EM-3

POWDER COATED STEEL MATTE BLACK FINISH

Composite Lumber Trex Cladding
Color: Havana Gold

EM-4

RECLAIMED METAL PANEL: VINTAGE CAR HOOD OCCURS AT FACE OF THE "T' ELEMENT ONLY

EWS-2

ALUMINUM STOREFRONT SYSTEM FINISH: ANODIZED BLACK

EWF-1

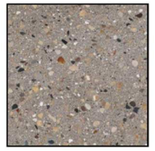
BELDEN NORMAN BRICK MASONRY MEDIUM RANGE, SMOOTH, IRON SPOT. MORTAR TO MATCH SOLOMON PRODUCTS IO H. WEATHERED HORIZONTAL STRIKE. VERTICAL JOINTS ARE FLUSH

P-10

Super Spec 23
Sherwin Williams Paint

EWF-2

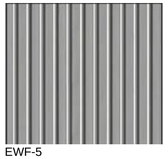
"SW 7669 SUMMIT GRAY" PORTLAND DRYVIT



Premier Ultra Burnished Masonry Units. "Dusk"

EWF-5

"132 MOUNTAIN FOG" PORTLAND DRYVIT



EWF-5
Berridge BR-12 S-Panel Metal Cladding Pre-Weathered Galvalume

Profile:

4 A-4 WEST ELEVATION
SCALE: 1/8" = 1'-0"

3 A-4 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"

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

1 A-4 NORTH ELEVATION
SCALE: 1/8" = 1'-0"

ADA ARCHITECTS
17710 Detroit Ave Lakewood, Ohio 44107
Phone: (216) 521-5134
Fax: (216) 521-4824
www.adaarchitects.com

ADA JOB NUMBER:
24503

SEAL:

CONSULTANT:

PROTOTYPE: NTV GROUND UP
SCHEME A

RAISING CANE'S
RESTAURANT NO.: #RC1353
7456 MINERAL POINT ROAD
MADISON, WI 53717

SHEET REVISIONS

REV	DATE	DESCRIPTION

DATE:
10.30.25

PROPOSED EXTERIOR ELEVATIONS

SHEET NAME:

A-4

SHEET NUMBER:

D-Series Size 0
LED Area Luminaire

Catalog Number: DSX0-LED-P5-50K-70CRI-T4M-MVOLT-RPA-DDBXD

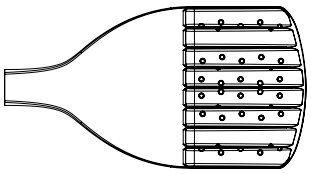
Notes:

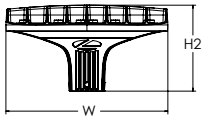
Type: SP1

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

Specifications

EPA:	0.44 ft² (0.04 m²)
Length:	26.18" (66.5 cm)
Width:	14.06" (35.7 cm)
Height H1:	2.26" (5.7 cm)
Height H2:	7.46" (18.9 cm)
Weight:	23 lbs (10.4 kg)





Introduction

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

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications, with typical energy savings of 70% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX0 LED P6 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX0 LED	P5	50K	70 CRI	T4M	MVOLT	RPA
Series	**LEDs**	**Color temperature** [2]	**Color Rendering Index** [2]	**Distribution**	**Voltage**	**Mounting**

Series
- DSX0 LED

LEDs

Forward optics
- P1, P2, P3, P4, P5, P6, P7

Rotated optics
- P10 [1], P11 [1], P12 [1], P13 [1]

Color temperature [2]

(this section 70CRI only)
- 30K 3000K
- 40K 4000K
- 50K 5000K

(this section 80CRI only, extended lead times apply)
- 27K 2700K
- 30K 3000K
- 35K 3500K
- 40K 4000K
- 50K 5000K

Color Rendering Index [2]
- 70CRI
- 70CRI
- 70CRI
- 80CRI
- 80CRI
- 80CRI
- 80CRI
- 80CRI

Distribution
- AFR Automotive front row
- T1S Type I short
- T2M Type II medium
- T3M Type III medium
- T3LG Type III low glare [3]
- T4M Type IV medium
- T4LG Type IV low glare [3]
- TFTM Forward throw medium
- T5M Type V medium
- T5LG Type V low glare
- T5W Type V wide
- BLC3 Type III backlight control [3]
- BLC4 Type IV backlight control [3]
- LCCO Left corner cutoff [3]
- RCCO Right corner cutoff [3]

Voltage
- MVOLT (120V-277V) [4]
- HVOLT (347V-480V) [5,6]
- XVOLT (277V-480V) [7,8]

Mounting

Shipped included
- SPA Square pole mounting (#8 drilling, 3.5" min. SQ pole)
- RPA Round pole mounting (#8 drilling, 3" min. RND pole)
- SPA5 Square pole mounting (#5 drilling. 3" min. SQ pole) [9]
- RPA5 Round pole mounting (#5 drilling, 3" min. RND pole) [9]
- SPA8N Square narrow pole mounting (#8 drilling, 3" min. SQ pole)
- WBA Wall bracket [10]
- MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)

			DDBXD
Control options		**Other options**	**Finish** *(required)*

Control options

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

Other options

Shipped installed
- HS Houseside shield (black finish standard) [20]
- L90 Left rotated optics [1]
- R90 Right rotated optics [1]
- CCE Coastal Construction [21]
- HA 50°C ambient operation [22]

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

Finish *(required)*
- DDBXD Dark Bronze
- DBLXD Black
- DNAXD Natural Aluminum
- DWHXD White
- DDBTXD Textured dark bronze
- DBLBXD Textured black
- DNATXD Textured natural aluminum
- DWHGXD Textured white

Ordering Information

Accessories

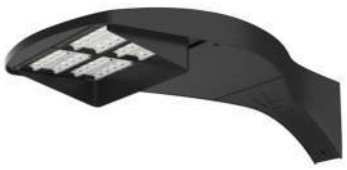
Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [23]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [23]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [23]
DSHORT SBK	Shorting cap [23]
DSX0HS P#	House-side shield (enter package number P1-7, P10-13 in place of #)
DSXRPA (FINISH)	Round pole adapter (#8 drilling, specify finish)
DSXRPA5 (FINISH)	Round pole adapter #5 drilling (specify finish)
DSXSPA5 (FINISH)	Square pole adapter #5 drilling (specify finish)
DSX0EGSR (FINISH)	External glare shield (specify finish)
DSX0BSDB (FINISH)	Bird spike deterrent bracket (specify finish)

NOTES

1 Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.
2 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
3 T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
4 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
5 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
6 HVOLT not available with package P1, P2 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
7 XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
8 XVOLT not available in packages P1, P2 or P10.
9 SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
10 WBA cannot be combined with Type 5 distributions plus photocell (PER).
11 NLTAIR2 and PIRHN must be ordered together. For more information on nLight Air 2.
12 NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50 and DMG. NLTAIR2 PIRHN not available with P1, P2 and P10 using HVOLT. NLTAIR2 PIRHN not available with P1, P2 and P10 using XVOLT.
13 PIR not available with NLTAIR2, PER, PER5, PER7, FAO BL30, BL50 and DMG. PIR not available with P1, P2 and P10 using HVOLT. PIR not available with P1, P2 and P10 using XVOLT.
14 PER/PER5/PER7 not available with NLTAIR2, PIR, BL30, BL50. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
15 FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, or DMG.
16 BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO and DMG.
17 DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50 and FAO.
18 Reference Motion Sensor Default Settings table on page 4 to see functionality.
19 Reference Controls Options table on page 4.
20 Option HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
21 CCE option not available with option BS and EGSR. Contact Technical Support for availability.
22 Option HA not available with performance packages P6, P7, P12 and P13.
23 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.

Shield Accessories

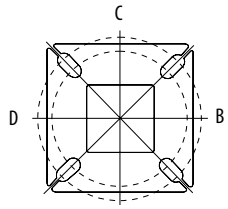


External Glare Shield (EGSR)

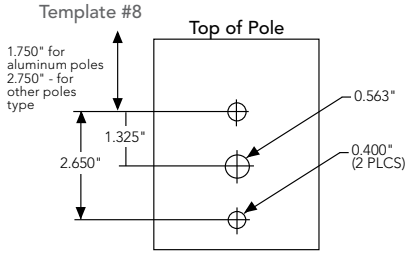
House Side Shield (HS)

Drilling

HANDHOLE ORIENTATION
(from top of pole)



Template #8



Tenon Mounting Slipfitter

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

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

DSX0 Area Luminaire - EPA

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

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX0 with SPA	0.44	0.88	0.96	1.18	---	1.16
DSX0 with SPA5, SPA8N	0.51	1.02	1.06	1.26	---	1.29
DSX0 with RPA, RPA5	0.51	1.02	1.06	1.26	1.24	1.29
DSX0 with MA	0.64	1.28	1.24	1.67	1.70	1.93

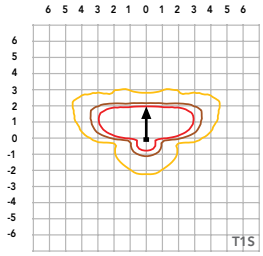
Photometric Diagrams

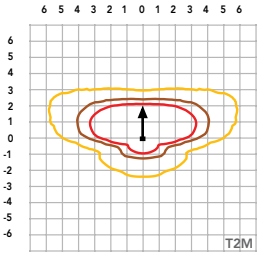
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's homepage.

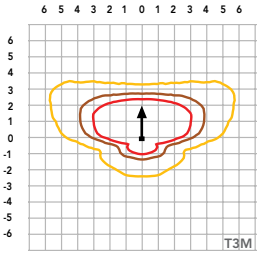
Isofootcandle plots for the DSX0 LED P7 40K 70CRI. Distances are in units of mounting height (20').

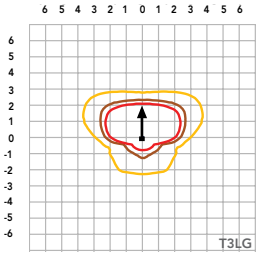
LEGEND

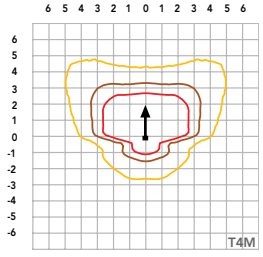
- 0.1 fc
- 0.5 fc
- 1.0 fc

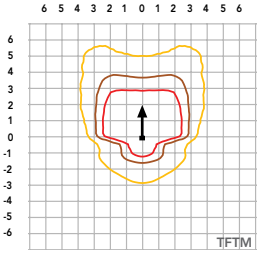


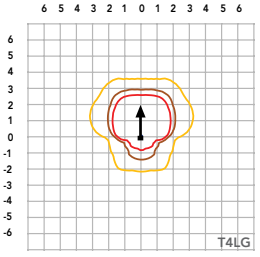


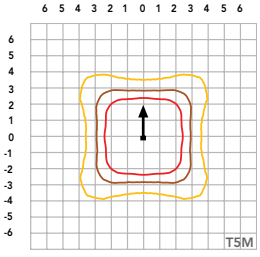


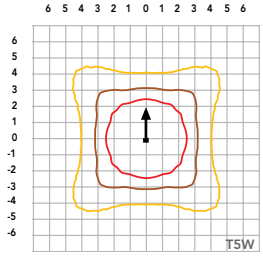


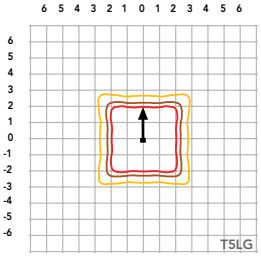


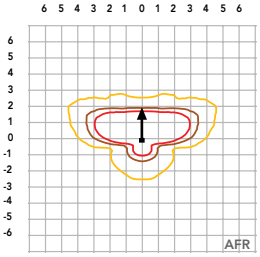


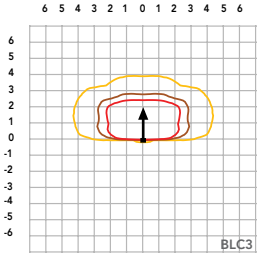


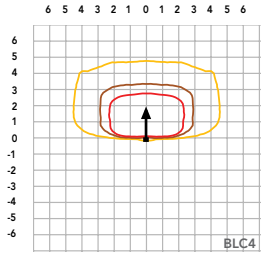


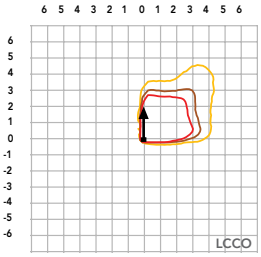


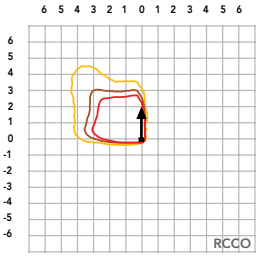












Lumen Ambient Temperature (LAT) Multipliers

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

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

Projected LED Lumen Maintenance

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

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

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.94
50,000	0.89
100,000	0.80

FAO Dimming Settings

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

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

Electrical Load

	Performance Package	LED Count	Drive Current (mA)	Wattage	Current (A) 120V	208V	240V	277V	347V	480V
Forward Optics (Non-Rotated)	P1	20	530	34	0.28	0.16	0.14	0.12	0.10	0.07
	P2	20	700	45	0.38	0.22	0.19	0.16	0.13	0.09
	P3	20	1050	69	0.57	0.33	0.29	0.25	0.20	0.14
	P4	20	1400	94	0.78	0.45	0.39	0.34	0.27	0.19
	P5	40	700	89	0.75	0.43	0.38	0.33	0.26	0.19
	P6	40	1050	136	1.14	0.66	0.57	0.49	0.39	0.29
	P7	40	1300	170	1.42	0.82	0.71	0.62	0.49	0.36
Rotated Optics (Requires L90 or R90)	P10	30	530	51	0.42	0.24	0.21	0.18	0.15	0.11
	P11	30	700	67	0.57	0.33	0.28	0.25	0.20	0.14
	P12	30	1050	103	0.86	0.50	0.43	0.37	0.30	0.22
	P13	30	1300	129	1.07	0.62	0.54	0.46	0.37	0.27

LED Color Temperature / Color Rendering Multipliers

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

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

Motion Sensor Default Settings

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

Controls Options

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

Performance Data

Lumen Output

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

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	33W	20	530	T1S	4,906	1	0	1	148	5,113	1	0	1	154	5,213	1	0	1	157
				T2M	4,545	1	0	2	137	4,736	1	0	2	143	4,829	1	0	2	145
				T3M	4,597	1	0	2	138	4,791	1	0	2	144	4,885	1	0	2	147
				T3LG	4,107	1	0	1	124	4,280	1	0	1	129	4,363	1	0	1	131
				T4M	4,666	1	0	2	141	4,863	1	0	2	146	4,957	1	0	2	149
				T4LG	4,244	1	0	1	128	4,423	1	0	1	133	4,509	1	0	1	136
				TFTM	4,698	1	0	2	141	4,896	1	0	2	147	4,992	1	0	2	150
				T5M	4,801	3	0	1	145	5,003	3	0	1	151	5,101	3	0	1	154
				T5W	4,878	3	0	1	147	5,084	3	0	2	153	5,183	3	0	2	156
				T5LG	4,814	2	0	1	145	5,018	2	0	1	151	5,115	2	0	1	154
				BLC3	3,344	0	0	1	101	3,485	0	0	1	105	3,553	0	0	1	107
				BLC4	3,454	0	0	2	104	3,599	0	0	2	108	3,670	0	0	2	111
				RCCO	3,374	0	0	1	102	3,517	0	0	1	106	3,585	0	0	1	108
				LCCO	3,374	0	0	1	102	3,517	0	0	1	106	3,585	0	0	1	108
				AFR	4,906	1	0	1	148	5,113	1	0	1	154	5,213	1	0	1	157
P2	45W	20	700	T1S	6,328	1	0	1	140	6,595	1	0	1	146	6,724	1	0	1	149
				T2M	5,862	1	0	2	130	6,109	1	0	2	135	6,228	1	0	2	138
				T3M	5,930	1	0	3	131	6,180	1	0	3	137	6,301	1	0	3	140
				T3LG	5,297	1	0	1	117	5,521	1	0	1	122	5,628	1	0	1	125
				T4M	6,018	1	0	3	133	6,272	1	0	3	139	6,395	1	0	3	142
				T4LG	5,474	1	0	1	121	5,705	1	0	1	126	5,816	1	0	1	129
				TFTM	6,060	1	0	3	134	6,316	1	0	3	140	6,439	1	0	3	143
				T5M	6,192	3	0	1	137	6,453	3	0	2	143	6,579	3	0	2	146
				T5W	6,293	3	0	2	139	6,558	3	0	2	145	6,686	3	0	2	148
				T5LG	6,210	2	0	1	138	6,472	3	0	1	143	6,598	3	0	1	146
				BLC3	4,313	0	0	2	96	4,495	0	0	2	100	4,583	0	0	2	102
				BLC4	4,455	0	0	2	99	4,643	0	0	2	103	4,733	0	0	2	105
				RCCO	4,352	0	0	2	96	4,536	0	0	2	100	4,624	0	0	2	102
				LCCO	4,352	0	0	2	96	4,536	0	0	2	100	4,624	0	0	2	102
				AFR	6,328	1	0	1	140	6,595	1	0	1	146	6,724	1	0	1	149
P3	69W	20	1050	T1S	9,006	1	0	2	131	9,386	1	0	2	136	9,569	1	0	2	139
				T2M	8,343	2	0	3	121	8,694	2	0	3	126	8,864	2	0	3	129
				T3M	8,439	2	0	3	122	8,795	2	0	3	128	8,967	2	0	3	130
				T3LG	7,539	1	0	2	109	7,857	1	0	2	114	8,010	1	0	2	116
				T4M	8,565	2	0	3	124	8,926	2	0	3	129	9,100	2	0	3	132
				T4LG	7,790	1	0	2	113	8,119	1	0	2	118	8,277	1	0	2	120
				TFTM	8,624	1	0	3	125	8,988	1	0	3	130	9,163	2	0	3	133
				T5M	8,812	3	0	2	128	9,184	4	0	2	133	9,363	4	0	2	136
				T5W	8,955	4	0	2	130	9,333	4	0	2	135	9,515	4	0	2	138
				T5LG	8,838	3	0	1	128	9,211	3	0	1	134	9,390	3	0	1	136
				BLC3	6,139	0	0	2	89	6,398	0	0	2	93	6,522	0	0	2	95
				BLC4	6,340	0	0	3	92	6,607	0	0	3	96	6,736	0	0	3	98
				RCCO	6,194	1	0	2	90	6,455	1	0	2	94	6,581	1	0	2	95
				LCCO	6,194	1	0	2	90	6,455	1	0	2	94	6,581	1	0	2	95
				AFR	9,006	1	0	2	131	9,386	1	0	2	136	9,569	1	0	2	139
P4	93W	20	1400	T1S	11,396	1	0	2	122	11,877	1	0	2	128	12,109	2	0	2	130
				T2M	10,557	2	0	3	113	11,003	2	0	3	118	11,217	2	0	3	121
				T3M	10,680	2	0	3	115	11,130	2	0	3	120	11,347	2	0	3	122
				T3LG	9,540	1	0	2	103	9,942	1	0	2	107	10,136	1	0	2	109
				T4M	10,839	2	0	3	117	11,296	2	0	3	121	11,516	2	0	4	124
				T4LG	9,858	1	0	2	106	10,274	1	0	2	110	10,474	1	0	2	113
				TFTM	10,914	2	0	3	117	11,374	2	0	3	122	11,596	2	0	3	125
				T5M	11,152	4	0	2	120	11,622	4	0	2	125	11,849	4	0	2	127
				T5W	11,332	4	0	3	122	11,811	4	0	3	127	12,041	4	0	3	129
				T5LG	11,184	3	0	1	120	11,656	3	0	2	125	11,883	3	0	2	128
				BLC3	7,768	0	0	2	83	8,096	0	0	2	87	8,254	0	0	2	89
				BLC4	8,023	0	0	3	86	8,362	0	0	3	90	8,524	0	0	3	92
				RCCO	7,838	1	0	2	84	8,169	1	0	2	88	8,328	1	0	2	90
				LCCO	7,838	1	0	2	84	8,169	1	0	2	88	8,328	1	0	2	90
				AFR	11,396	1	0	2	122	11,877	1	0	2	128	12,109	2	0	2	130

Performance Data

Lumen Output

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

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P5	90W	40	700	T1S	12,380	2	0	2	137	12,902	2	0	2	143	13,154	2	0	2	146
				T2M	11,468	2	0	3	127	11,952	2	0	3	133	12,185	2	0	3	135
				T3M	11,601	2	0	3	129	12,091	2	0	3	134	12,326	2	0	4	137
				T3LG	10,363	2	0	2	115	10,800	2	0	2	120	11,011	2	0	2	122
				T4M	11,774	2	0	4	131	12,271	2	0	4	136	12,510	2	0	4	139
				T4LG	10,709	1	0	2	119	11,160	2	0	2	124	11,378	2	0	2	126
				TFTM	11,856	2	0	3	132	12,356	2	0	4	137	12,596	2	0	4	140
				T5M	12,114	4	0	2	134	12,625	4	0	2	140	12,871	4	0	2	143
				T5W	12,310	4	0	3	137	12,830	4	0	3	142	13,080	4	0	3	145
				T5LG	12,149	3	0	2	135	12,662	3	0	2	141	12,908	3	0	2	143
				BLC3	8,438	0	0	2	94	8,794	0	0	2	98	8,966	0	0	2	99
				BLC4	8,715	0	0	3	97	9,083	0	0	3	101	9,260	0	0	3	103
				RCCO	8,515	1	0	2	94	8,874	1	0	2	98	9,047	1	0	2	100
				LCCO	8,515	1	0	2	94	8,874	1	0	2	98	9,047	1	0	2	100
				AFR	12,380	2	0	2	137	12,902	2	0	2	143	13,154	2	0	2	146
P6	137W	40	1050	T1S	17,545	2	0	3	128	18,285	2	0	3	133	18,642	2	0	3	136
				T2M	16,253	3	0	4	119	16,939	3	0	4	124	17,269	3	0	4	126
				T3M	16,442	2	0	4	120	17,135	3	0	4	125	17,469	3	0	4	128
				T3LG	14,687	2	0	2	107	15,306	2	0	2	112	15,605	2	0	2	114
				T4M	16,687	2	0	4	122	17,391	3	0	5	127	17,730	3	0	5	129
				T4LG	15,177	2	0	2	111	15,817	2	0	2	115	16,125	2	0	2	118
				TFTM	16,802	2	0	4	123	17,511	2	0	4	128	17,852	2	0	5	130
				T5M	17,168	4	0	2	125	17,893	5	0	3	131	18,241	5	0	3	133
				T5W	17,447	5	0	3	127	18,183	5	0	3	133	18,537	5	0	3	135
				T5LG	17,218	4	0	2	126	17,944	4	0	2	131	18,294	4	0	2	134
				BLC3	11,959	0	0	3	87	12,464	0	0	3	91	12,707	0	0	3	93
				BLC4	12,352	0	0	4	90	12,873	0	0	4	94	13,124	0	0	4	96
				RCCO	12,067	1	0	3	88	12,576	1	0	3	92	12,821	1	0	3	94
				LCCO	12,067	1	0	3	88	12,576	1	0	3	92	12,821	1	0	3	94
				AFR	17,545	2	0	3	128	18,285	2	0	3	133	18,642	2	0	3	136
P7	171W	40	1300	T1S	20,806	2	0	3	122	21,683	2	0	3	127	22,106	2	0	3	129
				T2M	19,273	3	0	4	113	20,086	3	0	4	118	20,478	3	0	4	120
				T3M	19,497	3	0	5	114	20,319	3	0	5	119	20,715	3	0	5	121
				T3LG	17,416	2	0	2	102	18,151	2	0	2	106	18,504	2	0	2	108
				T4M	19,787	3	0	5	116	20,622	3	0	5	121	21,024	3	0	5	123
				T4LG	17,997	2	0	2	105	18,756	2	0	2	110	19,121	2	0	2	112
				TFTM	19,924	3	0	5	117	20,765	3	0	5	122	21,170	3	0	5	124
				T5M	20,359	5	0	3	119	21,217	5	0	3	124	21,631	5	0	3	127
				T5W	20,689	5	0	3	121	21,561	5	0	3	126	21,982	5	0	3	129
				T5LG	20,418	4	0	2	120	21,279	4	0	2	125	21,694	4	0	2	127
				BLC3	14,182	0	0	3	83	14,780	0	0	3	87	15,068	0	0	3	88
				BLC4	14,647	0	0	4	86	15,265	0	0	4	89	15,562	0	0	4	91
				RCCO	14,309	1	0	3	84	14,913	1	0	3	87	15,204	1	0	3	89
				LCCO	14,309	1	0	3	84	14,913	1	0	3	87	15,204	1	0	3	89
				AFR	20,806	2	0	3	122	21,683	2	0	3	127	22,106	2	0	3	129

Performance Data

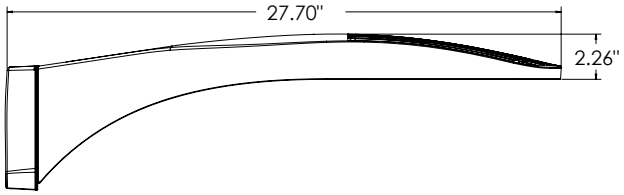
Lumen Output

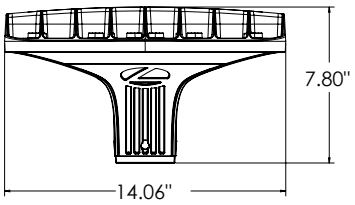
Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Rotated Optics

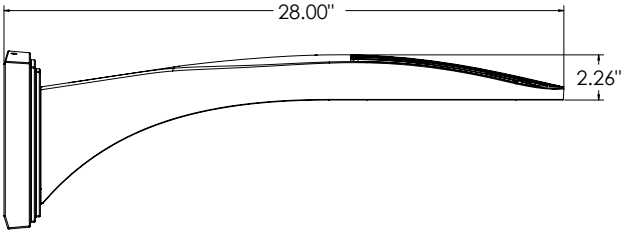
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P10	51W	30	530	T1S	7,399	3	0	3	145	7,711	3	0	3	151	7,862	3	0	3	154
				T2M	6,854	3	0	3	135	7,144	3	0	3	140	7,283	3	0	3	143
				T3M	6,933	3	0	3	136	7,225	3	0	3	142	7,366	3	0	3	145
				T3LG	6,194	2	0	2	122	6,455	2	0	2	127	6,581	2	0	2	129
				T4M	7,036	3	0	3	138	7,333	3	0	3	144	7,476	3	0	3	147
				T4LG	6,399	2	0	2	126	6,669	2	0	2	131	6,799	2	0	2	134
				TFTM	7,086	3	0	3	139	7,385	3	0	3	145	7,529	3	0	3	148
				T5M	7,239	3	0	2	142	7,545	3	0	2	148	7,692	3	0	2	151
				T5W	7,357	3	0	2	145	7,667	3	0	2	151	7,816	4	0	2	154
				T5LG	7,260	3	0	1	143	7,567	3	0	1	149	7,714	3	0	1	152
				BLC3	5,043	3	0	3	99	5,256	3	0	3	103	5,358	3	0	3	105
				BLC4	5,208	3	0	3	102	5,428	3	0	3	107	5,534	3	0	3	109
				RCCO	5,089	0	0	2	100	5,303	0	0	2	104	5,407	0	0	2	106
				LCCO	5,089	0	0	2	100	5,303	0	0	2	104	5,407	0	0	2	106
				AFR	7,399	3	0	3	145	7,711	3	0	3	151	7,862	3	0	3	154
P11	68W	30	700	T1S	9,358	3	0	3	138	9,753	3	0	3	143	9,943	3	0	3	146
				T2M	8,669	3	0	3	127	9,034	3	0	3	133	9,211	3	0	3	135
				T3M	8,768	3	0	3	129	9,138	3	0	3	134	9,316	3	0	3	137
				T3LG	7,833	3	0	3	115	8,164	3	0	3	120	8,323	3	0	3	122
				T4M	8,899	3	0	3	131	9,274	3	0	3	136	9,455	3	0	3	139
				T4LG	8,093	3	0	3	119	8,435	3	0	3	124	8,599	3	0	3	126
				TFTM	8,962	3	0	3	132	9,340	3	0	3	137	9,522	3	0	3	140
				T5M	9,156	4	0	2	135	9,542	4	0	2	140	9,728	4	0	2	143
				T5W	9,304	4	0	2	137	9,696	4	0	2	143	9,885	4	0	2	145
				T5LG	9,182	3	0	1	135	9,569	3	0	1	141	9,756	3	0	1	143
				BLC3	6,378	3	0	3	94	6,647	3	0	3	98	6,777	3	0	3	100
				BLC4	6,587	3	0	3	97	6,865	3	0	3	101	6,999	3	0	3	103
				RCCO	6,436	0	0	2	95	6,707	0	0	2	99	6,838	0	0	2	101
				LCCO	6,436	0	0	2	95	6,707	0	0	2	99	6,838	0	0	2	101
				AFR	9,358	3	0	3	138	9,753	3	0	3	143	9,943	3	0	3	146
P12	103W	30	1050	T1S	13,247	3	0	3	128	13,806	3	0	3	134	14,075	3	0	3	136
				T2M	12,271	4	0	4	119	12,789	4	0	4	124	13,038	4	0	4	126
				T3M	12,412	4	0	4	120	12,935	4	0	4	125	13,187	4	0	4	128
				T3LG	11,089	3	0	3	107	11,556	3	0	3	112	11,782	3	0	3	114
				T4M	12,597	4	0	4	122	13,128	4	0	4	127	13,384	4	0	4	129
				T4LG	11,457	3	0	3	111	11,940	3	0	3	116	12,173	3	0	3	118
				TFTM	12,686	4	0	4	123	13,221	4	0	4	128	13,479	4	0	4	130
				T5M	12,960	4	0	2	125	13,507	4	0	2	131	13,770	4	0	2	133
				T5W	13,170	4	0	3	127	13,726	4	0	3	133	13,994	4	0	3	135
				T5LG	12,998	3	0	2	126	13,546	3	0	2	131	13,810	3	0	2	134
				BLC3	9,029	3	0	3	87	9,409	3	0	3	91	9,593	3	0	3	93
				BLC4	9,324	4	0	4	90	9,718	4	0	4	94	9,907	4	0	4	96
				RCCO	9,110	1	0	2	88	9,495	1	0	2	92	9,680	1	0	2	94
				LCCO	9,110	1	0	2	88	9,494	1	0	2	92	9,680	1	0	2	94
				AFR	13,247	3	0	3	128	13,806	3	0	3	134	14,075	3	0	3	136
P13	129W	30	1300	T1S	15,704	3	0	3	122	16,366	3	0	3	127	16,685	4	0	4	130
				T2M	14,547	4	0	4	113	15,161	4	0	4	118	15,457	4	0	4	120
				T3M	14,714	4	0	4	114	15,335	4	0	4	119	15,634	4	0	4	121
				T3LG	13,145	3	0	3	102	13,700	3	0	3	106	13,967	3	0	3	108
				T4M	14,933	4	0	4	116	15,563	4	0	4	121	15,867	4	0	4	123
				T4LG	13,582	3	0	3	105	14,155	3	0	3	110	14,431	3	0	3	112
				TFTM	15,039	4	0	4	117	15,673	4	0	4	122	15,979	4	0	4	124
				T5M	15,364	4	0	2	119	16,013	4	0	2	124	16,325	4	0	2	127
				T5W	15,613	5	0	3	121	16,272	5	0	3	126	16,589	5	0	3	129
				T5LG	15,409	3	0	2	120	16,059	3	0	2	125	16,372	4	0	2	127
				BLC3	10,703	4	0	4	83	11,155	4	0	4	87	11,372	4	0	4	88
				BLC4	11,054	4	0	4	86	11,520	4	0	4	89	11,745	4	0	4	91
				RCCO	10,800	1	0	2	84	11,256	1	0	2	87	11,475	1	0	3	89
				LCCO	10,800	1	0	2	84	11,255	1	0	2	87	11,475	1	0	3	89
				AFR	15,704	3	0	3	122	16,366	3	0	3	127	16,685	4	0	4	130

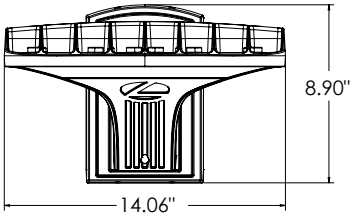
Dimensions



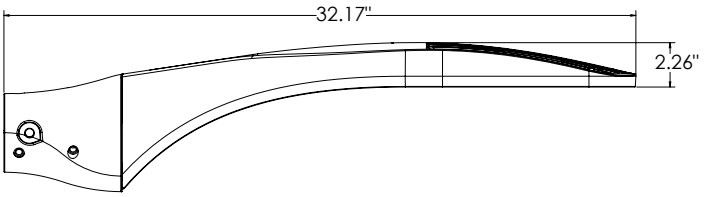


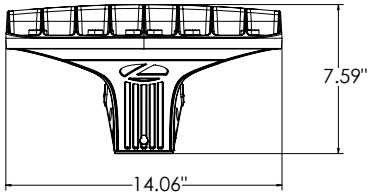
DSX0 with RPA, RPA5, SPA5, SPA8N mount
Weight: 25 lbs





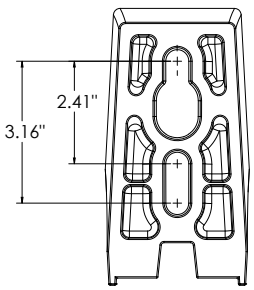
DSX0 with WBA mount
Weight: 27 lb



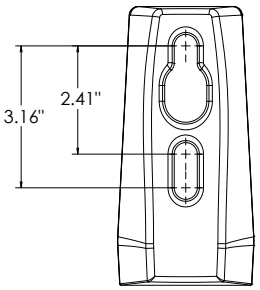


DSX0 with MA mount
Weight: 28 lbs

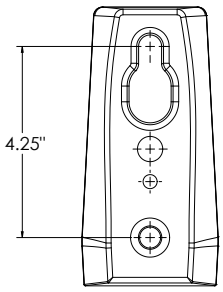
SPA (STANDARD ARM)



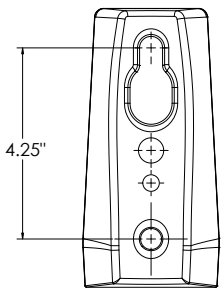
RPA



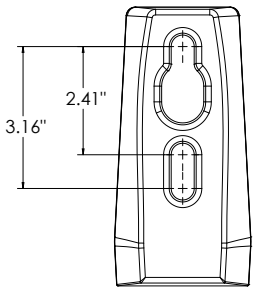
SPA5



RPA5



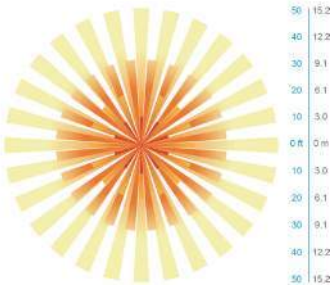
SPA8N



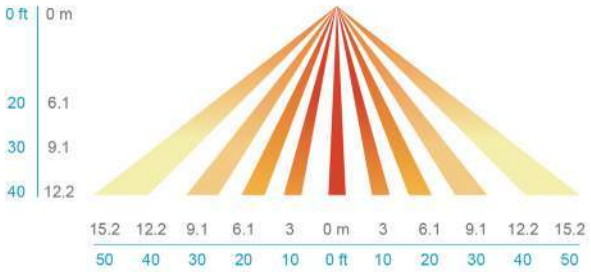
nLight Control - Sensor Coverage and Settings

nLight Sensor Coverage Pattern

NLTAIR2 PIRHN



Top



Side

FEATURES & SPECIFICATIONS

INTENDED USE

The sleek design of the D-Series Size 0 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and pedestrian areas.

CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 3G. Low EPA (0.44 ft^2) for optimized pole wind loading.

FINISH

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

COASTAL CONSTRUCTION (CCE)

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

OPTICS

Precision-molded proprietary silicone lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K or 5000 K (70 CRI) configurations. 80CRI configurations are also available. The D-Series Size 0 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L80/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS

The DSX0 LED area luminaire has a number of control options. DSX Size 0, comes standard with 0-10V dimming driver. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. PIR integrated motion sensor with on-board photocell feature field-adjustable programing and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

nLIGHT AIR CONTROLS

The DSX0 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

INSTALLATION

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

LISTINGS

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

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

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

WARRANTY

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

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

D-Series Size 0
LED Area Luminaire

Catalog Number: DSX0-LED-P5-50K-70CRI-MVOLT-RPA-DDBXD

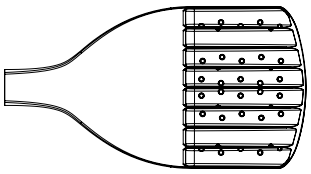
Notes:

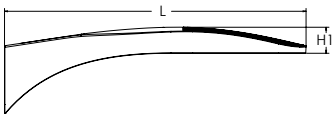
Type: SP2

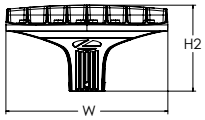
Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA:	0.44 ft² (0.04 m²)
Length:	26.18" (66.5 cm)
Width:	14.06" (35.7 cm)
Height H1:	2.26" (5.7 cm)
Height H2:	7.46" (18.9 cm)
Weight:	23 lbs (10.4 kg)







Introduction

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

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications, with typical energy savings of 70% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX0 LED P6 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX0 LED	P5	50K	70 CRI	T5M	MVOLT	RPA
Series	**LEDs**	**Color temperature** [2]	**Color Rendering Index** [2]	**Distribution**	**Voltage**	**Mounting**

DSX0 LED

Forward optics
P1 P5
P2 P6
P3 P7
P4

Rotated optics
P10 [1] P12 [1]
P11 [1] P13 [1]

(this section 70CRI only)

30K	3000K	70CRI
40K	4000K	70CRI
50K	5000K	70CRI

(this section 80CRI only, extended lead times apply)

27K	2700K	80CRI
30K	3000K	80CRI
35K	3500K	80CRI
40K	4000K	80CRI
50K	5000K	80CRI

AFR	Automotive front row
T1S	Type I short
T2M	Type II medium
T3M	Type III medium
T3LG	Type III low glare [3]
T4M	Type IV medium
T4LG	Type IV low glare [3]
TFTM	Forward throw medium
T5M	Type V medium
T5LG	Type V low glare
T5W	Type V wide
BLC3	Type III backlight control [3]
BLC4	Type IV backlight control [3]
LCCO	Left corner cutoff [3]
RCCO	Right corner cutoff [3]

MVOLT	(120V-277V) [4]
HVOLT	(347V-480V) [5,6]
XVOLT	(277V-480V) [7,8]

Shipped included

SPA	Square pole mounting (#8 drilling, 3.5" min. SQ pole)
RPA	Round pole mounting (#8 drilling, 3" min. RND pole)
SPA5	Square pole mounting (#5 drilling. 3" min. SQ pole) [9]
RPA5	Round pole mounting (#5 drilling, 3" min. RND pole) [9]
SPA8N	Square narrow pole mounting (#8 drilling, 3" min. SQ pole)
WBA	Wall bracket [10]
MA	Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)

DDBXD

Control options

Shipped installed

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

Other options

Shipped installed

HS	Houseside shield (black finish standard) [20]
L90	Left rotated optics [1]
R90	Right rotated optics [1]
CCE	Coastal Construction [21]
HA	50°C ambient operation [22]

Shipped separately

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

Finish *(required)*

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

Ordering Information

Accessories

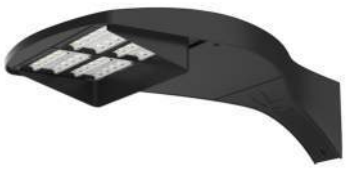
Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [23]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [23]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [23]
DSHORT SBK	Shorting cap [23]
DSX0HS P#	House-side shield (enter package number P1-7, P10-13 in place of #)
DSXRPA (FINISH)	Round pole adapter (#8 drilling, specify finish)
DSXRPA5 (FINISH)	Round pole adapter #5 drilling (specify finish)
DSXSPA5 (FINISH)	Square pole adapter #5 drilling (specify finish)
DSX0EGSR (FINISH)	External glare shield (specify finish)
DSX0BSDB (FINISH)	Bird spike deterrent bracket (specify finish)

NOTES

1 Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.
2 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
3 T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
4 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
5 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
6 HVOLT not available with package P1, P2 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
7 XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
8 XVOLT not available in packages P1, P2 or P10.
9 SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
10 WBA cannot be combined with Type 5 distributions plus photocell (PER).
11 NLTAIR2 and PIRHN must be ordered together. For more information on nLight Air 2.
12 NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50 and DMG. NLTAIR2 PIRHN not available with P1, P2 and P10 using HVOLT. NLTAIR2 PIRHN not available with P1, P2 and P10 using XVOLT.
13 PIR not available with NLTAIR2, PER, PER5, PER7, FAO BL30, BL50 and DMG. PIR not available with P1, P2 and P10 using HVOLT. PIR not available with P1, P2 and P10 using XVOLT.
14 PER/PER5/PER7 not available with NLTAIR2, PIR, BL30, BL50. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
15 FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, or DMG.
16 BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO and DMG.
17 DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50 and FAO.
18 Reference Motion Sensor Default Settings table on page 4 to see functionality.
19 Reference Controls Options table on page 4.
20 Option HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
21 CCE option not available with option BS and EGSR. Contact Technical Support for availability.
22 Option HA not available with performance packages P6, P7, P12 and P13.
23 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.

Shield Accessories

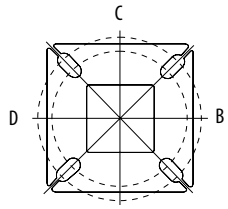


External Glare Shield (EGSR)

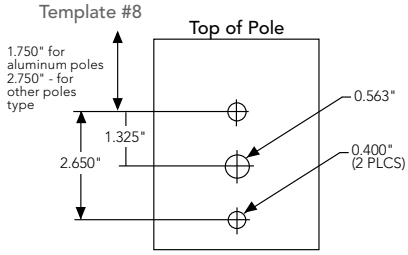
House Side Shield (HS)

Drilling

HANDHOLE ORIENTATION
(from top of pole)



Template #8



Tenon Mounting Slipfitter

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

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

DSX0 Area Luminaire - EPA

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

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX0 with SPA	0.44	0.88	0.96	1.18	---	1.16
DSX0 with SPA5, SPA8N	0.51	1.02	1.06	1.26	---	1.29
DSX0 with RPA, RPA5	0.51	1.02	1.06	1.26	1.24	1.29
DSX0 with MA	0.64	1.28	1.24	1.67	1.70	1.93

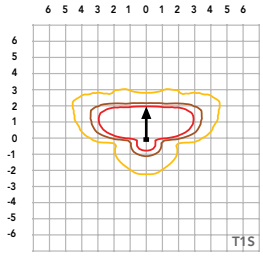
Photometric Diagrams

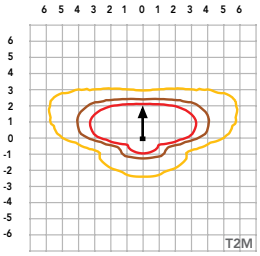
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's homepage.

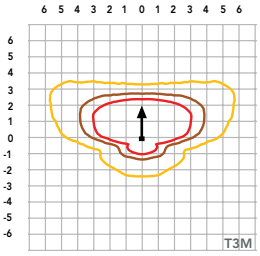
Isofootcandle plots for the DSX0 LED P7 40K 70CRI. Distances are in units of mounting height (20').

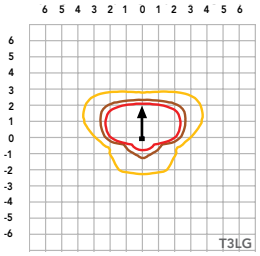
LEGEND

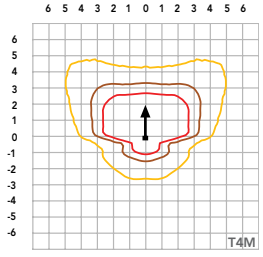
- 0.1 fc
- 0.5 fc
- 1.0 fc

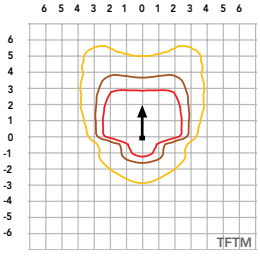


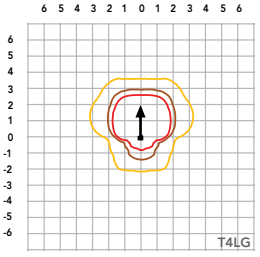


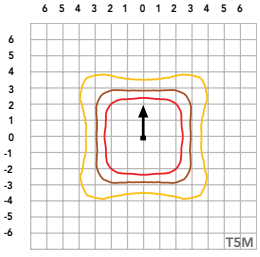


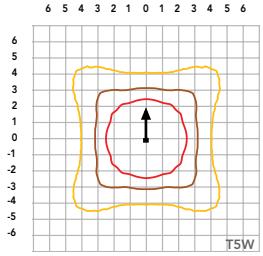


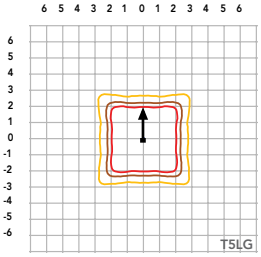


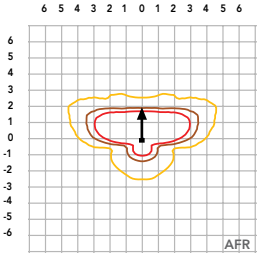


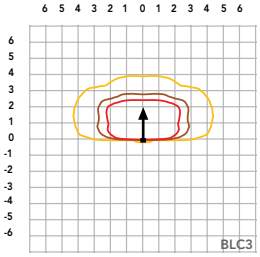


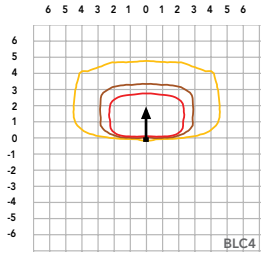


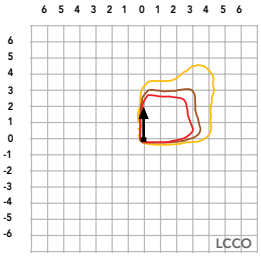


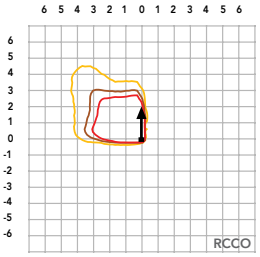












Lumen Ambient Temperature (LAT) Multipliers

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

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

Projected LED Lumen Maintenance

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

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

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.94
50,000	0.89
100,000	0.80

FAO Dimming Settings

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

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

Electrical Load

	Performance Package	LED Count	Drive Current (mA)	Wattage	Current (A) 120V	208V	240V	277V	347V	480V
Forward Optics (Non-Rotated)	P1	20	530	34	0.28	0.16	0.14	0.12	0.10	0.07
	P2	20	700	45	0.38	0.22	0.19	0.16	0.13	0.09
	P3	20	1050	69	0.57	0.33	0.29	0.25	0.20	0.14
	P4	20	1400	94	0.78	0.45	0.39	0.34	0.27	0.19
	P5	40	700	89	0.75	0.43	0.38	0.33	0.26	0.19
	P6	40	1050	136	1.14	0.66	0.57	0.49	0.39	0.29
	P7	40	1300	170	1.42	0.82	0.71	0.62	0.49	0.36
Rotated Optics (Requires L90 or R90)	P10	30	530	51	0.42	0.24	0.21	0.18	0.15	0.11
	P11	30	700	67	0.57	0.33	0.28	0.25	0.20	0.14
	P12	30	1050	103	0.86	0.50	0.43	0.37	0.30	0.22
	P13	30	1300	129	1.07	0.62	0.54	0.46	0.37	0.27

LED Color Temperature / Color Rendering Multipliers

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

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

Motion Sensor Default Settings

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

Controls Options

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

Performance Data

Lumen Output

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

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	33W	20	530	T1S	4,906	1	0	1	148	5,113	1	0	1	154	5,213	1	0	1	157
				T2M	4,545	1	0	2	137	4,736	1	0	2	143	4,829	1	0	2	145
				T3M	4,597	1	0	2	138	4,791	1	0	2	144	4,885	1	0	2	147
				T3LG	4,107	1	0	1	124	4,280	1	0	1	129	4,363	1	0	1	131
				T4M	4,666	1	0	2	141	4,863	1	0	2	146	4,957	1	0	2	149
				T4LG	4,244	1	0	1	128	4,423	1	0	1	133	4,509	1	0	1	136
				TFTM	4,698	1	0	2	141	4,896	1	0	2	147	4,992	1	0	2	150
				T5M	4,801	3	0	1	145	5,003	3	0	1	151	5,101	3	0	1	154
				T5W	4,878	3	0	1	147	5,084	3	0	2	153	5,183	3	0	2	156
				T5LG	4,814	2	0	1	145	5,018	2	0	1	151	5,115	2	0	1	154
				BLC3	3,344	0	0	1	101	3,485	0	0	1	105	3,553	0	0	1	107
				BLC4	3,454	0	0	2	104	3,599	0	0	2	108	3,670	0	0	2	111
				RCCO	3,374	0	0	1	102	3,517	0	0	1	106	3,585	0	0	1	108
				LCCO	3,374	0	0	1	102	3,517	0	0	1	106	3,585	0	0	1	108
				AFR	4,906	1	0	1	148	5,113	1	0	1	154	5,213	1	0	1	157
P2	45W	20	700	T1S	6,328	1	0	1	140	6,595	1	0	1	146	6,724	1	0	1	149
				T2M	5,862	1	0	2	130	6,109	1	0	2	135	6,228	1	0	2	138
				T3M	5,930	1	0	3	131	6,180	1	0	3	137	6,301	1	0	3	140
				T3LG	5,297	1	0	1	117	5,521	1	0	1	122	5,628	1	0	1	125
				T4M	6,018	1	0	3	133	6,272	1	0	3	139	6,395	1	0	3	142
				T4LG	5,474	1	0	1	121	5,705	1	0	1	126	5,816	1	0	1	129
				TFTM	6,060	1	0	3	134	6,316	1	0	3	140	6,439	1	0	3	143
				T5M	6,192	3	0	1	137	6,453	3	0	2	143	6,579	3	0	2	146
				T5W	6,293	3	0	2	139	6,558	3	0	2	145	6,686	3	0	2	148
				T5LG	6,210	2	0	1	138	6,472	3	0	1	143	6,598	3	0	1	146
				BLC3	4,313	0	0	2	96	4,495	0	0	2	100	4,583	0	0	2	102
				BLC4	4,455	0	0	2	99	4,643	0	0	2	103	4,733	0	0	2	105
				RCCO	4,352	0	0	2	96	4,536	0	0	2	100	4,624	0	0	2	102
				LCCO	4,352	0	0	2	96	4,536	0	0	2	100	4,624	0	0	2	102
				AFR	6,328	1	0	1	140	6,595	1	0	1	146	6,724	1	0	1	149
P3	69W	20	1050	T1S	9,006	1	0	2	131	9,386	1	0	2	136	9,569	1	0	2	139
				T2M	8,343	2	0	3	121	8,694	2	0	3	126	8,864	2	0	3	129
				T3M	8,439	2	0	3	122	8,795	2	0	3	128	8,967	2	0	3	130
				T3LG	7,539	1	0	2	109	7,857	1	0	2	114	8,010	1	0	2	116
				T4M	8,565	2	0	3	124	8,926	2	0	3	129	9,100	2	0	3	132
				T4LG	7,790	1	0	2	113	8,119	1	0	2	118	8,277	1	0	2	120
				TFTM	8,624	1	0	3	125	8,988	1	0	3	130	9,163	2	0	3	133
				T5M	8,812	3	0	2	128	9,184	4	0	2	133	9,363	4	0	2	136
				T5W	8,955	4	0	2	130	9,333	4	0	2	135	9,515	4	0	2	138
				T5LG	8,838	3	0	1	128	9,211	3	0	1	134	9,390	3	0	1	136
				BLC3	6,139	0	0	2	89	6,398	0	0	2	93	6,522	0	0	2	95
				BLC4	6,340	0	0	3	92	6,607	0	0	3	96	6,736	0	0	3	98
				RCCO	6,194	1	0	2	90	6,455	1	0	2	94	6,581	1	0	2	95
				LCCO	6,194	1	0	2	90	6,455	1	0	2	94	6,581	1	0	2	95
				AFR	9,006	1	0	2	131	9,386	1	0	2	136	9,569	1	0	2	139
P4	93W	20	1400	T1S	11,396	1	0	2	122	11,877	1	0	2	128	12,109	2	0	2	130
				T2M	10,557	2	0	3	113	11,003	2	0	3	118	11,217	2	0	3	121
				T3M	10,680	2	0	3	115	11,130	2	0	3	120	11,347	2	0	3	122
				T3LG	9,540	1	0	2	103	9,942	1	0	2	107	10,136	1	0	2	109
				T4M	10,839	2	0	3	117	11,296	2	0	3	121	11,516	2	0	4	124
				T4LG	9,858	1	0	2	106	10,274	1	0	2	110	10,474	1	0	2	113
				TFTM	10,914	2	0	3	117	11,374	2	0	3	122	11,596	2	0	3	125
				T5M	11,152	4	0	2	120	11,622	4	0	2	125	11,849	4	0	2	127
				T5W	11,332	4	0	3	122	11,811	4	0	3	127	12,041	4	0	3	129
				T5LG	11,184	3	0	1	120	11,656	3	0	2	125	11,883	3	0	2	128
				BLC3	7,768	0	0	2	83	8,096	0	0	2	87	8,254	0	0	2	89
				BLC4	8,023	0	0	3	86	8,362	0	0	3	90	8,524	0	0	3	92
				RCCO	7,838	1	0	2	84	8,169	1	0	2	88	8,328	1	0	2	90
				LCCO	7,838	1	0	2	84	8,169	1	0	2	88	8,328	1	0	2	90
				AFR	11,396	1	0	2	122	11,877	1	0	2	128	12,109	2	0	2	130

Performance Data

Lumen Output

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

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P5	90W	40	700	T1S	12,380	2	0	2	137	12,902	2	0	2	143	13,154	2	0	2	146
				T2M	11,468	2	0	3	127	11,952	2	0	3	133	12,185	2	0	3	135
				T3M	11,601	2	0	3	129	12,091	2	0	3	134	12,326	2	0	4	137
				T3LG	10,363	2	0	2	115	10,800	2	0	2	120	11,011	2	0	2	122
				T4M	11,774	2	0	4	131	12,271	2	0	4	136	12,510	2	0	4	139
				T4LG	10,709	1	0	2	119	11,160	2	0	2	124	11,378	2	0	2	126
				TFTM	11,856	2	0	3	132	12,356	2	0	4	137	12,596	2	0	4	140
				T5M	12,114	4	0	2	134	12,625	4	0	2	140	12,871	4	0	2	143
				T5W	12,310	4	0	3	137	12,830	4	0	3	142	13,080	4	0	3	145
				T5LG	12,149	3	0	2	135	12,662	3	0	2	141	12,908	3	0	2	143
				BLC3	8,438	0	0	2	94	8,794	0	0	2	98	8,966	0	0	2	99
				BLC4	8,715	0	0	3	97	9,083	0	0	3	101	9,260	0	0	3	103
				RCCO	8,515	1	0	2	94	8,874	1	0	2	98	9,047	1	0	2	100
				LCCO	8,515	1	0	2	94	8,874	1	0	2	98	9,047	1	0	2	100
				AFR	12,380	2	0	2	137	12,902	2	0	2	143	13,154	2	0	2	146
P6	137W	40	1050	T1S	17,545	2	0	3	128	18,285	2	0	3	133	18,642	2	0	3	136
				T2M	16,253	3	0	4	119	16,939	3	0	4	124	17,269	3	0	4	126
				T3M	16,442	2	0	4	120	17,135	3	0	4	125	17,469	3	0	4	128
				T3LG	14,687	2	0	2	107	15,306	2	0	2	112	15,605	2	0	2	114
				T4M	16,687	2	0	4	122	17,391	3	0	5	127	17,730	3	0	5	129
				T4LG	15,177	2	0	2	111	15,817	2	0	2	115	16,125	2	0	2	118
				TFTM	16,802	2	0	4	123	17,511	2	0	4	128	17,852	2	0	5	130
				T5M	17,168	4	0	2	125	17,893	5	0	3	131	18,241	5	0	3	133
				T5W	17,447	5	0	3	127	18,183	5	0	3	133	18,537	5	0	3	135
				T5LG	17,218	4	0	2	126	17,944	4	0	2	131	18,294	4	0	2	134
				BLC3	11,959	0	0	3	87	12,464	0	0	3	91	12,707	0	0	3	93
				BLC4	12,352	0	0	4	90	12,873	0	0	4	94	13,124	0	0	4	96
				RCCO	12,067	1	0	3	88	12,576	1	0	3	92	12,821	1	0	3	94
				LCCO	12,067	1	0	3	88	12,576	1	0	3	92	12,821	1	0	3	94
				AFR	17,545	2	0	3	128	18,285	2	0	3	133	18,642	2	0	3	136
P7	171W	40	1300	T1S	20,806	2	0	3	122	21,683	2	0	3	127	22,106	2	0	3	129
				T2M	19,273	3	0	4	113	20,086	3	0	4	118	20,478	3	0	4	120
				T3M	19,497	3	0	5	114	20,319	3	0	5	119	20,715	3	0	5	121
				T3LG	17,416	2	0	2	102	18,151	2	0	2	106	18,504	2	0	2	108
				T4M	19,787	3	0	5	116	20,622	3	0	5	121	21,024	3	0	5	123
				T4LG	17,997	2	0	2	105	18,756	2	0	2	110	19,121	2	0	2	112
				TFTM	19,924	3	0	5	117	20,765	3	0	5	122	21,170	3	0	5	124
				T5M	20,359	5	0	3	119	21,217	5	0	3	124	21,631	5	0	3	127
				T5W	20,689	5	0	3	121	21,561	5	0	3	126	21,982	5	0	3	129
				T5LG	20,418	4	0	2	120	21,279	4	0	2	125	21,694	4	0	2	127
				BLC3	14,182	0	0	3	83	14,780	0	0	3	87	15,068	0	0	3	88
				BLC4	14,647	0	0	4	86	15,265	0	0	4	89	15,562	0	0	4	91
				RCCO	14,309	1	0	3	84	14,913	1	0	3	87	15,204	1	0	3	89
				LCCO	14,309	1	0	3	84	14,913	1	0	3	87	15,204	1	0	3	89
				AFR	20,806	2	0	3	122	21,683	2	0	3	127	22,106	2	0	3	129

Performance Data

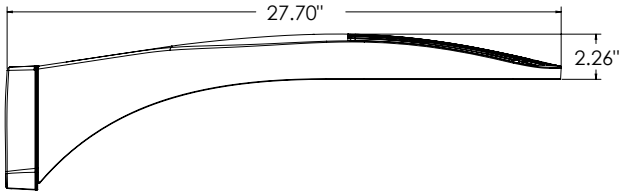
Lumen Output

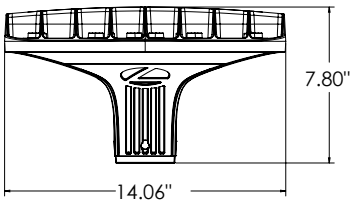
Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Rotated Optics

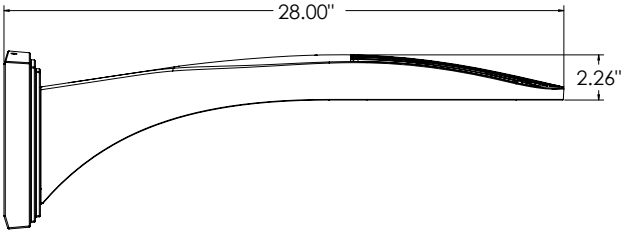
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P10	51W	30	530	T1S	7,399	3	0	3	145	7,711	3	0	3	151	7,862	3	0	3	154
				T2M	6,854	3	0	3	135	7,144	3	0	3	140	7,283	3	0	3	143
				T3M	6,933	3	0	3	136	7,225	3	0	3	142	7,366	3	0	3	145
				T3LG	6,194	2	0	2	122	6,455	2	0	2	127	6,581	2	0	2	129
				T4M	7,036	3	0	3	138	7,333	3	0	3	144	7,476	3	0	3	147
				T4LG	6,399	2	0	2	126	6,669	2	0	2	131	6,799	2	0	2	134
				TFTM	7,086	3	0	3	139	7,385	3	0	3	145	7,529	3	0	3	148
				T5M	7,239	3	0	2	142	7,545	3	0	2	148	7,692	3	0	2	151
				T5W	7,357	3	0	2	145	7,667	3	0	2	151	7,816	4	0	2	154
				T5LG	7,260	3	0	1	143	7,567	3	0	1	149	7,714	3	0	1	152
				BLC3	5,043	3	0	3	99	5,256	3	0	3	103	5,358	3	0	3	105
				BLC4	5,208	3	0	3	102	5,428	3	0	3	107	5,534	3	0	3	109
				RCCO	5,089	0	0	2	100	5,303	0	0	2	104	5,407	0	0	2	106
				LCCO	5,089	0	0	2	100	5,303	0	0	2	104	5,407	0	0	2	106
				AFR	7,399	3	0	3	145	7,711	3	0	3	151	7,862	3	0	3	154
P11	68W	30	700	T1S	9,358	3	0	3	138	9,753	3	0	3	143	9,943	3	0	3	146
				T2M	8,669	3	0	3	127	9,034	3	0	3	133	9,211	3	0	3	135
				T3M	8,768	3	0	3	129	9,138	3	0	3	134	9,316	3	0	3	137
				T3LG	7,833	3	0	3	115	8,164	3	0	3	120	8,323	3	0	3	122
				T4M	8,899	3	0	3	131	9,274	3	0	3	136	9,455	3	0	3	139
				T4LG	8,093	3	0	3	119	8,435	3	0	3	124	8,599	3	0	3	126
				TFTM	8,962	3	0	3	132	9,340	3	0	3	137	9,522	3	0	3	140
				T5M	9,156	4	0	2	135	9,542	4	0	2	140	9,728	4	0	2	143
				T5W	9,304	4	0	2	137	9,696	4	0	2	143	9,885	4	0	2	145
				T5LG	9,182	3	0	1	135	9,569	3	0	1	141	9,756	3	0	1	143
				BLC3	6,378	3	0	3	94	6,647	3	0	3	98	6,777	3	0	3	100
				BLC4	6,587	3	0	3	97	6,865	3	0	3	101	6,999	3	0	3	103
				RCCO	6,436	0	0	2	95	6,707	0	0	2	99	6,838	0	0	2	101
				LCCO	6,436	0	0	2	95	6,707	0	0	2	99	6,838	0	0	2	101
				AFR	9,358	3	0	3	138	9,753	3	0	3	143	9,943	3	0	3	146
P12	103W	30	1050	T1S	13,247	3	0	3	128	13,806	3	0	3	134	14,075	3	0	3	136
				T2M	12,271	4	0	4	119	12,789	4	0	4	124	13,038	4	0	4	126
				T3M	12,412	4	0	4	120	12,935	4	0	4	125	13,187	4	0	4	128
				T3LG	11,089	3	0	3	107	11,556	3	0	3	112	11,782	3	0	3	114
				T4M	12,597	4	0	4	122	13,128	4	0	4	127	13,384	4	0	4	129
				T4LG	11,457	3	0	3	111	11,940	3	0	3	116	12,173	3	0	3	118
				TFTM	12,686	4	0	4	123	13,221	4	0	4	128	13,479	4	0	4	130
				T5M	12,960	4	0	2	125	13,507	4	0	2	131	13,770	4	0	2	133
				T5W	13,170	4	0	3	127	13,726	4	0	3	133	13,994	4	0	3	135
				T5LG	12,998	3	0	2	126	13,546	3	0	2	131	13,810	3	0	2	134
				BLC3	9,029	3	0	3	87	9,409	3	0	3	91	9,593	3	0	3	93
				BLC4	9,324	4	0	4	90	9,718	4	0	4	94	9,907	4	0	4	96
				RCCO	9,110	1	0	2	88	9,495	1	0	2	92	9,680	1	0	2	94
				LCCO	9,110	1	0	2	88	9,494	1	0	2	92	9,680	1	0	2	94
				AFR	13,247	3	0	3	128	13,806	3	0	3	134	14,075	3	0	3	136
P13	129W	30	1300	T1S	15,704	3	0	3	122	16,366	3	0	3	127	16,685	4	0	4	130
				T2M	14,547	4	0	4	113	15,161	4	0	4	118	15,457	4	0	4	120
				T3M	14,714	4	0	4	114	15,335	4	0	4	119	15,634	4	0	4	121
				T3LG	13,145	3	0	3	102	13,700	3	0	3	106	13,967	3	0	3	108
				T4M	14,933	4	0	4	116	15,563	4	0	4	121	15,867	4	0	4	123
				T4LG	13,582	3	0	3	105	14,155	3	0	3	110	14,431	3	0	3	112
				TFTM	15,039	4	0	4	117	15,673	4	0	4	122	15,979	4	0	4	124
				T5M	15,364	4	0	2	119	16,013	4	0	2	124	16,325	4	0	2	127
				T5W	15,613	5	0	3	121	16,272	5	0	3	126	16,589	5	0	3	129
				T5LG	15,409	3	0	2	120	16,059	3	0	2	125	16,372	4	0	2	127
				BLC3	10,703	4	0	4	83	11,155	4	0	4	87	11,372	4	0	4	88
				BLC4	11,054	4	0	4	86	11,520	4	0	4	89	11,745	4	0	4	91
				RCCO	10,800	1	0	2	84	11,256	1	0	2	87	11,475	1	0	3	89
				LCCO	10,800	1	0	2	84	11,255	1	0	2	87	11,475	1	0	3	89
				AFR	15,704	3	0	3	122	16,366	3	0	3	127	16,685	4	0	4	130

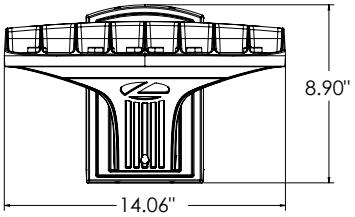
Dimensions



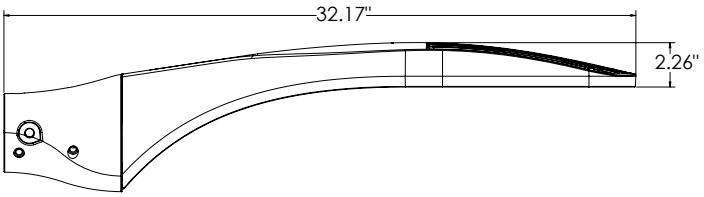


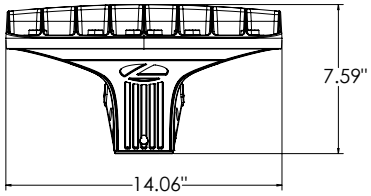
DSX0 with RPA, RPA5, SPA5, SPA8N mount
Weight: 25 lbs





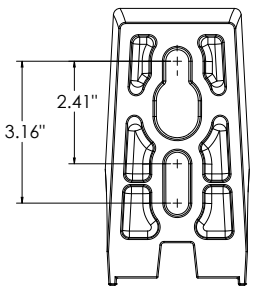
DSX0 with WBA mount
Weight: 27 lb



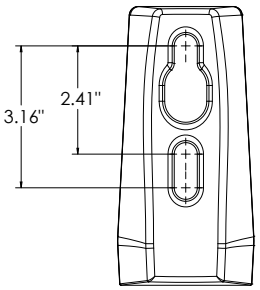


DSX0 with MA mount
Weight: 28 lbs

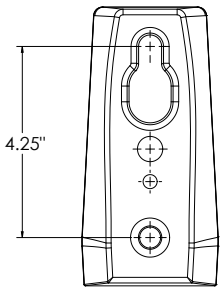
SPA (STANDARD ARM)



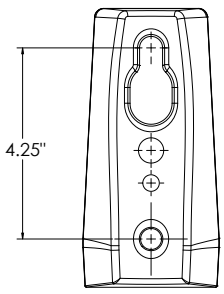
RPA



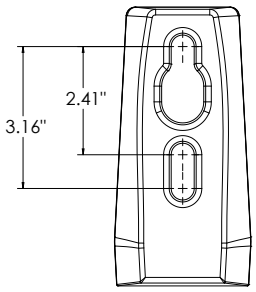
SPA5



RPA5



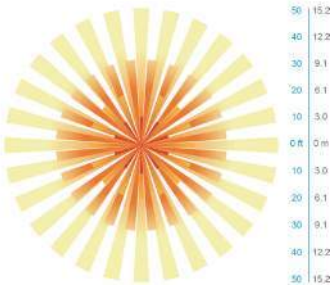
SPA8N



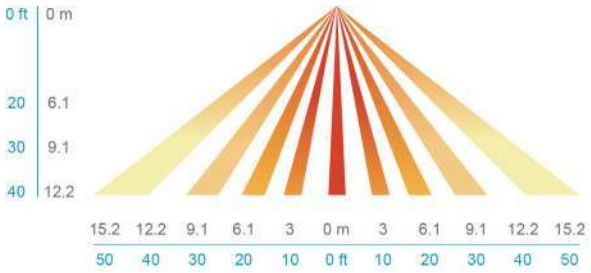
nLight Control - Sensor Coverage and Settings

nLight Sensor Coverage Pattern

NLTAIR2 PIRHN



Top



Side

FEATURES & SPECIFICATIONS

INTENDED USE

The sleek design of the D-Series Size 0 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and pedestrian areas.

CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 3G. Low EPA (0.44 ft^2) for optimized pole wind loading.

FINISH

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

COASTAL CONSTRUCTION (CCE)

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

OPTICS

Precision-molded proprietary silicone lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K or 5000 K (70 CRI) configurations. 80CRI configurations are also available. The D-Series Size 0 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L80/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS

The DSX0 LED area luminaire has a number of control options. DSX Size 0, comes standard with 0-10V dimming driver. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. PIR integrated motion sensor with on-board photocell feature field-adjustable programing and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

nLIGHT AIR CONTROLS

The DSX0 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

INSTALLATION

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

LISTINGS

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

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

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

WARRANTY

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

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

Catalog Number	RTS-20'-5-9B-DM19AS-VD-DDBXD
Notes	
Type	SP1 & SP2 POLE

Anchor Base Poles

RTS

ROUND TAPERED STEEL

BAA

FEATURES & SPECIFICATIONS

INTENDED USE — **These specifications are for USA standards only.** RTS poles are not to be utilized for Sportslighting applications requiring use of crossarms to mount luminaires. SPRTS series poles are the correct pole type for Sportslighting projects and are designed to be configured as a complete assembly with the desired crossarm(s) incorporated within the pole nomenclature description.

CONSTRUCTION —

Pole Shaft: The pole shaft is of 11-gauge (0.120"), 7-gauge (0.179") or, 3-gauge (0.239") with a uniform wall thickness and is made of a weldable-grade (ASTM A-595 Grade A or A572 Grade 55), hot-rolled, commercial-quality carbon steel tubing with a minimum yield of 55,000 psi. Shaft is one-piece construction with a full-length longitudinal high-frequency electric resistance weld and round in cross-section having a uniform linear taper of 0.14" per foot.

Pole Top: Options include tenon top, drilled for side mount fixture, tenon with drilling (includes extra handhole) and open top. Side drilled and open top poles include a removable steel top cap with set screws.

Handhole: A reinforced handhole with grounding provision is provided at 18" from the base end of the pole assembly on side A. Every handhole includes a cover and cover attachment hardware. 3" x 5" rectangular handhole is provided on pole with 5.9" diameter. Pole shaft with diameters greater than 5.9" are provided with a 4" x 6.5" oval shaped handhole.

Base Cover: A two-piece ABS plastic full base cover is provided with each pole assembly on pole shaft diameters of 9" or less. Shaft sized greater than 9" have a sheet steel two-piece base cover. Additional base cover options are available upon factory request. Bolt cover caps can be substituted on most pole shaft sizes. Options include heavy duty two-piece cast aluminum full base cover and bolt cover caps. All base covers and bolt cover caps are finished to match pole.

Anchor Base/Bolts: Anchor base is fabricated from hot-rolled carbon steel plate that conforms with ASTM A36. Anchor bolts are manufactured to ASTM F1554 Standards Grade 55, (55 KSI minimum yield strength and tensile strength of 75-95 KSI). Upper portion of anchor bolt is galvanized per ASTM A-153; bolts have an "L" bend on bottom end and are galvanized a minimum of 12" on the threaded end. Each hot-dipped galvanized anchor bolt is furnished with two hex nuts and two flat washers.

HARDWARE — All structural fasteners are high-strength galvanized carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel, or stainless steel.

FINISH — Extra durable painted finish is coated with TGIC (Triglycidyl Isocyanurate) Polyester powder that meets 5A and 5B classifications of ASTM D3359. Powder-coat finishes include Dark Bronze, White, Black, and Natural Aluminum colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes.

BUY AMERICAN ACT — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations.
Please refer to www.acuitybrands.com/buy-american for additional information.

INSTALLATION — **Do not** erect poles without having fixtures installed. Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates. If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage. Lithonia Lighting is not responsible for the foundation design.

WARRANTY — 1-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

NOTE: Actual performance may differ as a result of end-user environment and application.
Specifications subject to change without notice.

RTS Round Tapered Steel Poles

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative.

Example: RTS 30 6-6B DM19 DDBXD

RTS	20'	5-9B	DM19AS		VD	DDBXD
Series	**Nominal fixture mounting height**	**Nominal shaft base size/wall thickness[1]**	**Mounting[2]**		**Options**	**Finish[11]**
RTS	20'-50' (for 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.) (See technical information table for complete ordering information.)	5-9B (.120") 6-5B (.120") 6-6B (.120") 7-0B (.120") 7-0F (.179") 7-3B (.120") 7-8B (.120") 8-0B (.120") 8-0F (.179") 8-5B (.120") 9-0B (.120") 9-0F (.179") 9-5B (.120") 10-0B (.120") 10-0F (.179") 11-0F (.179") 13-0F (.179") 13-0M (.239") (See technical information table for complete ordering information.)	Tenon mounting PT Open top T20 2-3/8" O.D. (2" NPS)[2] T25 2-7/8" O.D. (2-1/2" NPS)[2] T30 3-1/2" O.D. (3" NPS)[2] T35 4" O.D. (3-1/2" NPS)[2] KAC/KAD/KSE/KSF/KVR/KVF Drill mounting[3] DM19 1 at 90° DM28 2 at 180° DM28PL 2 at 180° with one side plugged DM29 2 at 90°[2] DM32 3 at 120°[2] DM39 3 at 90°[2] DM49 4 at 90°[2] CSX/DSX/RSX/AERIS™/OMERO™/ HLA/KAX Drill mounting[3] DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90°[2] DM32AS 3 at 120°[2] DM39AS 3 at 90°[2] DM49AS 4 at 90°[2]	ESX Drill mounting[3] DM19ESX 1 at 90° DM28ESX 2 at 180° DM29ESX 2 at 90° DM39ESX 3 at 90° DM49ESX 4 at 90° AERIS™ Suspend drill mounting[3,4] DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90° DM39AST_ 3 at 90° DM49AST_ 4 at 90° OMERO™ Suspend drill mounting[3,4] DM19MRT_ 1 at 90° DM28MRT_ 2 at 180° DM29MRT_ 2 at 90° DM39MRT_ 3 at 90° DM49MRT_ 4 at 90°	Shipped installed VD Vibration damper HAxy Horizontal arm bracket (1 fixture)[5,6] FDLxy Festoon outlet less electrical[5,7] CPL12/xy 1/2" coupling[5] CPL34/xy 3/4" coupling[5] CPL1/xy 1" coupling[5] NPL12/xy 1/2" threaded nipple[5] NPL34/xy 3/4" threaded nipple[5] NPL1/xy 1" threaded nipple[5] EHHxy Extra handhole[5,8] FBCSTL2PC 2 Piece steel base cover (standard is plastic) IC Interior coating[9] L/AB Less anchor bolts (Include when anchor bolts are not needed) TP Tamper resistant handhole cover fasteners NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) UL UL listed with label (Includes NEC compliant cover) BAA Buy America(n) Act Compliant[10]	Super durable paint colors DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DGCXD Charcoal gray DTGXD Tennis green DBRXD Bright red DSBXD Steel blue DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured black aluminum DWHGXD Textured white Other finishes GALV Galvanized finish Architectural colors and special finishes Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes available.

NOTES:

1. Wall thickness will be signified with a "B" (11 Gauge), an "F" (7 Gauge) or, an "M" (3 Gauge) in nomenclature. "B" - 0.120" | "F" - 0.179" | "M" - 0.239"
2. PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20. The combination includes a required extra handhole.
3. Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
4. Insert "1" or "2" to designate fixture size; e.g. DM19AST2.
5. Specify location and orientation when ordering option.
   For "x": Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-".
   Example: 5ft = 5 and 20ft 3in = 20-3
   For "y": Specify orientation from handhole (A,B,C,D) Refer to the Handhole Orientation diagram below.
   Example: 1/2" coupling at 5' 8", orientation C = CPL12/5-8C
6. Horizontal arm is 18" x 2-3/8" O.D. tenon standard with radius curve providing 12' rise. If ordering two horizontal arm at the same height, specify with HAxyy. Example: HA20BD
7. FDL does not come with GFCI outlet or handhole cover. These must be supplied by contractor or electrician.
8. Combination of tenon-top and drill mount includes extra handhole. EHH includes cover.
9. Provides enhanced corrosion resistance. Not available with GALV.
10. Use when mill certifications are required.
11. Finish must be specified. Additional colors available; see Architectural Colors brochure linked here (Form No. 794.3). Lead times may be extended up to 2 weeks due to paint procurement.

Accessories: *Order as separate catalog number.*	
PL DT20	Plugs for ESX drillings
PL DT8	Plugs for DMxxAS drillings

RTS Round Tapered Steel Poles

TECHNICAL INFORMATION — EPA (ft^2) with 1.3 gust											
Catalog Number	**Nominal Shaft Length (ft.)***	**Pole Shaft Size (Base in. x Top in. x ft.)**	**Wall thick (in)**	**Gauge**	**80 MPH**	**Max. weight**	**90 MPH**	**Max. weight**	**100 MPH**	**Max. weight**	**Bolt size (in. x in. x in.)**
RTS 20 5-9B	20	5.9 x 3.1 x 20	0.120	11	19.3	482	15.1	377	12.2	305	1 x 36 x 4
RTS 20 6-5B	20	6.5 x 3.7 x 20	0.120	11	24.2	605	19.3	482	15.6	390	1 x 36 x 4
RTS 25 5-9B	25	5.9 x 2.4 x 25	0.120	11	12.5	312	9.9	247	8	200	1 x 36 x 4
RTS 25 7-0B	25	7.0 x 3.5 x 25	0.120	11	20.3	507	16.2	405	13.1	327	1 x 36 x 4
RTS 25 7-0F	25	7.0 x 3.5 x 25	0.179	7	30.5	760	24	625	19.8	495	1 x 36 x 4
RTS 30 6-6B	30	6.6 x 2.4 x 30	0.120	11	11.7	292	9.3	232	7.5	187	1 x 36 x 4
RTS 30 8-0B	30	8.0 x 3.8 x 30	0.120	11	18.9	473	14.9	373	12	300	1 x 36 x 4
RTS 30 8-0F	30	8.0 x 3.8 x 30	0.179	7	33.5	838	27	675	22	550	1-1/4 x 42 x 6
RTS 35 7-3B	35	7.3 x 2.4 x 35	0.120	11	11.2	280	8.9	222	7.1	177	1 x 36 x 4
RTS 35 8-5B	35	8.5 x 3.6 x 35	0.120	11	18.9	472	15.1	377	12.2	305	1 x 36 x 4
RTS 35 9-5B	35	9.5 x 4.6 x 35	0.120	11	23.2	580	18.2	455	14.5	363	1 x 36 x 4
RTS 39 7-8B	39	7.8 x 2.4 x 39	0.120	11	10.7	267	8.5	212	6.6	165	1 x 36 x 4
RTS 39 9-0B	39	9.0 x 3.6 x 39	0.120	11	17.2	430	13.5	338	10.8	270	1 x 36 x 4
RTS 39 9-0F	39	9.0 x 3.6 x 39	0.179	7	28.5	715	23	575	19	475	1-1/4 x 42 x 6
RTS 45 10-0B	45	10.0 x 3.7 x 45	0.120	11	17.4	435	13.5	338	10.6	265	1 x 36 x 4
RTS 45 10-0F	45	10.0 x 3.7 x 45	0.179	7	28.5	715	23	575	19	475	1-1/4 x 42 x 6
RTS 50 10-0B	50	10.0 x 3.0 x 50	0.120	11	13.2	330	10.6	265	8.3	208	1 x 36 x 4
RTS 50 10-0F	50	10.0 x 3.0 x 50	0.179	7	20.5	512	16.5	412	13.6	340	1-1/4 x 42 x 6
RTS 50 11-0F	50	11.0 x 3.0 x 50	0.179	7	29.9	748	23.5	588	18.6	465	1-1/4 x 42 x 6
RTS 50 13-0F	50	13.0 x 6.0 x 50	0.179	7	50.4	1260	39.7	992	31.4	785	1-1/4 x 54 x 6
RTS 50 13-0M	50	13.0 x 6.0 x 50	0.239	3	69.2	1730	55	1375	44.2	1105	1-3/4 x 84 x 6

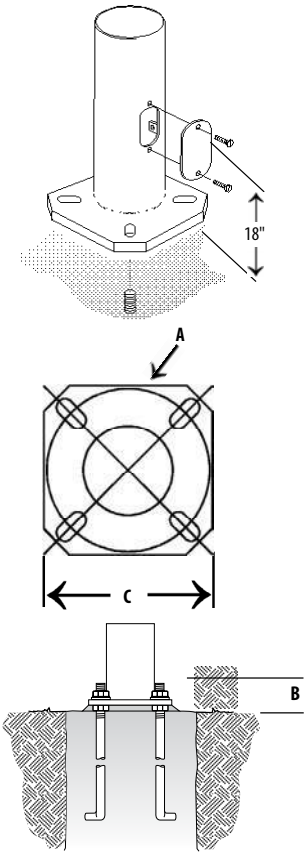
NOTE: EPA values are based ASCE 7-93 wind map.
*For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

TECHNICAL INFORMATION — EPA (ft^2) WITH 3-SECOND GUST PER AASHTO 2013																	
Series	**Mounting Height (ft)***	**Shaft Base Size**	**90 MPH**	**Max. weight**	**100 MPH**	**Max. weight**	**110 MPH**	**Max. weight**	**120 MPH**	**Max. weight**	**130 MPH**	**Max. weight**	**140 MPH**	**Max. weight**	**150 MPH**	**Max. weight**	**Approx. ship weight (lbs.)**
RTS	20	5-9B	18	400	14.5	363	12	300	10	250	8.5	213	7	175	6	150	140
RTS	20	6-5B	22	550	18	450	15	375	13	325	11	275	9.5	238	8	200	160
RTS	25	5-9B	13	200	10.5	200	8.5	200	7	175	5.5	138	4.5	113	4	100	155
RTS	25	7-0B	19	475	16	400	13	325	11	275	9	225	8	200	7	175	200
RTS	25	7-0F	21	525	17	425	14	350	11.5	288	9.5	238	8.5	213	7	175	280
RTS	30	6-6B	12.5	200	10	200	7.5	188	6.5	163	5.5	138	4.5	113	3.5	88	200
RTS	30	8-0B	17.5	438	14	350	11.5	288	9.5	238	8	200	6.5	163	5.5	138	265
RTS	30	8-0F	30	750	24.5	613	20.5	513	17.5	438	15	375	12.5	313	11	275	380
RTS	35	7-3B	12	188	9.5	188	7.5	188	6	150	5	125	4	100	3.5	88	250
RTS	35	8-5B	14	350	11	275	9	225	7	175	6	150	5	125	4	100	315
RTS	35	9-5B	16.5	413	13.5	338	11	275	9	225	7.5	188	6	150	5	125	370
RTS	39	7-8B	11.5	188	9	188	6.5	163	5	125	4	100	3	75	2.5	63	285
RTS	39	9-0B	13	325	10	250	8	200	6.5	163	5	125	4	100	3.5	88	355
RTS	39	9-0F	24	600	19.5	488	16	400	13	325	11	275	9.5	238	8	200	515
RTS	45	10-0B	10	250	7.5	188	6	150	4.5	113	3.5	88	2.5	63	2	50	450
RTS	45	10-0F	20.5	513	16	400	13	325	10.5	263	9	225	7.5	188	6	150	650
RTS	50	10-0B	7.5	188	5.5	138	4	100	2.5	63	1.5	38	1	25	0.5	13	475
RTS	50	10-0F	17.5	413	13	325	10.5	263	8	200	6.5	163	5	125	4	100	680
RTS	50	11-0F	19	475	15	375	12	300	10	250	8	200	6.5	163	5	125	812

NOTE: AASHTO 2013 criteria is the most conservative existing EPA calculation. For poles not showing EPA values under AASHTO 2013, EPA values may exist under commercial criteria (see table above).
*For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

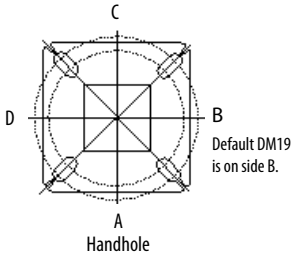
RTS Round Tapered Steel Poles

BASE DETAIL



POLE DATA					
Shaft base size	**Bolt circle A**	**Bolt projection B**	**Base square C**	**Template description**	**Anchor bolt description**
5.9"	9"	4.13"	10"	ABTEMPLATE PJ50075	AB36-0
6.5"	9.5"	4.13"	10.5"	ABTEMPLATE PJ50074	AB36-0
6.6"	9.5"	4.13"	10.5"	ABTEMPLATE PJ50078	AB36-0
7" B	10"	4.13"	10.88"	ABTEMPLATE PJ50077	AB36-0
7" F	10"	4.25"	10.88"	ABTEMPLATE PJ50076	AB36-0
7.3"	10.5"	4.13"	11.25"	ABTEMPLATE PJ50081	AB36-0
7.8"	11"	4.13"	11.5"	ABTEMPLATE PJ50084	AB36-0
8" B	11"	4.13"	11.5"	ABTEMPLATE PJ50079	AB36-0
8" F	11"	4.25"	11.5"	ABTEMPLATE PJ50080	AB42-0
8.5"	11.5"	4.25"	12"	ABTEMPLATE PJ50082	AB36-0
9" B	12.5"	4.25"	12.38"	ABTEMPLATE PJ50085	AB36-0
9" F	12.5"	5"	12.38"	ABTEMPLATE PJ50086	AB42-0
9.5"	13"	4.25"	13"	ABTEMPLATE PJ50083	AB36-0
10" B	13.5"	4.25"	14"	ABTEMPLATE PJ50087	AB36-0
10" F	13.5"	5"	14"	ABTEMPLATE PJ50088	AB42-0
11"	15"	5.25"	16.5"	ABTEMPLATE PJ50089	AB42-0
13" F	17"	5.75"	18"	ABTEMPLATE MANUFACTURER SUPPLIED	AB54-0
13" M	17.5"	6.5"	18.5"	ABTEMPLATE MANUFACTURER SUPPLIED	AB84-0

HANDHOLE ORIENTATION



Default DM19 is on side B.

IMPORTANT INSTALLATION NOTES:

- **Do not** erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Bolt circles have +/- 1/2" tolerance.
- For poles larger than 10" consult factory.
- Lithonia Lighting is not responsible for the foundation design.

Catalog #: CRUS SM-SC-LED-SS-50-UNV-WHT Project: _____

Prepared By: _____ Date: _____ Type: S2

Scottsdale® Legacy (CRUS SM)

LED Surface Mount Canopy Luminaire

MANUFACTURED IN THE USA | c UL us LISTED | DLC QPL LISTED | ida DARK SKY APPROVED | IP66

OVERVIEW	
Lumen Package	5,000 - 22,000
Wattage Range	38 - 152
Efficacy Range (LPW)	114 -156
Weight lbs(kg)	32 (14.5)

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Features a ultra-slim 11/16" profile die-cast housing, with flat clear tempered glass lens mounted to a die formed steel housing with one conduit knockout and four mounting holes. Unit is water-resistant, sealed and IP66 rated. Integral designed heat sink does not trap dirt and grime, ensuring cool running performance over the life of the fixture.
- Standard color is white and is finished with LSI's DuraGrip® polyester powder coat process. DuraGrip withstands extreme weather changes without cracking or peeling.
- Luminaire assembly incorporates a pressure stabilizing vent breather to prevent seal fatigue and failure.

Optical System

- Features an array of select, mid-power, high brightness, high efficiency LED; 3000K, 4000K, 5000K color temperature, 80 CRI (nominal).
- Choice of Symmetric or Asymmetric distribution. Asymmetric provides a wider distribution pattern.
- Six Lumen Packages: 5,000, 9,000, 10,000, 13,000, 18,000 and 22,000 Lumens.

Electrical

- High performance factory programmable driver features over-voltage, under voltage, short-circuit and over temperature protection with integral 6kV surge protection that meets IEEE C62.41.2 and ANSI C82.77-5 Location Category C Low standards. Additional field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/ IEEE C62.41.2). Custom lumen and wattage packages available.
- Driver components are fully encased in potting for moisture resistance. Complies with IEC and FCC standards. 0-10 V dimming supplied standard with all drive currents.
- Universal voltage power supply, 120-277 VAC, 50/60 HZ and 347-480 VAC, 50/60 HZ input.
- -40°C to 55°C (-40°F to 131°F) ambient operating temperature. (Varies based on lumen package and mounting style see performance data for specifics.)
- Minimum 60,000 to 100,000 hours depending upon the ambient temperature of the installation location (see performance data for specifics.)

Warranty

- LSI LED fixtures carry a 5-year warranty (contact your LSI representative for extended warranty options.)

Listings

- UL and ETL listed to UL 1598, UL 8750 and other U.S. and International safety standards. Suitable for wet locations.
- Meets Buy American Act requirements.
- IDA compliant with 3000K or lower color temperature.
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Type: _____

Scottsdale® Legacy LED Surface Mount Canopy Luminaire

ORDERING GUIDE

Back to Quick Links

TYPICAL ORDER EXAMPLE: **CRUS SM SC LED VHO 50 UNV WHT**

Prefix	Distribution	Light Source	Drive Current	Color Temperature	Input Voltage	Finish	Options
CRUS SM (Surface Mount)	**SC** - Standard Symmetric **AC** - Asymmetric[1]	**LED**	**SLW** - Super Low Watt **VLW** - Very Low Watt **LW** - Low Watt **SS** - Super Saver **HO** - High Output **VHO** - Very High Output	**50** - 5000K **40** - 4000K **30** - 3000K	**UNV** - Universal Voltage (120-277V) **347 - 480 Volt**	**WHT** - White **BRZ** - Bronze **BLK** - Black	**DFL** - Diffused Lens

FOOTNOTES:
1. AC distribution utilizes a reflector which alters the look from a standard SC distribution.

Accessory Ordering Information

Description	Order Number
SSA Slope Surface Adaptor	52152 CLR
10" Toggle Cable Hanger	TCH10

PERFORMANCE

Back to Quick Links

DELIVERED LUMENS

Lumen Package	Distribution	3000K CCT			4000K CCT			5000K CCT			Wattage
		Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	
VHO	SC	21301	140	B4-U0-G2	21835	144	B4-U0-G2	22697	150	B4-U0-G2	152
	AC	17355	114	B3-U0-G3	17799	117	B3-U0-G3	18502	122	B3-U0-G3	
HO	SC	17889	143	B3-U0-G1	18346	146	B3-U0-G2	19071	152	B4-U0-G2	125
	AC	14582	116	B3-U0-G2	14955	119	B3-U0-G2	15546	124	B3-U0-G2	
SS	SC	13113	141	B3-U0-G1	13449	144	B3-U0-G1	13980	150	B3-U0-G1	93
	AC	11468	123	B3-U0-G2	11761	126	B3-U0-G2	12226	131	B3-U0-G2	
LW	SC	10457	144	B3-U0-G1	10724	148	B3-U0-G1	11148	154	B3-U0-G1	73
	AC	9145	126	B2-U0-G2	9379	129	B2-U0-G2	9749	134	B2-U0-G2	
VLW	SC	8783	146	B3-U0-G1	9008	149	B3-U0-G1	9364	155	B3-U0-G1	60
	AC	7681	127	B2-U0-G1	7878	131	B2-U0-G1	8189	136	B2-U0-G1	
SLW	SC	5585	146	B2-U0-G1	5728	150	B2-U0-G1	5954	156	B2-U0-G1	38
	AC	4884	128	B1-U0-G1	5009	131	B1-U0-G1	5207	136	B1-U0-G1	

*LEDs are frequently updated therefore values are nominal.

ELECTRICAL DATA (AMPS)

Lumen Package	Wattage	120V	208V	240V	277V	347V	480V
VHO	152	1.27	0.73	0.64	0.55	0.44	0.32
HO	124	1.03	0.6	0.52	0.45	0.36	0.26
SS	92	0.77	0.44	0.38	0.33	0.27	0.19
LW	72	0.6	0.35	0.3	0.26	0.21	0.15
VLW	60	0.5	0.29	0.25	0.22	0.17	0.13
SLW	38	0.32	0.18	0.16	0.14	0.11	0.08

*Electrical data at 25C (77F). Actual wattage may differ by +/-10%.

OPERATING TEMPERATURE

LUMEN PACKAGE	MOUNTING	Max
VHO	Metal/Wood Canopy	45 C
HO	Metal/Wood Canopy	45 C
SS	Metal/Wood Canopy	55 C

Recommended Lumen Maintenance[1] CRUS SM VHO

Ambient Temp C	Initial [2]	25k hr [2]	50k hr [2]	75k hr [3]	100k hr [3]
0 C	102%	97%	92%	88%	84%
10 C	102%	97%	92%	88%	84%
20 C	102%	97%	92%	88%	84%
25 C	102%	97%	92%	88%	84%
30 C	102%	97%	92%	88%	84%
40 C	101%	95%	90%	85%	80%
50 C	101%	94%	89%	83%	78%

Recommended Lumen Maintenance[1] CRUS SM SS

Ambient Temp C	Initial [2]	25k hr [2]	50k hr [2]	75k hr [3]	100k hr [3]
0 C	102%	97%	92%	88%	84%
10 C	102%	97%	92%	88%	84%
20 C	102%	97%	92%	88%	84%
25 C	102%	97%	92%	88%	84%
30 C	102%	97%	92%	88%	84%
40 C	102%	97%	92%	88%	84%
50 C	101%	95%	91%	86%	82%

FOOTNOTES:
1 - Lumen maintenance values at 25˚C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing.
2 - In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED).
3 - In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times NA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED).

Scottsdale® Legacy LED Surface Mount Canopy Luminaire

PHOTOMETRICS

Back to Quick Links

Luminaire photometry has been conducted by an accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

See http://www.lsi-industries.com/products/led-lighting-solutions.aspx for detailed photometric data.

CRUS-SM-SC-SS-50

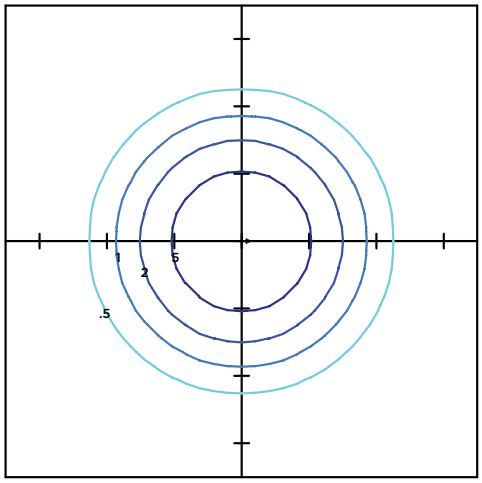
LUMINAIRE DATA

Type 5 Distribution	
Description	5000 Kelvin, 80 CRI
Delivered Lumens	13,980
Watts	93
Efficacy	150
IES Type	Type VS - Very Short
BUG Rating	B3-U0-G1

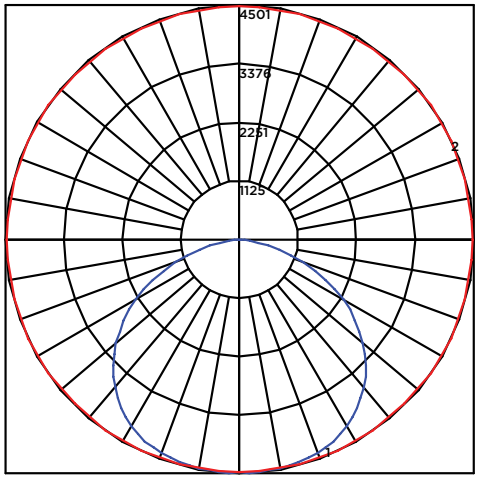
Zonal Lumen Summary

Zone	Lumens	%Luminaire
Low (0-30°)	3654.2	26%
Medium (30-60°)	7541.2	54%
High (60-80°)	2641.4	19%
Very High (80-90°)	143.2	1%
Uplight (90-180°)	0	0%
Total Flux	13980	100%

ISO FOOTCANDLE



POLAR CURVE



15' Mounting Height/15' Grid Spacing

5 FC 2 FC 1 FC .5 FC

CRUS-SM-AC-SS-50

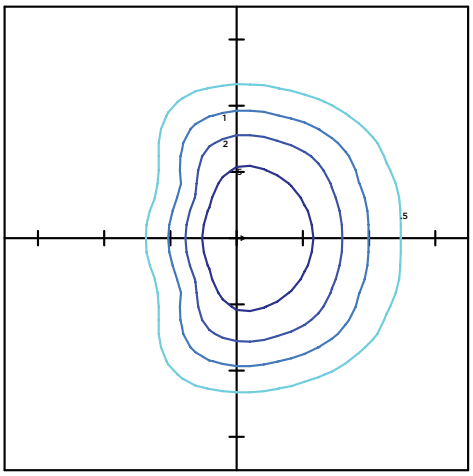
LUMINAIRE DATA

Type 3 Distribution	
Description	5000 Kelvin, 80 CRI
Delivered Lumens	12,226
Watts	93
Efficacy	131
IES Type	Type III, Very Short
BUG Rating	B3-U0-G2

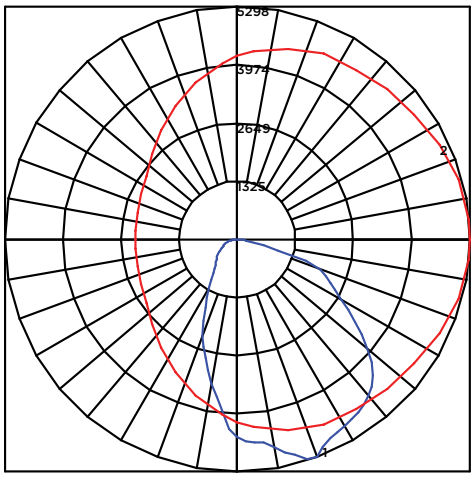
Zonal Lumen Summary

Zone	Lumens	%Luminaire
Low (0-30°)	3240.3	27%
Medium (30-60°)	6245.5	51%
High (60-80°)	2594.6	21%
Very High (80-90°)	146.1	1%
Uplight (90-180°)	0	0%
Total Flux	12227	100%

ISO FOOTCANDLE



POLAR CURVE



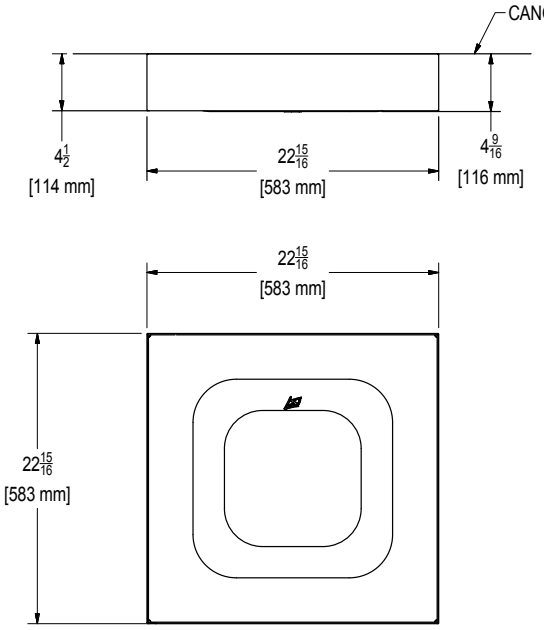
15' Mounting Height/15' Grid Spacing

5 FC 2 FC 1 FC .5 FC

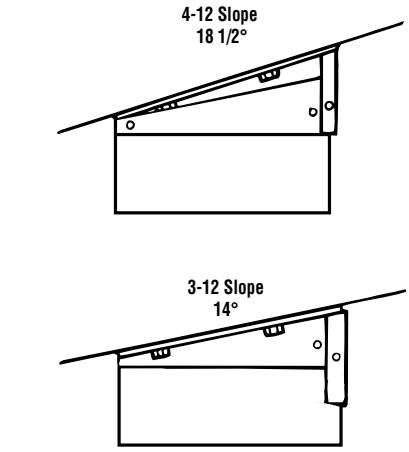
Scottsdale® Legacy LED Surface Mount Canopy Luminaire

PRODUCT DIMENSIONS

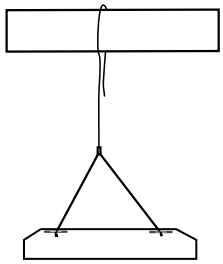
Back to Quick Links

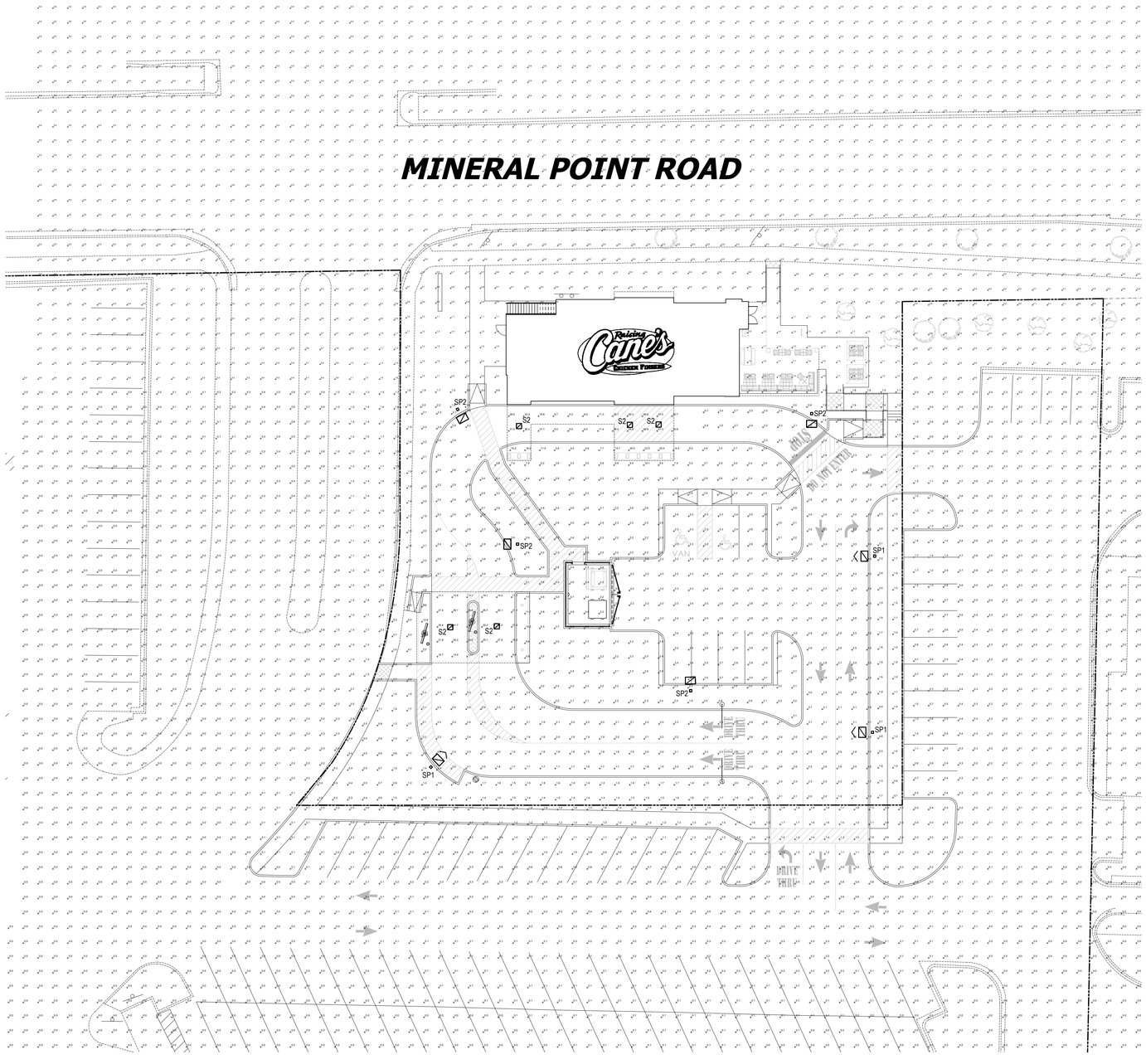


SLOPE SURFACE ADAPTOR – SSA ACCESSORY



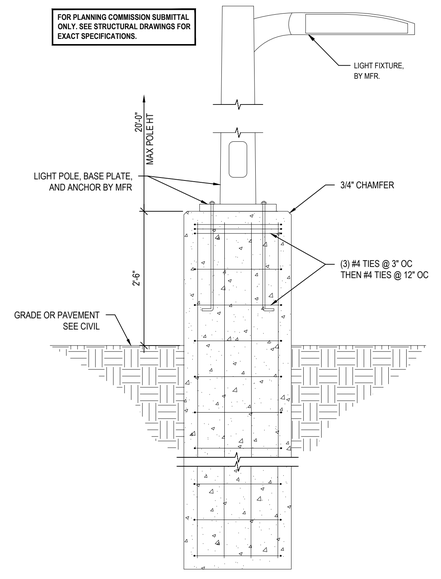
TOGGLE CABLE HANGER



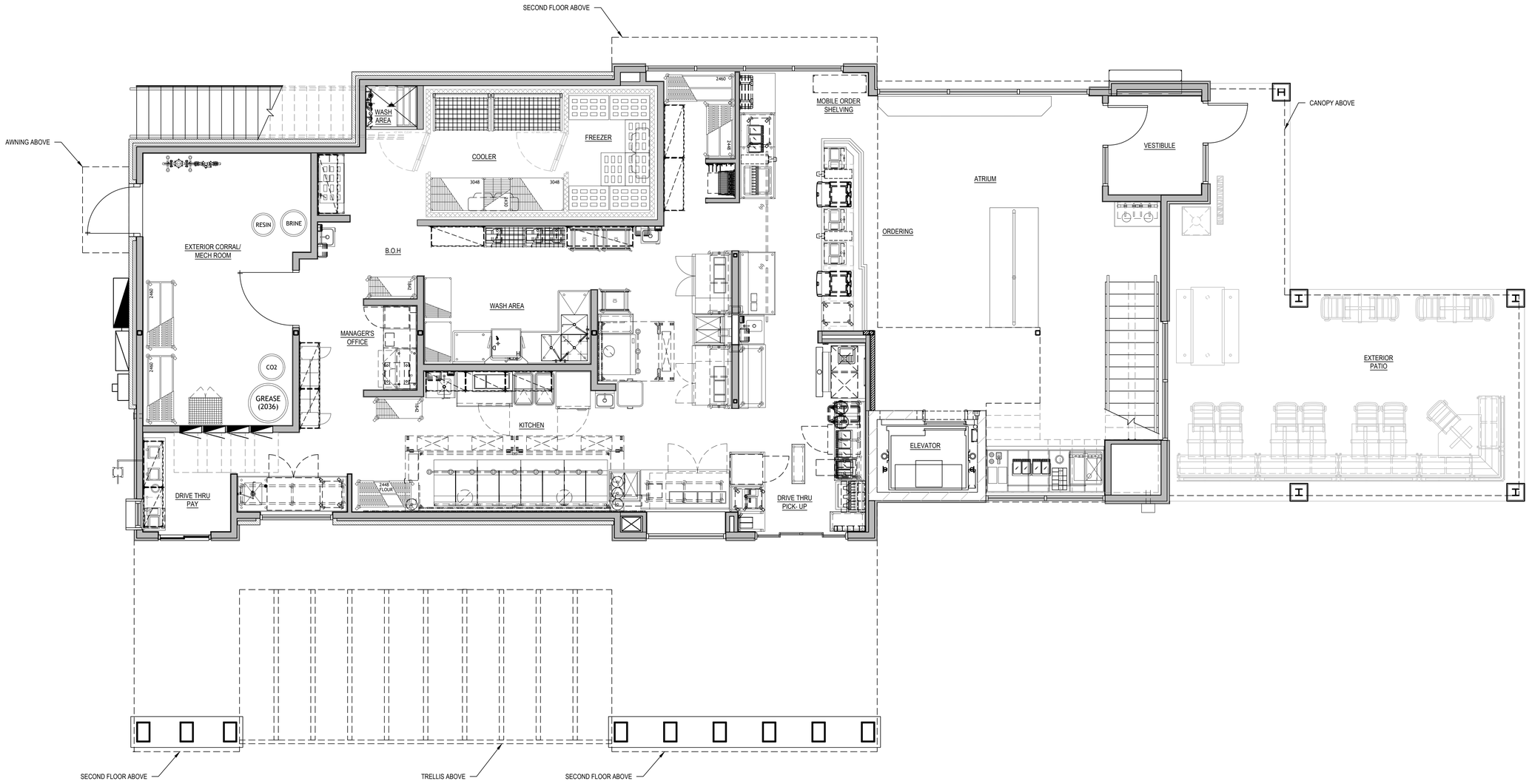


STATISTICS (VALUES ARE MAINTAINED)					
Description	Avg	Max	Min	Max/Min	Avg/Min
PARKING FIELD	2.6 fc	5.9 fc	1.3 fc	4.5:1	2.0:1
PROPERTY LINE	0.2 fc	1.9 fc	0.0 fc	N/A	N/A

FOR PLANNING COMMISSION SUBMITTAL ONLY. SEE STRUCTURAL DRAWINGS FOR EXACT SPECIFICATIONS.



1 PH1.0 TYPICAL LIGHT POLE BASE DETAIL
SCALE: N.T.S



N

FIRST FLOOR FIXTURE PLAN

SCALE: 1/4 = 1'-0"

SEATING COUNT	
EXTERIOR	25
INTERIOR	73

ADA ARCHITECTS
17710 Detroit Ave Lakewood, Ohio 44107
Phone: (216) 521-5134
Fax: (216) 521-4824
www.adaarchitects.com

ADA JOB NUMBER:
24503

SEAL:

PRELIMINARY
NOT FOR CONSTRUCTION

CONSULTANT:

PROTOTYPE: NTV GROUND UP
SCHEME A

RAISING CANE'S
RESTAURANT NO.: #RC1353
7456 MINERAL POINT ROAD
MADISON, WI 53717

SHEET REVISIONS

REV	DATE	DESCRIPTION

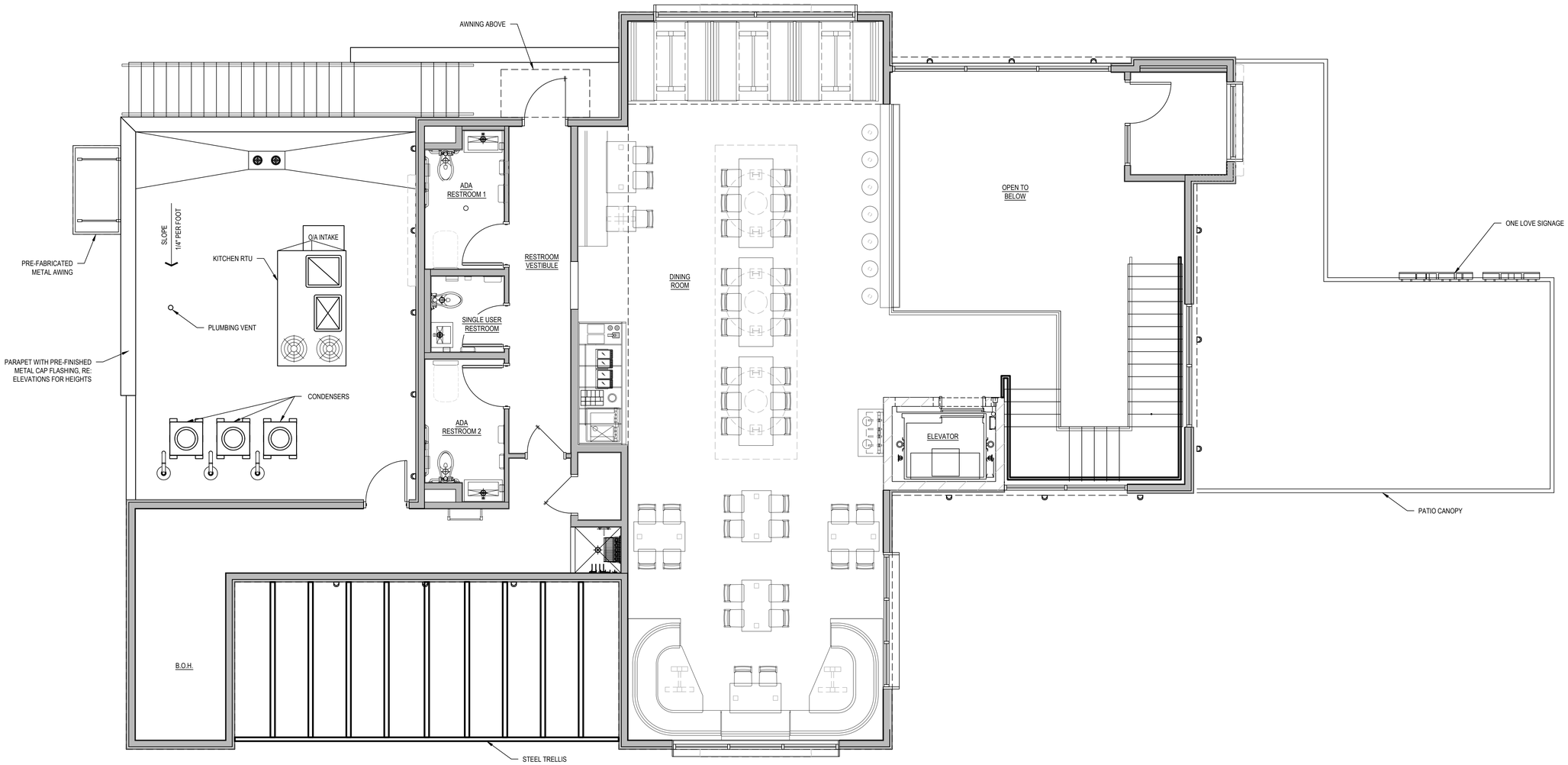
DATE:
10.30.25

FIRST FLOOR
FIXTURE PLAN

SHEET NAME:

A1

SHEET NUMBER:



N

SECOND FLOOR FIXTURE PLAN

SCALE: 1/4 = 1'-0"

SEATING COUNT	
EXTERIOR	25
INTERIOR	73

ADA ARCHITECTS
17710 Detroit Ave Lakewood, Ohio 44107
Phone: (216) 521-5134
Fax: (216) 521-4824
www.adaarchitects.com

ADA JOB NUMBER:
24503

SEAL:

PRELIMINARY
NOT FOR CONSTRUCTION

CONSULTANT:

PROTOTYPE: NTV GROUND UP
SCHEME A

RAISING CANE'S
RESTAURANT NO.: #RC1353
7456 MINERAL POINT ROAD
MADISON, WI 53717

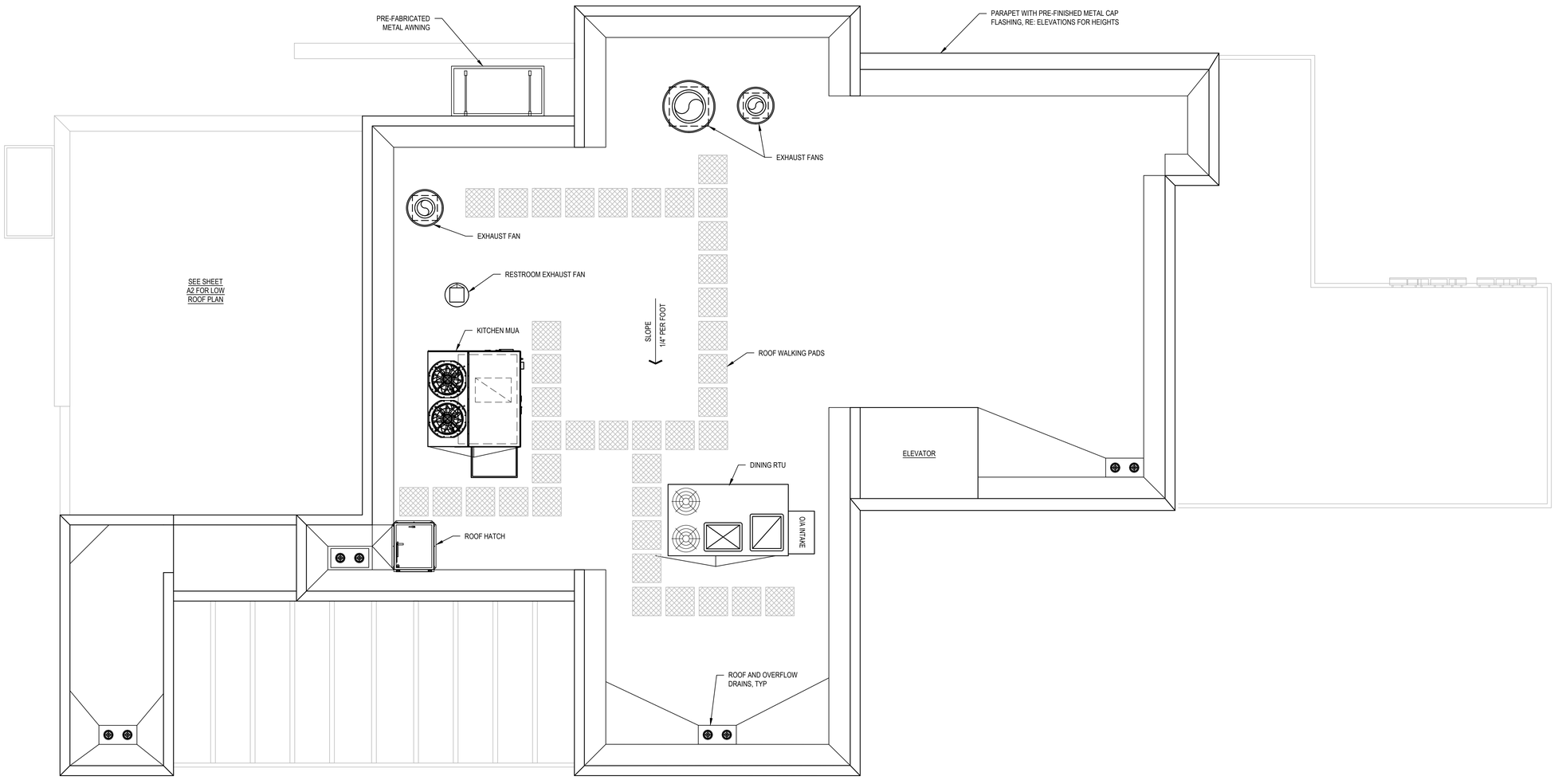
SHEET REVISIONS

REV	DATE	DESCRIPTION

DATE:
10.30.25

SECOND FLOOR FIXTURE PLAN
SHEET NAME:

A2
SHEET NUMBER:



N

ROOF PLAN

SCALE: 1/4 = 1'-0"

ADA ARCHITECTS
17710 Detroit Ave Lakewood, Ohio 44107
Phone: (216) 521-5134
Fax: (216) 521-4824
www.adaarchitects.com

ADA JOB NUMBER:
24503

SEAL:

PRELIMINARY
NOT FOR CONSTRUCTION

CONSULTANT:

PROTOTYPE: NTV GROUND UP
SCHEME A

RAISING CANE'S
RESTAURANT NO.: #RC1353
7456 MINERAL POINT ROAD
MADISON, WI 53717

SHEET REVISIONS

REV	DATE	DESCRIPTION

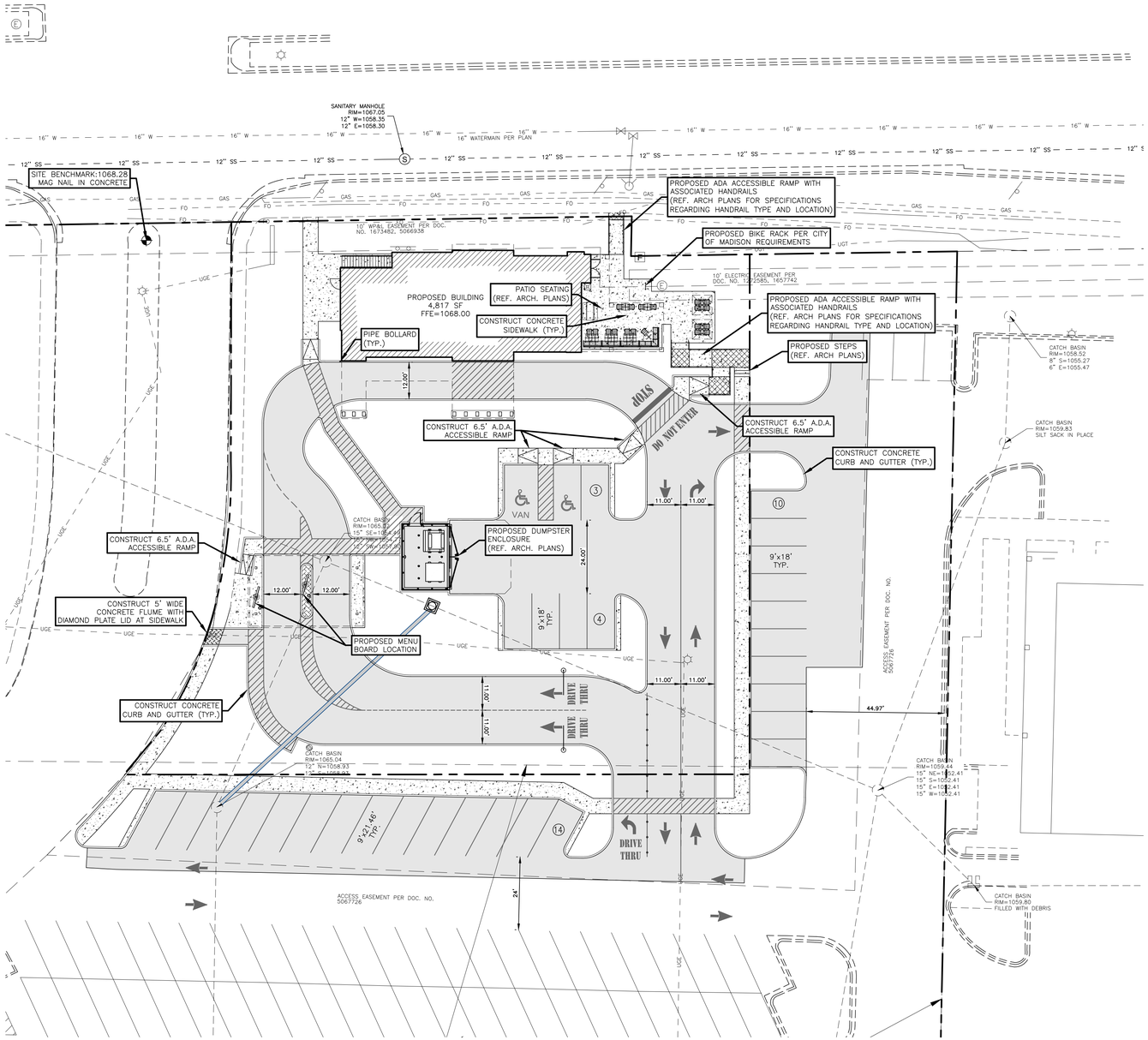
DATE:
10.30.25

ROOF PLAN

SHEET NAME:

A3

SHEET NUMBER:



GRAPHIC SCALE

0 20 40 60 FEET

SITE NOTES:

1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND DIMENSIONS OF SLOPED PAVING, EXIT PORCHES, PRECISE BUILDING DIMENSIONS, EXACT BUILDING ENTRANCE LOCATIONS, TOTAL NUMBER, LOCATIONS, SIZES AND OUTFALLS OF ROOF DOWNSPOUTS.
2. ALL SIGNS PLACED IN AREAS ACCESSIBLE BY VEHICLE TRAFFIC SHALL BE PLACED IN GUARD POST.
3. ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED AS SHOWN IN THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
4. ALL CURB RADII SHOWN ARE TO BACK OF CURB.
5. ALL PAVING DIMENSIONS ARE TO BACK OF CURB, WHERE APPLICABLE, OR TO THE EDGE OF PAVEMENT WHEN NO CURB IS PROPOSED, UNLESS OTHERWISE NOTED.
6. CONTRACTOR IS RESPONSIBLE FOR PROTECTION & REPLACEMENT OF ALL PROPERTY CORNERS.
7. CONTRACTOR SHALL MATCH EXISTING PAVEMENT IN GRADE AND ALIGNMENT.
8. CONTRACTOR SHALL MATCH EXISTING CURB AND GUTTER IN GRADE, SIZE, TYPE AND ALIGNMENT AT ADJACENT ROADWAYS.
9. THE EARTHWORK FOR ALL BUILDING SLABS SHALL BE IN ACCORDANCE WITH ARCHITECTURAL BUILDING PLANS AND SPECIFICATIONS.
10. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
11. ALL PAVEMENT MARKING PAINT SHALL BE SHERWIN WILLIAMS "PROMAR TRAFFIC MARKING", WHITE ON ASPHALT, YELLOW ON CONCRETE. PAINT SHALL BE APPLIED IN TWO COATS TO A CLEAN, DRY SURFACE USING TEMPLATE OR STRIPING MACHINE. STRIPES SHALL BE 4" WIDE UNLESS OTHERWISE INDICATED.
12. CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COSTS.
13. FOR SITE UTILITIES, SEE UTILITY PLAN. SEE ARCHITECT PLANS FOR ON-SITE LIGHTING DETAILS.
14. ALL WORK SHALL COMPLY WITH ALL GOVERNING JURISDICTIONS, STATE OF TEXAS, AND FEDERAL CODES AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER.
15. ALL WORK SHALL BE PERFORMED IN A FINISHED AND WORKMANLIKE MANNER TO THE ENTIRE SATISFACTION OF THE OWNER, AND IN ACCORDANCE WITH THE BEST RECOGNIZED TRADE PRACTICES.
16. ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE OWNER PRIOR TO USE.
17. ALL WORK PERFORMED ON CITY, COUNTY, AND/OR STATE OR FEDERAL RIGHT-OF-WAY SHALL BE IN STRICT CONFORMANCE WITH APPLICABLE STANDARDS AND SPECIFICATIONS OF THE APPROPRIATE GOVERNING AGENCIES.
18. ALL BUILDING DIMENSIONS SHALL BE CHECKED AND COORDINATED WITH THE ARCHITECTURAL PLANS PRIOR TO COMMENCEMENT OF CONSTRUCTION.

LEGEND

TEL PED □	EXISTING TELEPHONE PEDESTAL
C.O.○	EXISTING CLEANOUT
WV ⋈	EXISTING WATER VALVE
WM ⊞	EXISTING WATER METER
MH◯	EXISTING SAN. SEWER MANHOLE
PP-○-	EXISTING POWER POLE
FH-○-	EXISTING FIRE HYDRANT
OHE	EXISTING OVERHEAD ELECTRIC LINE
EX. WTR	EXISTING WATER LINE
EX. SS	EXISTING SAN. SEWER LINE
	PROPERTY LINE
	PROPOSED "LEVEL" LANDING (SLOPE OF LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION)

811 Know what's below. Call before you dig.

NOTICE TO CONTRACTORS

1. These plans are subject to review and approval by all jurisdictions having authority.
2. Contractor shall appropriately notify all relevant entities prior to digging on this project.
3. The contractor shall notify the engineer, in writing, of any errors or discrepancies discovered in the construction documents immediately.
4. The topographic information shown hereon is a reflection of the information provided by
   If the contractor discovers any errors in said information, he shall notify the engineer, in writing, immediately. The engineer and owner shall be indemnified of any problems and/or associated costs resulting from lack of notification.
5. The contractor shall be responsible for confirming the horizontal and vertical location of buried utilities and structures, including, but not limited to the following:

Telephone cable	Conduits	Pipes
Stormsewer lines	Water lines	Gas lines
Television cables	Sanitary Sewer lines	Oil Production lines
Saltwater lines		

Note: If discrepancies occur between that which is shown on the plans and conditions present in the field, the contractor shall notify the engineer, in writing immediately. Failure to do so shall absolve owner and engineer of liability and associated costs.

SUBMITTAL / REVISIONS	DATE	BY

BENCHMARK DESIGN GROUP
CIVIL / ENVIRONMENTAL / PLANNERS
2301 THREE LAKES PARKWAY TYLER TEXAS 75703 - (903) 534-5353 - FIRM NUMBER F-7814 - WWW.BENCHMARK-ENGINEERS.COM

THIS DOCUMENT IS RELEASED FOR THE PURPOSES OF INTERIM REVIEW AND COMMENTS UNDER THE AUTHORITY OF
RYAN W. DAVIS, P.E.,
REGISTRATION NO. E-49115
THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION OR BIDDING PURPOSES.

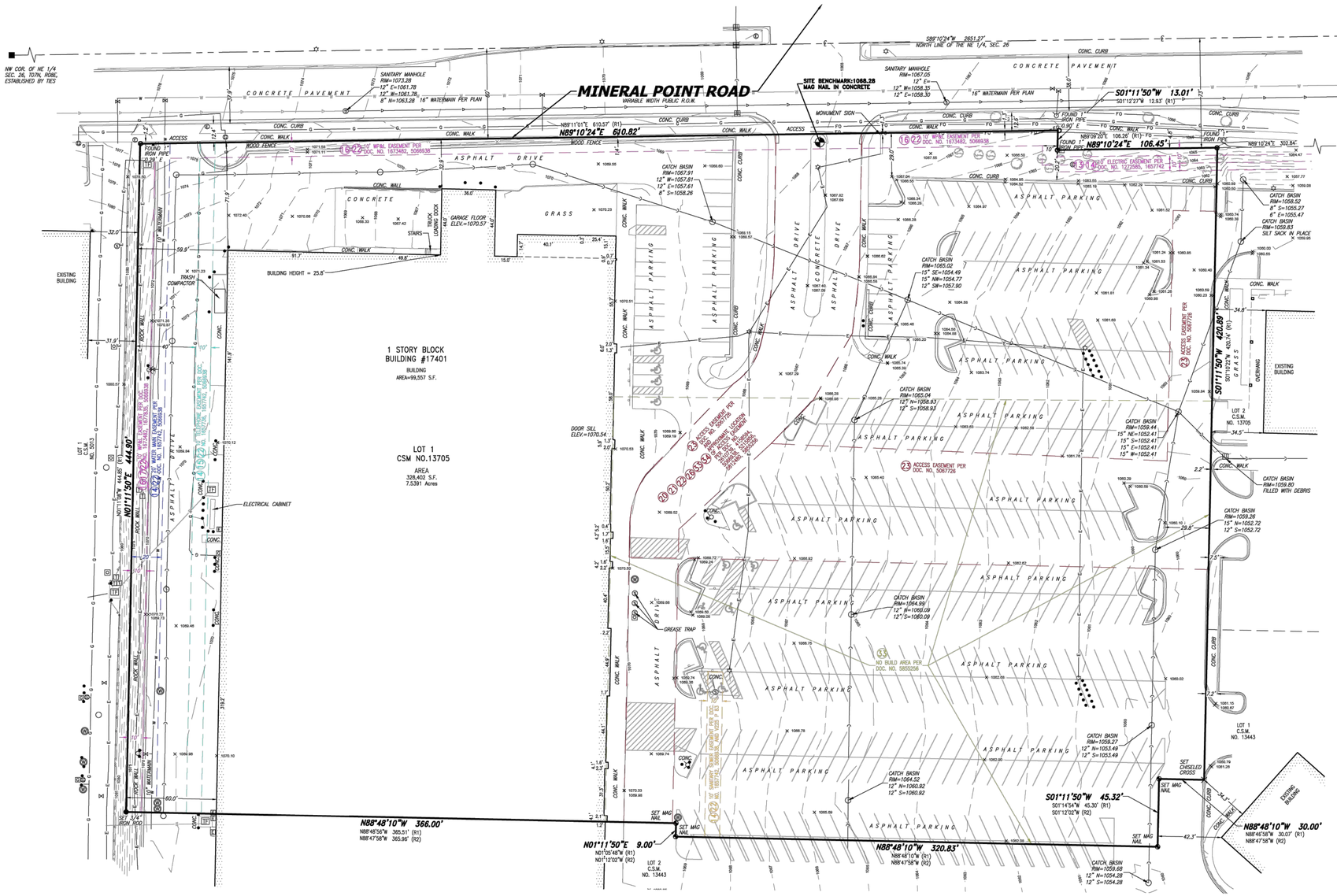
RAISING CANE'S
MADISON, WISCONSIN

SITE PLAN

BENCHMARK DESIGN GROUP

DRAWN BY:	RWD
CHECKED BY:	ELS
DATE:	OCTOBER 2025
JOB NO:	2024.077
SHEET NO.	C-1

ALTA/NSPS
LAND TITLE SURVEY



CLIENT
Benchmark Design Group, Inc.

SITE ADDRESS
7401 Mineral Point Road, City of Madison, Dane County, State of Wisconsin

LEGAL DESCRIPTION
Lot 1 of Certified Survey Map No. 13705, recorded April 30, 2014 in Volume 90 of Certified Survey Maps on Pages 143-149, as Document No. 5066938, being part of Lot 1, Certified Survey Map No. 3422, recorded in Volume 13, Page 250-253 of Certified Survey Maps of Dane County as Document No. 1657742, located in the Northwest 1/4 of the Northeast 1/4 of Section 26, Township 7 North, Range 8 East, in the City of Madison, County of Dane, State of Wisconsin.

Tax Key No: 251/0708-261-0092-0
Address: 7401 Mineral Point Road

BASIS OF BEARINGS
Bearings are referenced to Dane County Coordinate System, the north line of the NE 1 /4 of Sec. 26, T7N, R8E bears N89°10'24"E.

VERTICAL DATUM
Elevations are referenced to NAVD88, with the site benchmark being a mag nail in concrete near Mineral Point Road having an elevation of 1068.28.

TITLE COMMITMENT
This survey was prepared based on Chicago Title Insurance Company Commitment No. CCHI2403159NT, effective date of July 18, 2024 which lists the following easements and/or restrictions from schedule B-II:

1, 5, 6, 7, 8, & 10 visible evidence shown, if any.

2, 3, 4, & 9 not survey related.

11. Easement(s) for the purpose(s) and rights incidental thereto, as granted in a document, granted to The American Telephone and Telegraph Company of Wisconsin, for utility purposes, recorded on July 17, 1930, as Document No. 518061, and assigned to Wisconsin Telephone Company by Assignment recorded as Document No. 1172678. The location cannot be determined from the record document.
12. Easement(s) for the purpose(s) and rights incidental thereto, as granted in a document, granted to The American Telephone and Telegraph Company of Wisconsin, for utility purposes, recorded on July 17, 1930, as Document No. 518065, and assigned to Wisconsin Telephone Company by Assignment recorded as Document No.1172678. The location cannot be determined from the record document.
13. Easement(s) for the purpose(s) and rights incidental thereto, as granted in a document, granted to Wisconsin Power and Light Company, for utility purposes, recorded on September 4, 1970, as Document No. 1272585. Affects property by location, shown.
14. Easements and notes set forth on Certified Survey Map No. 3422, recorded as Document No. 1657742. Affects property by location, shown.
15. Easement(s) for the purpose(s) and rights incidental thereto, as granted in a document, granted to Mid-Plains Telephone Company, for utility purposes, recorded on February 15, 1980, as Document No. 1657736. Affects property by location, shown.
16. Easement(s) for the purpose(s) and rights incidental thereto, as granted in a document, granted to Wisconsin Power and Light Company, for utility purposes, recorded on August 4, 1980, as Document No. 1673482. Affects property by location, shown.
17. Consent to Occupy Public Water, Sanitary and Storm Sewer Easements recorded September 3, 1980 as Document No. 1677835. Affects property by location, shown.
18. Planned Commercial Site maps recorded as Document No's. 1657743, 1740910, 1894411, 2112324, 2291039, 2388739 and 3198520. Affects property by location, blanket type.
19. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in Easement, Restriction and Operating Agreement recorded on April 25, 1969, as Document No. 1239177, amended by an unrecorded Supplement dated January 24, 1969,
Second Supplement to Easement, Restriction and Operating Agreement recorded as Document No. 1288279, First Amendment to Easement, Restriction and Operating Agreement recorded as Document No. 1303874, Third Supplement to Easement, Restriction and Operating Agreement recorded as Document No. 1359322, Fourth Supplement to Easement, Restriction and Operating Agreement recorded as Document No. 1657737, Fifth Supplement to Easement, Restriction and Operating Agreement recorded as Document No. 1752610, Sixth Supplement to Easement, Restriction and Operating Agreement recorded as Document No. 1786646 and Seventh Supplement to Easement, Restriction and Operating Agreement recorded as Document No. 2124846. Affects property by location, general in nature.
20. Covenants, conditions, restrictions and easements but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in Easement, Restriction and Operating Agreement recorded as Document No. 1657735, amended by Amended and Restated Easement, Restriction and Operating Agreement recorded as Document No. 1740913 and First Amendment to Amended and Restated Easement, Restriction and Operating Agreement recorded as Document No. 2610739. Access easement affects property by location, shown.
Common area easement affects property by location, blanket type.
Utility easement locations cannot be determined by record document. (Exhibit not included.)
21. Assignment and Assumption of Operating Agreement recorded as Document No. 4158594. Affects property by location, shown.
22. Easements and notes set forth on Certified Survey Map No. 13705 recorded as Document No. 5066938. Affects property by location, shown.
23. Access Easement Agreement by and between Spirit SPE Portfolio 2006-1, LLC, a Delaware limited liability company and Madison Joint Venture, an Ohio general partnership, recorded as Document No. 5067726. Affects property by location, shown.
24. Reciprocal Storm Water Drainage Easement Agreement by and between Madison Joint Venture, an Ohio general partnership and Spirit SPE Portfolio 2006-1, LLC, a Delaware limited liability company recorded as Document No. 5067727. Affects property by location, blanket type.
25. Certification of corporate limits of the City of Madison after alteration as of December 1, 2015 recorded on December 11, 2015 as Document No. 5203056. Affects property by location, blanket type.
26. A leasehold as created by that certain lease dated December 23, 2015, executed by 7401 Mineral Point Rd Owner LLC, a Delaware limited liability company, as lessor, and Shopko Stores Operating Co., LLC, a Delaware limited liability company, as lessee, as referenced in the document entitled Memorandum of Lease, which was recorded February 19, 2016 as Document No. 5215856, for the term, upon and subject to all the provisions contained in said document, and in said lease. Affects property by location, shown.
27. Declaration of Conditions, Covenants and Restrictions for Maintenance of Stormwater Management Measures recorded on May 15, 2017 as Document No. 5325181. Does not affect property by location, not shown.
28. Easement Underground Electric and Communication to Wisconsin Power and Light Company, a Wisconsin corporation, Charter Cable Partners, LLC d/b/a Charter Communications and Mid-Plains Telephone, LLC d/b/a TDS Telecom recorded on March 20, 2018 as Document No. 5396255. Does not affect property by location, not shown.
29. Rights and Interests in Transportation Project Plat No: 5992-10-30 - 4.02 recorded on April 8, 2019 as Document No. 5479243. Does not affect property by location, not shown.
30. Rights and Interests in Transportation Project Plat No: 5992-10-30 - 4.03 recorded on April 8, 2019 as Document No. 5479244. Does not affect property by location, not shown.
31. Certificate of Corporate limits of the City of Madison after alteration as of December 1, 2020 recorded on December 3, 2020 as Document No. 5669369. Affects property by location, blanket type.
32. Certificate of Corporate limits of the City of Madison after alteration as of December 1, 2021 recorded on December 7, 2021 as Document No. 5795329. Affects property by location, blanket type.
33. A leasehold as created by that certain lease dated July 27, 2022, executed by Mineral West, LLC, a Wisconsin limited liability company, as lessor, and Bowl New England, Inc., a Vermont corporation d/b/a Spare Time Madison, as lessee, as referenced in the document entitled Memorandum of Lease, which was recorded August 15, 2022 as Document No. 5855256, for the term, upon and subject to all the provisions contained in said document, and in said lease. Affects property by location, shown.
34. Terms, conditions and restrictions in Quit Claim Deed given in lieu of foreclosure, recorded on February 15, 2022 as Document No. 5812480. Affects property by location, shown.
35. Extraterritorial Plat Approval Jurisdiction certifies resolution #RES-22-00714 ID# 73608 Amending the City's ETJ Boundary recorded on November 21, 2022 as Document No. 5874628. Does not affect property by location, not shown.

To: Benchmark Design Group
Chicago Title Insurance Company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 7(a), 7(b)(1), 7(c), 8, 9, 11(b), 19, and 20(b) of Table A thereof. The field work was completed on April 30, 2025.

Date of Map: May 12, 2025

WISCONSIN JOHN P. KONOPACKI S-2461 SUMMIT, WI LAND SURVEYOR

John P. Konopacki
Professional Land Surveyor
Registration Number S-2461

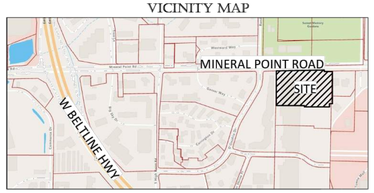
LEGEND OF SYMBOLS & ABBREVIATIONS

SANITARY MANHOLE, STORM MANHOLE, CLEANOUT, CURB INLET, STORM INLET, CATCH BASIN, LATERAL, UNKNOWN MANHOLE, WELL, HYDRANT, WATER VALVE, DOWN SPOUT, SPRINKLER VALVE, WATER SHUT OFF, STANDPIPE, WATER MANHOLE, FLOOD LIGHT, LIGHT POLE
FIBER OPTIC MARKER, FIBER OPTIC MANHOLE/VAULT, TELEPHONE PEDESTAL, TELEPHONE MANHOLE/VAULT, TELEPHONE MARKER, TRANSFORMER, ELECTRIC METER/PEDESTAL, ELECTRIC MANHOLE/VAULT, CABLE TV RISER/BOX CABLE, TV MANHOLE/VAULT, GAS VALVE, GAS METER, GAS MARKER, AIR CONDITIONING UNIT, VENT, UTILITY POLE, GUY WIRE, TRAFFIC SIGNAL POLE
SIGN, MAIL BOX, FLAG POLE, BOLLARD, CROSS CUT, IRON PIPE, IRON REBAR/ROD, MAG NAIL, SECTION MONUMENT, BENCH MARK, CONIFER TREE, DECIDUOUS TREE, BUSH, WETLAND SYMBOL, DIRECTIONAL ARROW, SPOT ELEVATION, HANDICAP STALL, DUMPSTER
SANITARY SEWER, SANITARY SEWER PER PLAN, STORM SEWER, STORM SEWER PER PLAN, WATER MAIN, WATER MAIN PER PLAN, FIBER OPTIC LINE, FIBER OPTIC PER PLAN, TELEPHONE LINE, TELEPHONE PER PLAN, ELECTRIC LINE, ELECTRIC LINE PER PLAN, OVERHEAD WIRES, CABLE TELEVISION, CABLE TELEVISION PER PLAN, GAS MAIN, GAS MAIN PER PLAN, TRAFFIC CONDUIT PER PLAN, TREE LINE, NO ACCESS

CL. =CENTERLINE
CONC. =CONCRETE
EL. =ELEVATION
EXT. =EXISTING
INV. =INVERT
MON. =MONUMENT
P.O.B. =POINT OF BEGINNING
P.O.C. =POINT OF COMMENCEMENT
R.O.W =RIGHT OF WAY
SEC. =SECTION
SQ. FT. =SQUARE FEET
W/ =WITH
(R) =RECORDED AS
(D) =DEEDED AS

NOTE:
RECORD DIMENSION SOURCE GUIDE
(R1) = CSM NO. 13705
(R2) = CSM NO. 13443

VICINITY MAP



GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

TABLE "A" ITEMS
3. According to the flood insurance rate map of the County of Dane, Community Panel No.55025C0395G, effective date of January 2, 2009, the map is not printed
4. The Land Area of the subject property is 328,402 square feet or 7.5391 acres.
9. There are 401 regular parking spaces and 12 handicap spaces marked on this site.
11(b). Evidence of underground utilities existing on or serving the surveyed property as determined by markings requested by the surveyor pursuant to a Diggers Hotline One-call center utility locate. Ticket Number 20251527405 & 20251527408. However, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. Client understands only utility lines with imbedded electric tracer wires or utilities made of materials capable of electric connectivity can be marked at the surface and located. Depth of utilities may prohibit their location even with electric connectivity.
20(b). Engineering design topography and utility survey: Vertical datum, elevations with 1 foot contour intervals and spot elevations on paved surfaces. Sewer lines will be depicted by location and depths where accessible without confined entry safety procedures and where traffic lanes do not pose a safety hazard accessing sewer data. Pipe sizes will be shown from plans, if available. Watermain and water services will be depicted from surface evidence and available plans. The limits of topography will extend to the centerline of the adjacent streets and 25' onto adjacent properties unless otherwise agreed upon.

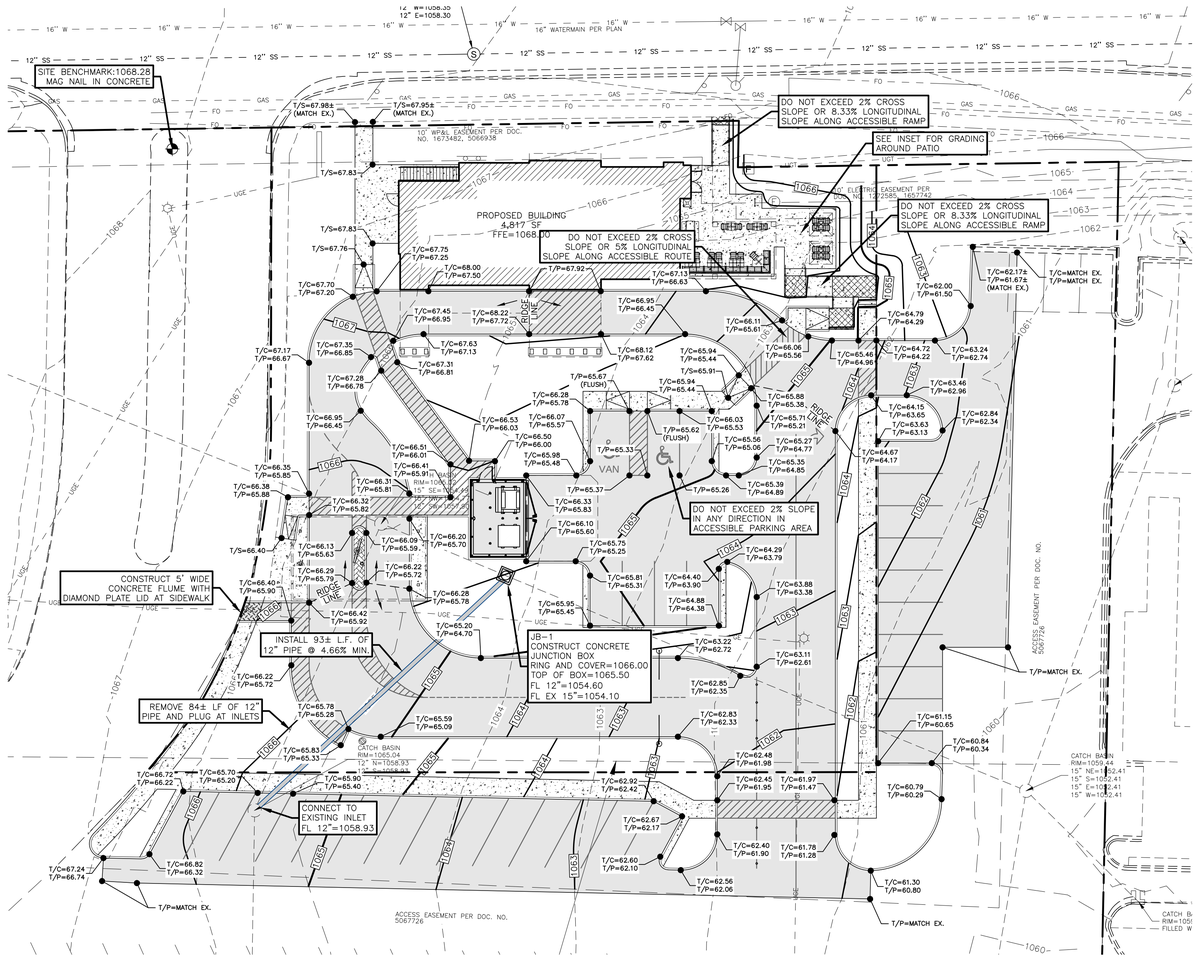
CHAPUT LAND SURVEYS
234 W. Florida Street, Milwaukee, WI 53204
414-224-8068
www.chaputlandsurveys.com

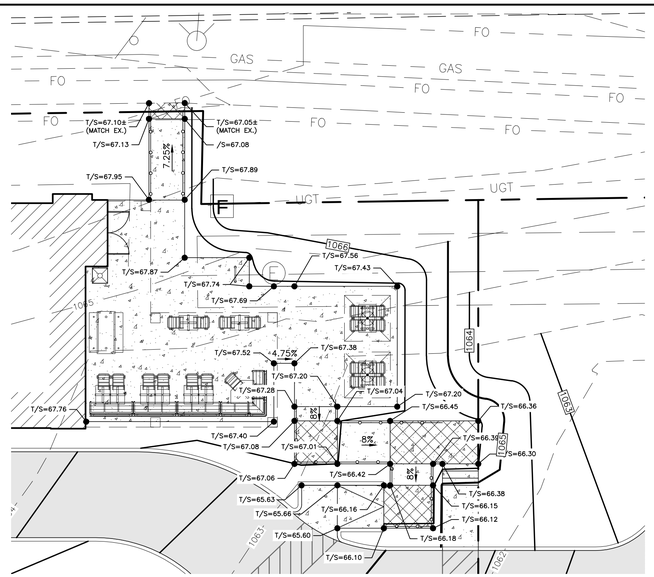
Date	Revision description

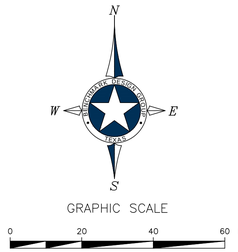
DRAFTED BY: JWD
Drawing No. 6479.00

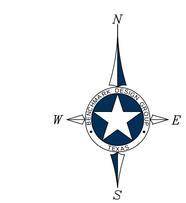
CHAPUT LAND SURVEYS

ALTA SURVEY









GRADING NOTES:

1. THE EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH GEOTECHNICAL REPORT.
2. ADJUST PAVEMENT AND/OR CURB ELEVATIONS AS NECESSARY TO ASSURE A SMOOTH FIT & CONTINUOUS GRADE WITH EXISTING.
3. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITIES AND NOTIFYING THE APPROPRIATE UTILITY COMPANY PRIOR TO BEGINNING CONSTRUCTION.
4. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING STORM SEWER STRUCTURES, PIPES, AND ALL UTILITIES PRIOR TO CONSTRUCTION.
5. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURBS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
6. EXISTING GRADE CONTOURS INTERVAL SHOWN AT ONE FOOT (1').
7. PROPOSED GRADE CONTOURS INTERVAL SHOWN AT ONE FOOT (1').
8. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE FOUR (4) INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES STEEPER THAN 3H:1V. ALL LANDSCAPING TO BE PER LANDSCAPE PLANS AND SPECIFICATIONS AND/OR AS DIRECTED BY OWNER.
9. FOR LOCATION OF ALL UTILITY ENTRANCES, SEE M.E.P. PLANS AND SPECIFICATIONS.
10. CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL PLANS, POWER COMPANY, TELEPHONE COMPANY AND GAS CO. FOR ACTUAL ROUTING OF POWER AND SERVICES TO BUILDING.
11. CONSTRUCTION SHALL COMPLY WITH ALL GOVERNING CODES AND BE CONSTRUCTED TO SAME.
12. ALL SPOT GRADES AND CONTOURS ARE TO FINISHED GRADE UNLESS OTHERWISE NOTED. FINISHED GRADE IS TO INCLUDE 4" TOPSOIL IN LANDSCAPED AREAS.
13. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURE. CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED TO, ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.
14. UNLESS OTHERWISE SHOWN ON THESE PLANS OR SPECIFIED BY OTHER DISCIPLINES, THE FINISHED GRADE (INCLUDING LANDSCAPING) SHALL BE A MINIMUM OF 9" BELOW THE FINISHED FLOOR ELEVATION (FFE).

LEGEND

TEL PED	EXISTING TELEPHONE PEDESTAL
C.O.	EXISTING CLEANOUT
WV	EXISTING WATER VALVE
WM	EXISTING WATER METER
MH	EXISTING SAN. SEWER MANHOLE
PP	EXISTING POWER POLE
FH	EXISTING FIRE HYDRANT
OHE	EXISTING OVERHEAD ELECTRIC LINE
EX. WTR	EXISTING WATER LINE
EX. SS	EXISTING SAN. SEWER LINE
	PROPERTY LINE
534	EXISTING 1' CONTOUR
535	EXISTING 5' CONTOUR
534	PROPOSED 1' CONTOUR
535	PROPOSED 5' CONTOUR
T/C=536.91 T/P=536.41	PROPOSED SPOT GRADE
T/C = TOP OF CURB T/P = TOP OF PAVEMENT T/S = TOP OF SIDEWALK F/G = FINISHED GRADE	
	PROPOSED "LEVEL" LANDING (SLOPE OF LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION)

NOTICE TO CONTRACTORS

1. These plans are subject to review and approval by all jurisdictions having authority.
2. Contractor shall appropriately notify all relevant entities prior to digging on this project.
3. The contractor shall notify the engineer, in writing, of any errors or discrepancies discovered in the construction documents immediately.
4. The topographic information shown hereon is a reflection of the information provided by
   If the contractor discovers any errors in said information, he shall notify the engineer, in writing, immediately. The engineer and owner shall be indemnified of any problems and/or associated costs resulting from lack of notification.
5. The contractor shall be responsible for confirming the horizontal and vertical location of buried utilities and structures, including, but not limited to the following:

Telephone cable	Conduits	Pipes
Stormsewer lines	Water lines	Gas lines
Television cables	Sanitary Sewer lines	Oil Production lines
Saltwater lines		

Note: If discrepancies occur between that which is shown on the plans and conditions present in the field, the contractor shall notify the engineer, in writing immediately. Failure to do so shall absolve owner and engineer of liability and associated costs.

SUBMITTAL / REVISIONS	DATE	BY

BENCHMARK DESIGN GROUP
CIVIL / ENVIRONMENTAL / PLANNERS
2301 THREE LAKES PARKWAY TYLER TEXAS 75703 - (903) 534-5353 - FIRM NUMBER F-7814 - WWW.BENCHMARK-ENGINEERS.COM

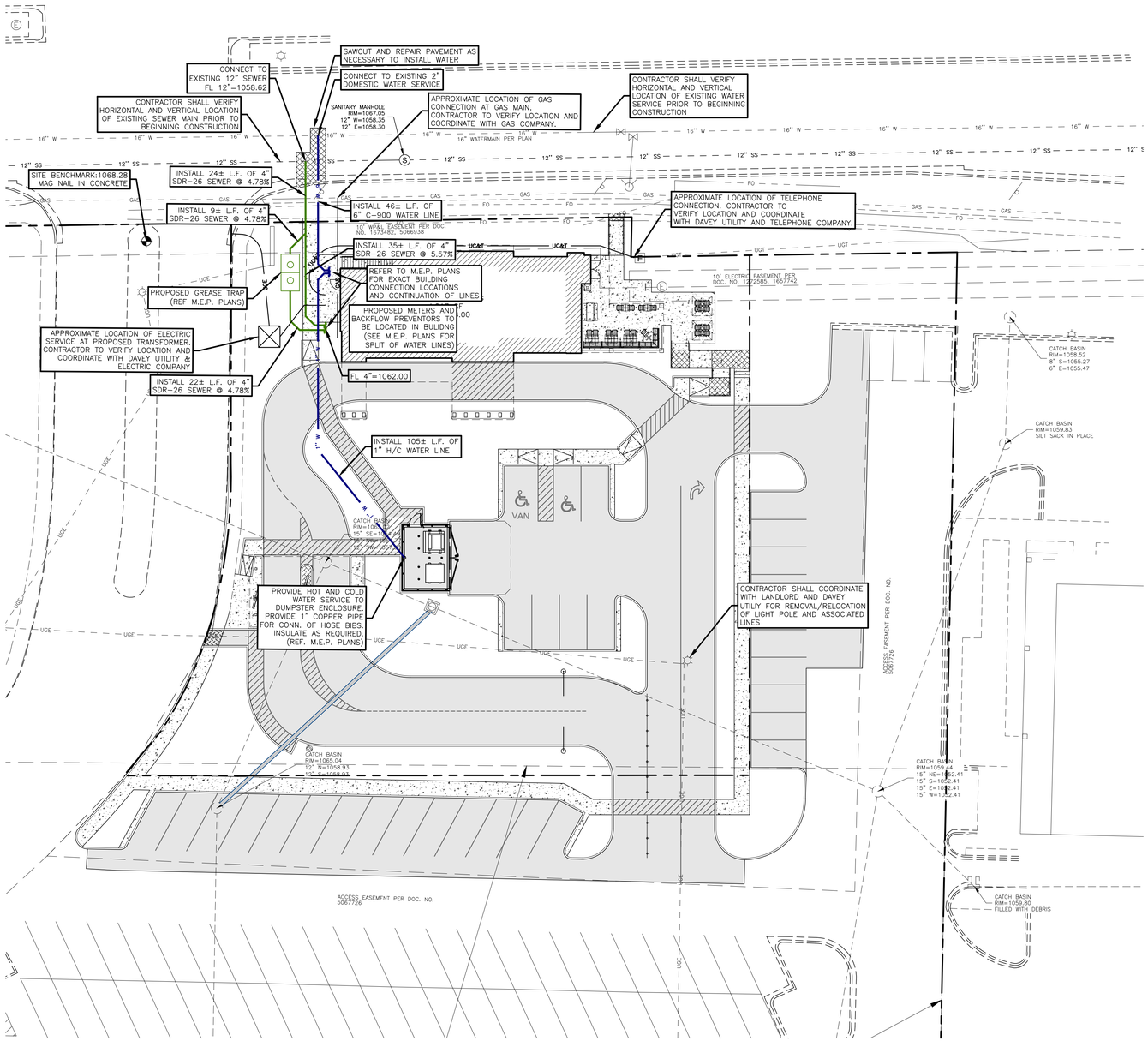
THIS DOCUMENT IS RELEASED FOR THE PURPOSES OF INTERIM REVIEW AND COMMENTS UNDER THE AUTHORITY OF
RYAN W. DAVIS, P.E.,
REGISTRATION NO. E-49115
THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION OR BIDDING PURPOSES.

RAISING CANE'S
MADISON, WISCONSIN

GRADING PLAN

BENCHMARK DESIGN GROUP

DRAWN BY:	RWD
CHECKED BY:	ELS
DATE:	OCTOBER 2025
JOB NO:	2024.077
SHEET NO.	C-3



UTILITY CONSTRUCTION NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, SIDEWALKS, DRIVEWAYS, FENCES, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
2. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURE. CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED TO, ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.
3. CONTRACTOR SHALL, ON ALL UTILITIES, COORDINATE INSPECTION WITH APPROPRIATE AUTHORITIES PRIOR TO COVERING TRENCHES.
4. CONSTRUCTION SHALL COMPLY WITH GOVERNING CODES AND REQUIREMENTS. CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE UTILITY COMPANIES AND OWNERS INSPECTING AUTHORITIES.
5. ADJUST PAVEMENT AND/OR CURB ELEVATIONS AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE WITH EXISTING.
6. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITIES AND NOTIFYING THE APPROPRIATE UTILITY COMPANY PRIOR TO BEGINNING CONSTRUCTION.
7. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING STORM SEWER STRUCTURES, PIPES, AND ALL UTILITIES PRIOR TO CONSTRUCTION.
8. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE FOUR (4) INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES STEEPER THAN 3H:1V. REFER TO OWNER FOR EXACT AREAS, DETAILS, AND SPECS.
9. CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL PLANS, POWER COMPANY, TELEPHONE COMPANY AND GAS COMPANY FOR ACTUAL ROUTING OF POWER AND SERVICES TO BUILDING.
10. CONSTRUCTION SHALL COMPLY WITH ALL GOVERNING CODES AND BE CONSTRUCTED TO SAME.
11. CONTRACTOR TO REFER TO LANDSCAPING/ARCHITECTURAL PLANS AND/OR OWNER FOR LOCATIONS OF PROPOSED LIGHT STANDARDS AND UTILITY SLEEVING.
12. REFER TO M.E.P. PLANS FOR ELECTRIC, GAS, TELEPHONE, CABLE AND ANY OTHER NECESSARY UTILITIES SERVICES, OTHER THAN WATER AND SANITARY SEWER.

LEGEND

TEL PED □	EXISTING TELEPHONE PEDESTAL
C.O.O	EXISTING CLEANOUT
WV ⋈	EXISTING WATER VALVE
WM ⊞	EXISTING WATER METER
MH ◯	EXISTING SAN. SEWER MANHOLE
PP ○	EXISTING POWER POLE
FH ○	EXISTING FIRE HYDRANT
OHE	EXISTING OVERHEAD ELECTRIC LINE
EX. WTR	EXISTING WATER LINE
EX. SS	EXISTING SAN. SEWER LINE
	PROPERTY LINE
WV ⋈	PROPOSED WATER VALVE
WM ⊞	PROPOSED WATER METER
FH ○	PROPOSED FIRE HYDRANT
W	PROPOSED WATER LINE
SS	PROPOSED SAN. SEWER LINE

N W E S

GRAPHIC SCALE

0 20 40 60 FEET

Know what's below. Call before you dig.

NOTICE TO CONTRACTORS

1. These plans are subject to review and approval by all jurisdictions having authority.
2. Contractor shall appropriately notify all relevant entities prior to digging on this project.
3. The contractor shall notify the engineer, in writing, of any errors or discrepancies discovered in the construction documents immediately.
4. The topographic information shown hereon is a reflection of the information provided by
   If the contractor discovers any errors in said information, he shall notify the engineer, in writing, immediately. The engineer and owner shall be indemnified of any problems and/or associated costs resulting from lack of notification.
5. The contractor shall be responsible for confirming the horizontal and vertical location of buried utilities and structures, including, but not limited to the following:

Telephone cable	Conduits	Pipes
Stormsewer lines	Water lines	Gas lines
Television cables	Sanitary Sewer lines	Oil Production lines
Saltwater lines		

Note: If discrepancies occur between that which is shown on the plans and conditions present in the field, the contractor shall notify the engineer, in writing immediately. Failure to do so shall absolve owner and engineer of liability and associated costs.

SUBMITTAL / REVISIONS	DATE	BY

BENCHMARK DESIGN GROUP
CIVIL / ENVIRONMENTAL / PLANNERS
2301 THREE LAKES PARKWAY TYLER TEXAS 75703 - (903) 534-5353 - FIRM NUMBER F-7814 - WWW.BENCHMARK-ENGINEERS.COM

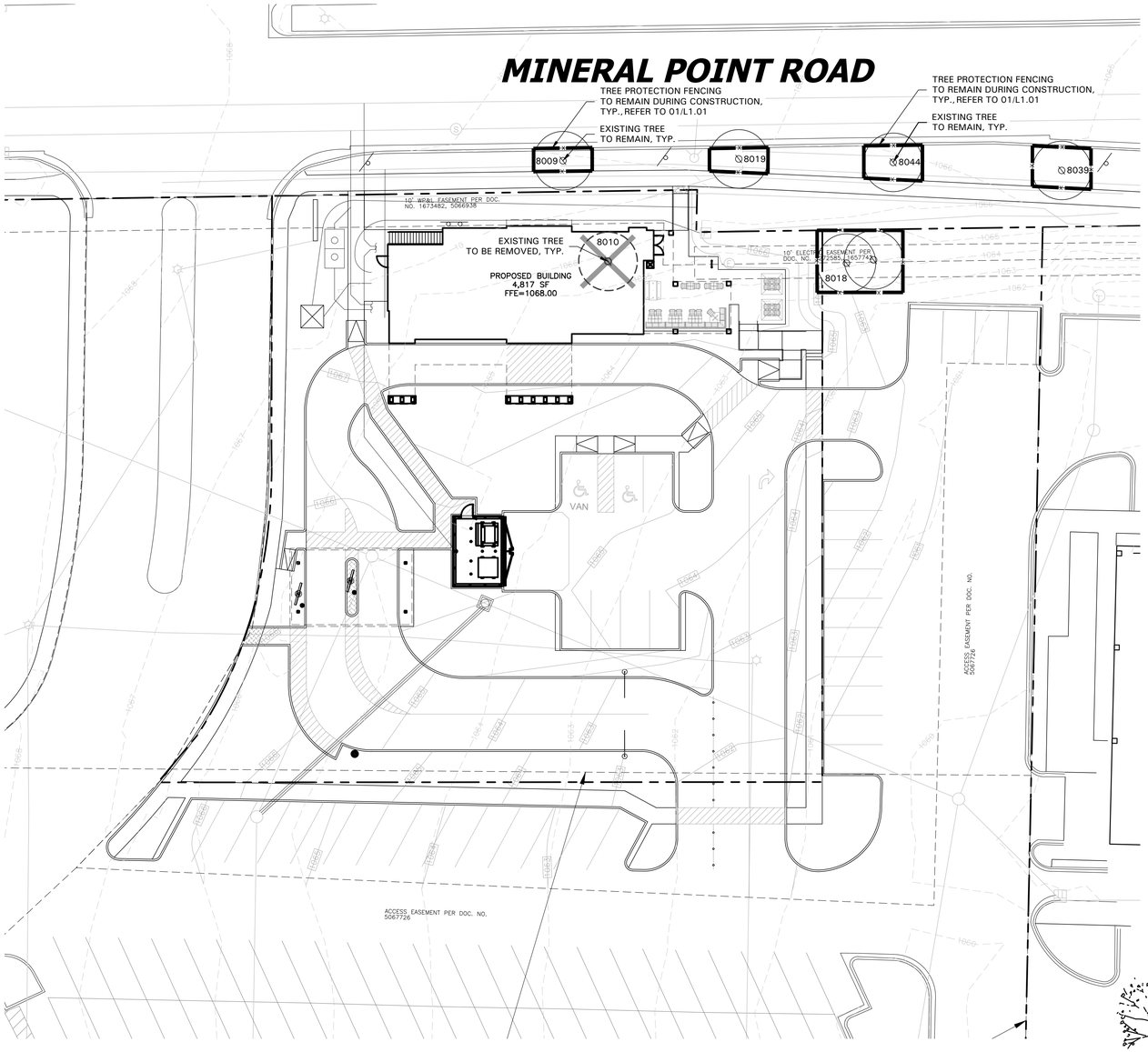
THIS DOCUMENT IS RELEASED FOR THE PURPOSES OF INTERIM REVIEW AND COMMENTS UNDER THE AUTHORITY OF
RYAN W. DAVIS, P.E.,
REGISTRATION NO. F-49115
THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION OR BIDDING PURPOSES.

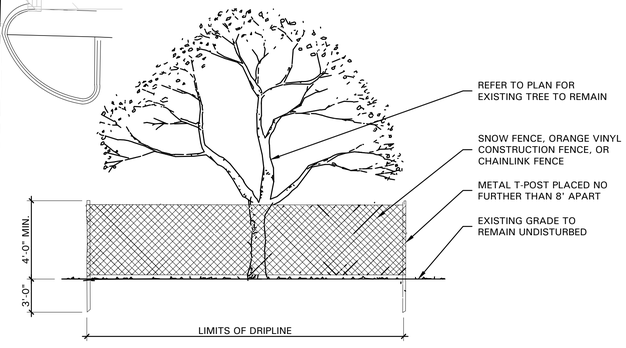
RAISING CANE'S
MADISON, WISCONSIN

UTILITY PLAN

BENCHMARK DESIGN GROUP

DRAWN BY:	RWD
CHECKED BY:	ELS
DATE:	OCTOBER 2025
JOB NO:	2024.077
SHEET NO.	C-4





01 TREE PROTECTIVE FENCING
NOT TO SCALE

TREE SURVEY FIELD DATA				
No.	Dia. (inches)	Species (common name)	Status	Remarks
8009	8	DECIDUOUS TREE	TO REMAIN	OUTSIDE PROPERTY
8010	18	DECIDUOUS TREE	TO BE REMOVED	
8018	18	DECIDUOUS TREE	TO REMAIN	OUTSIDE PROPERTY
8019	2	DECIDUOUS TREE	TO REMAIN	OUTSIDE PROPERTY
8039	8	DECIDUOUS TREE	TO REMAIN	OUTSIDE PROPERTY
8044	2	DECIDUOUS TREE	TO REMAIN	OUTSIDE PROPERTY
Total Caliper Inches on Site				**18**
Total Caliper Inches Removed				**18**

TREE PRESERVATION NOTES

1. EXISTING TREES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION FROM TREE STRUCTURE DAMAGE AND COMPACTION OF SOIL UNDER AND AROUND DRIP LINE (CANOPY) OF TREE.
2. IF ANY ROOT STRUCTURE IS DAMAGED DURING ADJACENT EXCAVATION / CONSTRUCTION, NOTIFY OWNER'S AUTHORIZED REPRESENTATIVE IMMEDIATELY. IT IS RECOMMENDED THAT A LICENSED ARBORIST BE SECURED FOR THE TREATMENT OF ANY POSSIBLE TREE WOUNDS.
3. NO DISTURBANCE OF THE SOIL GREATER THAN 4" SHALL BE LOCATED CLOSER TO THE TREE TRUNK THAN 1/2 THE DISTANCE OF THE DRIP LINE TO THE TREE TRUNK. A MINIMUM OF 75% OF THE DRIP LINE AND ROOT ZONE SHALL BE PRESERVED AT NATURAL GRADE.
4. ANY FINE GRADING DONE WITHIN THE CRITICAL ROOT ZONES OF THE PROTECTED TREES MUST BE DONE WITH LIGHT MACHINERY SUCH AS A BOBCAT OR LIGHT TRACTOR. NO EARTH MOVING EQUIPMENT WITH TRACKS IS ALLOWED WITHIN THE CRITICAL ROOT ZONE OF THE TREES.
5. NO MATERIALS INTENDED FOR USE IN CONSTRUCTION OR WASTE MATERIALS ACCUMULATED DUE TO EXCAVATION OR DEMOLITION SHALL BE PLACED WITHIN THE LIMITS OF THE DRIP LINE OF ANY TREE.
6. NO EQUIPMENT MAY BE CLEANED OR TOXIC SOLUTIONS, OR OTHER LIQUID CHEMICALS, SHALL BE DEPOSITED WITHIN THE LIMITS OF THE DRIP LINE OF A TREE, INCLUDING BUT NOT LIMITED TO: PAINT, OIL, SOLVENTS, ASPHALT, CONCRETE, MORTAR, PRIMERS, ETC.
7. NO SIGNS, WIRES OR OTHER ATTACHMENTS, OTHER THAN THOSE OF A PROTECTIVE NATURE, SHALL BE ATTACHED TO ANY TREE.
8. NO VEHICULAR / CONSTRUCTION EQUIPMENT TRAFFIC OR PARKING IS ALLOWED WITHIN THE LIMITS OF THE DRIP LINE OF TREES.
9. BORING OF UTILITIES MAY BE PERMITTED UNDER PROTECTED TREES IN CERTAIN CIRCUMSTANCES. THE MINIMUM LENGTH OF THE BORE SHALL BE THE WIDTH OF THE TREE'S CANOPY AND SHALL BE A MINIMUM DEPTH OF FORTY-EIGHT (48") INCHES.
10. IRRIGATION TRENCHING WHICH MUST BE DONE WITHIN THE CRITICAL ROOT ZONE OF A TREE SHALL BE DUG BY HAND AND ENTER THE AREA IN A RADIAL MANNER.
11. ALL TREES TO BE REMOVED FROM THE SITE SHALL BE FLAGGED BY THE CONTRACTOR WITH BRIGHT RED VINYL TAPE (3" WIDTH) WRAPPED AROUND THE MAIN TRUNK AT A HEIGHT OF FOUR (4') FEET ABOVE GRADE. FLAGGING SHALL BE APPROVED BY OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO ANY TREE REMOVAL. CONTRACTOR SHALL CONTACT OWNER'S AUTHORIZED REPRESENTATIVE WITH 72 HOURS NOTICE TO SCHEDULE ON-SITE MEETING.
12. ALL TREES TO REMAIN, AS NOTED ON DRAWINGS, SHALL HAVE PROTECTIVE FENCING LOCATED AT THE TREE'S DRIP LINE. THE PROTECTIVE FENCING MAY BE COMPRISED OF SNOW FENCING, ORANGE VINYL CONSTRUCTION FENCING, CHAIN LINK FENCE OR OTHER SIMILAR FENCING WITH A FOUR (4') FOOT APPROXIMATE HEIGHT. THE PROTECTIVE FENCING SHALL BE LOCATED AS INDICATED ON THE TREE PROTECTION DETAIL.
13. WHEN A LOW HANGING LIMB IS BROKEN DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE IMMEDIATELY. UNDER NO CIRCUMSTANCE SHALL THE CONTRACTOR PRUNE ANY PORTION OF THE DAMAGED TREE WITHOUT THE PRIOR APPROVAL BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

EXISTING TREE LEGEND

- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- TREE PROTECTION FENCING TO REMAIN DURING CONSTRUCTION REFER TO 01/L1.01

N

SCALE: 1" = 20'-0"
0 10 20 40

BELLE FIRMA
12801 N. Central Expy
Suite 1760
Dallas, Texas 75243
(214) 865-7192

ADA ARCHITECTS
17710 Detroit Ave Lakewood, Ohio 44107
Phone: (216) 521-5134
Fax: (216) 521-4824
www.adaarchitects.com

ADA JOB NUMBER:
24503

SEAL:
WISCONSIN
KORI ANN HAUG
LA-684-14
DALLAS, TEXAS
LANDSCAPE ARCHITECT
11/3/25

CONSULTANT:

Raising Cane's Chicken Fingers

PROTOTYPE: NTV GROUND UP
SCHEME A

RAISING CANE'S
RESTAURANT NO.: #RC1353
7456 MINERAL POINT ROAD
MADISON, WI 53717

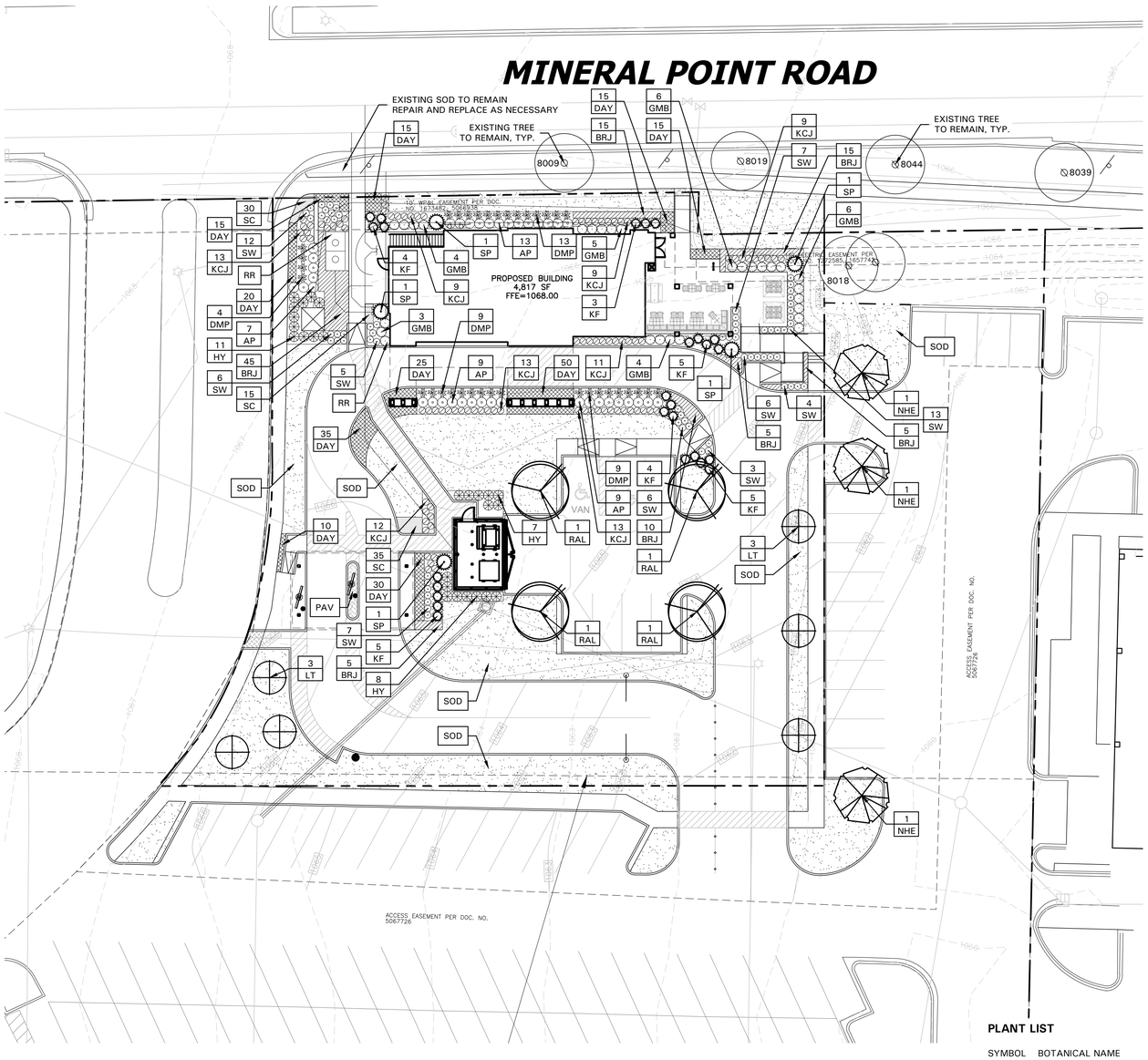
SHEET REVISIONS

REV	DATE	DESCRIPTION

DATE:
10.20.25

TREE PRESERVATION PLAN
SHEET NAME:

L1.01
SHEET NUMBER:



LANDSCAPE NOTES

1. CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED SITE ELEMENTS AND NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES. SURVEY DATA OF EXISTING CONDITIONS WAS SUPPLIED BY OTHERS.
2. CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES AND NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS. CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN THE VICINITY OF UNDERGROUND UTILITIES.
3. CONTRACTOR SHALL PROVIDE A MINIMUM 2% SLOPE AWAY FROM ALL STRUCTURES.
4. CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED. LEAVE AREAS TO RECEIVE TOPSOIL 3" BELOW FINAL FINISHED GRADE IN PLANTING AREAS AND 1" BELOW FINAL FINISHED GRADE IN LAWN AREAS.
5. ALL PLANTING BEDS AND LAWN AREAS SHALL BE SEPARATED BY STEEL EDGING. NO STEEL EDGING SHALL BE INSTALLED ADJACENT TO BUILDINGS, WALKS, OR CURBS. CUT STEEL EDGING AT 45 DEGREE ANGLE WHERE IT INTERSECTS WALKS AND CURBS.
6. TOP OF MULCH SHALL BE 1/2" MINIMUM BELOW THE TOP OF WALKS AND CURBS.
7. ALL LAWN AREAS SHALL BE KENTUCKY BLUEGRASS FESCUE MIX, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
8. ALL REQUIRED LANDSCAPE AREAS SHALL BE PROVIDED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM WITH RAIN AND FREEZE SENSORS AND EVAPOTRANSPIRATION (ET) WEATHER-BASED CONTROLLERS AND SAID IRRIGATION SYSTEM SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL AND INSTALLED BY A LICENSED IRRIGATOR.
9. CONTRACTOR SHALL PROVIDE BID PROPOSAL LISTING UNIT PRICES FOR ALL MATERIAL PROVIDED.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED LANDSCAPE AND IRRIGATION PERMITS.

MAINTENANCE NOTES

1. THE OWNER, TENANT AND THEIR AGENT, IF ANY, SHALL BE JOINTLY AND SEVERALLY RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE.
2. ALL LANDSCAPE SHALL BE MAINTAINED IN A NEAT AND ORDERLY MANNER AT ALL TIMES. THIS SHALL INCLUDE MOWING, EDGING, PRUNING, FERTILIZING, WATERING, WEEDING AND OTHER SUCH ACTIVITIES COMMON TO LANDSCAPE MAINTENANCE.
3. ALL LANDSCAPE AREAS SHALL BE KEPT FREE OF TRASH, LITTER, WEEDS AND OTHER SUCH MATERIAL OR PLANTS NOT PART OF THIS PLAN.
4. ALL PLANT MATERIAL SHALL BE MAINTAINED IN A HEALTHY AND GROWING CONDITION AS IS APPROPRIATE FOR THE SEASON OF THE YEAR.
5. ALL PLANT MATERIAL WHICH DIES SHALL BE REPLACED WITH PLANT MATERIAL OF EQUAL OR BETTER VALUE.
6. CONTRACTOR SHALL PROVIDE SEPARATE BID PROPOSAL FOR ONE YEAR'S MAINTENANCE TO BEGIN AFTER FINAL ACCEPTANCE.

GENERAL LAWN NOTES

1. CONTRACTOR SHALL COORDINATE OPERATIONS AND AVAILABILITY OF EXISTING TOPSOIL WITH ON-SITE CONSTRUCTION MANAGER.
2. CONTRACTOR SHALL LEAVE LAWN AREAS 1" BELOW FINAL FINISHED GRADE PRIOR TO TOPSOIL INSTALLATION.
3. CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED ON CIVIL PLANS. ADJUST CONTOURS TO ACHIEVE POSITIVE DRAINAGE AWAY FROM BUILDINGS. PROVIDE UNIFORM ROUNDING AT TOP AND BOTTOM OF SLOPES AND OTHER BREAKS IN GRADE. CORRECT IRREGULARITIES AND AREAS WHERE WATER MAY STAND.
4. ALL LAWN AREAS SHALL BE FINE GRADED, IRRIGATION TRENCHES COMPLETELY SETTLED AND FINISH GRADE APPROVED BY THE OWNER'S CONSTRUCTION MANAGER OR LANDSCAPE ARCHITECT PRIOR TO LAWN INSTALLATION.
5. CONTRACTOR SHALL REMOVE ALL ROCKS 3/4" DIAMETER AND LARGER, DIRT CLODS, STICKS, CONCRETE SPOILS, ETC. PRIOR TO PLACING TOPSOIL AND LAWN INSTALLATION.
6. CONTRACTOR SHALL MAINTAIN ALL LAWN AREAS UNTIL FINAL ACCEPTANCE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: MOWING, WATERING, WEEDING, CULTIVATING, CLEANING AND REPLACING DEAD OR BARE AREAS TO KEEP PLANTS IN A VIGOROUS, HEALTHY CONDITION.
7. CONTRACTOR SHALL GUARANTEE ESTABLISHMENT OF ACCEPTABLE TURF AREA AND SHALL PROVIDE REPLACEMENT FROM LOCAL SUPPLY IF NECESSARY.

SOLID SOD NOTES

1. PLANT SOD BY HAND TO COVER INDICATED AREAS COMPLETELY. ENSURE EDGES OF SOD ARE TOUCHING. TOP DRESS JOINTS BY HAND WITH TOPSOIL TO FILL VOIDS.
2. ROLL GRASS AREAS TO ACHIEVE A SMOOTH, EVEN SURFACE, FREE FROM UNNATURAL UNDULATIONS.
3. WATER SOD THOROUGHLY AS SOD OPERATION PROGRESSES.

LANDSCAPE TABULATIONS

THE CITY OF MADISON, WISCONSIN

DEVELOPED AREA

1. Five (5) landscape points shall be provided for each three hundred (300) square feet of developed area.

Total Developed Area: 25,642 s.f.

Required	Provided
427 points	1,795 points

PLANT LIST

SYMBOL	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	REMARKS	CATEGORY	PTS	TOTAL
	TREES							
LT	*Syringa reticulata 'Ivory Silk'*	Ivory Silk Japanese Lilac Tree	6	1-1/2" cal.	container grown, 6' ht., 3' branching ht., 3' spread min., matching	Ornamental Tree	15	90
NHE	*Ulmus carpinifolia 'New Horizon'*	New Horizon Smoothleaf Elm	3	3" cal.	container grown, 12' ht., 4' spread, 4' branching ht., matching	Overstory Deciduous Tree		
RAL	*Tilia americana 'Redmond'*	Redmond American Linden	4	3" cal.	container grown, 12' ht., 4' spread, 4' branching ht., matching	Overstory Deciduous Tree	35	140
	SHRUBS/GROUNDCOVER							
AP	*Ligustrum amurense*	Amur Privet	38	5 gal.	container full, 20" spread, 36" o.c.	Deciduous Shrub	3	114
BRJ	*Juniperus horizontalis 'Wiltonii'*	Blue Rug Juniper	100	1 gal.	container full, 12" spread, 24" o.c.			
DAY	*Hemerocallis 'Stella de Oro'*	Stella de Oro' Daylily	230	1 gal.	container full, 18" o.c.	Perennial	2	460
DMP	*Pinus mugo var. pumilio*	Dwarf Mugo Pine	35	5 gal.	container full, 20" spread	Evergreen Shrub	4	140
GMB	*Buxus sempervirens 'Green Mountain'*	Green Mountain Boxwood	28	5 gal.	container full, 20" spread, 36" o.c.	Evergreen Shrub	4	112
HY	*Taxus x media 'Hicksii'*	Hicks Yew	26	5 gal.	container full, 24" spread, 36" o.c.	Evergreen Shrub	4	104
KCJ	*Juniperus x media 'Kallay's Compact'*	Kallay's Compact Juniper	89	5 gal.	container full, 20" spread, 24" o.c.	Evergreen Shrub	4	356
KF	*Calamagrostis x acutiflora 'Karl Foerster'*	Karl Foerster Feather Reed Grass	26	5 gal.	container full, 36" o.c.	Ornamental Grass	2	52
SC		Seasonal Color	80	4" pots	container full, 12" o.c., selection by Owner			
SP	*Juniperus chinensis 'Spartan'*	Spartan Juniper	5	4' ht.	B&B or container grown, full to base, 3' spread	Evergreen Shrub	4	20
SW	*Weigela florida 'Bokraspiwi'*	Spilled Wine Weigela	69	3 gal.	container full, 18" spread, 24" o.c.	Deciduous Shrub	3	207
SOD	*Poa pratensis x Festuca arundinacea*	Kentucky Bluegrass Fescue Mix			solid sod, refer to Solid Sod Notes			
	MISCELLANEOUS							**1,795**
PAV		Concrete Pavers			refer to architectural plans for details and specifications			
RR		Native River Rock			2" - 4" dia., 4" depth rock mulch, typ. at planting adjacent to patio			

NOTE: ALL TREES SHALL HAVE STRAIGHT TRUNKS AND BE MATCHING WITHIN VARIETIES.
PLANT LIST IS AN AID TO BIDDERS ONLY. CONTRACTOR SHALL VERIFY ALL QUANTITIES ON PLAN.
ALL HEIGHTS AND SPREADS ARE MINIMUMS. ALL PLANT MATERIAL SHALL MEET OR EXCEED REMARKS AS INDICATED.

N

SCALE: 1" = 20'-0"
0 10 20 40

BELLE FIRMA
12801 N. Central Expy
Suite 1760
Dallas, Texas 75243
(214) 865-7192

ADA ARCHITECTS
17710 Detroit Ave Lakewood, Ohio 44107
Phone: (216) 521-5134
Fax: (216) 521-4824
www.adaarchitects.com

ADA JOB NUMBER:
24503

SEAL:

WISCONSIN
KORI ANN HAUG
LA-684-14
DALLAS, TEXAS
LANDSCAPE ARCHITECT
11/3/25

CONSULTANT:

PROTOTYPE: NTY GROUND UP
SCHEME A

RAISING CANE'S
RESTAURANT NO.: #RC1353
7456 MINERAL POINT ROAD
MADISON, WI 53717

SHEET REVISIONS

REV	DATE	DESCRIPTION

DATE:
10.20.25

LANDSCAPE PLAN

SHEET NAME:

L2.01

SHEET NUMBER:

SECTION 32 9300 - LANDSCAPE

PART 1 - GENERAL

1.1 REFERENCED DOCUMENTS

A. Refer to Landscape Plans, notes, details, bidding requirements, special provisions, and schedules for additional requirements.

1.2 DESCRIPTION OF WORK

A. Work included: Furnish all supervision, labor, materials, services, equipment and appliances required to complete the work covered in conjunction with the landscaping covered in these specifications and landscaping plans, including:

1. Planting (trees, shrubs and grasses)
2. Bed preparation and fertilization
3. Notification of sources
4. Water and maintenance until final acceptance
5. Guarantee

1.3 REFERENCE STANDARDS

A. American Standard for Nursery Stock published by American Association of Nurserymen: April 14, 2014 Edition; by American National Standards Institute, Inc. (Z60.1) – plant material

B. American Joint Committee on Horticultural Nomenclature: 1942 Edition of Standardized Plant Names.

C. Wisconsin Association of Nurserymen, Grades and Standards

D. Hortis Third, 1976 - Cornell University

1.4 NOTIFICATION OF SOURCES AND SUBMITTALS

A. Samples: Provide representative quantities of sandy loam soil, mulch, bed mix material, gravel, crushed stone, steel edging and tree stakes. Samples shall be approved by Owner's Authorized Representative before use on the project.

1.5 JOB CONDITIONS

A. General Contractor to complete the following punch list: Prior to Landscape Contractor initiating any portion of landscape installation, General Contractor shall leave planting bed areas three (3") inches below final finish grade of sidewalks, drives and curbs as shown on the drawings. All lawn areas to receive solid sod shall be left one (1") inch below the final finish grade of sidewalks, drives and curbs. All construction debris shall be removed prior to Landscape Contractor beginning any work.

B. Storage of materials and equipment at the job site will be at the risk of the Landscape Contractor. The Owner cannot be held responsible for theft or damage.

1.6 MAINTENANCE AND GUARANTEE

A. Maintenance:

1. The Landscape Contractor shall be held responsible for the maintenance of all work from the time of planting until final acceptance by the Owner. No trees, shrubs, groundcover or grass will be accepted unless they show healthy growth and satisfactory foliage conditions.
2. Maintenance shall include watering of trees and plants, cultivation, weeding spraying, edging, pruning of trees, mowing of grass, cleaning up and all other work necessary of maintenance.
3. A written notice requesting final inspection and acceptance should be submitted to the Owner at least seven (7) days prior to completion. An on-site inspection by the Owner's Authorized Representative will be completed prior to written acceptance.

B. Guarantee:

1. Trees, shrubs and groundcover shall be guaranteed for a twelve (12) month period after final acceptance. The Contractor shall replace all dead materials as soon as weather permits and upon notification of the Owner. Plants, including trees, which have partially died so that shape, size, or symmetry have been damaged, shall be considered subject to replacement. In such cases, the opinion of the Owner shall be final.
   a. Plants used for replacement shall be of the same size and kind as those originally planted and shall be planted as originally specified. All work, including materials, labor and equipment used in replacements, shall carry a twelve (12) month guarantee. Any damage, including ruts in lawn or bed areas, incurred as a result of making replacements shall be immediately repaired.
   b. At the direction of the Owner, plants may be replaced at the start of the next year's planting season. In such cases, dead plants shall be removed from the premises immediately.
   c. When plant replacements are made, plants, soil mix, fertilizer and mulch are to be utilized as originally specified and re-inspected for full compliance with the contract requirements. All replacements are to be included under "Work" of this section.
2. The Owner agrees that for the guarantee to be effective, he will water plants at least twice a week during dry periods and cultivate beds once a month after final acceptance.
3. The above guarantee shall not apply where plants die after acceptance because of injury from storms, hail, freeze, insects, diseases, injury by humans, machines or theft.
4. Acceptance for all landscape work shall be given after final inspection by the Owner provided the job is in a complete, undamaged condition and there is a stand of grass in all lawn areas. At that time, the Owner will assume maintenance on the accepted work.

C. Repairs: Any necessary repairs under the Guarantee must be made within ten (10) days after receiving notice, weather permitting. In the event the Landscape Contractor does not make repairs accordingly, the Owner, without further notice to Contractor, may provide materials and men to make such repairs at the expense to the Landscape Contractor.

1.7 QUALITY ASSURANCE

A. General: Comply with applicable federal, state, county and local regulations governing landscape materials and work.

B. Personnel: Employ only experienced personnel who are familiar with the required work. Provide full time supervision by a qualified foreman acceptable to Landscape Architect.

C. Selection of Plant Material:

1. Make contact with suppliers immediately upon obtaining notice of contract acceptance to select and book materials. Develop a program of maintenance (pruning and fertilization) which will ensure the purchased materials will meet and / or exceed project specifications.
2. Substitutions: Do not make plant material substitutions. If the specified landscape material is not obtainable, submit proof of non-availability to Landscape Architect, together with proposal for use of equivalent material. At the time bids are submitted, the Contractor is assumed to have located the materials necessary to complete the job as specified.
3. Landscape Architect will provide a key identifying each tree location on site. Written verification will be required to document material selection, source and delivery schedules to site.
4. Measurements: Measure trees with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Take caliper measurements six inches above ground for trees up to and including 4" caliper size, and twelve inches above ground for larger sizes. Measure main body of all plant material of height and spread dimensions, do not measure from branch or root tip-to-tip.
5. Owner's Authorized Representative shall inspect all plant material with requirements for genus, species, cultivar / variety size and quality.
6. Owner's Authorized Representative retains the right to further inspect all plant material upon arrival to the site and during installation for size and condition of root balls and root systems, limbs, branching habit, insects, injuries and latent defects.
7. Owner's Authorized Representative may reject unsatisfactory or defective material at any time during the process work. Remove rejected materials immediately from the site and replace with acceptable material at no additional cost to the Owner. Plants damaged in transit or at job site shall be rejected.

1.8 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Preparation:

1. Balled and Burlapped (B&B) Plants: Dig and prepare shipment in a manner that will not damage roots, branches, shape and future development.
2. Container Grown Plants: Deliver plants in rigid container to hold ball shape and protect root mass.

B. Delivery:

1. Deliver packaged materials in sealed containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and while stored on site.
2. Deliver only plant materials that can be planted in one day unless adequate storage and watering facilities are available on job site.
3. Protect root balls by heeling in with sawdust or other approved moisture retaining material if not planted within 24 hours of delivery.
4. Protect plants during delivery to prevent damage to root balls or desiccation of leaves. Keep plants moist at all times. Cover all materials during transport.
5. Notify Owner's Authorized Representative of delivery schedule 72 hours in advance job site.
6. Remove rejected plant material immediately from job site.
7. To avoid damage or stress, do not lift, move, adjust to plumb, or otherwise manipulate plants by trunk or stems.

PART 2 - PRODUCTS

2.1 PLANTS

A. General: Well-formed No. 1 grade or better nursery grown stock. Listed plant heights are from tops of root balls to nominal tops of plants. Plant spread refers to nominal outer width of the plant, not to the outer leaf tips. Plants will be individually approved by the Owner's Authorized Representative and his decision as to their acceptability shall be final.

B. Quantities: The drawings and specifications are complementary. Anything called for on one and not the other is as binding as if shown and called for on both. The plant schedule is an aid to bidders only. Confirm all quantities on plan.

C. Quality and size: Plant materials shall conform to the size given on the plan, and shall be healthy, symmetrical, well-shaped, full branched and well rooted. The plants shall be free from injurious insects, diseases, injuries to the bark or roots, broken branches, objectionable disfigurements, insect eggs and larvae, and are to be of specimen quality.

D. Approval: All plants which are found unsuitable in growth, or are in any unhealthy, badly shaped or undersized condition will be rejected by the Owner's Authorized Representative either before or after planting and shall be removed at the expense of the Landscape Contractor and replaced with acceptable plant as specified at no additional cost to the Owner.

E. Trees shall be healthy, full-branched, well-shaped, and shall meet the minimum trunk and diameter requirements of the plant schedule. Balls shall be firm, neat, slightly tapered and well wrapped in burlap. Any tree loose in the ball or with a broken root ball at time of planting will be rejected. Balls shall be ten (10") inches in diameter for each one (1") inch of trunk diameter, measured six (6") inches above ball. (Nomenclature confirms to the customary nursery usage. For clarification, the term "multi-trunk" defines a plant having three (3) or more trunks of nearly equal diameter.)

F. Pruning: All pruning of trees and shrubs, as directed by the Landscape Architect prior to final acceptance, shall be executed by the Landscape Contractor at no additional cost to the Owner.

2.2 SOIL PREPARATION MATERIALS

A. Sandy Loam:

1. Friable, fertile, dark, loamy soil, free of clay lumps, subsoil, stones and other extraneous material and reasonably free of weeds and foreign grasses. Loam containing Dallasgrass or Nutgrass shall be rejected.
2. Physical properties as follows:
   a. Clay – between 7-27 percent
   b. Silt – between 15-25 percent
   c. Sand – less than 52 percent
3. Organic matter shall be 3%-10% of total dry weight.
4. If requested, Landscape Contractor shall provide a certified soil analysis conducted by an approved soil testing laboratory verifying that sandy loam meets the above requirements.

B. Organic Material: Compost with a mixture of 80% vegetative matter and 20% animal waste. Ingredients should be a mix of course and fine textured material.

C. Sharp Sand: Sharp sand must be free of seeds, soil particles and weeds.

D. Mulch: Double Shredded Hardwood Mulch, partially decomposed, dark brown.

E. Organic Fertilizer: Fertilaid, Sustane, or Green Sense or equal as recommended for required applications. Fertilizer shall be delivered to the site in original unopened containers, each bearing the manufacturer's guaranteed statement of analysis.

F. Commercial Fertilizer: 10-20-10 or similar analysis. Nitrogen source to be a minimum 50% slow release organic Nitrogen (SCU or UF) with a minimum 8% sulfur and 4% iron, plus micronutrients.

G. Peat: Commercial sphagnum peat moss or partially decomposed shredded pine bark or other approved organic material.

2.3 MISCELLANEOUS MATERIALS

A. Steel Edging: All steel edging shall be 3/16" thick x 4" deep x 16' long with 6 stakes per section, painted black at the factory as manufactured by The J.D. Russell Company and under its trade name DURAEDGE Heavy Duty Steel.

B. Staking Material for Shade Trees: refer to details.

C. Gravel: Washed native pea gravel, graded 1 inch to 1-1/2 inch.

D. Filter Fabric: 'Mirafi Mirascape' by Mirafi Construction Products or approved equal.

E. River Rock: 'Colorado' or native river rock, 2" - 4" dia.

F. Decomposed Granite: Base material shall consist of a natural material mix of granite aggregate not to exceed 1/8" diameter in size and shall be composed of various stages of decomposed earth base.

PART 3 - EXECUTION

3.1 BED PREPARATION & FERTILIZATION

A. Landscape Contractor to inspect all existing conditions and report any deficiencies to the Owner.

B. All planting areas shall be conditioned as follows:

1. Prepare new planting beds by scraping away existing grass and weeds as necessary. Till existing soil to a depth of six (6") inches prior to placing compost and fertilizer. Apply fertilizer as per Manufacturer's recommendations. Add six (6") inches of compost and till into a depth of six (6") inches of the topsoil. Apply organic fertilizer such as Sustane or Green Sense at the rate of twenty (20) pounds per one thousand (1,000) square feet.
2. All planting areas shall receive a three (3") inch layer of specified mulch.
3. Backfill for tree pits shall be as follows: Use existing top soil on site (use imported topsoil as needed) free from large clumps, rocks, debris, caliche, subsoils, etc., placed in nine (9") inch layers and watered in thoroughly.

C. Grass Areas:

1. Blocks of sod should be laid joint to joint (staggered joints) after fertilizing the ground first. Roll grass areas to achieve a smooth, even surface. The joints between the blocks of sod should be filled with topsoil where they are evidently gaped open, then watered thoroughly.

3.2 INSTALLATION

A. Maintenance of plant materials shall begin immediately after each plant is delivered to the site and shall continue until all construction has been satisfactorily accomplished.

B. Plant materials shall be delivered to the site only after the beds are prepared and areas are ready for planting. All shipments of nursery materials shall be thoroughly protected from the drying winds during transit. All plants which cannot be planted at once, after delivery to the site, shall be well protected against the possibility of drying by wind and Balls of earth of B & B plants shall be kept covered with soil or other acceptable material. All plants remain the property of the Contractor until final acceptance.

C. Position the trees and shrubs in their intended location as per plan.

D. Notify the Owner's Authorized Representative for inspection and approval of all positioning of plant materials.

E. Excavate pits with vertical sides and horizontal bottom. Tree pits shall be large enough to permit handling and planting without injury to balls of earth or roots and shall be of such depth that,when planted and settled, the crown of the plant shall bear the same relationship to the finish grade as it did to soil surface in original place of growth.

F. Shrub and tree pits shall be no less than twenty-four (24") inches wider than the lateral dimension of the earth ball and six (6") inches deeper than it's vertical dimension. Remove and haul from site all rocks and stones over three-quarter (¾") inch in diameter. Plants should be thoroughly moist before removing containers.

G. Dig a wide, rough sided hole exactly the same depth as the height of the ball, especially at the surface of the ground. The sides of the hole should be rough and jagged, never slick or glazed.

H. Percolation Test: Fill the hole with water. If the water level does not percolate within 24 hours, the tree needs to move to another location or have drainage added. Install a PVC stand pipe per tree planting detail as approved by the Landscape Architect if the percolation test fails. Percolation test to be completed at each tree or grouping of trees.

I. Backfill only with 5 parts existing soil or sandy loam and 1 part bed preparation. When the hole is dug in solid rock, topsoil from the same area should not be used. Carefully settle by watering to prevent air pockets. Remove the burlap from the top ⅓ of the ball, as well as all nylon, plastic string and wire. Container trees will usually be root bound, if so follow standard nursery practice of 'root scoring'.

J. Do not wrap trees.

K. Do not over prune.

L. Mulch the top of the ball. Do not plant grass all the way to the trunk of the tree. Leave the area above the top of the ball and mulch with at least three (3") inches of specified mulch.

M. All plant beds and trees to be mulched with a minimum settled thickness of three (3") inches over the entire bed or pit.

N. Obstruction below ground: In the event that rock, or underground construction work or obstructions are encountered in any plant pit excavation work to be done under this section, alternate locations may be selected by the Owner. Where locations cannot be changed, the obstructions shall be removed to a depth of not less than three (3') feet below grade and no less than six (6") inches below the bottom of ball when plant is properly set at the required grade. The work of this section shall include the removal from the site of such rock or underground obstructions encountered at the cost of the Landscape Contractor.

O. Trees and large shrubs shall be staked as site conditions require. Position stakes to secure trees against seasonal prevailing winds.

P. Pruning and Mulching: Pruning shall be directed by the Landscape Architect and shall be pruned in accordance with standard horticultural practice following Fine Pruning, Class I pruning standards provided by the National Arborist Association.

1. Dead wood, suckers, broken and badly bruised branches shall be removed. General tipping of the branches is not permitted. Do not cut terminal branches.
2. Pruning shall be done with clean, sharp tools.
3. Immediately after planting operations are completed, all tree pits shall be covered with a layer of organic material two (2") inches in depth. This limit of the organic material for trees shall be the diameter of the plant pit.

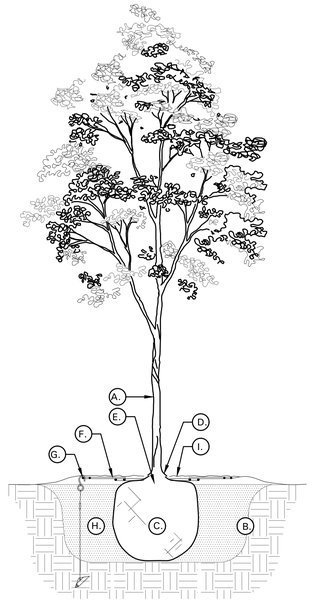
Q. Steel Curbing Installation:

1. Curbing shall be aligned as indicated on plans. Stake out limits of steel curbing and obtain Owners approval prior to installation.
2. All steel curbing shall be free of kinks and abrupt bends.
3. Top of curbing shall be ½" maximum height above final finished grade.
4. Stakes are to be installed on the planting bed side of the curbing, as opposed to the grass side.
5. Do not install steel edging along sidewalks or curbs.
6. Cut steel edging at 45 degree angle where edging meets sidewalks or curbs.

3.3 CLEANUP AND ACCEPTANCE

A. Cleanup: During the work, the premises shall be kept neat and orderly at all times. Storage areas for all materials shall be so organized so that they, too, are neat and orderly. All trash and debris shall be removed from the site as work progresses. Keep paved areas clean by sweeping or hosing them at end of each work day.

END OF SECTION



01 TREE PLANTING DETAIL
NOT TO SCALE

TREE PLANTING DETAIL LEGEND AND NOTES

A. TREE: TREES SHALL CONFORM WITH LATEST AMERICAN STANDARD FOR NURSERY STOCK. www.anla.org

B. TREE PIT: WIDTH TO BE AT LEAST TWO (2) TIMES THE DIAMETER OF THE ROOT BALL CENTER TREE IN HOLE & REST ROOT BALL ON UNDISTURBED NATIVE SOIL.

C. ROOT BALL: REMOVE TOP ⅓ BURLAP AND ANY OTHER FOREIGN OBJECT; CONTAINER GROWN STOCK TO BE INSPECTED FOR GIRDLING ROOTS.

D. ROOT FLARE: ENSURE THAT ROOT FLARE IS EXPOSED, FREE FROM MULCH, AND AT LEAST TWO INCHES ABOVE GRADE. TREES SHALL BE REJECTED WHEN GIRDLING ROOTS ARE PRESENT & ROOT FLARE IS NOT APPARENT.

E. ROOTBALL ANCHOR RING: REFER TO MANUFACTURER'S GUIDELINES FOR SIZING. PLACE ROOTBALL ANCHOR RING ON BASE OF ROOTBALL, TRUNK SHOULD BE IN THE CENTER OF THE RING.

F. 'U' BRACKET.

G. "S"-HOOK: REFER TO MANUFACTURER'S GUIDELINES FOR SIZING. INSTALL NAIL STAKES WITH HAMMER OR MALLET FIRMLY INTO UNDISTURBED GROUND. DRIVE NAIL STAKES FLUSH WITH "U" BRACKET ADJACENT TO ROOTBALL (DO NOT DISTURB ROOTBALL).

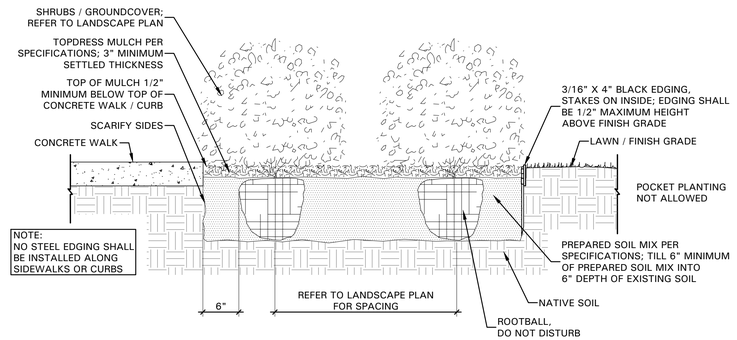
H. BACKFILL: USE EXISTING NATIVE SOIL (no amendments) WATER THOROUGHLY TO ELIMINATE AIR POCKETS.

I. MULCH: DOUBLE SHREDDED HARDWOOD MULCH 3 INCH SETTLED THICKNESS, WITH 2" HT. WATERING RING; ENSURE THAT ROOT FLARE IS EXPOSED. BELOW GROUND STAKE SHOULD NOT BE VISIBLE.

J. TREE STAKES:
TREE STAKE SOLUTIONS 'SAFETY STAKE' BELOW GROUND MODEL AVAILABLE FROM:
Tree Stake Solutions
ATTN: Jeff Tuley
(903) 676-6143
jeff@treestakesolutions.com
www.treestakesolutions.com

OR APPROVED EQUAL. TREES SHALL BE STAKED BELOW GROUND WHERE NECESSARY; ABOVE GROUND STAKING IS EXPRESSLY PROHIBITED.

K. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN A COPY OF THE MANUFACTURER'S SPECIFICATIONS PRIOR TO INSTALLATION OF TREE STAKES. CONTRACTOR SHALL ADHERE TO MANUFACTURER'S INSTALLATION GUIDELINES, SPECIFICATIONS, AND OTHER REQUIREMENTS FOR TREE STAKE INSTALLATION.



02 SHRUB / GROUNDCOVER DETAIL
NOT TO SCALE

ADA ARCHITECTS
17710 Detroit Ave Lakewood, Ohio 44107
Phone: (216) 521-5134
Fax: (216) 521-4824
www.adaarchitects.com

ADA JOB NUMBER:
24503

SEAL:

WISCONSIN
KORI ANN HAUG
LA-684-14
DALLAS, TEXAS
LANDSCAPE ARCHITECT
11/3/25

CONSULTANT:

PROTOTYPE: NTY GROUND UP
SCHEME A

RAISING CANE'S
RESTAURANT NO.: #RC1353
7456 MINERAL POINT ROAD
MADISON, WI 53717

SHEET REVISIONS

REV	DATE	DESCRIPTION

DATE:
10.20.25

LANDSCAPE SPECIFICATIONS AND DETAILS
SHEET NAME:

L2.02
SHEET NUMBER:

BELLE FIRMA
12801 N. Central Expy
Suite 1760
Dallas, Texas 75243
(214) 865-7192

City of Madison Fire Department

314 W Dayton Street, Madison, WI 53703
Phone: 608-266-4420 • Fax: 608-267-1100 • E-mail: *fire@cityofmadison.com*

Project Address:	7401 Mineral Point Rd. Madison, WI 53717
Contact Name & Phone #:	Spencer McNichols (ADA Architects, Inc.) 216.521.5134

FIRE APPARATUS ACCESS AND FIRE HYDRANT WORKSHEET

1. Is the building completely protected by an NFPA 13 or 13R automatic fire sprinkler system?	☑ Yes	☐ No	☐ N/A
If non-sprinklered, fire lanes extend to within 150-feet of all portions of the exterior wall?	☐ Yes	☐ No	☑ N/A
If sprinklered, fire lanes are within 250-feet of all portions of the exterior wall?	☑ Yes	☐ No	☐ N/A
2. Is the fire lane constructed of concrete or asphalt, designed to support a minimum load of 85,000 lbs?	☑ Yes	☐ No	☐ N/A
a) Is the fire lane a minimum unobstructed width of at least 20-feet?	☑ Yes	☐ No	☐ N/A
b) Is the fire lane unobstructed with a vertical clearance of at least 13½-feet?	☑ Yes	☐ No	☐ N/A
c) Is the minimum inside turning radius of the fire lane at least 28-feet?	☑ Yes	☐ No	☐ N/A
d) Is the grade of the fire lane not more than a slope of 8%?	☑ Yes	☐ No	☐ N/A
e) Is the fire lane posted as fire lane? (Provide detail of signage.)	☐ Yes	☑ No	☐ N/A
f) Is a roll-able curb used as part of the fire lane? (Provide detail of curb.)	☐ Yes	☑ No	☐ N/A
g) Is part of a sidewalk used as part of the required fire lane? (Must support +85,000 lbs.)	☐ Yes	☑ No	☐ N/A
3. Is the fire lane obstructed by security gates or barricades? If yes:	☐ Yes	☑ No	☐ N/A
a) Is the gate a minimum of 20-feet clear opening?	☐ Yes	☐ No	☐ N/A
b) Is an approved means of emergency operations installed, key vault, padlock or key switch?	☐ Yes	☐ No	☐ N/A
4. Is the Fire lane dead-ended with a length greater than 150-feet?	☐ Yes	☑ No	☐ N/A
If yes, does the area for turning around fire apparatus comply with IFC D103?	☐ Yes	☐ No	☐ N/A
5. Is any portion of the building to be used for high-piled storage in accordance with IFC Chapter 3206.6 If yes, see IFC 3206.6 for further requirements.	☐ Yes	☑ No	☐ N/A
6. Is any part of the building greater than 30-feet above the grade plane?	☑ Yes	☐ No	☐ N/A
If yes, answer the following questions:			
a) Is the aerial apparatus fire lane parallel to one entire side of the building and covering at least 25% of the perimeter?	☑ Yes	☐ No	☐ N/A
b) Is the near edge of the aerial apparatus fire lane between 15' and 30' from the building?	☑ Yes	☐ No	☐ N/A
c) Are there any overhead power or utility lines located across the aerial apparatus fire lane?	☐ Yes	☑ No	☐ N/A
d) Are there any tree canopies expected to grow across the aerial fire lane? (Based on mature canopy width of tree species)	☑ Yes	☐ No	☐ N/A
e) Does the aerial apparatus fire lane have a minimum unobstructed width of 26-feet?	☑ Yes	☐ No	☐ N/A
f) Is the space between the aerial lane and the building free of trees exceeding 20' in heights?	☐ Yes	☑ No	☐ N/A
7. Are all portions of the required fire lanes within 500-feet of at least (2) hydrants?	☑ Yes	☐ No	☐ N/A
Note: Distances shall be measured along the path of the hose lay as it comes off the fire apparatus.			
a) Is the fire lane at least 26' wide for at least 20-feet on each side of the hydrants?	☑ Yes	☐ No	☐ N/A
b) Is there at least 40' between a hydrant and the building?	☑ Yes	☐ No	☐ N/A
c) Are the hydrant(s) setback no less than 5-feet nor more than 10-feet from the curb or edge of the street or fire lane?	☑ Yes	☐ No	☐ N/A
d) Are hydrants located in parking lot islands a minimum of 3½-feet from the hydrant to the curb?	☑ Yes	☐ No	☐ N/A
e) Are there no obstructions, including but not limited to: power poles, trees, bushes, fences, posts located, or grade changes exceeding 1½-feet, within 5-feet of a fire hydrant?	☑ Yes	☐ No	☐ N/A
Note: Hydrants shall be installed and in-service prior to combustible construction on the project site.			

Attach an additional sheet if further explanation is required for any answers.

This worksheet is based on **MGO 34.503** and **IFC 2021 Edition Chapter 5 and Appendix D**; please see the codes for further information.

CITY OF MADISON
LANDSCAPE WORKSHEET

Section 28.142 Madison General Ordinance

Project Location / Address 7401 Mineral Point Road

Name of Project RC 1353 - Raising Canes

Owner / Contact Sarah Allen - Raising Canes Restaurants, LLC

Contact Phone 469-863-4376 Contact Email Sallen12@raisingcanes.com

**** Landscape plans for zoning lots greater than ten thousand (10,000) square feet in size MUST be prepared by a registered landscape architect. ****

Applicability

The following standards apply to all exterior construction and development activity, including the expansion of existing buildings, structures and parking lots, except the construction of detached single-family and two-family dwellings and their accessory structures. The entire development site must be brought up to compliance with this section unless **all** of the following conditions apply, in which case only the affected areas need to be brought up to compliance:

(a) The area of site disturbance is less than ten percent (10%) of the entire development site during any ten-(10) year period.

(b) Gross floor area is only increased by ten percent (10%) during any ten-(10) year period.

(c) No demolition of a principal building is involved.

(d) Any displaced landscaping elements must be replaced on the site and shown on a revised landscaping plan.

Landscape Calculations and Distribution

Required landscaped areas shall be calculated based upon the total developed area of the property. Developed area is defined as that area within a single contiguous boundary which is made up of structures, parking, driveways and docking/loading facilities, but excluding the area of any building footprint at grade, land designated for open space uses such as athletic fields, and undeveloped land area on the same zoning lot. There are three methods for calculating landscape points depending on the size of the lot and Zoning District.

(a) For all lots except those described in (b) and (c) below, five (5) landscape points shall be provided for each three hundred (300) square feet of developed area.

Total square footage of developed area 25,642 s.f.

Total landscape points required 427 pts

(b) **For lots larger than five (5) acres**, points shall be provided at five (5) points per three hundred (300) square feet for the first five (5) developed acres, and one (1) point per one hundred (100) square feet for all additional acres.

Total square footage of developed area N/A

Five (5) acres = 217,800 square feet

First five (5) developed acres = 3,630 points

Remainder of developed area N/A

Total landscape points required N/A

(c) **For the Industrial – Limited (IL) and Industrial – General (IG) districts**, one (1) point shall be provided per one hundred (100) square feet of developed area.

Total square footage of developed area N/A

Total landscape points required N/A

Tabulation of Points and Credits

Use the table to indicate the quantity and points for all existing and proposed landscape elements.

Plant Type/ Element	Minimum Size at Installation	Points	Credits/ Existing Landscaping		New/ Proposed Landscaping	
			Quantity	Points Achieved	Quantity	Points Achieved
Overstory deciduous tree	2½ inch caliper measured diameter at breast height (dbh)	35			4	140
Tall evergreen tree (i.e. pine, spruce)	5-6 feet tall	35				
Ornamental tree	1 1/2 inch caliper	15			6	90
Upright evergreen shrub (i.e. arborvitae)	3-4 feet tall	10				
Shrub, deciduous	#3 gallon container size, Min. 12”-24”	3			107	321
Shrub, evergreen	#3 gallon container size, Min. 12”-24”	4			183	732
Ornamental grasses/ perennials	#1 gallon container size, Min. 8”-18”	2			256	506
Ornamental/ decorative fencing or wall	n/a	4 per 10 lineal ft.				
Existing significant specimen tree	Minimum size: 2 ½ inch caliper dbh. *Trees must be within developed area and cannot comprise more than 30% of total required points.	14 per caliper inch dbh. Maximum points per tree: 200				
Landscape furniture for public seating and/or transit connections	* Furniture must be within developed area, publically accessible, and cannot comprise more than 5% of total required points.	5 points per “seat”				
Sub Totals						1,795

Total Number of Points Provided 1,795

* As determined by ANSI, ANLA- American standards for nursery stock. For each size, minimum plant sizes shall conform to the specifications as stated in the current American Standard for Nursery Stock.

Landscaping shall be distributed throughout the property along street frontages, within parking lot interiors, as foundation plantings, or as general site landscaping. The total number of landscape points provided shall be distributed on the property as follows.

Total Developed Area

Required landscaped areas shall be calculated based upon the total developed area of the property. Developed area is defined as that area within a single contiguous boundary which is made up of structures, parking, driveways and docking/loading facilities, but excluding the area of any building footprint at grade, land designated for open space uses such as athletic fields, and undeveloped land area on the same zoning lot.

Development Frontage Landscaping

Landscaping and/or ornamental fencing shall be provided between buildings or parking areas and the adjacent street(s), except where buildings are placed at the sidewalk. Landscape material shall include a mix of plant materials.

Interior Parking Lot Landscaping

The purpose of interior parking lot landscaping is to improve the appearance of parking lots, provide shade, and improve stormwater infiltration. **All parking lots with twenty (20) or more parking spaces** shall be landscaped in accordance with the interior parking lot standards.

Foundation Plantings

Foundation plantings shall be installed along building facades, except where building facades directly abut the sidewalk, plaza, or other hardscape features. Foundation plantings shall consist primarily of shrubs, perennials, and native grasses.

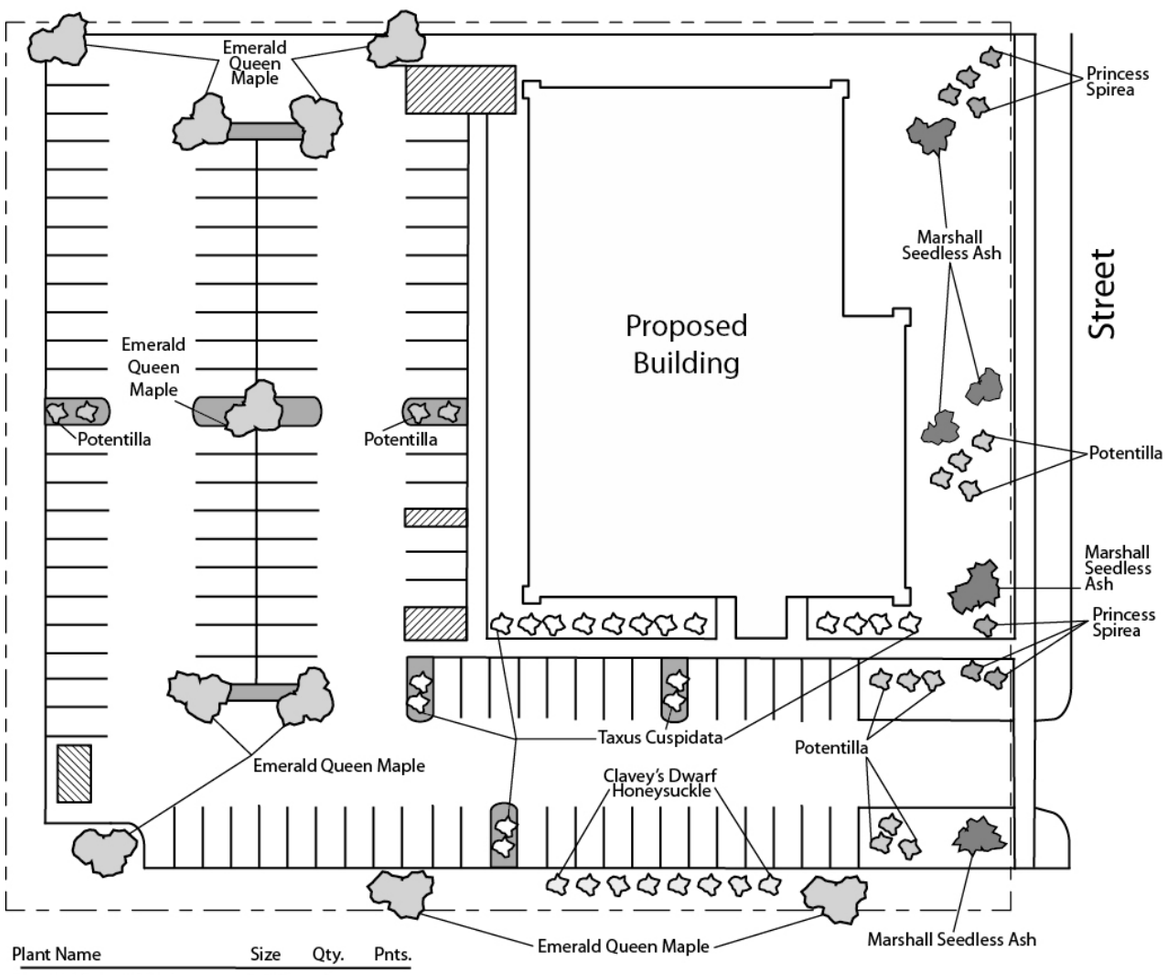
Screening Along District Boundaries

Screening shall be provided along side and rear property boundaries between commercial, mixed use or industrial districts and residential districts.

Screening of Other Site Elements

The following site elements shall be screened in compatibility with the design elements, materials and colors used elsewhere on the site: refuse disposal areas, outdoor storage areas, loading areas, and mechanical equipment.

Example Landscape Plan



Plant Name	Size	Qty.	Pnts.
Emerald Queen Maple	2-2.5"	9	-
Marshall Seedless Ash	2-2.5"	4	450
Clavey's Dwarf Honelysuckle	1 Gal	8	24
Princess Spirea	1 Gal	7	21
Potentilla	1 Gal	10	30
Taxus Cuspidata	2 Gal	12	60
		TOTAL	585

Call City Zoning, 266-4551, with your questions about this type of plan

LANDSCAPE PLAN AND LANDSCAPE WORKSHEET INSTRUCTIONS

Refer to Zoning Code Section 28.142 LANDSCAPING AND SCREENING REQUIREMENTS for the complete requirements for preparing and submitting a Landscape Plan and Landscape Worksheet.

Applicability.

The following standards apply to all exterior construction and development activity, including the expansion of existing buildings, structures and parking lots, except the construction of detached single-family and two-family dwellings and their accessory structures. The entire development site must be brought up to compliance with this section unless all of the following conditions apply, in which case only the affected areas need to be brought up to compliance:

(a) The area of site disturbance is less than ten percent (10%) of the entire development site during any ten-(10) year period.

(b) Gross floor area is only increased by ten percent (10%) during any ten-(10) year period.

(c) No demolition of a principal building is involved.

(d) Any displaced landscaping elements must be replaced on the site and shown on a revised landscaping plan.

Landscape Plan and Design Standards.

Landscape plans shall be submitted as a component of a site plan, where required, or as a component of applications for other actions, including zoning permits, where applicable. Landscape plans for zoning lots greater than ten thousand (10,000) square feet in size must be prepared by a registered landscape architect.

(a) Elements of the landscape plan shall include the following:

1. Plant list including common and Latin names, size and root condition (i.e. container or ball & burlap).
2. Site amenities, including bike racks, benches, trash receptacles, etc.
3. Storage areas including trash and loading.
4. Lighting (landscape, pedestrian or parking area).
5. Irrigation.
6. Hard surface materials.
7. Labeling of mulching, edging and curbing.
8. Areas of seeding or sodding.
9. Areas to remain undisturbed and limits of land disturbance.
10. Plants shall be depicted at their size at sixty percent (60%) of growth.
11. Existing trees eight (8) inches or more in diameter.
12. Site grading plan, including stormwater management, if applicable.

(b) Plant Selection. Plant materials provided in conformance with the provisions of this section shall be nursery quality and tolerant of individual site microclimates.

(c) Mulch shall consist of shredded bark, chipped wood or other organic material installed at a minimum depth of two (2) inches.

Landscape Calculations and Distribution.

Required landscaped areas shall be calculated based upon the total developed area of the property. Developed area, for the purpose of this requirement, is defined as that area within a single contiguous boundary which is made up of structures, parking driveways and docking/loading facilities, but **excluding** the area of any building footprint at grade, land designated for open space uses such as athletic fields, and undeveloped land area on the same zoning lot.

(a) Landscaping shall be distributed throughout the property along street frontages, within parking lot interiors, and as foundation plantings, or as general site landscaping.

(b) Planting beds or planted areas must have at least seventy-five percent (75%) vegetative cover.

(c) Canopy tree diversity requirements for new trees:

1. If the development site has fewer than 5 canopy trees, no tree diversity is required.
2. If the development site has between 5 and 50 canopy trees, no single species may comprise more than 33% of trees.
3. If the development site has more than 50 canopy trees, no single species may comprise more than 20% of trees.

Development Frontage Landscaping.

Landscaping and/or ornamental fencing shall be provided between buildings or parking areas and the adjacent street(s), except where buildings are placed at the sidewalk. Landscape material shall include a mix of plant material meeting the following minimum requirements:

(a) One (1) overstory deciduous tree and five (5) shrubs shall be planted for each thirty (30) lineal feet of lot frontage. Two (2) ornamental trees or two (2) evergreen trees may be used in place of one (1) overstory deciduous tree.

(b) In cases where building facades directly abut the sidewalk, required frontage landscaping shall be deducted from the required point total.

(c) In cases where development frontage landscaping cannot be provided due to site constraints, the zoning administrator may waive the requirement or substitute alternative screening methods for the required landscaping.

(d) Fencing shall be a minimum of three (3) feet in height, and shall be constructed of metal, masonry, stone or equivalent material. Chain link or temporary fencing is prohibited.

Interior Parking Lot Landscaping.

The purpose of interior parking lot landscaping is to improve the appearance of parking lots, provide shade, and improve stormwater infiltration. **All parking lots with twenty (20) or more parking spaces** shall be landscaped in accordance with the following interior parking lot standards.

(a) For new development on sites previously undeveloped or where all improvements have been removed, a minimum of eight percent (8%) of the asphalt or concrete area of the parking lot shall be devoted to interior planting islands, peninsulas, or landscaped strips. For changes to a developed site, a minimum of five percent (5%) of the asphalt or concrete area shall be interior planting islands, peninsulas, or landscaped strips. A planting island shall be located at least every twelve (12) contiguous stalls with no break or alternatively, landscaped strips at least seven (7) feet wide between parking bays.

(b) The primary plant materials shall be shade trees with at least one (1) deciduous canopy tree for every one hundred sixty (160) square feet of required landscaped area. Two (2) ornamental deciduous trees may be substituted for one (1) canopy tree, but ornamental trees shall constitute no more than twenty-five percent (25%) of the required trees. No light poles shall be located within the area of sixty percent (60%) of mature growth from the center of any tree.

(c) Islands may be curbed or may be designed as uncurbed bio-retention areas as part of an approved low impact stormwater management design approved by the Director of Public Works. The ability to maintain these areas over time must be demonstrated. (See Chapter 37, Madison General Ordinances, Erosion and Stormwater Runoff Control.)

Foundation Plantings.

Foundation plantings shall be installed along building facades, except where building facades directly abut the sidewalk, plaza, or other hardscape features. Foundation plantings shall consist primarily of shrubs, perennials, and native grasses. The Zoning Administrator may modify this requirement for development existing prior to the effective date of this ordinance, as long as improvements achieve an equivalent or greater level of landscaping for the site.

Screening Along District Boundaries.

Screening shall be provided along side and rear property boundaries between commercial, mixed use or industrial districts and residential districts. Screening shall consist of a solid wall, solid fence, or hedge with year-round foliage, between six (6) and eight (8) feet in height, except that within the front yard setback area, screening shall not exceed four (4) feet in height. Height of screening shall be measured from natural or approved grade. Berms and retaining walls shall not be used to increase grade relative to screening height.

Screening of Other Site Elements.

The following site elements shall be screened in compatibility with the design elements, materials and colors used elsewhere on the site, as follows:

(a) Refuse Disposal Areas. All developments, except single family and two family developments, shall provide a refuse disposal area. Such area shall be screened on four (4) sides (including a gate for access) by a solid, commercial-grade wood fence, wall, or equivalent material with a minimum height of six (6) feet and not greater than seven (7) feet.

(b) Outdoor Storage Areas. Outdoor storage areas shall be screened from abutting residential uses with a by a building wall or solid, commercial-grade wood fence, wall, year-round hedge, or equivalent material, with a minimum height of six (6) feet and not greater than seven (7) feet. Screening along district boundaries, where present, may provide all or part of the required screening.

(c) Loading Areas. Loading areas shall be screened from abutting residential uses and from street view to the extent feasible by a building wall or solid, commercial-grade wood fence, or equivalent material, with a minimum height of six (6) feet and not greater than seven (7) feet. Screening along district boundaries, where present, may provide all or part of the required screening.

(d) Mechanical Equipment. All rooftop and ground level mechanical equipment and utilities shall be fully screened from view from any street or residential district, as viewed from six (6) feet above ground level. Screening may consist of a building wall or fence and/or landscaping as approved by the Zoning Administrator.

Maintenance.

The owner of the premises is responsible for the watering, maintenance, repair and replacement of all landscaping, fences, and other landscape architectural features on the site. All planting beds shall be kept weed free. Plant material that has died shall be replaced no later than the upcoming June 1.