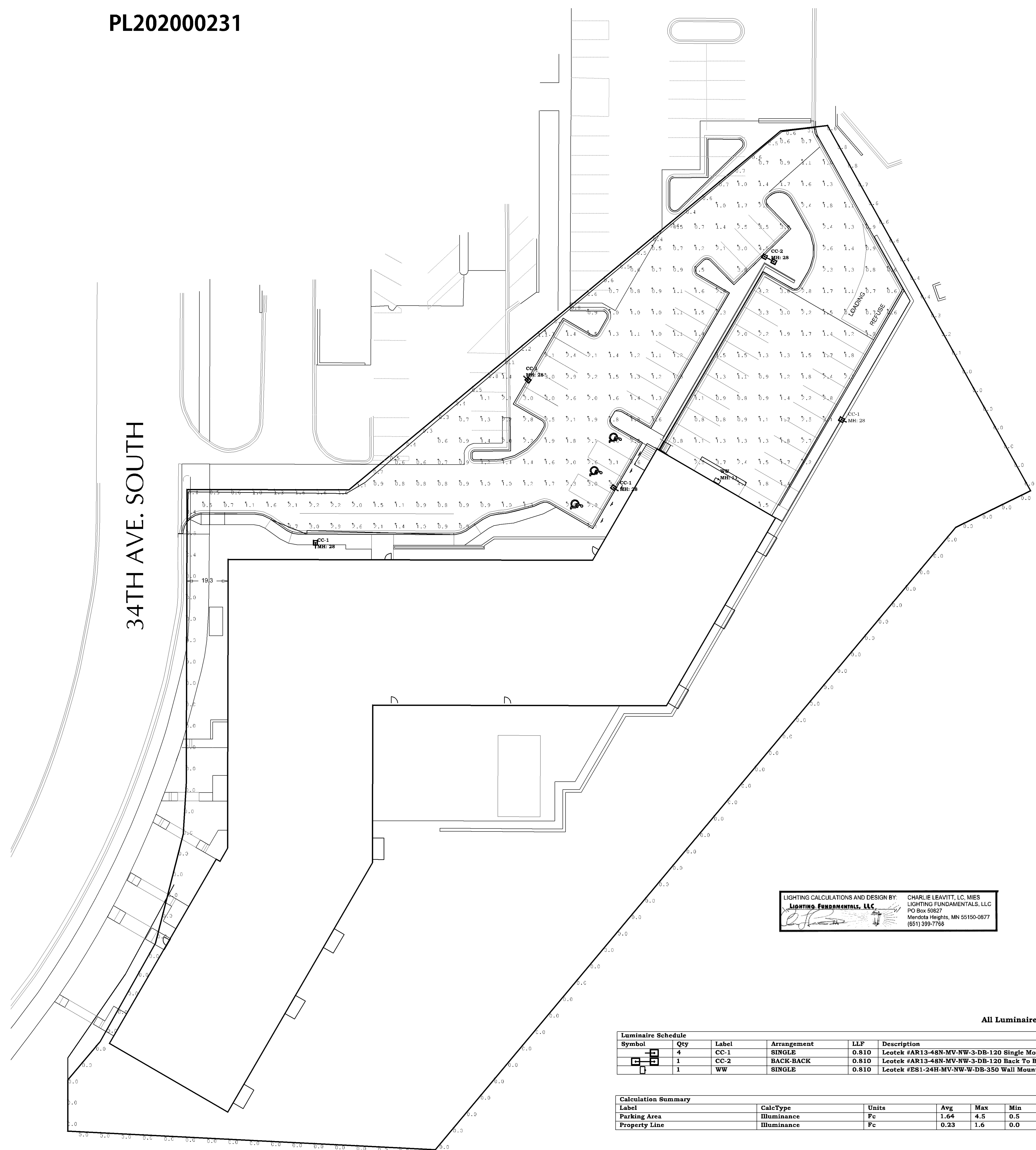


PL202000231

34TH AVE. SOUTH



LIGHTING CALCULATIONS AND DESIGN BY: CHARLIE LEAVITT, LC, MIES
 LIGHTING FUNDAMENTALS, LLC
 PO Box 50827
 Mendota Heights, MN 55150-0877
 (651) 399-7768

All Luminaires Are Full Cut-Off Type - Uplight = 0

Symbol	Qty	Label	Arrangement	LLF	Description	Lum. Watts	Lum. Lumens	BUG Rating
☐	4	CC-1	SINGLE	0.810	Leotek #AR13-48N-MV-NW-3-DB-120 Single Mounted On A Square Steel Pole - Mounting Height Is 28' Including Base	87,344.4	131106	B3-U0-G3
☐	1	CC-2	BACK-BACK	0.810	Leotek #AR13-48N-MV-NW-3-DB-120 Back To Back Mounted On A Square Steel Pole - Mounting Height Is 28' Including Base	87,344.4	131106	B3-U0-G3
☐	1	WW	SINGLE	0.810	Leotek #ES1-24H-MV-NW-W-DB-350 Wall Mounted At 11'	28.71	3301	B1-U0-G1

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking Area	Illuminance	Fc	1.64	4.5	0.5	3.28	9.00
Property Line	Illuminance	Fc	0.23	1.6	0.0	N.A.	N.A.

Parking Area Is 22,889 Square Feet.

Total Lighting Wattage Is 552.714 Watts

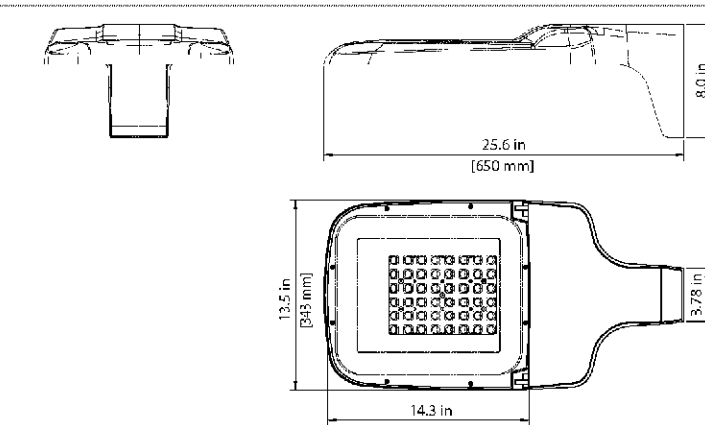
Lighting Power Density = .2414 Watts Per Square Foot



ARIETA® 13 Architectural LED Area Luminaire
AR13 N-Series Specification Data Sheet

Luminaire Data
 Weight 15.4 lbs [7 kg]
 EPA 0.47 W

Project 8131 34th Avenue, Bloomington, MN
 Type CC-1 & CC-2
 Catalog No. AR13-48N-MV-NW-3-DB-120
 Single Mounted On Bronze Square Steel Pole At 28' Mounting Height, Including Base.



Ordering Information

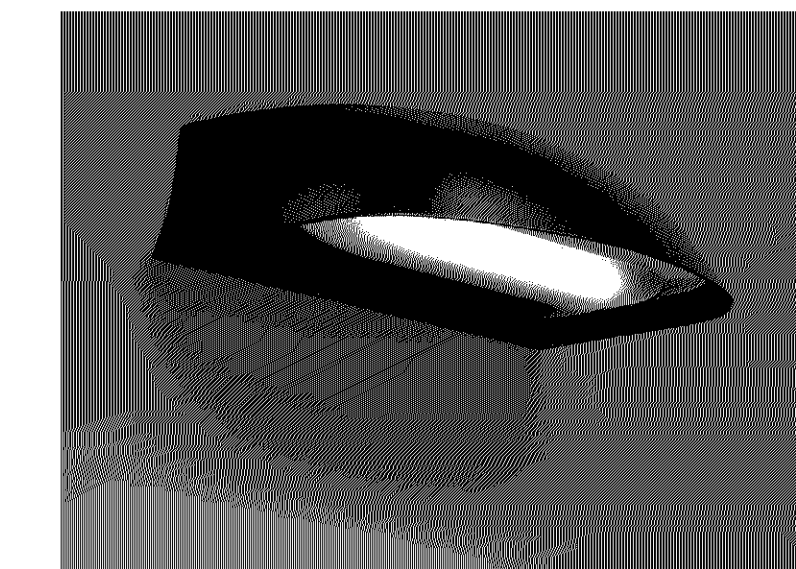
Product	LED Code	Voltage	Nominal Color Temperature	Distribution	Finish ¹	Output Code ²	Options
AR13	48N	MV	NW	3	DB	120	
			3000K	2	Black	WW-3000K	BS ³ Back Light Shield (Factory Installed)
			4000K	3	Dark Bronze	040	FDC ⁴ Field Output Code
			5000K	4	Medium Bronze	055	NSA Photocell
			6000K	5	Light Bronze	070	RS ⁵ Receptacle
			7000K	6	Dark Bronze	085	ASD 7-Frame Photocell
			8000K	7	Medium Bronze	100	PCRT ⁶ Receptacle
			9000K	8	Light Bronze	115	CR3-CP ⁷ Control Ready Triac
			10000K	9	Dark Gray	130	Proflux ⁸ Receptacle
			11000K	10	Medium Gray	145	Motion Sensor with 12 Lens
			12000K	11	Light Gray	160	Motion Sensor with 13 Lens
			13000K	12	Natural Aluminum	175	20K VZDA Surge Protector
			14000K	13		190	Part-Night Dimming
			15000K	14		205	Part-Night Dimming
			16000K	15		220	Part-Night Dimming
			17000K	16		235	Part-Night Dimming
			18000K	17		250	Part-Night Dimming
			19000K	18		265	Part-Night Dimming
			20000K	19		280	Part-Night Dimming
			21000K	20		295	Part-Night Dimming
			22000K	21		310	Part-Night Dimming
			23000K	22		325	Part-Night Dimming
			24000K	23		340	Part-Night Dimming
			25000K	24		355	Part-Night Dimming
			26000K	25		370	Part-Night Dimming
			27000K	26		385	Part-Night Dimming
			28000K	27		400	Part-Night Dimming
			29000K	28		415	Part-Night Dimming
			30000K	29		430	Part-Night Dimming
			31000K	30		445	Part-Night Dimming
			32000K	31		460	Part-Night Dimming
			33000K	32		475	Part-Night Dimming
			34000K	33		490	Part-Night Dimming
			35000K	34		505	Part-Night Dimming
			36000K	35		520	Part-Night Dimming
			37000K	36		535	Part-Night Dimming
			38000K	37		550	Part-Night Dimming
			39000K	38		565	Part-Night Dimming
			40000K	39		580	Part-Night Dimming
			41000K	40		595	Part-Night Dimming
			42000K	41		610	Part-Night Dimming
			43000K	42		625	Part-Night Dimming
			44000K	43		640	Part-Night Dimming
			45000K	44		655	Part-Night Dimming
			46000K	45		670	Part-Night Dimming
			47000K	46		685	Part-Night Dimming
			48000K	47		700	Part-Night Dimming
			49000K	48		715	Part-Night Dimming
			50000K	49		730	Part-Night Dimming
			51000K	50		745	Part-Night Dimming
			52000K	51		760	Part-Night Dimming
			53000K	52		775	Part-Night Dimming
			54000K	53		790	Part-Night Dimming
			55000K	54		805	Part-Night Dimming
			56000K	55		820	Part-Night Dimming
			57000K	56		835	Part-Night Dimming
			58000K	57		850	Part-Night Dimming
			59000K	58		865	Part-Night Dimming
			60000K	59		880	Part-Night Dimming
			61000K	60		895	Part-Night Dimming
			62000K	61		910	Part-Night Dimming
			63000K	62		925	Part-Night Dimming
			64000K	63		940	Part-Night Dimming
			65000K	64		955	Part-Night Dimming
			66000K	65		970	Part-Night Dimming
			67000K	66		985	Part-Night Dimming
			68000K	67		1000	Part-Night Dimming
			69000K	68		1015	Part-Night Dimming
			70000K	69		1030	Part-Night Dimming
			71000K	70		1045	Part-Night Dimming
			72000K	71		1060	Part-Night Dimming
			73000K	72		1075	Part-Night Dimming
			74000K	73		1090	Part-Night Dimming
			75000K	74		1105	Part-Night Dimming
			76000K	75		1120	Part-Night Dimming
			77000K	76		1135	Part-Night Dimming
			78000K	77		1150	Part-Night Dimming
			79000K	78		1165	Part-Night Dimming
			80000K	79		1180	Part-Night Dimming
			81000K	80		1195	Part-Night Dimming
			82000K	81		1210	Part-Night Dimming
			83000K	82		1225	Part-Night Dimming
			84000K	83		1240	Part-Night Dimming
			85000K	84		1255	Part-Night Dimming
			86000K	85		1270	Part-Night Dimming
			87000K	86		1285	Part-Night Dimming
			88000K	87		1300	Part-Night Dimming
			89000K	88		1315	Part-Night Dimming
			90000K	89		1330	Part-Night Dimming
			91000K	90		1345	Part-Night Dimming
			92000K	91		1360	Part-Night Dimming
			93000K	92		1375	Part-Night Dimming
			94000K	93		1390	Part-Night Dimming
			95000K	94		1405	Part-Night Dimming
			96000K	95		1420	Part-Night Dimming
			97000K	96		1435	Part-Night Dimming
			98000K	97		1450	Part-Night Dimming
			99000K	98		1465	Part-Night Dimming
			100000K	99		1480	Part-Night Dimming

1. Black, Dark Bronze, White, Gray or Natural Aluminum standard. DB (RAL 5023) is our original dark bronze. DB (RAL 5025) is a new dark bronze option. Consult factory for color finishes. See page 2 for specifications.
 2. Specified output code set at the factory set. Includes feature mounted output selector that enables field adjustable light levels.
 3. Flush mounted enhanced back light shield factory installed.
 4. No field adjustable output. Specified output code set at the factory.
 5. Includes motion sensor that enables field adjustability of light levels. Field changeable connectors included to enable dimming connection to PCRT (wireless dimming is enabled by default).
 6. Control ready wired at factory for wireless node dimming. Output selector not included in fixture. Not able to adjust above specified drive current.
 7. See L7 or L3 Lens coverage details on page 4. Consult factory for MS specified with ANSI 7-Frame Photocell. Photocell 7-Frame option compared to On/Off control using light sensor.
 8. For PND2 profile options see page 5. Only available with MV (120-277V).
 9. Specify Color (DB, DBL, BK, GR, NA).
 10. Specify MV (120-277V) or HV (240V/480V).
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 AR13_N-Series_SpecSheet_Sheet_05-11-20. Specifications subject to change without notice.
 Page 1



Eseta™ LED Wall Sconce
ES1

Luminaire Data
 Weight 9.9 lbs [4.5 kg]
 14.6 lbs [6.6kg] with EM, MS options

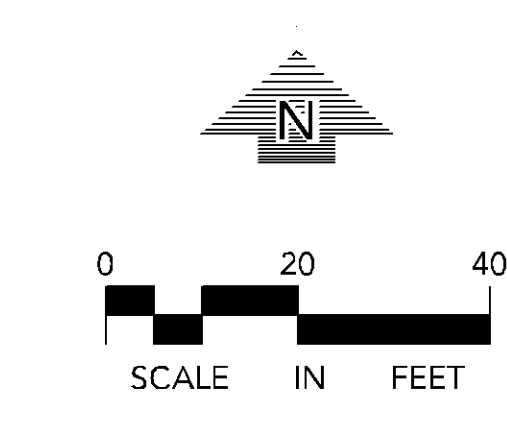


Ordering Information

Product	No. & Type of LEDs	Voltage	Color Temperature	Distribution	Finish ¹	W	DB	350	Options
ES1	24H	MV	NW	3	DB	350			
			3000K	W	Black	350	350mA	FC ²	Photo Control
			4000K	W	Dark Bronze	530	530mA	MSL ³	Motion Sensor, 12 Lens
			5000K	W	Medium Bronze	700	700mA	MSL ³	Motion Sensor, 13 Lens
			6000K	W	Light Bronze			EM ⁴	Emergency System
			7000K	W	Dark Gray			MS	Motion Sensor
			8000K	W	Light Gray			FSIR100	Configuration Tool

Notes:
 1. Consult factory for color finish specifications.
 2. Consult factory for non-standard finish options. See page 2 for specifications.
 3. Factory set drive current, non field adjustable. 3000mA is not available for 48H version. Refer to performance data on page 2. Consult factory for other drive current options.
 4. Motion Sensor available with MV only. Motion Sensor default setting dims luminaire to 20% when no motion is detected for 3 minutes. Field adjustable settings available using FSIR100 system.
 5. Emergency Battery System available with MV only. 3 year limited warranty on Emergency Battery System.
 6. Available with MV. Consult factory for HV options, single voltage only, either 240V or 480V.
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 ES1-24H-MV-NW-W-DB-350. Specifications subject to change without notice.
 Page 1

Lighting by:
Charlie Leavitt, LC, MIES
Lighting Fundamentals, LLC
PO Box 50827
Mendota Heights, MN 55150-0877
charlie@lightingfundamentalsllc.net
651-399-7768



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 BLOOMINGTON, MN

ROERS COMPANIES
 110 Cheshire Lane, Suite 120
 Minneapolis, MN 55405

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 LAND SURVEYING
 LANDSCAPE ARCHITECTURE
 ENVIRONMENTAL
 7200 Hemlock Lane, Suite 300
 Maple Grove, MN 55369
 763.424.5505
 www.loucksinc.com

CADD QUALIFICATION
 CADD files prepared by the Contractor for this project are the property of the Contractor and shall remain the property of the Contractor. The Contractor shall be responsible for the accuracy of the CADD files and shall be responsible for the accuracy of the CADD files. The Contractor shall be responsible for the accuracy of the CADD files. The Contractor shall be responsible for the accuracy of the CADD files.

SUBMITTAL/REVISIONS
 12/22/20 CITY SUBMITTAL

PROFESSIONAL SIGNATURE
PRELIMINARY
 QUALITY CONTROL

C1-1	DEMO PLAN
C2-1	SITE PLAN
C3-1	GRADING PLAN
C3-2	SWPPP
C3-3	SWPPP NOTES
C4-1	SANITARY AND WATERMAIN
C4-2	STORM SEWER
C8-1	CIVIL DETAILS
C8-2	CIVIL DETAILS
L1-1	LANDSCAPE PLAN
L1-2	LANDSCAPE DETAILS
P1-1	PHOTOMETRICS PLAN

LIGHTING PHOTOMETRICS PLAN
P1-1