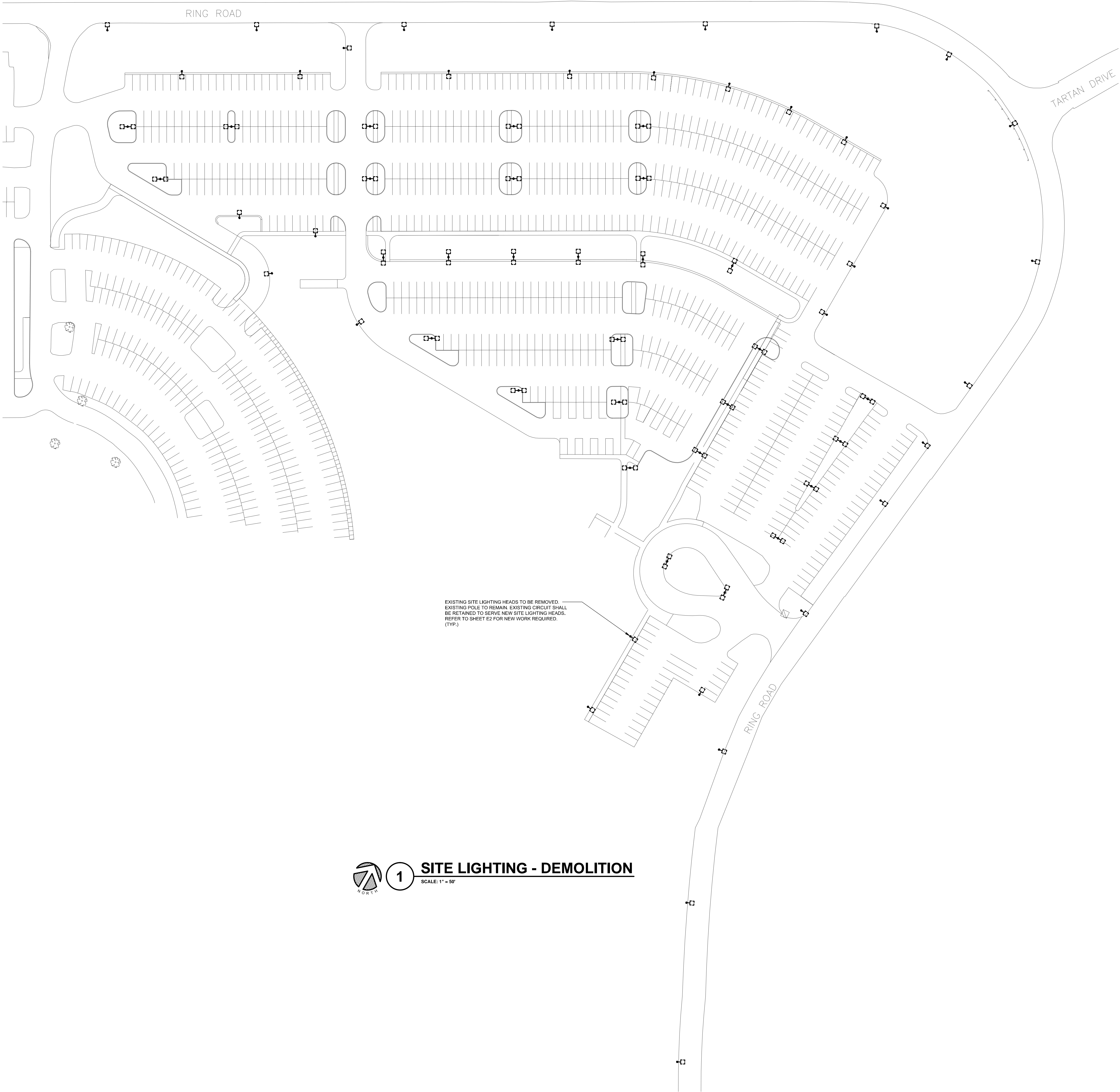


- ELECTRICAL DEMOLITION NOTES:**
1. THE ELECTRICAL DRAWINGS INDICATE EXISTING ELECTRICAL ITEMS TO BE REMOVED. THE DRAWINGS ARE INTENDED TO INDICATE THE SCOPE OF WORK REQUIRED AND DO NOT INDICATE EVERY BOX, CONDUIT, OR WIRE THAT MUST BE REMOVED. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING A BID AND VERIFY EXISTING CONDITIONS.
 2. ELECTRICAL ITEMS (i.e., LIGHTING FIXTURES ETC.) REMOVED AND NOT RELOCATED REMAIN THE PROPERTY OF THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF MATERIAL THE OWNER DOES NOT WANT TO REUSE OR RETAIN (i.e., FOR MAINTENANCE PURPOSES).
 3. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE OWNER BEFORE TURNING OFF POWER TO CIRCUITS, FEEDERS, PANELS, ETC. COORDINATE ALL OUTAGES WITH OWNER.
 4. BALLASTS MANUFACTURED PRIOR TO 1980 CONTAIN PCBs AND SHALL BE DISPOSED OF BY A FEDERAL OR STATE E.P.A. APPROVED METHOD AND IN ACCORDANCE WITH SPECIFICATIONS.
 5. HID LAMPS CONTAIN MERCURY AND SHALL BE DISPOSED OF BY A FEDERAL OR STATE E.P.A. APPROVED METHOD AND IN ACCORDANCE WITH SPECIFICATIONS.

ELECTRICAL DEMOLITION SYMBOL LIST	
SYMBOL:	DESCRIPTION:
---	INDICATES EXISTING TO REMAIN
----	INDICATES EXISTING TO BE REMOVED.
□	POLE MOUNTED LUMINAIRE - (1) HEAD
□ □	POLE MOUNTED LUMINAIRE - (2) HEAD



1

SITE LIGHTING - DEMOLITION

SCALE: 1" = 50'

McHENRY COUNTY COLLEGE LIGHTING SYSTEMS IMPROVEMENTS 8900 US HIGHWAY 14, CRYSTAL LAKE, ILLINOIS 60012

NO.	DATE	REVISION DESCRIPTION

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REFERENCE SCALE IN INCHES

DESIGNED BY	DRAWN BY	CHECKED BY
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MDC	MAW	JML
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PROJECT NUMBER	DATE
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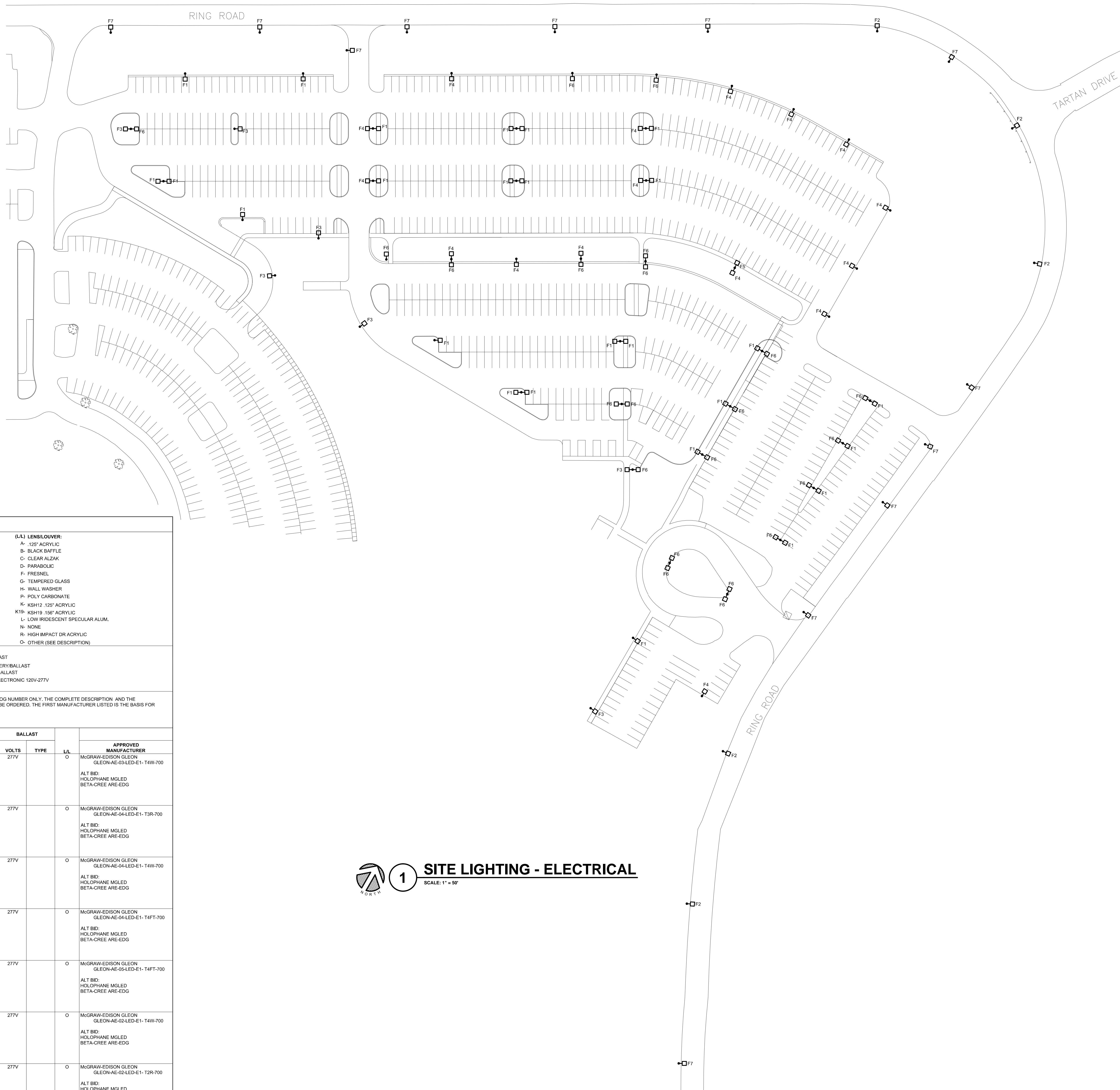
SHEET DESCRIPTION

SITE LIGHTING - DEMOLITION

SHEET NUMBER

E1

**McHENRY COUNTY COLLEGE
LIGHTING SYSTEMS IMPROVEMENTS
8900 US HIGHWAY 14, CRYSTAL LAKE, ILLINOIS 60012**



GENERAL ELECTRICAL NOTES:

1. ABBREVIATION KEY:
E.C. TYPE: ELECTRICAL CONTRACTOR
TYPICAL
2. LINE TYPE KEY:
_____ NEW WORK BY THIS CONTRACTOR (DARK SOLID LINE)
_____ NEW WORK BY OTHERS AND/OR EXISTING TO REMAIN (LIGHT SOLID LINE)
3. INSTALL NEW SITE LIGHTING HEADS ON EXISTING POLE. COORDINATE MOUNTING REQUIREMENTS WITH EXISTING POLE AND APPROVED SITE LUMINAIRE. PROVIDE ALL MOUNTING HARDWARE AND ACCESSORIES AS REQUIRED TO MAKE A COMPLETE AND FUNCTIONAL LUMINAIRE. ENSURE THE APPROPRIATE MOUNTING HARDWARE IS PROVIDED IN RELATION TO THE QUANTITY OF SPECIFIED SITE LIGHTING HEADS PER POLE.
4. CONNECT SITE LIGHTING HEADS TO EXISTING CIRCUIT. EXTEND EXISTING CONDUIT AND CONDUCTORS AS NECESSARY. NEW CONDUIT AND CONDUCTORS SHALL MATCH SIZE AND TYPE OF EXISTING.
5. ALTERNATE BID MANUFACTURERS IN THE LUMINAIRE SCHEDULE SHALL BE RESPONSIBLE TO PROVIDE THE REQUIRED SITE CALL OUT DIMENSIONS.

LUMINAIRE SCHEDULE

(MTG) MOUNTING:

RE - RECESSED

SP - SUSPENDED

CL - CEILING SURFACE

WL - WALL

UC - UNDER CABINET

CV - COVE

PL - POLE

FR- FLANGED RECESSED

O - OTHER (SEE DESCRIPTION)

DOOR:

FA - FLAT ALUMINUM

FS - FLAT STEEL

RA - REGRESSED ALUMINUM

RS - REGRESSED STEEL

(Type) LAMP TECHNOLOGY:

FL - FLUORESCENT

CF - COMPACT FLUORESCENT

HL - HALOGEN

IN - INCANDESCENT

LED - LIGHT EMITTING DIODE

HS - HIGH PRESSURE SODIUM

MH - METAL HALIDE

SMH - SUPER METAL HALIDE

PSMH - PULSE START METAL HALIDE

CMH - CERAMIC METAL HALIDE

O - OTHER (SEE DESCRIPTION)

XL - EXTENDED LIFE

XLP - EXTENDED LIFE & OUTPUT

(L/L) LENS/COVER:

A- 125' ACRYLIC

B- BLACK BAFFLE

C - CLEAR ALZAK

D- PARABOLIC

F- FENNEL

G- TEMPERED GLASS

H- WALL WASHER

P- POLY CARBONATE

K- KSH12 125' ACRYLIC

K19- KSH19 186' ACRYLIC

L- LOW IRIDESCENT SPECULAR ALUM.

N- NONE

R- HIGH IMPACT DR ACRYLIC

O - OTHER (SEE DESCRIPTION)

FINISH:

PAF - PAINT AFTER FABRICATION

CSA - FINISH SELECTION BY ARCHITECT

(TYPE) BALLAST:

DIM07- LINE DIMMING BALLAST

DIM10- 0-10V DIMMING BALLAST

HL- HIGH / LOW LEVEL BALLAST

ML- MULTI-LEVEL SWITCHING

HP- HIGH PERFORMANCE / LBF

(TYPE) BALLAST:

EB- ELECTRONIC BALLAST

EM- EMERGENCY BATTERY/BALLAST

DALI- DIGITAL DIMMING BALLAST

MV- MULTI-VOLTAGE ELECTRONIC 120V-277V

BB- BALLAST FACTOR

CATALOG NUMBER SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. THE COMPLETE DESCRIPTION AND THE SPECIFICATION SHALL BE COORDINATED WITH THE CATALOG NUMBER TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE FIRST MANUFACTURER LISTED IS THE BASIS FOR DESIGN.

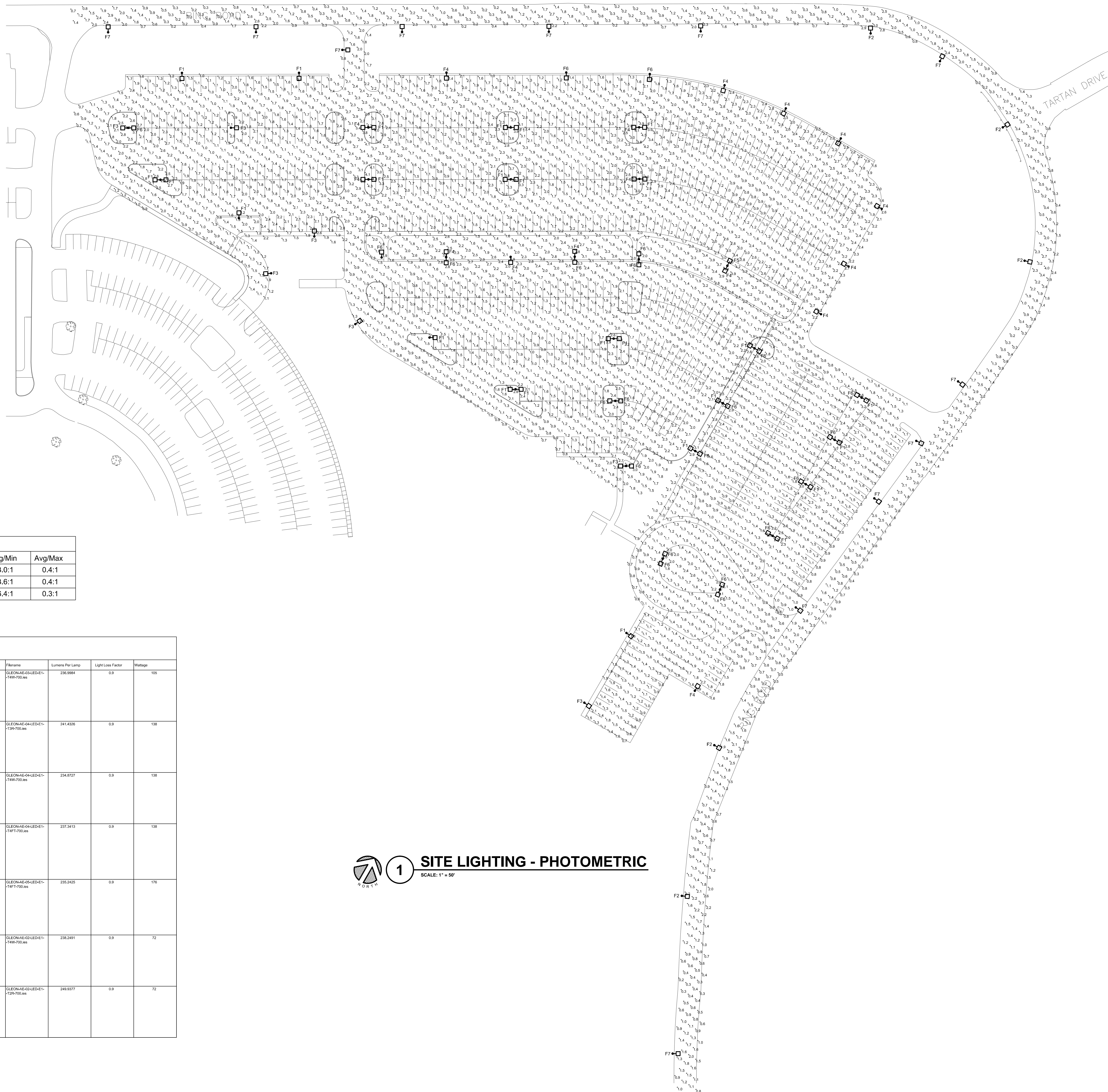
LAMP CORRELATED COLOR TEMPERATURE 4000°K, COLOR RENDERING INDEX (CRI) AT OR ABOVE 70, UNLESS NOTED OTHERWISE.

ITEM	DESCRIPTION	DIMENSIONS				MTG	LAMPS			BALLAST		APPROVED MANUFACTURER	
		L	W	H	DIA.		TYPE	QTY	MODEL	VOLTS	TYPE		L/L
F1	LED SITE LUMINAIRE, DIE-CAST ALUMINUM HOUSING, WET LOCATION LISTED, 10kV TRANSIENT LINE SURGE PROTECTOR, COORDINATE FINISH SELECTION WITH OWNER. TYPE IV WIDE DISTRIBUTION	15-1/2"	28-3/4"	3-15/16"		PL	LED	1	10x WATTS 11,370 LUMENS	277V		O	McGRAW-EDISON GLEON GLEON-AE-03-LED-E1- T4W-700 ALT BID: HOLOPHANE MGLD BETA-CREE ARE-EDGE
F2	LED SITE LUMINAIRE, DIE-CAST ALUMINUM HOUSING, WET LOCATION LISTED, 10kV TRANSIENT LINE SURGE PROTECTOR, COORDINATE FINISH SELECTION WITH OWNER. TYPE II ROADWAY DISTRIBUTION	15-1/2"	28-3/4"	3-15/16"		PL	LED	1	138 WATTS 15,469 LUMENS	277V		O	McGRAW-EDISON GLEON GLEON-AE-04-LED-E1- T3R-700 ALT BID: HOLOPHANE MGLD BETA-CREE ARE-EDGE
F3	LED SITE LUMINAIRE, DIE-CAST ALUMINUM HOUSING, WET LOCATION LISTED, 10kV TRANSIENT LINE SURGE PROTECTOR, COORDINATE FINISH SELECTION WITH OWNER. TYPE IV WIDE DISTRIBUTION	15-1/2"	28-3/4"	3-15/16"		PL	LED	1	138 WATTS 15,024 LUMENS	277V		O	McGRAW-EDISON GLEON GLEON-AE-04-LED-E1- T4W-700 ALT BID: HOLOPHANE MGLD BETA-CREE ARE-EDGE
F4	LED SITE LUMINAIRE, DIE-CAST ALUMINUM HOUSING, WET LOCATION LISTED, 10kV TRANSIENT LINE SURGE PROTECTOR, COORDINATE FINISH SELECTION WITH OWNER. TYPE IV FORWARD THROW DISTRIBUTION	15-1/2"	28-3/4"	3-15/16"		PL	LED	1	138 WATTS 15,221 LUMENS	277V		O	McGRAW-EDISON GLEON GLEON-AE-04-LED-E1- T4FT-700 ALT BID: HOLOPHANE MGLD BETA-CREE ARE-EDGE
F5	LED SITE LUMINAIRE, DIE-CAST ALUMINUM HOUSING, WET LOCATION LISTED, 10kV TRANSIENT LINE SURGE PROTECTOR, COORDINATE FINISH SELECTION WITH OWNER. TYPE IV FORWARD THROW DISTRIBUTION	15-1/2"	28-3/4"	3-15/16"		PL	LED	1	176 WATTS 7,995 LUMENS	277V		O	McGRAW-EDISON GLEON GLEON-AE-02-LED-E1- T4FT-700 ALT BID: HOLOPHANE MGLD BETA-CREE ARE-EDGE
F6	LED SITE LUMINAIRE, DIE-CAST ALUMINUM HOUSING, WET LOCATION LISTED, 10kV TRANSIENT LINE SURGE PROTECTOR, COORDINATE FINISH SELECTION WITH OWNER. TYPE IV WIDE DISTRIBUTION	15-1/2"	28-3/4"	3-15/16"		PL	LED	1	72 WATTS 7,620 LUMENS	277V		O	McGRAW-EDISON GLEON GLEON-AE-02-LED-E1- T4W-700 ALT BID: HOLOPHANE MGLD BETA-CREE ARE-EDGE
F7	LED SITE LUMINAIRE, DIE-CAST ALUMINUM HOUSING, WET LOCATION LISTED, 10kV TRANSIENT LINE SURGE PROTECTOR, COORDINATE FINISH SELECTION WITH OWNER. TYPE II ROADWAY DISTRIBUTION	15-1/2"	28-3/4"	3-15/16"		PL	LED	1	72 WATTS 7,995 LUMENS	277V		O	McGRAW-EDISON GLEON GLEON-AE-02-LED-E1- T2R-700 ALT BID: HOLOPHANE MGLD BETA-CREE ARE-EDGE

 1 **SITE LIGHTING - ELECTRICAL**
SCALE: 1" = 50'

McHENRY COUNTY COLLEGE

8900 US HIGHWAY 14, CRYSTAL LAKE, ILLINOIS 60012



STATISTICS							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
Parking lot E	+	1.5 fc	3.8 fc	0.5 fc	7.6:1	3.0:1	0.4:1
Parking lot F	+	1.8 fc	4.5 fc	0.5 fc	9.0:1	3.6:1	0.4:1
Ring Road	+	1.3 fc	4.0 fc	0.2 fc	20.0:1	6.4:1	0.3:1

LUMINAIRE SCHEDULE											
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number of Lamps	Fluorene	Lumens Per Lamp	Light Loss Factor	Wattage
	F1	28	COOPER LIGHTING - McGRAW-HILL	GLEON-A-04-LEDE1-1467-70.0a6	GALSSON LED AREA AND ROADWAY LUMINAIRE (3) 10 CRI 4000K 7000A LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV BISE OPTICS ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONKPHOTOMETRIC WITH TEST DISTANCE OF 20.75 FEET	64	GLEON-A-04-LEDE1-1467-70.0a6	236,988	0.9	105	
	F2	3	COOPER LIGHTING - McGRAW-HILL	GLEON-A-04-LEDE1-1787-70.0a6	GALSSON LED AREA AND ROADWAY LUMINAIRE (4) 10 CRI 4000K 7000A LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II BISE OPTICS ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONKPHOTOMETRIC WITH TEST DISTANCE OF 20.75 FEET	64	GLEON-A-04-LEDE1-1787-70.0a6	241,436	0.9	138	
	F3	7	COOPER LIGHTING - McGRAW-HILL	GLEON-A-04-LEDE1-1767-70.0a6	GALSSON LED AREA AND ROADWAY LUMINAIRE (4) 10 CRI 4000K 7000A LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II BISE OPTICS ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONKPHOTOMETRIC WITH TEST DISTANCE OF 20.75 FEET	64	GLEON-A-04-LEDE1-1767-70.0a6	234,872	0.9	138	
	F4	16	COOPER LIGHTING - McGRAW-HILL	GLEON-A-04-LEDE1-1477-70.0a6	GALSSON LED AREA AND ROADWAY LUMINAIRE (4) 10 CRI 4000K 7000A LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONKPHOTOMETRIC WITH TEST DISTANCE OF 20.75 FEET	64	GLEON-A-04-LEDE1-1477-70.0a6	237,343	0.9	138	
	F5	1	COOPER LIGHTING - McGRAW-HILL	GLEON-A-04-LEDE1-1477-70.0a6	GALSSON LED AREA AND ROADWAY LUMINAIRE (3) 10 CRI 4000K 7000A LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONKPHOTOMETRIC WITH TEST DISTANCE OF 20.75 FEET	80	GLEON-A-04-LEDE1-1477-70.0a6	235,343	0.9	176	
	F6	22	COOPER LIGHTING - McGRAW-HILL	GLEON-A-02-LEDE1-1467-70.0a6	GALSSON LED AREA AND ROADWAY LUMINAIRE (2) 10 CRI 4000K 7000A LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV BISE OPTICS ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONKPHOTOMETRIC WITH TEST DISTANCE OF 20.75 FEET	32	GLEON-A-02-LEDE1-1467-70.0a6	238,281	0.9	72	
	F7	11	COOPER LIGHTING - McGRAW-HILL	GLEON-A-04-LEDE1-1787-70.0a6	GALSSON LED AREA AND ROADWAY LUMINAIRE (2) 10 CRI 4000K 7000A LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II BISE OPTICS ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONKPHOTOMETRIC WITH TEST DISTANCE OF 20.75 FEET	32	GLEON-A-04-LEDE1-1787-70.0a6	240,837	0.9	72	



SITE LIGHTING - PHOTOMETRIC

SCALE: 1" = 50'

NO.	DATE	REVISION DESCRIPTION
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MBO	MAW	IMI
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15-010-00	02-17-2017

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SHEET DESCRIPTION

SITE LIGHTING -

PHOTOMETRIC

SHEET NUMBER

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