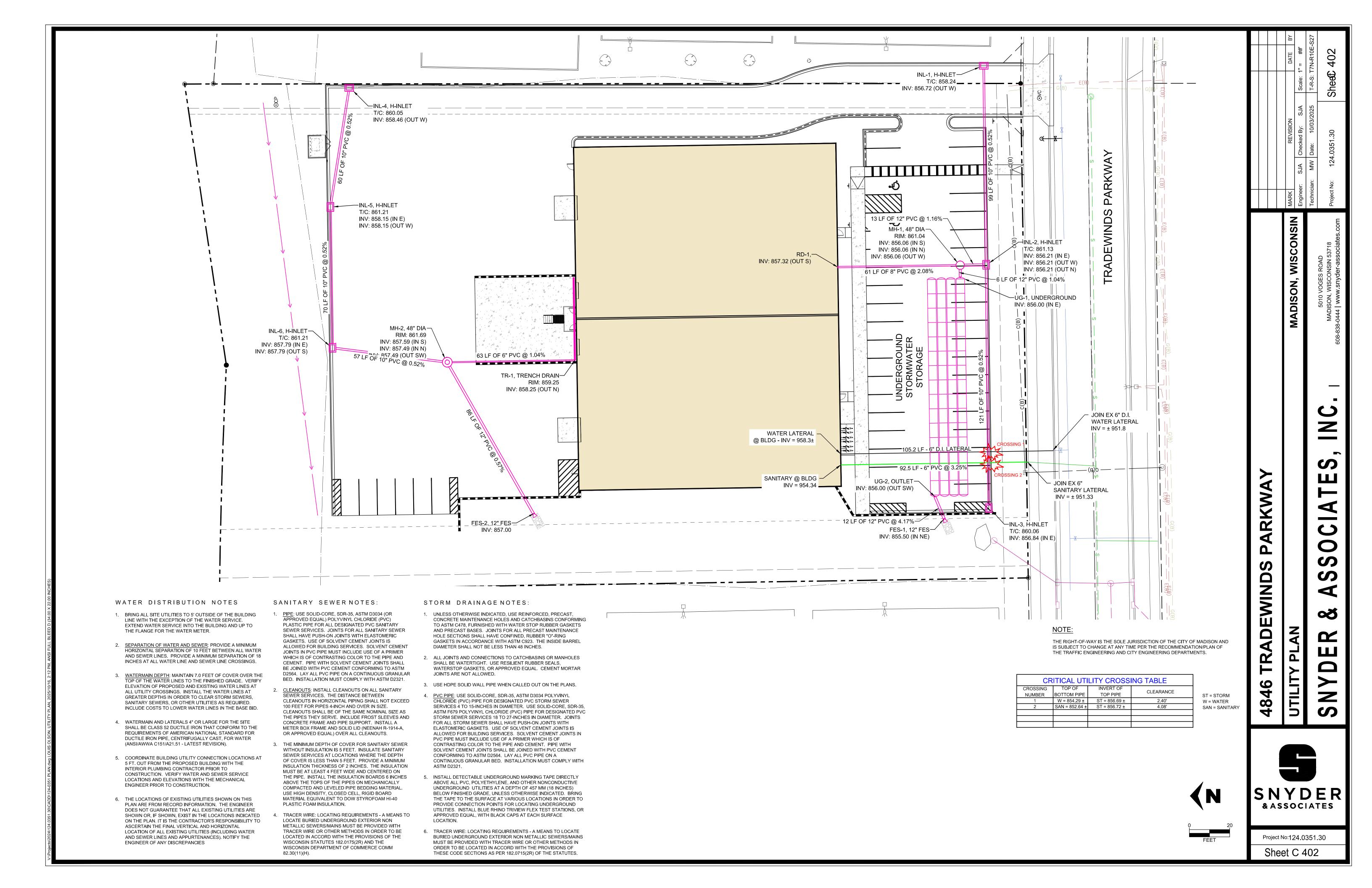


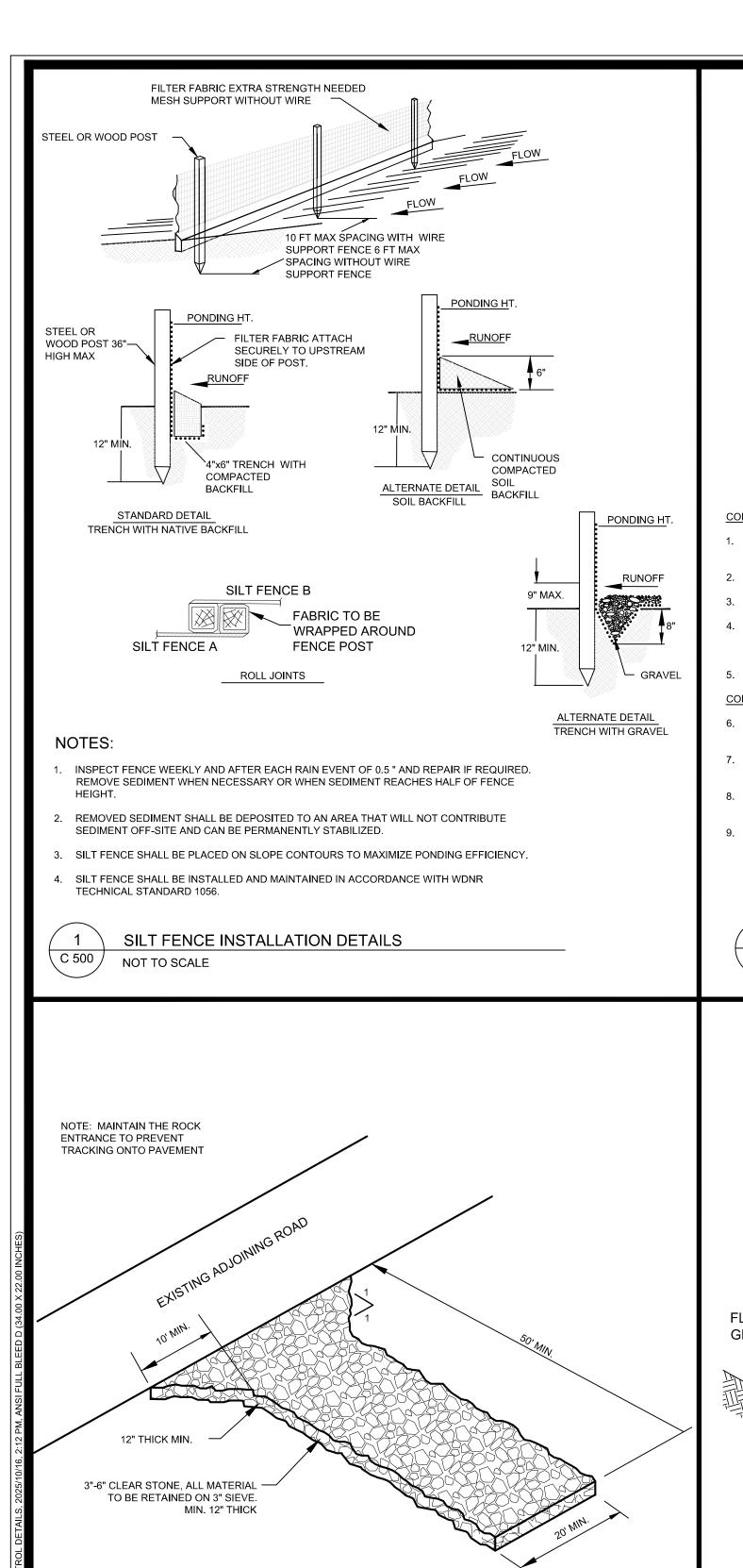
GRADING

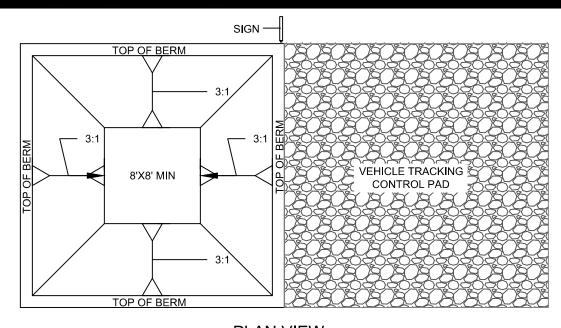
Project No:124 0351 30

Sheet C 400







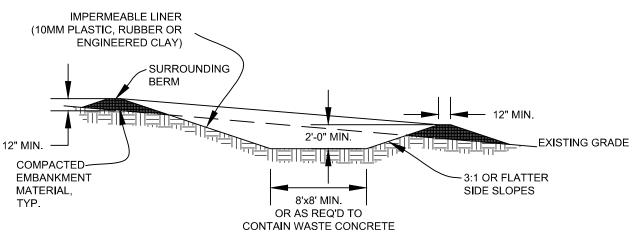


PLAN VIEW

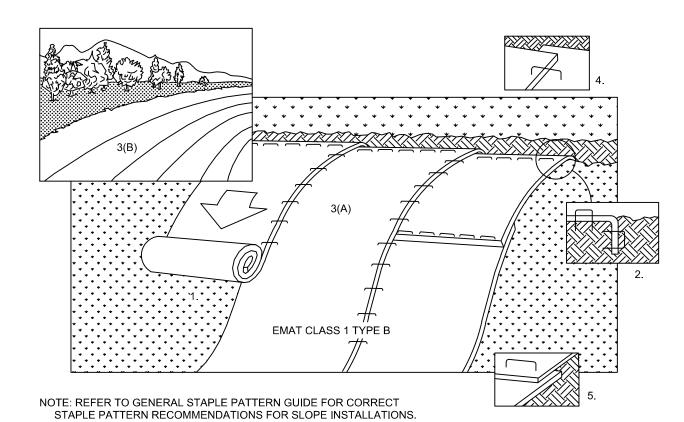
### **CONCRETE WASHOUT AREA INSTALLATION NOTES**

- SEE EROSION CONTROL PLAN FOR LOCATIONS OF CONCRETE WASHOUT AREA(S). TO BE PLACED A MIN. OF 50' FROM DRAINAGEWAYS, BODIES OF WATER, AND INLETS.)
- 2. THE CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
- 3. VEHICLE TRACKING CONTROL PAD IS REQ'D AT THE ACCESS POINT(S).
- SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA(S), AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREAS TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
- 5. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.
- CONCRETE WASHOUT AREA MAINTENANCE NOTES
- 6. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE
- 7. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
- WHEN CONCRETE WASHOUT AREA(S) IS REMOVED, THE DISTURBED AREA SHALL BE STABILIZED PER SITE EROSION CONTROL MEASURES.
- 9. INSPECT WEEKLY AND DURING AND AFTER ALL STORM EVENTS. CLEAN-OUT OR COVER WASHOUT AREA PRIOR TO PREDICTED STORM EVENTS TO PREVENT OVER-FLOW.





TYPICAL SECTION



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.

3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE.

5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY

6. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SLOPE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.



**EROSION CONTROL MAT - SLOPE** 

ULTIMATE BYPASS AREA—

GALVANIZED STEEL FRAMING

WITH STAINLESS CLAMPING BAND

WITH LIFT HANDLES

REPLACEABLE FILTER BAG

NOT TO SCALE

FLEXSTORM CATCH-IT INLET FILTERS FOR ROUND OPENINGS

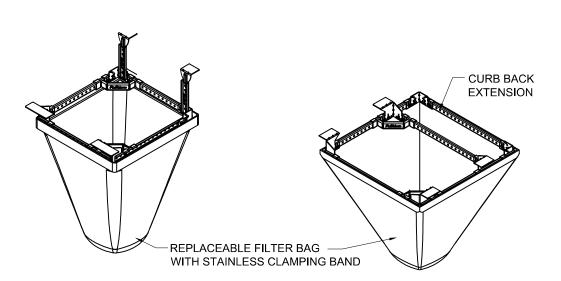
# \*FLOW RATINGS SHOWN ARE 50% MAXIMIUM

- 1. ALL FRAMING IS CONSTRUCTED OF CORROSION RESISTANT STEEL FRAMING FOR PROLONGED PRODUCT LIFE.
- 2. TOTAL BYPASS CAPACITY WILL VARY WITH EACH SIZED DRAINAGE STRUCTURE. FLEXSTORM DESIGNS FRAMING BYPASS TO MEET OR EXCEED THE DESIGN FLOW OF THE PARTICULAR DRAINAGE STRUCTURE. CONCRETE STRUCUTRES MAY REQUIRE ADDITIONAL
- 3. UPON ORDERING THE ADS P/N CONFIRMATION OF THE DOT CALLOUT, FLEXSTORM ITEM CODE, CASTING MAKE AND MODEL, OR DETAILED DIMENSIONAL FORMS MUST BE PROVIDED.
- 4. FOR WRITTEN SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.INLETFILTERS.COM

# **INSTALLATION:**

- 1 REMOVE GRATE
- 2 DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
- 3 REPLACE GRATE

				Bag Cap	Flow Rat		
Neenah Casting	Inlet Type	Grate Size	Opening Size	(ft <sup>3</sup> )	FX	Bypass	ADS P/N
1040/1642/1733	Round	26	24	1.9	1.5	5.4	62MRDFX
3067 w/FLAP	Curb Box	35.25 x 17.75	33.0 x 15.0	3.8	1.9	5.6	62LCBEXT
3067 EXTENDED BACK	Curb Box	35.25 x 17.75	33.0 x 15.0	4.4	2.3	5.8	62LCBEXTI
3246A	Curb Box	35.75 x 23.875	33.5 x 21.0	4.2	2.2	3.3	62LCBFX
3030	Square/Rect (SQ)	23 x 16	20.5 x 13.5	1.6	1.4	2.2	62MCBFX
3067-C	Square/Rect (SQ)	35.25 x 17.75	33 x 15	3.2	2.0	5.2	62LSQFX



FLEXSTORM CATCH-IT INLET FITLERS FOR

SQUARE/RECTANGULAR OPENINGS

— GALVANIZED STEEL

WITH LIFT HANDLES

FLEXSTORM CATCH-IT INLET FITLERS FOR FLEXSTORM CATCH-IT INLET FITLERS FOR ROLLED CURB CURB BOX OPENINGS (MAGNETIC CURB



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Project No:124.0351.30

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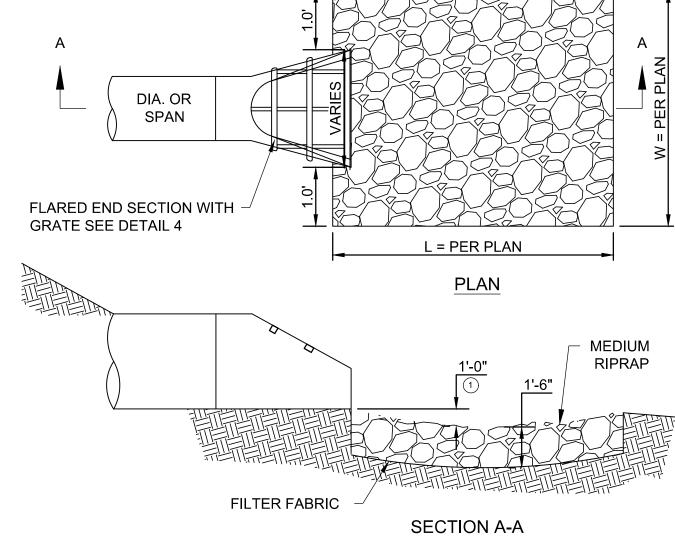
INLET PROTECTION DETAIL NOT TO SCALE

# - EXISTING PAVEMENT 6" HIGH BERM -GEOTEXTILE MATERIAL -(WIS DOT TYPE-R)

STONE CONSTRUCTION ENTRANCE DETAIL

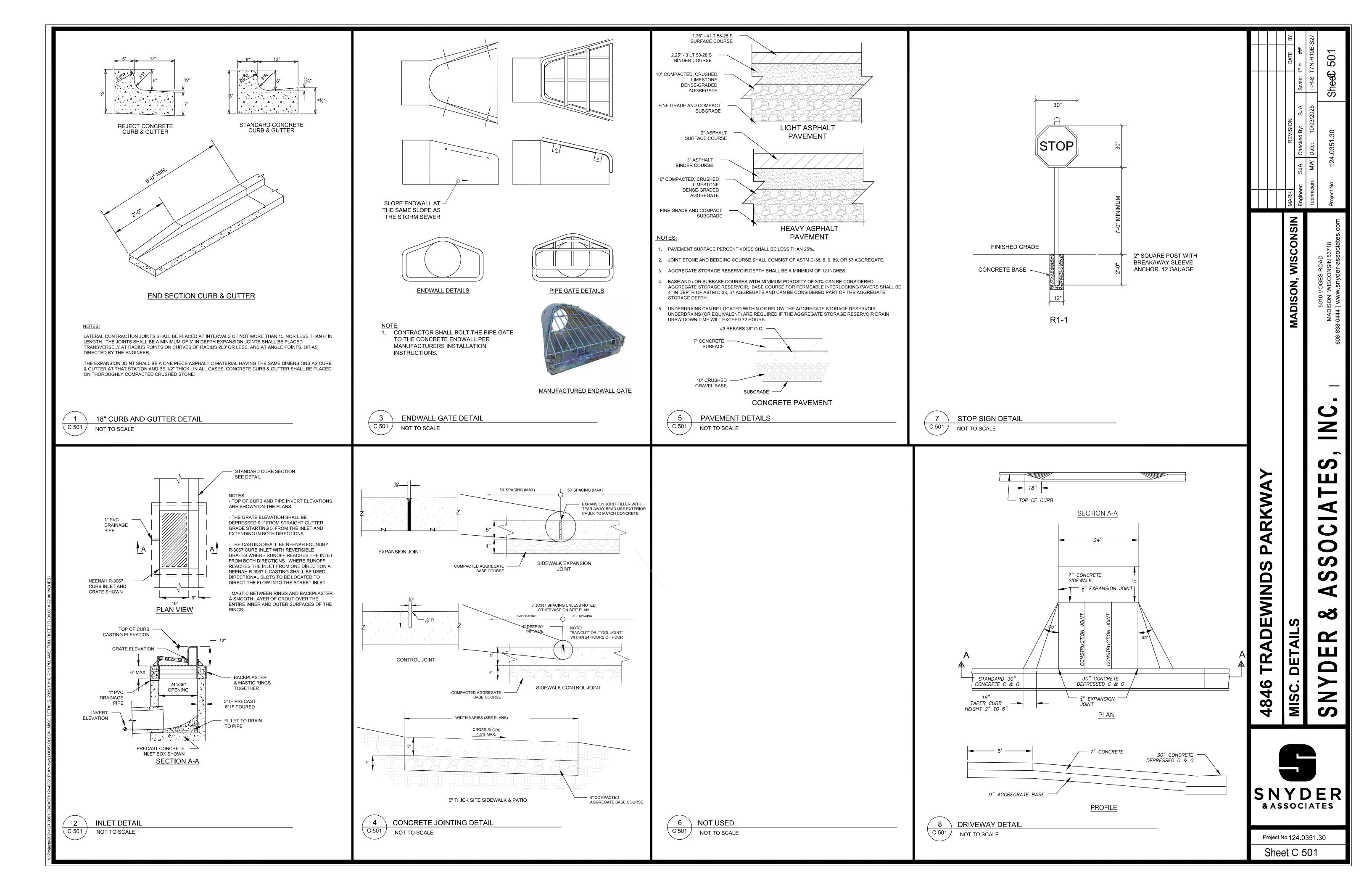
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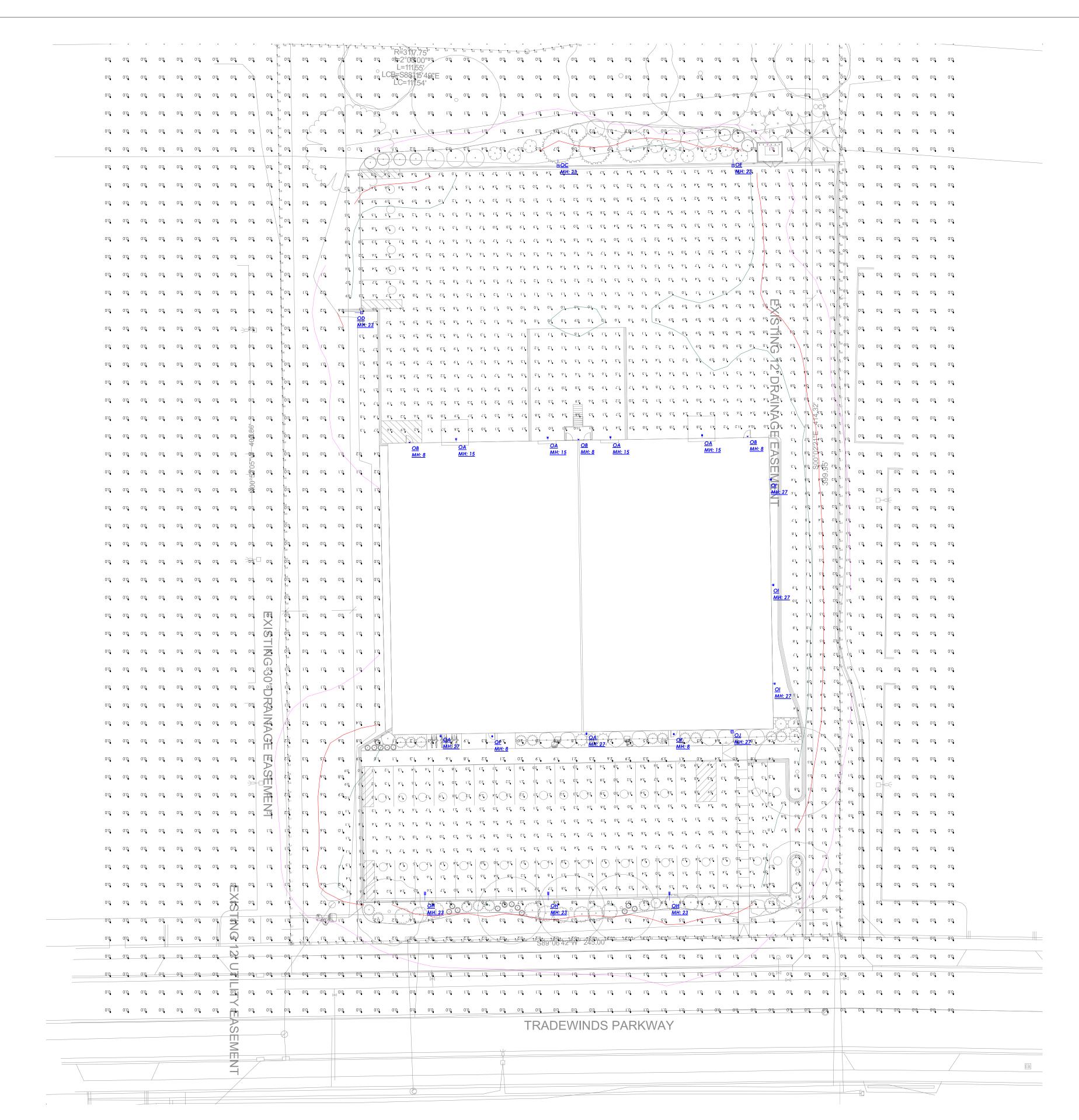
NOT TO SCALE



- GEOTEXTILE FILTER FABRIC SHALL BE TYPE "HR" UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 401.4.1.
  - 1 FOR PIPES GREATER THAN OR EQUAL TO 30" USE 1.5'.

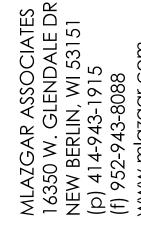






Calculation Summary							
Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
LOADING DOCK - DRIVE	Illuminance	Fc	1.48	11.2	0.0	N.A.	N.A.
PARKING	Illuminance	Fc	2.40	5.7	0.8	3.00	7.13
PROPERTY LINE	Illuminance	Fc	0.07	0.4	0.0	N.A.	N.A.
SITE	Illuminance	Fc	0.13	8.3	0.0	N.A.	N.A.

Luminaire Sch	edule							
Symbol	Qty	Label	Manufacturer	Description	Arrangement	Lum. Lumens	Lum. Watts	LLF
	6	OA	COOPER LIGHTING SOLUTIONS - McGRAW-EDISON (FORMERLY EATON)	GALN-SA1A-740-U-T4FT-WM-WH	Single	4617	33	0.900
<del> </del>	3	ОВ	MULE LIGHTING, INC_	MERU-LED-ACEM-WH-IH	Single	1581	16.4	0.900
<u></u> →	1	OC	COOPER LIGHTING SOLUTIONS - McGRAW-EDISON (FORMERLY EATON)	GALN-SA3B-740-U-T4FT-HSS-SA- WH	Single	12232	121	0.900
	1	OD	COOPER LIGHTING SOLUTIONS - McGRAW-EDISON (FORMERLY EATON)	GALN-SA3B-740-U-T4W-HSS-SA- WH	Single	12288	121	0.900
	1	OE	COOPER LIGHTING SOLUTIONS - McGRAW-EDISON (FORMERLY EATON)	GALN-SA3B-740-U-SLR-HSS-SA- WH	Single	12199	121	0.900
→	2	OF	COOPER LIGHTING SOLUTIONS - HALO COMMERCIAL (FORMERLY EATON)	HC610D010-HM60525840-61WDW	Single	1195	9.9	0.900
<del></del>	3	ОН	COOPER LIGHTING SOLUTIONS - McGRAW-EDISON (FORMERLY EATON)	GALN-SA2B-740-U-T4FT-HSS-SA- WH	Single	8240	82	0.900
	3	OI	COOPER LIGHTING SOLUTIONS - McGRAW-EDISON (FORMERLY EATON)	GALN-SA1A-740-U-T1-WM-WH	Single	4619	33	0.900
+	1	OJ	COOPER LIGHTING SOLUTIONS - McGRAW-EDISON (FORMERLY EATON)	GALN-SA3B-740-U-SLR-HSS-WM- WH	Single	12199	121	0.900





Comments					
Date					
#					
	Re	visi	on	S	

SIT SNYDER & MADISON,

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<sup>1.</sup> Standard Reflectance of 80/50/20 unless noted otherwise 2. Not a Construction Document, for Design purposes only 3. Standard indoor calc points @ 30" A.F.F. unless noted otherwise

<sup>4.</sup> Standard outdoor calc points @ Grade unless noted otherwise

<sup>5.</sup> Egress calc points @ 0" A.F.F.

<sup>6.</sup> Mazgar Associates assumes no responsibility for installed light levels due to field conditions, etc.

1.	UTILITY WARNING: THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD
	SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO
	GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE
	AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEY FURTHER DOES NOT
	WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.
2	NOTIFY LITH ITY OWNERS PRIOR TO REGINNING ANY CONSTRUCTION

SENERAL LANDSCAPE NOTES

- NOTIFY UTILITY OWNERS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXISTENCE, EXACT LOCATION AND DEPTH OF ALL UTILITIES. AVOID DAMAGE TO UTILITIES AND SERVICES DURING CONSTRUCTION. ANY DAMAGE DUE TO THE CONTRACTOR'S CARELESSNESS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE COORDINATE AND COOPERATE WITH UTILITY COMPANIES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL FOLLOW THE LANDSCAPE PLANS AS CLOSELY AS POSSIBLE. ANY SUBSTITUTION OR ALTERATION SHALL NOT BE ALLOWED WITHOUT APPROVAL OF THE OWNER'S REPRESENTATIVE. OVERALL PLANT QUANTITY AND QUALITY SHALL BE CONSISTENT WITH THE PLANS.
- ALL PLANT MATERIAL SHALL AT LEAST MEET MINIMUM REQUIREMENTS SHOWN IN 27. EXISTING TURF AREAS THAT ARE DISTURBED DURING CONSTRUCTION, THE "AMERICAN STANDARDS FOR NURSERY STOCK" (ANSI Z60.1-LATEST EDITION).
- MULCH SHALL NOT BE PLACED AROUND THE COLLAR OF SHRUB OR TREE. PROVIDE A MINIMUM OF 2" BETWEEN MULCH AND COLLAR OF SHRUB OR TREE.
- ALL PLANT MATERIAL SHALL BE GROWN IN ZONE CAPABLE OF WITHSTANDING LOCAL CLIMATE AND GROWING CONDITIONS.
- TREE OR SHRUB SHALL STAND PLUMB. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACK FILLING.
- LIVE PLANTS CAN BE PLANTED IN THE FIELD DURING THE GROWING SEASON FROM MAY 1 THROUGH OCTOBER 1. ANY SUGGESTED PLANTING TIMES NOT IN THIS WINDOW SHALL BE APPROVED BY LANDSCAPE ARCHITECT. IF PLANTING OCCURS OUTSIDE OF THIS WINDOW, ADDITIONAL MEASURES MAY NEED TO BE TAKEN (I.E. MULCH) TO ENSURE PLANT SURVIVAL. IN THESE INSTANCES, THE CONTRACT PRICE MAY NEED TO BE ADJUSTED ACCORDINGLY.
- PLANTS SHOULD BE WATERED IN AFTER INSTALLATION TO ENSURE THEIR SURVIVAL. THIS TYPICALLY INVOLVES WATERING AT TIME OF INSTALLATION AND 2 TIMES WEEKLY FOR A ONE MONTH PERIOD OR UNTIL GROUND FREEZE UP IF NATURAL RAINFALLS ARE INSUFFICIENT. A SINGLE WATERING EVENT INVOLVES WATERING THE SOIL IN THE PLANTED AREAS TO THE POINT OF SATURATION BUT STOPPING SHORT OF SOIL DISPLACEMENT. SHOULD VERY DRY CONDITIONS DEVELOP WITHIN ONE YEAR OF PLANTING, ADDITIONAL WATERINGS MAY BE NECESSARY, CONSULTANT OR LANDSCAPE ARCHITECT WILL DETERMINE THIS AND CONTRACT PRICES MAY BE ADJUSTED TO ACCOMMODATE THIS ACTION.
- ALL PLANT MATERIAL SHALL BE SPECIMEN QUALITY, HEALTHY, FREE OF DISEASE AND INSECTS AND SHALL HAVE HEALTHY, WELL-DEVELOPED ROOT SYSTEMS. PLANTS SHALL ALSO BE FREE FROM PHYSICAL DAMAGE OR OTHER CONDITIONS THAT WOULD PREVENT VIGOROUS GROWTH.
- ALL PROPOSED PLANTS SHALL BE LOCATED AS SHOWN ON PLANS. ALL TREES TO 4 BE PLANTED A MINIMUM DISTANCE OF 5 FEET FROM PAVEMENTS AND 6 FEET FROM ALL HYDRANTS.
- CONTRACTOR IS RESPONSIBLE FOR PLANTS AWAITING INSTALLATION AND SHALL PROTECT THEM FROM INJURY AND THEFT.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES. GRAPHIC QUANTITIES TAKES PRECEDENCE OVER WRITTEN QUANTITIES.
- THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND TAG ALL PLANT MATERIAL PRIOR TO SHIPPING TO THE SITE. IN ALL CASES, THE OWNER'S REPRESENTATIVE MAY REJECT PLANT MATERIAL AT THE SITE IF MATERIAL IS DAMAGED, DISEASED, OR DECLINING IN HEALTH AT THE TIME OF ONSITE INSPECTIONS OR IF THE PLANT MATERIAL DOES NOT MEET THE MINIMUM SPECIFIED STANDARD IDENTIFIED ON THE PLANS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE FOR INSPECTION AND APPROVAL OF ALL MATERIALS AND PRODUCTS PRIOR TO INSTALLATION.
- THE OWNER'S REPRESENTATIVE MAY ELECT TO UPSIZE PLANT MATERIAL AT THEIR DISCRETION BASED ON SELECTION, AVAILABILITY, OR TO ENHANCE SPECIFIC AREAS OF THE PROJECT. THE CONTRACTOR SHALL VERIFY PLANT MATERIAL SIZES WITH OWNER'S REPRESENTATIVE PRIOR TO PURCHASING. SHIPPING OR STOCKING OF PLANT MATERIALS. SUBMIT CHANGE ORDER REQUEST TO OWNER'S REPRESENTATIVE FOR APPROVAL IF ADDITIONAL COST IS REQUESTED BY THE CONTRACTOR PRIOR TO INSTALLATION. RE-STOCKING CHARGES WILL NOT BE APPROVED IF THE CONTRACTOR FAILS TO SUBMIT A REQUEST FOR MATERIAL CHANGES.
- THE CONTRACTOR SHALL WARRANTY ALL CONTRACTED WORK AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION HAS BEEN ISSUED BY THE OWNER'S REPRESENTATIVE FOR THE ENTIRE PROJECT UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.
- LANDSCAPE MATERIAL LOCATIONS SHALL HAVE PRECEDENCE OVER IRRIGATION MAINLINE AND LATERAL LOCATIONS. IF IRRIGATION IS INCLUDED, COORDINATE INSTALLATION OF IRRIGATION EQUIPMENT SO THAT IT DOES NOT INTERFERE WITH THE PLANTING OF TREES OR OTHER LANDSCAPE MATERIAL.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE EXISTS IN ALL LANDSCAPE AREAS. SURFACE DRAINAGE ON LANDSCAPE AREAS SHALL NOT FLOW TOWARD STRUCTURES AND FOUNDATIONS. MAINTAIN SLOPE AWAY FROM FOUNDATIONS PER THE GEOTECHNICAL REPORT RECOMMENDATIONS. ALL LANDSCAPE AREAS BETWEEN WALKS AND CURBS SHALL DRAIN FREELY TO THE CURB UNLESS OTHERWISE IDENTIFIED ON THE GRADING PLAN. IN NO CASE SHALL THE GRADE, TURF THATCH, OR OTHER LANDSCAPE MATERIALS DAM WATER AGAINST WALKS. MINIMUM SLOPES ON LANDSCAPE AREAS SHALL BE 2%; MAXIMUM SLOPE SHALL BE 25% UNLESS SPECIFICALLY IDENTIFIED ON THE PLANS OR APPROVED BY THE OWNER'S REPRESENTATIVE.
- PRIOR TO INSTALLATION OF PLANT MATERIALS, AREAS THAT HAVE BEEN COMPACTED OR DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE THOROUGHLY LOOSENED TO A DEPTH OF 8" - 12".
- ALL LANDSCAPED AREAS ARE TO RECEIVE ORGANIC SOIL PREPARATION PER RATE IDENTIFIED BY A SOIL TEST.
- TREES SHALL NOT BE LOCATED IN DRAINAGE SWALES, DRAINAGE AREAS, OR UTILITY EASEMENTS. CONTACT OWNER'S REPRESENTATIVE FOR RELOCATION OF PLANTS IN QUESTIONABLE AREAS PRIOR TO INSTALLATION.
- THE CENTER OF EVERGREEN TREES SHALL NOT BE PLACED CLOSER THAN 8' AND THE CENTER OF ORNAMENTAL TREES CLOSER THAN 6' FROM A SIDEWALK, STREET OR DRIVE LANE. EVERGREEN TREES SHALL NOT BE LOCATED ANY CLOSER THAN 15' FROM IRRIGATION ROTOR HEADS. NOTIFY OWNER'S REPRESENTATIVE IF TREE LOCATIONS CONFLICT WITH THESE STANDARDS FOR FURTHER DIRECTION.

### 23. ALL EVERGREEN TREES SHALL BE FULLY BRANCHED TO THE GROUND AND SHALL NOT EXHIBIT SIGNS OF ACCELERATED GROWTH AS DETERMINED BY THE

GENERAL LANDSCAPE NOTES CONT.

- OWNER'S REPRESENTATIVE. 24. ALL TREES ARE TO BE STAKED AND GUYED PER DETAILS FOR A PERIOD OF 1
- YEAR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING STAKES AT THE END OF 1 YEAR FROM ACCEPTANCE OF LANDSCAPE INSTALLATION BY THE 17. OWNER'S REPRESENTATIVE. OBTAIN APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO REMOVAL.
- 25. ALL TREES INSTALLED ABOVE RETAINING WALLS UTILIZING GEO-GRID MUST BE HAND DUG TO PROTECT GEO-GRID. IF GEO-GRID MUST BE CUT TO INSTALL TREES, APPROVAL MUST BE GIVEN BY OWNER'S REPRESENTATIVE PRIOR TO
- 26. ALL TREES IN SEED OR TURF AREAS SHALL RECEIVE MULCH RINGS, OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE FOR ANY TREES THAT WILL NOT BE MULCHED FOR EXCESSIVE MOISTURE REASONS.
- ESTABLISHMENT AND THE MAINTENANCE PERIOD SHALL BE RESTORED WITH NEW SOD TO MATCH EXISTING TURF SPECIES. DISTURBED NATIVE AREAS WHICH ARE TO REMAIN SHALL BE OVER SEEDED AND RESTORED WITH SPECIFIED SEED MIX.
- WHEN COMPLETE, ALL GRADES SHALL BE WITHIN +/- 1/8" OF FINISHED GRADES 20. AS SHOWN ON THE PLANS.
- 29. PRIOR TO THE PLACEMENT OF MULCH AND WEED FABRIC, A GRANULAR, PRE-EMERGENT, WEED CONTROL AGENT SHALL BE ADDED TO ALL PLANTING BEDS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTION, EXCEPT AROUND ORNAMENTAL GRASSES.
- THE CONTRACTOR IS EXPECTED TO KNOW AND UNDERSTAND THE CITY AND COUNTY SPECIFICATIONS FOR LANDSCAPE AND IRRIGATION. IN CASES OF DISCREPANCIES THE HIGHER OF THE TWO STANDARDS SHALL HAVE PRECEDENCE.

### **GENERAL NOTES**

- 1. DRAWINGS ARE INTENDED TO BE PRINTED ON 34" X 22" PAPER. PRINTING THESE 22. DRAWINGS AT A DIFFERENT SIZE WILL IMPACT THE SCALE. VERIFY THE GRAPHIC SCALE BEFORE REFERENCING ANY MEASUREMENTS ON THESE SHEETS. THE RECIPIENT OF THESE DRAWINGS SHALL BE RESPONSIBLE FOR ANY ERRORS RESULTING FROM INCORRECT PRINTING, COPYING, OR ANY OTHER CHANGES THAT ALTER THE SCALE OF THE DRAWINGS.
- 2. VERIFY ALL PLAN DIMENSIONS PRIOR TO START OF CONSTRUCTION. NOTIFY THE OWNER'S REPRESENTATIVE TO ADDRESS ANY QUESTIONS OR CLARIFY ANY DISCREPANCIES.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- GEOTECHNICAL SOILS REPORT RECOMMENDATIONS SHALL BE FOLLOWED DURING CONSTRUCTION. THE CONTRACTOR SHALL USE THESE CONTRACT DOCUMENTS AS A BASIS FOR THE BID.
- 5. CONTRACTOR SHALL CONFIRM THAT SITE CONDITIONS ARE SIMILAR TO THE PLANS, WITHIN TOLERANCES STATED IN THE CONTRACT DOCUMENTS, AND SATISFACTORY TO THE CONTRACTOR PRIOR TO START OF WORK. SHOULD SITE CONDITIONS BE DIFFERENT THAN REPRESENTED ON THE PLANS OR UNSATISFACTORY TO THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND FURTHER DIRECTION.
- 6. THE CONTRACTOR IS RESPONSIBLE TO PAY FOR, AND OBTAIN, ANY REQUIRED APPLICATIONS, PERMITTING, LICENSES, INSPECTIONS AND METERS ASSOCIATED WITH WORK
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO ANY VIOLATIONS OR NON-CONFORMANCE WITH THE PLANS, CONTRACT DOCUMENTS, JURISDICTIONAL CODES, AND REGULATORY AGENCIES.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL UTILITY LOCATES PRIOR TO ANY EXCAVATION. REFER TO ENGINEERING UTILITY PLANS FOR ALL PROPOSED UTILITY LOCATIONS AND DETAILS. NOTIFY OWNER'S REPRESENTATIVE IF EXISTING OR PROPOSED UTILITIES INTERFERE WITH THE ABILITY TO PERFORM WORK.
- 9. UNLESS IDENTIFIED ON THE PLANS FOR DEMOLITION OR REMOVAL, THE CONTRACTOR IS RESPONSIBLE FOR THE COST TO REPAIR UTILITIES. ADJACENT OR EXISTING LANDSCAPE, ADJACENT OR EXISTING PAVING, OR ANY PUBLIC AND PRIVATE PROPERTY THAT IS DAMAGED BY THE CONTRACTOR OR THEIR SUBCONTRACTOR'S OPERATIONS DURING INSTALLATION, ESTABLISHMENT OR DURING THE SPECIFIED MAINTENANCE PERIOD. ALL DAMAGES SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITIONS AS DETERMINED BY THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR LOGGING ANY DAMAGES PRIOR TO START OF CONSTRUCTION AND DURING THE CONTRACT PERIOD.
- 10. ALL WORK SHALL BE CONFINED TO THE AREA WITHIN THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS. ANY AREAS OR IMPROVEMENTS DISTURBED OUTSIDE THESE LIMITS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IN THE EVENT THE CONTRACTOR REQUIRES A MODIFICATION TO THE CONSTRUCTION LIMITS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER'S REPRESENTATIVE PRIOR TO ANY DISTURBANCE OUTSIDE OF THE LIMITS OF WORK.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY OF THEIR TRENCHES OR EXCAVATIONS THAT SETTLE.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE TO PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN TO THE APPROPRIATE JURISDICTIONAL AGENCIES AND THE OWNER'S REPRESENTATIVE IF THEIR WORK AND OPERATIONS AFFECT OR IMPACT THE PUBLIC RIGHTS-OF-WAY. OBTAIN APPROVAL PRIOR TO ANY WORK WHICH AFFECTS OR IMPACTS THE PUBLIC RIGHTS-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THIS REQUIREMENT DURING THE CONTRACT PERIOD.
- 13. SIGHT TRIANGLES AND SIGHT LINES SHALL REMAIN UNOBSTRUCTED BY EQUIPMENT, CONSTRUCTION MATERIALS, PLANT MATERIAL OR ANY OTHER VISUAL OBSTACLE DURING THE CONTRACT PERIOD AND AT MATURITY OF PLANTS PER LOCAL JURISDICTIONAL REQUIREMENTS.
- 14. NO PLANT MATERIAL OTHER THAN GROUND COVER IS ALLOWED TO BE PLANTED ADJACENT TO FIRE HYDRANTS AS STIPULATED BY JURISDICTIONAL REQUIREMENTS.
- 15. COORDINATE SITE ACCESS, STAGING, STORAGE AND CLEANOUT AREAS WITH OWNER'S REPRESENTATIVE.

### CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SAFETY FENCING AND BARRIERS AROUND ALL IMPROVEMENTS SUCH AS WALLS, PLAY STRUCTURES, EXCAVATIONS, ETC. ASSOCIATED WITH THEIR WORK UNTIL SUCH FACILITIES ARE COMPLETELY INSTALLED PER THE PLANS AND MANUFACTURER'S RECOMMENDATIONS.

GENERAL LANDSCAPE NOTES CONT

- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THEIR MATERIAL STOCK PILES AND WORK FROM VANDALISM, EROSION OR UNINTENDED DISTURBANCE DURING THE CONSTRUCTION PERIOD AND UNTIL FINAL ACCEPTANCE IS ISSUED.
- THE CONTRACTOR SHALL KNOW. UNDERSTAND AND ABIDE BY ANY STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ASSOCIATED WITH THE SITE. IF A STORM WATER POLLUTION PREVENTION PLAN IS NOT PROVIDED BY THE OWNER'S REPRESENTATIVE. REQUEST A COPY BEFORE PERFORMANCE OF ANY
- MAINTAIN ANY STORM WATER MANAGEMENT FACILITIES THAT EXIST ON SITE FOR FULL FUNCTIONALITY. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ANY NEW STORM WATER MANAGEMENT FACILITIES THAT ARE IDENTIFIED IN THI SCOPE OF WORK TO FULL FUNCTIONALITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER FOR FAILURE TO MAINTAIN STORM WATER MANAGEMENT FACILITIES DURING THE CONTRACT PERIOD.
- THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM EXITING THE SITE OR ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION OR CONSTRUCTION OPERATIONS THAT ARE PART OF THE LANDSCAPE INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE REQUIREMENTS DURING THEIR CONTRACTED COURSE OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PREVENT ANY IMPACTS TO ADJACENT WATERWAYS, WETLANDS, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS RESULTING FROM WORK DONE AS PART OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE STANDARDS DURING THEIR CONTRACTED COURSE OF WORK
- THE CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL ENSURE THAT ALL LOADS OF CONSTRUCTION MATERIAL IMPORTED TO OR EXPORTED FROM THE PROJECT SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF MATERIAL DURING TRANSPORT. TRANSPORTATION METHODS ON PUBLIC RIGHT-OF WAYS SHALL CONFORM TO JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE REQUIREMENTS.
- THE CLEANING OF EQUIPMENT IS PROHIBITED AT THE JOB SITE UNLESS AUTHORIZED BY THE OWNER'S REPRESENTATIVE IN A DESIGNATED AREA. THE DISCHARGE OF WATER, WASTE CONCRETE, POLLUTANTS, OR OTHER MATERIALS SHALL ONLY OCCUR IN AREAS DESIGNED FOR SUCH USE AND APPROVED BY THE OWNER'S REPRESENTATIVE.
- THE CLEANING OF CONCRETE EQUIPMENT IS PROHIBITED AT THE JOB SITE EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE IN THE STORM SEWER IS PROHIBITED.
- LOCAL, STATE AND FEDERAL JURISDICTIONAL REQUIREMENTS, RESTRICTIONS OR PROCEDURES SHALL SUPERSEDE THESE PLANS, NOTES WHEN MORE STRINGENT. NOTIFY THE OWNER'S REPRESENTATIVE IF CONFLICTS OCCUR

## CITY OF MADISON LANDSCAPE REGULATIONS

ZONING DISTRICT: IL - INDUSTRIAL LIMITED

### **TOTAL DEVELOPED AREA:** TOTAL SITE AREA: 99,703 SF

TOTAL DISTURBED AREA: 84,962 SF TOTAL SQUARE FOOTAGE OF DEVELOPED AREA: 62,862 SF

## LANDSCAPE POINTS REQUIRED:

1 POINT PER 100 SF OF DEVELOPED AREA = 68,862 / 100 = 689 POINTS.

## LANDSCAPE POINTS PROVIDED: 888 POINTS

FRONTAGE LANDSCAPE: REQUIREMENT: 1 OVERSTORY TREE AND 5 SHRUBS FOR EACH 30 LF OF LOT

# TRADEWINDS DRIVE:

REQUIRED: 195 LF / 30 LF = 7 TREES AND 33 SHRUBS PROVIDED: 7 TREES AND 36 SHRUBS

### HIGHWAY 18: REQUIRED: 255 LF / 30 = 9 TREES AND 43 SHRUBS

PROVIDED: 9 TRESS AND 26 SHRUBS\* \*DRAINAGE LIMITS SPACE AVAILABILITY FOR SHRUBS. ADDITIONAL SHRUBS LOCATED ALONG BUILDING FOUNDATION.

## INTERIOR PARKING LOT LANDSCAPE:

REQUIREMENT: 8% OF PARKING LOT SHALL BE DEVOTED TO INTERIOR PLANTING ISLANDS, PENINSULAS OR LANDSCAPE STRIPS.

### REQUIREMENT: 11,1645 SF X .08% = 894 SF OF LANDSCAPE PROVIDED: 1,535 SF

REQUIREMENT: 1 CANOPY TREE FOR EVERY 160 SF OF REQUIRED LANDSCAPE 894 /160 = 6 TREES

# FOUNDATION PLANTINGS:

PROVIDED: 6 TREES

FOUNDATION PLATING SHALL BE INSTALLED ALONG BUILDING FACADES.

PLANT	SCHF	EDULE						
SYMBOL TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	TYPE	POINTS	POIN
	BN	2	Betula nigra	River Birch Multi-Trunk	2.5" Cal.	B&B	35	70
$\bigcirc$	СО	2	Celtis occidentalis	Common Hackberry	2.5" Cal.	B&B	35	70
•	GA	3	Ginkgo biloba 'Autumn Gold' TM	Autumn Gold Maidenhair Tree	2.5" Cal.	B&B	35	105
	GS	2	Gleditsia triacanthos inermis 'Shademaster'	Shademaster Honey Locust	2.5" Cal.	B&B	35	70
•	GD	2	Gymnocladus dioica 'Espresso'	Kentucky Coffeetree	2.5" Cal.	B&B	35	70
	QB	1	Quercus bicolor	Swamp White Oak	2.5" Cal.	B&B	35	35
	QN	1	Quercus robur x bicolor 'Nadler'	Kindred Spirit® Oak	2.5" Cal.	B&B	35	35
EVERGREE	<u>EN TREE</u>	<u></u>			<u> </u>			
	PA	1	Picea abies	Norway Spruce	6` Ht.	B&B	35	35
J. J	PD	2	Picea glauca 'Densata'	Black Hills White Spruce	6` Ht.	B&B	35	70
And on the	ті	3	Thuja x 'Green Giant'	Green Giant Arborvitae	4` Ht.	B&B	10	30
	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	POINTS	
SHRUBS	cs	9	Cornus alba 'Sibirica'	Redbark Dogwood	3 gal.	Pot	3	27
lacksquare	СН	8	Cotoneaster horizontalis	Rockspray Cotoneaster	3 gal.	Pot	3	24
$\overline{\bullet}$	JF	7	Juniperus chinensis 'Sea Green'	Sea Green Juniper	3 gal.	Pot	4	28
) · · ·	JB	20	Juniperus horizontalis 'Bar Harbor'	Bar Harbor Creeping Juniper	3 gal.	Pot	4	80
£ • }	РВ	14	Physocarpus opulifolius 'Monlo'	Diabolo® Ninebark	3 gal.	Pot	3	42
A A I	PP2	6	Pinus mugo 'Pumilio'	Dwarf Mugo Pine	3 gal.	Pot	4	24
·	RA	2	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	3 gal.	Pot	3	6
	SB2	9	Spiraea prunifolia 'Bridalwreath'	Bridal Wreath Spirea	3 gal.	Pot		27
GRASSES			Spirace It.					
SUUVUC	SH2	17	Sporobolus heterolepis	Prairie Dropseed	1 gal.	Pot	2	40
	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	TYPE		888
GROUND C	'							
	RM	614 sf	Rock Mulch	Rock Mulch - See Notes for Type	Mulch			
+++++++++	TD	9,327 sf	Turf Seed Drought Tolerant Dwarf Fescue Blend	Seed - See Notes for Type	seed			
* * * * *	TB2	4,347 sf	Turf Sod Bluegrass	Sod - See Notes for Type	sod		'	
	wc	5,114 sf	Wood Mulch	Wood Mulch - See Notes for Type	Mulch			



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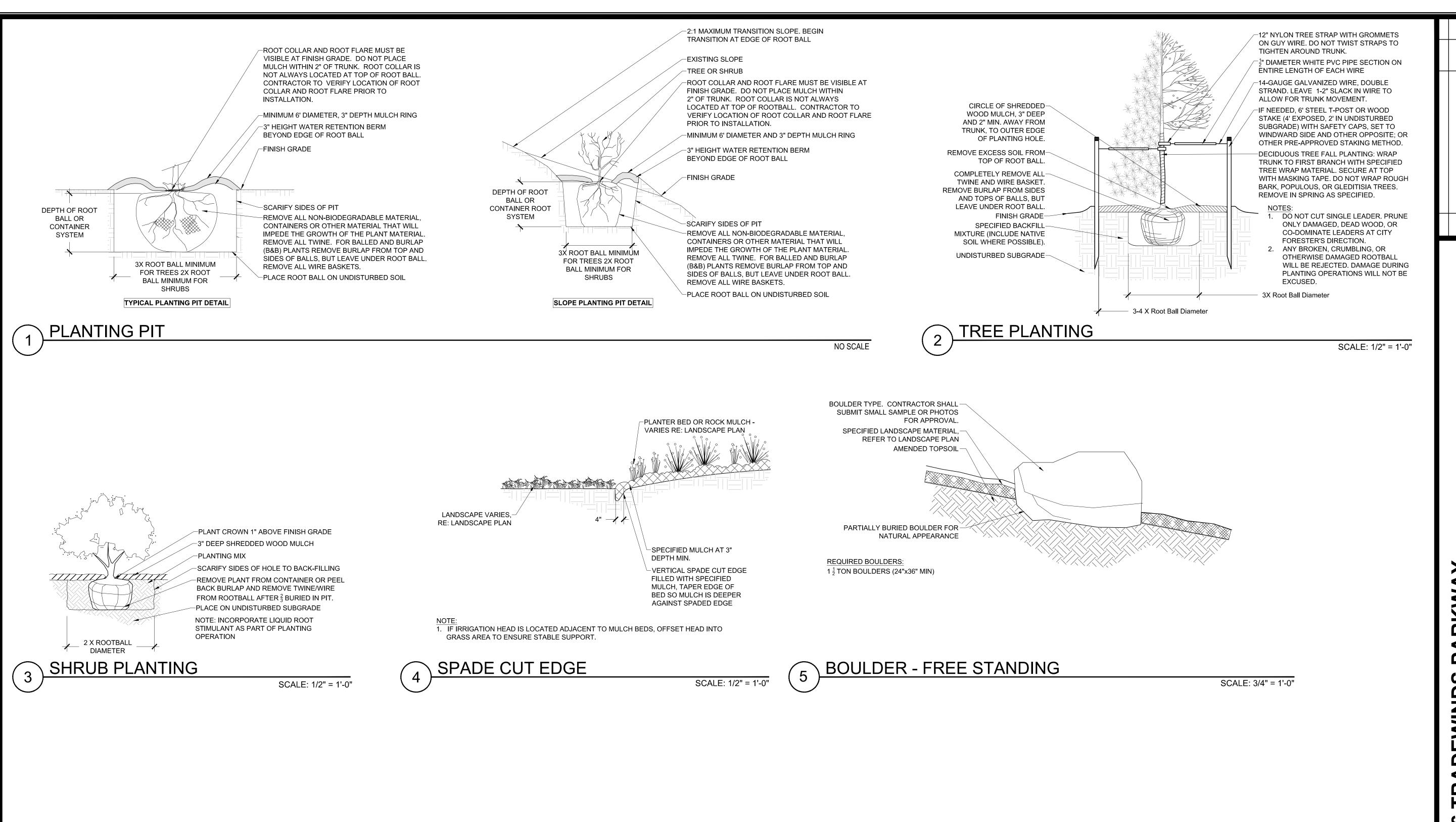
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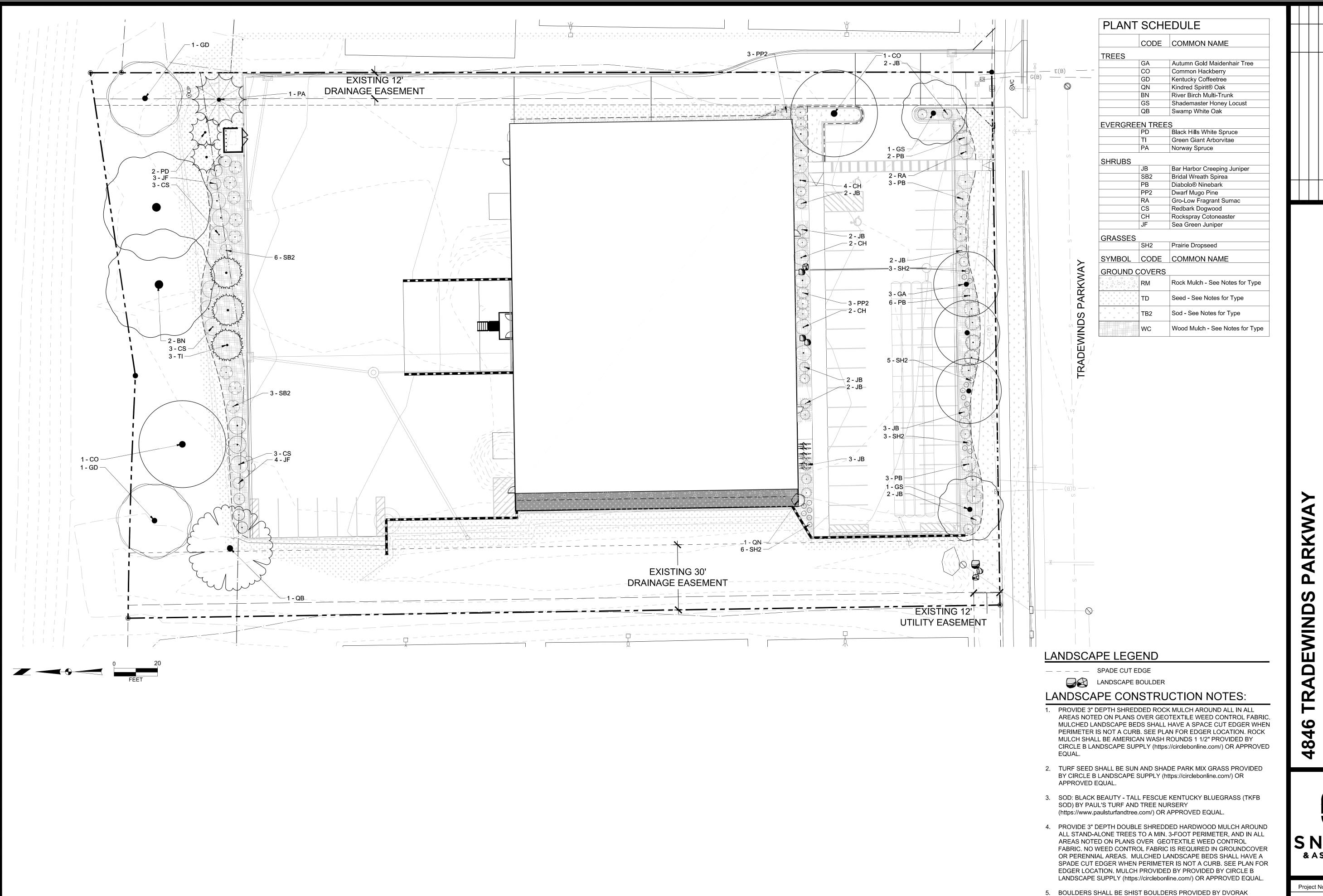
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SNYDER & ASSOCIATES

Project No: 124.0351.30

Sheet L 101



rer: SJA Checked By: SJA Scale: 1" = ##"
cian: MW Date: 10/03/2025 T-R-S: T7N-R10E-S2
ct No: 124.0351.30 Sheet L 200

WISCONSINMARKREVISIONEngineer: SJAChecked By: SJATechnician: MWDate: 10/03/2025CONSIN 53718Project No: 124.0351.30

5010 VOGES ROAD MADISON, WISCONSIN 5 608-838-0444 | www.snyder-ass

MADISON,

NC.

ASSOCIATES, IN

PLANTING PLAN
SNYDER & ASSC

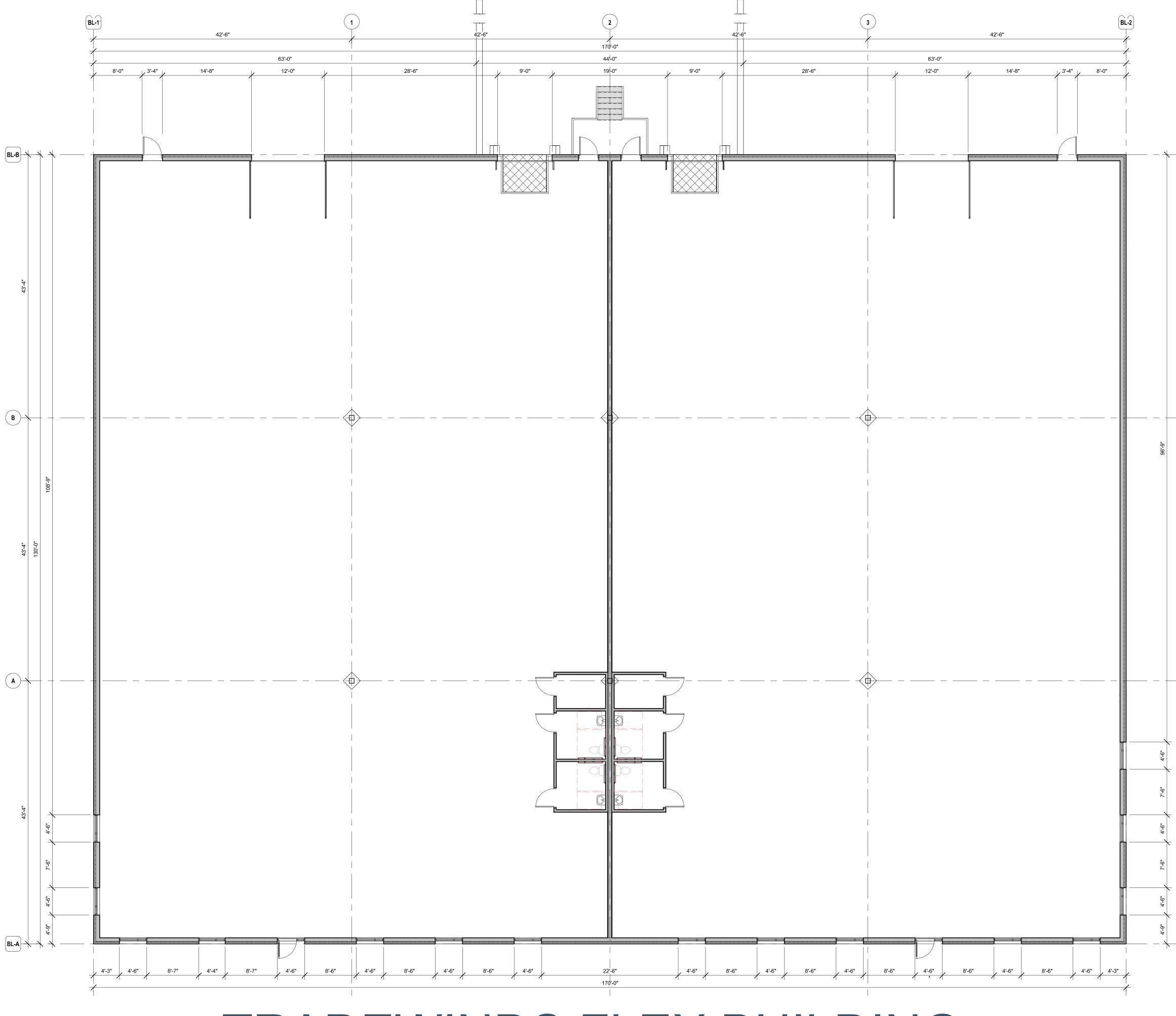
SNYDER & ASSOCIATES

Project No: 124.0351.30

Sheet L 200

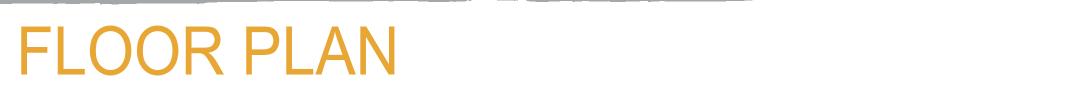
LANDSCAPE (https://www.dvoraklandscape.com/) OR APPROVED EQUAL.

REFER TO DETAIL FOR INSTALLATION.



TRADEWINDS FLEX BUILDING

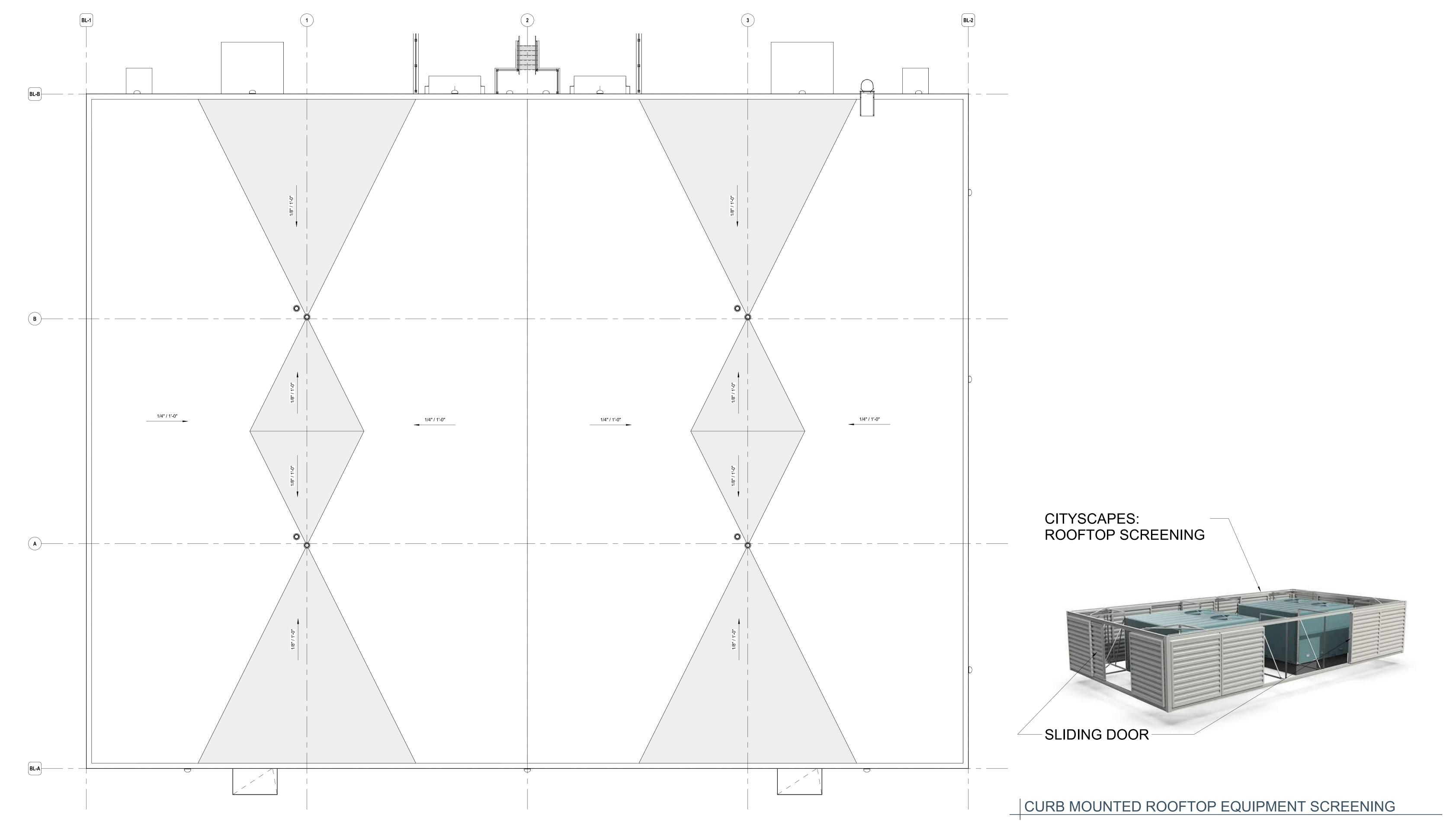






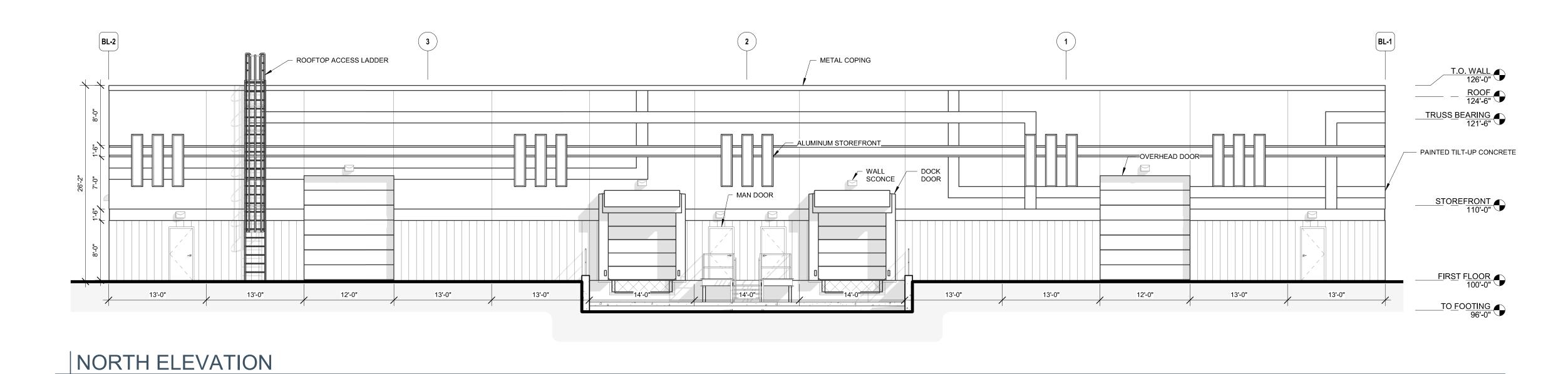
0' 2' 4' 8' 0' 1/4" 1/2" 1" SCALE: 1/8" = 1'-0"

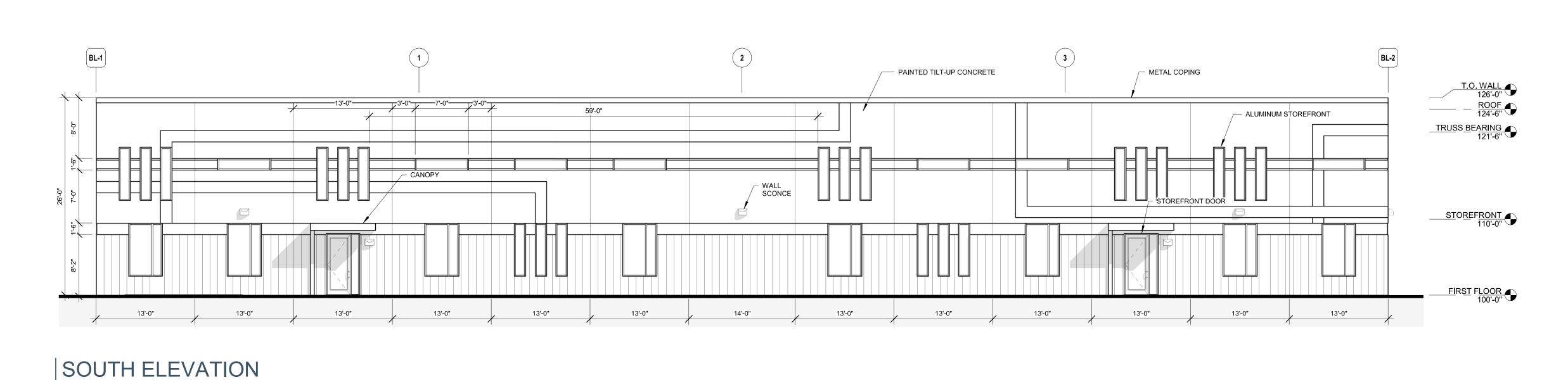
A101

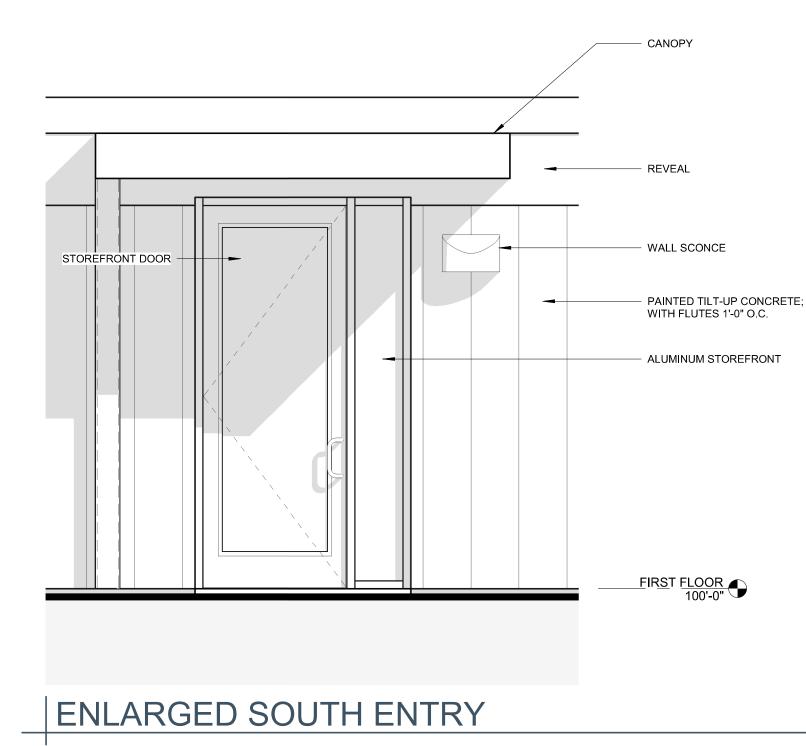




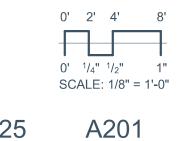


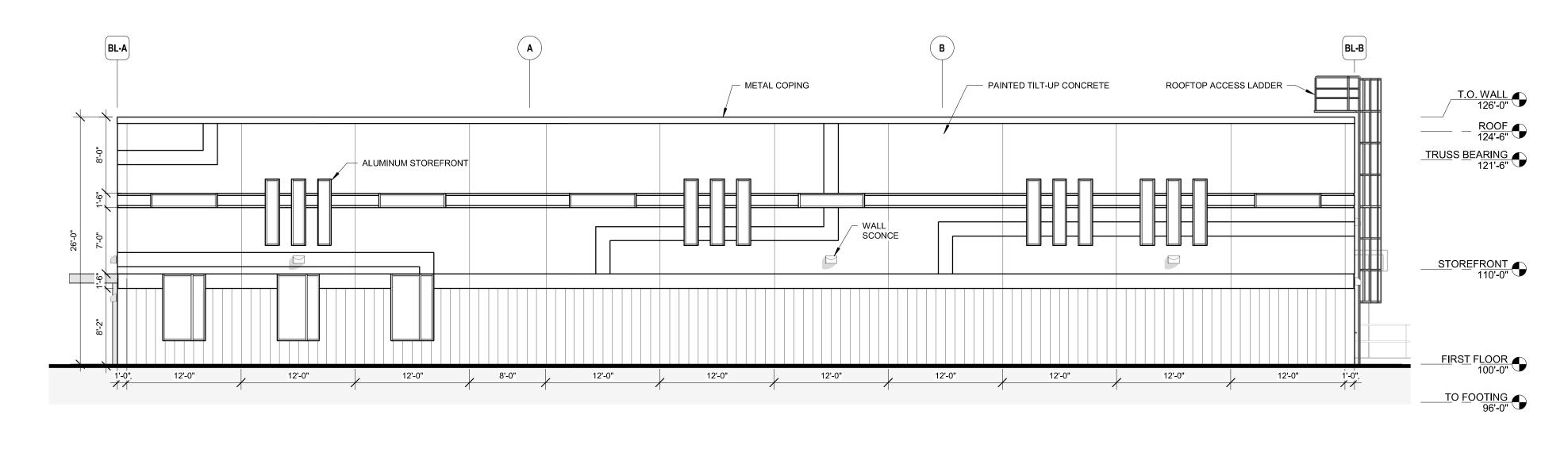




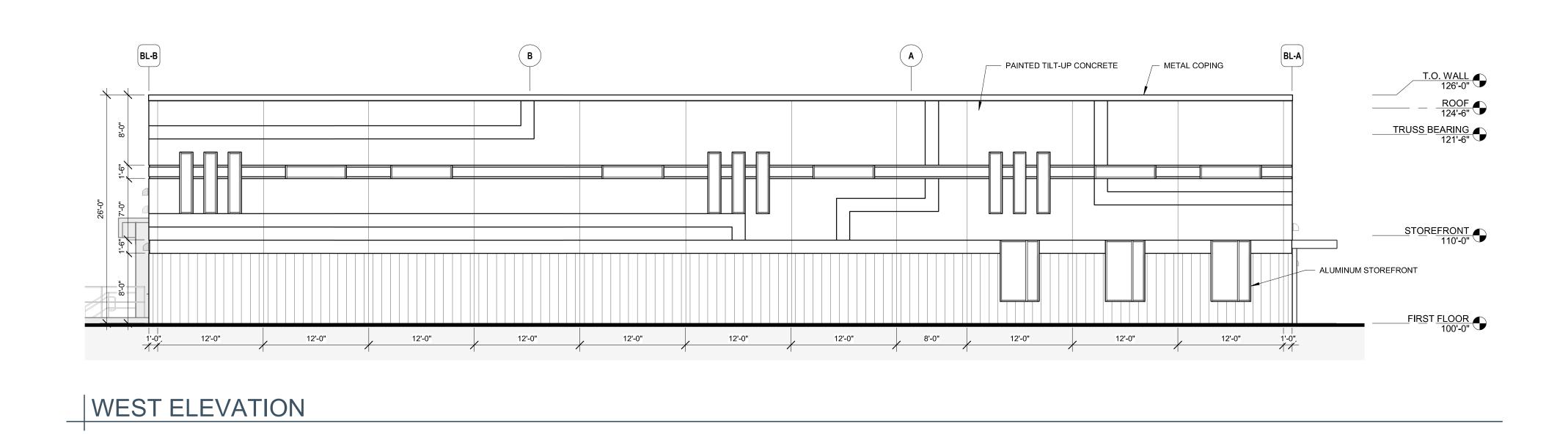






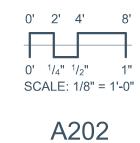


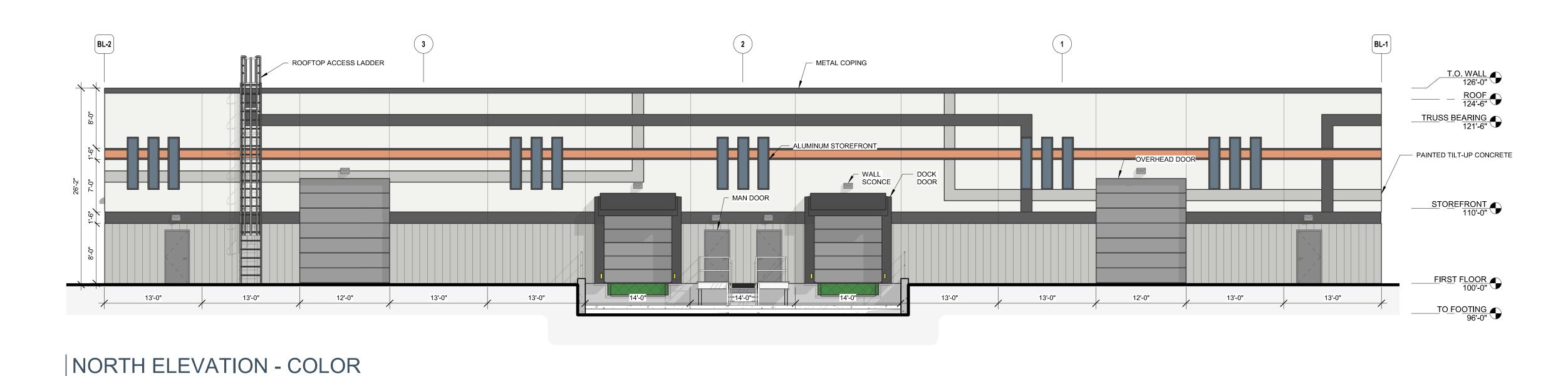


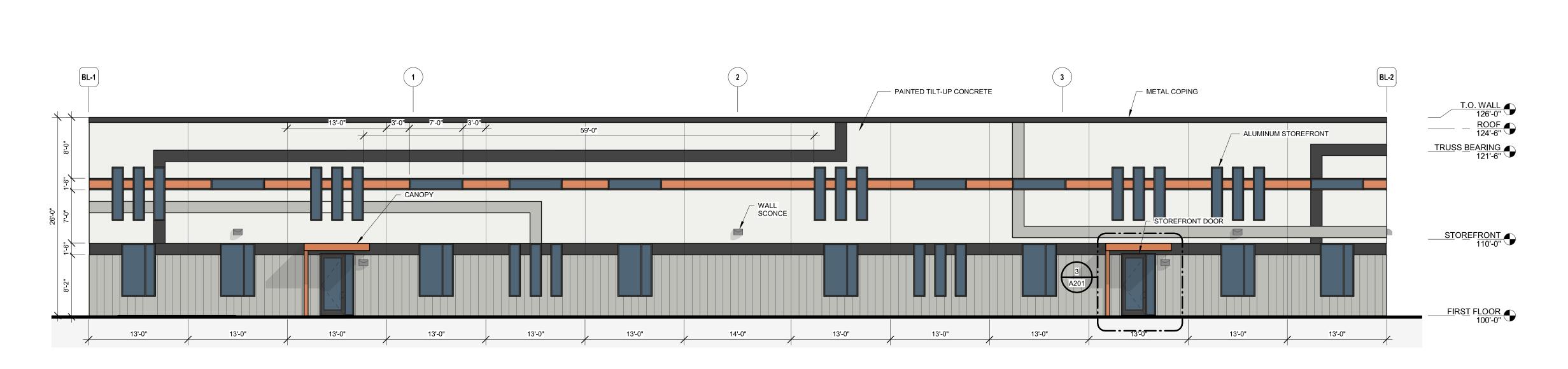














SOUTH ELEVATION - COLOR



BL-A В METAL COPING PAINTED TILT-UP CONCRETE ROOFTOP ACCESS LADDER TRUSS BEARING 121'-6" STOREFRONT 110'-0" FIRST FLOOR 100'-0" TO FOOTING 96'-0" EAST ELEVATION - COLOR

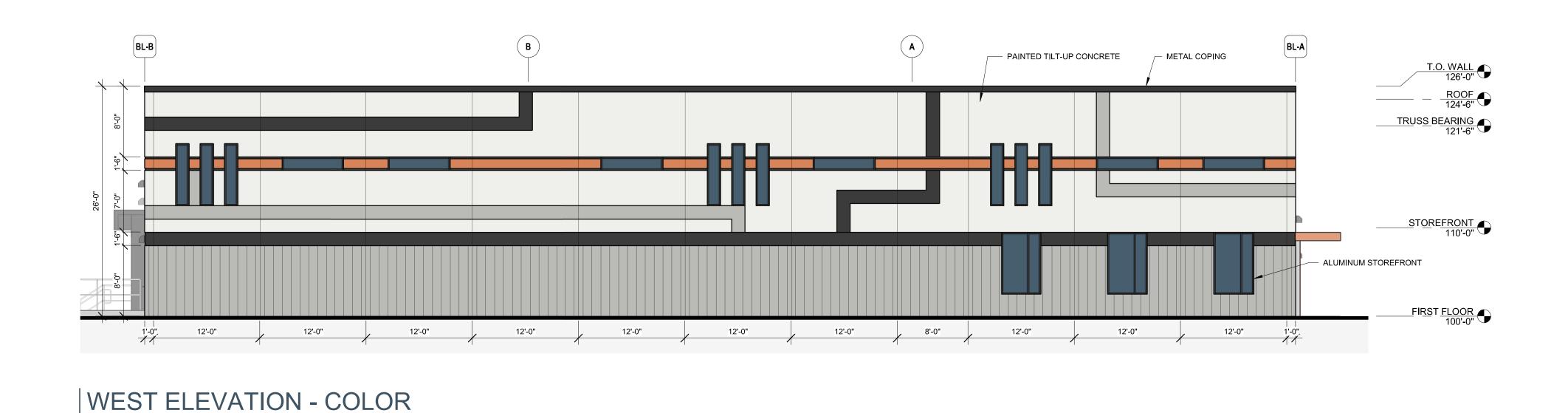
SW 7006 Extra White

Designer Color Collection

SW 7658 **Gray Clouds** 

SW 6991 Black Magic

SW 6634 Copper Harbor

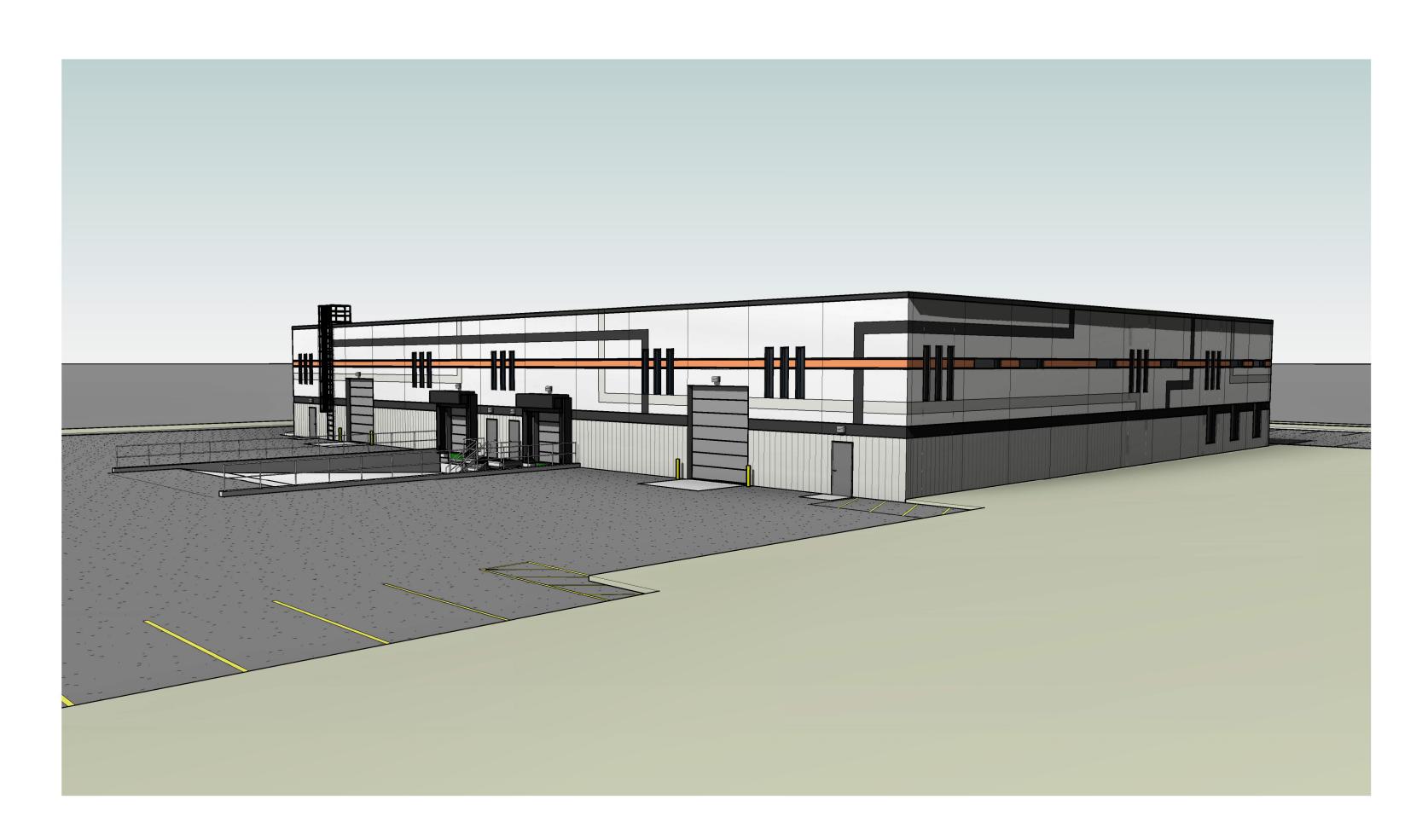


# WOOD DUMPSTER ENCLOSURE



4846 TRADEWINDS PARKWAY MADISON, WI 53718













# FIXTURE TYPE OA, OC, OD, OE & OH



# **McGraw-Edison**

### **GALN Galleon II**

Area / Site Luminaire

### **Product Features**











### **ℳ** Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 5
- Product Specifications page 5
- Energy and Performance Data page 6
- Control Options page 17

### **Product Certifications**



















### **Quick Facts**

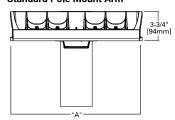
- Lumen packages range from 3,300 102,700 (33W - 658W)
- 17 optical distributions
- Efficacy up to 178 LPW

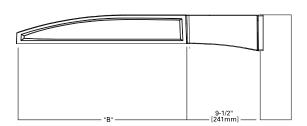
### Connected Systems

- Wavelinx LITE Wireless
- Wavelinx PRO Wireless
- AirMesh Wireless

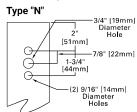
### **Dimensional Details**

### Standard Pole Mount Arm





### **Pole Drilling Pattern**



Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm				
1-4	16"	22"	29 <b>l</b> b	0.95				
5-6	22"	22"	39 lb	0.95				
7-9	22"	28-1/8"	48 lb	1.1				
NOTES: For arm selection requirement	NOTES: For arm selection requirements and additional line art, see Mounting Details section.							

NOTES:
1. IDA Certified (3000K CCT and warmer only, fixed mounting options)



### Ordering Information

SAMPLE NUMBER: GALN-SA4C-740-U-T4FT-GM

		Light Engine Config	uration	Color					
Product Family 1,2	Light Square	Square Count	Lumen Output	Temperature	Voltage	Distr	ribution	Mounting	Finish
GALN=Galleon II BAA-GALN=Galleon II Buy American Act Compliant 8 TAA-GALN=Galleon II Trade Agreements Act Compliant 79 BABA-GALN=Galleon II BABA/IJJA Compliant 39	SA=16 LED Light Square SB=26 LED Light Square	1=1 Light Square 2=2 Light Squares 3=3 Light Squares 4=4 Light Squares 5=5 Light Squares 6=6 Light Squares 7=7 Light Squares 8=8 Light Squares 9=9 Light Squares	A=Output Level 1 B=Output Level 2 C=Output Level 3 D=Output Level 4 <sup>4.16</sup> Z=Configured Output <sup>32</sup>	722=70CRI, 2200K 727=70CRI, 2700K 730=70CRI, 3000K 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K 827=80CRI, 2700K 835=80CRI, 3000K 840=80CRI, 3000K 840=80CRI, 4000K 935=90CRI, 3000K 940=90CRI, 3000K 940=90CRI, 4000K 950=90CRI, 5000K AMB=Amber <sup>14, 16</sup>	U=120-277V H=347V-480V <sup>7,29</sup> 1=120V 2=208V 3=240V 4=277V 8=480V <sup>7,29</sup> 9=347V <sup>7</sup> DV=277V-480V DuraVolt Drivers <sup>28,29,30</sup>	SLR=90° Spill Li Right RW=Rectangula AFL=Automotive T2BC=Type II w/ T3BC=Type II w/ T4BC=Type IV w/ LBC=90° Left w/	adway orward Throw ide rrow uare Medium uare Wide spill Control Spill Control Spill Control spill Eliminator Left ight Eliminator r Wide Type I	[Blank]=Standard Pole Mount Arm QU=Quick Mount Universal Arm QM=Pole Mount Arm with Quick Mount Adaptor PA=Pole Mount, Adjustable SP=3° Slipfitter, Adjustable <sup>8</sup> SP2=2-3/8° Slipfitter, Adjustable <sup>8</sup> QMA=Quick Mount Mast Arm, Fixed MA=Mast Arm, Fixed WM=Wall Mount, Fixed WM=Wall Mount, Fixed WM=Up=Upswept Arm	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White RALXX=Custom Color
Opt	Options (Add as Suffix)		Cont	ontrols and Systems Options (Add as Suffix)			Accessories (Order Separately) 27		
F=Single Fuse (120, 277 or 3 <sup>2</sup> 47V Specify Voltage) FF=Double Fuse (208, 240 or 480V Specify Voltage) 20K=20kV UL 1449 fused surge protective device <sup>10</sup> FADC=Field Adjusta 21_=Two Circuits <sup>10</sup> PSC=Photocontrol 'SPB2=Dimming Mo			BPC=Button Type Photo PR=NEMA 3-PIN Photo PR7=NEMA 7-PIN Photo FADC=Field Adjustable PSC=Photocontrol Shor SPB2=Dimming Motion SPB4=Dimming Motion	control Receptacle ocontrol Receptacle <sup>20</sup> Dimming Controller <sup>31</sup> ting Cap Sensor, 9'-20' mountin	tacle <sup>20</sup> olar 31  olar 31  olar 31  olar 32  olar 31  olar 32  olar 32				

noo-instanted riouse Side Sinted "
BCS=Backlight Control Shield "1.3"
GRSBH-Glare Reducing Shield, Black \*2
GRSWH-Glare Reducing Shield, White \*2\*
LCF-Light Square Trim Painted to Match Housing \*25
TH-TooHess Door Hardware \*5
CC-Control Construction Finish \*2\*
CC-Control Construction Finish \*2\*

CC=Coastal Construction finish 3 L90=Optics Rotated 90° Left

R90=Optics Rotated 90° Right 3SDCM=3 Standard Deviation Color Matching <sup>36</sup>

AHD145=After Hours Dim, 5 Hours <sup>21</sup> AHD245=After Hours Dim, 6 Hours <sup>21</sup>

AHD255=After Hours Dim, 7 Hours <sup>21</sup> AHD355=After Hours Dim, 8 Hours <sup>21</sup>

DALI=DALI Drivers

CDW=Non-programmable drivers 40

SPB2/X=Dimming Motion Sensor, limited square count, 9'-20' mounting <sup>23</sup> SPB4/X=Dimming Motion Sensor, limited square count, 21'-40' mounting <sup>23</sup> MS/DIM-L20=Motion Sensor for Dimming Operation, 9'-20' Mounting <sup>33</sup>
MS/DIM-L40=Motion Sensor for Dimming Operation, 21'-40' Mounting <sup>33</sup>

MS/DIM-L40=Motion Sensor for Dimming Operation, 21<sup>-4</sup>0' Mounting <sup>33</sup>
WLS2XX=WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7'-15' Mounting <sup>12-18-34</sup>
WLS4XX=WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15'-40' Mounting <sup>12-18-34</sup>
WPS2XX=WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7'-15' Mounting <sup>12-18-34</sup>
WPS4XX=WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15'-40' Mounting <sup>12-18-18-34</sup>
DIM10-1-20-AirMesh Occupancy Sensor (9'-20' Mounting) <sup>18-35</sup>
DIM10-1-20-AirMesh Occupancy Sensor (71'-40' Mounting) <sup>18-35</sup>

DIM10-L40=AirMesh Occupancy Sensor (21'-40' Mounting) 18,35

MA1037-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon

MA1037-XX=2@180° lenon Adapter for 2-3/8° 0.D. Ienon MA1197-XX=3@120° Tenon Adapter for 2-3/8° 0.D. Tenon MA1188-XX=4@90° Tenon Adapter for 2-3/8° 0.D. Tenon MA1189-XX=2@90° Tenon Adapter for 2-3/8° 0.D. Tenon MA1190-XX=3@90° Tenon Adapter for 2-3/8° 0.D. Tenon MA1191-XX=2@120° Tenon Adapter for 2-3/8° 0.D. Tenon

FSIR-100=Wireless Configuration Tool for MS/DIM <sup>33</sup> LS/HSS=Field Installed House Side Shield for SA Light Squares <sup>9, 17</sup>

LS/nSs-Fried Installed House side Shield for SA Light Squares 9.17
LS/nSs-SB-Field Installed House Side Shield for SB Light Squares 9.17
LS/nSs-Ba-Field Installed House Side Shield for SB Light Squares 9.17
LS/nSSBK-2PK = Glare Reducing Shield, Black 9.22
LS/nSSBK-2PK = Glare Reducing Shield, White 9.22
LS/nSsP-perimeter Shield, Black 15
WOLL 7.71 ADAM Westign 19. Outdoor Control Models 11.18.13

WOLC-7P-10A=WaveLinx Outdoor Control Module 11, 18, 13

TL7-G1-HV= AirMesh 7-PIN node, 110-480V <sup>11, 18, 35</sup>

CBSSW-450-002= AirMesh central base station with 5-button control 35

- Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our
- white paper WP513001EN for additional support information.

  Description After the wave seignlights consorting Qualified Products List under Family Models for details. Coastal construction finish salt spray tested towover 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. Not available with TH option
- When using SA light squares, Output Level 4 not available with color temperatures 722, 727, 827, 830 or 930 when HSS is

- used.
  TH option not 3G rated. Not available with Coastal Construction (CC) option.
  Not available with voltage options H, 8 or 9.
  Not available with sB1A or SB2A configurations. Not available in combination with HA high ambient and sensor options at Output Level 3. H voltage not available with sensor options, choose voltage 8 or 9.
  SP arm limited to 3" O.D. vertical tenon. SP2 limited to 2-3/8" O.D. vertical tenon.
  One required for each Light Square.
  2 L is not available with SB light squares. Not available with SPB at 347V or 480V. Not available with WaveLinx or 20kV surge
- Requires PR7
- Replace XX with sensor color (WH, BZ or BK.)
- 11. Replace XX with sensor color (WH, BZ or BK.).

  12. Replace XX with sensor color (WH, BZ or BK.).

  13. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. WAC not required for LC Bluetooth sensors.

  14. Narrow-band 590mm +/- 5mm for wildlife and observatory use. Choose Output Level 1; supplied at 500mA drive current only. Not available with SB light squares. Exact luminaire wattage available in IES files. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option.

  15. Set of 4 pes. One set required per Light Square.

  16. HA option not available with Output Level 4 or AMB Amber.

  17. Not for use with 11, SNQ, SMQ, SWQ or RW optics.

  18. Cannot be used with other control options.

  19. Low voltage control lead brought out 18° outside fixture. Not available with DALI or integrated controls options.

  20. Not available if any SPB, or WaveLinx sensor is selected. Motion sensor has an integral photocell.

  21. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. Not available with SB light squares when using Output Level 4.

  22. Not for use with 11, 74FT, T4W or SL optics. See IES files for details. Not available with SB light squares when using Output Level 4.

- Sensor configuration mobile application required for configuration. See controls page for details.

  Replace X with number of Light Squares controlled by the SPB, referencing the "SPB/X Availability Table" on the controls page.

  Not available with HSS, GRSWH or GRSBK.
- Not available with HSS, GRSWH or GRSBK.
   Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to <u>DOMESTIC PREFERENCES</u> website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
   For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
   DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signify.com/duravolt for more information.
   480 not to be used with ungrounded or impedance grounded systems.
   Not available with SATA or SATB. Not available with SB1, or any SB configuration using Output Level 1. Not available with any control option event SPB.

- - Cannot be used with DALI, PR7, or other motion response control options. Not available with SB light squares when using Output
- 32. Use GALN Product Configurator to specify lumen output, drive current and wattage. Not available with AMB, Not available with SB

- 32. Use GALN Product Configurator to specify lumen output, drive current and wattage. Not available with AMB. Not available with AMB. Not available with Split squares.

  32. Use Sta FSP-211 motion sensor. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information.

  34. Controls system is not available with photocontrol receptacles (PR, PR7) or other controls systems (FADC, SPBx).

  35. Requires AirMesh central base station CBSSW-450-002 and Synapse commissioning for operation.

  36. 3-step MacAdam ellipse binning. Available in 740 CRI/CCT only. Longer lead times apply, consult your lighting representative at Cooper Lighting Solutions for more information.

  38. Only product configurations with these prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or the Build America Buy America Act (BABA). BABA is the minimum Government compliance requirement for the Build America Buy American Act of the Infrastructure and Investment Jobs Act (IJA). Individual Government Agencies may have more stringent compliance standards. Please refer to the DOME-STIC PEFFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

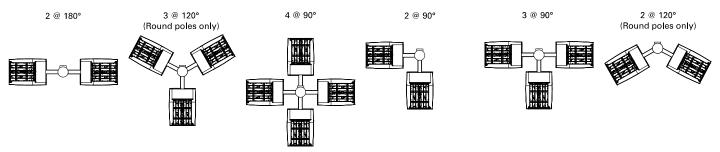
  39. Select SA light square. Only available with Output Levels 1, 2 or 3. Not compatible with HSS, GRS, BCS or PFS shield options, or LCF.

  40. Uses non-NFC (Near Field Communication) drivers to eliminate field-programmability.



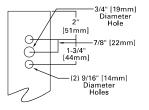
### **Mounting Details**

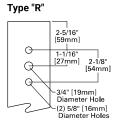
### **Pole Configuration Options**

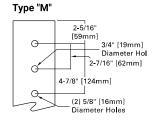


### **Pole Drilling Patterns**

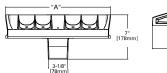
Type "N"

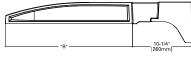






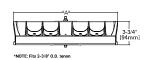
### **Quick Mount Universal Arm (QU)**





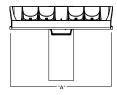
\*NOTE: Universal bolt pattern compatible with Type N through Type M drilling patterns

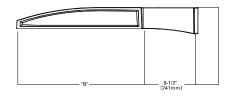
### Quick Mount Mast Arm (QMA)



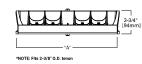


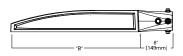
### Pole Mount Arm with Quick Mount Adaptor (QM)





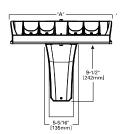
### Mast Arm, Fixed (MA)

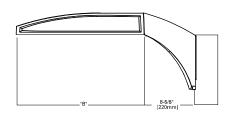




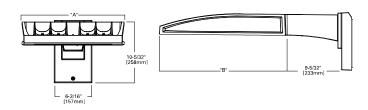
### Upswept Arm (UP)

\*NOTE: Use Type N drilling pattern





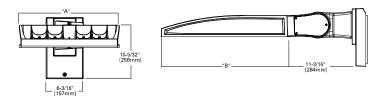
Wall Mount, Fixed (WM)



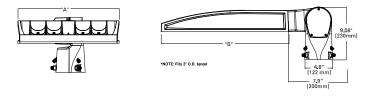
\*NOTE: Universal bolt pattern compatible with Type N through Type M drilling patterns

### **Mounting Details**

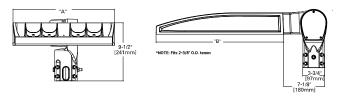
### Wall Mount, Adjustable (WA)



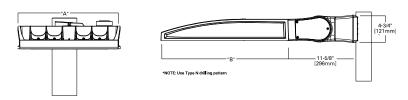
### 3" Slipfitter, Adjustable (SP)



### 2-3/8" Slipfitter, Adjustable (SP2)



### Pole Mount, Adjustable Arm (PA)



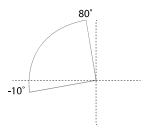
### **Fixture Weights and EPAs**

<b>Tilt Angle</b> (Degrees)	Number of Light Squares	Weight	1 @ 90°	2 @ 180°	2 @ 90°	2 @ 120°	3 @ 90°	3 @ 120°	4 @ 90°
	1-4	33.5 lb (15.2 kg)	0.85	1.70	1.46	1.66	2.31	2.25	2.35
0°	5-6	43.5 lb (19.7 kg)	0.86	1.71	1.62	1.80	2.49	2.35	2.50
	7-9	52.5 lb (23.8 kg)	0.98	1.95	1.75	1.98	2.73	2.55	2.76
	1-4	33.5 lb (15.2 kg)	1.10	1.71	1.95	2.26	2.81	3.30	2.87
15°	5-6	43.5 lb (19.7 kg)	1.42	1.71	2.27	2.72	3.13	3.63	3.15
	7-9	52.5 lb (23.8 kg)	1.69	1.96	2.67	3.22	3.65	4.38	3.72
	1-4	33.5 lb (15.2 kg)	1.72	1.81	2.58	3.21	3.44	4.59	3.53
30°	5-6	43.5 lb (19.7 kg)	2.26	2.29	3.11	4.00	3.97	5.27	4.00
	7-9	52.5 lb (23.8 kg)	2.75	2.85	3.73	4.83	4.71	6.45	4.81
	1-4	33.5 lb (15.2 kg)	2.25	2.36	3.10	4.00	3.96	5.63	4.08
45°	5-6	43.5 lb (19.7 kg)	2.96	2.99	3.81	5.06	4.67	6.49	4.71
	7-9	52.5 lb (23.8 kg)	3.63	3.76	3.73	6.17	5.59	8.03	5.73
	1-4	33.5 lb (15.2 kg)	2.63	2.77	3.49	4.58	4.34	6.21	4.48
60°	5-6	43.5 lb (19.7 kg)	3.46	3.51	4.32	5.84	5.19	7.01	5.22
	7-9	52.5 lb (23.8 kg)	4.27	4.44	5.25	7.15	6.23	8.80	6.40

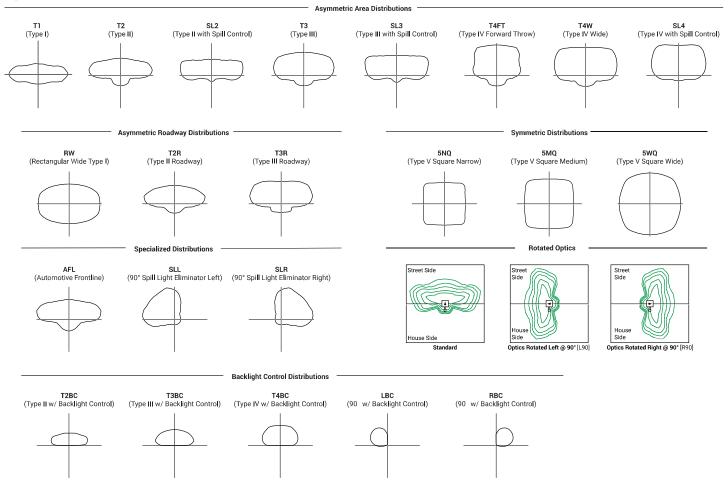
# COOPER Lighting Solutions a (signify business)

### **Adjustable Arm Range of Motion**

- Includes WA, SP, SP2 and PA mounting options
- Adjustable in increments of 5°
- Must maintain downward facing orientation



### **Optical Distributions**



### **Product Specifications**

### Construction

- Die-cast aluminum housing and heat sink
- Three housing sizes, using 1 to 9 light squares

### Optics

- · High-efficiency injection-molded AccuLED Optics technology
- 17 optical distributions for area site and roadway applications
- 4 shielding options include HSS, BCS, GRS and PFS
- IDA Certified (3000K CCT and warmer only, fixed mounting options)
- 5 step MacAdam ellipse binning (5 SDCM) standard with 70CRI and 80CRI.
   3SDCM option available with 740 CRI/CCT. 3 step MacAdam ellipse binning standard with 90CRI

### Electrical

- Removable power tray assembly includes drivers, surge modules and control
  modules for ease of maintenance and serviceability
- · Standard with 0-10V dimming
- Standard with 10kV surge module, optional 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected

### Mounting

- Arms are factory installed, enabling closed-housing installation
- All arms suitable for round or square pole installation
- All arms provide clearance for multiple fixture installations at 90°

### **Finish**

- 6 standard finishes use super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117
- RAL and custom color matches available
- Coastal Construction (CC) option salt-spray tested to 5,000 hours per ASTM B117, achieving a scribe rating of 9 per ASTM D1654

### Compliance

- Visit <a href="https://www.designlights.org/search/">https://www.designlights.org/search/</a> to confirm qualification. Not all product variations are DLC qualified
- IDA Certified (3000K CCT and warmer only, fixed mounting options)
- FHWA and FTA agencies are utilizing their BAA rules for BABA compliance. Only
  product configurations with these prefixes are built to be compliant with the Buy
  American Act of 1933 (BAA) or the Buy America Build America Act (BABA).BABA
  is the minimum Government compliance requirement for the Buy America Build
  America standards which is part of the Infrastructure and Investment Jobs Act
  (IIJA). Individual Government Agencies may have more stringent compliance
  standards.
- Please refer to the <u>DOMESTIC PREFERENCES</u> website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements

### **Typical Applications**

- Outdoor, Parking Lots, Walkways, Roadways, Building Areas
- Sports lighting, including tennis, pickleball, basketball courts

### Warranty

 Five-year limited warranty. Consult website for details. www.cooperlighting.com/legal



### **Energy and Performance Data**

### Lumen Maintenance (TM-21)

Output Level	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
	Devel   Temperature   Hours*   Hours*	> 2.4M				
Output Levels 1-3	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
Output	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
Level 4	Level 4	96.7%	> 1.3M			

**FADC Settings** SA1-SA3 (All Output Levels)

FADC Position	Percent of Typical Lumen Output
1	25%
2	48%
3	56%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: +/-5% typical value

# FADC Settings SA4-SA6 (All Output Levels)

FADC Position	Percent of Typical Lumen Output
1	14%
2	25%
3	32%
4	43%
5	49%
6	57%
7	65%
8	72%
9	80%
10	100%

Note: +/-5% typical value

### Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

FADC Settings SA7-SA9 (All Output Levels)

FADC Position	Percent of Typical Lumen Output
1	19%
2	38%
3	47%
4	63%
5	74%
6	85%
7	95%
8	97%
9	100%
10	100%

Note: +/-5% typical value

### **Drive Currents**

Lumen Output	SA Light Squares	SB Light Squares
Output Level 1	615mA	350mA
Output Level 2	800mA	450mA
Output Level 3	1050mA	615mA
Output Level 4	1200mA	900mA

<sup>\*</sup> Supported by IES TM-21 standards

\*\* Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

SA Ligh	t Squares, Output Level 1	, 4000K CCT, 7	O CRI				🖋 Galleon II	IES Files	🖋 Supplemental	Lumen Tables
	of Light Squares	1	2	3	4	5	6	7	8	9
	l Power (Watts)	33	63	93	121	154	182	215	244	274
	irrent @ 120V	0.283	0.529	0.778	1.058	1.310	1.556	1.839	2.089	2.335
	urrent @ 208V	0.165	0.309	0.460	0.618	0.771	0.919	1.082	1.240	1.379
· ·		0.143	0.270	0.398	0.540	0.671	0.796	0.944	1.078	1.194
		0.145	0.270	0.352	0.473	0.581	0.795	0.818	0.962	1.057
		0.098	0.181	0.272	0.362	0.454	0.544	0.636	0.738	0.816
•	irrent @ 480V	0.073	0.133	0.200	0.267	0.335	0.400	0.470	0.554	0.600
Optics										
	Lumens	4,619	9,180	13,628	18,059	22,861	27,070	31,796	36,863	41,385
T1	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	140	146	147	149	148	149	148	151	151
	Lumens	4,654	9,249	13,730	18,194	23,032	27,273	32,034	37,138	41,694
T2	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	141	147	148	150	150	150	149	152	152
	Lumens	4,716	9,372	13,913	18,437	23,340	27,637	32,462	37,634	42,251
T2R	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
	Lumens per Watt	143	149	150	152	152	152	151	154	154
	Lumens	4,589	9,120	13,538	17,940	22,711	26,892	31,587	36,620	41,112
Т3	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	139	145	146	148	147	148	147	150	150
	Lumens	4,735	9,411	13,970	18,513	23,436	27,751	32,596	37,790	42,425
T3R	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	143	149	150	153	152	152	152	155	155
	Lumens	4,617	9,176	13,622	18,051	22,851	27,058	31,782	36,847	41,366
T4FT	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	140	146	146	149	148	149	148	151	151
	Lumens	4,631	9,203	13,662	18,104	22,918	27,138	31,876	36,955	41,488
T4W	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	140	146	147	150	149	149	148	151	151
	Lumens	4,619	9,180	13,627	18,058	22,860	27,069	31,795	36,861	41,383
SL2	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5
	Lumens per Watt	140	146	147	149	148	149	148	151	151
Nominal Input Cur Input Cu	Lumens	4,586	9,115	13,531	17,931	22,699	26,879	31,571	36,602	41,091
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	139	145	145	148	147	148	147	150	150
01.4	Lumens	4,529	9,002	13,363	17,708	22,417	26,544	31,178	36,146	40,580
SL4	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	137	143	144	146	146	146	145	148	148
ENO	Lumens	4,829	9,598	14,247	18,880	23,901	28,301 B4-U0-G2	33,242	38,539	43,266
ЭИŲ	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2		B5-U0-G2	B5-U0-G3	B5-U0-G3
	Lumens per Watt Lumens	146 4,853	152 9,645	153 14,318	156 18,974	155 24,020	155 28,442	155 33,407	158 38,731	158 43,482
EMO			9,645 B3-U0-G2		18,974 B4-U0-G2		B5-U0-G3		85-U0-G4	45,462 B5-U0-G4
SIVIQ	BUG Rating  Lumens per Watt	B3-U0-G1	153	B4-U0-G2		B5-U0-G3		B5-U0-G4 155	159	159
-	Lumens	147 4,843	9,625	154 14,288	157 18,934	156 23,969	156 28,382	33,337	38,649	43,390
EWO	BUG Rating	B3-U0-G1	9,023 B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	#5,390 B5-U0-G5
SWQ	Lumens per Watt	147	153	154	156	156	156	155	158	158
		3,989								
SLL/	Lumens BUG Rating	3,989 B1-U0-G2	7,927 B1-U0-G2	11,768 B2-U0-G3	15,594 B2-U0-G3	19,741 B2-U0-G4	23,375 B3-U0-G4	27,456 B3-U0-G4	31,831 B3-U0-G5	35,736 B3-U0-G5
SLR	Lumens per Watt	121	126	127	129	128	128	128	130	130
	Lumens per watt	4,774	9,488	14,085	18,665	23,628	27,979	32,863	38,100	42,774
DW	BUG Rating	4,774 B2-U0-G1	9,488 B3-U0-G1	14,085 B3-U0-G2	18,005 B4-U0-G2	23,628 B4-U0-G2	B4-U0-G2	B5-U0-G3	38,100 B5-U0-G3	42,774 B5-U0-G3
LC AA	-	145			154			153		
	Lumens per Watt		151 9,286	151 13,785	18,268	153 23,126	154 27,384	32,164	156 37,290	156 41,864
$\neg$						. /3 I/b			1 37 /90	41.864
A.F.1	Lumens	4,673								
AFL	BUG Rating  Lumens per Watt	4,673 B1-U0-G1	B1-U0-G1	B2-U0-G2 148	B2-U0-G2 151	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3 153



							( 0 : -		2	
SA Ligh	nt Squares, Output Level	2, 4000K CCT, 7	70 CRI					IES Files	Supplemental	Lumen Table
Numbe	r of Light Squares	1	2	3	4	5	6	7	8	9
Nomina	al Power (Watts)	44	82	121	164	204	243	286	325	364
Input Co	urrent @ 120V	0.367	0.689	1.014	1.378	1.704	2.027	2.393	2.716	3.041
Input Co	urrent @ 208V	0.213	0.401	0.594	0.802	0.997	1.188	1.400	1.605	1.782
Input Co	urrent @ 240V	0.184	0.347	0.510	0.694	0.860	1.021	1.210	1.386	1.531
Input Co	urrent @ 277V	0.160	0.303	0.449	0.605	0.757	0.898	1.065	1.242	1.347
Input Co	urrent @ 347V	0.125	0.235	0.355	0.471	0.592	0.710	0.828	0.958	1.065
Input C	urrent @ 480V	0.092	0.172	0.258	0.344	0.432	0.517	0.605	0.706	0.775
Optics										
оршоо	Lumens	5,748	11,423	16,957	22,470	28,446	33,683	39,563	45,867	51,494
T1	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
• • •	Lumens per Watt	131	139	140	137	139	139	138	141	141
	Lumens	5,790	11,508	17,083	22,638	28,658	33,935	39,859	46,210	51,879
T2	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
'-	Lumens per Watt	132	140	141	138	140	140	139	142	143
	Lumens	5,868	11,662	17,311	22,941	29,041	34,388	40,391	46,827	52,572
T2R	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
	Lumens per Watt	133	142	143	140	142	142	141	144	144
	Lumens Lumens	5,710	11,347	16,845	22,322	28,258	33,461	39,303	45,565	51,155
Т3	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	130	138	139	136	139	138	137	140	141
	Lumens	5,892	11,710	17,383	23,035	29,161	34,530	40,558	47,020	52,788
T3R	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	134	143	144	140	143	142	142	145	145
	Lumens	5,745	11,418	16,949	22,460	28,433	33,668	39,546	45,847	51,471
T4FT	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
	Lumens	5,762	11,451	16,999	22,526	28,517	33,767	39,662	45,982	51,622
T4W	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	140	140	137	140	139	139	141	142
	Lumens	5,747	11,422	16,956	22,469	28,444	33,681	39,561	45,865	51,491
SL2	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
	Lumens	5,707	11,342	16,836	22,311	28,244	33,444	39,283	45,542	51,129
SL3	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	130	138	139	136	138	138	137	140	140
	Lumens	5,636	11,201	16,627	22,034	27,893	33,028	38,794	44,976	50,493
SL4	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	128	137	137	134	137	136	136	138	139
	Lumens	6,009	11,942	17,727	23,492	29,739	35,214	41,362	47,953	53,835
5NQ	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	137	146	147	143	146	145	145	148	148
	Lumens	6,039	12,001	17,816	23,609	29,887	35,389	41,568	48,191	54,103
5MQ	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	137	146	147	144	147	146	145	148	149
	Lumens	6,026	11,976	17,778	23,559	29,824	35,315	41,480	48,090	53,989
5WQ	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
*	Lumens per Watt	137	146	147	144	146	145	145	148	148
	Lumens	4,963	9,863	14,642	19,403	24,563	29,085	34,163	39,607	44,465
SLL/	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
SLR	Lumens per Watt	113	120	121	118	120	120	119	122	122
	Lumens	5,940	11,806	17,526	23,224	29,400	34,813	40,891	47,407	53,222
RW	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	135	144	145	142	144	143	143	146	146
	Lumens	5,814	11,555	17,153	22,730	28,775	34,073	40,021	46,398	52,090
AFL	BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4
	Lumens per Watt	132	141	142	139	141	140	140	143	143
	<u> </u>	1	I	I		1	1			



	ONER CARROLL									
SA Ligh	nt Squares, Output Level 3	3, 4000K CCT, 7	0 CRI				🖋 Galleon I	IES Files ;	🥜 Supplemental	Lumen Tables
Numbe	r of Light Squares	1	2	3	4	5	6	7	8	9
Nomina	al Power (Watts)	57	108	160	213	269	321	377	429	481
Input C	urrent @ 120V	0.478	0.905	1.338	1.810	2.244	2.675	3.150	3.584	4.013
Input C	urrent @ 208V	0.279	0.532	0.780	1.064	1.313	1.559	1.845	2.093	2.339
Input C	urrent @ 240V	0.243	0.458	0.664	0.916	1.123	1.328	1.582	1.788	1.991
Input C	urrent @ 277V	0.213	0.404	0.582	0.808	0.997	1.164	1.401	1.589	1.745
_	urrent @ 347V	0.164	0.322	0.471	0.644	0.795	0.943	1.117	1.269	1.414
<u> </u>	urrent @ 480V	0.121	0.235	0.341	0.469	0.579	0.681	0.814	0.923	1.022
Optics										
оршоо	Lumens	7,101	14,113	20,950	27,763	35,146	41,616	48,882	56,671	63,623
T1	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	125	131	131	130	131	130	130	132	132
	Lumens	7,154	14,219	21,107	27,970	35,408	41,927	49,247	57,094	64,098
T2	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	126	132	132	131	132	131	131	133	133
	Lumens	7,250	14,408	21,389	28,344	35,881	42,487	49,905	57,857	64,954
T2R	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	127	133	134	133	133	132	132	135	135
	Lumens	7,054	14,020	20,812	27,580	34,914	41,342	48,560	56,297	63,203
Т3	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
	Lumens	7,280	14,468	21,477	28,461	36,029	42,663	50,111	58,096	65,222
T3R	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	128	134	134	134	134	133	133	135	136
	Lumens	7,098	14,107	20,941	27,751	35,130	41,598	48,860	56,646	63,594
T4FT	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
	Lumens	7,119	14,148	21,003	27,832	35,233	41,720	49,004	56,812	63,781
T4W	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	131	131	130	130	132	133
	Lumens	7,101	14,112	20,949	27,761	35,144	41,614	48,879	56,668	63,619
SL2	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
	Lumens	7,051	14,013	20,802	27,566	34,897	41,321	48,535	56,269	63,172
SL3	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
	Lumens	6,963	13,839	20,543	27,223	34,463	40,808	47,932	55,569	62,386
SL4	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	122	128	128	128	128	127	127	130	130
	Lumens	7,424	14,755	21,903	29,025	36,743	43,508	51,104	59,247	66,515
5NQ	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	130	137	137	136	137	136	136	138	138
F1.40	Lumens	7,461	14,828	22,012	29,169	36,926	43,725	51,359	59,542	66,846
5MQ	BUG Rating	B3-U0-G1	B4-U0-G2 137	B5-U0-G3	B5-U0-G3 137	B5-U0-G4 137	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5 139
	Lumens per Watt	7,445	14,797	138 21,966	29,108		136 43,633	136 51,250	139 59,417	
5WQ	Lumens BUG Rating	7,443 B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	36,849 B5-U0-G4	45,033 B5-U0-G5	B5-U0-G5	B5-U0-G5	66,705 B5-U0-G5
JWQ	Lumens per Watt	131	137	137	137	137	136	136	139	139
	Lumens	6,132	12,187	18,091	23,973	30,348	35,936	42,210	48,935	54,938
SLL/	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
SLR	Lumens per Watt	108	113	113	113	113	112	112	114	114
	Lumens	7,340	14,587	21,653	28,694	36,325	43,013	50,522	58,573	65,757
RW	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	129	135	135	135	135	134	134	137	137
	Lumens	7,183	14,276	21,193	28,084	35,552	42,098	49,448	57,327	64,359
AFL	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4
"-	Lumens per Watt	126	132	132	132	132	131	131	134	134
* Nomina	· · · · · · · · · · · · · · · · · · ·						I	1		1
	Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.									



SA Liak	nt Squares, Output Level 4	4000K CCT 3	70 CDI					IES Files		Lumen Tables
			2 2	3	4	F				
	r of Light Squares	1				5	6	7	8	9
	I Power (Watts)	65	125	184	245	309	368	433	493	552
	urrent @ 120V	0.546	1.041	1.535	2.082	2.578	3.070	3.619	4.114	4.605
-	urrent @ 208V	0.318	0.610	0.893	1.219	1.504	1.786	2.113	2.397	2.679
	urrent @ 240V	0.276	0.523	0.758	1.046	1.282	1.516	1.806	2.041	2.274
Input C	urrent @ 277V	0.241	0.460	0.662	0.920	1.133	1.325	1.593	1.807	1.987
Input Co	urrent @ 347V	0.187	0.370	0.543	0.740	0.915	1.085	1.285	1.459	1.628
Input Co	urrent @ 480V	0.138	0.269	0.391	0.537	0.663	0.782	0.932	1.057	1.173
Optics										
	Lumens	7,814	15,529	23,053	30,549	38,672	45,793	53,787	62,358	70,007
T1	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	120	124	125	125	125	124	124	126	127
	Lumens	7,872	15,645	23,225	30,777	38,962	46,135	54,189	62,824	70,530
T2	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	121	125	126	126	126	125	125	127	128
	Lumens	7,977	15,854	23,535	31,188	39,482	46,751	54,913	63,663	71,472
T2R	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	127	128	127	127	129	129
	Lumens	7,762	15,427	22,901	30,348	38,418	45,491	53,433	61,947	69,546
Т3	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
	Lumens	8,010	15,920	23,632	31,317	39,645	46,944	55,139	63,925	71,767
T3R	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	128	128	128	127	130	130
	Lumens	7,810	15,522	23,043	30,535	38,655	45,772	53,763	62,330	69,976
T4FT	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
	Lumens	7,833	15,568	23,110	30,625	38,769	45,907	53,921	62,513	70,182
T4W	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	121	125	126	125	125	125	125	127	127
	Lumens	7,813	15,528	23,052	30,547	38,670	45,790	53,784	62,354	70,003
SL2	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
	Lumens	7,758	15,419	22,889	30,332	38,398	45,468	53,406	61,916	69,511
SL3	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
	Lumens	7,662	15,228	22,605	29,955	37,921	44,903	52,742	61,146	68,646
SL4	BUG Rating	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	118	122	123	122	123	122	122	124	124
	Lumens	8,169	16,235	24,101	31,938	40,431	47,874	56,232	65,193	73,190
5NQ	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	126	130	131	130	131	130	130	132	133
F140	Lumens	8,210	16,316	24,221	32,097	40,632	48,113	56,512 B5-U0-G5	65,517	73,554
5MQ	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4		B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	131	132	131	131	131	131	133	133
EWO	Lumens	8,192	16,282 B4-U0-G2	24,170	32,029 B5-U0-G4	40,546	48,011 B5-U0-G5	56,393	65,379	73,399 B5-U0-G5
5WQ	BUG Rating	B3-U0-G2	130	B5-U0-G3		B5-U0-G4		B5-U0-G5	B5-U0-G5	133
	Lumens per Watt	126 6,747		131	131	131	130 39,542	130	133	
SLL/	Lumens		13,410	19,906 B2-U0-G4	26,379	33,394 B3-U0-G5	B3-U0-G5	46,445 B3-U0-G5	53,846	60,451 B4-U0-G5
SLR	BUG Rating  Lumens per Watt	B1-U0-G2 104	B2-U0-G3 107	108	B3-U0-G4 108	108	107	107	B3-U0-G5 109	110
	Lumens per watt	8,076	16,050	23,826	31,574	39,970	47,329	55,592	64,450	72,356
RW	BUG Rating	8,076 B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	72,330 B5-U0-G5
KVV				129	129	129			+	
	Lumens per Watt	7 904	128				129	128	63.079	70.817
AEI	Lumens	7,904	15,709	23,320	30,902	39,120	46,323	54,410 P2-U0-C4	63,079	70,817
AFL	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3 127	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4
* N~~-:-	Lumens per Watt	122	126	127	126		126	126	128	128
" inomina	Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.									



## SB Light Squares, Output Level 1, 4000K, 70 CRI

	duares, Output Le					-		-		
	ight Squares	1	2	3	4	5	6	7	8	9
Nominal Pov	wer (Watts)	31	57	85	114	142	171	199	227	256
Input Curren	nt @ 120V	0.263	0.484	0.717	0.952	1.201	1.434	1.685	1.918	2.151
Input Curren	nt @ 208V	0.154	0.280	0.420	0.552	0.700	0.839	0.979	1.119	1.259
Input Curren	nt @ 240V	0.136	0.245	0.370	0.483	0.615	0.740	0.860	0.985	1.110
Input Curren	nt @ 277V	0.122	0.216	0.330	0.425	0.546	0.660	0.762	0.876	0.989
Input Curren	nt @ 347V	-	-	0.248	0.328	0.413	0.495	0.577	0.665	0.743
Input Curren	nt @ 480V	-	-	0.182	0.238	0.304	0.364	0.426	0.493	0.547
Optics										
	Lumens	4,696	9,389	14,086	18,816	23,716	28,470	33,388	37,964	42,763
T1	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4
	Lumens per Watt	152	164	166	165	167	167	168	167	167
	Lumens	4,704	9,404	14,109	18,846	23,754	28,515	33,442	38,024	42,831
T2	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G5
	Lumens per Watt	152	164	167	165	168	167	168	167	168
	Lumens	4,835	9,667	14,503	19,373	24,418	29,313	34,377	39,087	44,029
T2R	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
	Lumens per Watt	156	169	171	170	172	172	173	172	172
	Lumens	4,751	9,497	14,249	19,033	23,989	28,798	33,773	38,401	43,256
Т3	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	154	166	168	167	169	169	170	169	169
	Lumens	4,874	9,743	14,618	19,526	24,611	29,544	34,648	39,396	44,376
T3R	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5
	Lumens per Watt	158	170	173	171	174	173	174	173	174
	Lumens	4,692	9,380	14,074	18,799	23,694	28,444	33,358	37,929	42,724
T4FT	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	152	164	166	165	167	166	168	167	167
	Lumens	4,738	9,472	14,211	18,983	23,926	28,723	33,685	38,300	43,142
T4W	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	153	165	168	167	169	168	169	169	169
	Lumens	4,719	9,433	14,153	18,905	23,828	28,605	33,546	38,143	42,965
SL2	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5
, SEE	Lumens per Watt	153	165	167	166	168	167	168	168	168
	Lumens	4,640	9,276	13,916	18,589	23,430	28,127	32,986	37,506	42,247
SL3	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
OLS	Lumens per Watt	150	162	164	163	165	165	166	165	165
	Lumens	4,706	9,408	14,115	18,854	23,764	28,527	33,456	38,040	42,849
SL4	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
OL4	Lumens per Watt	152	164	167	165	168	167	168	168	168
	Lumens	4,975	9,945	14,921	19,931	25,121	30,157	35,367	40,213	45,297
5NQ	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	#5,297 B5-U0-G3
City	Lumens per Watt	161	174	176	175	177	176	178	177	177
	Lumens	4,972	9,939	14,912	19,919	25,106	30,139	35,346	40,189	45,269
5MQ	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
54	Lumens per Watt	161	173	176	175	177	176	178	177	177
	Lumens	4,802	9,600	14,403	19,239	24,249	29,110	34,139	38,817	43,724
5WQ	BUG Rating	B3-U0-G1	9,000 B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
5.1.4	Lumens per Watt	155	168	170	169	171	170	171	171	171
	Lumens	4,730	9,457	14,188	18,952	23,887	28,676	33,630	38,238	43,072
SLL/SLR	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
OLL/OLK	Lumens per Watt	153	165	168	166	169	168	169	168	169
	Lumens	4,889	9,773	14,663	19,586	24,686	29,635	34,755	39,517	44,513
RW	BUG Rating	82-U0-G1	9,773 B3-U0-G1	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4
	Lumens per Watt	158	171	173	172	174	173	175	174	174
	Lumens	4,828	9,652	14,482	19,344	24,381	29,269	34,325	39,029	43,963
AFL	BUG Rating	4,828 B1-U0-G1	9,652 B2-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	#3,963 B3-U0-G3
AFL	Lumens per Watt	156	168	171	170	172	171	172	172	172
	Lumens per watt	150	108	1/1	1/0	1/2	1/1	1/2	1/2	1/2



## SB Light Squares, Output Level 2, 4000K, 70 CRI

	B Light Squares, Output Level 2, 4000K, 70 CRI									
Number of L	ight Squares	1	2	3	4	5	6	7	8	9
Nominal Pov	wer (Watts)	40	74	109	147	183	220	257	293	330
Input Curren	nt @ 120V	0.330	0.627	0.919	1.255	1.547	1.838	2.174	2.466	2.758
Input Curren	it @ 208V	0.192	0.370	0.533	0.739	0.902	1.066	1.272	1.435	1.598
Input Curren	nt @ 240V	0.169	0.327	0.467	0.655	0.794	0.933	1.121	1.260	1.400
Input Curren	nt @ 277V	0.150	0.294	0.412	0.588	0.706	0.823	1.000	1.118	1.235
Input Curren	nt @ 347V	0.112	0.215	0.316	0.431	0.531	0.632	0.746	0.847	0.947
Input Curren	nt @ 480V	0.086	0.160	0.230	0.320	0.390	0.460	0.550	0.620	0.690
Optics										
	Lumens	5,895	11,786	17,683	23,620	29,771	35,739	41,913	47,656	53,681
T1	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	148	159	162	161	163	162	163	163	163
	Lumens	5,905	11,805	17,711	23,658	29,818	35,796	41,980	47,732	53,766
T2	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	148	160	162	161	163	162	164	163	163
	Lumens	6,070	12,135	18,206	24,319	30,652	36,797	43,154	49,067	55,270
T2R	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	153	164	167	165	168	167	168	168	168
	Lumens	5,963	11,922	17,887	23,892	30,114	36,151	42,396	48,206	54,300
Т3	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	150	161	164	163	165	164	165	165	165
	Lumens	6,118	12,231	18,350	24,511	30,894	37,087	43,494	49,454	55,706
T3R	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	154	166	168	167	169	168	169	169	169
	Lumens	5,890	11,775	17,667	23,599	29,744	35,706	41,875	47,613	53,632
T4FT	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	148	159	162	161	163	162	163	163	163
	Lumens	5,948	11,891	17,840	23,830	30,035	36,056	42,285	48,079	54,157
T4W	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	149	161	163	162	164	164	165	164	164
	Lumens	5,923	11,842	17,766	23,732	29,912	35,908	42,111	47,882	53,935
SL2	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	149	160	163	161	164	163	164	164	164
	Lumens	5,824	11,644	17,469	23,335	29,412	35,308	41,407	47,081	53,033
SL3	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	146	158	160	159	161	160	161	161	161
	Lumens	5,907	11,810	17,718	23,668	29,831	35,811	41,998	47,752	53,789
SL4	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5
	Lumens per Watt	148	160	162	161	163	162	164	163	163
	Lumens	6,245	12,484	18,731	25,020	31,535	37,857	44,397	50,480	56,862
5NQ	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	157	169	172	170	173	172	173	172	173
	Lumens	6,241	12,477	18,719	25,005	31,516	37,834	44,370	50,450	56,827
5MQ	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	157	169	171	170	173	172	173	172	172
	Lumens	6,028	12,051	18,080	24,151	30,440	36,542	42,855	48,728	54,887
5WQ	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	151	163	166	164	167	166	167	166	167
	Lumens	5,938	11,871	17,811	23,791	29,986	35,997	42,216	48,001	54,069
SLL/SLR	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	149	161	163	162	164	163	164	164	164
	Lumens	6,137	12,268	18,406	24,587	30,989	37,201	43,628	49,606	55,877
RW	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	154	166	169	167	170	169	170	169	170
	Lumens	6,061	12,117	18,179	24,283	30,606	36,742	43,089	48,993	55,187
AFL	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4
	Lumens per Watt	152	164	166	165	168	167	168	167	167
			1	1			1		1	



## SB Light Squares, Output Level 3, 4000K, 70 CRI

	SB Light Squares, Output Level 3, 4000K, 70 CKI									
Number of L	ight Squares	1	2	3	4	5	6	7	8	9
Nominal Pov	wer (Watts)	54	101	149	201	250	301	351	400	450
Input Curren	it @ 120V	0.437	0.857	1.259	1.714	2.116	2.518	2.973	3.375	3.776
Input Curren	t @ 208V	0.254	0.498	0.721	0.996	1.219	1.442	1.717	1.940	2.163
Input Curren	it @ 240V	0.223	0.437	0.628	0.874	1.065	1.256	1.501	1.693	1.884
Input Curren	nt @ 277V	0.197	0.386	0.550	0.772	0.936	1.100	1.322	1.485	1.649
Input Curren	nt @ 347V	0.150	0.292	0.432	0.584	0.724	0.863	1.016	1.155	1.295
Input Curren	it @ 480V	0.111	0.213	0.311	0.427	0.525	0.622	0.738	0.836	0.933
Optics										
	Lumens	7,841	15,675	23,517	31,414	39,594	47,531	55,743	63,381	71,393
T1	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	144	155	158	157	159	158	159	159	159
	Lumens	7,853	15,700	23,555	31,464	39,657	47,607	55,832	63,482	71,507
T2	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5
'-	Lumens per Watt	144	156	158	157	159	158	159	159	159
	Lumens	8,073	16,139	24,214	32,344	40,766	48,938	57,393	65,257	73,507
T2R	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4		B4-U0-G5	B4-U0-G5		B4-U0-G5
IZR		148				B3-U0-G4	163		B4-U0-G5	
	Lumens per Watt		160	162	161	163		164	163	163 72.217
т-2	Lumens	7,931	15,856	23,789	31,776	40,051	48,080	56,386	64,112	72,217 B5-U0-G5
Т3	BUG Rating	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	
	Lumens per Watt	146	157	160	158	161	160	161	160	161
	Lumens	8,137	16,267	24,405	32,599	41,088	49,325	57,846	65,773	74,087
T3R	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	150	161	164	162	165	164	165	165	165
	Lumens	7,834	15,661	23,496	31,385	39,558	47,488	55,692	63,324	71,329
T4FT	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5
	Lumens per Watt	144	155	158	156	159	158	159	158	159
	Lumens	7,910	15,814	23,726	31,693	39,946	47,953	56,238	63,944	72,027
T4W	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	145	157	159	158	160	159	160	160	160
	Lumens	7,878	15,749	23,629	31,562	39,781	47,756	56,006	63,681	71,731
SL2	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	145	156	158	157	159	159	160	159	159
	Lumens	7,746	15,486	23,234	31,035	39,117	46,958	55,070	62,616	70,532
SL3	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	142	153	156	155	157	156	157	157	157
	Lumens	7,857	15,707	23,565	31,477	39,674	47,627	55,855	63,509	71,538
SL4	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	144	156	158	157	159	158	159	159	159
	Lumens	8,305	16,604	24,911	33,275	41,940	50,348	59,046	67,137	75,624
5NQ	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	153	165	167	166	168	167	168	168	168
	Lumens	8,300	16,594	24,896	33,255	41,915	50,318	59,010	67,097	75,578
5MQ	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	153	164	167	166	168	167	168	168	168
	Lumens	8,017	16,027	24,046	32,120	40,484	48,600	56,996	64,806	72,998
5WQ	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	147	159	161	160	162	162	163	162	162
	Lumens	7,897	15,788	23,687	31,641	39,880	47,875	56,146	63,839	71,909
SLL/SLR	BUG Rating	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5
,	Lumens per Watt	145	156	159	158	160	159	160	160	160
	Lumens	8,162	16,317	24,480	32,699	41,215	49,476	58,024	65,975	74,315
RW	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	150	162	164	163	165	164	166	165	165
	Lumens	8,061	16,115	24,177	32,295	40,705	48,865	57,307	65,160	73,397
AFL	BUG Rating	81-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G3	40,703 B3-U0-G3	84-U0-G4	84-U0-G4	84-U0-G4	73,397 B4-U0-G4
AFL										
	Lumens per Watt	148	160	162	161	163	162	164	163	163



## SB Light Squares, Output Level 4, 4000K, 70 CRI

Normalian of I	inht Courses	1	2	3	4	5	6	7	8	9
	ight Squares									
Nominal Pov		80	148	218	294	365	440	513	585	658
Input Curren		0.638	1.234	1.840	2.469	3.094	3.680	4.349	4.934	5.519
Input Curren	it @ 208V	0.367	0.705	1.045	1.410	1.779	2.090	2.513	2.824	3.135
Input Curren	nt @ 240V	0.320	0.614	0.913	1.227	1.567	1.827	2.220	2.480	2.740
Input Curren	nt @ 277V	0.280	0.537	0.813	1.075	1.402	1.626	1.992	2.215	2.439
Input Curren	nt @ 347V	0.219	0.430	0.640	0.897	1.089	1.280	1.537	1.729	1.920
Input Curren	nt @ 480V	0.160	0.313	0.479	0.700	0.829	0.958	1.179	1.308	1.437
Optics										
	Lumens	10,654	21,299	31,955	42,684	53,800	64,585	75,742	86,121	97,008
T1	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	134	144	147	145	147	147	148	147	147
	Lumens	10,671	21,333	32,006	42,752	53,886	64,688	75,863	86,258	97,162
T2	BUG Rating	B2-U0-G2	B3-U0-G3	B4-U0-G4	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	134	145	147	146	148	147	148	147	148
	Lumens	10,969	21,929	32,901	43,948	55,392	66,496	77,984	88,670	99,879
T2R	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5
	Lumens per Watt	138	149	151	150	152	151	152	152	152
	Lumens	10,777	21,545	32,324	43,177	54,420	65,329	76,616	87,114	98,127
Т3	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	135	146	148	147	149	148	149	149	149
	Lumens	11,056	22,103	33,161	44,295	55,830	67,022	78,600	89,371	100,668
T3R	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	139	150	152	151	153	152	153	153	153
	Lumens	10,644	21,280	31,926	42,646	53,751	64,526	75,674	86,043	96,920
T4FT	BUG Rating	B2-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
1411		134	144	146	145	147	147	148	147	147
	Lumens per Watt									
T 414	Lumens	10,748	21,488	32,239	43,063	54,277	65,158	76,414	86,885	97,869
T4W	BUG Rating	B2-U0-G2	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	135	146	148	147	149	148	149	149	149
	Lumens	10,704	21,400	32,106	42,886	54,054	64,890	76,100	86,528	97,467
SL2	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	134	145	147	146	148	147	148	148	148
	Lumens	10,525	21,042	31,570	42,169	53,151	63,805	74,828	85,082	95,837
SL3	BUG Rating	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	132	143	145	144	146	145	146	145	146
	Lumens	10,675	21,342	32,020	42,771	53,908	64,715	75,895	86,295	97,204
SL4	BUG Rating	B2-U0-G3	B3-U0-G4	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	134	145	147	146	148	147	148	148	148
	Lumens	11,285	22,561	33,849	45,214	56,988	68,412	80,230	91,224	102,756
5NQ	BUG Rating	B3-U0-G1	B4 <b>-</b> U0 <b>-</b> G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	142	153	155	154	156	155	156	156	156
	Lumens	11,278	22,547	33,828	45,187	56,954	68,371	80,182	91,169	102,694
5MQ	BUG Rating	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	142	153	155	154	156	155	156	156	156
	Lumens	10,893	21,778	32,673	43,644	55,009	66,037	77,445	88,057	99,189
5WQ	BUG Rating	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	137	148	150	149	151	150	151	151	151
	Lumens	10,731	21,453	32,186	42,993	54,189	65,051	76,290	86,743	97,709
SLL/SLR	BUG Rating	B2-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	135	145	148	146	149	148	149	148	148
	Lumens	11,090	22,171	33,263	44,431	56,001	67,228	78,842	89,645	100,978
RW	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	139	150	153	151	153	153	154	153	153
	Lumens	10,953	21,897	32,852	43,882	55,309	66,397	77,868	88,538	99,730
AFL	BUG Rating	B2-U0-G1	B3-U0-G2	83-U0-G3	43,862 B3-U0-G3	84-U0-G4	84-U0-G4	B4-U0-G5	84-U0-G5	99,730 B5-U0-G5
AFL										
	Lumens per Watt	138	148	151	149	152	151	152	151	152



#### Backlight Control Optics, Output Level 1, 4000K CCT, 70 CRI

Number of L	ight Squares	1	2	3	4	5	6	7	8	9
Nominal Po	wer (Watts)	29	56	82	108	136	162	193	218	245
Input Currer	nt @ 120V	0.247	0.469	0.680	0.939	1.150	1.361	1.619	1.829	2.041
Input Currer	nt @ 208V	0.144	0.273	0.396	0.546	0.669	0.792	0.942	1.070	1.188
Input Currer	nt @ 240V	0.126	0.240	0.348	0.480	0.588	0.696	0.828	0.944	1.045
Input Currer	nt @ 277V	0.111	0.212	0.310	0.424	0.522	0.620	0.734	0.844	0.929
Input Currer	nt @ 347V	0.087	0.160	0.240	0.319	0.400	0.481	0.559	0.650	0.721
Input Currer	nt @ 480V	0.066	0.118	0.177	0.237	0.295	0.354	0.414	0.483	0.532
Optics		SA1A	SA2A	SA3A	SA4A	SA5A	SA6A	SA7A	SA8A	SA9A
	Lumens	3,639	7,299	10,947	14,537	17,743	21,263	24,840	28,510	32,106
T2BC	BUG Rating	B0-U0-G1	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4
	Lumens per Watt	125	131	134	135	130	131	129	131	131
	Lumens	3,824	7,670	11,504	15,276	18,645	22,344	26,103	29,960	33,739
тзвс	BUG Rating	B0-U0-G1	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5
	Lumens per Watt	132	137	141	142	136	137	135	138	138
	Lumens	3,698	7,417	11,125	14,772	18,030	21,607	25,242	28,972	32,626
T4BC	BUG Rating	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	128	133	137	138	132	133	131	133	133
	Lumens	3,327	6,673	10,008	13,290	16,221	19,439	22,709	26,065	29,352
RBC	BUG Rating	B0-U0-G1	B0-U0-G2	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4
	Lumens per Watt	115	120	123	124	119	119	118	120	120
	Lumens	3,327	6,673	10,008	13,290	16,221	19,439	22,709	26,064	29,352
LBC	BUG Rating	B0-U0-G1	B0-U0-G2	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4
		115	120	123	124	119	119	118	120	120

#### Backlight Control Optics, Output Level 2, 4000K CCT, 70 CRI

Number of L	ight Squares	1	2	3	4	5	6	7	8	9
Nominal Pov	wer (Watts)	39	73	106	144	179	213	249	283	314
Input Curren	nt @ 120V	0.320	0.610	0.890	1.220	1.500	1.781	2.110	2.385	2.671
Input Curren	nt @ 208V	0.185	0.352	0.513	0.704	0.865	1.027	1.217	1.380	1.540
Input Curren	nt @ 240V	0.161	0.307	0.449	0.615	0.756	0.898	1.064	1.210	1.347
Input Curren	nt @ 277V	0.141	0.270	0.395	0.539	0.665	0.790	0.934	1.069	1.185
Input Curren	nt @ 347V	0.111	0.207	0.314	0.414	0.522	0.629	0.729	0.847	0.943
Input Curren	nt @ 480V	0.083	0.152	0.229	0.303	0.380	0.457	0.532	0.620	0.686
Optics		SA1B	SA2B	SA3B	SA4B	SA5B	SA6B	SA7B	SA8B	SA9B
	Lumens	4,549	9,135	14,026	17,976	22,214	26,621	31,146	35,647	39,532
T2BC	BUG Rating	B0-U0-G1	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5
	Lumens per Watt	118	125	132	125	124	125	125	126	126
	Lumens	4,780	9,599	14,739	18,890	23,344	27,975	32,730	37,460	41,542
тзвс	BUG Rating	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	124	132	139	131	131	131	131	132	133
	Lumens	4,622	9,282	14,253	18,267	22,574	27,052	31,650	36,224	40,172
T4BC	BUG Rating	B0-U0-G2	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	119	128	134	127	126	127	127	128	128
	Lumens	4,159	8,351	12,823	16,434	20,309	24,338	28,475	32,590	36,141
RBC	BUG Rating	B0-U0-G1	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4	B0-U0-G5
	Lumens per Watt	107	115	121	114	114	114	114	115	116
	Lumens	4,158	8,351	12,822	16,434	20,308	24,337	28,474	32,589	36,140
LBC	BUG Rating	B0-U0-G1	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4	B0-U0-G5
	Lumens per Watt	107	115	121	114	114	114	114	115	116

## Backlight Control Optics, Output Level 3, 4000K CCT, 70 CRI

Number of L	ight Squares	1	2	3	4	5	6	7	8	9
Nominal Pov	wer (Watts)	50	96	140	190	236	283	330	377	417
Input Currer	nt @ 120V	0.427	0.803	1.176	1.606	1.979	2.352	2.782	3.155	3.528
Input Currer	nt @ 208V	0.248	0.465	0.672	0.929	1.136	1.343	1.601	1.808	2.015
Input Currer	nt @ 240V	0.218	0.407	0.586	0.814	0.993	1.171	1.399	1.578	1.757
Input Currer	nt @ 277V	0.192	0.359	0.512	0.718	0.872	1.025	1.231	1.384	1.537
Input Currer	nt @ 347V	0.144	0.286	0.418	0.573	0.704	0.836	0.991	1.122	1.253
Input Currer	nt @ 480V	0.108	0.209	0.301	0.418	0.510	0.602	0.719	0.811	0.903
Optics		SA1C	SA2C	SA3C	SA4C	SA5C	SA6C	SA7C	SA8C	SA9C
	Lumens	5,676	11,326	16,920	22,428	27,616	33,094	38,563	43,758	49,195
T2BC	BUG Rating	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	113	118	121	118	117	117	117	116	118
	Lumens	5,965	11,902	17,780	23,568	29,020	34,777	40,524	45,983	51,697
ТЗВС	BUG Rating	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	119	124	127	124	123	123	123	121	124
	Lumens	5,768	11,509	17,194	22,791	28,063	33,630	39,187	44,466	49,992
T4BC	BUG Rating	B0-U0-G2	B0-U0-G3	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	115	120	122	120	119	119	119	117	120
	Lumens	5,189	10,355	15,468	20,504	25,247	30,255	35,255	40,004	44,976
RBC	BUG Rating	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	103	108	110	108	107	107	107	106	108
	Lumens	5,189	10,354	15,468	20,503	25,246	30,255	35,255	40,004	44,975
LBC	BUG Rating	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	103	108	110	108	107	107	107	106	108

### **Control Options**

#### 0-10V (DIM)

This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

#### Photocontrol (BPC, PR and PR7)

Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

#### After Hours Dim (AHD)

This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

#### Dimming Occupancy Sensor (SPB and MS/DIM-LXX)

These passive infrared (PIR) sensors are factory installed in the luminaire housing. When the SPB (FSP-321 or FSP-311) or MS/DIM (FSP-211) sensor options are selected, the occupancy sensor is connected to a dimming driver and the luminaire dims when no motion is detected. After a set period of time, the luminaire turns off, and when motion is detected, the luminaire returns to full light output. Both sensors are factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM sensor requires the FSIR-100 programming tool to adjust factory defaults. The SPB sensor default parameters are listed in the table below and can be configured utilizing the Sensor Configuration mobile application for iOS and Android devices. The SPB/X is configured to control only the specified number of light squares (See SPB/X Availability Table below.) An integral photocontrol can be activated with the app for "dusk-to-dawn" control or daylight harvesting - the factory default is off. Four sensor colors are available; Bronze, Black, Gray and White, and are automatically selected based on the luminaire finish as indicated by the table below.

#### SPB sensor finish matched to luminaire finish SPB Sensor Luminaire Finish Finish\* White White ВК Black Black GM Graphite Metallic Black ΒZ Bronze Bronze ΔΡ Gray Gray DP Dark Platinum Grav

*SPB beze	l color	automatically	selected t	pased	on luminaire finish

SPB/X	SPB/X Availability Table							
Fixture Square Count	Available SPB/X Square Count							
1	Not Available							
2	Not Available							
3	Not Available							
4	2							
5	2 or 3							
6	3							
7	2, 3, 4 or 5							
8	2, 3, 5 or 6							
9	3 or 6							

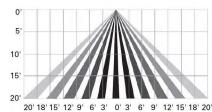
#### Default Program Settings (Out of the Box Functionality)

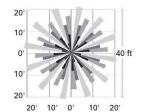
Occupancy Sensor					
Setting	MS/DIM	WaveLinx (WPS)			
High Mode %	100%	100%	100%	100%	
Low Mode %	10%	10%	50%	50%	
Time Delay	5 min	5 min	15 min	15 min	
Cut Off Delay	1 hr	1 hr	Disabled	Disabled	
Photocell Enabled	No	No	Yes	Yes	

#### WaveLinx Wireless Control and Monitoring System

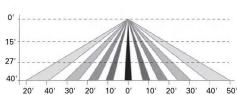
Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinx (WPS2 to WPS4) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinx Lite (WLS4 and WLS2) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx Lite mobile application for set-up and configuration. WAC not required. WaveLinx Outdoor Control Module (WOLC-7P-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

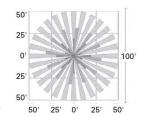
#### For mounting heights up to 15' (WPS2 and WLS2)





#### For mounting heights up to 40' (WPS4 and WLS4)





#### AirMesh (DIM10)

AirMesh integrated wireless controls system includes factory installed DIM10 Synapse control module and FSP-201 motion sensor; requires additional AirMesh components for operation. Contact Synapse at <a href="https://www.synapsewireless.com">www.synapsewireless.com</a> for product support, warranty and terms and conditions.

## **MERU Series**

LED GENERAL & EMERGENCY LIGHTING



The MERU Series is an architectural, low-profile outdoor light, offering "normally On" AC and emergency lighting with powerful LED illumination. The housing is fully sealed and gasketed, and has an IP65 rating. Designed for wall mounting with universal K/O pattern in back-plate for easy installation to most standard size junction boxes. Includes a single ½" NPT conduit entry in the top, center of the housing. Illumination provided by 8 high power LEDs which achieve 1,800 lumens in AC and 600 lumens in emergency. LED color at 4000K.

#### **PRODUCT SPECIFICATIONS**

#### **CONSTRUCTION**

Die cast aluminum housing with superior heat sink • Scratch resistant Polyester powder coat finish • UV resistant polycarbonate lens • Snap-fit housing and mounting plate are held together by four stainless steel clips • Universal mounting pattern molded into the back plate • 1/2" threaded top access for surface conduit installation • Silicone rubber seal with hollow center, shape adaptive design protects the electrical components • Junction box neoprene seal is attached to the back plate for a weather proof installation • Dark Bronze or White textured finish.

#### **ELECTRICAL**

Dual Voltage 120-277V 60Hz input • Solid state charging and switching • Battery low voltage disconnect • AC power indicator and test switch at the bottom of the unit • Standard with Self Diagnostics to monitor proper operation.

#### **LAMPS**

Supplied with eight (8) LG SMD 4000K LED'S • L70 > 72,000hours • 17 Watts total (32 Watts with IH option) • 1800 Lumens in AC mode, 600 Lumens in Emergency mode • Full cut-off optics for Dark Sky compliance

#### **BATTERY**

Maintenance-free, long-life rechargeable NiCad battery will operate fixture for a minimum of 90 minutes in the event of a power outage • 24 hour recharge after 90 minute discharge.

#### **CODE COMPLIANCE**

UL924 • Listed for wet location applications (0°C-50°C) • Optional "IH" cold weather package for (-40°C-50°C) • IP65 Rated • NFPA 101 Life Safety Code compliant • NFPA 70 • NEC and OSHA compliant • DLC Listed • RoHS Compliant

#### WARRANTY

5-year warranty. Product specifications subject to change without notice.

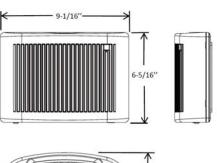
## **INSTALLATION**

#### MOUNTING

Suitable for indoor or outdoor wall mounting on junction box, or with surface conduit using the supplied 1/2" threaded top access • Mounting plate has molded universal mounting pattern for simple mounting over junction box.









#### ACEM Model (NiCad Battery Backup)

Integral photocell: Unit operates as a dusk to dawn luminaire and in the event of a power failure as an emergency light.

**Remote Switched**: The integral photocell can be defeated to allow remote switching for normal operation. In the event of a power failure unit operates as an emergency light.

BUG Rating: B1-U1-G0











ORDERING INFORMATION						
model	operation mode	housing color	options			
MERU-LED	ACEM = General & Emergency Lighting	DB = Dark Bronze	Self-Diagnostics & Photocell (Included Standard)			
	AC = General Lighting	WH = White BK = Black	IH = Internal Heater			
Ordering Example:	MERU-ACEM-DB	NK = Nickel				

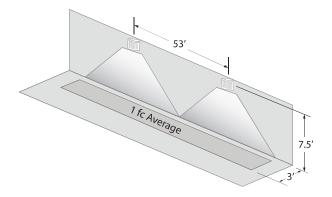
## **MERU Series**



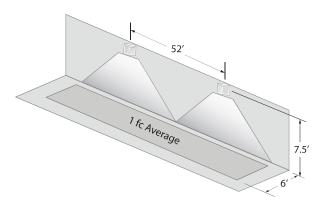
LED GENERAL & EMERGENCY LIGHTING

## **PHOTOMETRICS**

## 3ft Path Spacing



## 6ft Path Spacing



## **SELF DIAGNOSTICS**

## **Included Self Diagnostic**



#### **Manual Testing**

Press button once - 1 minute test Press button twice - 5 minute test Press button 3 times - 30 minute test Press button 4 times - 90 minute test

Full self-test, self-diagnostic system is standard in every unit, performs a monthly, test as well as continuously monitoring all functions to ensure reliability, a manual test may be initiated at any time



# FIXTURE TYPE OF & OG



# **HALO Commercial**

# HC6 | HM6 | 61 | 61PS

6-inch LED downlight and wall wash

#### **Typical Applications**

Office • Healthcare • Hospitality • Institutional • Mixed-Use/Retail















• Order Information page 2

- Energy & Performance Data page 8
- Connected Systems page 10
- Product Warranty

Interactive Menu





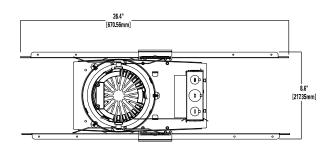


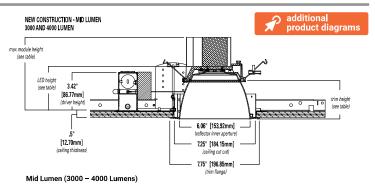


## **Top Product Features**

- New construction/remodel series; 500 to 6,000 lumens
- Narrow, Medium and Wide distributions; Wall wash with rotatable linear spread lens
- · 2700K, 3000K, 3500K, 4000K, 5000K CCT; 80 or 90 CRI
- Universal voltage 120V-277V; Standard 0-10V driver dims to 1%
- Mounting frame converts to remodel that installs from below the ceiling
- Quick Spec emergency backup mounting frames fast delivery option

## **Dimensional and Mounting Details**





Distribution	Max. Module Height	Trim Height	LED Height
Narrow	6.6"	3.4"	3.8"
Medium	6.7"	3.5"	3.9"
Wide	6.5"	3.3"	3.7"
Baffle	6.5"	3.3"	3.7"



## **Mounting Frame Order Information**

Sample Number: HC620D010REM7 - HM60525835 - 61MDC

A complete luminaire consists of a housing frame, LED module, and reflector (ordered separately)

Mounting Frame	Lumens	Driver Options	Factory Installed Emergency & Connected Lighting Options	Accessories (Order & Install Separately)
HC6 = 6" new construction downlight housing HC6CP = 6" new construction housing, Chicago Plenum - CCEA compliant	05 = 500 lm 07 = 750 lm 10 = 1000 lm 15 = 1500 lm 20 = 2000 lm 25 = 2500 lm 30 = 3000 lm 35 = 3500 lm 40 = 4000 lm 45 = 4500 lm 50 = 5000 lm 50 = 5000 lm 60 = 6000 lm	D010=UNV 120-277V, 50/60Hz, 0-10V 1%-100% dimming at 120-277V on 0-10V controls  Canada Option 500-4000 lumens: D010347 = 347VAC 50/60Hz 0-10V 1%-100% dimming. For 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000lm models only (**)  Canada Option 4500-6000 lumens: D010X347 = step down transformer factory installed (with standard "0010" 120V-277V LED driver). For 4500, 5000, 5500, 6000lm models only (**)  DLV = Distributed Low Voltage dimming driver 1%-100%, 1000-4000 lumens only. For use with DLVP system only, refer to DLVP specifications for details. (**)	REM7 = 7 watt emergency battery pack with remote test / indicator light, use with D010 only (102) (9)  REM14 = 14 watt emergency battery pack with remote test / indicator light, use with D010 only (102) (9)  IEM7 = 7 watt emergency battery pack with integral test / indicator light, use with D010 only (102) (9)  IEM14 = 14 watt emergency battery pack with integral test / indicator light, use with D010 only (102) (9)  BDD7ST = 7.5 watt Bodine self-test emergency battery pack with remote test / indicator light, use with D010 only (102) (9)  WTA = Factory WaveLinx PRO Tilemount Sensor Kit (9)  WTK = Factory WaveLinx LITE Tilemount Sensor Kit (9)  WTN = WaveLinx PRO Wireless Node without Sensor (19)  WEN = WaveLinx LITE Wireless Node without Sensor (19)  REMV7 = 7 watt emergency battery pack with remote test / indicator light, use with DLV only (102) (10) (10) (10) (10) (10) (10) (10) (10	HB128APK = L channel hanger bar, 26", pair (replacement)  RMB22 = Adjustable wood joist mounting bars, pair, extend to 22" long HSA6 = Slope Adapter for 6" Aperture Housings, Specify Slope (refer to instructions for installing housing and trim)  H347 = 347 to 120V step down transformer, 75VA  H347200 = 347 to 120V step down transformer, 200VA  WTA = Field WaveLinx PRO Tilemount Sensor Kit (9)  WTK = Field WaveLinx LITE Tilemount Sensor Kit (9)
Notes	Notes  (7) Marked Spacing: Center to Center of Adjacent Luminaires = 36° Center of Luminaire to Building Member = 18° Minimum overhead = 0,5	Notes (1) Not available with CP models	Notes  (1) Not available with CP models (2) Not available with D010347 (347V models) (3) ULus for U.S. only (4) WTA = WaveLinx PRO tilemount sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only, (Refer to WaveLinx PRO specifications).  (5) WTX = WaveLinx LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only, (Refer to WaveLinx LITE specifications).  (6) Emergency battery backup options are Non-IC only, and rated for a minimum starting temperature of 0°C (9) WPN = WaveLinx RD wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0°100 vitre only, Not compatible with 347V or Chicago plenum. (Refer to WaveLinx PRO specifications.)  (10) MLN = WaveLinx LITE wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired, Use with 0°100 vitre only. Not compatible with 347V or Chicago plenum. (Refer to WaveLinx RID specifications.)	Notes  (4) WTA = WaveLinx PRO tilemount sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only. (Refer to WaveLinx PRO specifications.).  (5) WTK = WaveLinx LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only. (Refer to WaveLinx LITE specifications.)

## **LED Module Order Information**

LED Module	Lumens	CRI/	ССТ
HM6 = 6" LED Modules For use with HC6 - HC6CP New Construction housings only	<b>0525</b> = 500 - 2500 lumen <b>3040</b> = 3000-4000 lumen <b>4560</b> = 4500-6000 lumen	827 = 80CRI, 2700K 830 = 80CRI, 3000K 835 = 80CRI, 3500K 840 = 80CRI, 4000K 850 = 80CRI, 5000K	927 = 90CRI, 2700K 930 = 90CRI, 3000K 935 = 90CRI, 3500K 940 = 90CRI, 4000K 950 = 90CRI, 5000K
Notes	Notes	Notes	



## **Trim Order Information**

Reflector	Distribution <sup>(8)</sup>	Finish	Flange	Accessories
61 = 6" conical reflector	ND = narrow 55° beam angle 0.97 SC MD = medium 60° beam angle 1.10 SC WD = wide 65° beam angle 1.28 SC RWW = rotatable wall wash with linear spread lens	C = Specular clear H = Semi-specular clear W = White	Blank = Polished flange standard with C & H reflectors Blank = White flange standard with W reflector WF = White flange option available with C & H reflectors BF = Black Flange option available with C, H & W reflectors	61RWWPK = Replacement part kit - wall wash lens insert - for use with 61RWW* only.
Notes	Notes	Notes	Notes	Notes
	(8) Values are nominal, with specular clear reflector, other finishes and field results may vary.			

Baffle	Distribution <sup>(8)</sup>	Finish	Flange	Accessories
61 = 6" baffle reflector	WD = wide 65° beam angle 1.28 SC (nominal) RWW = rotatable wall wash with linear spread lens	BB = Black baffle WB = White baffle	Blank = White flange standard with BB, & WB reflectors BF = Black flange option available with BB reflectors	61RWWPK = Replacement part kit - wall wash lens insert - for use with 61RWW* only.
Notes	Notes (8) Values are nominal, with specular clear reflector, other finishes and field results may vary.	Notes	Notes	Notes

Reflector	Distribution <sup>(8)</sup>	Finish	Flange
61PS = 6" non-conductive polymer 'dead front' conical reflector (9)	MD = medium 60° beam angle 1.10 SC (nominal)	<b>W</b> = White	Blank = White flange standard with W reflector BF = Black Flange option available with W reflectors
Notes	Notes	Notes	Notes
(9) 61PS is 1000-2000 lumens Non-IC rated. 500 & 750 lumens IC rated. 61PS is not for use over 2000lm in Non-IC or over 750lm in IC.	(8) Values are nominal, with specular clear reflector, other finishes and field results may vary.		

IEM Reflector	Distribution <sup>(8)</sup>	Finish	Flange	Integral Emergency
<b>61</b> = 6" IEM reflector for integral emergency only	ND = narrow 55° beam angle 0.97 SC MD = medium 60° beam angle 1.10 SC WD = wide 65° beam angle 1.28 SC	C = Specular clear H = Semi-specular clear W = White	Blank = Polished flange standard with C & H reflectors Blank = White flange standard with W reflector WF = White flange option available with C & H reflectors BF = Black flange option available with C, H, & W reflectors	IEM = Reflector for use with integral emergency housings only. Provides access hole for integral emergency test switch.
Notes	Notes  (8) Values are nominal, with specular clear reflector, other finishes and field results may vary.	Notes	Notes	Notes

IEM Baffle	Distribution <sup>(8)</sup>	Finish	Flange	Integral Emergency
<b>61</b> = 6" IEM baffle reflector for integral emergency only	WD = wide 65° beam angle 1.28 SC (nominal)	BB = Black baffle WB = White baffle	Blank = White flange standard with BB, & WBreflectors BF = Black flange option with BB reflectors	IEM = Reflector for use with integral emergency housings only. Provides access hole for integral emergency test switch.
Notes	Notes  (8) Values are nominal, with specular clear reflector, other finishes and field results may vary.	Notes	Notes	Notes

## **Product Specifications**

#### **Housing Frame**

- · Boat shaped galvanized steel plaster frame with adjustable plaster lip
- Accommodates 1/2" to 1-1/2" thick ceilings
- · Installs in new construction or from below the finished ceiling (non-accessible) for remodeling (with mounting bars removed)
- · Provided with two remodel clips to secure the frame to the ceiling

#### **Universal Mounting Bracket**

- · Adjusts 2" vertically from above and below the
- Use with the included mounting bars or with 1/2" Electric Metallic Tube (EMT)
- Removable to facilitate remodeling installation from below the finished ceiling

#### **Mounting Bars**

- Captive pre-installed No Fuss™ mounting bars lock to T-grid with screwdriver or pliers
- Centering detents allow for consistent positioning of fixtures

#### **LED Module**

- · Proximity phosphors over chip on board LEDs provide a uniform source with high efficiency and
- · Available in 80 or 90 color rendering index (CRI)
- Color accuracy within 3 SDCM provides color consistency and uniformity
- 90 CRI option: R9>50 (refer to chromaticity information for details)
- Available in 2700K, 3000K, 3500K, 4000K and 5000K correlated color temperature (CCT)
- Lumen options include 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000, 5500, 6000 lumens (nominal)
- · Passive thermal management achieves 60,000 hours at 70% lumen maintenance (L70) in insulated ceilings (IC) and non-IC applications
- Integral connector allows quick connection to housing flex

#### Reflector

- · Self-flanged aluminum reflectors available in narrow, medium or wide distribution patterns
- Medium distribution polymer non-conductive matte white reflector may be used to meet local codes for 'dead front' applications (500 & 750 lumen max. in IC and 2000 lumen max. in Non-IC)
- · Integral diffuse lens provides visual shielding
- · Wall wash reflector features a rotatable linear spread lens for alignment of vertical illumination
- Reflectors attach to LED module with three speed clamps
- · Available in multiple painted or plated finishes

#### **Reflector/Module Retention**

· Reflector/module assembly is securely retained in the housing with two torsion springs

- · Field-replaceable constant current driver provides low noise operation
- · Universal 120-277VAC 50/60Hz input standard
- · Continuous, 1% to 100% dimming with 0-10V analog control
- · Optional low-voltage DC driver for use with Distributed Low Voltage Power (DLVP) system
- · Distributed Low Voltage Power (DLVP) system combines power, lighting and controls with ease of installation (refer to DLVP Design Guide at www.cooperlighting.com for details)

#### **Canada Options**

- 347VAC 50/60Hz; 1% dimming on 0-10V analog control, for 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000 lumen models only
- · 347V step down transformer factory installed with the standard "D010" 120V-277V. LED driver on 4500, 5000, 5500, 6000 lumen models only

#### **Emergency Option**

- Provides 90 minutes of standby lighting, meeting most life safety codes for egress lighting
- Available with integral or remote charge indicator and test switch
- Available Self-Test (self-diagnostic) with remote charge indicator and test switch
- Quick Spec emergency ordering option for quick-turn projects

#### **Connected Lighting System**

Two WaveLinx connected solutions to choose from. Refer to WaveLinx system specifications and application guides for details.

#### WaveLinx PRO Tilemount Sensor Kit

· WaveLinx PRO WTA tilemount sensor kit offers daylight dimming, PIR motion sensing, scene and zone configuration, automatic commissioning; and optional RLTS - Real Time Location Services available.

#### WaveLinx PRO Wireless Node

· WaveLinx PRO WPN wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only. Note: Not compatible with 347V or Chicago plenum.

#### WaveLinx LITE Tilemount Sensor Kit

WaveLinx LITE WTK tilemount sensor kit offers daylight dimming and PIR motion sensing, scene and grouping configuration.

#### WaveLinx LITE Wireless Node

WaveLinx LITE WLN wireless node provides luminaire level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only. Note: Not compatible with 347V or Chicago plenum.

#### WaveLinx Tilemount Sensor Kits Application

- The WTA and WTK tilemount sensor kits include a control module mounted on the luminaire junction box via 1/2" knock-out, and a tilemount sensor on 54-inch whip; for ceiling installation by directmount spring clips or via mounting bracket in octagon ceiling boxes.
- The WTA and WTK tilemount sensor kits may be ordered as factory installed on the luminaire, or ordered separately as a field installed accessory kit.
- Note: WaveLinx PRO devices are only compatible with the WaveLinx PRO system.
- Note: WaveLinx LITE devices are only compatible with the WaveLinx LITE system.

#### Junction Box

- · Galvanized steel junction box
- · 20 in3 internal volume excluding voltage barrier
- · 25 in<sup>3</sup> internal total volume
- Voltage barrier for 0-10V dimming wires (occupies one 1/2" pry-out space)
- Listed for eight #12 AWG (four in, four out) 90°C conductors and feed-thru branch wiring
- Three 1/2" and two 3/4" trade size pry-outs available
- Three 4-port push wire nuts for mains voltage with 1-port for fixture connection

#### Compliance

- cULus Certified to UL 1598 / C22.2 No. 250.0. suitable for damp locations and wet locations in covered ceilings only
- Emergency options provided with UL Listed emergency drivers to UL 924 / C22.2 No. 141, suitable for indoor/damp locations
- IP20 Above finished ceiling; IP65 Below finished ceilina
- Non-Insulated ceiling (Non-IC) rated for 2500, 3000, 3500, 4000, 4500, 5000, 5500, 6000 lumen models (insulation must be kept 3" from top and sides)
- Insulated ceiling (IC) rated for 500, 750, 1000, 1500, 2000 lumen models and suitable for direct contact with air permeable insulation\* (IC models are also suitable for Non-IC installations)
- Non-IC marked spacing required for 4500, 5000, 5500, 6000 lumen models
  - Marked Spacing Center to Center of Adjacent Luminaires = 36'
  - Center of Luminaire to Building Member = 18"
  - Minimum overhead = 0.5"
- · Airtight per ASTM-E283-04
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
- · EMI/RFI emissions FCC CFR Title 47 Part 15 Class A at 120/277V
- Contains no mercury or lead and RoHS compliant
- Photometric testing completed in accordance of
- Lumen maintenance projection in accordance of IES I M-80-08 and TM-21-11
- 500, 750, 1,000, 1,500 and 2,000 lumen, 90 CRL ICAT models may be used to comply with State of California Title 24 residential code, per JA8 certification standards
- May be used to comply with State of California Title 24 non-residential code as a dimmable LED luminaire
- ENERGY STAR® certified, reference certified light fixtures database
  - \*Not for use in direct contact with spray foam insulation, consult NEMA LSD57-2013

· Five year limited warranty, consult website for details. www.cooperlighting.com/legal

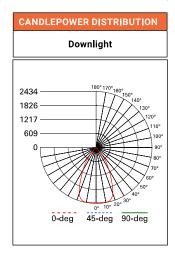


## **Photometric Data**



## NARROW DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

NARROW (55° BEAM*)				
Test Number	P581878			
Housing	HC620D010			
Module	HM60525835			
Reflector	61NDC			
Lumens	2228 Lm			
Efficacy	111.4 Lm/W			
sc	0.93			
UGR	11.7			



CONE OF LIGHT					
0° D					
МН	FC	L	W		
5.5'	80.2	5	5		
7'	49.5	6.4	6.4		
8'	37.9	7.4	7.4		
9'	30	8.2	8.2		
10'	24.3	9.2	9.2		
12'	16.9	11	11		

CANDELA TABLE		
Degrees Vertical	Candela	
0	2427	
5	2422	
15	2405	
25	1621	
35	761	
45	118	
55	12	
65	3	
75	2	
85	0	
90	0	

ZONAL LUMEN SUMMARY			
Lumens	% Fixture		
1636	73.4		
2098	94.2		
2223	99.8		
2228	100		
0	0		
2228	100		
	Lumens 1636 2098 2223 2228 0		

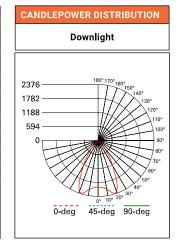
LUMINANCE		
Average Candela Degrees	Average 0° Luminance	
45	9187	
55	1118	
65	376	
75	318	
85	0	

\*Value are nominal with specular clear reflectors, other finishes and field results may vary. SC = Spacing Criteria UGR = Unified Glare Rating

To estimate lumen output in emergency mode, multiply nominal battery wattage by LPW. Example: 6W x 115 LPW = 690 Lumens.

#### MEDIUM DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

MEDIUM (60° BEAM*)		
Test Number	P581875	
Housing	HC620D010	
Module	HM60525835	
Reflector	61MDC	
Lumens	2307 Lm	
Efficacy	115.3 Lm/W	
sc	1.06	
UGR	11.8	



0°   D			
МН	FC	L	w
5.5'	68.7	5.6	5.6
7'	42.4	7.2	7.2
8'	32.5	8.2	8.2
9'	25.7 9.4 9.4		
10'	20.8	10.4	10.4
12'	14.4	12.4	12.4

CONE OF LIGHT

CANDELA TABLE		
Degrees Vertical	Candela	
0	1998	
5	2022	
15	2307	
25	1842	
35	796	
45	126	
55	15	
65	4	
75	2	
85	0	
90	0	

ZONAL LUMEN SUMMARY			
Zone	Lumens	% Fixture	
0-30	1671	72.4	
0-40	2163	93.8	
0-60	2301	99.7	
0-90	2307	100	
90-180	0	0	
0-180	2307	100	
	-	-	

LUMINANCE		
Average Candela Degrees	Average 0° Luminance	
45	9753	
55	1395	
65	571	
75	318	
85	0	

\*Value are nominal with specular clear reflectors, other finishes and field results may vary. SC = Spacing Criteria UGR = Unified Glare Rating

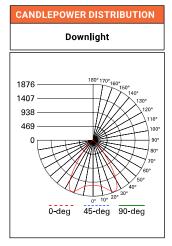
To estimate lumen output in emergency mode, multiply nominal battery wattage by LPW. Example: 6W x 115 LPW = 690 Lumens.

## **Photometric Data**



#### WIDE DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

WIDE (65° BEAM*)		
Test Number	P581885	
Housing	HC620D010	
Module	HM60525835	
Reflector	61WDC	
Lumens	2359 Lm	
Efficacy	118 Lm/W	
sc	1.28	
UGR	11.6	



CONE OF LIGHT				
0°		 D 		
МН	FC	L	w	
5.5'	50.5	7	7	
7'	31.2	8.8	8.8	
8'	23.9	10.2	10.2	
9'	9' 18.8 11.4 11.4			
10'	15.3	12.8	12.8	
12'	10.6	15.4	15.4	

CANDELA TABLE		
Degrees Vertica <b>l</b>	Candela	
0	1526	
5	1540	
15	1685	
25	1861	
35	1027	
45	252	
55	32	
65	6	
75	2	
85	0	
90	0	

ZONAL LUMEN SUMMARY			
Zone	Lumens	% Fixture	
0-30	1461	61.9	
0-40	2105	89.2	
0-60	2351	99.6	
0-90	2359	100	
90-180	0	0	
0-180	2359	100	
		l .	

LUMINANCE					
Average Candela Degrees	Average 0° Luminance				
45	19506				
55	3078				
65	765				
75	318				
85	0				

\*Value are nominal with specular clear reflectors, other finishes and field results may vary. SC = Spacing Criteria UGR = Unified Glare Rating

To estimate lumen output in emergency mode, multiply nominal battery wattage by LPW. Example: 6W x 115 LPW = 690 Lumens.

#### **Photometric Multipliers (Nominal Lumen Values)**

500 Lumen	750 Lumen	1000 Lumen	1500 Lumen	2000 Lumen	2500 Lumen	3000 Lumen	3500 Lumen
0.33	0.44	0.54	0.74	1.00	1.12	1.46	1.76
4000 Lumen	4500 Lumen	5000 Lumen	5500 Lumen	6000 Lumen			

2.65

2.38

Multipliers for relative lumen values with other series models.

2.17

#### **Color Finish Multipliers**

Finish code	С	Н	W/WB	ВВ
Finish	Specular Clear	Semi-Specular	Matte White White Baffle	Black Baffle
Multiplier	1.00	0.92	0.91	0.82

2.28

Multipliers for relative lumen values with other color finishes.

### CCT Multipliers - 80CRI

2700K	3000K	3500K	4000K	5000K
0.92	0.98	1.00	1.03	1.03

Multipliers for relative lumen values with other series color temperatures.

### CCT Multipliers - 90CRI

2700K	3000K		4000K	5000K
0.77	0.84	0.89	0.90	0.90

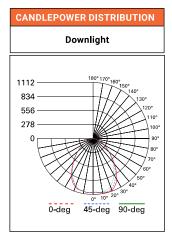
Multipliers for relative lumen values with other series color temperatures.

## **Photometric Data**



#### WALL WASH DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

W	ALL WASH
Test Number	P581882
Housing	HC620D010
Module	HM60525835
Reflector	61RWWC
Lumens	2179 Lm
Efficacy	109 Lm/W
sc	1.15



CANDEL	A TABLE
Degrees Vertical	Candela
0	1080
5	1081
15	1112
25	1034
35	800
45	514
55	319
65	184
75	85
85	12
90	0

ZONAL LUMEN SUMMARY							
Zone	Lumens	% Fixture					
0-30	849	39					
0-40	1313	60.2					
0-60	1978	90.8					
0-90	2179	100					
90-180	0	0					
0-180	2179	100					

LUMINANCE					
Average Candela Degrees	Average 0° Luminance				
45	39810				
55	30479				
65	23907				
75	17983				
85	7359				

SC = Spacing Criteria, nominal for specular clear reflector, other may vary.

To estimate lumen output in emergency mode, multiply nominal battery wattage by LPW. Example: 6W x 115 LPW = 690 Lumens.

#### SINGLE UNIT FOOTCANDLES 2.5' from wall (distance from fixture along wall) 19.3 13.8 6.1 0.3 0.1 29.1 12.3 22.6 5.7 2.5 1.2 0.6 27.6 22.5 13.8 7.3 1.9 3.7 1 4 21 18.2 12.4 7.4 4.2 2.4 1.4 5 14.4 13.1 9.9 6.6 2.5 4.1 1.6 6 9.7 7.5 6.7 6.4 5.5 4.3 3.2 2.2 1.5 47 46 41 3 4 27 2 14 3.4 3.3 3.1 2.7 2.2 1.7 1.3 10 2.5 2.5 2.1 1.8 1.1

MULTIPLE UNIT FOOTCANDLES							
2.5' from wall (Distance from fixture along 3"\					all ure along		
1	21.5	19.1	21.5		20	12.1	20
2	34.7	34.4	34.7		31.6	24.6	31.6
3	34.9	36 34.9			31.3	27.6	31.3
4	28.4	30.7	30.7 28.4 23.2 21 16.8 15.2 12 11		25.2	24.8	25.2
5	21	23.2			18.6	19.8	18.6
6	15.2	16.8			13.4	15	13.4
7	11	12			9.9	11	9.9
8	8.1	8.7	8.1		7.4	8.2	7.4
9	6.1	6.5	6.1		5.6	6.2	5.6
10	4.6	4.9	4.6		4.3	4.7	4.3

## Photometric Multipliers (Nominal Lumen Values)

500 Lumen	750 Lumen	1000 Lumen	1500 Lumen	2000 Lumen	2500 Lumen	3000 Lumen	3500 Lumer
0.33	0.44	0.54	0.74	1.00	1.12	1.46	1.76
4000 Lumen	4500 Lumen	5000 Lumen	5500 Lumen	6000 Lumen			

2.65

2.38

Multipliers for relative lumen values with other series models.

2.17

#### **Color Finish Multipliers**

1.81

Finish code	С	Н	W/WB	ВВ
Finish	Specular Clear	Semi-Specu <b>l</b> ar	Matte White White Baffle	Black Baffle
Multiplier	1.00	0.92	0.91	0.82

2.28

Multipliers for relative lumen values with other color finishes.

#### CCT Multipliers - 80CRI

2700K	3000K	3500K	4000K	5000K
0.92	0.98	1.00	1.03	1.03

Multipliers for relative lumen values with other series color temperatures.

#### CCT Multipliers - 90CRI

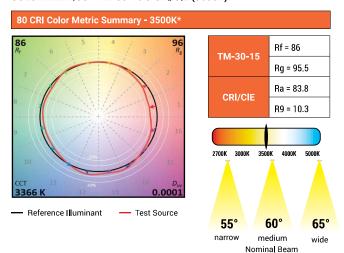
2700K	3000K	3500K	4000K	5000K
0.77	0.84	0.89	0.90	0.90

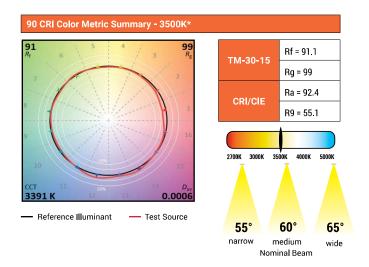
Multipliers for relative lumen values with other series color temperatures.



## **Energy & Performance Data**

#### COLOR METRICS - TM-30-15 & CRI/CIE (3500K)





\* Color values are based on 61WDWB reflector, other finishes and field results may vary.

#### **ENERGY DATA**

Series	500 l	umen	750 I	umen	1000	lumen	1500	umen	2000	umen
Input Voltage 120-277VAC	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V
Input Current (A)	0.051	0.026	0.067	0.036	0.083	0.039	0.119	0.053	0.171	0.077
Input Power (W)	6.1	6.5	7.9	8.3	10	10.4	14.5	14.5	20.9	20.6
In-rush (A)	1.9	8.4	2	8.4	2.2	8.5	2.7	8.5	2.1	9.7
Inrush duration (µs)	251	135	237	133	250	134	250	139	245	131
THD (%)	6.2	13.5	7.4	8.8	5.4	10.3	10	6.7	6.5	7.9
PF	≥ 0.99	≥ 0.9	≥ 0.98	≥ 0.92	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.97	≥ 0.99	≥ 0.96

Series	2500	umen	3000	lumen	3500	lumen	4000	umen	4500 l	umen
Input Voltage 120-277VAC	120V	277V								
Input Current (A)	0.23	0.103	0.24	0.107	0.292	0.152	0.351	0.159	0.384	0.172
Input Power (W)	27.5	27.5	28.6	28.5	34.6	35.1	42.1	42.1	45.9	45.6
In-rush (A)	2.5	5.6	2.5	11.6	3.4	13.9	3.1	14.7	3.1	14.8
Inrush duration (µs)	232	123	216	111	183	95	200	98	202	100
THD (%)	6.5	8.1	7.8	8.3	5.6	10	4.1	9.5	4.5	8.5
PF	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.93	≥ 0.99	≥ 0.94	≥ 0.99	≥ 0.95

Series	5000 lumen		5500 lumen		6000 lumen	
Input Voltage 120-277VAC	120V	277V	120V	277V	120V	277V
Input Current (A)	0.419	0.186	0.457	0.201	0.489	0.214
Input Power (W)	50.1	49.5	54.6	53.7	58.4	57.4
In-rush (A)	3.1	15	3.2	14.8	3.4	14.8
Inrush duration (µs)	202	117	196	131	192	121
THD (%)	5.5	7.6	7	7.2	8.1	7.2
PF	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.97

Minimum starting temperature -30°C (-22°F)\*

(Nominal input 120-277VAC & 100% of rated output power)

Sound Rating: Class A standards

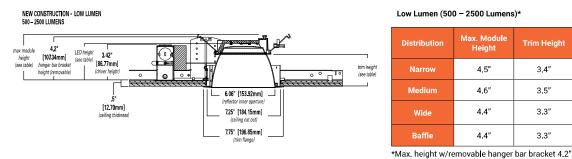
#### Notes:

\* Emergency Battery packs are rated for a minimum starting temperature of 0°C.



## **Dimensional and Mounting Details**

#### NEW CONSTRUCTIONS - LOW LUMEN 500 - 2500 LUMENS



#### Low Lumen (500 - 2500 Lumens)\*

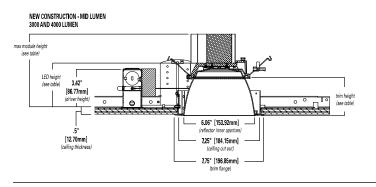
Distribution	Max. Module Height	Trim Height	LED Height	
Narrow	4.5"	3.4"	3.8"	
Medium	4.6"	3.5"	3.9"	
Wide	4.4"	3.3"	3.7"	
Baffle	4.4"	3.3"	3.7"	





Low Lumen Module

#### **NEW CONSTRUCTIONS - MID LUMEN 3000 - 4000 LUMENS**



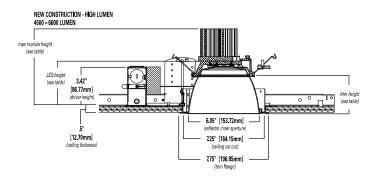
#### Mid Lumen (3000 - 4000 Lumens)

Distribution	Max. Module Height	Trim Height	LED Height	
Narrow	6.6"	3.4"	3.8"	
Medium	Medium 6.7"		3.9"	
Wide	6.5"	3.3"	3.7"	
Baffle	Baffle 6.5"		3.7"	



Mid Lumen Module

#### **NEW CONSTRUCTIONS - HIGH LUMEN 4500 - 6000 LUMENS**



#### High Lumen (4500 - 6000 Lumens)

Distribution	Max. Module Height	Trim Height	LED Height	
Narrow	6.9"	3.4"	3.8"	
Medium	7.0"	3.5"	3.9"	
Wide	6.8"	3.3"	3.7"	
Baffle	Baffle 6.8"		3.7"	



High Lumen Module

#### **Connected Solutions**

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#### **WaveLinx LITE - WTK Tilemount Sensor**

WaveLinx LITE devices only compatible with the WaveLinx LITE system.

- · Intuitive Android™ or Apple® iOS® app for basic system code compliant set up and configuration via Bluetooth
- Up to 28 unique areas per project site (WaveLinx LITE Bluetooth network)
- Up to 50 devices for an area, any one of 16 control zones, up to 6 occupancy sets, and custom lighting scenes
- Automatic occupancy or vacancy, sensor sensitivity, daylight dimming, etc. configurable through the app
- Refer to the WaveLinx system specifications for details









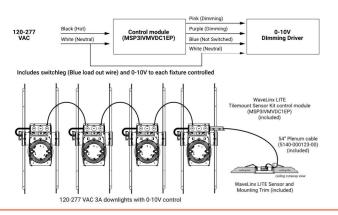








#### **WaveLinx LITE WTK Tilemount Wiring Diagram**



# **WaveLinx LITE Bluetooth Enabled System** Secure Porta \$ \* 8

## WaveLinx PRO - WTA Tilemount Sensor

WaveLinx PRO devices only compatible with the WaveLinx PRO system.

- WaveLinx PRO tilemount functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with Wireless Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building Network Installations



#### WaveLinx mobile app settings











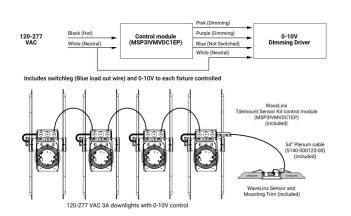




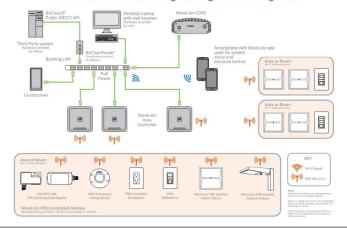




#### **WaveLinx WTA Tilemount Wiring Diagram**



#### **WaveLinx CORE Building Management Integration**



#### Connected Solutions



#### WaveLinx LITE Wireless Node - WLN

WaveLinx LITE devices only compatible with the WaveLinx LITE system.

- Intuitive Android™ or Apple® iOS® app for basic system code compliant set up and configuration via Bluetooth
- Up to 28 unique areas per project site (WaveLinx LITE Bluetooth network)
- Up to 50 devices for an area, any one of 16 control zones, up to 6 occupancy sets, and custom lighting scenes
- Refer to the WaveLinx system specifications for details

WaveLinx mobile app settings









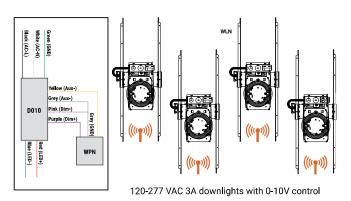








#### WaveLinx LITE Wireless Node (WLN) Wiring Diagram





## **WaveLinx PRO Wireless Node - WPN**

WaveLinx PRO devices only compatible with the WaveLinx PRO system.

- · WaveLinx Wireless functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with WaveLinx Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building Network Installations



#### WaveLinx mobile app settings









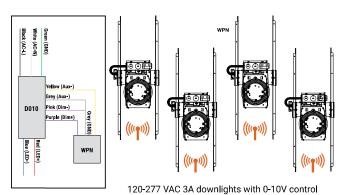








#### WaveLinx PRO Wireless Node (WPN) Wiring Diagram



#### **WaveLinx CORE Building Management Integration**

