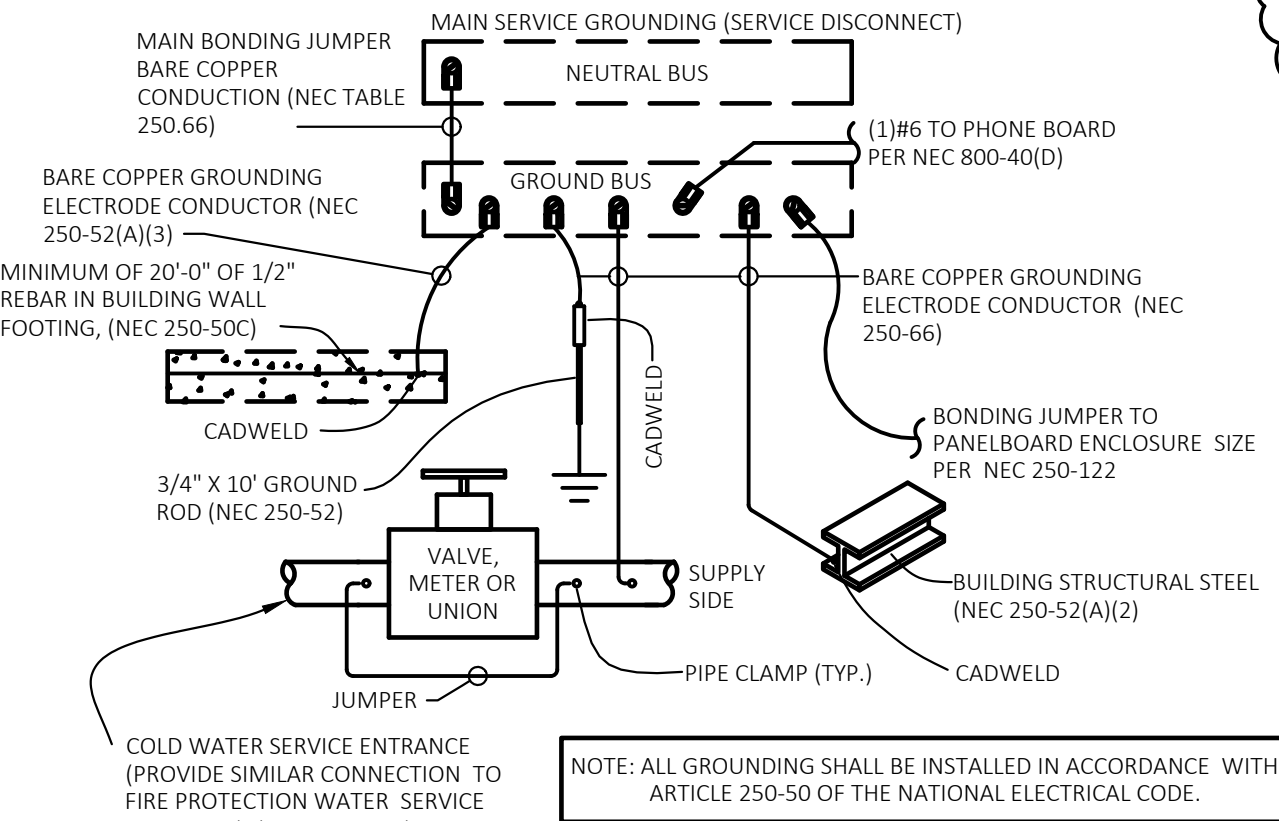


2
E301
ENLARGED SERVICE ENTRANCE
SCALE: NOT TO SCALE

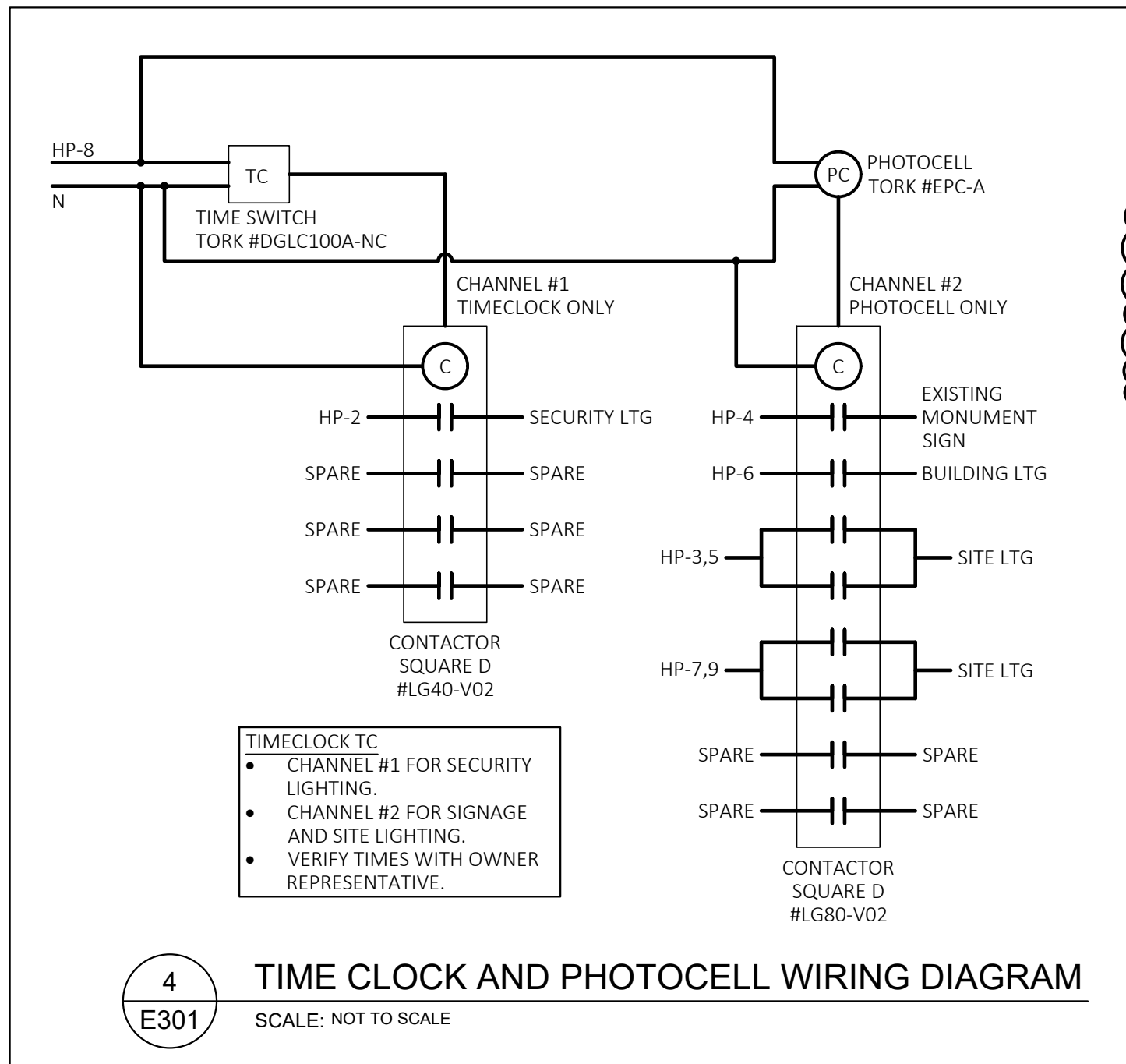
GENERAL GROUNDING NOTES

- 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.

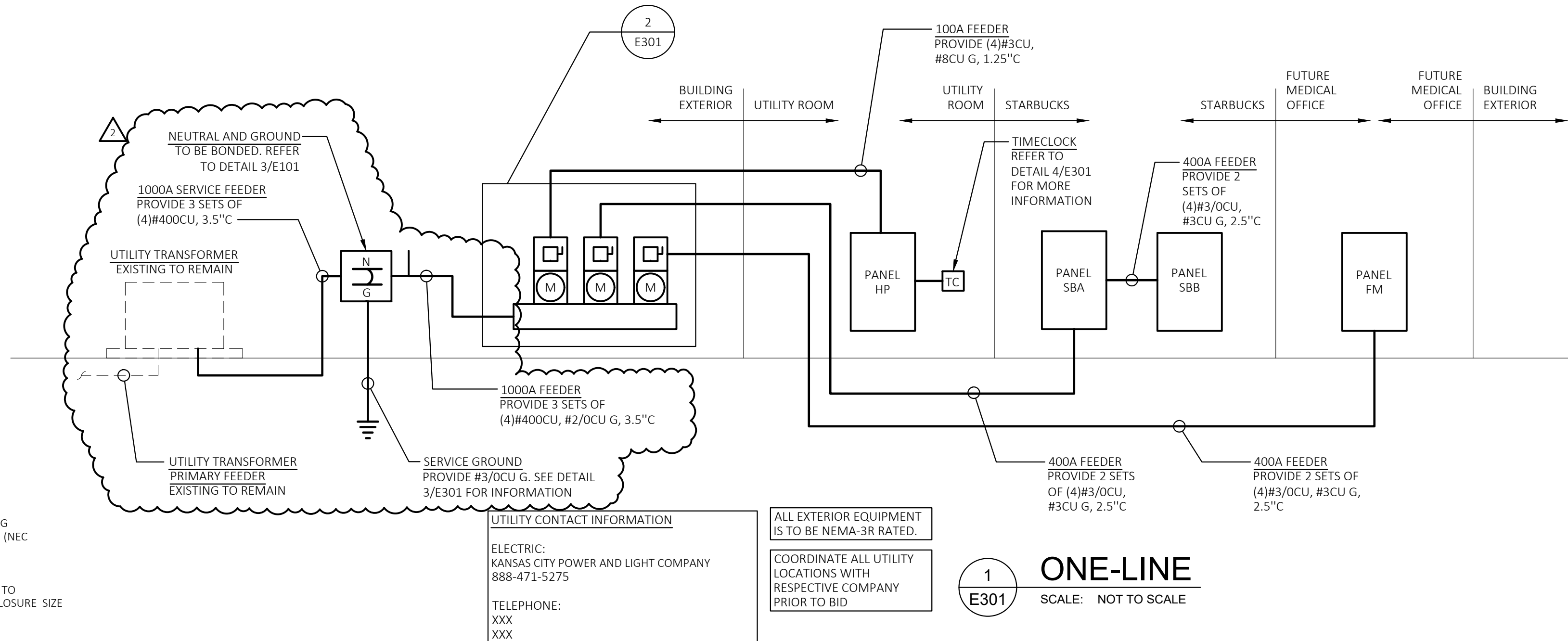


3
E301
GROUNDING DETAIL
SCALE: NOT TO SCALE

ELECTRICAL SYMBOLS (NOT ALL SYMBOLS ARE USED)	
LIGHTNING	CONDUIT
C.K.T. A LP-1a WALL SCONCE CANOPY LIGHT WALL PACK POLE LIGHT EXTERIOR 90 MIN BATTERY BACK-UP EMERGENCY HEADS	CONDUIT CONCEALED IN WALLS OR CEILING CONDUIT UNDER GROUND LP-1,3 HOME RUN #1/0 CU. GROUND
MISCELLANEOUS	GENERAL
JUNCTION BOX MOUNT ON WALL AT 18" AFF UNO TELEPHONE WALL BOX 18" AFF UNO STUB 3/4" CONDUIT UP INTO ACCESSIBLE CEILING AREA WITH INSULATED BUSHING, PROVIDE PULL WIRE PHONE/DATA WALL BOX 18" AFF UNO STUB 3/4" CONDUIT UP INTO ACCESSIBLE CEILING AREA WITH INSULATED BUSHING, PROVIDE PULL WIRE DATA WALL BOX 18" AFF UNO STUB 3/4" CONDUIT UP INTO ACCESSIBLE CEILING AREA WITH INSULATED BUSHING, PROVIDE PULL WIRE CEILING MOUNTED PHONE BOX MOTOR	EQUIPMENT CALL OUT ELECTRICAL KEYED NOTE DESIGNATION REVISION SYMBOL POWER AND CONTROLS PANELBOARD DISCONNECT SWITCH RECEPTACLES DUPLEX RECEPTACLE 16" AFF TO BOTTOM, UNO. GFCI DUPLEX RECEPTACLE 16" AFF TO BOTTOM, UNO SPECIAL RECEPTACLE



4
E301
TIME CLOCK AND PHOTOCELL WIRING DIAGRAM
SCALE: NOT TO SCALE



1
E301
ONE-LINE
SCALE: NOT TO SCALE

LIGHTING FIXTURE SCHEDULE						
PLAN MARK	MANUFACTURER	CATALOG NO.	LAMP DATA		REMARKS AND MOUNTING HEIGHT TO BOTTOM OF LIGHT FIXTURE	WATTS PER FIXTURE
			NO	WATTAGE & LAMPS		
A	LITHONIA	DSX0 LED-P6-40K-BLC-208-RPA--DDB		LED FURNISHED WITH FIXTURE	13" W x 28" 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
B	LITHONIA	DSXW1 LED-20C-530-30K-T2M-INVOLT-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
C	HINKLEY LIGHTING, INC.	1649SK-LED		LED FURNISHED WITH FIXTURE	9" W x 24" H x 4" D WALL SCONCE, 70CRI, 2700K, 900 LUMENS, SURFACE MOUNTED 8'-0" AFF TO BOTTOM OF FIXTURE UNLESS OTHERWISE NOTED	11
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
F	LITHONIA	TWP-150S-TB-LPI		HIGH PRESSURE SODIUM	17" W x 16" H x 8" D WALL PACK, 18,000 LUMENS, SURFACE MOUNTED 8'-0" AFF TO BOTTOM OF FIXTURE UNLESS OTHERWISE NOTED	150
G	LITHONIA	HEAD: DSX0 LED-P6-40K-T5W-208-RPA--DDB POLE: RTS-25-6-5-9B-T20-DM28AS-DDBXD		LED FURNISHED WITH FIXTURE	13" W x 28" L x 7" H HEAD MOUNTED ON A EXISTING 28" TALL ROUND POLE. 70 CRI, 4000K, 136704 LUMENS, WET LOCATION LISTED. COORDINATE POLE DRILL HOLES WITH THE EXISTING POLES	134 HEADS: 2 POLE: 1
X	LITHONIA	AFF-OEL-DOBTD-XD-UVOLT-LTP-SDRT-WT-CWD		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
** LAMPS: LED; I - INCANDESCENT; F - FLUORESCENT; CF - COMPACT FLUORESCENT; MH - METAL HALIDE						
NOTE: A. PRIOR TO THE INSTALLATION OF ALL EXIT SIGNS AND EMERGENCY LIGHTS, THE ELECTRICAL CONTRACTOR SHALL VERIFY WITH THE GC AND FIRE DEPARTMENT INSPECTOR THE FINAL APPROVED LOCATIONS. B. LIGHT FIXTURE QUANTITIES ARE APPROXIMATE CONTRACTOR IS RESPONSIBLE FOR VERIFYING FIXTURE COUNT						

EQUIPMENT SCHEDULE							
PLAN MARK	EQUIPMENT SERVED	LOAD	VOLT/ PHASE	FED BY	DISC BY	MCA	REMARKS
RTU 1	ROOF TOP UNIT	19.45KVA	208/3	SBA	EC	54.0A	60A (3)#4, #8G 1" 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
DAC 1	DRIVE-THRU AIR CURTAIN	7.07KVA	208/1	SBA	EC	34.0A	40A (2)#8, #10G 3/4" C
DW 1	DRIVE-THRU WINDOW	0.96KVA	120/1	SBA	EC	8.0A	15A (2)#12, #12G 1/2" C
EF 1	EXHAUST FAN	0.12KVA	120/1	SBA	EC	1.0A	20A (2)#12, #12G 1/2" C

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

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MIDLAND

Starbucks & Medical Office
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CONSTR. DOC. & REVISIONS

No.	Description	Date
1	Owner Review	05/12/20
2	Owner Revision 2	06/04/20
3	Owner Revision 3	07/20/20
6	Owner Revision 6	08/20/20

CASCO DIVERSIFIED CORPORATION PROFESSIONAL ENGINEERING CERTIFICATE OF AUTHORITY #000613 EXP. 12/31/21

HARRY J. AJUMAN
L.C. #E16827
EXP. 12/31/20

Drawn By/Checked By: EAV/DAW
Project Number 320488
Permit Date 06-17-20

ELECTRICAL
ONE-LINE AND
DETAILS
E301