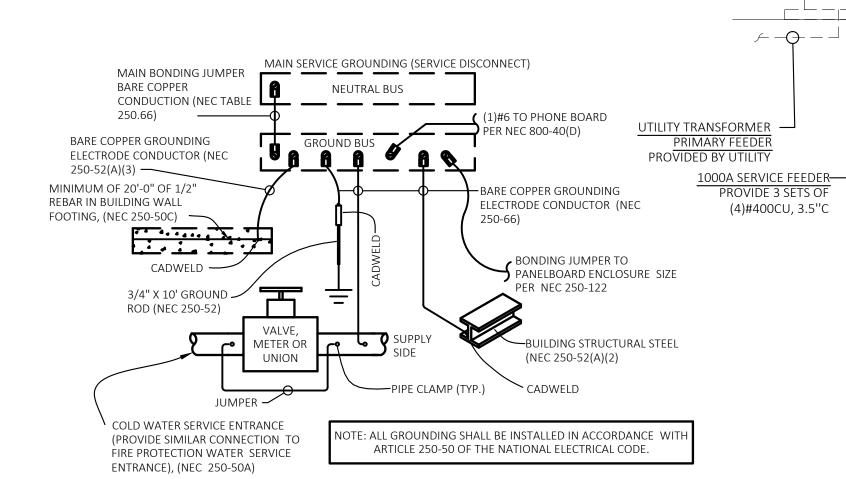


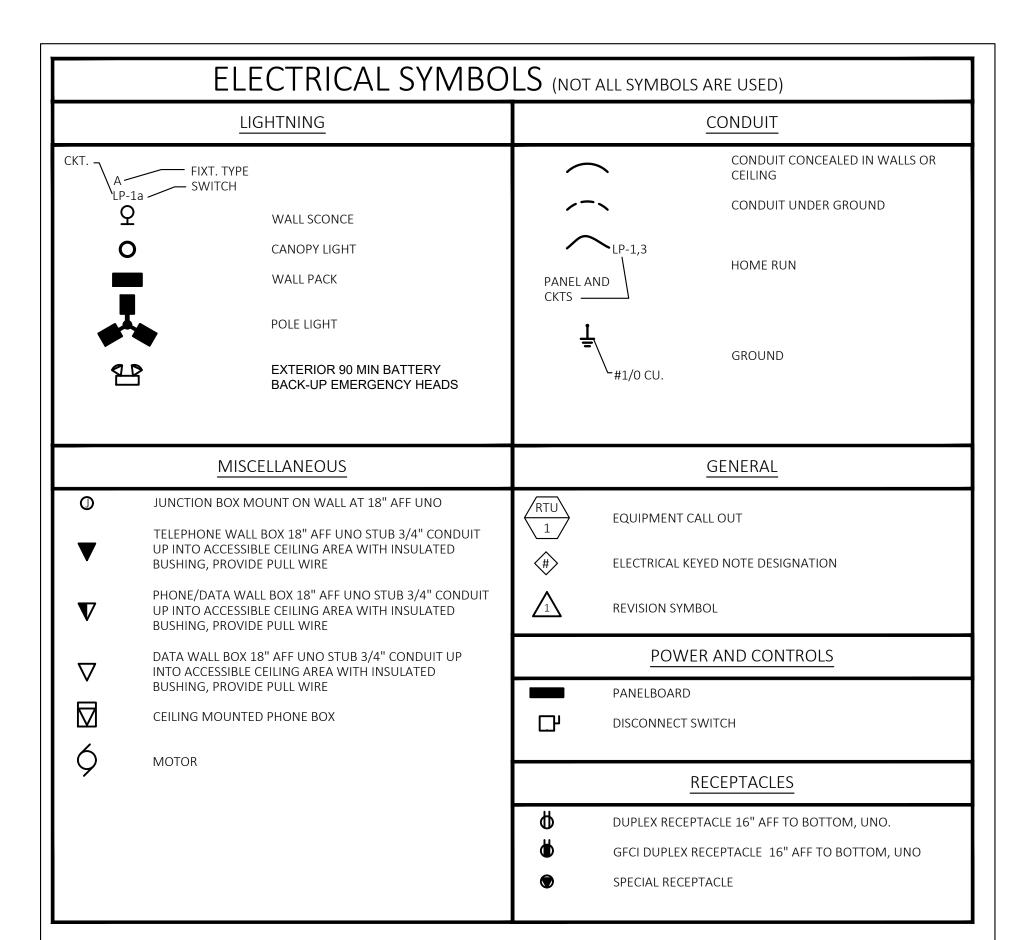
## 2 ENLARGED SERVICE ENTRANCE SCALE: NOT TO SCALE

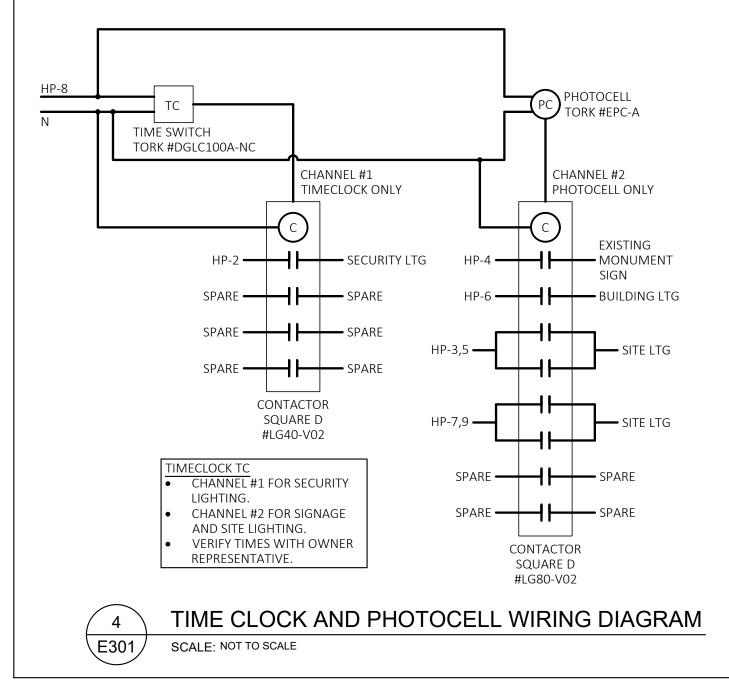
## **GENERAL GROUNDING NOTES**

- A. FULL SIZE GROUND MEANS THAT GROUND CONNECTOR SIZE SHALL BE AS SHOWN ON SERVICE EQUIPMENT ON THE POWER RISER DIAGRAM.
- B. AFTER GROUNDING SYSTEM IS INSTALLED, GROUND RESISTANCE SHALL BE MEASURED, TO ASSURE THAT GROUND VALUE OF 15 OHM MAXIMUM RESISTANCE IS ACHIEVED. IF NOT, ADDITIONAL GROUNDING SHALL BE PROVIDED TO MEET THE SPECIFIC VALUE.
- C. ALL CONNECTIONS TO GROUND RODS SHALL BE EXOTHERMIC WELD CONNECTIONS
- D. WHERE LOCATED OUTSIDE OF BUILDING, TOP OF GROUND ROD SHALL BE 12" (MINIMUM) BELOW GRADE. PROVIDE NON-METALIC INSPECTION WELL WITH REMOVABLE COVER.
- E. GROUND CONNECTOR SHALL BE LOCATED WITHIN OR NEAR BOTTOM OF CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH, AND SHALL CONSIST OF AT LEAST 20 FEET OF ONE OR MORE STEEL REINFORCING BARS OR RODS OF NOT LESS THAN 1/2 INCH DIAMETER OR OF AT LEAST 20 FEET OF BARE COPPER CONDUCTOR.
- F. SEE THE RISER DIAGRAM DETAIL 1/E301 FOR THE SIZE OF THE MAIN BONDING JUMPER AND BARE COPPER GROUNDING ELECTRODE CONDUCTORS.
- G. NOT ALL GROUNDING OPTIONS MAY APPLY. CONTRACTOR TO VERIFY AVAILABLE GROUNDING METHODS.









NEUTRAL AND GROUND—

TO DETAIL 3/E101

SERVICE GROUND —

JTILITY CONTACT INFORMATION

888-471-5275

TELEPHONE:

KANSAS CITY POWER AND LIGHT COMPANY

PROVIDE #3/0CU G.

SEE DETAIL 3/E301

FOR INFORMATION

TO BE BONDED. REFER

UTILITY TRANSFORMER

PROVIDED BY UTILITY

PLAN MARK	MANUFACTURER	CATALOG NO.	LAMP DATA	REMARKS AND MOUNTING	WATTS PER FIXTURE	FIXTURE QUANTITY
		CATALOG NO.	** NO. WATTAGE & LA	HEIGHT TO BOTTOM OF LIGHT FIXTURE		
A	LITHONIA	DSX0 LED-P6-40K-BLC-208-RPA DDB	LED FURNISHED WITH FIXTURE	13" W x 26" L x 7" H HEAD MOUNTED ON A EXISTING 28' TALL ROUND POLE, 70 CRI, 4000K, 13090 LUMENS, WET LOCATION LISTED. COORDINATE POLE DRILL HOLES WITH THE EXISTING POLES	134	5
В	LITHONIA	DSXW1 LED-20C-530-30K-T2M- MVOLT-DDBXD	LED FURNISHED WITH FIXTURE	14" W x 7" H x 10" D WALL PACK, 70CRI, 3000K, 3887 LUMENS, SURFACE MOUNTED 8'-0" AFF TO BOTTOM OF FIXTURE UNLESS OTHERWISE NOTED.	36	6
С	LITHONIA	OLLWU LED-P1-40K-MVOLT-DDB	LED FURNISHED WITH FIXTURE	5" W x 10" H x 4" D WALL SCONCE, UP AND DOWN LIGHT, 70CRI, 4000K, 947 LUMENS, SURFACE MOUNTED 8'-0" AFF TO BOTTOM OF FIXTURE UNLESS OTHERWISE NOTED.	14	7
D	PORTFOLIO	LD6B-15-D010-EU6B-1020-80-30-6LB- W-1-MB	LED FURNISHED WITH FIXTURE	7" W x 6" H DOWN LIGHT MOUNTED WITHIN THE CANOPY 10'-0" AFF UNLESS NOTED OTHERWISE	11	5
Х	LITHONIA	AFF-OEL-DDBTXD-UVOLT-LTP-SDRT- WT-CW	LED FURNISHED WITH FIXTURE	7" W x 10" H x 4" D EXTERIOR EMERGENCY LIGHT, SURFACE MOUNT WITH BOTTOM OF FIXTURE AT 8'-0" AFF, LITHIUM ION PHOSPHATE BATTERY, OUTPUTS FOR 90 MINUTES AFTER LOSS OF POWER, LISTED FOR COLD WEATHER AND WET LOCATION	12	4
	** LAMPS	LED; I - INCANDESCENT; F - FL	UORESCENT; CF - COMPA	ACT FLUORESCENT; MH - METAL H	ALIDE	
			NOTE:			

- 100A FEEDER PROVIDE (4)#3CU,

#8CU G, 1.25"C

E301

ROOM STARBUCKS

TIMECLOCK REFER TO

DETAIL 4/E301

INFORMATION

PANEL

SBA

- 400A FEEDER

OF (4)#3/0CU,

#3CU G, 2.5"C

**ONE-LINE** 

SCALE: NOT TO SCALE

PROVIDE 2 SETS

FOR MORE

UTILITY

PANEL

ALL EXTERIOR EQUIPMENT

COORDINATE ALL UTILITY

LOCATIONS WITH

PRIOR TO BID

RESPECTIVE COMPANY

IS TO BE NEMA-3R RATED.

EXTERIOR UTILITY ROOM

EQUIPMENT SCHEDULE				FILE: 320488 LOAD.xlsm					
PLAN MARK	EQUIPMENT SERVED	LOAD	VOLT/ PHASE	FED BY	DISC BY	MCA	MOCPD	FEEDER	REMARKS
RTU 1	ROOF TOP UNIT	15.20KVA	208/3	SBA	EC	42.2A	50A	(3)#6,#8G 3/4"C	
RTU 2	ROOF TOP UNIT	15.20KVA	208/3	SBA	EC	42.2A	50A	(3)#6,#8G 3/4"C	
FF 1	FLY FAN	0.77KVA	120/1	SBA	EC	6.4A	20A	1/2"C W/ PULL STRINGS	MARS #STD248-1U-OF
DAC 1	DRIVE-THRU AIR CURTAIN	7.07KVA	208/1	SBA	EC	34.0A	40A	(2)#8,#10G 3/4"C	AA300-275 PASS-THRU AIR CURTAIN

DRIVE-THRU 0.96KVA 120/1 SBA EC 8.0A 15A (2)#12,#12G 1/2"C

B. LIGHT FIXTURE QUANTITIES ARE APPROXIMATE CONTRACTOR IS RESPONSIBLE FOR VERIFYING FIXTURE COUNT

			ABBREVIATIONS			
( <u>NOTE:</u> NOT ALL ABBREVIATIONS ARE USED)						
AFF	ABOVE FINISHED FLOOR	DIM	DIMMER	IG	ISOLATED GROUND	
AL	ALUMINUM	DISC SW	DISCONNECT SWITCH	JB	JUNCTION BOX	
AMP	AMPERE	DP	DOUBLE POLE	MCB	MAIN CIRCUIT BREAKER	
ATS	AUTO-TRANSFER-SWITCH	DT	DOUBLE THROW	MDP	MAIN DISTRIBUTION PANEL	
BFG	BELOW FINSHED GRADE	DPP	DISTRIBUTION POWER PANEL	MLO	MAIN LUG ONLY	
BLDG	BUILDING	EC	EMPTY CONDUIT	MTD HT	MOUNTING HEIGHT	
СВ	CIRCUIT BREAKER	EF	EXHAUST FAN	NF	NON FUSED	
CKT	CIRCUIT	EM	EMERGENCY	NIC	NOT IN CONTRACT	
CLG	CEILING	EWC	ELECTRIC WATER COOLER	RTU	ROOF TOP UNIT	
COND OR "C"	CONDUIT	EXIST'G	EXISTING	sw	SWITCH	
CONN	CONNECT	FL	FLOOR	UG	UNDER GROUND	
CONT	CONTRACTOR	FLUOR	FLUORESCENT	UNO	UNLESS NOTED OTHERWISE	
CU	COPPER	GFCI	GROUND FAULT CURRENT INTERUPTER	WP	WEATHER-PROOF	
С/Т	CURRENT TRANSFORMER	GND OR (G)	GROUND	XFMR	TRANSFORMER	

12 Sunnen Drive. Suite 100. St. Louis. MO 63143 T: 314 821.1100

FUTURE

MEDICAL | BUILDING

OFFICE EXTERIOR

FUTURE

MEDICAL

– 400A FEEDER

2.5"C

PROVIDE 2 SETS OF

(4)#3/0CU, #3CU G,

PANEL

FM

275 SERIES

STARBUCKS OFFICE

– 400A FEEDER

PROVIDE 2

(4)#3/0CU,

#3CU G, 2.5"C

SETS OF

PANEL

Office MIDLAND
WY
4802

Starbucks & Medical Offi 155 S.W. MO-150 HWY LEE'S SUMMIT, MO 64802

Da 005 006

CASCO DIVERSIFIED
CORPERATION PROFESSIONAL
ENGINEERING CERTIFICATE OF



AUTHORITY #000613

EXP. 12/31/21

HARRY J. AUMAN LIC. #E16827 EXP. 12/31/20

Drawn By/Checked By: EAV/DAW
Project Number 320488

Permit Date

ELECTRICAL
ONE-LINE AND
DETAILS

06-17-20

E301