VOICE/DATA/VIDEO LEGEND

SYMBOL	DESCRIPTION
▷	DATA OUTLET FLUSH IN WALL, 4 11/16" SQUARE BOX, 2-1/8" DEEP, ONE DEVICE COVER, UP 18" A.F.F. EXTEND CONDUIT TO ACCESSIBLE ACCESSIBLE CEILING SPACE. REFER TO SYMBOL, CONDUIT, WIRING, JACKS, ETC. LISTED BELOW. "W" DENOTES WALL MOUNTED, +46" TO CENTER OF OUTLET. "MR" DENOTES MUD-RING (NO BOX).
▶	COMBINATION VOICE/DATA OUTLET FLUSH IN WALL, 4 11/16" SQUARE BOX, 2-1/8" DEEP, ONE DEVICE COVER, UP 18" A.F.F. EXTEND CONDUIT TO ACCESSIBLE ACCESSIBLE CEILING SPACE. REFER TO SYMBOL, CONDUIT, WIRING, JACKS, ETC. LISTED BELOW. "W" DENOTES WALL MOUNTED, +46" TO CENTER OF OUTLET. "MR" DENOTES MUD-RING (NO BOX).
▶	VOICE OUTLET FLUSH IN WALL, 4 11/16" SQUARE BOX, 2-1/8" DEEP, ONE DEVICE COVER, UP 18" A.F.F. EXTEND CONDUIT TO ACCESSIBLE ACCESSIBLE CEILING SPACE. REFER TO SYMBOL, CONDUIT, WIRING, JACKS, ETC. LISTED BELOW. "W" DENOTES WALL MOUNTED, +46" TO CENTER OF OUTLET. "MR" DENOTES MUD-RING (NO BOX).
▽	DATA OUTLET FLUSH IN CEILING, 4 11/16" SQUARE BOX, 2-1/8" DEEP, ONE DEVICE
▽ ▽ ▽	SAME AS ABOVE EXCEPT MOUNTED HORIZONTALLY 4" ABOVE COUNTERTOP
	TELEPHONE GROUND BAR.
	COMMUNICATION PLYWOOD BACKBOARD WITH #6 GROUND. REFER TO DRAWINGS FOR SIZE, TYPE.
▽	FLUSH FLOOR 1-GANG OUTLET BOX WITH COVER FOR TELEPHONE
▽	FLUSH FLOOR 1-GANG OUTLET BOX WITH COVER FOR DATA
▷	TELEVISION OUTLET UP 78" OR AS INDICATED (75 OHM). 3/4" CONDUIT WITH PULLSTRING STUBBED UP INTO ACCESSIBLE CEILING SPACE. PROVIDE BLANK METAL COVERLATE

SYMBOL	CONDUIT SIZE	JACKS	TYPE	QTY. OF WIRES	WIRING
	1"	----	----	1	PULLSTRING

SYMBOL	CONDUIT SIZE	JACKS	TYPE	QTY. OF WIRES	WIRING
	1"	----	----	1	PULLSTRING

SYMBOL	CONDUIT SIZE	JACKS	TYPE	QTY. OF WIRES	WIRING
	1"C	----	----	1	PULLSTRING
		----	----		

LIGHTING

SYMBOL	DESCRIPTION
	LAY-IN 1x4 FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	LAY-IN 2x4 FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	LAY-IN 2x2 FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	JUNCTION BOX WITH FLEXTAILS. MAXIMUM 6'-0" LENGTH OF CONDUIT WITH REQUIRED CONDUCTORS ALONG WITH GREEN WIRE GROUND.
	LIGHTING FIXTURE INDICATED WITH CROSS SHADING IS CONNECTED TO EMERGENCY POWER SOURCE, OR HAS INTEGRAL BATTERY PACK 1350 LUMEN MIN.
	FLANGED OR SURFACE MOUNTED FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	FLANGE OR SURFACE MOUNTED 2x4 FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	FLANGE OR SURFACE MOUNTED 2x2 FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	UTILITY STRIP FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	INDUSTRIAL FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	ROUND RECESSED DOWNLIGHT. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	SUSPENDED INDIRECT FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	COVE FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	RECESSED WALL WASH FIXTURE. TYPE AS INDICATED IN SCHEDULE
	SURFACE MOUNTED WASH FIXTURE. TYPE AS INDICATED IN SCHEDULE
	HI-BAY MOUNTED FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
HB	LINEAR HI-BAY MOUNTED FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	WALL MOUNTED LIGHT FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	INTERIOR WALL SCONCE LIGHT FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	EXTERIOR WALL SCONCE LIGHT FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	SURFACE CEILING FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE
	PENDANT HUNG FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	STEM MOUNTED DECORATIVE FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	WALL MOUNTED FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE
	UNDERCOUNTER FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	STEP LIGHT. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	SQUARE DOWNLIGHT. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	RECESSED WALL WASH DOWNLIGHT. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	TRACK MOUNTED LIGHT FIXTURE AND OUTLET (LENGTH AS INDICATED). TYPE AS INDICATED IN FIXTURE SCHEDULE.
T	LOW VOLTAGE LIGHTING STEP DOWN TRANSFORMER

APPARATUS LEGEND

SYMBOL	DESCRIPTION
	SERVICE ENTRANCE RATED SWITCHBOARD.
	480/277V SURFACE MOUNTED DISTRIBUTION PANELBOARD. SEE PANEL SCHEDULE FOR CHARACTERISTICS.
	480/277V SURFACE MOUNTED PANELBOARD. SEE PANEL SCHEDULE FOR CHARACTERISTICS.
	480/277V FLUSH MOUNTED PANELBOARD. SEE PANEL SCHEDULE FOR CHARACTERISTICS.
	208/120V SURFACE MOUNTED DISTRIBUTION PANELBOARD. SEE PANEL SCHEDULE FOR CHARACTERISTICS.
	208/120V SURFACE MOUNTED PANELBOARD. SEE PANEL SCHEDULE FOR CHARACTERISTICS.
	208/120V FLUSH MOUNTED PANELBOARD. SEE PANEL SCHEDULE FOR CHARACTERISTICS.
T	DRY-TYPE TRANSFORMER AS NOTED.
	SAFETY SWITCH, PROVIDED AND INSTALLED UNDER DIV. 26. TO HAVE POLES AND RATIN. NEMA 3R UNLESS NOTED OTHERWISE.
	ENCLOSED CIRCUIT BREAKER, FRAME SIZE, TRIP SIZE, # POLES, AIC RATING
	SPECIAL CABINET AS NOTED.
	SURGE PROTECTION DEVICE (SPD)

BOXES

SYMBOL	DESCRIPTION
	JUNCTION BOX, WALL OR CEILING MOUNTED.
H	JUNCTION BOX FLUSH IN WALL. HEIGHT AS INDICATED FOR CONNECTION TO EQUIPMENT.
J	SCREW COVER JUNCTION BOX. SIZE AND TYPE AS SCHEDULED.
	IN-GRADE JUNCTION BOX. SIZE AND TYPE AS SCHEDULED.

CONDUIT LEGEND

SYMBOL	DESCRIPTION
	BRANCH CIRCUIT IN WALLS OR CEILING.
	BRANCH CIRCUIT UNDER FLOOR.
	BRANCH CIRCUIT EXPOSED.
A-2,4	HOME RUN TO PANEL WITH BRANCH CIRCUIT NUMBERS INDICATED.
	TIC MARKS REPRESENT NEUTRAL, HOT, SWITCH LEG, AND GROUND CONDUCTORS RESPECTIVELY. CONDUITS WITH NO TIC MARKS SHALL BE TWO CONDUCTORS AND EQUIPMENT GROUND (EITHER "A HOT, A NEUTRAL AND EQUIPMENT GROUND", "A HOT, A SWITCH LEG AND EQUIPMENT GROUND", OR "A NEUTRAL, A SWITCH LEG AND EQUIPMENT GROUND). ALL CONDUITS SHALL HAVE AN EQUIPMENT GROUND CONDUCTOR INSTALLED.
	INDICATES CONDUIT DROP WITHIN BUILDING WALL.
	INDICATES CONDUIT RISER WITHIN BUILDING WALL.

POWER

SYMBOL	DESCRIPTION
XX	DUPLEX CONVENIENCE OUTLET. UP 18" OR AS INDICATED. TYPE AS DESIGNATED BELOW.
	20A GFCI SIMPLEX OUTLET, UP 18" OR AS INDICATED.
	20A GFCI DUPLEX OUTLET, UP 18" OR AS INDICATED.
	20A DOUBLE DUPLEX OUTLET, UP 18" OR AS INDICATED.
	20A USB/DUPLEX OUTLET, UP 18" OR AS INDICATED.
	20A OUTLET MOUNTED HORIZONTALLY, 6" ABOVE COUNTER OR TOP OF BACKSPLASH.
	20A GFCI DUPLEX OUTLET MOUNTED VERTICALLY 6" ABOVE COUNTER OR TOP OF BACKSPLASH.
	20A USB/DUPLEX OUTLET MOUNTED VERTICALLY, 6" ABOVE COUNTER OR TOP OF BACKSPLASH.
	20A GFCI SIMPLEX OUTLET OUTLET WITH RED PILOT LIGHT MOUNTED VERTICALLY 6" ABOVE COUNTER OR TOP OF BACKSPLASH.
	20A DOUBLE DUPLEX OUTLET 6" ABOVE COUNTER OR TOP OF BACKSPLASH.
	ROOF MOUNTED 20A WP GFCI SERVICE OUTLET PER NEC 210-63.
	250 VOLT RECEPTACLE UP 24" OR AS INDICATED. AMPERAGE AS NOTED ON DRAWINGS.
	SPECIAL RECEPTACLE UP 24" OR AS INDICATED.
	20A 125V SIMPLEX OUTLET MOUNTED 18" A.F.F. UNLESS NOTED OTHERWISE.
	20A 125V USB/SIMPLEX OUTLET MOUNTED 18" A.F.F. UNLESS NOTED OTHERWISE.
	20A USB/SIMLEX OUTLET MOUNTED VERTICALLY, 6" ABOVE COUNTER OR TOP OF BACKSPLASH.
	PEDESTAL MOUNT 20A 125V DUPLEX OUTLET MOUNTED 24" A.F.F. UNLESS NOTED OTHERWISE.
	PEDESTAL MOUNT 20A 250V OUTLET MOUNTED 24" A.F.F. UNLESS NOTED OTHERWISE.
	SWITCH CONTROLLED DUPLEX CONVENIENCE OUTLET, UP 18" OR AS INDICATED
PL	PLUG LOAD CONTROLLER FOR MODULAR FURNITURE 25% CONTROLLED FUNCTION.

DESIGNATION	SYSTEM
C	FLUSH CEILING MOUNT
CS	CEILING SURFACE MOUNT
EDF	ELECTRIC DRINKING FOUNTAIN
EM	EMERGENCY
TR	TAMPER RESISTANT
USB	UNIVERSAL SERIAL BUS
W	WIREMOLD
WP	WEATHERPROOF

GENERAL ELECTRICAL NOTES: (APPLICABLE TO ALL SHEETS)

A. FURNISH AND INSTALL A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.

B. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOOK THROUGH ALL DRAWINGS ASSOCIATED WITH THIS PROJECT. WORK ASSOCIATED WITH THE ELECTRICAL CONTRACTOR'S TRADE MAY BE SHOWN ON OTHER DRAWINGS. ANY ADDITIONAL COSTS RESULTING FROM THE FAILURE TO INCLUDE THESE ITEMS SHOWN ON OTHER DRAWINGS WILL BE INCURRED BY THE CONTRACTOR.

C. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VISIT EACH SITE TO FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS PRIOR TO BIDDING THIS PROJECT. NO ALLOWANCES WILL BE MADE FOR EXISTING CONDITIONS OR CONTRACTORS FAILURE TO ACCOMMODATE EXISTING CONDITIONS ON HIS BID.

D. ALL WORK SHALL CONFORM WITH FEDERAL, STATE, AND LOCAL CODES, RULES, AND REGULATIONS. ALL WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER.

E. THE SYSTEMS SHALL BE INSTALLED COMPLETE AND FULLY OPERATIVE UNLESS OTHERWISE INDICATED CONTRACTOR SHALL SECURE AND PAY ALL REQUIRED PERMITS, FEES, INSPECTIONS AND TESTS UNLESS OTHERWISE INDICATED.

F. THE CONTRACTOR SHALL NOT SCALE THE CONTRACT DOCUMENTS. THE CONTRACT DOCUMENTS ARE DIAGRAMMATIC IN NATURE AND DO NOT COMPLETELY DEPICT ALL EXISTING CONDITIONS. IN THE AREA.

G. THESE DRAWINGS ARE BASED UPON RECORD DOCUMENTS, SITE OBSERVATIONS AND ORIGINAL DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER IN WRITING OF ANY APPARENT CONFLICT OR INCONSISTENCY IN THE DRAWINGS, SPECIFICATIONS OR DESIGN PRIOR TO HIS BID. OTHERWISE THE CONTRACTOR ACCEPTS RESPONSIBILITY TO CORRECT (AT HIS COST) ANY SUCH ITEMS TO MEET THE ESIGN INTENT AS INTERPRETED BY THE ENGINEER.

H. WORK ASSOCIATED WITH THE ELECTRICAL CONTRACTOR'S TRADE MAY BE SHOWN ON OTHER DRAWINGS. ANY ADDITIONAL COSTS RESULTING FROM THE FAILURE TO INCLUDE THESE ITEMS SHOWN ON OTHER DRAWINGS WILL BE INCURRED BY THE CONTRACTOR.

I. ANY VARIANCE OR EXCEPTIONS TO THE DRAWINGS AND SPECIFICATIONS MUST BE REQUESTED AND APPROVED IN WRITING BY THE ENGINEER. WHERE UNAUTHORIZED CHANGES ARE FOUND, THE CONTRACTOR SHALL REMOVE THE INSTALLED WORK AND INSTALL IT AS SHOWN ON THE DRAWINGS AT NO ADDITIONAL COST TO THE CLIENT. COSTS SHALL INCLUDE ANY CUTTING, PATCHING, PAINTING AND REPAIR COSTS TO INSTALLED CEILINGS, WALLS ETC. AS REQUIRED FOR CORRECTING THE DEFICIENCY.

J. THE CONTRACTOR SHALL COORDINATE AND PROVIDE INFORMATION AS REQUIRED TO THE SERVING UTILITIES WITHIN (2) WEEKS OF AWARD OF CONTRACT IN ORDER TO PROVIDE THE SERVICE(S) REQUIRED AND MEET UTILITY REQUIREMENTS. VERIFY ALL TRENCH ROUTING, SERVICE LOCATIONS, ETC. WITH SERVING UTILITY COMPANY DESIGN CONSTRUCTION DRAWINGS AND SPECIFICATIONS PRIOR TO COMMENCING REQUIRED WORK.

K. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER, ARCHITECT, AND ENGINEER ANY REQUIRED SHUT-DOWNS OR TIE-INS RELATING TO THESE SYSTEMS. REQUESTS FOR SHUTDOWNS SHALL BE SUBMITTED IN WRITING AT LEAST ONE WEEK IN ADVANCE FOR APPROVAL BY THE OWNER. CONTRACTOR SHALL NOT PROCEED UNTIL WRITTEN AUTHORIZATION IS OBTAINED FROM THE OWNER.

L. AFTER COMPLETION OF THE INSTALLATION, THE ENTIRE ELECTRICAL SYSTEM SHALL BE THOROUGHLY CLEANED. REMOVE ALL FOREIGN MATERIAL, DUST, PAINT, OIL, GREASE, UNNEEDED LABELS AND STICKERS FROM EQUIPMENT. REMOVE ALL DEBRIS ACCUMULATED DURING CONSTRUCTION.

M. ALL EXPOSED CONDUIT SHALL BE PAINTED TO MATCH ADJACENT SURFACES.

N. PROVIDE BLANK METAL COVERPLATE OVER ALL UNUSED BOXES. PAINT COVERPLATE TO MATCH ADJACENT SURFACES.

O. OUTLET MOUNTING HEIGHTS INDICATED ON THE DRAWINGS ARE APPROXIMATE. THIS CONTRACTOR SHALL BE REPSONSIBLE FOR COORDINATING WITH OTHER TRADES FOR EXACT HEIGHT REQUIRED. THIS REQUIREMENT ALSO APPLIES TO SWITCHES, TELEPHONE OUTETS, DATA OUTLETS, HVAC SENSORS, ETC.. ANY DEVICE THAT HAS TO BE RELOCATED DUE TO CONTRACTOR'S FAILURE TO COORDINATE LOCATION WITH COUNTERTOPS, CHALKBOARDS, TACKBOARDS, ETC. WILL BE DONE AT NO ADDITIONAL COST TO THE OWNER.

P. CONTRACTOR SHALL SAW CUT AND PATCH ASPHALT, CONCRETE OR OTHER MATERIAL ENCOUNTERED AS REQUIRED TO INSTALL NEW UNDERGROUND CONDUITS. REFER TO ARCHITECTURAL SPECIFICATIONS FOR PATCHING REQUIREMENTS. CONTRACTOR SHALL SAW CUT AND PATCH EXISTING WALLS OR OTHER MATERIAL ENCOUNTERED AS REQUIRED TO INSTALL NEW OUTLETS, SWITCHES, CONDUIT AND MISCELLANEOUS DEVICES. CONTRACTOR SHALL RESTORE WALL TO ITS ORIGINAL CONDITION AFTER INSTALLATION OF NEW OUTLETS, SWITCHES, CONDUIT AND MISCELLANEOUS DEVICES HAVE BEEN INSTALLED.

Q. ALL CONDUITS TO AND FROM ROOF MOUNTED HVAC EQUIPMENT SHALL BE ROUTE INSIDE OF HVAC EQUIPMENT CURB WHERE APPLICABLE. CONDUITS SHALL BE ROUTED BELOW CEILING DECK WITHIN THE FACILITY. NO CONDUITS PERMITTED TO RUN EXPOSED ACROSS ROOF DECK UNLESS WRITTEN APPROVAL IS GIVEN BY THE ENGINEER.

R. THE ELECTRICAL CONTRACTOR SHALL, PRIOR TO ROUGH-IN, VERIFY ALL HVAC AMPERAGES, PHASES AND VOLTAGES AGAINST PLAN REQUIREMENTS AND NOTIFY ENGINEER/ARCHITECT OF ANY DISCREPANCIES. FAILURE TO VERIFY AND NOTIFY ENGINEER/ARCHITECT PRIOR TO ROUGH-IN SHALL RESULT IN THE ELECTRICAL CONTRACTOR ASSUMING RESPONSIBILITY FOR DESIGN AND INSTALLATION REQUIREMENTS.

S. THE ELECTRICAL CONTRACTOR SHALL INSURE FINAL COORDINATION OF THE MANUFACTURERS RECOMMENDED FUSE SIZES FOR THE INSTALLED MECHANICAL EQUIPMENT WITH THE SIZE DISCONNECT PRIOR TO OR DURING ROUGH-IN. ADVISE ENGINEER IF CHANGES IN THE FINAL SELECTION OF MECHANICAL EQUIPMENT HAVE IMPACTED DISCONNECT SWITCH, BREAKER OR CONDUCTOR SIZES.

T. COORDINATE INSTALLATION OF LAY-IN FIXTURES WITH ARCHITECTURAL REFLECTED CEILING PLAN PRIOR TO INSTALLATION OF NEW FIXTURES.

U. THE ELECTRICAL CONTRACTOR ASSUMES ALL RESPONSIBILITY AND LIABILITY FOR ANY "VALUE ENGINEERING" OF THE MATERIALS, SPECIFICATIONS AND DESIGN OF THIS PROJECT, INCLUDING ANY AND ALL COSTS FOR ANY REVISIONS TO THE CONTRACT DOCUMENTS REQUIRED AS A RESULT IF THE "VALUE ENGINEERING".

V. SUBMITTALS SHOWING PROPOSED ALTERNATE FIXTURES FOR EXTERIOR LIGHTING MUST INCLUDE A PHOTOMETRIC STUDY ON A SITE PLAN SPECIFIC TO THIS PROJECT SHOWING COMPLIANCE WITH ALL APPLICABLE LIGHTING CODES AND ORDINANCES. THE CONTRACTOR AND/OR VENDOR ASSUME ALL RESPONSIBILITY AND LIABILITY FOR COMPLIANCE WITH APPLICABLE CODES AND ORDINANCES IF ALTERNATE FIXTURES ARE USED ON THIS PROJECT.

W. SUBMITTALS SHOWING PROPOSED ALTERNATE FIXTURES MUST BE "LIKE FOR LIKE" SUBSTITUTIONS. "VALUE ENGINEERED" FIXTURE SUBMITTALS WILL NOT BE REVIEWED BY THE ENGINEER. THE CONTRACTOR AND VENDOR(S) SHALL ASSUME RESPONSIBILITY AND LIABILITY FOR ALL "VALUE ENGINEERED" FIXTURES INSTALLED ON THIS PROJECT.

X. DIRECTORIES IN EXISTING PANELS AFFECTED BY WORK UNDER THIS PROJECT SHALL BE REVISED TO REFLECT CHANGES. BREAKERS SERVING LOADS THAT ARE REMOVED SHALL BECOME SPARES UNLESS INDICATED OTHERWISE. PROVIDE NEW TYPE WRITTEN DIRECTORY IF EXISTING PANELBOARD DIRECTORY IS MISSING.

CODE COMPLIANCE INFORMATION

YEAR	DESCRIPTION
2020	NATIONAL ELECTRICAL CODE AS ADOPTED BY THE CITY OF COLORADO SPRINGS
2021	INTERNATIONAL BUILDING CODE
2021	INTERNATIONAL ENERGY CONSERVATION CODE

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Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: ELECTRICAL NOTES & SYMBOLS

E001

ONE LINE SYMBOLS

SYMBOL	DESCRIPTION
	TRANSFORMER AS NOTED.
225AF 200AT 3P 35K AIC	CIRCUIT BREAKER, FRAME SIZE, TRIP SIZE, # POLES, AIC RATING
600AS 300AF LPS	FUSIBLE SWITCH, SWITCH SIZE, FUSE SIZE, FUSE TYPE
200AS 200AF CLASS T	FUSIBLE PULLOUT SWITCH, SWITCH SIZE, FUSE SIZE, FUSE TYPE
M	UTILITY METERING
	MAIN LUGS ONLY CONNECTION
GFP	GROUND FAULT PROTECTION
	GROUND
	MAIN BREAKER PANELBOARD
	MAIN LUGS ONLY PANELBOARD
	FUSIBLE SAFETY SWITCH, PROVIDED AND INSTALLED UNDER DIV. 16. TO HAVE POLES AND RATIN. NEMA 3R UNLESS NOTED OTHERWISE.
	NON-FUSIBLE SAFETY SWITCH, PROVIDED AND INSTALLED UNDER DIV. 16. TO HAVE POLES AND RATIN. NEMA 3R UNLESS NOTED OTHERWISE.
LINE #1 LOAD LINE #2	DOUBLE POLE, DOUBLE THROW SAFETY SWITCH, PROVIDED AND INSTALLED UNDER DIV. 16. TO HAVE POLES AND RATING. NEMA 3R UNLESS NOTED OTHERWISE.
	ENCLOSED CIRCUIT BREAKER, FRAME SIZE, TRIP SIZE, # POLES, AIC RATING
SIZE 3	MAGNETIC STARTER PROVIDED AND INSTALLED UNDER DIV. 16.
SIZE 3	COMBO MAGNETIC STARTER PROVIDED AND INSTALLED UNDER DIV. 16.
M 2	MOTOR CONNECTION WITH HP INDICATED.
VFD 25	VFD WITH INTEGRAL CIRCUIT BREAKER. NUMBER REPRESENTS HP
VFD 25	VFD WITH INTEGRAL FUSIBLE SWITCH. NUMBER REPRESENTS HP
VFD 25	VFD WITHOUT BYPASS SWITCH. NUMBER REPRESENTS HP
	WEATHERHEAD
K	KIRK KEY INTERLOCK
E.O.	ELECTRONICALLY OPERATED
ST	SHUNT TRIP

MOTOR ITEMS

SYMBOL	DESCRIPTION
M 2	MOTOR CONNECTION WITH HP INDICATED.
	MOTOR CONTROLLER INTEGRAL WITH EQUIPMENT.
	SAFETY SWITCH, PROVIDED AND INSTALLED UNDER DIV. 16. TO HAVE POLES AND RATIN. NEMA 3R UNLESS NOTED OTHERWISE.
	COMBINATION MAGNETIC STARTER PROVIDED AND INSTALLED UNDER DIV. 16.
	VFD MOTOR CONTROLLER, PROVIDED UNDER DIVISION 15, INSTALLED BY DIV. 16. SIZE AND POLES FOR MOTOR

SITE LIGHTING

SYMBOL	DESCRIPTION
	LIGHT POLE AND NUMBER OF LUMINARES SHOWN. TYPE AS INDICATED IN FIXTURE SCHEDULE
	DUSK-TO-DAWN CONTROLLED LIGHT POLE AND NUMBER OF LUMINARES SHOWN. TYPE AS INDICATED IN THE FIXTURE SCHEDULE.
	WALL MOUNTED TRIANGULAR FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	FLOODLIGHT FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	POST-TOP/BOLLARD FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE
	ROADWAY FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE
	TWIN-HEAD ROADWAY FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE
	HI-MAST ROADWAY FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE

FLOOR BOXES/POWERPOLES/SURFACE RACEWAY

SYMBOL	DESCRIPTION
	DUPLEX FLUSH FLOOR POWER OUTLET OR AS NOTED. VERIFY EXACT LOCATION IN FIELD WITH ARCHITECT.
	FLUSH FLOOR 2-GANG RECTANGULAR OUTLET BOX WITH RECEPTACLE FOR POWER AND COVER FOR DATA/TELEPHONE. VERIFY EXACT LOCATION IN FIELD WITH ARCHITECT.
	FLUSH FLOOR 2-GANG ROUND OUTLET BOX WITH RECEPTACLE FOR POWER AND COVER FOR DATA/TELEPHONE. VERIFY EXACT LOCATION IN FIELD WITH ARCHITECT.
	4-COMPARTMENT RECESSED MOUNTED FLOOR OUTLET (POWER/DATA), WIREMOLD RFB-9 OR AS NOTED. VERIFY EXACT LOCATION IN FIELD WITH ARCHITECT.
	SURFACE MOUNTED PLUGMOLD WITH RECEPTACLES 24" O.C. AS CALLED FOR IN SPECS OR DRAWINGS. PROVIDE LENGTH AS NOTED. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS
SR SR	SINGLE CHANNEL MULTI-OUTLET SURFACE RACEWAY WITH RECEPTACLES AS CALLED FOR IN SPECS OR DRAWINGS. PROVIDE LENGTH AS NOTED. OUTLET SPACING SHALL MATCH DRAWINGS. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS
SD SD	SINGLE CHANNEL MULTI-OUTLET SURFACE RACEWAY WITH VOICE/DATA OUTLETS AS CALLED FOR IN SPECS OR DRAWINGS. PROVIDE LENGTH AS NOTED. OUTLET SPACING SHALL MATCH DRAWINGS. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS
DR DR	DUAL CHANNEL MULTI-OUTLET SURFACE RACEWAY WITH RECEPTACLES AS CALLED FOR IN SPECS OR DRAWINGS. PROVIDE LENGTH AS NOTED. OUTLET SPACING SHALL MATCH DRAWINGS. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS
TP	DUAL-COMPARTMENT TELEPOWER POLE, STEEL TYPE, IVORY COLORED
PP	SINGLE-COMPARTMENT POWER POLE, STEEL TYPE, IVORY COLORED

LIGHTING CONTROL

SYMBOL	DESCRIPTION
	WALL MOUNTED OCCUPANCY SENSOR WALL SWITCH. FLUSH MOUNTED UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED. SENSOR SHALL BE DUAL TECHNOLOGY, LINE VOLTAGE. APPROVED MANUFACTURER IS SENSORSWITCH WSX PDT SA WH (OR EQUIVALENT).
2P	WALL MOUNTED OCCUPANCY SENSOR WALL SWITCH, DUAL RELAY. FLUSH MOUNTED UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED. SENSOR SHALL BE DUAL TECHNOLOGY, LINE VOLTAGE. APPROVED MANUFACTURER IS SENSORSWITCH WSX PDT 2P SA WH (OR EQUIVALENT).
LV	WALL MOUNTED OCCUPANCY SENSOR WALL SWITCH. FLUSH MOUNTED UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED. SENSOR SHALL BE DUAL TECHNOLOGY, LOW VOLTAGE. APPROVED MANUFACTURER IS SENSORSWITCH nWSX PDT LV WH (OR EQUIVALENT).
	WALL MOUNTED OCCUPANCY SENSOR WALL SWITCH. FLUSH MOUNTED UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED. SENSOR SHALL BE DUAL TECHNOLOGY, LINE VOLTAGE, DIMMING CAPABILITY FOR LED LIGHTING. APPROVED MANUFACTURER IS SENSORSWITCH WSX PDT D VA WH (OR EQUIVALENT).
WW	WALL MOUNTED OCCUPANCY SENSOR WALL SWITCH. FLUSH MOUNTED UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED. SENSOR SHALL BE WIRELESS TECHNOLOGY, LINE VOLTAGE. APPROVED MANUFACTURER IS SENSORSWITCH SPODMR WR SA WH (OR EQUIVALENT).
LV	LOW VOLTAGE 2-BUTTON ON/OFF OVERRIDE SWITCH, FLUSH MOUNTED UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED. APPROVED MANUFACTURER IS SENSORSWITCH nWSX PDT LV DX WH (OR EQUIVALENT. SUBSCRIPT 'D' ADDS BUTTONS FOR RAISE/LOWER DIMMING CAPABILITIES.
9L	CEILING MOUNTED OCCUPANCY SENSOR (STANDARD RANGE, 360°, LINE VOLTAGE, DUAL TECHNOLOGY). APPROVED MANUFACTURER IS SENSORSWITCH CMR PDT 9 (OR EQUIVALENT)
9W	CEILING MOUNTED OCCUPANCY SENSOR (STANDARD RANGE, 360°, LOW VOLTAGE, DUAL TECHNOLOGY, WIRLEESS). APPROVED MANUFACTURER IS SENSORSWITCH CM PDT 9 WR (OR EQUIVALENT)
9	CEILING MOUNTED OCCUPANCY SENSOR (STANDARD RANGE, 360°, LOW VOLTAGE, DUAL TECHNOLOGY). APPROVED MANUFACTURER IS SENSORSWITCH CM PDT 9 (OR EQUIVALENT)
10W	CEILING MOUNTED OCCUPANCY SENSOR (EXTENDED RANGE, 360°, LOW VOLTAGE, DUAL TECHNOLOGY, WIRLEESS). APPROVED MANUFACTURER IS SENSORSWITCH CM PDT 10 WR (OR EQUIVALENT)
10L	CEILING MOUNTED OCCUPANCY SENSOR (EXTENDED RANGE, 360°, LINE VOLTAGE, DUAL TECHNOLOGY). APPROVED MANUFACTURER IS SENSORSWITCH CMR PDT 10 (OR EQUIVALENT)
10	CEILING MOUNTED OCCUPANCY SENSOR (EXTENDED RANGE, 360°, LOW VOLTAGE, DUAL TECHNOLOGY). APPROVED MANUFACTURER IS SENSORSWITCH CM PDT 10 (OR EQUIVALENT)
RP	RELAY POWER PAK FOR 24VDC SENSOR. POWER PAK SHALL BE MOUNTED TO 4-SQ BOX VIA 1/2" SNAP-IN NIPPLE. LINE VOLTAGE WIRING SHALL BE INSTALLED WITHIN 4-SQ. BOX. PROVIDE BLANK COVER FOR 4-SQ. BOX. SENSORSWITCH PP-20 (OR EQUIVALENT).
DR	DIMMABLE RELAY POWER PAK FOR 24VDC SENSOR. POWER PAK SHALL BE MOUNTED TO 4-SQ BOX VIA 1/2" SNAP-IN NIPPLE. LINE VOLTAGE WIRING SHALL BE INSTALLED WITHIN 4-SQ. BOX. PROVIDE BLANK COVER FOR 4-SQ. BOX. SENSORSWITCH PP-20-D (OR EQUIVALENT).
PS 9L	CEILING MOUNTED PHOTOSENSOR (STANDARD RANGE, 360°, LINE VOLTAGE, DUAL TECHNOLOGY). APPROVED MANUFACTURER IS SENSORSWITCH RMR PDT 9 P (OR EQUIVALENT)
PS 9	CEILING MOUNTED PHOTOSENSOR (STANDARD RANGE, 360°, LOW VOLTAGE, DUAL TECHNOLOGY). APPROVED MANUFACTURER IS SENSORSWITCH RM PDT 9 P (OR EQUIVALENT)
PS 10L	CEILING MOUNTED PHOTOSENSOR (EXTENDED RANGE, 360°, LINE VOLTAGE, DUAL TECHNOLOGY). APPROVED MANUFACTURER IS SENSORSWITCH RMR PDT 10 P (OR EQUIVALENT)
PS 10	CEILING MOUNTED PHOTOSENSOR (EXTENDED RANGE, 360°, LOW VOLTAGE, DUAL TECHNOLOGY). APPROVED MANUFACTURER IS SENSORSWITCH RM PDT 10 P (OR EQUIVALENT)
PS 9L	CEILING MOUNTED PHOTOSENSOR/AUTO DIMMING (STANDARD RANGE, 360°, LINE VOLTAGE, DUAL TECHNOLOGY). APPROVED MANUFACTURER IS SENSORSWITCH RMR PDT 9 ADC (OR EQUIVALENT)
PS 9	CEILING MOUNTED PHOTOSENSOR/AUTODIMMING (STANDARD RANGE, 360°, LOW VOLTAGE, DUAL TECHNOLOGY). APPROVED MANUFACTURER IS SENSORSWITCH RM PDT 9 ADC (OR EQUIVALENT)
PS 10L	CEILING MOUNTED PHOTOSENSOR/AUTO DIMMING (EXTENDED RANGE, 360°, LINE VOLTAGE, DUAL TECHNOLOGY). APPROVED MANUFACTURER IS SENSORSWITCH RMR PDT 10 ADC (OR EQUIVALENT)
PS 10	CEILING MOUNTED PHOTOSENSOR/AUTO DIMMING (EXTENDED RANGE, 360°, LOW VOLTAGE, DUAL TECHNOLOGY). APPROVED MANUFACTURER IS SENSORSWITCH RM PDT 10 ADC (OR EQUIVALENT)
WS	WIRELESS WALL SWITCH. FLUSH MOUNTED UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED.
DS	LIGHTING CONTROL DATALINE OVERRIDE WALL SWITCH. FLUSH MOUNTED UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED.
PC	PHOTOCELL, MOUNTED ON 1/2" RIGID CONDUIT. STUB UP 12" ABOVE ROOF, WITH WINDOW FACING NORTH.
TC	TIMECLOCK IN NEMA 1 ENCLOSURE UNLESS NOTED OTHERWISE. REFER TO DRAWINGS FOR TYPE.
C	MECHANICALLY HELD LIGHTING CONTACTOR IN NEMA 1 ENCLOSURE. REFER TO DRAWINGS FOR TYPE.
LCP	LIGHTING RELAY CONTROL PANEL

EMERGENCY/EXIT LIGHTING

SYMBOL	DESCRIPTION
	CEILING MOUNTED EXIT FIXTURE AND OUTLET WITH DIRECTIONAL INDICATOR. TYPE AS INDICATED IN FIXTURE SCHEDULE. SOLID PORTION REPRESENTS ILLUMINATED SIDE.
	WALL MOUNTED EXIT LIGHT FIXTURE AND OUTLET WITH DIRECTIONAL INDICATOR. TYPE AS AS INDICATED IN FIXTURE SCHEDULE. SOLID PORTION REPRESENTS ILLUMINATED SIDE.
	WALL MOUNTED COMBO EXIT/EMERGENCY LIGHT FIXTURE AND OUTLET WITH DIRECTIONAL INDICATOR. TYPE AS AS INDICATED IN FIXTURE SCHEDULE. SOLID PORTION REPRESENTS ILLUMINATED SIDE.
	SELF-CONTAINED TWO-HEAD EMERGENCY BATTERY PACK FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	EXTERIOR MOUNTED EMERGENCY EGRESS. TYPE AS INDICATED IN FIXTURE SCHEDULE
	WALL MOUNTED DECORATIVE TWO-HEAD EMERGENCY BATTERY PACK FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	RECESS MOUNTED TWO-HEAD EMERGENCY BATTERY PACK FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	WALL MOUNTED LIGHT FIXTURE ON EMERGENCY. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	RECESSED EMERGENCY FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.

VOLTAGE DROP

For 2.5% maximum voltage drop on 20A and 30A single phase home-run circuits, utilize the following table. L is length of home run.

Wire Guage	20A 120V 1-phase	20A 208V 1-phase	20A 277V 1-phase	30A 120V 1-phase	30A 208V 1-phase	20A 480V 1-phase
#12cu.	L<55'	L<100'	L<125'			L<200'
#10cu.	55'<L<100'	100'<L<155'	125'<L<210'	L<60'	L<100'	200'<L<350'
#8cu.	100'<L<145'	155'<L<250'	210'<L<325'	60'<L<100'	100'<L<160'	350'<L<550'
#6cu.	145'<L<225'	250'<L<400'	325'<L<500'	100'<L<150'	160'<L<250'	550'<L<800'
#4cu.	225'<L<350'	400'<L<550'	500'<L<700'	150'<L<225'	250'<L<400'	800'<L<1100'

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ARIZONA, U.S.A.

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:
Title: ELECTRICAL NOTES & SYMBOLS

E002

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JOB # 21-120A

COMcheck Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2021 IECC
Project Title: 21120 - AFW COLORADO
Project Type: New Construction

Construction Site:
AMERICAN HEIGHTS & TUTT BOULEVARD
COLORADO SPRINGS, Colorado

Owner/Agent:

Designer/Contractor:
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Additional Efficiency Package(s)

Credits: 10.0 Required 0.0 Proposed

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Retail	123855	0.84	104038
2-Warehouse	210531	0.45	94739
3-Workshop	40569	0.91	36918
		Total Allowed Watts =	235695

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
1-Retail				
LED: A: HIGH BAY: Other:	1	321	158	50718
LED: AA: CIRCULAR FIXTURE: Other:	1	7	188	1316
LED: C1E: 8' STRIP: Other:	1	35	53	1855
LED: D/DE: 2X4 LAY-IN: Other:	1	16	40	640
LED: J/JE: 8" DOWNLIGHT: Other:	1	11	55	605
LED: K: 2' MINI STRIP: Other:	1	40	21	840
LED: N/NE: 6" DOWNLIGHT: Other:	1	4	20	80
LED: R/RE: 6" DOWNLIGHT: Other:	1	36	18	648
LED: X/XE: PENDANT: Other:	1	8	37	296
LED: Z/ZE: 4' STRIP: Other:	1	9	34	306
Track Lighting: T1: TRACK: Wattage based on current limiting device capacity	0	0	21600	21600
2-Warehouse				
LED: B/BE: HIGH BAY: Other:	1	605	96	58080
LED: B1/B1E: HIGH BAY: Other:	1	120	96	11520
LED: E/EE: 6" DOWNLIGHT: Other:	1	20	22	440

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
LED: P/PE: 4' STRIP: Other:	1	9	35	315
Linear Fluorescent: FE: WALL MOUNT: 46" T5 28W: Electronic:	1	3	28	84
LED: D/DE: 2X4 LAY-IN: Other:	1	11	40	440
LED: P1/P1E: 8' STRIP: Other:	1	78	70	5460
LED: R/RE: 6" DOWNLIGHT: Other:	1	4	18	72
3-Workshop				
LED: D/DE: 2X4 LAY-IN: Other:	1	74	40	2960
LED: Z/ZE: 4' STRIP: Other:	1	8	34	272
LED: R/RE: 6" DOWNLIGHT: Other:	1	19	18	342
LED: Z/ZE: 4' STRIP: Other:	1	14	34	476
LED: G/GEM: 8' ARCH PENDANT: Other:	1	12	112	1344
LED: Z1/Z1E: 8' STRIP: Other:	1	67	66	4422
			Total Proposed Watts =	165131

Interior Lighting PASSES: Design 30% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Mark Bentley II - Senior Electrical Designer — Signature — 08-15-2024

Name - Title — Date

LIGHT FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER NAME AND NUMBER	# LAMPS	LAMP TYPE	BALLAST	TOTAL VA	MOUNTING	VOLTAGE	REMARKS
A	22" LED PENDANT, 3500K COLOR TEMP, 19,415 LUMENS, 80CRI	LUMINIS PR2287-L1L200-277V-WHT-K35	1	LED	LED DRIVER	158	PENDANT	277	
T1	TRACK MOUNTED LED LIGHT FIXTURE	JUNO T275L 40K 90CRI NFL WH (6818S)	1	LED	LED DRIVER	27	TRACK @ 10'	120	
T1	1 CIRCUIT TRACK WITH LP99 TRACK CURRENT LIMITER (15A) REFER TO LIGHTING PLANS FOR LENGTH	JUNO T SERIES WHITE TRACK. PROVIDE FITTINGS AS REQUIRED							
B	NARROW DISTRIBUTION LINEAR FLUORESCENT HIGH BAY	LITHONIA IBG 2FT 15000LM SEF ND ACL 35K 80CRI	1	LED	LED DRIVER	96	PEND @ 36' -0"	UNV	
BE	NARROW DISTRIBUTION LINEAR FLUORESCENT HIGH BAY. WITH EMERGENCY BATTERY PACK	LITHONIA IBG 2FT 15000LM SEF ND ACL 35K 80CRI PS30250 T20C	1	LED	LED DRIVER	96	PEND @ 36' -0"	UNV	2
B1	NARROW DISTRIBUTION LINEAR FLUORESCENT HIGH BAY	LITHONIA IBG 2FT 24000LM SEF GND ACL 35K 80CRI	1	LED	LED DRIVER	150	PEND @ 36' -0"	UNV	
B1E	NARROW DISTRIBUTION LINEAR FLOURESCENT HIGH BAY. WITH EMERGENCY BATTERY PACK	LITHONIA IBG 2FT 24000LM SEF GND ACL 35K 80CRI PS30250 T20C	1	LED	LED DRIVER	150	PEND @ 36' -0"	UNV	2
C1	8' INDUSTRIAL STRIP BROAD DISTRIBUTION REFLECTOR	LITHONIA CLX L96 8000LM SEF RDL MVOLT GZ10 40K 90CRI	1	LED	LED DRIVER	53	PEND	UNV	
C1E	8' INDUSTRIAL STRIP BROAD DISTRIBUTION REFLECTOR. WITH EMERGENCY BATTERY PACK	LITHONIA CLX L96 8000LM SEF RDL MVOLT GZ10 40K 90CRI WGCLX48 PS1050	1	LED	LED DRIVER	53	PEND	UNV	2
D	2' X 4' DIRECT/INDERECT	CREE CR24-40L-35K-S-HD	1	LED	LED DRIVER	40	RECE	UNV	
DE	2' X 4' DIRECT/INDERECT AND EMERGENCY BATTERY PACK	CREE CR24-40L-35K-S-HD-EB14	1	LED	LED DRIVER	40	RECE	UNV	2
E	6" DOWNLIGHT	JUNO TC922LEDG3-35K-U-HB-26/27C-WH	1	LED	LED DRIVER	22	RECE	UNV	
EE	6" DOWNLIGHT WITH EMERGENCY BATTERY PACK	JUNO TC22LEDG3-35K-U-BR-HB-26/27C-WH	1	LED	LED DRIVER	22	RECE	UNV	2
F	ARCHITECTURAL WALL MOUNTED FIXTURE	H.E. WILLIAMS WMA-4-128TSS-A-EB1-UNV	1	T5	FLUOR	28	SURF	UNV	
FE	ARCHITECTURAL WALL MOUNTED FIXTURE WITH EMERGENCY BATTERY PACK	H.E. WILLIAMS WMA-4-128TSS-A-EM/1400(T5)/1-EB1-277	1	T5	FLUOR	28	SURF	277	2
G	8' ARCHITECTURAL PENDANT INDIRECT WITH 33% OPEN PERFORATION PROVIDE "J" & "F" OPTION AS LOCATION WARRANTS	H.E. WILLIAMS A15P33-8-428TSS-**-EB2/2-BD-UNV	4	T5	FLUOR	112	PEND	UNV	
GEM	8' ARCHITECTURAL PENDANT INDIRECT WITH 33% OPEN PERFORATION & EM BATT PACK. PROVIDE "J" & "F" OPTION AS LOCATION WARRANTS	H.E. WILLIAMS A15P33-8-428TSS-**-EB2/2-EM1400(T5)-BD-277	4	T5	FLUOR	112	PEND	277	2
J	8" DOWNLIGHT	SPECTRUM SGB85QLEDGV-55W-35K-E2-BH21-AR086LEDGV-MW	1	LED	LED DRIVER	55	RECE @ 38'	277	1
JE	8" DOWNLIGHT WITH EMERGENCY BATTERY PACK	SPECTRUM SGB85QLEDGV-55W-35K-E2-EM-BH12-AR086LEDGV-MW	1	LED	LED DRIVER	55	RECE @ 38'	277	1, 2
K	STAGGERED MINI STRIP	H.E. WILLIAMS 75-2-LED-PH30/835-EDDPH-UNV	1	LED	LED LUMEN	21	SURF	UNV	
N	6" DOWNLIGHT	SPECTRUM SGE65QLEDXI-20W-35K-WD-E2--BH12-AR0306XI-MW	1	LED	LED DRIVER	20	RECE	277	
NE	6" DOWNLIGHT WITH EMERGENCY BATTERY PACK	SPECTRUM SGE65QLEDXI-20W-35K-WD-E2--BH12-AR0306XI-MW-EMLED	1	LED	LED DRIVER	20	RECE	277	2
P	4' INDUSTRIAL STRIP BROAD DISTRIBUTION REFLECTOR	LITHONIA CLX L48 5000LM SEF FDL MVOLT GZ10 35K 80CRI WGCLX48	1	LED	LED DRIVER	35	PEND	UNV	
PE	4' INDUSTRIAL STRIP BROAD DISTRIBUTION REFLECTOR WITH EMERGENCY BATTERY BACKUP	LITHONIA CLX L48 5000LM SEF FDL MVOLT GZ10 35K 80CRI WGCLX48 PS1050	1	LED	LED DRIVER	35	PEND	UNV	2
P1	8' INDUSTRIAL STRIP BROAD DISTRIBUTION REFLECTOR	LITHONIA CLX L96 10000LM SEF FDL MVOLT GZ10 35K 80CRI WGCLX48	1	LED	LED DRIVER	70	PEND	UNV	
P1E	8' INDUSTRAIL STRIP BROAD DISTRIBUTION REFLECTOR. WITH EMERGENCY BATTERY PACK	LITHONIA CLX L96 10000LM SEF FDL MVOLT GZ10 35K 80CRI WGCLX48 PS1050	1	LED	LED DRIVER	70	PEND	UNV	2
R	6" DOWNLIGHT	JUNO SDSQ6-11352-SDSQ6-SASF	1	LED	LED DRIVER	18	RECE	277	
RE	6" DOWNLIGHT WITH EMERGENCY BATTERY PACK	JUNO SDSQ6-11352-BP/SDSQ6-SASF	1	LED	LED DRIVER	18	RECE	277	2
R2	6" WET LOCATION DOWNLIGHT	JUNO SDSQ6-11352/SDSQ6-SASF -WET	1	LED	LED DRIVER	18	RECE	277	1
R2E	6" WET LOCATION DOWNLIGHT WITH LENG AND EMERGENCY BATTERY PACK	JUNO SDSQ6--11352-BP/SDSQ6 SASF WET	1	LED	LED DRIVER	18	RECE	277	1,2
X	LED PENDANT FIXTURE	ANP D616-M037LDD-W-35K-XXX-SRTCC-BLC-01	1	LED	LED	37	PEND	277	
XE	LED PENDANT FIXTURE WITH EMERGENCY BATTERY PACK	ANP D616-M037LDD-W-35K-XXX-DCCEM-BLC-EM-LED10-01	1	LED	LED	37	PEND	277	2
Z	4' INDUSTRAIL STRIP SHALLOW BROAD DISTRIBUTION REFLECTOR	H.E. WILLIAMS 80-4-L53-8-35K-WG8014-DIM-UNV	1	LED	LED	34	PEND	UNV	
ZE	4' INDUSTRAIL STRIP SHALLOW BROAD DISTRIBUTION REFLECTOR WITH EMERGENCY BATTERY PACK	H.E. WILLIAMS 80-4-L53-8-35K-WG8014-DIM-UNV-EM/10W	1	LED	LED	34	PEND	277	2
Z1	8' INDUSTRIAL STRIP SHALLOW BROAD DISTRIBUTION REFLECTOR	H.W. WILLIAMS 80-8-L106-8-35K-(2)WG8014-DIM-UNV	1	LED	LED	66	PEND	UNV	
Z1E	8' INDUSTRIAL STRIP SHALLOW BROAD DISTRIBUTION REFLECTOR WITH EMERGENCY BATTERY PACK	H.W. WILLIAMS 80-8-L106-8-35K-(2)WG8014-DIM-UNV-EM/10W	1	LED	LED	66	PEND	277	2
AA	5' CIRCULAR FIXTURE FINISH AND MOUNTING HEIGHT BY ARCHITECT	DELRAY UDC8 X W35 X	1	LED	LED DRIVER	188	PEND	277	
AAE	5' CIRCULAR FIXTURE FINISH AND MOUNTING HEIGHT BY ARCHITECT PROVIDE REMOTE INVERTER FOR EMERGENCY	DELRAY UDC8 X W35 X	1	LED	LED DRIVER	188	PEND	277	2
DD	8' RECESSED LINEAR LED FIXTURE	SELECTED BY ARCHITECT	1	LED	LED MAX	100	RECE	UNV	
DDE	8' RECESSED LINEAR LED FIXTURE WITH EMERGENCY BATTERY PACK	SELECTED BY ARCHITECT	1	LED	LED MAX	100	RECE	UNV	2
	LED EXIT SIGN WITH NI-CAD BATTERY BACK-UP PROVIDE DUAL FACE AND/OR DIRETIONAL ARROWS AS LOCATIONS/PLANS REQUIRE	THOMAS @ BETTS EMERGI-LITE. BA-TXN1R (SINGLE-FACE) BA-TXN2R (DOUBLE FACE)					SURF	277	2

REMARKS
1. FIXTURE SHALL BE LISTED AS DAMP/WET LOCATION PER NFPA-70, ARTICLE 410.10(A)
2. FIXTURE SHALL HAVE A MINIMUM OF 90-MINUTE BATTERY BACK-UP PER NFPA-700, ARTICLE 700.12(F) AND IBC 1008.3/1013.6.3

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JABS HEIGHTS & TUTT BOULEVARD
COLORADO SPRINGS, CO

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: LUMINAIRE SCHEDULE & ENERGY CALCS

E003

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JOB # 21-120A

COMcheck Software Version COMcheckWeb
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2021 IECC
Project Title: 21120 - AFW COLORADO
Project Type: New Construction
Exterior Lighting Zone 2 (Neighborhood business district (LZ2))

Construction Site:
AMERICAN HEIGHTS & TUTT BOULEVARD
COLORADO SPRINGS, Colorado

Owner/Agent:

Designer/Contractor:
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Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Parking area	1118980	0.04	Yes	44759
			Total Tradable Watts (a) =	44759
			Total Allowed Watts =	44759
			Total Allowed Supplemental Watts (b) =	400

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Parking area (1118980 ft2): Tradable Wattage				
LED: SA1: LED POLE: Other:	1	1	398	398
LED: SA2: LED POLE: Other:	1	12	686	8232
LED: SB: LED POLE: Other:	1	4	343	1372
LED: SC: LED POLE: Other:	1	5	343	1715
LED: SF: LED DECO POLE: Other:	1	4	80	320
LED: SH: LED WALL PACK: Other:	1	16	109	1744
LED: SL: LED WALL PACK: Other:	1	9	109	981
LED: SJ/SJE: Other:	1	40	23	920
			Total Tradable Proposed Watts =	15682

Exterior Lighting PASSES: Design 65% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Mark Bentley II - Senior Electrical Designer — Name - Title
Signature
08-15-2024 — Date

SITE LIGHT FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER NAME AND NUMBER	# LAMPS	LAMP TYPE	BALLAST	TOTAL VA	MOUNTING	VOLTAGE	REMARKS
SA1	LED SINGLE POLE MOUNT, TYPE T5W DIST, 47379 LUMENS, 40K, DARK BRONZE HOUSING	LITHONIA DSX2-LED-P7-40K-T5W-MVOLT/SSS 27.5' WITH 2.5' BASE	1	LED	LED ELECTRONIC	398	POLE	277	1
SA2	LED TWIN POLE MOUNT, TYPE T5W DIST, 42347 LUMENS, 40K, DARK BRONZE HOUSING	LITHONIA DSX2-LED-P6-40K-T5W-MVOLT/SSS 27.5' WITH 2.5' BASE	1	LED	LED ELECTRONIC	686	POLE	277	1
SB	LED SINGLE POLE MOUNT, TYPE T3M DIST, 32105 LUMENS, 40K, DARK BRONZE HOUSING	LITHONIA DSX2-LED-P6-40K-T3M-MVOLT/SSS 27.5' WITH 2.5' BASE	1	LED	LED ELECTRONIC	343	POLE	277	1
SC	LED SINGLE POLE MOUNT, TYPE TFTM DIST, 31845 LUMENS, 40K, DARK BRONZE HOUSING	LITHONIA DSX2-LED-P6-40K-TFTM-MVOLT/SSS 27.5' WITH 2.5' BASE	1	LED	LED ELECTRONIC	343	POLE	277	1
SF	LED POST TOP DECORATIVE POLE MOUNT, TYPE T5W DIST, 9721 LUMENS, 40K, DARK BRONZE HOUSING	VISIONAIRE LTG PRE-2-L-T5W-48LC-5-4K-PT SL/ROUND POLE/ 15'	1	LED	LED ELECTRONIC	80	POLE	277	1
SH	LED WALL PAK, TYPE TFTM DIST, 11120 LUMENS, 40K, DARK BRONZE HOUSING	LITHONIA DSXW2-LED-30C-1000-40K-TFTM-MVOLT	1	LED	LED ELECTRONIC	109	WALL	277	1
SJ	6" ROUND DOWNLIGHT, 40K, (2000 LUMENS), CLEAR TRIM, SEMI-SPECULAR FINISH, 0-10 DIMMING DOWN TO 1%, 80CRI	GOTHAM EVO-40/20-6AR-MD-LSS-EZ10	1	LED	0-10V DIMMING	23	RECESSED	277	1
SJE	6" ROUND DOWNLIGHT, 40K, (2000 LUMENS), CLEAR TRIM, SEMI-SPECULAR FINISH, 0-10 DIMMING DOWN TO 1%, 80CRI, EMERGENCY BATTERY BACKUP	GOTHAM EVO-40/20-6AR-MD-LSS-EZ10-EL	1	LED	0-10V DIMMING	23	RECESSED	277	1, 2
SL	LED WALL PAK, TYPE T2M DIST, 10184 LUMENS, 40K, DARK BRONZE HOUSING	LITHONIA DSXW2-LED-30C-1000-40K-T2M-MVOLT	1	LED	LED ELECTRONIC	109	WALL	277	1
EM	EXTERIOR EGRESS EMERGENCY UNIT, 120/277V, DARK BRONZE COLORED	LITHONIA AFN-DB-EXT	1	XENON	N/A	12	WALL	277	2

REMARKS
1. FIXTURE SHALL BE LISTED AS DAMP/WET LOCATION PER NFPA-70, ARTICLE 410.10(A)

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Phoenix, Arizona 85034
Phone 602-957-1800

KRAEMER CONSULTING ENGINEERS, PLLC
PRELIMINARY NOT FOR CONSTRUCTION
ARIZONA, U.S.A.

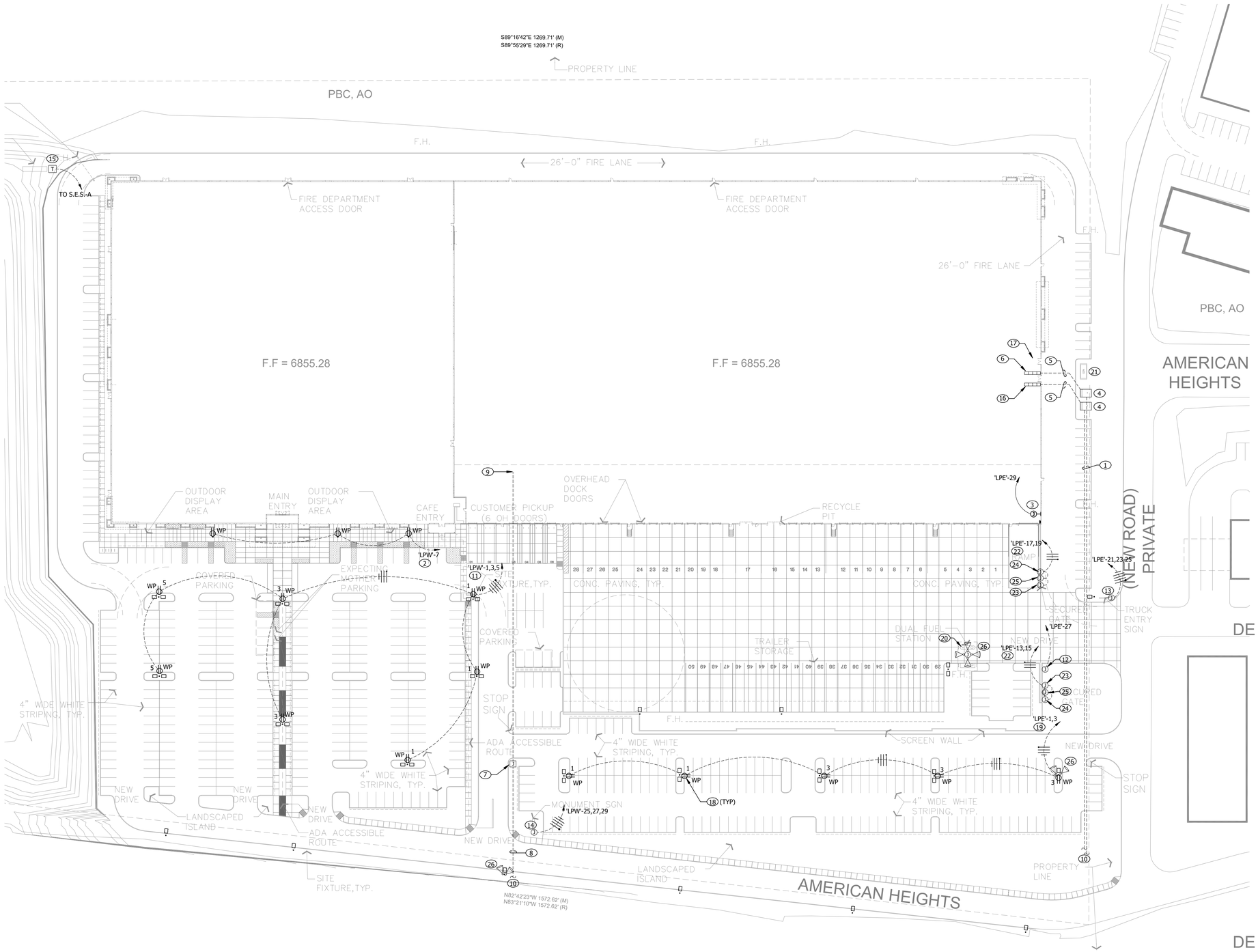
American Furniture Warehouse
Your LIFESTYLE FURNITURE *Store*
JABS HEIGHTS & TUTT BOULEVARD
COLORADO SPRINGS, CO

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:
Title: LUMINAIRE SCHEDULE & ENERGY CALCS

E004

Kraemer Consulting Engineers, PLLC.
Mechanical and Electrical Engineers
2050 West Whispering Wind Dr., Suite 158
Phoenix, Arizona 85085-2864
(602) 285-1669
(602) 285-4450 - fax
JOB # 21-120A



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1 ELECTRICAL SITE PLAN
SCALE: 1" = 50'-0"

GENERAL NOTES

A. NO CONSTRUCTION IS TO BEGIN UNTIL FINAL UTILITY COMPANY PLANS ARE RECEIVED.

B. ALL WORK SHALL BE PER UTILITY COMPANY CONSTRUCTION STANDARDS AND SPECIFICATIONS. PROVIDE CONDUIT RACKS THROUGH-OUT AND CONCRETE ENCASEMENT WHERE FEEDERS PASS UNDER DRIVEWAYS AND/OR PARKING LOT.

C. ALL TRANSFORMER BOXES, METER PANELS, ELECTRICAL EQUIPMENT, AND MISC. UTILITY EQUIPMENT SHALL BE PAINTED TO MATCH ADJACENT BUILDING COLORS WHERE SCREENING IS NOT APPLICABLE.

D. UTILITY COMPANY DESIGN IS NOT AVAILABLE AT THIS TIME. ADDITIONAL WORK WILL BE REQUIRED.

E. REFER TO ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK FOR DIMENSIONS FOR FLOOR BOXES, COLUMNS, STAIRWELLS, ELECTRICAL ROOMS, ETC. TO AID IN FINALIZING CONDUIT TERMINATION POINTS.

F. ELECTRICAL CONTRACTOR TO PROVIDE LUG ADAPTORS FOR CONNECTIONS TO EQUIPMENT WHERE INCREASED FEEDER SIZE (DUE TO VOLTAGE DROP) EXCEEDS EQUIPMENT LUG CONNECTION SIZE.

#KEYED NOTES:

1. (4)-4"C WITH PULLSTRING FOR PRIMARY CABLES (CABLES FURNISHED AND INSTALLED BY LOCAL UTILITY). MINIMUM BURIAL DEPTH SHALL BE 48" BELOW FINISHED GRADE.
2. #10'S IN 3/4" CONDUIT THRU-OUT. CIRCUIT VIA TIMECLOCK.
3. PROVIDE WEATHERPROOF JUNCTION BOX FOR IRRIGATION CONTROLLER. COORDINATE EXACT LOCATION WITH LANDSCAPE AND/OR ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
4. CONTRACTOR SHALL FURNISH AND INSTALL TRANSFORMER PAD AND GROUNDING PER LOCAL UTILITY ELECTRIC DISTRIBUTION CONSTRUCTION STANDARDS.
5. (16)-4"C EACH WITH 500KCMIL CU. CONDUCTORS. MINIMUM BURIAL DEPTH SHALL BE 36" BELOW FINISHED GRADE.
6. NEW SERVICE ENTRANCE SECTION S.E.S.-A. SINGLE LINE DIAGRAM ON SHEET E511 FOR ADDITIONAL INFORMATION.
7. COMMUNICATIONS PULLBOX PROVIDED BY QWEST & COX, INSTALLED BY ELECTRICAL CONTRACTOR PER UTILITY CO. PLANS AND SPECIFICATIONS.
8. (3) 4" E.C. FOR TELEPHONE SERVICE AND (1) 2" FOR CATV SERVICE. ALL CONDUIT, TRENCHING, AND BACKFILL BY ELECTRICAL CONTRACTOR PER QWEST & COX PLANS AND SPECIFICATIONS. VERIFY EXACT ROUTING, LENGTH, AND POINT OF TERMINATIONS WITH QWEST & COX PLANS PRIOR TO BEGINNING WORK.
9. MAIN TELEPHONE MOUNTING BOARD, LOCATED IN MDF/DATA ROOM 207.
10. COORDINATE TERMINATION POINT WITH RESPECTIVE UTILITY COMPANY.
11. #8'S IN 1" CONDUIT THRU-OUT. CIRCUIT VIA TIMECLOCK.
12. PROVIDE WEATHERPROOF JUNCTION BOX @ +10'-0" A.F.F. ON WALL FOR SIGNAGE. COORDINATE EXACT LOCATION PRIOR TO BEGINNING WORK. FEED WITH #2S IN 1-1/4" CONDUIT AND CIRCUIT VIA TIMECLOCK.
13. PROVIDE WEATHERPROOF JUNCTION BOX FOR MONUMENT SIGN, SIGN FURNISHED AND INSTALLED BY OTHERS. FEED WITH #6'S IN 1-1/4" CONDUIT AND CIRCUIT VIA TIMECLOCK. COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS PRIOR TO BEGINNING WORK.
14. PROVIDE WEATHERPROOF JUNCTION BOX FOR MONUMENT SIGN, SIGN FURNISHED AND INSTALLED BY OTHERS. FEED WITH #4'S IN 1-1/4" CONDUIT AND CIRCUIT VIA TIMECLOCK. COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS PRIOR TO BEGINNING WORK.
15. PROVIDE WEATHERPROOF, NEMA 3R, 45 KVA XFRMR AND 150 MCB 120/208V 3PH, 4W, NEMA 3R, SERVICE RATED PANEL FOR MONUMENT SIGN. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO BEGINNING WORK. SEE SINGLE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
16. NEW SERVICE ENTRANCE SECTION S.E.S.-B. SEE SINGLE LINE DIAGRAM ON SHEET E512 FOR ADDITIONAL INFORMATION.
17. NEW SERVICE RATED FIRE PUMP CONTROLLER. SEE SINGLE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
18. WEATHERPROOF PEDESTAL MOUNTED RECEPTACLE FOR SEASONAL LIGHTING. LOCATE AT BASE OF POLE.
19. #6'S IN 1-1/4" CONDUIT THRU-OUT. CIRCUIT VIA TIMECLOCK.
20. REFER TO SHEET E104 FOR FUEL STATION CONDUIT REQUIREMENTS.
21. 500KW WEATHERPROOF, NEMA 3R GENERATOR. SEE SINGLE-LINE DIAGRAM ON SHEET E512 FOR ADDITIONAL INFORMATION.
22. #8S IN 1" CONDUIT THRU-OUT. CIRCUIT VIA TIMECLOCK.
23. PROVIDE WEATHERPROOF JUNCTION BOX FOR MOTORIZED GATE. COORDINATE WITH MANUFACTURER'S SPECIFICATIONS FOR ALL INSTALLATION REQUIREMENTS INCLUDING MISC. CONDUIT QUANTITIES & ROUTING.
24. PROVIDE WEATHERPROOF JUNCTION BOX FOR MOTORIZED GATE CALL BOX. PROVIDE (1) 3/4" E.C. WITH PULLSTRING TO MOTORIZED GATE JUNCTION BOX AND (1) 1" E.C. WITH ARCHITECTURAL PLANS AND INSTALLATION/CONDUIT REQUIREMENTS WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
25. PROVIDE WEATHERPROOF JUNCTION BOX FOR MOTORIZED GATE TAG READER. PROVIDE (1) 3/4" E.C. WITH PULLSTRING TO MOTORIZED GATE JUNCTION BOX FOR COMMUNICATIONS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS AND INSTALLATION/CONDUIT REQUIREMENTS WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
26. PROVIDE SECURITY CAMERA. COORDINATE MOUNTING HEIGHT WITH SECURITY VENDOR AND OWNER. RUN 3/4" CONDUIT FROM CAMERA TO BUILDING AS REQUIRED.

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Case #:
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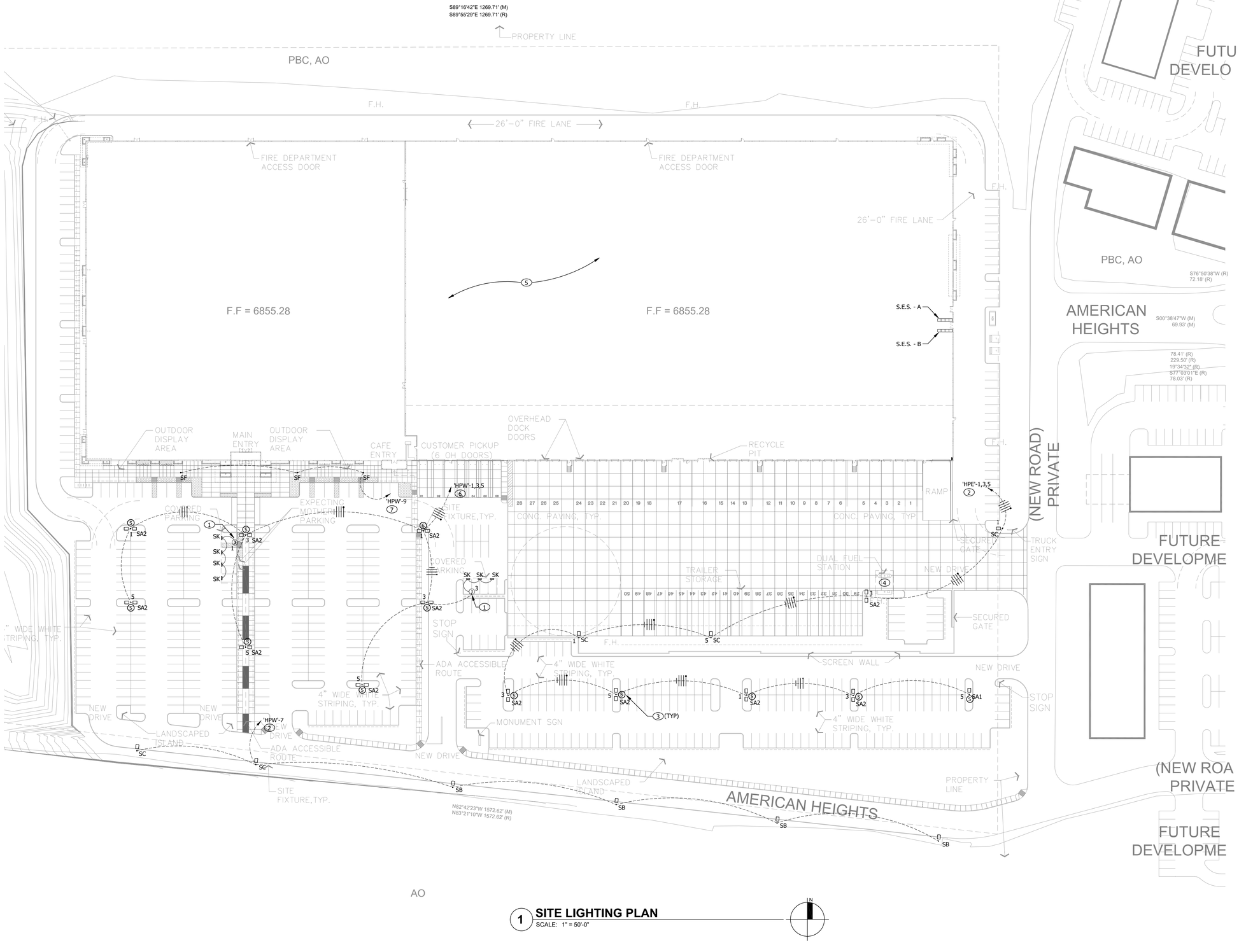
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:
Title: ELECTRICAL SITE PLAN

E011



AO

1 SITE LIGHTING PLAN

SCALE: 1" = 50'-0"

#KEYED NOTES:

1. PROVIDE WEATHERPROOF JUNCTION BOX FOR CANOPY LIGHTING.
2. CIRCUIT VIA TIMECLOCK WITH #6'S IN 1" CONDUIT. PROVIDE HOT LEG AHEAD OF TIMECLOCK FOR EXTERIOR EMERGENCY EGRESS LIGHTING WHERE REQUIRED.
3. PROVIDE POLE MOUNTED SPEAKER. PROVIDE 1" E.C. WITH PULLSTRING FROM SPEAKER TO MDF ROOM FOR FUTURE EXTENSION TO OWNER SOUND SYSTEM.
4. FUEL STATION CANOPY LIGHTING TO BE DESIGNED UNDER CONCURRENT FUEL STATION DESIGN. REFER TO SHEET E014 FOR UNDERGROUND CONDUIT INFRASTRUCTURE.
5. REFER TO E100 SERIES LIGHTING PLANS FOR BUILDING MOUNTED LIGHTING.
6. CIRCUIT VIA TIMECLOCK WITH #8'S IN 1" CONDUIT. PROVIDE HOT LEG AHEAD OF TIMECLOCK FOR EXTERIOR EMERGENCY EGRESS LIGHTING WHERE REQUIRED.
7. CIRCUIT VIA TIMECLOCK WITH #10'S IN 3/4" CONDUIT. PROVIDE HOT LEG AHEAD OF TIMECLOCK FOR EXTERIOR EMERGENCY EGRESS LIGHTING WHERE REQUIRED.

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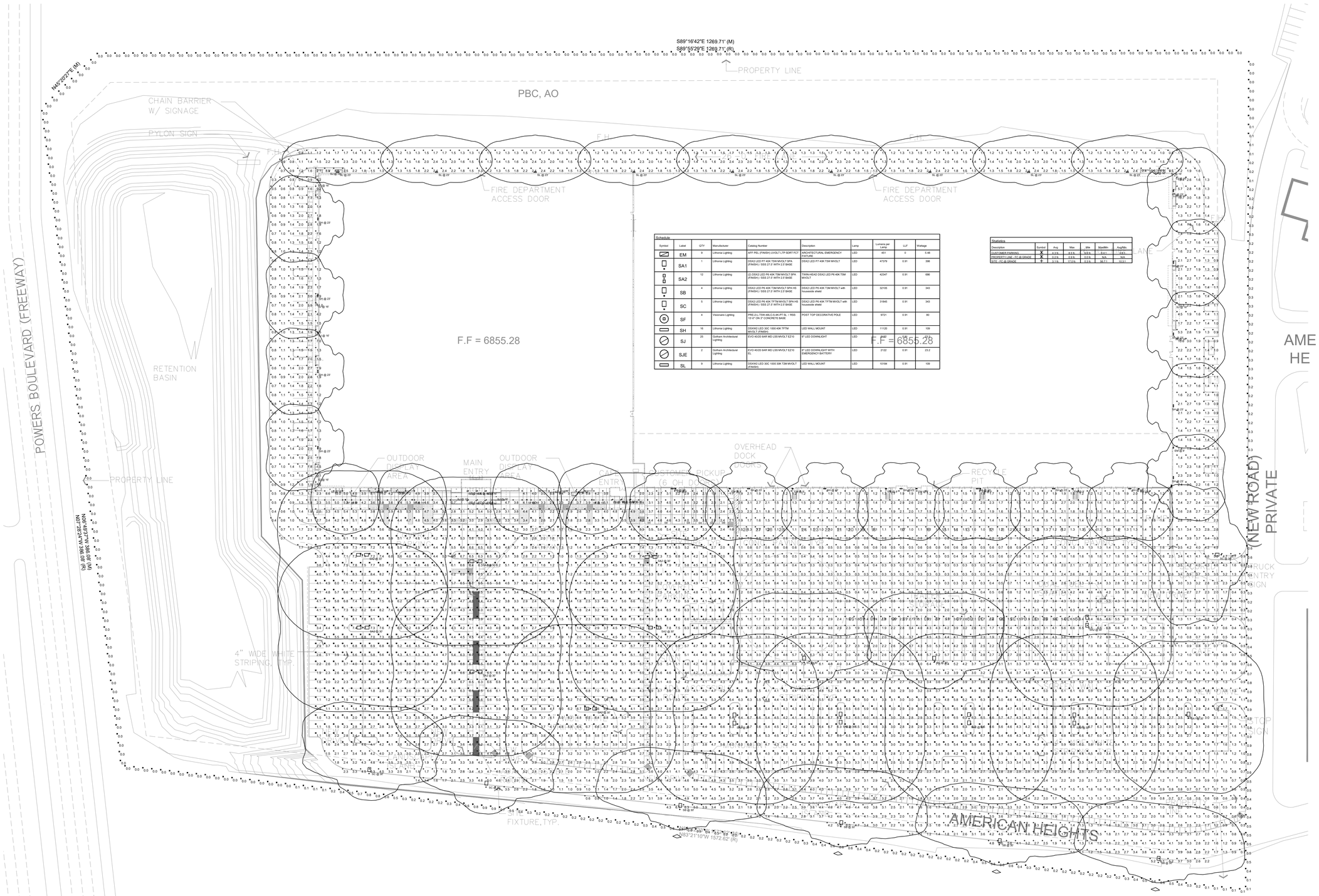
Revisions:

Project Number: 20068.100
Drawn By:
Title: SITE LIGHTING PLAN

E012



Schedule									
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Lumens per Lamp	LLF	Wattage
	EM	9	Lithonia Lighting	AFF PEL (FINISH) LVOLT LTP SDRT FCT	ARCHITECTURAL EMERGENCY FIXTURE	LED	401	0	5.48
	SA1	1	Lithonia Lighting	DSX2 LED P7 40K TSW MVOLT SPA (FINISH) / SSS 27.5' WITH 2.5' BASE	DSX2 LED P7 40K TSW MVOLT	LED	47379	0.91	398
	SA2	12	Lithonia Lighting	(2) DSX2 LED P6 40K TSW MVOLT SPA (FINISH) / SSS 27.5' WITH 2.5' BASE	TWIN-HEAD DSX2 LED P6 40K TSW MVOLT	LED	42347	0.91	686
	SB	4	Lithonia Lighting	DSX2 LED P6 40K TSW MVOLT SPA HS (FINISH) / SSS 27.5' WITH 2.5' BASE	DSX2 LED P6 40K TSW MVOLT with houseside shield	LED	32105	0.91	343
	SC	5	Lithonia Lighting	DSX2 LED P6 40K TFTM MVOLT SPA HS (FINISH) / SSS 27.5' WITH 2.5' BASE	DSX2 LED P6 40K TFTM MVOLT with houseside shield	LED	31845	0.91	343
	SF	4	Visionaire Lighting	PRE-2-L-TSW-WLC-4-4K-P7 SL / RSS 15'-0" ON 3' CONCRETE BASE	POST TOP DECORATIVE POLE	LED	9721	0.91	80
	SH	16	Lithonia Lighting	DSXW0 LED 30C 1000 40K TFTM MVOLT (FINISH)	LED WALL MOUNT	LED	11120	0.91	109
	SJ	25	Gotham Architectural Lighting	EVO 4G/20 6AR MD LSS MVOLT EZ1G	6" LED DOWNLIGHT	LED	2122	0.91	23.2
	SJE	2	Gotham Architectural Lighting	EVO 4G/20 6AR MD LSS MVOLT EZ1G EL	6" LED DOWNLIGHT WITH EMERGENCY BATTERY	LED	2122	0.91	23.2
	SL	9	Lithonia Lighting	DSXW2 LED 30C 1000 30K T2M MVOLT (FINISH)	LED WALL MOUNT	LED	10184	0.91	109

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
CUSTOMER PARKING	+	4.3 fc	9.5 fc	0.5 fc	9.5:1	4.6:1
PROPERTY LINE - FC @ GRADE	+	0.2 fc	0.3 fc	0.0 fc	N/A	N/A
SITE - FC @ GRADE	+	3.1 fc	17.0 fc	0.3 fc	56.7:1	10.3:1

AO

1 **PHOTOMETRIC SITE PLAN**
SCALE: 1" = 50'-0"

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Project Number: 20068.100
Drawn By:
Title: PHOTOMETRIC SITE PLAN

E013

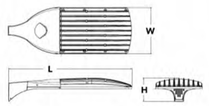
D-Series Size 2
LED Area Luminaire

d-series

Catalog Number
Notes
Type

Specifications

EPA:	1.1 ft² (0.10 m²)
Length:	40" (101.6 cm)
Width:	15" (38.1 cm)
Height:	7-1/4" (18.4 cm)
Weight (max):	36 lbs (16.3 kg)



A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability!
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background.

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: DSX2 LED P7 T3M MVOLT SPA DDBXD

DSX2 LED

Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX2 LED	**Forward optics** P1 P5 P2 P6 P3 P7 P4 P8 **Rotated optics**[1] P10 P13 P11 P14 P12	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted[2]	T1S Type I Short T2S Type II Short T2M Type II Medium T3S Type III Short T3M Type III Medium T4M Type IV Medium TFTM Forward Throw Medium T5VS Type V Very Short T5S Type V Short T5M Type V Medium T5W Type V Wide BLC Backlight control[3] LCCO Left corner cutoff[3] RCCO Right corner cutoff[3]	MVOLT[4,5] 120[5] 208[5,6] 240[5,6] 277[5] 347[5,6,7] 480[5,6,7] **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[7]	**Shipped included** SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor[7] RPUMBA Round pole universal mounting adaptor[7] **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[7]

Control options	Other options	Finish (required)
Shipped installed NLTAIR2 nLight AIR generation 2 enabled[8] PER NEMA twist-lock receptacle only (no controls)[9] PER5 Five-wire receptacle only (no controls)[9,10] PER7 Seven-wire receptacle only (no controls)[9,10] DMG 0-10V dimming extend out back of housing for external control (no controls) DS Dual switching[11,12] PIRH Bi-level, motion/ambient sensor, 15'-30' mounting height, ambient sensor enable at 5fc[11,13] PIRHN Network, Bi-Level motion/ambient sensor[11] PIR1FC3V Bi-level, motion sensor, 15'-30' mounting height, ambient sensor enabled at 1fc[11,13] BL30 Bi-level switched dimming, 30%[11,12] BL50 Bi-level switched dimming, 50%[11,12] PNMTDD3 Part night, dim till dawn[14] PNMT5D3 Part night, dim 5 hrs[5,14] PNMT6D3 Part night, dim 6 hrs[5,14] PNMT7D3 Part night, dim 7 hrs[5,14] FAO Field Adjustable Output[15]	**Shipped installed** HS House-side shield[16] SF Single fuse (120, 277, 347V)[5] DF Double fuse (208, 240, 480V)[5] L90 Left-rotated optics[1] R90 Right-rotated optics[1] **Shipped separately** BS Bird spikes[17] EGS External glare shield[17]	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

FIXTURES TYPE 'SA1', 'SA2', 'SB' & 'SC'

SCALE: NONE

PRE-2-L LED Specifications

Project Name:
Catalog Number:
Type:

Contemporary design meets this new generation of LED green technology in this stunning luminaire, the **PRE-2-L**. The Premier II series provides over fifty percent energy savings over traditional HID light sources; and offers excellent beam control and LED life beyond 100,000 hours for 350 milliamp systems. The PRE-2-L is offered in six optical distributions.

The PRE-2-L's fully-sealed housing features an exceptionally well-designed thermal management system that provides superior heat dissipation.

The PRE-2-L fixture is built with a cast aluminum housing, extruded aluminum arms and a spun aluminum, removable top.

The popular **PRE-2-L** is the perfect compliment to any university campus, business park, or walkway project where contemporary, architectural design is desired.

Ordering Information

MODEL	OPTICS	SOURCE	CURRENT	KELVIN	VOLTAGE	MOUNTING	FINISH	OPTIONS
PRE-2-L	T1 T2 T3 T4 T5 T5W	48LC 64LC 80LC 96LC	3 350mA 5 530mA 7 700mA	3K 3000K 4K 4000K 5K 5000K	UNV 120-277V 8 347V 5 480V	PT Post Top *Slips over 4" OD tenon X 4.5" tall as standard	BZ Bronze BK Black SBK Smooth Black WH White SWH Smooth White GP Graphite GY Grey SL Silver Metallic CC Custom Color	PC-120 PC-208 PC-240 PC-277 Button Type Photocell WSC-8 Motion Sensor 8' Mounting Height WSC-20 Motion Sensor 9-20' Mounting Height WSC-40 Motion Sensor 21-40' Mounting Height This option will require (1) ISR 100 remote for programming DIM 0-10v Dimming Driver VWC Visionaire Wireless Controls *Consult Factory IR-(R, B, G Illuminated Rings (Red, Blue, Green)

VISIONAIRE LIGHTING

A

FIXTURES TYPE 'SF'

SCALE: NONE

D-Series Size 2
LED Wall Luminaire

d-series

Catalog Number
Notes
Type

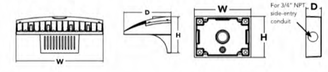
Specifications

Luminaire

Width:	18-1/2" (47.0 cm)	Weight:	21 lbs (9.5 kg)
Depth:	10" (25.4 cm)		
Height:	7-5/8" (19.4 cm)		

Back Box (BBW)

Width:	5-1/2" (14.0 cm)	BBW Weight:	1 lbs (0.5 kg)
Depth:	1-1/2" (3.8 cm)		
Height:	4" (10.2 cm)		



A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability!
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background.

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: DSXW2 LED 30C 700 40K T3M MVOLT DDBTXD

DSXW2 LED

Series	LEDs	Drive Current	Color temperature	Distribution	Voltage	Mounting	Control Options
DSXW2 LED	20C 20 LEDs (two engines) 30C 30 LEDs (three engines)	350 350 mA 530 530 mA 700 700 mA 1000 1000 mA (1 A)	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted[1]	T2S Type II Short T2M Type II Medium T3S Type III Short T3M Type III Medium T4M Type IV Medium TFTM Forward Throw Medium	MVOLT[3] 120[4] 208[4] 240[4] 277[4] 347[4,5] 480[4,5]	**Shipped included** (blank) Surface mounting bracket **Shipped separately** BBW Surface-mounted back box (for conduit entry)	**Shipped installed** PE Photoelectric cell, button type[6] PER NEMA twist-lock receptacle only (control ordered separately)[7] PER5 Five-wire receptacle only (control ordered separately)[8,9] PER7 Seven-wire receptacle only (control ordered separately)[8,9] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) PIR 180° motion/ambient light sensor, <15' mtg ht[10,11] PIRH 180° motion/ambient light sensor, 15-30' mtg ht[10,11] PIR1FC3V Motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[11,12] PIRH1FC3V Motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[11,12]

Other Options	Finish (required)
Shipped installed SF Single fuse (120, 277, 347V)[4] DF Double fuse (208, 240, 480V)[4] HS House-side shield[13] SPD Separate surge protection[14] **Shipped separately**[15] BSW Bird-deterrent spikes VG Vandal-guard	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone

FIXTURES TYPE 'SH' & 'SL'

SCALE: NONE

gotham® | E V O®
Multiple Layers of Light

Luminaire Type:
Catalog Number:

General Illumination Round Downlight 6"

250 - 8,000 lumens

10,000 - 17,500 lumens

OVERVIEW

Feature Set

- Bounding Ray™ optical design
- Unitized optics mechanically attach the light engine to the lower reflector for complete optical alignment.
- 45° cutoff to source and source image
- Fully serviceable and upgradeable lensed LED light engine
- 70% lumen maintenance at 60,000 hours
- 2.5 SDCM; 85 CRI typical, 90+ CRI optional
- Fixtures are wet location, covered ceiling
- Available with 10% dimming, 1% dimming, or dim to dark
- Batwing distribution with feathered edges provides even illumination on horizontal and vertical surfaces
- ENERGY STAR® certified product

Distribution

Superior Performance

Nominal Lumens	250	500	750	1000	1500	2000	2500	3000	3500	4000	4500	5000	6000	8000	10,000	12,000	15,000	17,500
Delivered Lumens	297	519	776	994	1471	2006	2537	3077	3542	4027	4533	5256	6371	8247	10637	12332	15776	17801
Wattage	3.4	6.2	8.2	9.6	14.7	19.7	24.7	29.5	33.8	39.0	47.3	48.7	57.6	74.9	97.1	115.0	150.9	175.3
Lumens per Watt	87.4	83.7	94.6	103.5	100.1	101.8	102.7	104.3	104.8	103.3	95.8	107.9	110.6	110.1	109.5	107.2	104.5	101.5

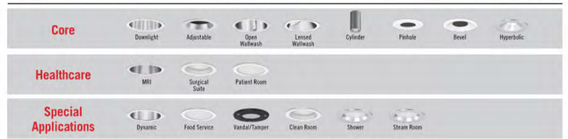
CONFIGURATIONS

Coordinated Apertures I Multiple Layers of Light

General Illumination Layer I EVO

High Center Beam Layer I Incito

EVO + Incito — Multiple Layers of Light



CONFIGURATIONS

GOTHAM ARCHITECTURAL DOWNLIGHTING I 1400 Lester Road Conyers, GA 30012 I P 800-705-SERV (7378) I gothamlighting.com

FIXTURES TYPE 'SJ' & 'SJE'

SCALE: NONE

Type:
Project:

ILLUMINA® LED | WET | IP65 | IK05

LOGICA SANITATION TITLE 20 TITLE 24 DLC SSL RoHS

BS101LED

- The ILLUMINA® BS101LED is corrosion, flame and vandal resistant.
- HOUSING: 100% UV stabalized polycarbonate, liquid silicone perimeter gasket with memory retention.
- DIFFUSER: The frosted UV stabalized polycarbonate diffuser eliminates glare and provides even light distribution.
- LUMENS: **LO:** 6138 up to 6498 lm **HO:** 8593 up to 9098 lm
- OPERATING TEMP: HT (AC Only) -40°F to 104°F (-40°C to 40°C) SA (AC & Emergency) 32°F to 104°F(0°C to 40°C)
- WEIGHT: 9 lbs. / 4.08 kg.

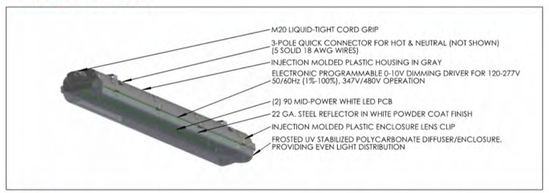
APPLICATION: The ILLUMINA® BS101LED provides ideal illumination for canopies, warehouses, schools, breezeways and service corridors.

CONFIGURATIONS

MODEL	LENGTH	OPERATION	LUMENS	COLOR TEMP	INPUT	MOUNTING	OPTIONS
BS101LED	4 (ft)	HT (AC only)	LO	WT35 (3500K)	120-277V	AC[1](aviation cable)	SS (stainless steel clips)
		SA* (AC & EM)	HO	WT40 (4000K)	347V	SPK[1](single pendant kit)	FP (fuse protection - 3A)
				WT50 (5000K)	480V	SVLSPK[2](swivel single pendant kit)	TPS[3](tamper proof screws)
						SVLDPK[2](swivel double pendant kit)	TPB (tamper proof under driver bit)
						DPK[2](double pendant kit)	NODL[4] (integrated node - LOGICA)
						CH[1](chain hang kit)	EOSL[5](external occupancy sensor - LOGICA)
						TM[3](trunnion mount)	EOS (external occupancy sensor)
						PM (pivot mount)	SP (surge protection - 10KA)
						JM[6] (junction mount)	B[7](black housing)
						QMB[3] (quick mount bracket)	W[7](white housing)
							FA*(fully assembled)
							D (dali driver)

NOTE 1: Emergency pack 120-277V, 10W, 1264 lm. CEC - Listed Title 20.
NOTE 2: Specify length for AC-SA*, 72", 100", 150", 250" fully adjustable.
NOTE 3: SPK, DPK, CH, TM, & SVLDPK options must specify length.
NOTE 4: JM option - the unit is no longer wet location, but damp location.
NOTE 5: QMB must be used with JM.
NOTE 6: 18-8 stainless steel screws.
NOTE 7: Logica (beghelli wireless and powerless control solutions). Contact factory for more details.
NOTE 8: Contact factory.
NOTE 9: Includes latches and grommets installed at the factory. Can be combined with the JM option.

TECHNICAL INFORMATION



Beghelli LUCE www.beghelliusa.com 8/19/19

Beghelli reserves the right to change, without notice, specifications or materials that in our opinion will not alter the function or performance of the product. Technical specifications that appear on www.beghelliusa.com supersede all other versions existing in print or electronic form.

FIXTURES TYPE 'SK'

SCALE: NONE

Catalog Number
Notes
Type

LITHONIA LIGHTING®

FEATURES & SPECIFICATIONS

INTENDED USE — Ideal for applications requiring low-profile, attractive emergency lighting with Optional normally-off or normally-on with photocell control. Provides a minimum of 90 minutes of illumination both indoors and outdoors upon loss of AC power. **Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate. Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.**

CONSTRUCTION — Compact, low-profile, architectural design with die-cast aluminum housing. Finishes are texturized powder coat paint for dark bronze, white, black and non-texturized for natural aluminum. Test switch indicator light and remote enabled are located on the bottom of the housing and are easily accessible and visible from the floor.

OPTICS — LEDs with L70 of 55,000 hours. Delivers 635 lumens in Normal-On and Emergency operation. Optional field configurable for wide and forward throw distribution **(DS Patent Pending)**. Outdoor wide throw distribution: 70' (3 path of egress) at a 7.5' mounting height with 1 FC Average.

4,000K correlated color temperature (CCT).

70 CRI.

ELECTRICAL — UVOLT (120 thru 347V, 50/60hz). Current-limiting charger maximizes battery life and minimizes energy consumption to provide low operating costs. Small battery chargers Certified in the CA Title 20 Appliance Efficiency Database

Short-circuit protection — current-limiting charger circuitry protects printed circuit board from shorts. Regulated charge voltage maintains a stable charge voltage over a wide range of line voltages.

Prevents over/undercharging that shortens battery life and reduces capacity. Filtered charger input minimizes charge voltage ripple and extends battery life.

Photocell option (PEL) for normally on product in order to discontinue illumination during periods when ambient light is present.

Remote units (DELR) are normally off. Emergency only functionality with DC power from an external battery.

BATTERY: Sealed, maintenance-free Lithium Iron Phosphate battery.

SELF-DIAGNOSTICS AND REMOTE TEST (SDRT OPTION): Automatic 24-hour recharge after a 90-minute discharge. Advanced electrical design provides constant light output throughout the entire discharge period for non-CW batteries. (For cold weather and cold temperature applications, the light may diminish though the discharge cycle). Brownout protection is automatically switched to emergency mode when supply voltage drops below approximately 80 percent nominal of 120, 220, 277 or 347. Other input voltage may vary. AC/LVD re- set allows battery connection before AC power is applied and prevents battery damage from deep discharge.

Self-Diagnostics: Continuously monitors AC functionality. Standard derangement monitoring will indicate disconnected battery, charger failure and displays green flashing indicator light while in emergency mode. Single multi-chromatic LED indicator to display two-state charging, test activation and three-state self-diagnostics.

Self-diagnostic testing: Five minutes every 30 days and 90 minutes annually. Diagnostic evaluation of lamps, AC to DC transfer, battery charging and condition of microprocessor. Automatic test is easily postponed for eight hours by activating manual test switch or use of remote tester (RTKIT accessory).

Manual testing: Test switch and remote tester (RTKIT accessory) provides manual activation of 60- second diagnostic testing for on- demand visual inspection. 90 minute manual testing can be enabled by pressing the test switch again while in test mode.

INSTALLATION — Wall mount; typically meets 7.5' to 14' mounting height from ground or floor. Power supplied by either mounting directly to a 4" square or 4" octagon j-box (wall mount) and accepts rigid or flex conduit.

LISTINGS — UL wet location listed standard at 32-122°F (0-50°C). Unit with CW battery(cold weather) listed for -22°F to 122°F (-30° to 50°C). Remote listed for -40°F to 122°F (-40° to 50°C). Meets or exceeds all applicable requirements for UL 924, NFPA 101 (current Life Safety code), NFPA 70 (NEC), NOM (Norma Oficial Mexicana), California Energy Commission Title 20 section 1605.3 (W)(4), FCC Title 47, Part 15, Subpart B and OSHA. List and labeled to comply with Canadian Standards C22.2 No. 141-10. Meets City of Chicago Code.

WARRANTY — 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/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.

† Small Battery Chargers Certified in the CA Title 20 Appliance Efficiency Database.

AFFINITY®

Premium Die-Cast Architectural Emergency Light

AFF

without photocell (white)

without photocell (natural aluminum)

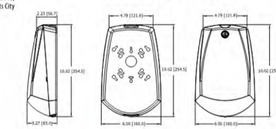
with photocell (white)

with photocell (dark bronze)

MOUNTING

All dimensions are inches (centimeters).
Shipping weight: 3.5 lbs. (1.59 kgs.)

Length: 6 1/2 (16.51)
Depth: 3 27/100 (8.30)
Height: 10 (25.45)
Weight : 3.5 lbs (1.59kg)



cULus LISTED LEED BC RoHS Compliant Title 20 FC

EMERGENCY AFF

FIXTURES TYPE 'EM'

SCALE: NONE

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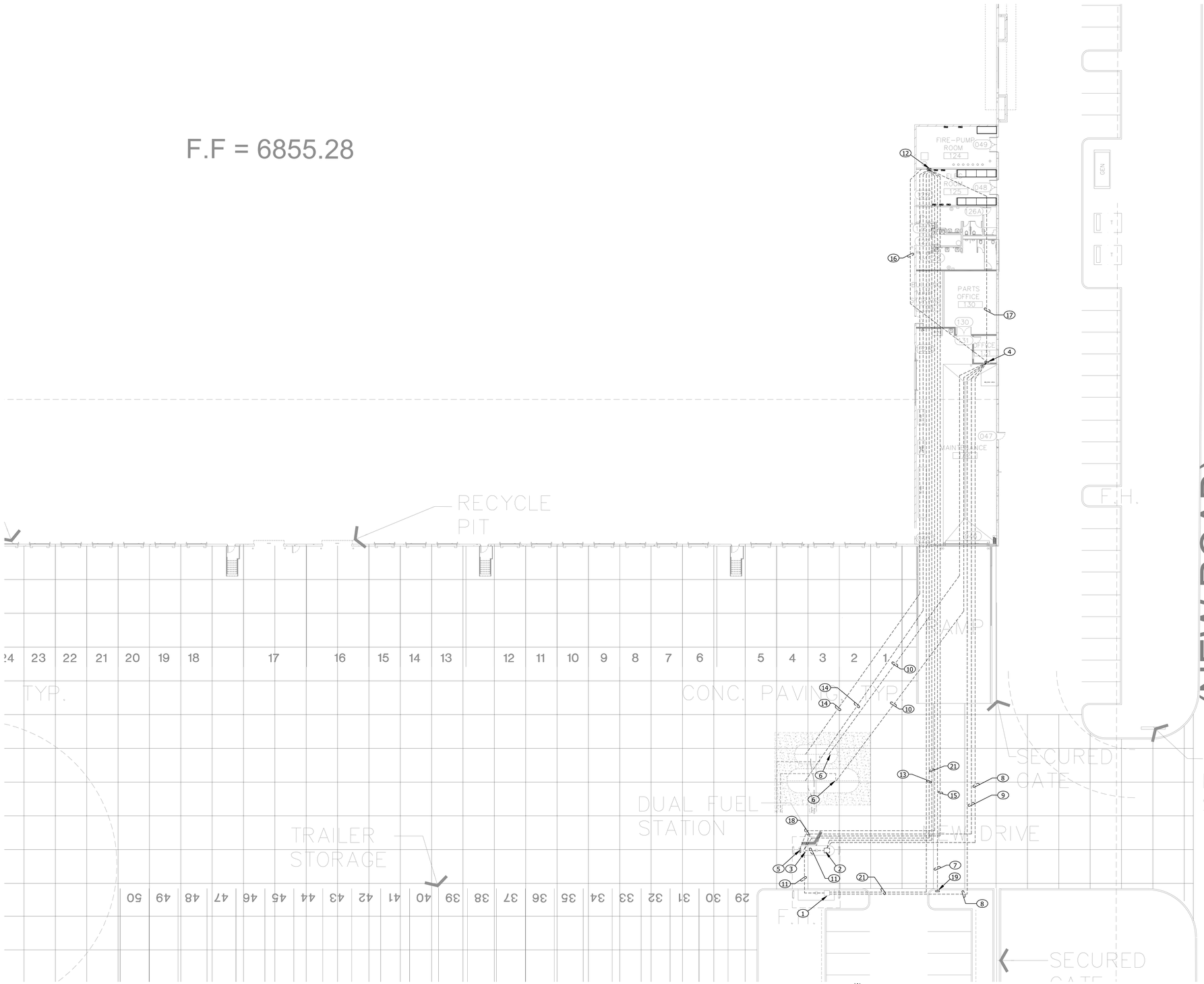
BRADEMER CONSULTING ENGINEERS, PLLC ARIZONA, U.S.A.

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: LIGHT FIXTURE CUT SHEETS

E014



1 FUEL STATION CONDUIT PLAN

SCALE: 1" = 20'-0"

GENERAL NOTES

A. ELECTRICAL CONTRACTOR TO PROVIDE SEAL-OFFS FOR ALL FUEL STATION CONDUITS PER NFPA CODE.

B. ELECTRICAL CONTRACTOR TO PREFER TO CONCURRENT FUEL STATION DESIGN PACKAGE FOR FINAL DEVICE LOCATIONS AND INSTALLATION REQUIREMENTS PRIOR TO BEGINNING WORK.

C. PROVIDE APPROPRIATELY SIZED CRISTY BOXES WHERE REQUIRED.

D. ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH NEC SECTION 514.

E. ELECTRICAL CONTRACTOR TO COORDINATE ALL WORK WITH FUEL SYSTEM CONTRACTOR.

F. PROVIDE CONDUIT SEAL-OFFS'S FOR ALL CONDUIT STUB-UPS AT PANEL STARTERS, CONTROL/MONITOR CABINETS, DISPENSERS. CARD KEY PEDESTALS, AND FUEL TANKS, PER NEC ARTICLE 500/514.

G. ALL WORK IN PITS OR DEPRESSIONS AND UP TO 18" ABOVE FINISH FLOOR OR RAISED CURB TO BE CLASS 1, DIVISION 1 COMPLAINT WITH NEC SECTIONS 501.

A KEYED NOTES:

1. FUTURE GASBOY ELECTRICAL SINGLE FUEL DISPENSER WITH OPEN CONTAINMENT PANS.
2. FUTURE GASBOY ELECTRICAL DOUBLE FUEL DISPENSER WITH OPEN CONTAINMENT PANS.
3. FUTURE PEDESTAL MOUNTED GASBOY TOPKAT FUEL MANAGEMENT SYSTEM W/CARD READER.
4. FUTURE VEEDER ROOT TLS-450 UST MONITORING SYSTEM.
5. FUTURE VEEDER ROOT OVERFILL ALARM PANEL.
6. FUTURE FUEL TANK VEEDER ROOT MONITORING PROBE.
7. PROVIDE (1) ¾" E.C. WITH PULLSTRING FROM EMERGENCY SHUT-OFF SWITCH TO POWER GUTTER/PANEL FS1. CAP AND MARK FOR FUTURE USE.
8. PROVIDE ¾" E.C. WITH PULLSTRING FROM DOUBLE DISPENSER TO PC. CAP AND MARK FOR FUTURE USE.
9. PROVIDE 1" E.C. WITH PULLSTRING FROM GASBOY TOPKAT FUEL MANAGEMENT SYSTEM TO VEENDER ROOT TLS-450 UST MONITORING SYSTEM. CAP AND MARK FOR FUTURE USE.
10. PROVIDE 1" E.C. FROM FUEL TANK V.R. MONITORING PROBE TO VEENDER ROOT TLS-450 UST MONITORING SYSTEM. CAP AND MARK FOR FUTURE USE.
11. PROVIDE (2) ¾" E.C. WITH PULLSTRING FROM GASBOY TOPKAT FUEL MANAGEMENT SYSTEM TO DISPENSER. CAP AND MARK FOR FUTURE USE.
12. FUTURE PANEL FS1, 100A, 120/208V, 3PH, 4W WITH SHUNT TRIP MAIN CIRCUIT BREAKER AND POWER GUTTER.
13. PROVIDE (1) E.C. WITH PULLSTRING & (1) ¾" E.C. WITH PULLSTRING FROM GASBOY TOPKAT FUEL MANAGEMENT SYSTEM TO POWER GUTTER/PANEL FS1. CAP AND MARK FOR FUTURE USE.
14. PROVIDE (2) ¾" E.C. WITH PULLSTRING FROM EACH FUEL TANK SUBMERSIBLE PUMP TO POWER GUTTER/PANEL FS1. 1 FOR POWER & 1 FOR SENSOR. CAP AND MARK FOR FUTURE USE. COORDINATE FINAL NUMBER OF SUBMERSIBLE PUMPS PER TANK WITH MANUFACTURER'S PLANS AND SPECIFICATIONS PRIOR TO BEGINNING WORK AND ADJUST CONDUIT QUANTITY AS NECESSARY.
15. PROVIDE (1) 1" E.C. WITH PULLSTRING FROM FUEL STATION CANOPY COLUMN TO POWER GUTTER/PANEL FS1 FOR FUTURE CANOPY LIGHTING. CAP AND MARK FOR FUTURE USE.
16. PROVIDE (1) 1" E.C. WITH PULLSTRING FROM VEEDER ROOT TLS-450 UST MONITORING SYSTEM TO TMB. CAP AND MARK FOR FUTURE USE.
17. PROVIDE (1) 1" E.C. WITH PULLSTRING FROM VEEDER ROOT TLS-450 UST MONITORING SYSTEM TO POWER GUTTER/PANEL FS1.
18. PROVIDE (1) ¾" E.C. WITH PULLSTRING FROM VEEDER ROOT OVERFILL ALARM PANEL TO POWER GUTTER/PANEL FS1. CAP AND MARK FOR FUTURE USE.
19. FUTURE RACK MOUNTED EMERGENCY SHUT-OFF SWITCH LOCATED A MINIMUM OF 25' FROM FUEL STATION. COORDINATE EXACT LOCATION WITH CONCURRENT FUEL STATION DESIGN PRIOR TO BEGINNING WORK.
20. PROVIDE (1) ¾" E.C. WITH PULLSTRING FROM EMERGENCY SHUT-OFF SWITCH TO POWER GUTTER/PANEL FS1. CAP AND MARK FOR FUTURE USE.
21. PROVIDE (1) ¾" E.C. WITH PULL STRING FROM DISPENSER TO POWER GUTTER/PANEL FS1. CAP AND MARK FOR FUTURE USE.

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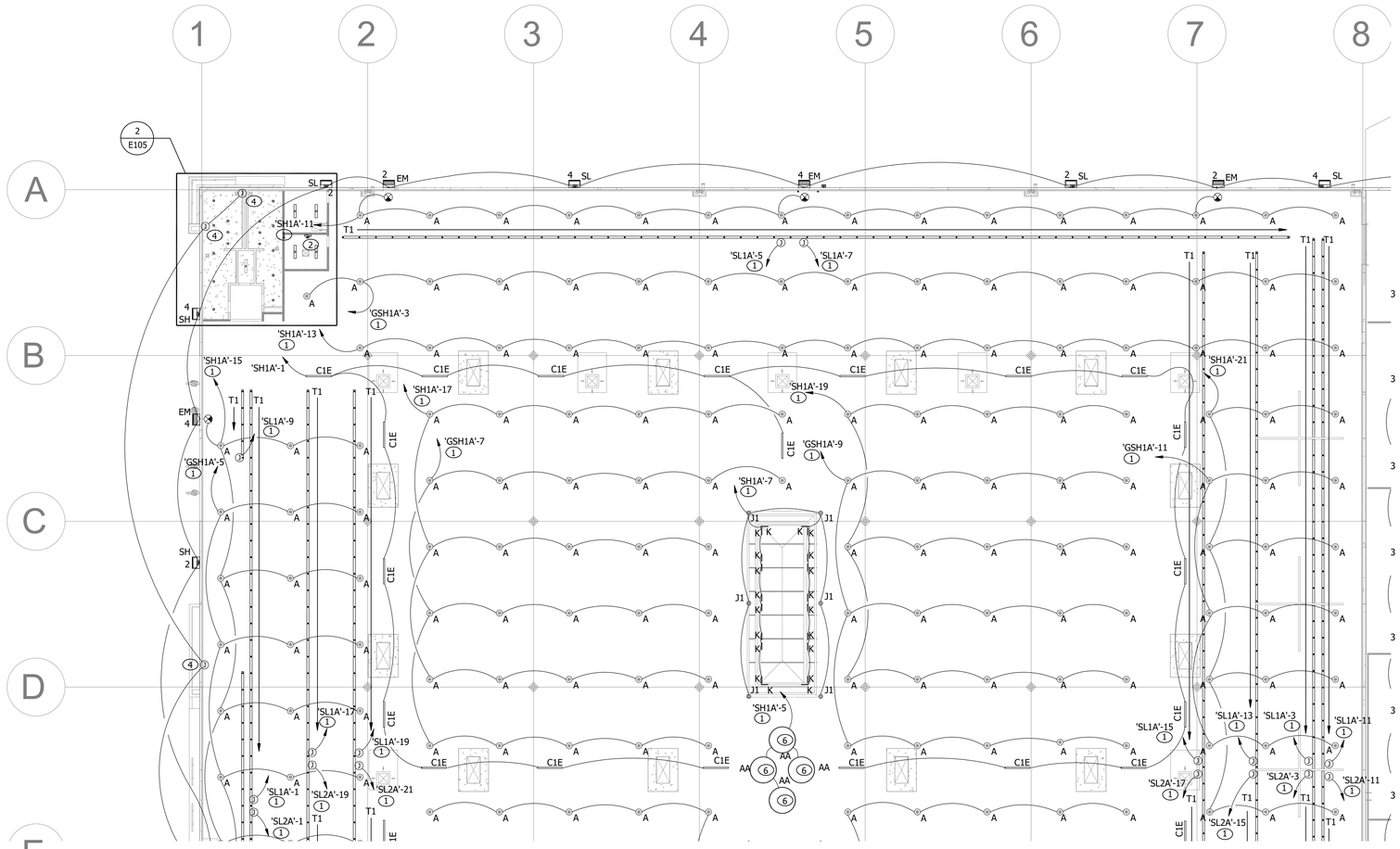
COLORADO SPRINGS, CO

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:
Title: FUEL STATION CONDUIT PLAN

E015



1 SHOWROOM LIGHTING PLAN-NORTH

SCALE: 1" = 20'-0"

GENERAL NOTES

A. EMERGENCY LIGHTING LAY-OUT COMPLIES WITH 2012 IBC 1006.3 REQUIREMENTS PER MANUFACTURER'S PHOTOMETRY.

B. ELECTRICAL CONTRACTOR TO ENSURE FINAL EXIT SIGN PLACEMENT COMPLIES WITH 2012 IBC 1011.1 REQUIREMENTS.

C. CONDUCTOR SIZES FOR 120V LIGHTING: HOMERUNS LESS THAN 70 FEET, NUMBER 12 AWG: 70 TO 115 FEET, NUMBER 10 AWG, 115' TO 175', MORE THAN 175', NUMBER 6 AWG.

D. CONDUCTOR SIZES FOR 277V LIGHTING: HOMERUNS LESS THAN 150 FEET, NUMBER 12 AWG: 150 TO 260' FEET, NUMBER 10 AWG, 260' TO 400', NUMBER 8 AWG, MORE THAN 400', NUMBER 6 AWG.

E. AISLE LIGHTS SHALL BE MOUNTED AT 14'-0" A.F.F. UNLESS NOTED OTHERWISE.

(#) KEYED NOTES:

(NOT ALL NOTES MAY BE USED ON THIS SHEET)

1. CIRCUIT VIA LIGHTING CONTROL PANEL (ALL LIGHTING) IN RESPECTIVE ELEC ROOM. PROVIDE HOT LEG AHEAD OF LIGHTING CONTROL PANEL FOR CONNECTION TO EMERGENCY BATTERY PACKS FOR APPLICABLE CIRCUITS. PROVIDE LOW VOLTAGE SWITCH, LOCATED IN SALES MANAGER'S OFFICE. COORDINATE FINAL OVERRIDE SWITCH LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK. PROVIDE UNIQUE CONTROL DESIGNATION PER CIRCUIT.
2. PROVIDE (1) 48 RELAY LX SERIES LIGHTING CONTROL PANELS.
3. NOT USED.
4. PROVIDE JUNCTION BOX(ES) AND LED TAPE LIGHT (ACCLAIM LIGHTING # FLEXOH4) FOR TOWER ELEMENT BACKLIGHTING. REFER TO ARCHITECTURAL DETAILS ON SHEETS A403 & A505 FOR QUANTITY/LENGTH (1100 FEET +/- TOTAL), LOCATION, AND INSTALLATION REQUIREMENTS PRIOR TO PURCHASE. PROVIDE ALL COMPONENTS (POWER SUPPLIES, CONNECTORS, CHANNELS, ETC.) FOR A COMPLETE SYSTEM.
5. CIRCUIT VIA TIMECLOCK WITH #8S. PROVIDE HOT LEG AHEAD OF TIMECLOCK FOR EXTERIOR EMERGENCY LIGHTING WHERE REQUIRED.
6. DECORATIVE CIRCULAR PENDANTS SHALL BE MOUNTED AT 14'-0".

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PRELIMINARY NOT FOR CONSTRUCTION
ARIZONA, U.S.A.

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

BUILDING KEY PLAN

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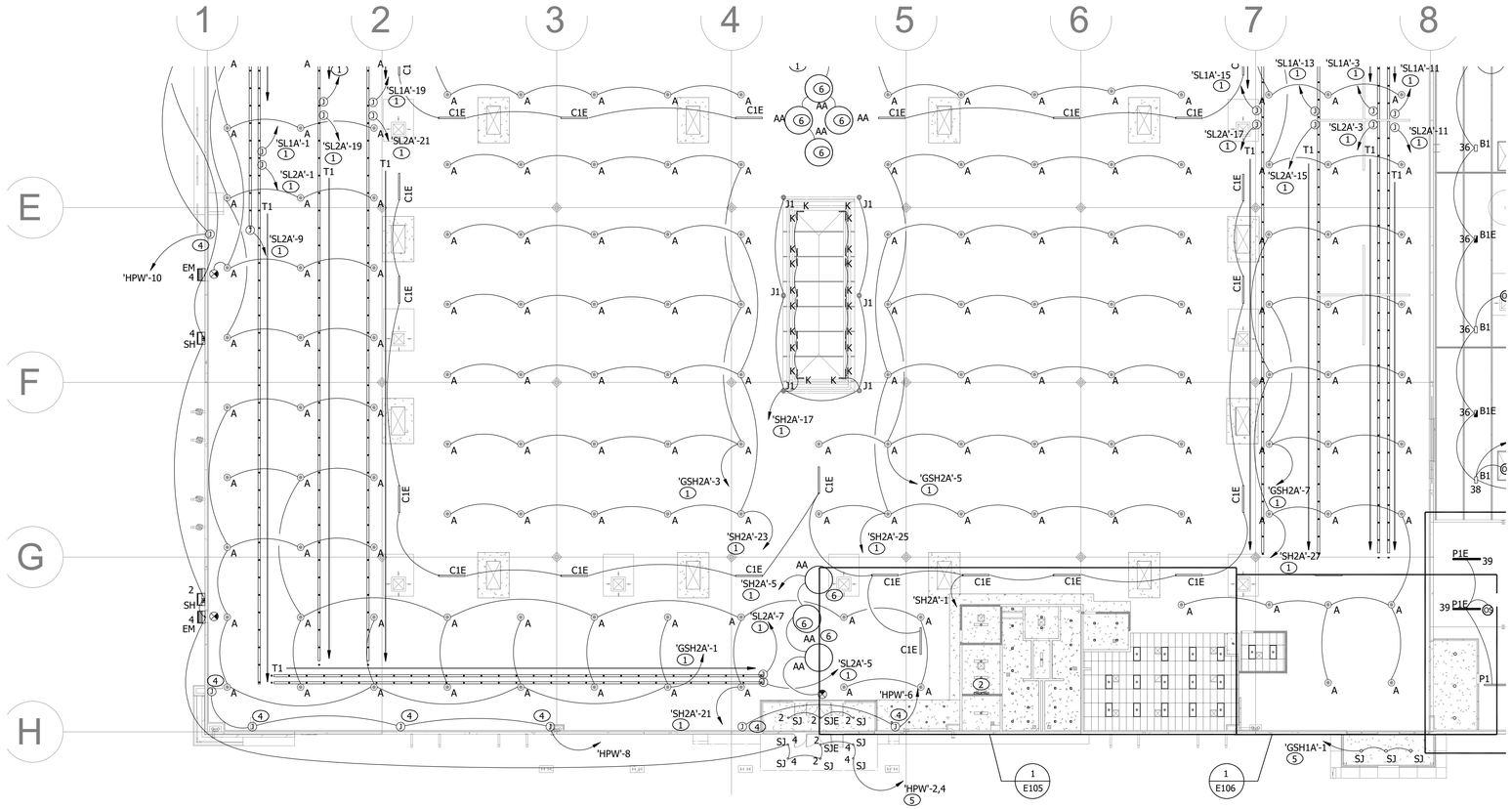
Mechanical and Electrical Engineers
2050 West Whispering Wind Dr., Suite 158
Phoenix, Arizona 85085-2864
(602) 285-1669
(602) 285-1450 - fax
JOB # 21-120A

Project Number: 20068.100
Drawn By:
Title: PARTIAL SHOWROOM LIGHTING PLAN

E101



1 SHOWROOM LIGHTING PLAN-SOUTH

SCALE: 1" = 20'-0"

GENERAL NOTES

A. EMERGENCY LIGHTING LAY-OUT COMPLIES WITH 2012 IBC 1006.3 REQUIREMENTS PER MANUFACTURER'S PHOTOMETRY.

B. ELECTRICAL CONTRACTOR TO ENSURE FINAL EXIT SIGN PLACEMENT COMPLIES WITH 2012 IBC 1011.1 REQUIREMENTS.

C. CONDUCTOR SIZES FOR 120V LIGHTING: HOMERUNS LESS THAN 70 FEET, NUMBER 12 AWG: 70 TO 115 FEET, NUMBER 10 AWG, 115' TO 175', MORE THAN 175', NUMBER 6 AWG.

D. CONDUCTOR SIZES FOR 277V LIGHTING: HOMERUNS LESS THAN 150 FEET, NUMBER 12 AWG: 150 TO 260' FEET, NUMBER 10 AWG, 260' TO 400', NUMBER 8 AWG, MORE THAN 400', NUMBER 6 AWG.

E. AISLE LIGHTS SHALL BE MOUNTED AT 14'-0" A.F.F. UNLESS NOTED OTHERWISE.

#KEYED NOTES:

(NOT ALL NOTES MAY BE USED ON THIS SHEET)

1. CIRCUIT VIA LIGHTING CONTROL PANEL (ALL LIGHTING) IN RESPECTIVE ELEC ROOM. PROVIDE HOT LEG AHEAD OF LIGHTING CONTROL PANEL FOR CONNECTION TO EMERGENCY BATTERY PACKS FOR APPLICABLE CIRCUITS. PROVIDE LOW VOLTAGE SWITCH, LOCATED IN SALES MANAGER'S OFFICE. COORDINATE FINAL OVERRIDE SWITCH LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK. PROVIDE UNIQUE CONTROL DESIGNATION PER CIRCUIT.
2. PROVIDE (1) 48 RELAY LX SERIES LIGHTING CONTROL PANELS.
3. NOT USED.
4. PROVIDE JUNCTION BOX(ES) AND LED TAPE LIGHT (ACCLAIM LIGHTING # FLEXOH4) FOR TOWER ELEMENT BACKLIGHTING. REFER TO ARCHITECTURAL DETAILS ON SHEETS A403 & A505 FOR QUANTITY/LENGTH (1100 FEET +/- TOTAL), LOCATION, AND INSTALLATION REQUIREMENTS PRIOR TO PURCHASE. PROVIDE ALL COMPONENTS (POWER SUPPLIES, CONNECTORS, CHANNELS, ETC.) FOR A COMPLETE SYSTEM.
5. CIRCUIT VIA TIMECLOCK WITH #8S. PROVIDE HOT LEG AHEAD OF TIMECLOCK FOR EXTERIOR EMERGENCY LIGHTING WHERE REQUIRED.
6. DECORATIVE CIRCULAR PENDANTS SHALL BE MOUNTED AT 14'-0".

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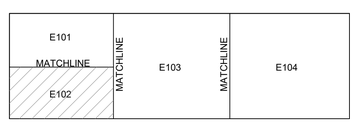
Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: PARTIAL SHOWROOM LIGHTING PLAN

E102



BUILDING KEY PLAN

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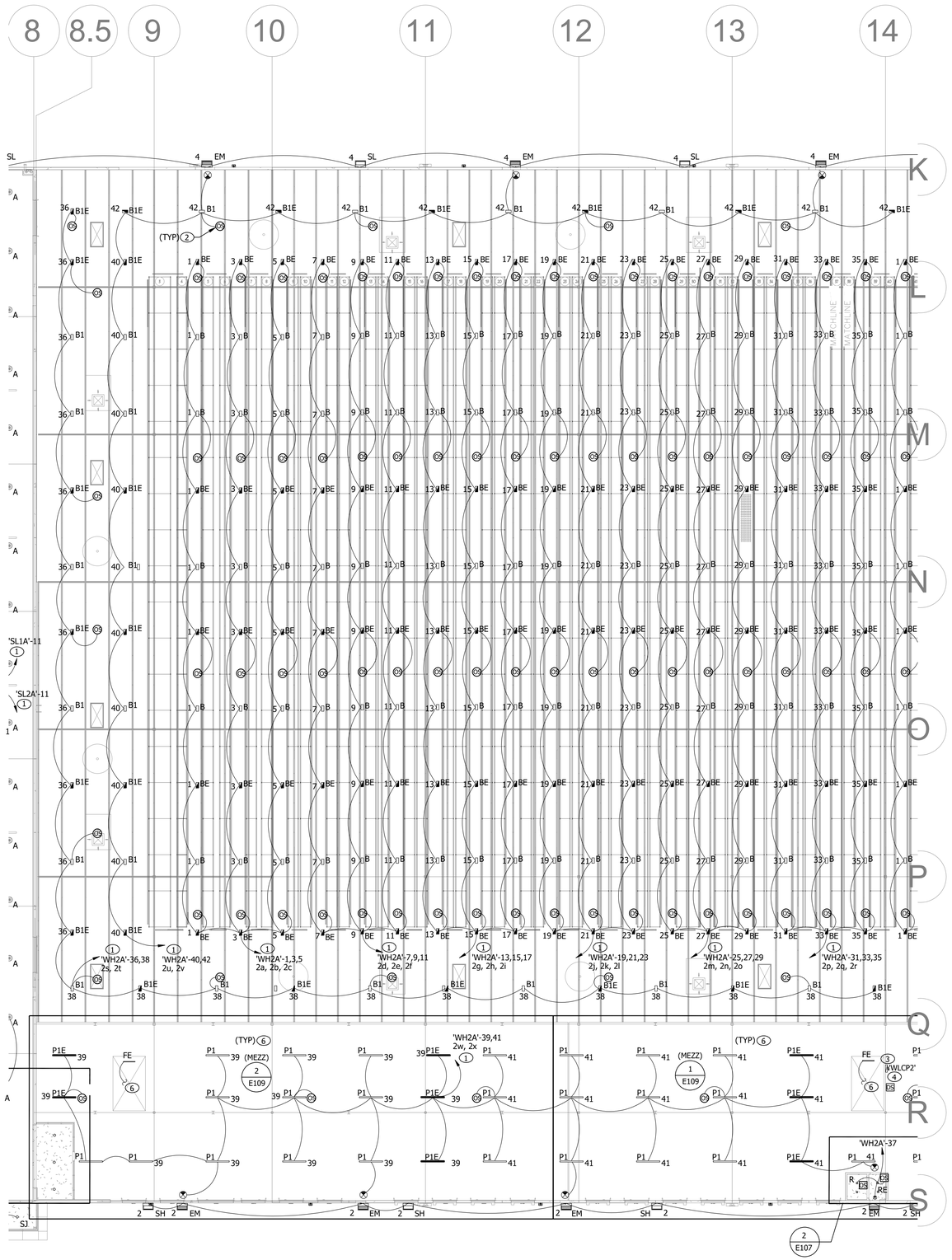

1 WAREHOUSE LIGHTING PLAN - WEST

SCALE: 1" = 20'-0"

GENERAL NOTES

A. EMERGENCY LIGHTING LAY-OUT COMPLIES WITH 2012 IBC 1006.3 REQUIREMENTS PER MANUFACTURER'S PHOTOMETRY.

B. ELECTRICAL CONTRACTOR TO ENSURE FINAL EXIT SIGN PLACEMENT COMPLIES WITH 2012 IBC 1011.1 REQUIREMENTS.

C. CONDUCTOR SIZES FOR 120V LIGHTING: HOMERUNS LESS THAN 70 FEET, NUMBER 12 AWG: 70 TO 115 FEET, NUMBER 10 AWG, 115' TO 175', NUMBER 8 AWG, MORE THAN 175', NUMBER 6 AWG.

D. CONDUCTOR SIZES FOR 277V LIGHTING: HOMERUNS LESS THAN 150 FEET, NUMBER 12 AWG: 150 TO 260' FEET, NUMBER 10 AWG, 260' TO 400', NUMBER 8 AWG, MORE THAN 400', NUMBER 6 AWG.

E. ALL WAREHOUSE FIXTURES SHALL BE MOUNTED AT 36'-0" A.F.F. UNLESS NOTED OTHERWISE.

F. UNDERNEATH MEZZANINE VERTICAL CONDUITS ARE TO BE RUN WITHIN WIDE FLANGE WEB. ELECTRICAL CONTRACTOR TO CONFIRM FINAL INSTALLATION ALLOWS FOR COLUMN PROTECTORS TO FIT.

#KEYED NOTES:

(NOT ALL NOTES MAY BE USED ON THIS SHEET)

1. CIRCUIT VIA LIGHTING CONTROL PANEL RESPECTIVE ELEC ROOM. PROVIDE LOW VOLTAGE OVERRIDE SWITCH FOR EACH RELAY. COORDINATE FINAL OVERRIDE SWITCH LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. PROVIDE HUBBEL CEILING MOUNTED HIGH BAY MOTION SENSOR, DUEL CIRCUIT WHERE REQUIRED. PROVIDE POWER PACKS PER MANUFACTURER'S REQUIREMENTS. ENSURE FINAL LAY-OUT PROVIDES FULL COVERAGE OF AREA. COORDINATE FINAL MOUNTING HEIGHT WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
3. PROVIDE 32 RELAY LX SERIES LIGHTING CONTROL PANEL.
4. LOW VOLTAGE OVERRIDE SWITCH BANK. QUANTITY AS REQUIRED. COORDINATE WITH ARCHITECTURAL PLANS FOR EXACT LOCATION PRIOR TO BEGINNING WORK.
5. CIRCUIT VIA TIMECLOCK WITH #8S. PROVIDE HOT LEG AHEAD OF TIMECLOCK FOR EXTERIOR EMERGENCY LIGHTING WHERE REQUIRED.
6. PENDANT MOUNT @ +96" ABOVE 1ST LANDING.

E101			
MATCHLINE	MATCHLINE	E103	MATCHLINE	E104
E102			

BUILDING KEY PLAN

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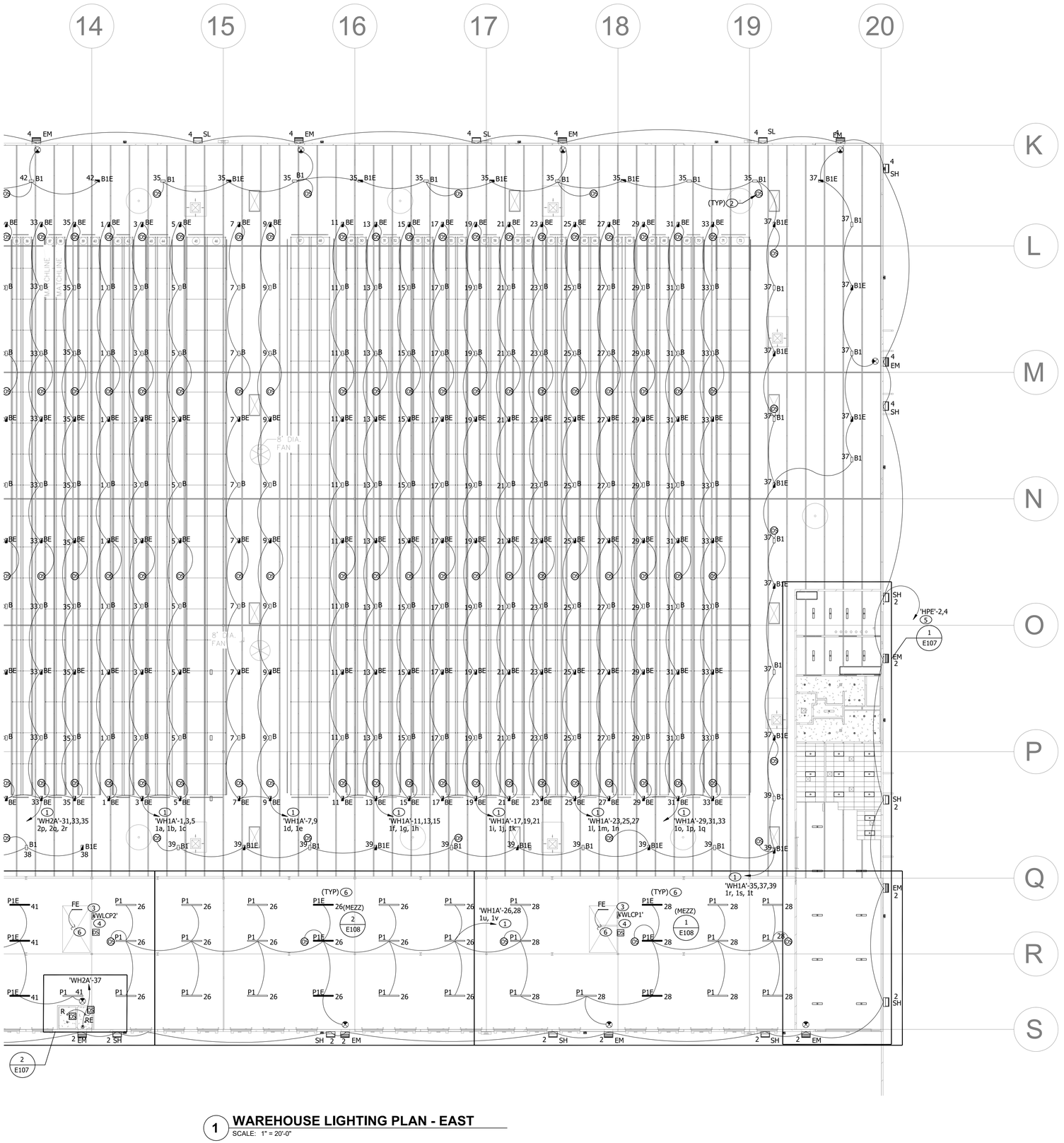
COLORADO SPRINGS, CO

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:
Title: PARTIAL WAREHOUSE LIGHTING PLAN

E103



1 WAREHOUSE LIGHTING PLAN - EAST

SCALE: 1" = 20'-0"

GENERAL NOTES

A. EMERGENCY LIGHTING LAY-OUT COMPLIES WITH 2012 IBC 10006.3 REQUIREMENTS PER MANUFACTURER'S PHOTOMETRY.

B. ELECTRICAL CONTRACTOR TO ENSURE FINAL EXIT SIGN PLACEMENT COMPLIES WITH 2012 IBC 1011.1 REQUIREMENTS.

C. CONDUCTOR SIZES FOR 120V LIGHTING: HOMERUNS LESS THAN 70 FEET, NUMBER 12 AWG: 70 TO 115 FEET, NUMBER 10 AWG, 115' TO 175', NUMBER 8 AWG, MORE THAN 175', NUMBER 6 AWG.

D. CONDUCTOR SIZES FOR 277V LIGHTING: HOMERUNS LESS THAN 150 FEET, NUMBER 12 AWG: 150 TO 260' FEET, NUMBER 10 AWG, 260' TO 400', NUMBER 8 AWG, MORE THAN 400', NUMBER 6 AWG.

E. ALL WAREHOUSE FIXTURES SHALL BE MOUNTED AT 36'-0" A.F.F. UNLESS NOTED OTHERWISE.

F. UNDERNEATH MEZZANINE VERTICAL CONDUITS ARE TO BE RUN WITHIN WIDE FLANGE WEB. ELECTRICAL CONTRACTOR TO CONFIRM FINAL INSTALLATION ALLOWS FOR COLUMN PROTECTORS TO FIT.

#KEYED NOTES:

(NOT ALL NOTES MAY BE USED ON THIS SHEET)

1. CIRCUIT VIA LIGHTING CONTROL PANEL RESPECTIVE ELEC ROOM. PROVIDE LOW VOLTAGE OVERRIDE SWITCH FOR EACH RELAY. COORDINATE FINAL OVERRIDE SWITCH LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. PROVIDE HUBBELL CEILING MOUNTED HIGH BAY MOTION SENSOR, DUAL CIRCUIT WHERE REQUIRED. PROVIDE POWER PACKS PER MANUFACTURER'S REQUIREMENTS. ENSURE FINAL LAY-OUT PROVIDES FULL COVERAGE OF AREA. COORDINATE FINAL MOUNTING HEIGHT WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
3. PROVIDE 32 RELAY LX SERIES LIGHTING CONTROL PANEL.
4. LOW VOLTAGE OVERRIDE SWITCH BANK. QUANTITY AS REQUIRED. COORDINATE WITH ARCHITECTURAL PLANS FOR EXACT LOCATION PRIOR TO BEGINNING WORK.
5. CIRCUIT VIA TIMECLOCK WITH #8S. PROVIDE HOT LEG AHEAD OF TIMECLOCK FOR EXTERIOR EMERGENCY LIGHTING WHERE REQUIRED.
6. PENDANT MOUNT @ +96" ABOVE 1ST LANDING.

E101 MATCHLINE E102	MATCHLINE E103 MATCHLINE	E104

BUILDING KEY PLAN

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JABS HEIGHTS & TUTT BOULEVARD
COLORADO SPRINGS, CO

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

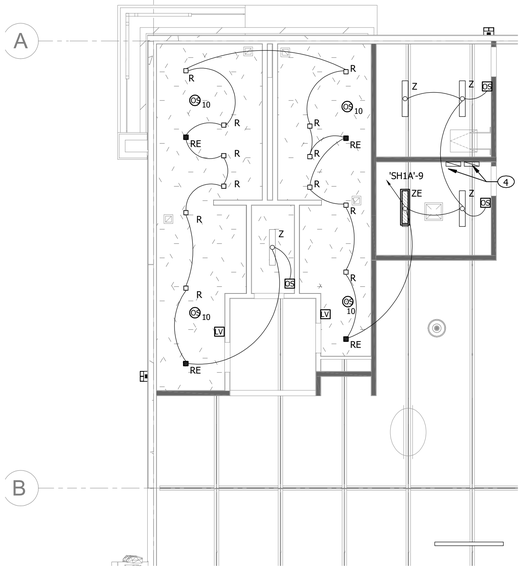
Project Number: 20068.100
Drawn By:

Title: PARTIAL WAREHOUSE LIGHTING PLAN

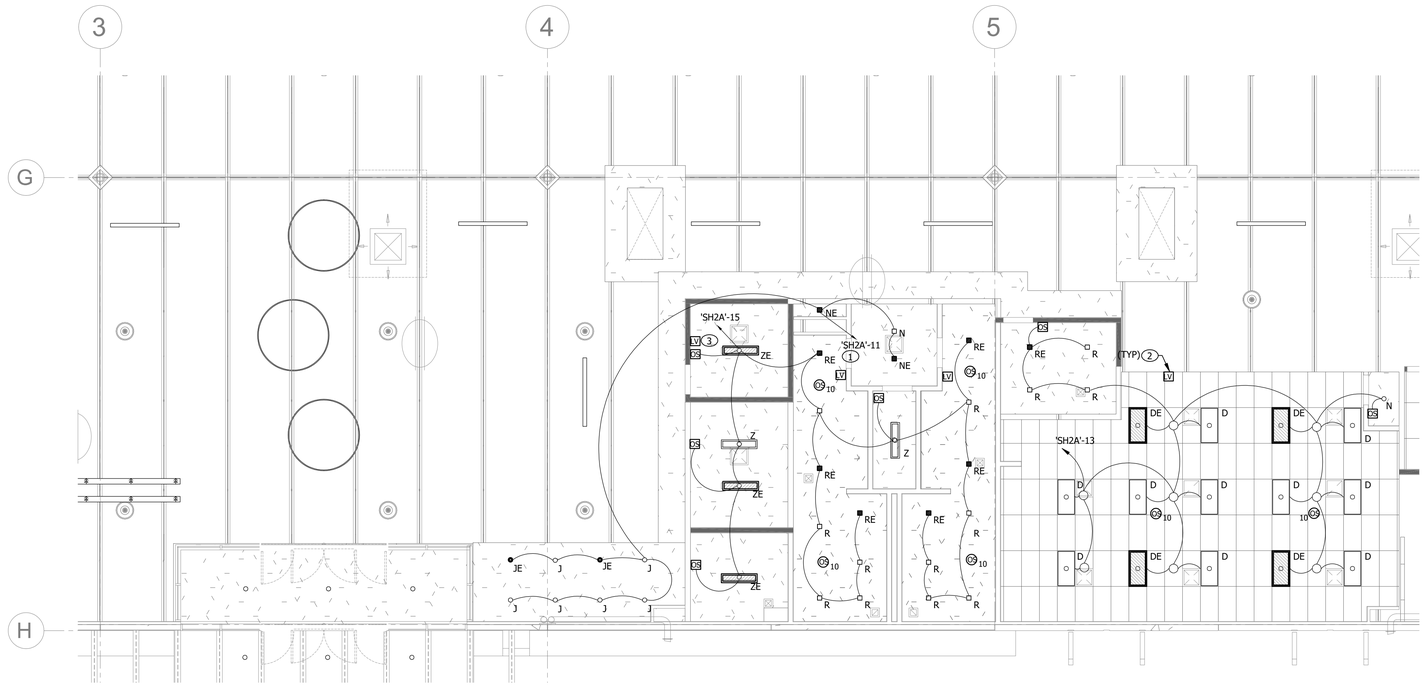
E104

KEYED NOTES:

1. CIRCUIT VIA LIGHTING CONTROL PANEL IN RESPECTIVE ELEC ROOM. PROVIDE LOW VOLTAGE OVERRIDE SWITCH FOR EACH RELAY. COORDINATE FINAL OVERRIDE SWITCH LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. LOW VOLTAGE OVERRIDE SWITCH BANK. QUANTITY AS REQUIRED. COORDINATE WITH ARCHITECTURAL PLANS FOR EXACT LOCATION PRIOR TO BEGINNING WORK.
3. LOW VOLTAGE OVERRIDE SWITCHBANK FOR SHOWROOM LIGHTING. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO BEGINNING WORK.
4. PROVIDE 48 RELAY LX SERIES LIGHTING CONTROL PANEL.



2 **ENLARGE LTG PLAN-SHOWROOM OFFICES**
SCALE: 1/8" = 1'-0"



1 **ENLARGE LTG PLAN- SHOWROOM ENTRY**
SCALE: 1/8" = 1'-0"

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Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: ENLARGED MAIN ENTRY-OFFICES LTG

E105

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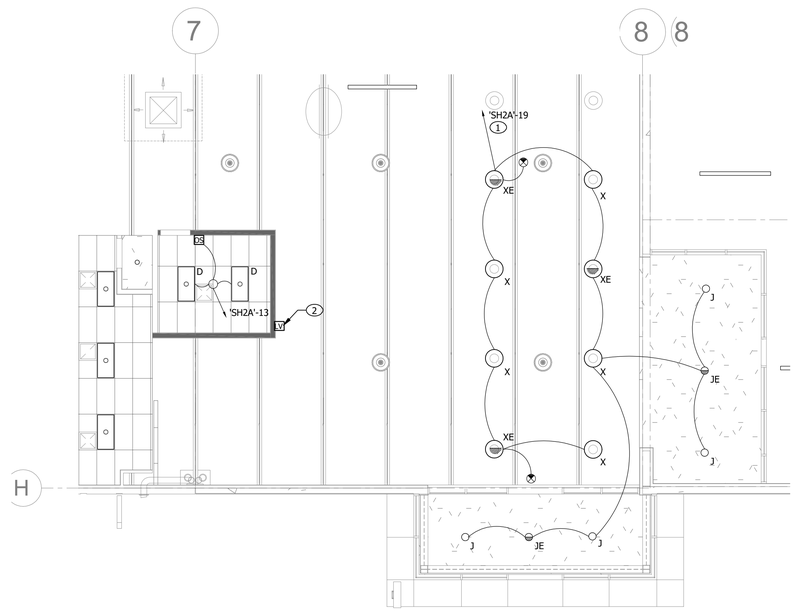
KEYED NOTES:

1. CIRCUIT VIA LIGHTING CONTROL PANEL IN RESPECTIVE ELEC ROOM. PROVIDE LOW VOLTAGE OVERRIDE SWITCH FOR EACH RELAY. COORDINATE FINAL OVERRIDE SWITCH LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. DECORATIVE PENDANTS SHALL BE MOUNTED AT 14'-0" A.F.F.
3. LOW VOLTAGE OVERRIDE SWITCH BANK. QUANTITY AS REQUIRED. COORDINATE WITH ARCHITECTURAL PLANS FOR EXACT LOCATION PRIOR TO BEGINNING WORK.



1 ENLARGE LTG PLAN-CAFE-CUSTOMER PICKUP
SCALE: 1/8" = 1'-0"

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COLORADO SPRINGS, CO

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: ENLARGED CAFE CUST-PICKUP/SALES MEZZ LTG

E106

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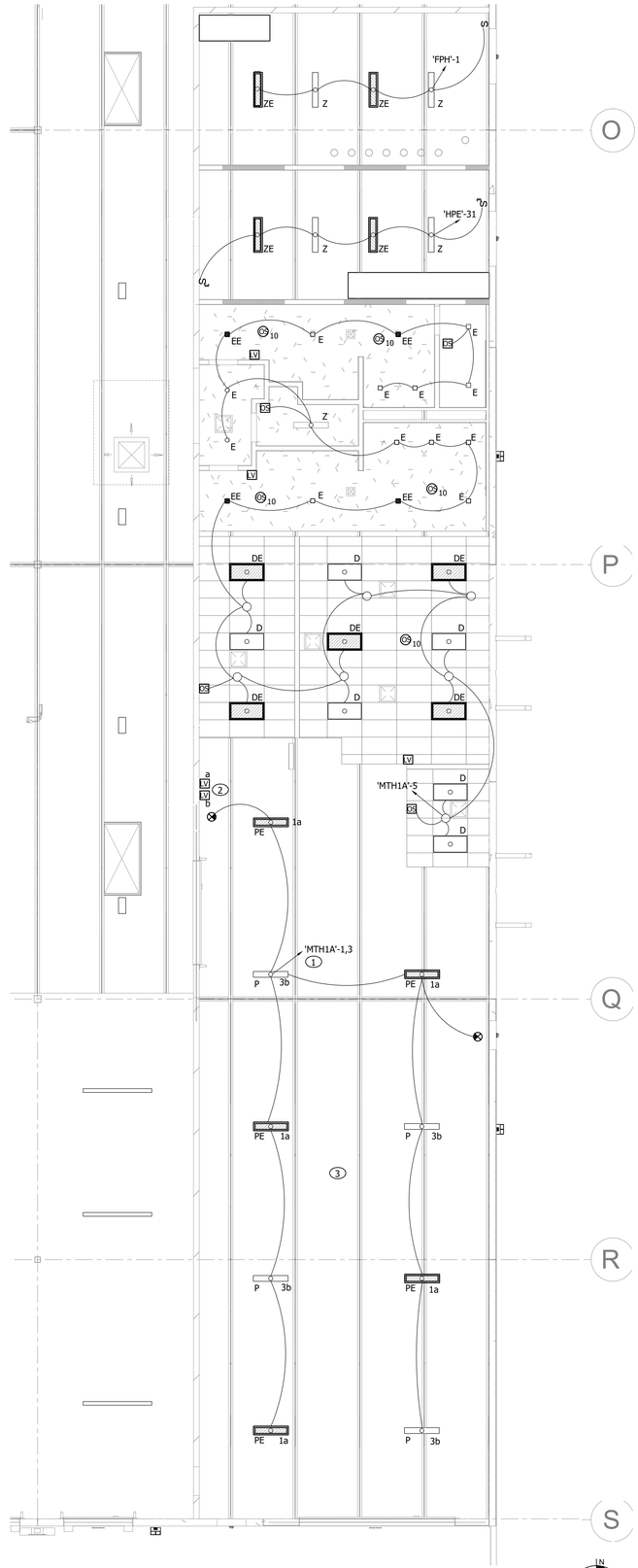
2 WAREHOUSE RESTROOM LTG PLAN

SCALE: 1/4" = 1'-0"



1 ENLARGED LTG PLAN- MAINTENANCE

SCALE: 1/8" = 1'-0"

ⓝ KEYED NOTES:

1. CIRCUIT VIA LIGHTING CONTROL PANEL IN RESPECTIVE ELEC ROOM. PROVIDE LOW VOLTAGE OVERRIDE SWITCH FOR EACH RELAY. COORDINATE FINAL OVERRIDE SWITCH LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. LOW VOLTAGE OVERRIDE SWITCH BANK. QUANTITY AS REQUIRED. COORDINATE WITH ARCHITECTURAL PLANS FOR EXACT LOCATION PRIOR TO BEGINNING WORK.
3. ALL ELECTRICAL DEVICES SHALL BE INSTALLED AT A MINIMUM OF 20" TO BOTTOM OF DEVICE. ALL WORK IN THIS AREA TO BE PERFORMED IN COMPLIANCE WITH N.E.C. ARTICLE 511.

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Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:
Title: ENLARGED MAINTENANCE LTG PLAN

E107

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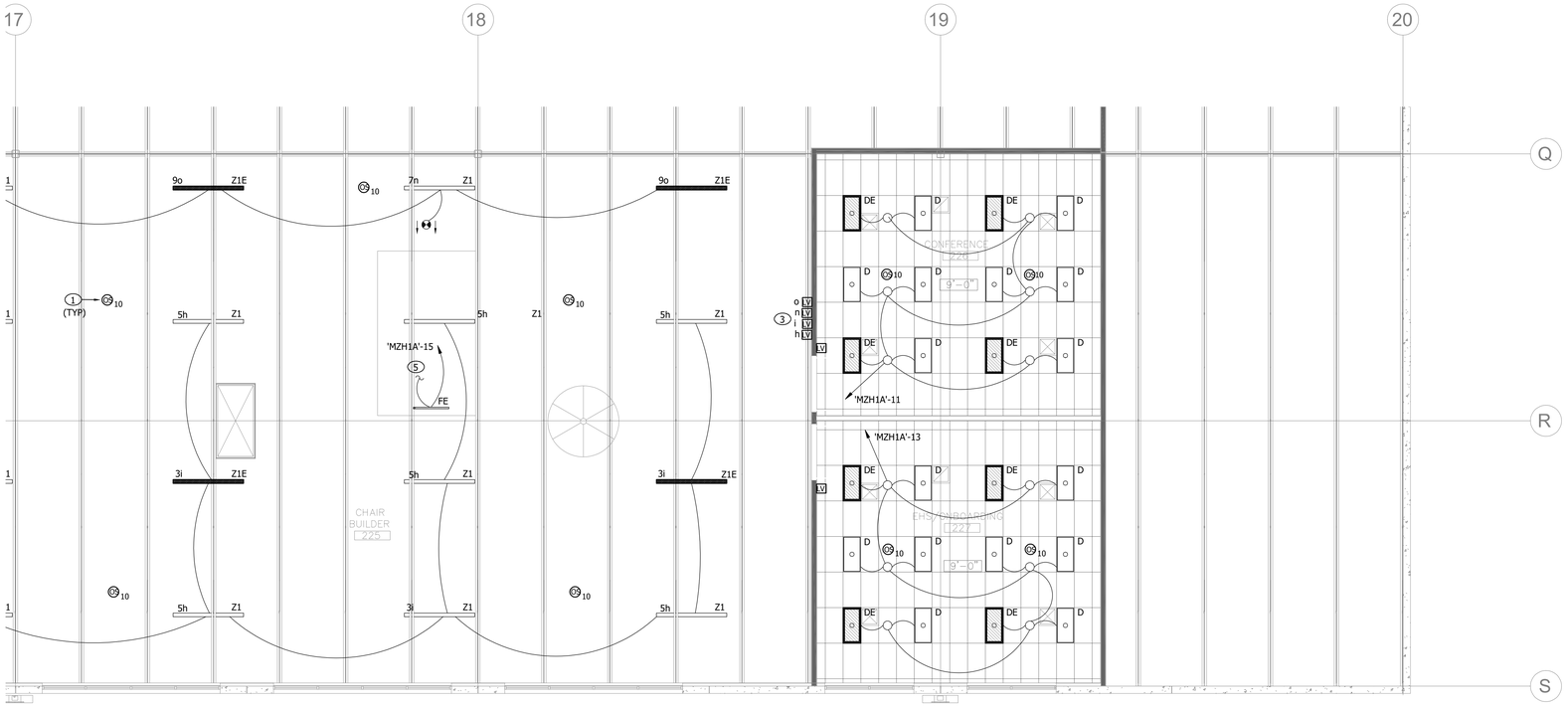
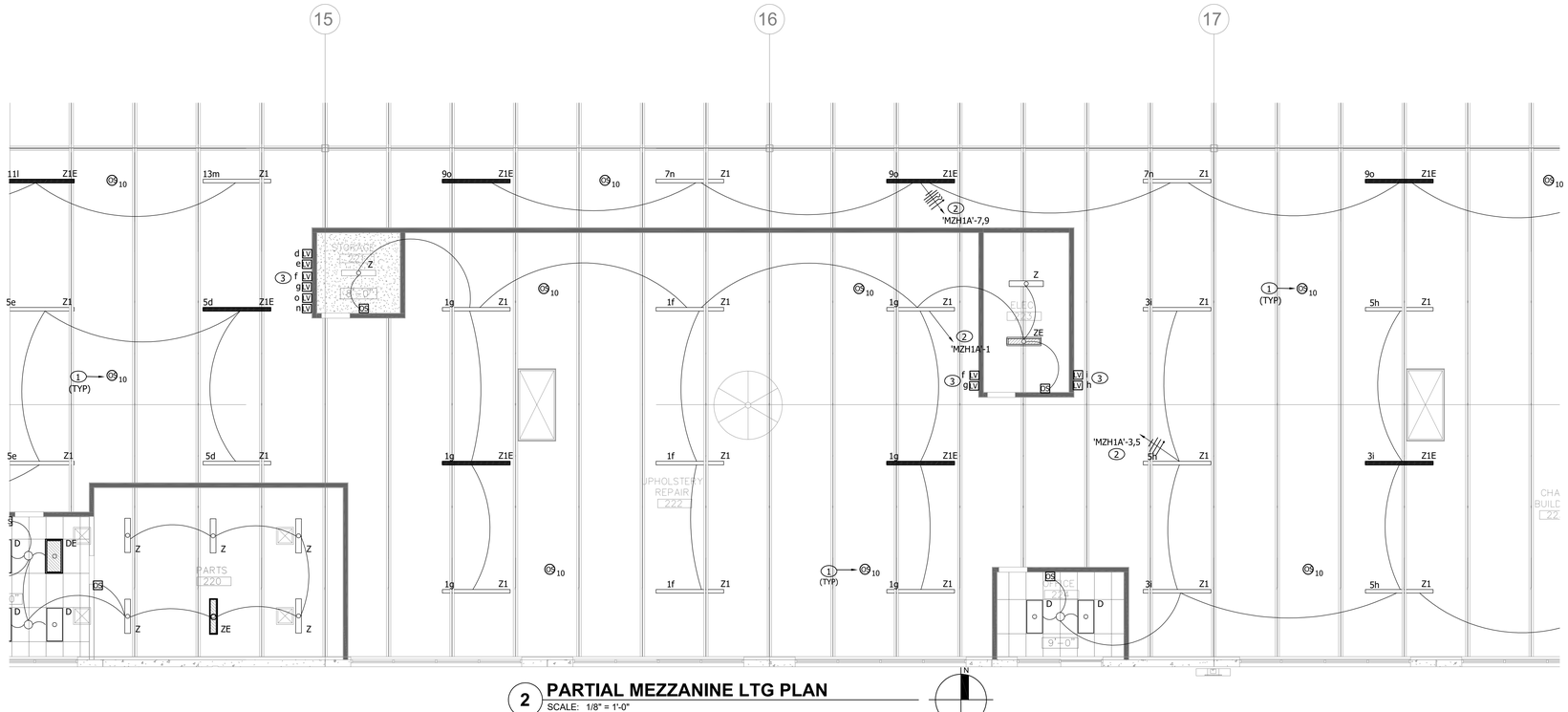


1 PARTIAL MEZZANINE LTG PLAN

SCALE: 1/8" = 1'-0"



2 PARTIAL MEZZANINE LTG PLAN

SCALE: 1/8" = 1'-0"

GENERAL NOTES

A. CONDUCTOR SIZES FOR 120V LIGHTING: HOMERUNS LESS THAN 70 FEET, NUMBER 12 AWG: 70 TO 115 FEET, NUMBER 10 AWG, 115' TO 175', NUMBER 8 AWG, MORE THAN 175', NUMBER 6 AWG.

B. CONDUCTOR SIZES FOR 277V LIGHTING: HOMERUNS LESS THAN 150 FEET, NUMBER 12 AWG: 150 TO 260' FEET, NUMBER 10 AWG, 260' TO 400', NUMBER 8 AWG, MORE THAN 400', NUMBER 6 AWG.

#KEYED NOTES:

1. PROVIDE HUBBELL CEILING MOUNTED MOTION SENSOR, MULTI-CIRCUIT WHERE REQUIRED. PROVIDE POWER PACKS PER MANUFACTURER'S REQUIREMENTS. ENSURE FINAL LAY-OUT PROVIDES FULL COVERAGE OF AREA. COORDINATE FINAL MOUNTING HEIGHT WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. CIRCUIT VIA LIGHTING CONTROL PANEL RESPECTIVE ELEC ROOM. PROVIDE LOW VOLTAGE OVERRIDE SWITCH FOR EACH RELAY. COORDINATE FINAL OVERRIDE SWITCH LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
3. LOW VOLTAGE OVERRIDE SWITCH BANK. QUANTITY AS REQUIRED. COORDINATE WITH ARCHITECTURAL PLANS FOR EXACT LOCATION PRIOR TO BEGINNING WORK.
4. PROVIDE 16 RELAY LX SERIES LIGHTING CONTROL PANEL.
5. FIXTURE TO BE SURFACE MOUNTED ABOVE 2ND STAIR LANDING. REFER TO ARCHITECTURAL STAIR SECTION FOR ADDITIONAL INFORMATION PRIOR TO BEGINNING WORK.

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Case #:
Plan Check #:
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Revisions:

Project Number: 20068.100
Drawn By:
Title: PARTIAL MEZZANINE LTG PLANS

E108

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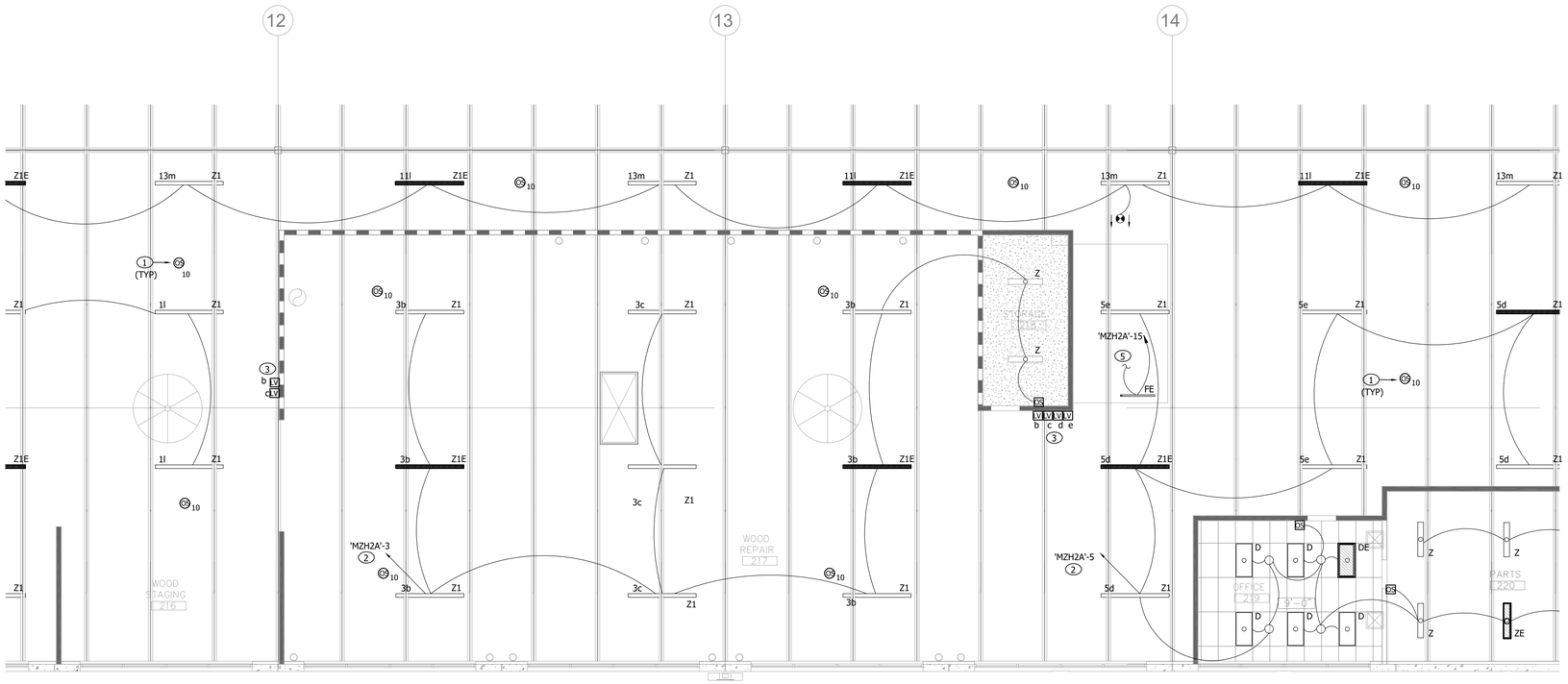
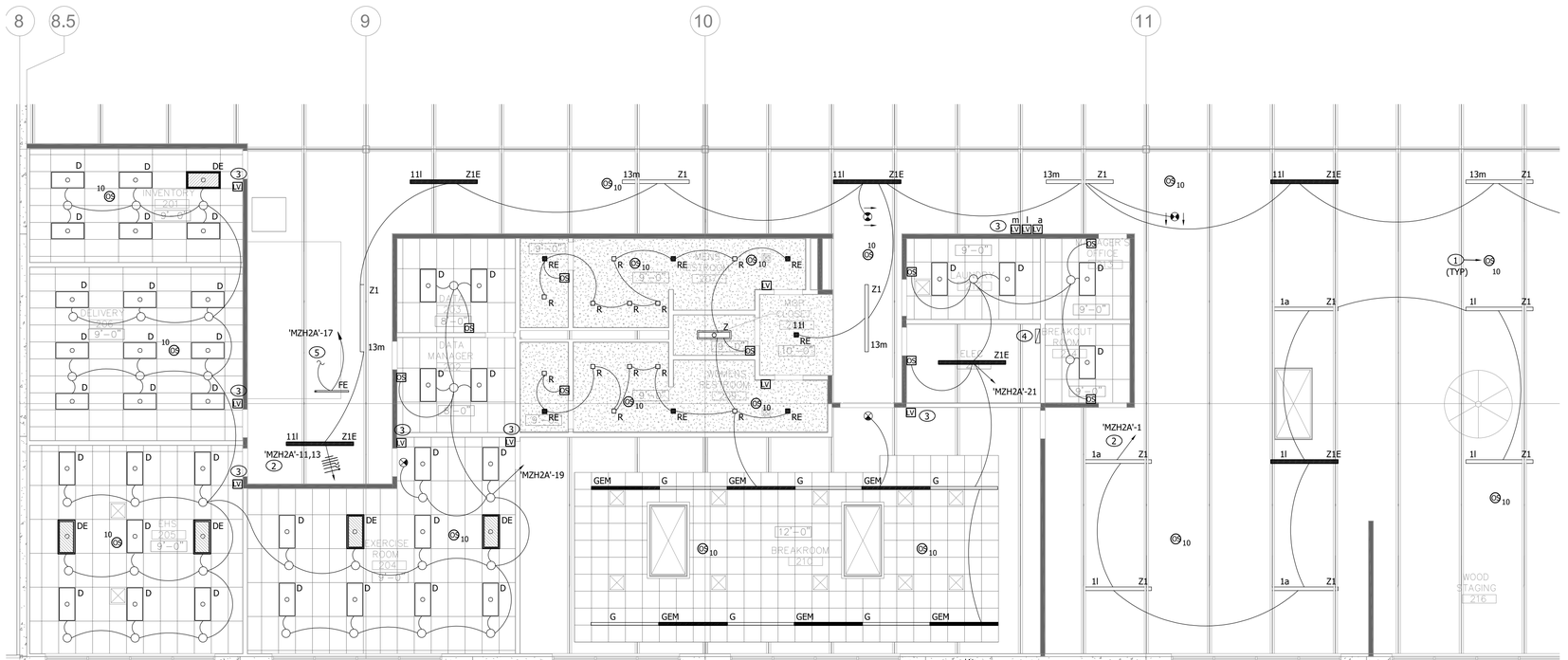


1 **WH MEZZ LTG PLAN - WEST MIDDLE**
SCALE: 1/8" = 1'-0"



2 **PARTIAL MEZZANINE LTG PLAN**
SCALE: 1/8" = 1'-0"

GENERAL NOTES

A. CONDUCTOR SIZES FOR 120V LIGHTING: HOMERUNS LESS THAN 70 FEET, NUMBER 12 AWG: 70 TO 115 FEET, NUMBER 10 AWG, 115' TO 175', NUMBER 8 AWG, MORE THAN 175', NUMBER 6 AWG.

B. CONDUCTOR SIZES FOR 277V LIGHTING: HOMERUNS LESS THAN 150 FEET, NUMBER 12 AWG: 150 TO 260' FEET, NUMBER 10 AWG, 260' TO 400', NUMBER 8 AWG, MORE THAN 400', NUMBER 6 AWG.

#KEYED NOTES:

1. PROVIDE HUBBELL CEILING MOUNTED MOTION SENSOR, MULTI-CIRCUIT WHERE REQUIRED. PROVIDE POWER PACKS PER MANUFACTURER'S REQUIREMENTS. ENSURE FINAL LAY-OUT PROVIDES FULL COVERAGE OF AREA. COORDINATE FINAL MOUNTING HEIGHT WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. CIRCUIT VIA LIGHTING CONTROL PANEL RESPECTIVE ELEC ROOM. PROVIDE LOW VOLTAGE OVERRIDE SWITCH FOR EACH RELAY. COORDINATE FINAL OVERRIDE SWITCH LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
3. LOW VOLTAGE OVERRIDE SWITCH BANK. QUANTITY AS REQUIRED. COORDINATE WITH ARCHITECTURAL PLANS FOR EXACT LOCATION PRIOR TO BEGINNING WORK.
4. PROVIDE 16 RELAY LX SERIES LIGHTING CONTROL PANEL.
5. FIXTURE TO BE SURFACE MOUNTED ABOVE 2ND STAIR LANDING. REFER TO ARCHITECTURAL STAIR SECTION FOR ADDITIONAL INFORMATION PRIOR TO BEGINNING WORK.

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Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: PARTIAL MEZZANINE LTG PLANS

E109

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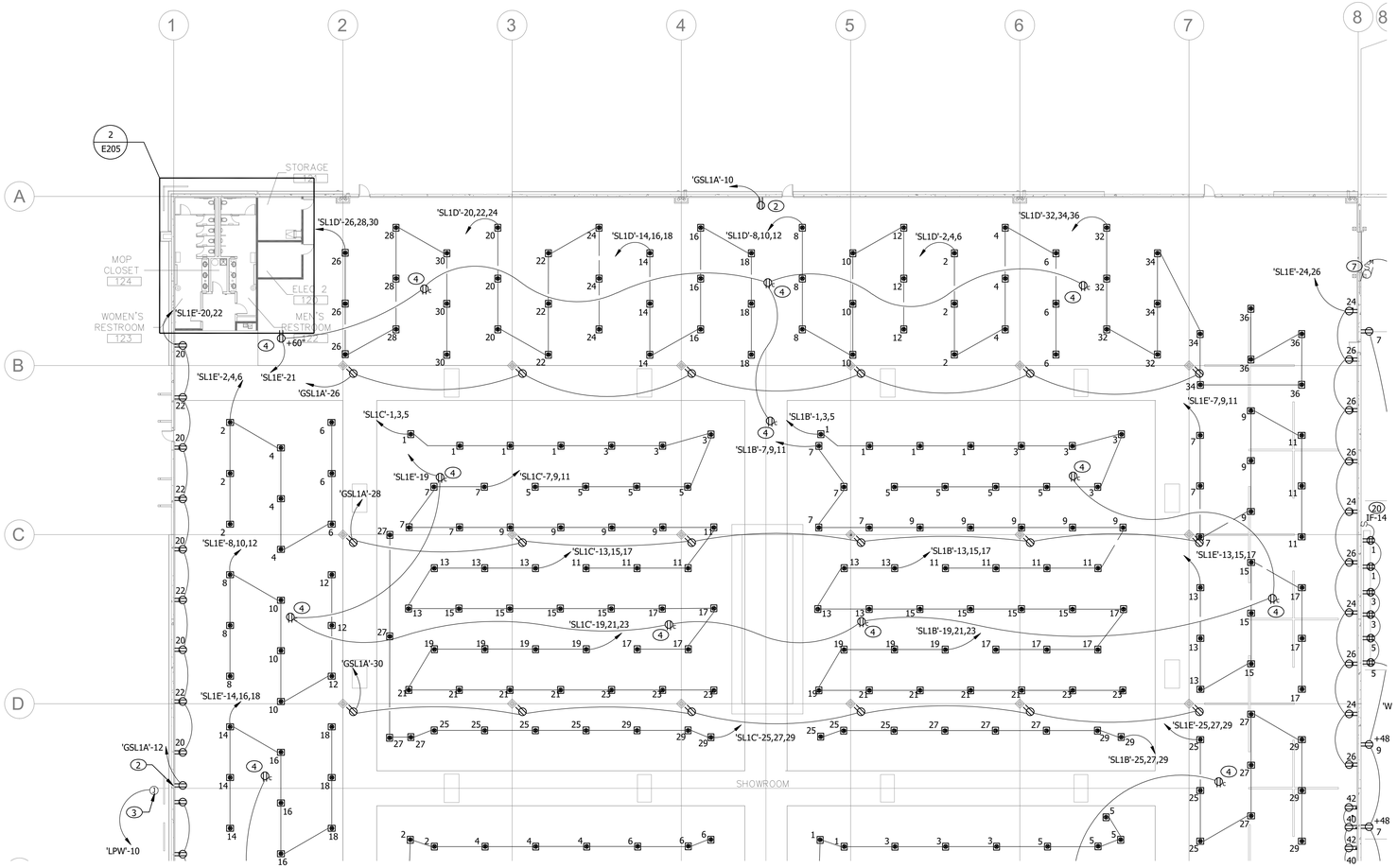

1 SHOWROOM POWER PLAN-NORTH

SCALE: 1" = 20'-0"

GENERAL NOTES

A. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG; 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

B. ALL FLOOR BOXES SHALL HAVE SILVER COVERPLATES.

C. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG; 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

#KEYED NOTES:

1. PROVIDE WIREMOLD FOR POWER TO TV.
2. PROVIDE RECEPTACLE AT +16'-0" FOR IDF. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
3. PROVIDE WEATHERPROOF JUNCTION BOX FOR BUILDING SIGN. CIRCUIT VIA TIMECLOCK AND FEED WITH #8'S IN 1" CONDUIT. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS AND INSTALLATION REQUIREMENTS WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
4. PROVIDE RECEPTACLE FOR OVERHEAD SIGNAGE. RECEPTACLE SHALL BE PENDANT MOUNTED FROM CEILING OR WALL MOUNTED WHERE SHOWN. COORDINATE FINAL LOCATION AND HEIGHT WITH OWNER AND SIGNAGE MANUFACTURER PRIOR TO BEGINNING WORK.

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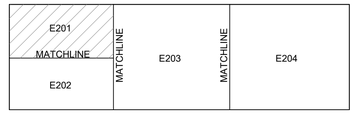
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: PARTIAL SHOWROOM POWER PLAN

E201



BUILDING KEY PLAN

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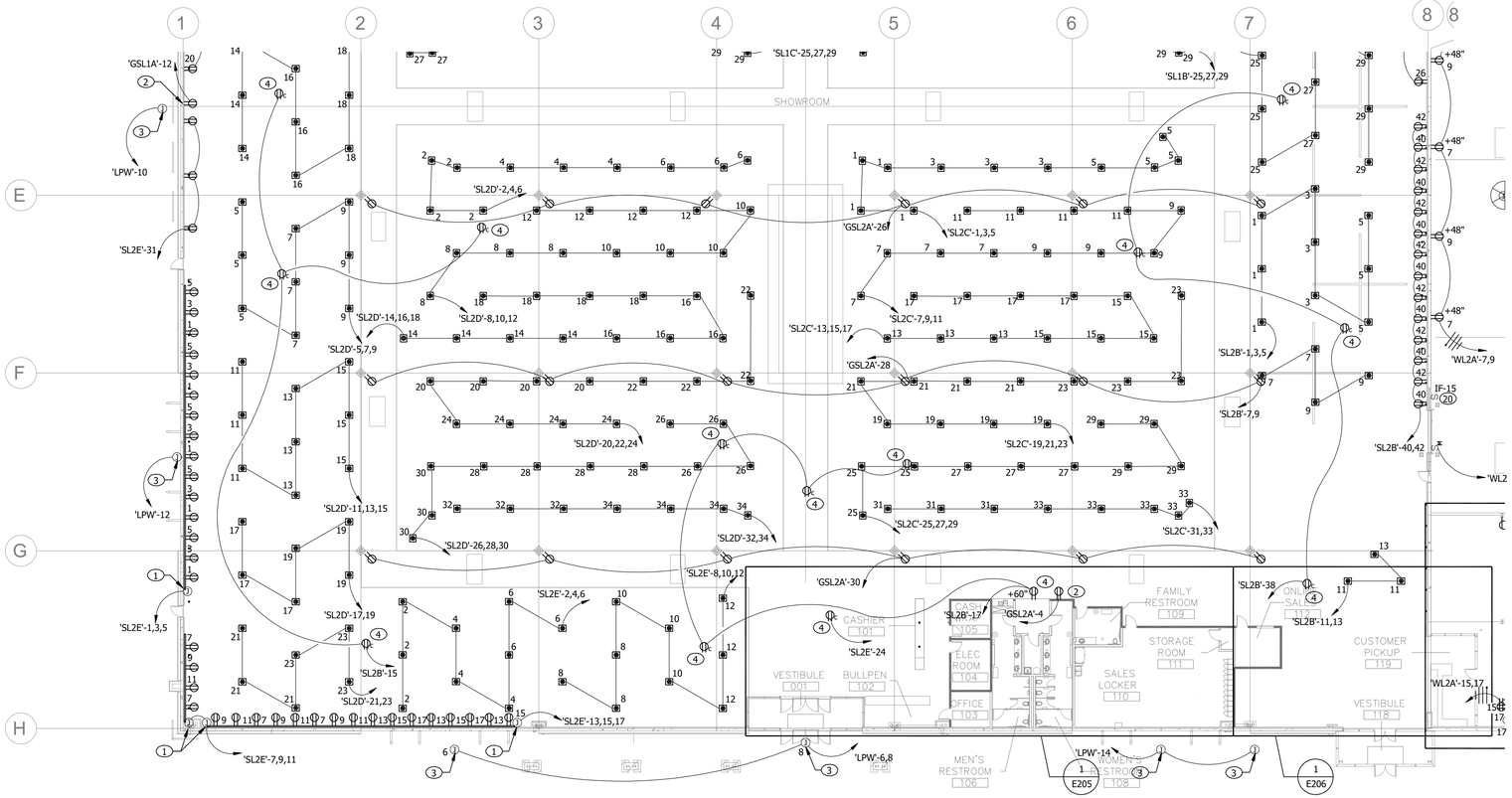

1 SHOWROOM POWER PLAN-SOUTH

SCALE: 1" = 20'-0"

GENERAL NOTES

A. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG; 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

B. ALL FLOOR BOXES SHALL HAVE SILVER COVERPLATES.

C. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG; 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

#KEYED NOTES:

1. PROVIDE WIREMOLD FOR POWER TO TV.
2. PROVIDE RECEPTACLE AT +16'-0" FOR IDF. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
3. PROVIDE WEATHERPROOF JUNCTION BOX FOR BUILDING SIGN. CIRCUIT VIA TIMECLOCK AND FEED WITH #8'S IN 1" CONDUIT. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS AND INSTALLATION REQUIREMENTS WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
4. PROVIDE RECEPTACLE FOR OVERHEAD SIGNAGE. RECEPTACLE SHALL BE PENDANT MOUNTED FROM CEILING OR WALL MOUNTED WHERE SHOWN. COORDINATE FINAL LOCATION AND HEIGHT WITH OWNER AND SIGNAGE MANUFACTURER PRIOR TO BEGINNING WORK.

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Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:
Title: PARTIAL SHOWROOM POWER PLAN

E202

BUILDING KEY PLAN

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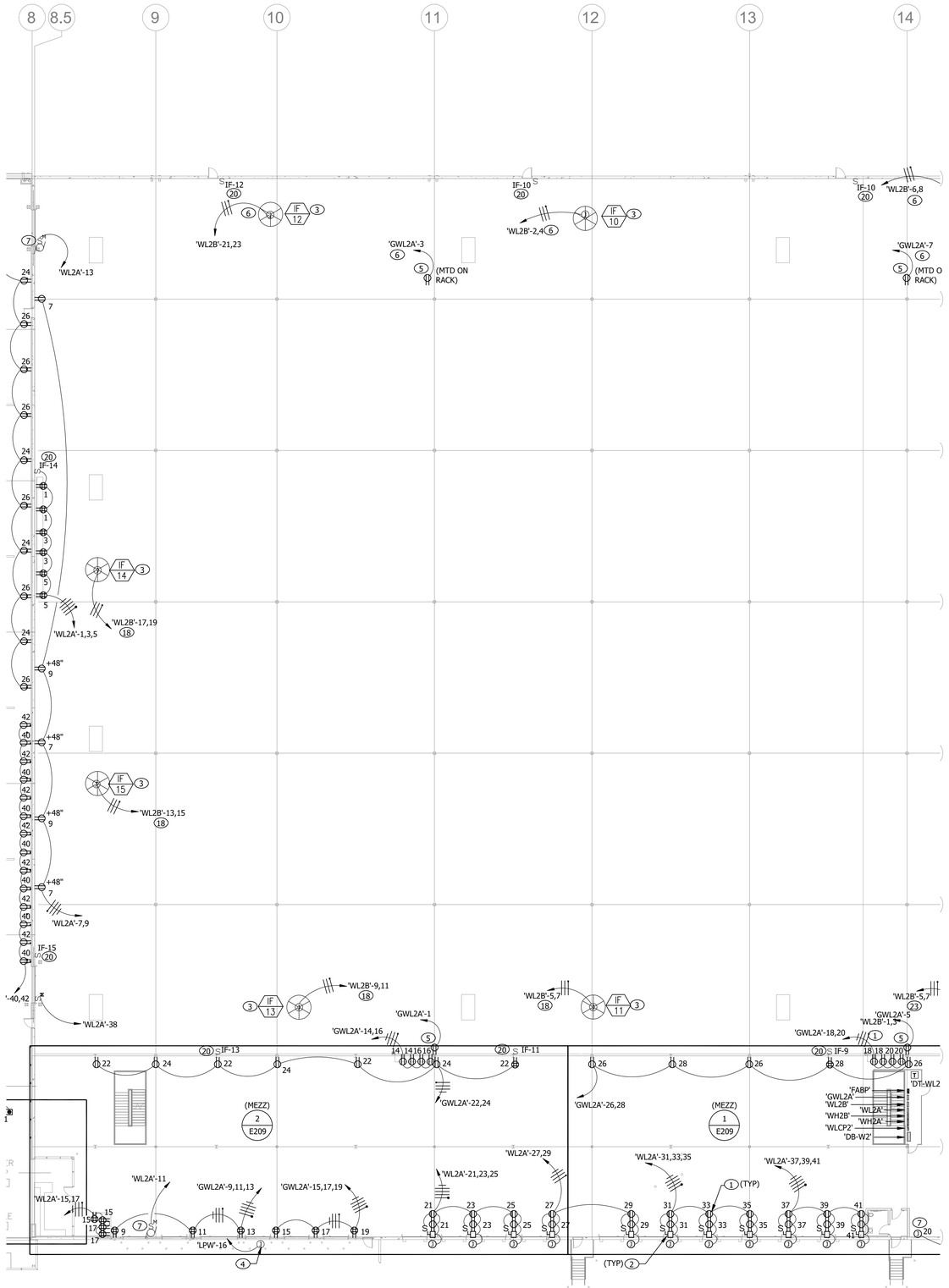

1 WAREHOUSE POWER PLAN - WEST

SCALE: 1" = 20'-0"

GENERAL NOTES

A. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG: 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

B. UNDERNEATH MEZZANINE VERTICAL CONDUITS ARE TO BE RUN WITHIN WIDE FLANGE WEB. ELECTRICAL CONTRACTOR TO CONFIRM FINAL INSTALLATION ALLOWS FOR COLUMN PROTECTORS TO FIT.

(#) KEYED NOTES:

(NOT ALL NOTES MAY BE USED ON THIS SHEET)

1. PROVIDE SWITCHED DUPLEX RECEPTACLE @ +84" A.F.F. FOR DOCK LIGHT AND FAN. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. PROVIDE FUSIBLE DISCONNECT SWITCH, SIZED PER MANUFACTURER'S REQUIREMENTS, FOR PITBULL SL40 DOCK LOCK VEHICLE RESTRAINT CONTROL PANEL, 120V/1PH. PROVIDE CONDUIT AND JUNCTION BOX INFRASTRUCTURE FOR INTERIOR AND EXTERIOR INDICATOR LIGHTS PER MANUFACTURER'S SPECIFICATIONS. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH OWNER AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
3. PROVIDE JUNCTION BOX FOR BIG ASS CEILING FAN, 208V, 1PH, 1HP FAN TO BE CONTROLLED VIA SMARTSENSE VARIABLE SPEED CONTROLLER. COORDINATE WITH MECHANICAL PLANS FOR CONTROLLER LOCATION. PROVIDE RELAY TO INTERLOCK FAN WITH FIRE ALARM SYSTEM SO THAT FANS ARE SHUT OFF UPON RECEIVING A WATERFLOW SIGNAL PER NFPA 72 REQUIREMENTS. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
4. PROVIDE WEATHERPROOF JUNCTION BOX FOR BUILDING SIGN. CIRCUIT VIA TIMECLOCK AND FEED WITH #4S IN 1-1/4" CONDUIT. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS AND INSTALLATION REQUIREMENTS WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
5. PROVIDE RECEPTACLE AT +20'-0" FOR IDF. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
6. 1"C WITH (2)-#6CU., (1)-#6CU. GND.
7. PROVIDE JUNCTION BOX FOR INSTALLATION OF MOTORIZED DOOR. PROVIDE LOCAL WALL CONTROL WHERE REQUIRED. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ARCHITET PLANS PRIOR TO BEGINNING WORK.
8. 3/4"C WITH (2)-#8CU., (1)-#10CU. GND.
9. 1"C WITH (2)-#6CU., (1)-#8CU. GND.
10. 1"C WITH (2)-#4CU., (1)-#8CU. GND.
11. PROVIDE 60A/3P, FUSED DISCONNECT SWITCH FOR CONNECTION TO BATTERY CHARGER. PROVIDE FUSES SIZED PER MANUFACTURER RECOMMENDATION. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
12. PROVIDE 30A/3P, FUSED DISCONNECT SWITCH, SUPPORTED VIA UNISTRUT, WITH 30A, FRS FUSES FOR 480V/3PH BATTERY MOVER POWER. FEED WITH 3#10, 1#10 GND,. IN 3/4" CONDUIT. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH OWNER & MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
13. PROVIDE A DUPLEX RECEPTACLE FOR 120V/1PH BATTERY MOVER POWER. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH OWNER & MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
14. PROVIDE 200A/3P DISCONNECT SWITCH FOR 60HP, 480V/3P SHREDDER. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK. PROVIDE MOTOR RATED CIRCUIT BREAKER WITH TRIP SETTINGS ADJUSTED TO PREVENT NUISANCE TRIPPING.
15. PROVIDE 30A/3P DISCONNECT SWITCH FOR 10HP, 480V/3P BALER. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
16. PROVIDE 60A/3P FUSIBLE DISCONNECT SWITCH WITH 50A FRS-R FUSES FOR CONNECTION TO HE-GO STRECTH. 50A FRS-R FUSES HAVE AN INSTANTANEOUS PEAK LET-THROUGH CURRENT OF UNDER 5,000 AMPS WITH A PROSPECTIVE SHORT CIRCUIT CURRENT OF 35,000 AMPS OR LESS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK. USE EXISTING CONDUITS THRU PIT CENTER ISLAND.
17. PROVIDE 30A/3P DISCONNECT SWITCH FOR STYRO PRESS COMPACTOR. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
18. 1"C WITH (2)-#8CU., (1)-#8CU. GND. FROM FAN TO PANEL.
19. 1"C WITH (2)-#6CU., (1)-#6CU, GND. FROM FAN TO PANEL.
20. BIG ASS FAN SWITCH BANK (1 SWITCH PER FAN). ELECTRICAL CONTRACTOR TO PROVIDE 3/4" CONDUIT FROM SWITCH TO FAN FOR CONTROL WIRING. FINAL LOCATION PER MECHANICAL PLANS.
21. PROVIDE WEATHERPROOF JUNCTION BOX FOR BUILDING SIGN. CIRCUIT VIA TIMECLOCK AND FEED WITH #8'S IN 1" CONDUIT. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS AND INSTALLATION REQUIREMENTS WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
22. PROVIDE 50A RECEPTACLE FOR WELDER. FEED WITH 2#6, 1#10 GND., IN 1"C. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURERS REQUIREMENTS PRIOR TO BEGINNING WORK.
23. 3/4"C WITH (2)-#10CU., (1)-#10CU, GND. FROM FAN TO PANEL.

E201	MATCHLINE	
MATCHLINE		E203
E202	MATCHLINE	E204

BUILDING KEY PLAN

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KRAEMER CONSULTING ENGINEERS, PLLC ARIZONA, U.S.A.
PRELIMINARY NOT FOR CONSTRUCTION

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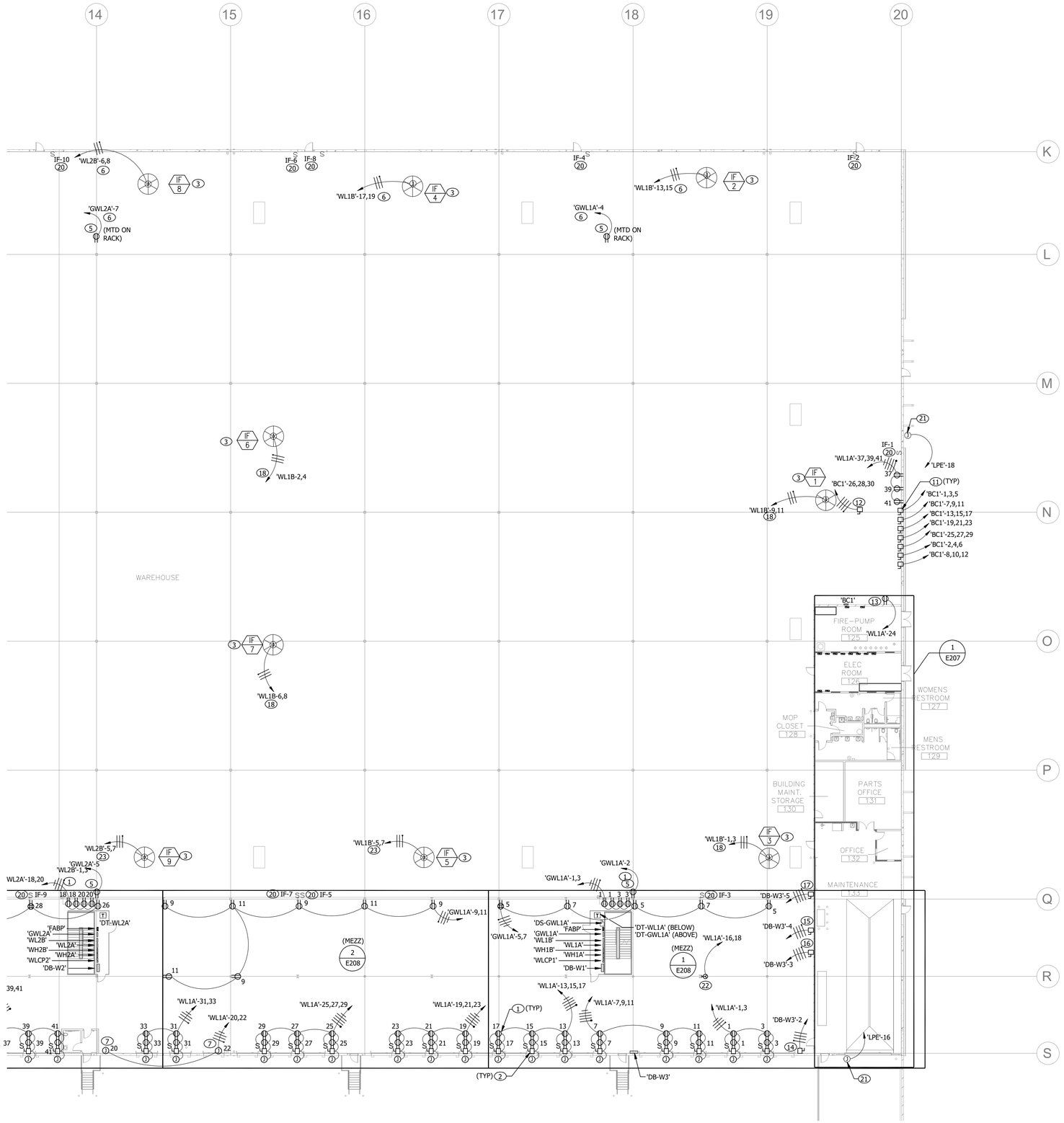
JABS HEIGHTS & TUTT BOULEVARD
COLORADO SPRINGS, CO

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:
Title: PARTIAL WAREHOUSE POWER PLAN

E203



1 WAREHOUSE POWER PLAN - EAST

SCALE: 1" = 20'-0"

GENERAL NOTES

A. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG: 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

B. UNDERNEATH MEZZANINE VERTICAL CONDUITS ARE TO BE RUN WITHIN WIDE FLANGE WEB. ELECTRICAL CONTRACTOR TO CONFIRM FINAL INSTALLATION ALLOWS FOR COLUMN PROTECTORS TO FIT.

(#) KEYED NOTES:

(NOT ALL NOTES MAY BE USED ON THIS SHEET)

1. PROVIDE SWITCHED DUPLEX RECEPTACLE @ +84" A.F.F. FOR DOCK LIGHT AND FAN. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. PROVIDE FUSIBLE DISCONNECT SWITCH, SIZED PER MANUFACTURER'S REQUIREMENTS, FOR PITBULL SL40 DOCK LOCK VEHICLE RESTRAINT CONTROL PANEL, 120V/1PH. PROVIDE CONDUIT AND JUNCTION BOX INFRASTRUCTURE FOR INTERIOR AND EXTERIOR INDICATOR LIGHTS PER MANUFACTURER'S SPECIFICATIONS. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH OWNER AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
3. PROVIDE JUNCTION BOX FOR BIG ASS CEILING FAN, 208V, 1PH, 1HP FAN TO BE CONTROLLED VIA SMARTSENSE VARIABLE SPEED CONTROLLER. COORDINATE WITH MECHANICAL PLANS FOR CONTROLLER LOCATION. PROVIDE RELAY TO INTERLOCK FAN WITH FIRE ALARM SYSTEM SO THAT FANS ARE SHUT OFF UPON RECEIVING A WATERFLOW SIGNAL PER NFPA 72 REQUIREMENTS. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
4. PROVIDE WEATHERPROOF JUNCTION BOX FOR BUILDING SIGN. CIRCUIT VIA TIMECLOCK AND FEED WITH #4S IN 1-1/4" CONDUIT. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS AND INSTALLATION REQUIREMENTS WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
5. PROVIDE RECEPTACLE AT +20'-0" FOR IDF. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
6. 1"C WITH (2)-#6CU., (1)-#6CU. GND.
7. PROVIDE JUNCTION BOX FOR INSTALLATION OF MOTORIZED DOOR. PROVIDE LOCAL WALL CONTROL WHERE REQUIRED. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ARCHITET PLANS PRIOR TO BEGINNING WORK.
8. 3/4"C WITH (2)-#8CU., (1)-#10CU. GND.
9. 1"C WITH (2)-#6CU., (1)-#8CU. GND.
10. 1"C WITH (2)-#4CU., (1)-#8CU. GND.
11. PROVIDE 60A/3P, FUSED DISCONNECT SWITCH FOR CONNECTION TO BATTERY CHARGER. PROVIDE FUSES SIZED PER MANUFACTURER RECOMMENDATION. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
12. PROVIDE 30A/3P, FUSED DISCONNECT SWITCH, SUPPORTED VIA UNISTRUT, WITH 30A, FRS FUSES FOR 480V/3PH BATTERY MOVER POWER. FEED WITH 3#10, 1#10 GND,. IN 3/4" CONDUIT. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH OWNER & MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
13. PROVIDE A DUPLEX RECEPTACLE FOR 120V/1PH BATTERY MOVER POWER. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH OWNER & MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
14. PROVIDE 200A/3P DISCONNECT SWITCH FOR 60HP, 480V/3P SHREDDER. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK. PROVIDE MOTOR RATED CIRCUIT BREAKER WITH TRIP SETTINGS ADJUSTED TO PREVENT NUISANCE TRIPPING.
15. PROVIDE 30A/3P DISCONNECT SWITCH FOR 10HP, 480V/3P BALER. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
16. PROVIDE 60A/3P FUSIBLE DISCONNECT SWITCH WITH 50A FRS-R FUSES FOR CONNECTION TO HE-GO STRECTH. 50A FRS-R FUSES HAVE AN INSTANTANEOUS PEAK LET-THROUGH CURRENT OF UNDER 5,000 AMPS WITH A PROSPECTIVE SHORT CIRCUIT CURRENT OF 35,000 AMPS OR LESS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK. USE EXISTING CONDUITS THRU PIT CENTER ISLAND.
17. PROVIDE 30A/3P DISCONNECT SWITCH FOR STYRO PRESS COMPACTOR. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
18. 1"C WITH (2)-#8CU., (1)-#8CU. GND. FROM FAN TO PANEL.
19. 1"C WITH (2)-#6CU., (1)-#6CU, GND. FROM FAN TO PANEL.
20. BIG ASS FAN SWITCH BANK (1 SWITCH PER FAN). ELECTRICAL CONTRACTOR TO PROVIDE 3/4" CONDUIT FROM SWITCH TO FAN FOR CONTROL WIRING. FINAL LOCATION PER MECHANICAL PLANS.
21. PROVIDE WEATHERPROOF JUNCTION BOX FOR BUILDING SIGN. CIRCUIT VIA TIMECLOCK AND FEED WITH #8'S IN 1" CONDUIT. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS AND INSTALLATION REQUIREMENTS WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
22. PROVIDE 50A RECEPTACLE FOR WELDER. FEED WITH 2#6, 1#10 GND., IN 1"C. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURERS REQUIREMENTS PRIOR TO BEGINNING WORK.
23. 3/4"C WITH (2)-#10CU., (1)-#10CU, GND. FROM FAN TO PANEL.

E201 MATCHLINE E202	MATCHLINE	E203
	MATCHLINE	E204

BUILDING KEY PLAN

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Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:
Title: PARTIAL WAREHOUSE POWER PLAN

E204

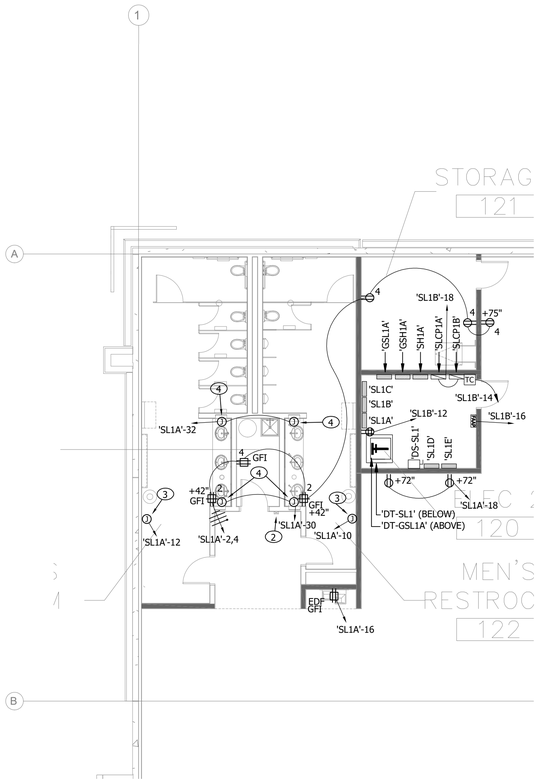
GENERAL NOTES

A. ALL RECEPTACLES WITHIN 6 FEET OF A SINK AND/OR POWERING A VENDING MACHINE SHALL BE GFCI

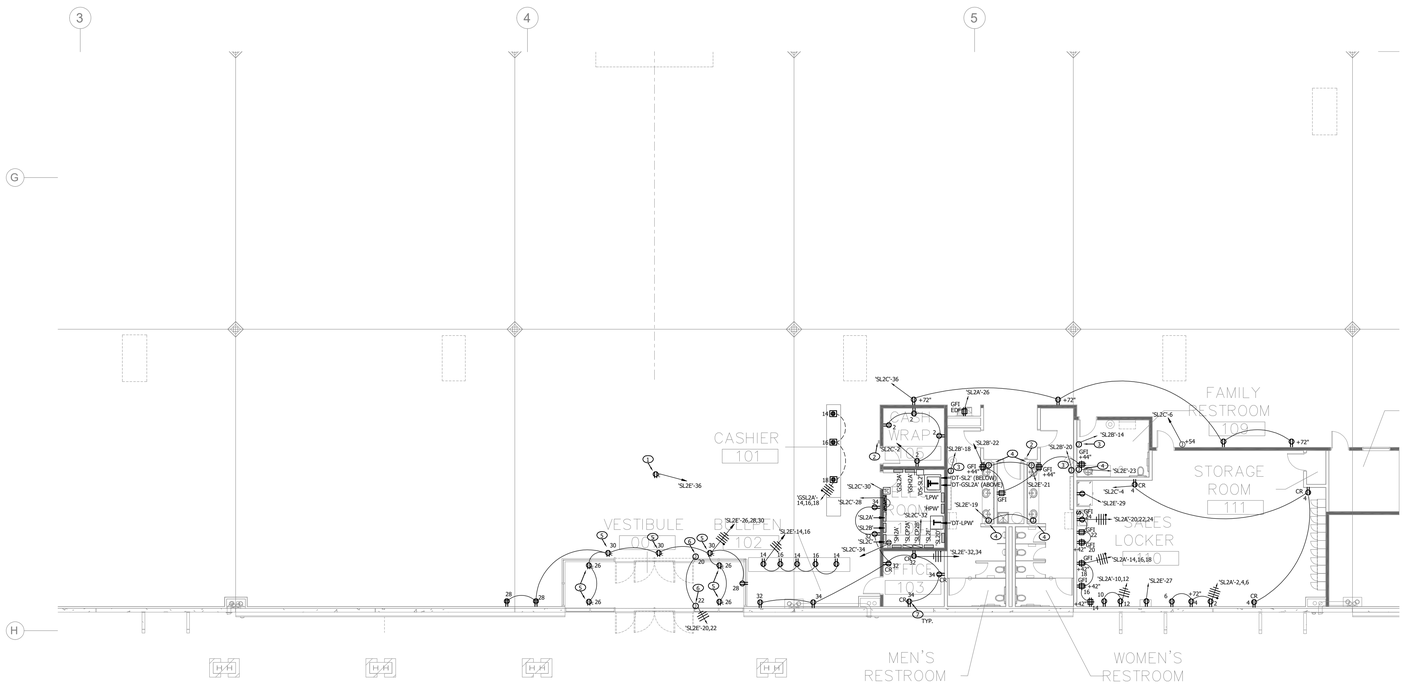
B. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG: 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

#KEYED NOTES:

1. PROVIDE CEILING MOUNTED RECEPTACLE. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. LOW VOLTAGE BIOSCAN DEVICE. PROVIDE CONDUIT INFRASTRUCTURE AS REQUIRED. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH OWNER AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
3. PROVIDE JUNCTION BOX FOR ELECTRIC HAND DRYER. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
4. PROVIDE JUNCTION BOX AND CONDUIT INFRASTRUCTURE FOR AUTOMATED PAPER TOWEL DISPENSER. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH TENANT PRIOR TO BEGINNING WORK.
5. PROVIDE RECEPTACLE FOR OVERHEAD SIGNAGE. RECEPTACLE SHALL BE PENDANT MOUNTED FROM CEILING. COORDINATE FINAL LOCATION AND HEIGHT WITH OWNER AND SIGNAGE MANUFACTURER PRIOR TO BEGINNING WORK.
6. PROVIDE JUNCTION BOX FOR SLIDING ENTRANCE DOORS, 120V/1PH, 5 AMPS. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
7. SPLIT CONTROLLED DUPLEX CONVENIENCE OUTLET, WITH TOP RECEPTACLE CONTROLLED. UP 18" OR AS INDICATED. TOP OUTLET TO BE CONNECTED TO ROOM OCCUPANCY SENSOR FOR ON/OFF FOR ON/OFF FUNCTIONALITY PER IECC C405.11, C405.11.1 REQUIREMENTS. RECEPTACLES ARE TO PERMANENTLY MARKED PER NFPA 70.



2 ENLARGE POWER PLAN-SHOWROOM OFFICES
SCALE: 1/8" = 1'-0"



1 ENLARGE POWER PLAN- SHOWROOM ENTRY
SCALE: 1/8" = 1'-0"

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Case #:
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Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title:
ENLARGED MAIN ENTRY OFFICES POWER PLANS

E205

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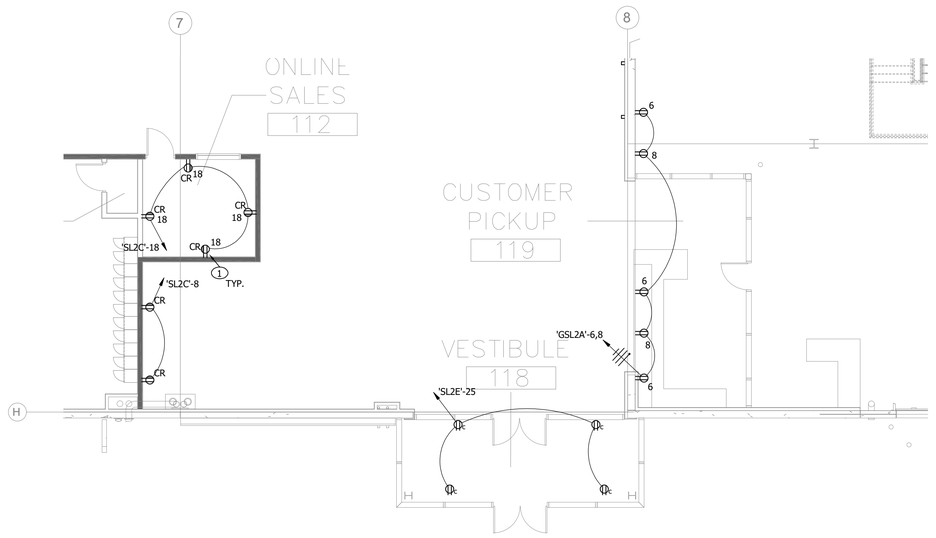
GENERAL NOTES

A. ALL RECEPTACLES WITHIN 6 FEET OF A SINK AND/OR POWERING A VENDING MACHINE SHALL BE GFCI.

B. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG: 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

#KEYED NOTES:

1. SPLIT CONTROLLED DUPLEX CONVENIENCE OUTLET, WITH TOP RECEPTACLE CONTROLLED. UP 18" OR AS INDICATED. TOP OUTLET TO BE CONNECTED TO ROOM OCCUPANCY SENSOR FOR ON/OFF FOR ON/OFF FUNCTIONALITY PER IECC C405.11, C405.11.1 REQUIREMENTS. RECEPTACLES ARE TO PERMANENTLY MARKED PER NFPA 70.



1 ENLARGE POWER PLAN-CUSTOMER PICKUP
SCALE: 1/8" = 1'-0"

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Project Number: 20068.100
Drawn By:

Title: ENLARGED CUSTOMER PICKUP POWER

E206

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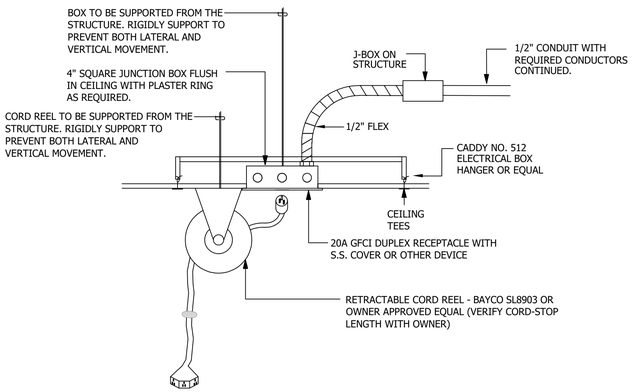
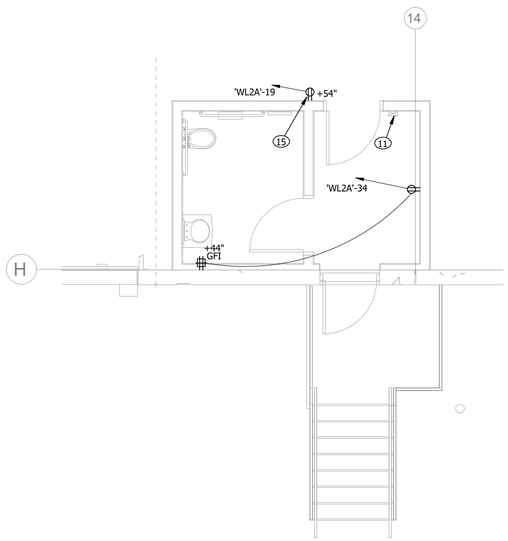


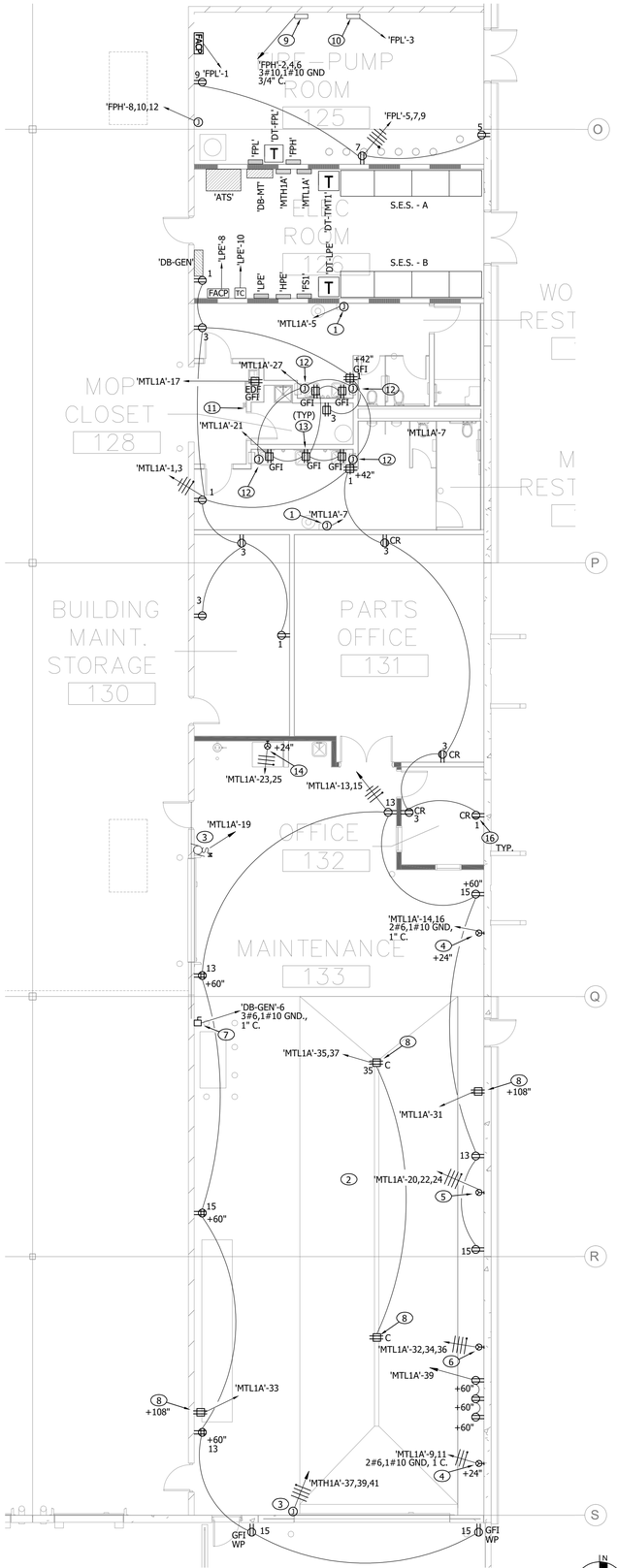
POWER CORD REEL OUTLET DETAIL

SCALE: NONE



2 WAREHOUSE RESTROOM POWER PLAN

SCALE: 1/4" = 1'-0"



1 ENLARGED POWER PLAN- MAINTENANCE

SCALE: 1/8" = 1'-0"

GENERAL NOTES

A. ALL RECEPTACLES WITHIN 6 FEET OF A SINK AND/OR POWERING A VENDING MACHINE SHALL BE GFCI.

B. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG: 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

#KEYED NOTES:

1. PROVIDE JUNCTION BOX FOR ELECTRIC HAND DRYER. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. ALL ELECTRICAL DEVICES SHALL BE INSTALLED AT A MINIMUM OF 20" TO BOTTOM OF DEVICE. ALL WORK IN THIS AREA TO BE PERFORMED IN COMPLIANCE WITH N.E.C. ARTICLE 511. NO EXPOSED CONDUIT.
3. PROVIDE JUNCTION BOX FOR INSTALLATION OF MOTORIZED DOOR. PROVIDE LOCAL WALL CONTROLS WHERE REQUIRED. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
4. PROVIDE RECEPTACLE FOR WELDER. COORDINATE EXACT LOCATION AND NEMA CONFIGURATION WITH ARCHITECT AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
5. PROVIDE RECEPTACLE FOR PLASMA CUTTER. COORDINATE EXACT LOCATION AND NEMA CONFIGURATION WITH ARCHITECT AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
6. PROVIDE RECEPTACLE FOR FIREBALL PUMPS. COORDINATE EXACT LOCATION AND NEMA CONFIGURATION WITH ARCHITECT AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
7. PROVIDE 60A/3P DISCONNECT SWITCH WITH 40A DUAL ELEMENT TIME DELAY FUSES FOR MODEL #CR15 COMPRESSOR, 480V/3PH. COORDINATE EXACT LOCATION AND NEMA CONFIGURATION WITH ARCHITECT AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
8. PROVIDE GFCI RECEPTACLE FOR CORD REEL. "C" INDICATED CEILING MOUNTED. COORDINATE EXACT LOCATION AND CORD REEL REQUIREMENTS WITH ARCHITECT PRIOR TO BEGINNING WORK. SET ADJUSTABLE BALL STOP TO LEAVE RECEPTACLE AT +15'-0" A.F.F.
9. JOCKEY PUMP CONTROL PANEL. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH FIRE PUMP PLANS PRIOR TO BEGINNING WORK.
10. FIRE PUMP CONTROL PANEL. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH FIRE PUMP PLANS PRIOR TO BEGINNING WORK.
11. LOW VOLTAGE BIOSCAN DEVICE. PROVIDE CONDUIT INFRASTRUCTURE AS REQUIRED. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH OWNER AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
12. PROVIDE JUNCTION BOX AND CONDUIT INFRASTRUCTURE FOR AUTOMATED PAPER TOWEL DISPENSER. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH TENANT PRIOR TO BEGINNING WORK.
13. PROVIDE GFCI RECEPTACLE FOR 120V WALL MOUNT FAUCET.
14. PROVIDE 208/1PH RECEPTACLE FOR ICE MAKER. COORDINATE NEMA CONFIGURATION WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
15. PROVIDE 4" RECESSED RECEPTACLE FOR TIMECLOCK. COORDINATE EXACT INSTALLATION REQUIREMENTS INCLUDING LOCATION WITH OWNER AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
16. SPLIT CONTROLLED DUPLEX CONVENIENCE OUTLET, WITH TOP RECEPTACLE CONTROLLED. UP 18" OR AS INDICATED. TOP OUTLET TO BE CONNECTED TO ROOM OCCUPANCY SENSOR FOR ON/OFF FOR ON/OFF FUNCTIONALITY PER IECC C405.11, C405.11.1 REQUIREMENTS. RECEPTACLES ARE TO PERMANENTLY MARKED PER NFPA 70.

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Project Number: 20068.100
Drawn By:

Title: ENLARGED MAINTENANCE POWER PLAN

E207

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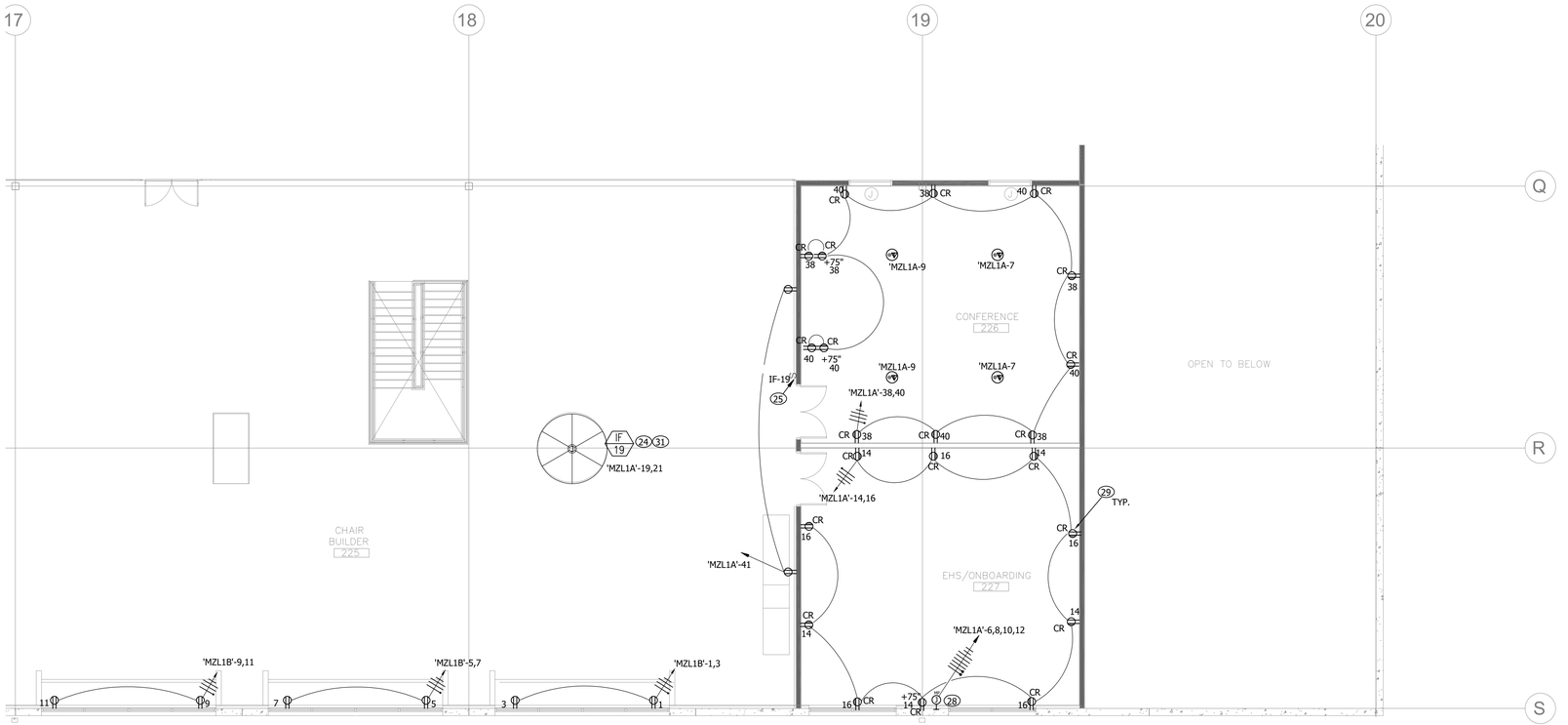
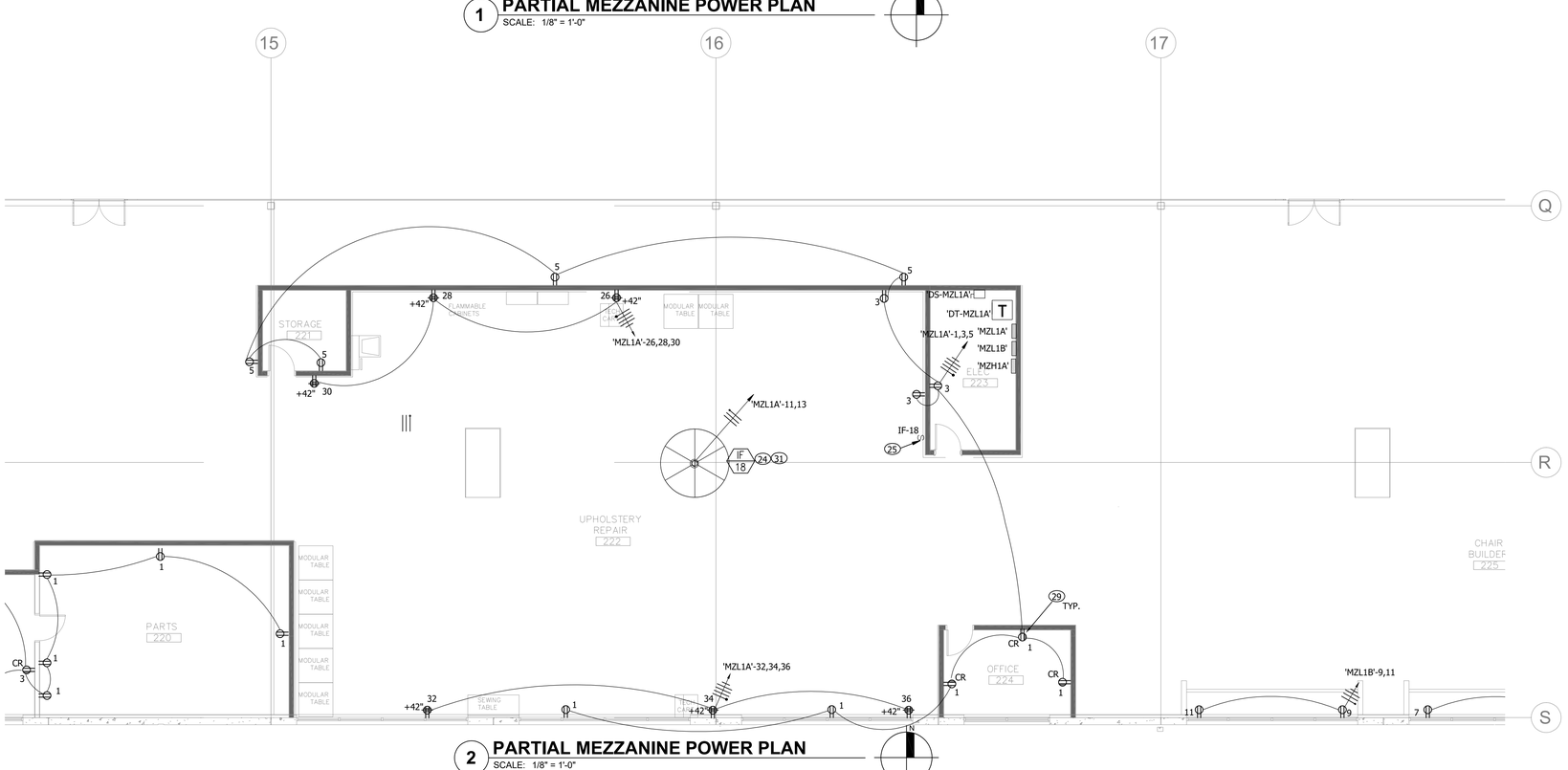


1 PARTIAL MEZZANINE POWER PLAN

SCALE: 1/8" = 1'-0"



2 PARTIAL MEZZANINE POWER PLAN

SCALE: 1/8" = 1'-0"

GENERAL NOTES

A. ALL RECEPTACLES WITHIN 6 FEET OF A SINK AND/OR POWERING A VENDING MACHINE SHALL BE GFCI.

B. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG: 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

C. ALL RECEPTACLES WITHIN 6 FEET OF A SINK AND/OR POWERING A VENDING MACHINE SHALL BE GFCI.

D. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG: 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

(E) KEYED NOTES:

(ALL NOTES MAY NOT BE USED ON THIS SHEET)

1. PROVIDE DUPLEX RECEPTACLE FOR JET #JSG-96 COMBINATION SANDER, 120V/1PH, 11 AMPS. FEED WITH 2#12, 1#12 $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
2. PROVIDE PEDESTAL/UNISTRUT MOUNTED DUPLEX RECEPTACLE FOR JET #JDP-17 DRILL PRESS, 120V1PH, 9 AMPS. FEED WITH 2#12 1#12 $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
3. PROVIDE 30A/2P UNISTRUT MOUNTED DISCONNECT SWITCH WITH 25A FRN-R FUSES FOR JET #JWP-208 20 INCH PLANER, 208V/1PH, 18 AMPS. FEED WITH $\frac{1}{10}$, 1#10G $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
4. PROVIDE L6-30 RECEPTACLE FOR SAWSTOP #ICSS3480 10 INCH INDUSTRIAL TABLE SAW, 208V/1HP, 19.7 AMPS. FEED WITH 2#10, 1#10G $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
5. PROVIDE 30A/2P UNISTRUT MOUNTED DISCONNECT SWITCH WITH 30A FRN-R FUSES FOR LAGUNA 5HP CYCLONE DUST COLLECTOR, 208V/1HP, 23.6AMPS. FEED WITH 2#10, 1#10G, $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
6. PROVIDE DUPLEX RECEPTACLE FOR JET #JMS-12X MITER SAW, 120V/1PH, 1.7 KW. FEED WITH 2#12, 1#12G, $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
7. PROVIDE PEDESTAL/UNISTRUT MOUNTED DUPLEX RECEPTACLE FOR JET #JWL-1440VS WOOD LATHE, 120V/1PH, 11 AMPS. FEED WITH 2#12, 1#12G, $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
8. PROVIDE DUPLEX RECEPTACLE FOR CRL #2300RP GLASS SANDER, 120V/1HP, 0.74 KW. FEED WITH 2#12, 1#12G, $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
9. PROVIDE 208V/1PH, 20A RECEPTACLE FOR JET #JWBS-15-3 BAND SAW, 208V/1PH, 12 AMP. FEED WITH 2#12, 1#12G, $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
10. PROVIDE 30A/3P DISCONNECT SWITCH WITH 30A FRN-R FUSES FOR COL-MET SPRAY PAINT BOOTH EXHAUST FAN, 208V/3PH, 5HP. FEED WITH 3#8, 1#10 GND., IN 1" CONDUIT. CIRCUIT VIA PAINT BOOTH CONTROL PANEL. COORDINATE FINAL INSTALLATION REQUIREMENTS WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK. THIS INSTALLATION SHALL COMPLY WITH CLASS 1, DIVISION 1 REQUIREMENTS AS DETAILED IN ARTICLES 501 AND 516 OF THE NEC.
11. INTERIOR OF SPRAY PAINT BOOTH IS CLASSIFIED AS CLASS 1, DIVISION 1. 3 FEET IN ALL DIRECTIONS FROM ANY OPENING IS CLASSIFIED AS CLASS 1, DIVISION 2. INSTALLATION SHALL COMPLY WITH RESPECTIVE REQUIREMENTS DETAILED IN ARTICLES 501 AND 516 OF THE NEC AS IT PERTAINS TO WIRING METHODS (501.30: 516.4: 516.7) SEALING (501.15), DRAINING (501.15), EQUIPMENT/MATERIALS (501 PART 3: 516.4: 516.7), ILLUMINATION (501.30: 516.4 9C)), AND GROUNDING/BONDING (501.30: 516.16). REFER TO ARCHITECTURAL PLANS FOR CROSS SECTIONS.
12. REFER TO MANUFACTURER'S SPECIFICATIONS FOR ALL INTERLOCKING REQUIREMENTS FOR SPRAY PAINT BOOTH EXHAUST FAN AND LIGHTING.
13. PAINT BOOTH CONTROL PANEL.
14. PROVIDE 30A/1P NON-FUSED DISCONNECT SWITCH FOR COL-MET SPRAY PAINT BOOTH LIGHT FIXTURES, 120V/1PH, 3 AMP. FEED WITH 2#12, 1#12 GND., IN $\frac{3}{4}$" CONDUIT. CIRCUIT VIA PAINT BOOTH CONTROL PANEL. COORDINATE FINAL INSTALLATION REQUIREMENTS WITH MANUFACTURER'S SPECIFICATION PRIOR TO BEGINNING WORK. THIS INSTALLATION SHALL COMPLY WITH CLASS 1, DIVISION 1 REQUIREMENTS AS DETAILED IN ARTICLES 501 AND 516 OF THE NEC.
15. PROVIDE RECEPTACLE FOR COMMERCIAL WASHER. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS AND NEMA CONFIGURATION WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
16. PROVIDE (4) 4" CONDUIT SLEEVES. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
17. PROVIDE NEMA 6-30R RECEPTACLE FOR UPS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK. FEED WITH 2#8, 1#10 GND., IN $\frac{3}{4}$" CONDUIT.
18. PROVIDE CABLE TRAY FOR THIS ROOM. COORDINATE LAY-OUT WITH ARCHITECT/TENANT PRIOR TO BEGINNING WORK.
19. FEED WITH 4#8, 1#10 GND., IN $\frac{3}{4}$" CONDUIT.
20. PROVIDE JUNCTION BOX FOR POWER CONNECTION TO MODULAR FURNITURE. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATION PRIOR TO BEGINNING WORK.
21. LOW VOLTAGE BIOSCAN DEVICE. PROVIDE CONDUIT INFRASTRUCTURE AS REQUIRED. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH OWNER AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
22. PROVIDE NEMA 14 RECEPTACLE FOR CONNECTION TO DRYER 5400W. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK. FINAL LOCATION MUST BE ACCESSIBLE.
23. PROVIDE 4" RECESSED RECEPTACLE FOR TIMECLOCK. COORDINATE EXACT INSTALLATION REQUIREMENTS INCLUDING LOCATION WITH OWNER AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
24. PROVIDE JUNCTION BOX FOR 12 FOOT BIG ASS CEILING FAN, 208V, 1PH, 1HP. FAN TO BE CONTROLLED VIA SMARTSENSE VARIABLE SPEED CONTROLLER. COORDINATE WITH MECHANICAL PLANS FOR CONTROLLER LOCATION. PROVIDE RELAY TO INTERLOCK FAN WITH FIRE ALARM SYSTEM SO THAT FANS ARE SHUT OFF UPON RECEIVING A WATERFLOW SIGNAL PER NFPA 72 REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
25. BIG ASS FAN SWITCH BANK (1 SWITCH PER FAN). ELECTRICAL CONTRACTOR TO PROVIDE 3/4" CONDUIT FROM SWITCH TO FAN FOR CONTROL WIRING. FINAL LOCATION PER MECHANICAL PLANS.
26. PROVIDE 208V/1PH RECEPTACLE FOR COPIER. COORDINATE NEMA CONFIGURATION AND LOCATION PRIOR TO BEGINNING WORK.
27. PROVIDE JUNCTION BOX FOR ELECTRIC HAND DRYER. COORDINATE EXACT LOCATION INCLUDING HEIGHT WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
28. PROVIDE JUNCTION BOX FOR POWER CONNECTION TO MODULAR FURNITURE. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
29. SPLIT CONTROLLED DUPLEX CONVENIENCE OUTLET, WITH TOP RECEPTACLE CONTROLLED. UP 18" OR AS INDICATED. TOP OUTLET TO BE CONNECTED TO ROOM OCCUPANCY SENSOR FOR ON/OFF FOR ON/OFF FUNCTIONALITY PER IECC C405.11, C405.11.1 REQUIREMENTS. RECEPTACLES ARE TO PERMANENTLY MARKED PER NFPA 70.
30. 3/4"C WITH (2)-#8CU., (1)-#8CU. GND. FROM FAN TO PANEL.
31. 3/4"C WITH (2)-#10CU., (1)-#10CU, GND. FROM FAN TO PANEL.

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COLORADO SPRINGS, CO

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: PARTIAL MEZZANINE POWER PLANS

E208

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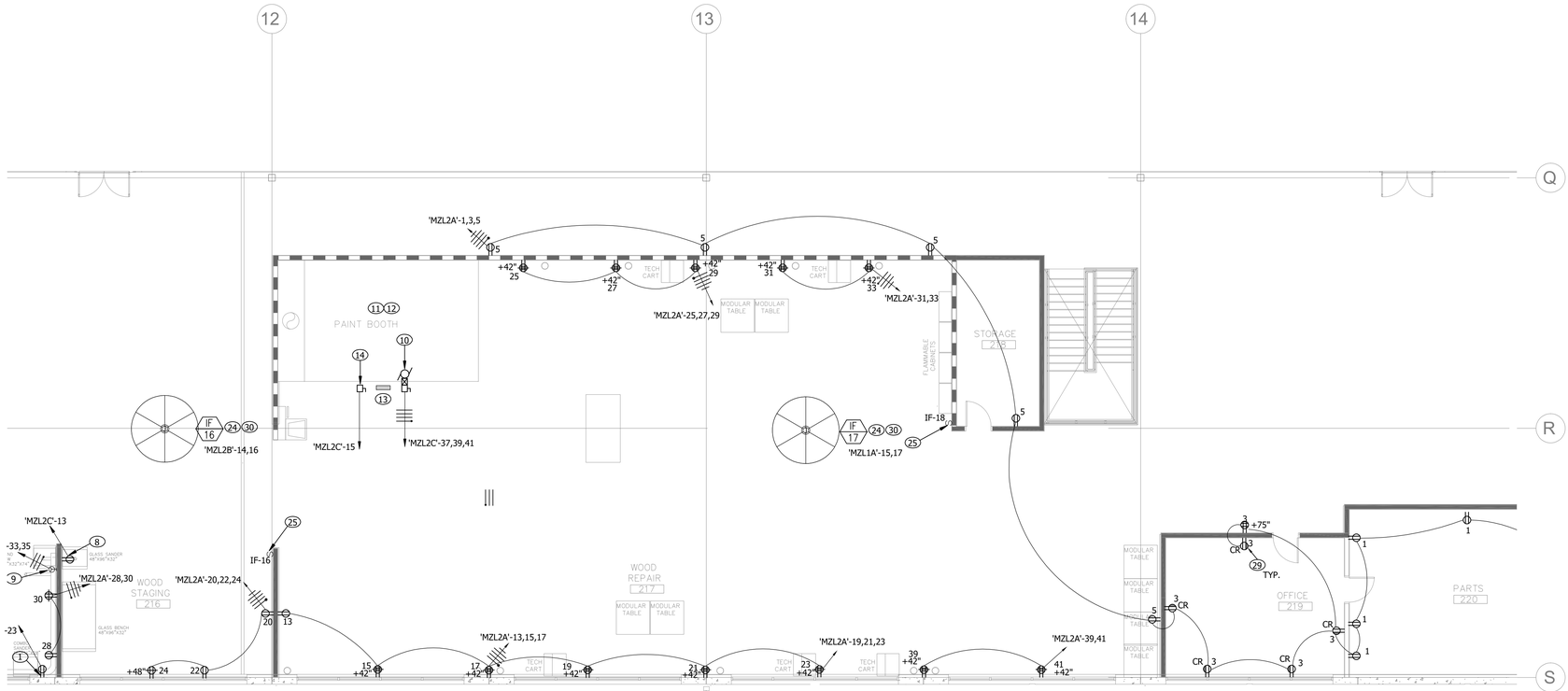
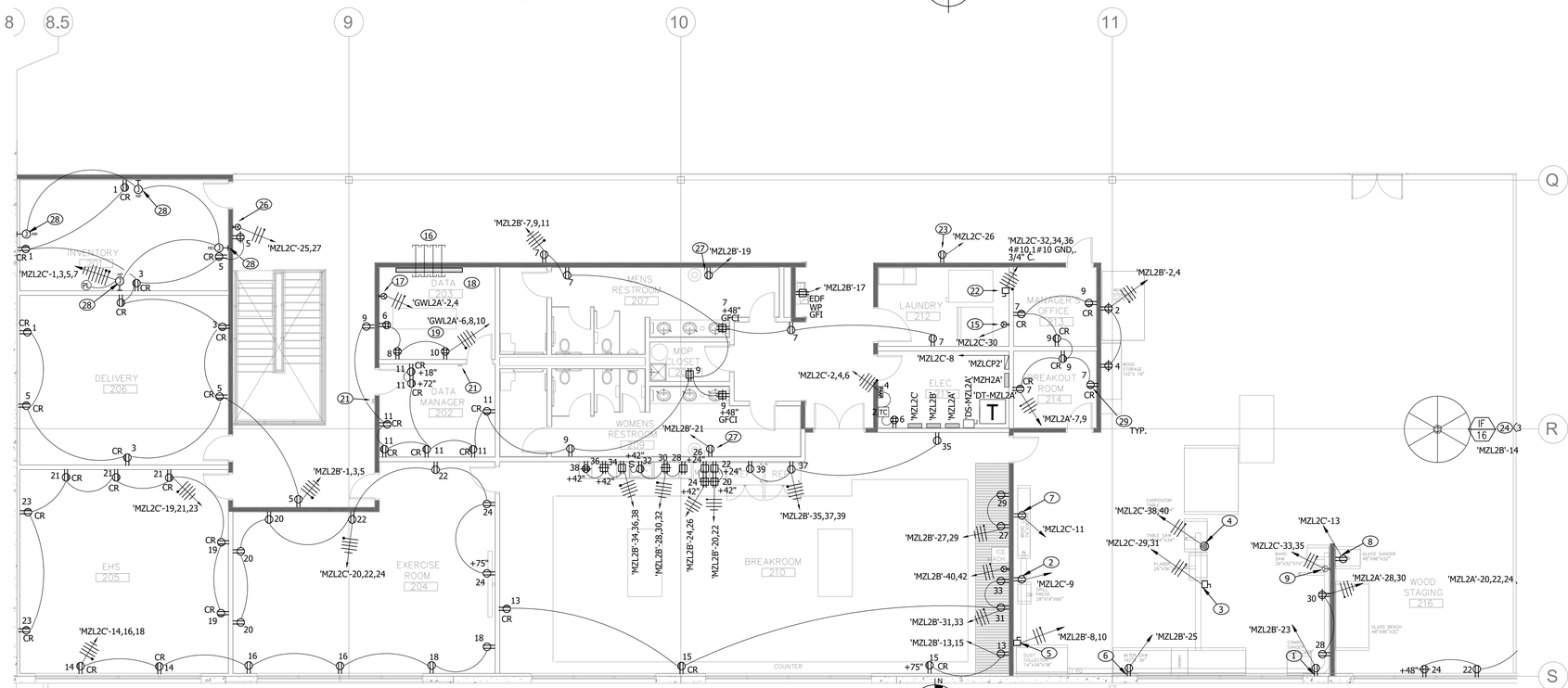


1 WH MEZZ POWER PLAN - WEST MIDDLE

SCALE: 1/8" = 1'-0"



2 PARTIAL MEZZANINE POWER PLAN

SCALE: 1/8" = 1'-0"

GENERAL NOTES

A. ALL RECEPTACLES WITHIN 6 FEET OF A SINK AND/OR POWERING A VENDING MACHINE SHALL BE GFCI.

B. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG: 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

C. ALL RECEPTACLES WITHIN 6 FEET OF A SINK AND/OR POWERING A VENDING MACHINE SHALL BE GFCI.

D. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG: 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

ⓔ KEYED NOTES:

(ALL NOTES MAY NOT BE USED ON THIS SHEET)

1. PROVIDE DUPLEX RECEPTACLE FOR JET #JSG-96 COMBINATION SANDER, 120V/1PH, 11 AMPS. FEED WITH 2#12, 1#12 $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
2. PROVIDE PEDESTAL/UNISTRUT MOUNTED DUPLEX RECEPTACLE FOR JET #JDP-17 DRILL PRESS, 120V1PH, 9 AMPS. FEED WITH 2#12 1#12 $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
3. PROVIDE 30A/2P UNISTRUT MOUNTED DISCONNECT SWITCH WITH 25A FRN-R FUSES FOR JET #JWP-208 20 INCH PLANER, 208V/1PH, 18 AMPS. FEED WITH $\frac{1}{2}$" 1#10G ,$\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
4. PROVIDE L6-30 RECEPTACLE FOR SAWSTOP #ICSS3480 10 INCH INDUSTRIAL TABLE SAW, 208V/1HP, 19.7 AMPS. FEED WITH 2#10, 1#10G $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
5. PROVIDE 30A/2P UNISTRUT MOUNTED DISCONNECT SWITCH WITH 30A FRN-R FUSES FOR LAGUNA 5HP CYCLONE DUST COLLECTOR, 208V/1HP, 23.6AMPS. FEED WITH 2#10, 1#10G, $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
6. PROVIDE DUPLEX RECEPTACLE FOR JET #JMS-12X MITER SAW, 120V/1PH, 1.7 KW. FEED WITH 2#12, 1#12G, $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
7. PROVIDE DUPLEX RECEPTACLE FOR JET #JWL-1440VS WOOD LATHE, 120V/1PH, 11 AMPS. FEED WITH 2#12, 1#12G, $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
8. PROVIDE DUPLEX RECEPTACLE FOR CRL #2300RP GLASS SANDER, 120V/1HP, 0.74 KW. FEED WITH 2#12, 1#12G, $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
9. PROVIDE 208V/1PH, 20A RECEPTACLE FOR JET #JWBS-15-3 BAND SAW, 208V/1PH, 12 AMP. FEED WITH 2#12, 1#12G, $\frac{3}{4}$" C. COORDINATE EXACT LOCATION AND FINAL INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
10. PROVIDE 30A/3P DISCONNECT SWITCH WITH 30A FRN-R FUSES FOR COL-MET SPRAY PAINT BOOTH EXHAUST FAN, 208V/3PH, 5HP. FEED WITH 3#8, 1#10 GND., IN 1" CONDUIT. CIRCUIT VIA PAINT BOOTH CONTROL PANEL. COORDINATE FINAL INSTALLATION REQUIREMENTS WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK. THIS INSTALLATION SHALL COMPLY WITH CLASS 1, DIVISION 1 REQUIREMENTS AS DETAILED IN ARTICLES 501 AND 516 OF THE NEC.
11. INTERIOR OF SPRAY PAINT BOOTH IS CLASSIFIED AS CLASS 1, DIVISION 1. 3 FEET IN ALL DIRECTIONS FROM ANY OPENING IS CLASSIFIED AS CLASS 1, DIVISION 2. INSTALLATION SHALL COMPLY WITH RESPECTIVE REQUIREMENTS DETAILED IN ARTICLES 501 AND 516 OF THE NEC AS IT PERTAINS TO WIRING METHODS (501.30: 516.4: 516.7) SEALING (501.15), DRAINING (501.15), EQUIPMENT/MATERIALS (501 PART 3: 516.4: 516.7), ILLUMINATION (501.30: 516.4 9C)), AND GROUNDING/BONDING (501.30: 516.16). REFER TO ARCHITECTURAL PLANS FOR CROSS SECTIONS.
12. REFER TO MANUFACTURER'S SPECIFICATIONS FOR ALL INTERLOCKING REQUIREMENTS FOR SPRAY PAINT BOOTH EXHAUST FAN AND LIGHTING.
13. PAINT BOOTH CONTROL PANEL.
14. PROVIDE 30A/1P NON-FUSED DISCONNECT SWITCH FOR COL-MET SPRAY PAINT BOOTH LIGHT FIXTURES, 120V/1PH, 3 AMP. FEED WITH 2#12, 1#12 GND., IN $\frac{3}{4}$" CONDUIT. CIRCUIT VIA PAINT BOOTH CONTROL PANEL. COORDINATE FINAL INSTALLATION REQUIREMENTS WITH MANUFACTURER'S SPECIFICATION PRIOR TO BEGINNING WORK. THIS INSTALLATION SHALL COMPLY WITH CLASS 1, DIVISION 1 REQUIREMENTS AS DETAILED IN ARTICLES 501 AND 516 OF THE NEC.
15. PROVIDE RECEPTACLE FOR COMMERCIAL WASHER. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS AND NEMA CONFIGURATION WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
16. PROVIDE (4) 4" CONDUIT SLEEVES. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
17. PROVIDE NEMA 6-30R RECEPTACLE FOR UPS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK. FEED WITH 2#8, 1#10 GND., IN $\frac{3}{4}$" CONDUIT.
18. PROVIDE CABLE TRAY FOR THIS ROOM. COORDINATE LAY-OUT WITH ARCHITECT/TENANT PRIOR TO BEGINNING WORK.
19. FEED WITH 4#8, 1#10 GND., IN $\frac{3}{4}$" CONDUIT.
20. PROVIDE JUNCTION BOX FOR POWER CONNECTION TO MODULAR FURNITURE. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATION PRIOR TO BEGINNING WORK.
21. LOW VOLTAGE BIOSCAN DEVICE. PROVIDE CONDUIT INFRASTRUCTURE AS REQUIRED. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH OWNER AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
22. PROVIDE NEMA 14 RECEPTACLE FOR CONNECTION TO DRYER 5400W. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK. FINAL LOCATION MUST BE ACCESSIBLE.
23. PROVIDE 4" RECESSED RECEPTACLE FOR TIMECLOCK. COORDINATE EXACT INSTALLATION REQUIREMENTS INCLUDING LOCATION WITH OWNER AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
24. PROVIDE JUNCTION BOX FOR 12 FOOT BIG ASS CEILING FAN, 208V, 1PH, 1 HP. FAN TO BE CONTROLLED VIA SMARTSENSE VARIABLE SPEED CONTROLLER. COORDINATE WITH MECHANICAL PLANS FOR CONTROLLER LOCATION. PROVIDE RELAY TO INTERLOCK FAN WITH FIRE ALARM SYSTEM SO THAT FANS ARE SHUT OFF UPON RECEIVING A WATERFLOW SIGNAL PER NFPA 72 REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
25. BIG ASS FAN SWITCH BANK (1 SWITCH PER FAN). ELECTRICAL CONTRACTOR TO PROVIDE 3/4" CONDUIT FROM SWITCH TO FAN FOR CONTROL WIRING. FINAL LOCATION PER MECHANICAL PLANS.
26. PROVIDE 208V/1PH RECEPTACLE FOR COPIER. COORDINATE NEMA CONFIGURATION AND LOCATION PRIOR TO BEGINNING WORK.
27. PROVIDE JUNCTION BOX FOR ELECTRIC HAND DRYER. COORDINATE EXACT LOCATION INCLUDING HEIGHT WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
28. PROVIDE JUNCTION BOX FOR POWER CONNECTION TO MODULAR FURNITURE. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
29. SPLIT CONTROLLED DUPLEX CONVENIENCE OUTLET, WITH TOP RECEPTACLE CONTROLLED. UP 18" OR AS INDICATED. TOP OUTLET TO BE CONNECTED TO ROOM OCCUPANCY SENSOR FOR ON/OFF FOR ON/OFF FUNCTIONALITY PER IECC C405.11, C405.11.1 REQUIREMENTS. RECEPTACLES ARE TO PERMANENTLY MARKED PER NFPA 70.
30. 3/4"C WITH (2)-#8CU., (1)-#8CU. GND. FROM FAN TO PANEL.

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ARIZONA, U.S.A.

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: PARTIAL MEZZANINE POWER PLANS

E209

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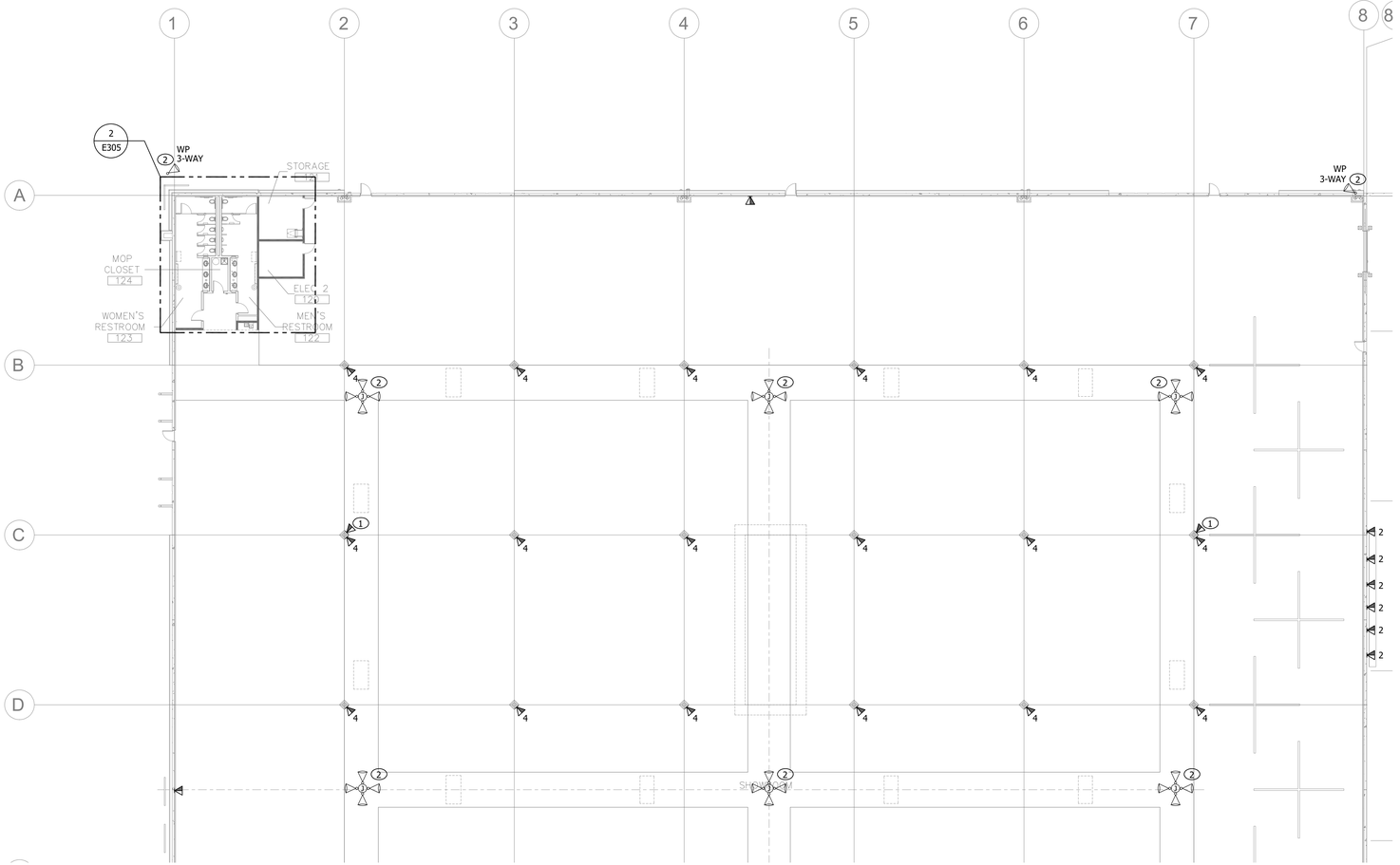

1 SHOWROOM SPECIAL SYSTEMS PLAN-NORTH

SCALE: 1" = 20'-0"

#KEYED NOTES:

1. PROVIDE DATA OUTLET NEAR ROOF DECK JOIST FOR WIRELESS ACCESS POINT. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. PROVIDE SECURITY CAMERA MOUNTED AT +18'-0"AFF. RUN 3/4" CONDUIT TO CAMERA AS REQUIRED.

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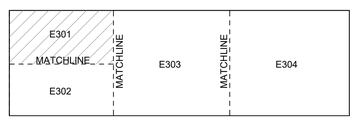

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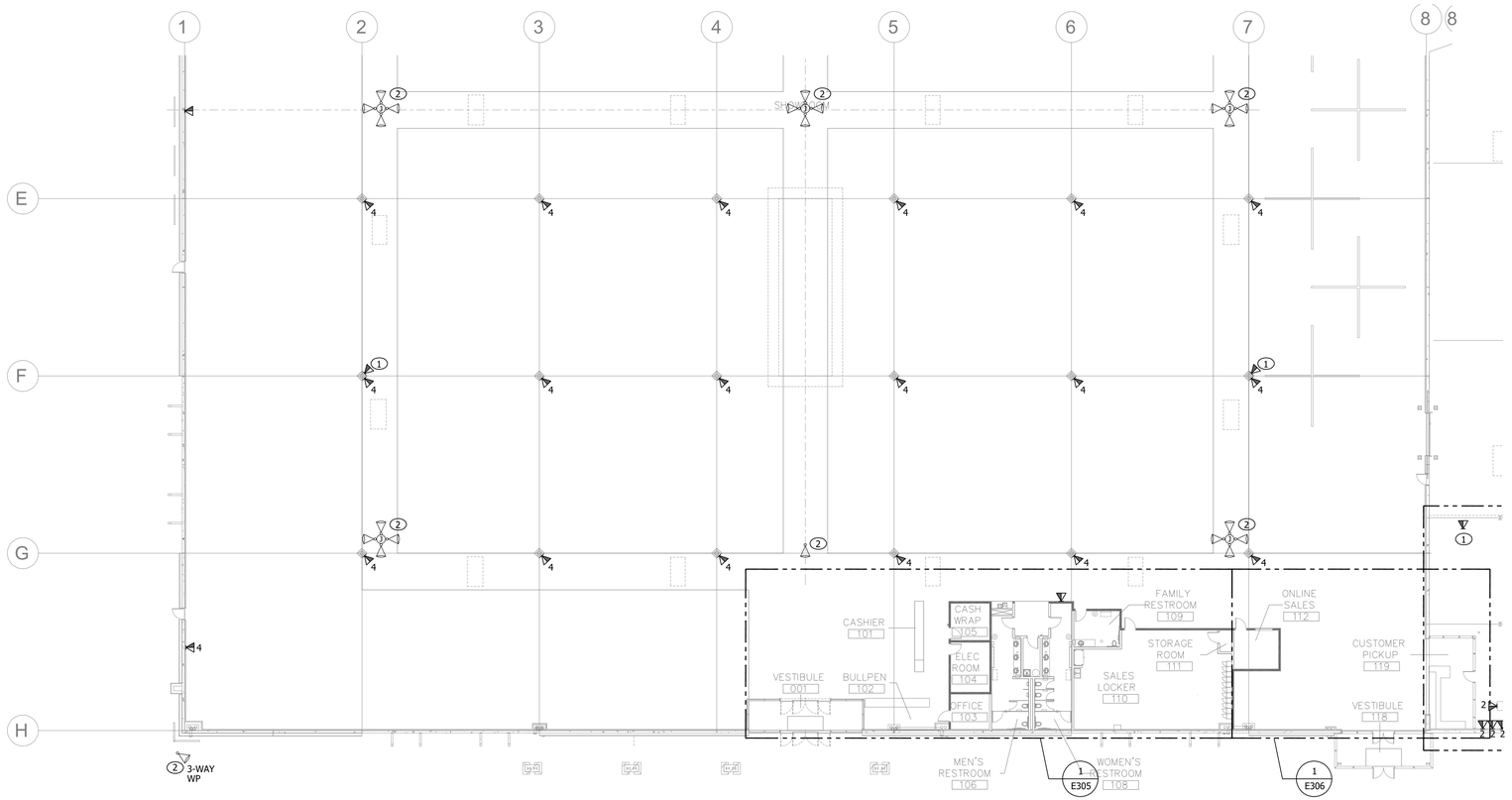
Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: PARTIAL SHOWROOM SPECIAL SYSTEMS PLAN

E301



1 SHOWROOM SPECIAL SYSTEMS PLAN-SOUTH

SCALE: 1" = 20'-0"

#KEYED NOTES:

1. PROVIDE DATA OUTLET NEAR ROOF DECK JOIST FOR WIRELESS ACCESS POINT. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. PROVIDE SECURITY CAMERA MOUNTED AT +18'-0"AFF. RUN 3/4" CONDUIT TO CAMERA AS REQUIRED.

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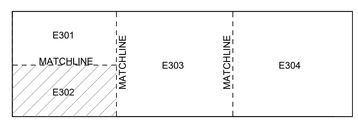

BUILDING KEY PLAN

Project Number: 20068.100
Drawn By:

Title: PARTIAL SHOWROOM SPECIAL SYSTEMS PLAN

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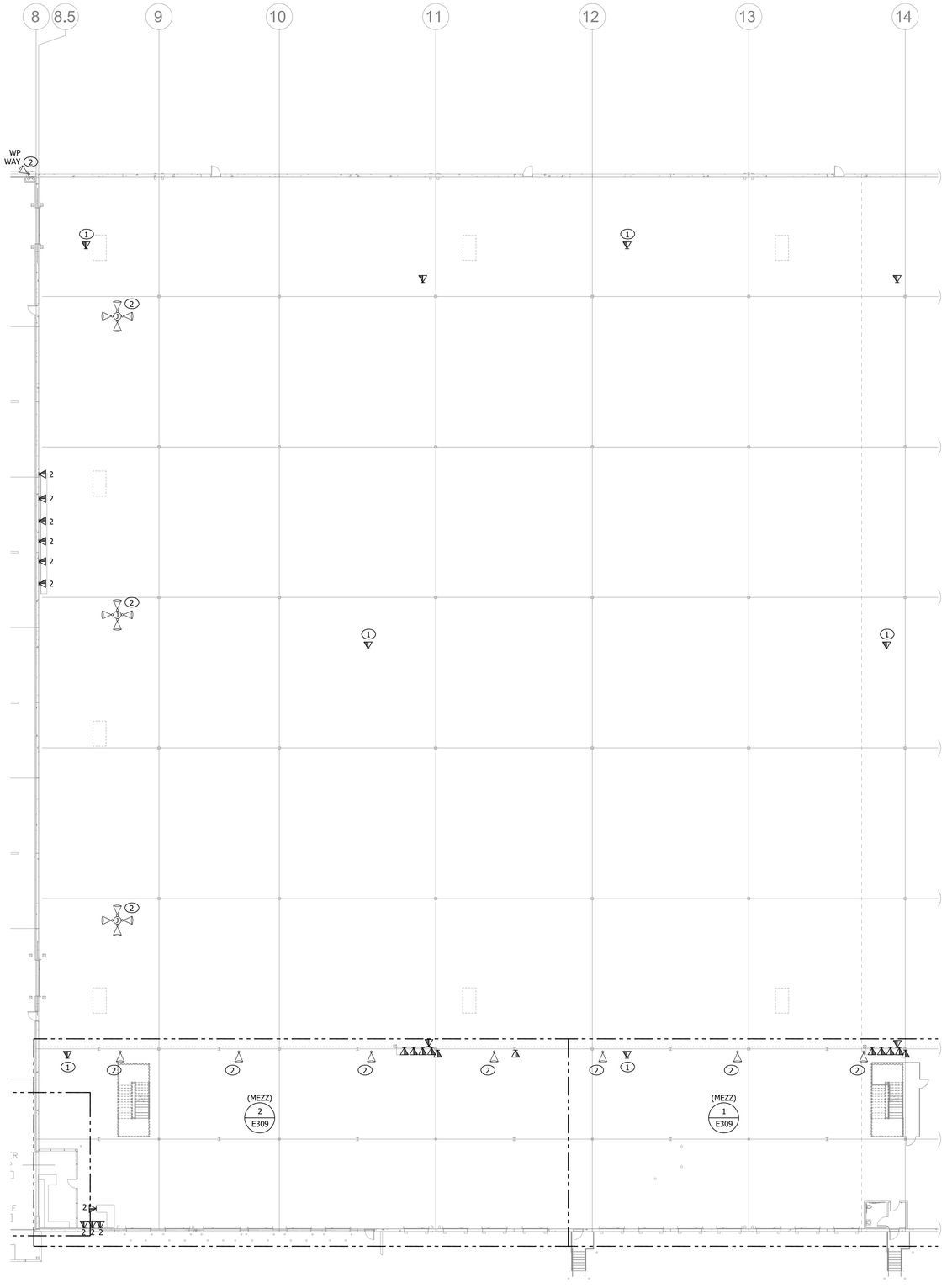
E302



1 WAREHOUSE SPECIAL SYSTEMS PLAN - WEST

SCALE: 1" = 20'-0"

GENERAL NOTES

A. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG: 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

B. UNDERNEATH MEZZANINE VERTICAL CONDUITS ARE TO BE RUN WITHIN WIDE FLANGE WEB. ELECTRICAL CONTRACTOR TO CONFIRM FINAL INSTALLATION ALLOWS FOR COLUMN PROTECTORS TO FIT.

(#) KEYED NOTES:

(NOT ALL NOTES MAY BE USED ON THIS SHEET)

1. PROVIDE DATA OUTLET NEAR ROOF DECK JOIST FOR WIRELESS ACCESS POINT. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. PROVIDE SECURITY CAMERA MOUNTED AT +37'-0"AFF IN OPEN WAREHOUSE LOCATIONS OR ON UNDERSIDE OF MEZZANINE WHEN LOCATED BELOW MEZZANINE. RUN 3/4" CONDUIT TO CAMERA AS REQUIRED.

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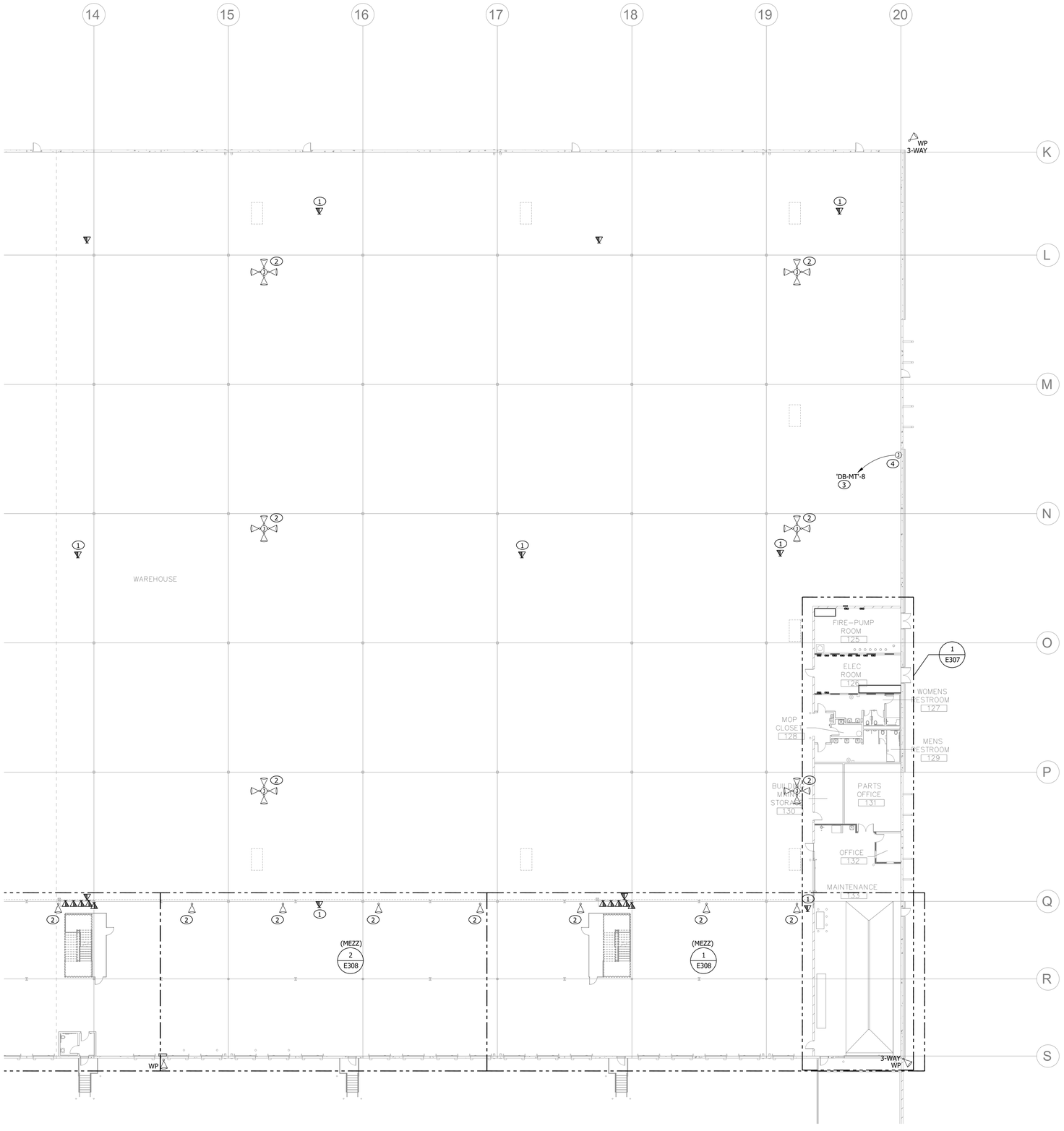
Project Number: 20068.100
Drawn By:
Title: PARTIAL WAREHOUSE SPECIAL SYSTEMS PLAN

E303



1 **WAREHOUSE SPECIAL SYSTEMS PLAN - EAST**
SCALE: 1" = 20'-0"

GENERAL NOTES

A. CONDUCTOR SIZES FOR 120V GENERAL RECEPTACLES: HOMERUNS LESS THAN 100 FEET, NUMBER 12 AWG: 100 TO 175 FEET, NUMBER 10 AWG, MORE THAN 175, NUMBER 8 AWG.

B. UNDERNEATH MEZZANINE VERTICAL CONDUITS ARE TO BE RUN WITHIN WIDE FLANGE WEB. ELECTRICAL CONTRACTOR TO CONFIRM FINAL INSTALLATION ALLOWS FOR COLUMN PROTECTORS TO FIT.

(#) KEYED NOTES:

(NOT ALL NOTES MAY BE USED ON THIS SHEET)

1. PROVIDE DATA OUTLET NEAR ROOF DECK JOIST FOR WIRELESS ACCESS POINT. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO BEGINNING WORK.
2. PROVIDE SECURITY CAMERA MOUNTED AT +37'-0"AFF IN OPEN WAREHOUSE LOCATIONS OR ON UNDERSIDE OF MEZZANINE WHEN LOCATED BELOW MEZZANINE. RUN 3/4" CONDUIT TO CAMERA AS REQUIRED.
3. 2"C WITH (3)-#3/0CU., (1)-#6CU. GND.
4. JUNCTION BOX FOR CONNECTION TO EMERGENCY SHOWER EYEWASH HEATER, HEATER PROVIDED WITH INTEGRAL DISCONNECT SWITCH. SEE PLUMBING PLANS FOR EXACT LOCATION.

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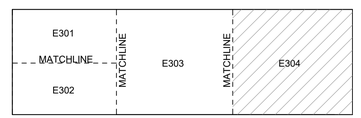

BUILDING KEY PLAN

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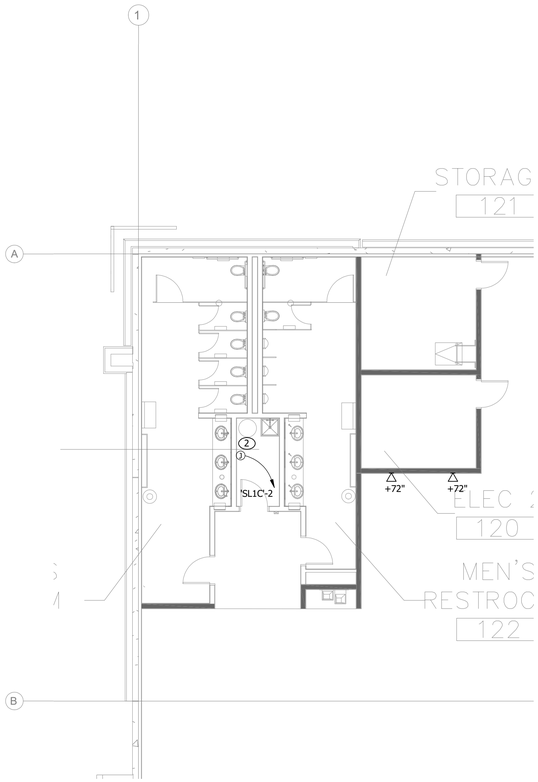
Project Number: 20068.100
Drawn By:
Title: PARTIAL WAREHOUSE SPECIAL SYSTEMS PLAN

E304

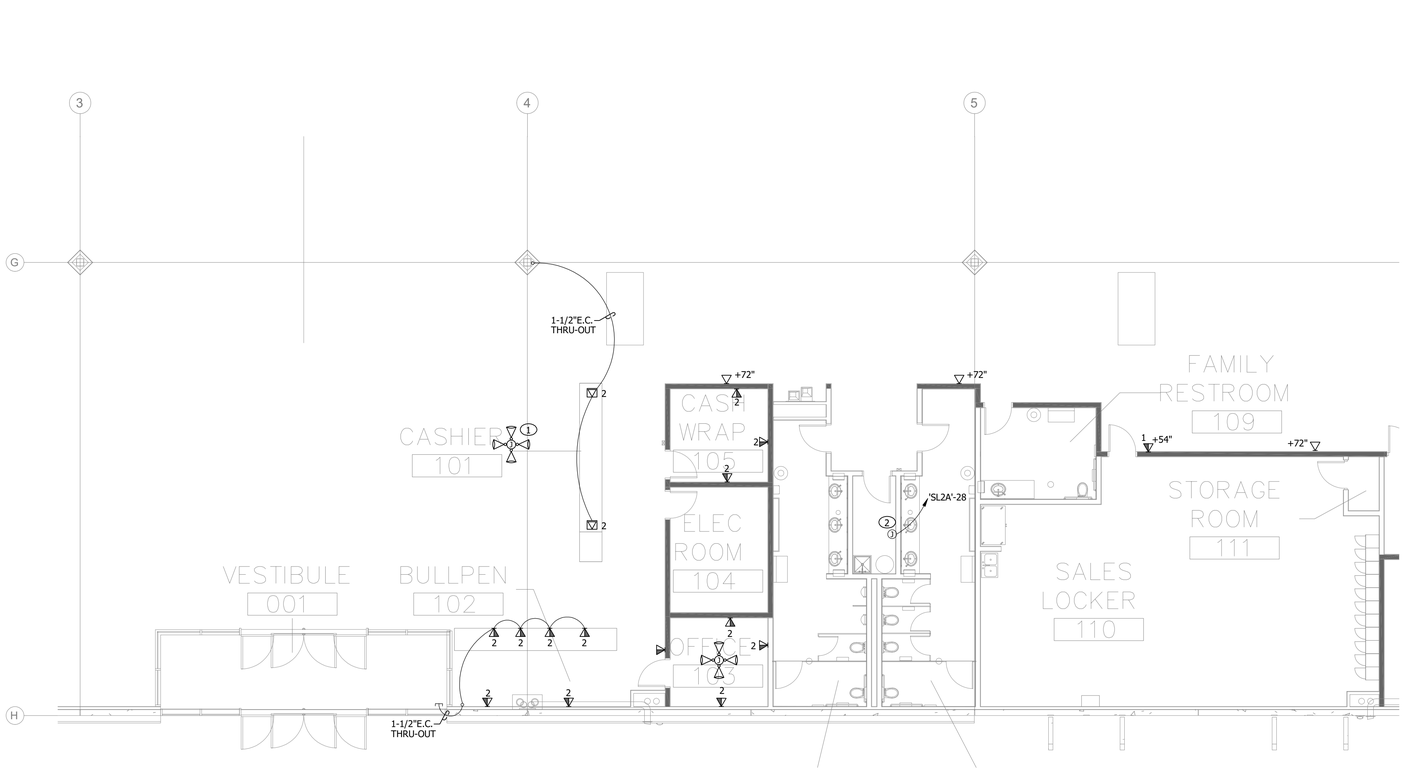
KEYED NOTES:

1. PROVIDE SECURITY CAMERA MOUNTED AT +18'-0" AFF. RUN 3/4" CONDUIT TO CAMERA AS REQUIRED.
2. PROVIDE JUNCTION BOX FOR AQUASTAT, 16A, 120V/1PH. COORDINATE EXACT LOCATION WITH PLUMBING PLANS PRIOR TO BEGINNING WORK.



2 ENLARGE SPECIAL SYSTEMS PLAN-SHOWROOM OFFICES

SCALE: 1/8" = 1'-0"



1 ENLARGE SPECIAL SYSTEMS PLAN- SHOWROOM ENTRY

SCALE: 1/8" = 1'-0"

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Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title:
ENLARGED MAIN ENTRY OFFICES
SPECIAL SYSTEMS PLANS

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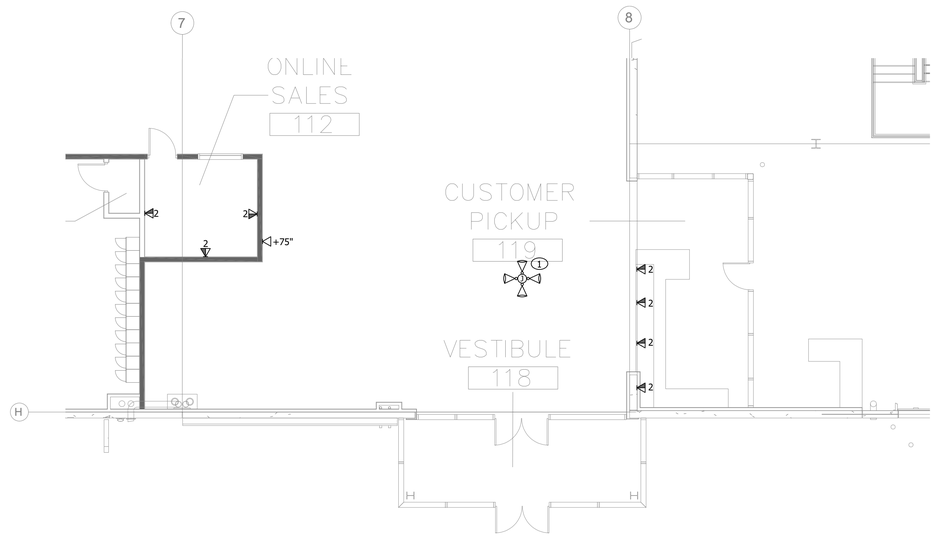
JOB # 21-120A

E305

KEYED NOTES:

1. PROVIDE SECURITY CAMERA MOUNTED AT +18'-0" AFF. RUN 3/4" CONDUIT TO CAMERA AS REQUIRED.



1 ENLARGE SPECIAL SYSTEMS PLAN-CUSTOMER PICKUP
SCALE: 1/8" = 1'-0"

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Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: ENLARGED CUSTOMER PICKUP/SALES S.S.

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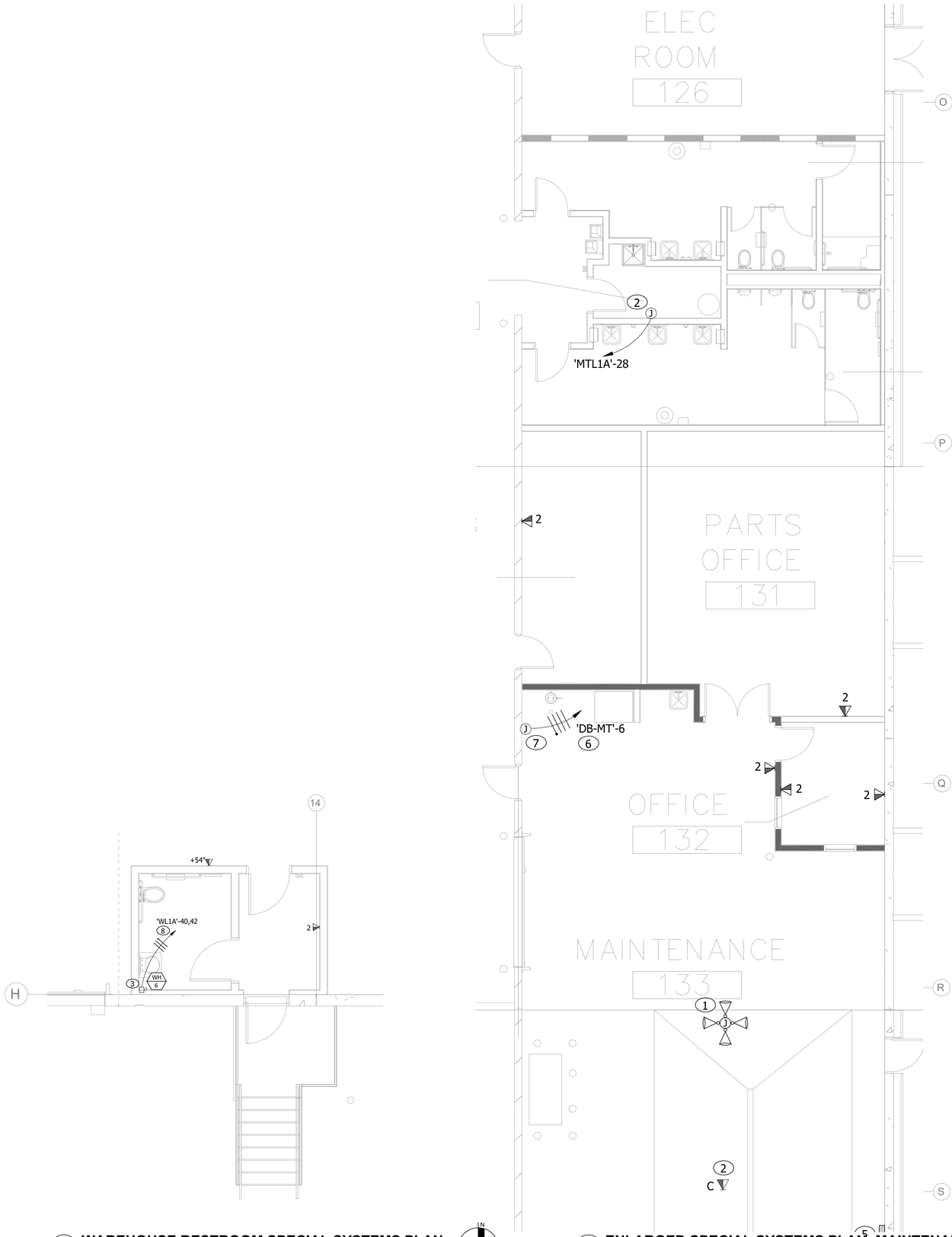
E306



2 WAREHOUSE RESTROOM SPECIAL SYSTEMS PLAN

SCALE: 1/4" = 1'-0"

1 ENLARGED SPECIAL SYSTEMS PLAN- MAINTENANCE

SCALE: 1/8" = 1'-0"

#KEYED NOTES:

1. PROVIDE SECURITY CAMERA MOUNTED AT +18'-0" AFF. RUN 3/4" CONDUIT TO CAMERA AS REQUIRED.
2. PROVIDE JUNCTION BOX FOR AQUASTAT, 16A, 120V/1PH. COORDINATE EXACT LOCATION WITH PLUMBING PLANS PRIOR TO BEGINNING WORK.
3. NOT USED.
4. ALL ELECTRICAL DEVICES SHALL BE INSTALLED AT A MINIMUM OF 20" TO BOTTOM OF DEVICE. ALL WORK IN THIS AREA TO BE PERFORMED IN COMPLIANCE WITH N.E.C. ARTICLE 511.
5. OIL WATER SEPERATOR ALARM PANEL. PROVIDE 3/4" CONDUIT BETWEEN PANEL AND OWS. SEE PLUMBING PLANS FOR EXACT LOCATION.
6. 2"C WITH (3)-#3/0CU., (1)-#6CU. GND.
7. JUNCTION BOX FOR CONNECTION TO EMERGENCY SHOWER EYEWASH HEATER, HEATER PROVIDED WITH INTEGRAL DISCONNECT SWITCH. SEE PLUMBING PLANS FOR EXACT LOCATION.

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Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: ENLARGED MAINTENANCE SPECIAL SYSTEMS PLAN

E307

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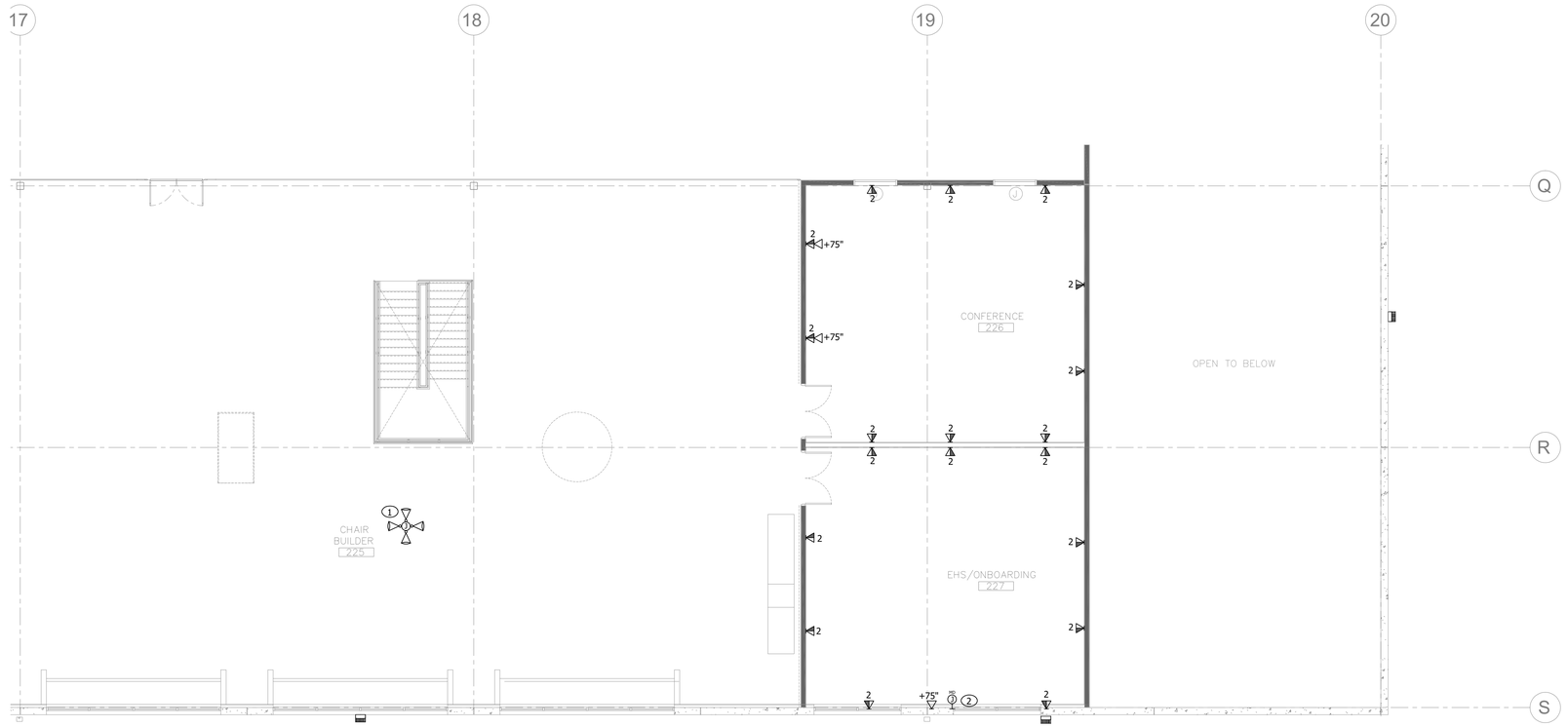
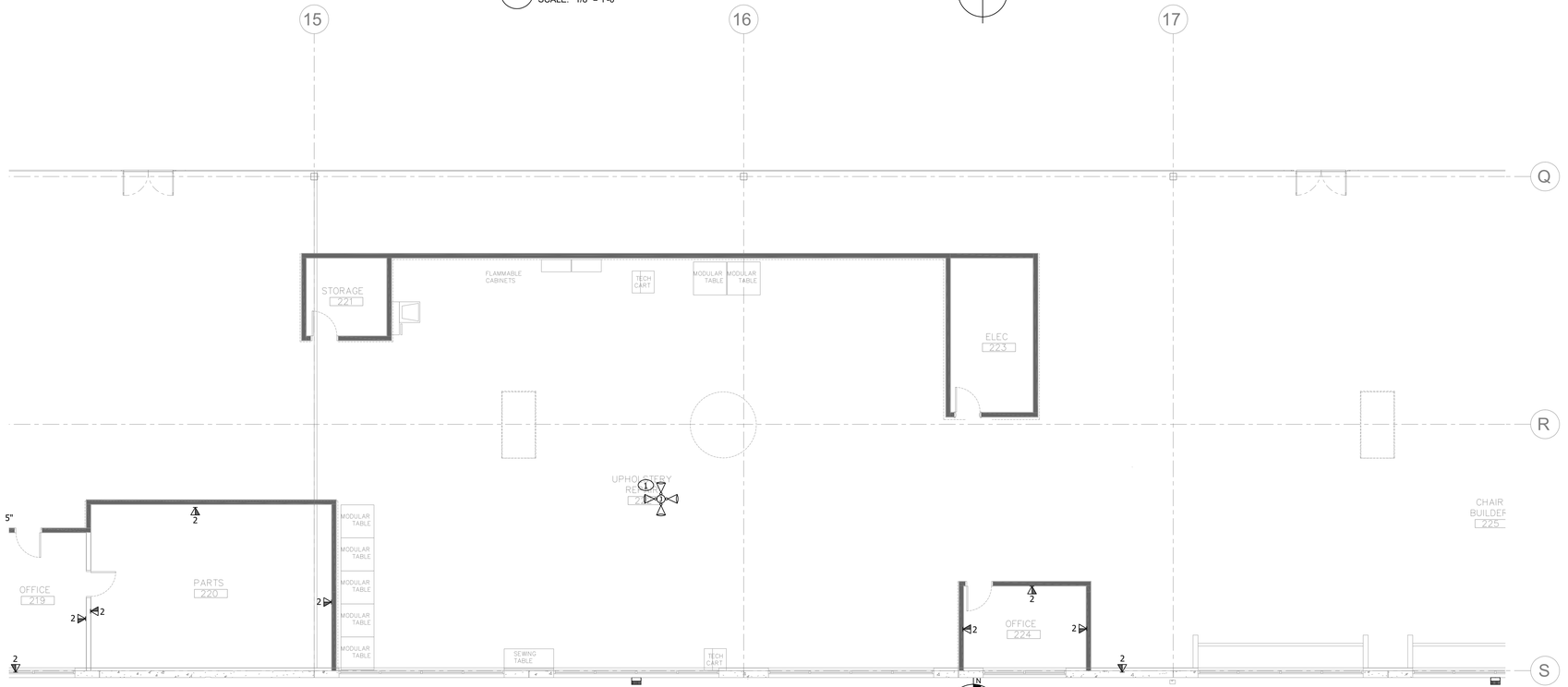


1 PARTIAL MEZZANINE SPECIAL SYSTEMS PLAN
SCALE: 1/8" = 1'-0"



2 PARTIAL MEZZANINE SPECIAL SYSTEMS PLAN
SCALE: 1/8" = 1'-0"

KEYED NOTES:

1. PROVIDE SECURITY CAMERA MOUNTED AT +18'-0" AFF. RUN 3/4" CONDUIT TO CAMERA AS REQUIRED.
2. PROVIDE WALL MOUNTED JUNCTION BOX WITH 1-1/2" E.C. STUBBED INTO ACCESSIBLE CEILING SPACE FOR CONNECTION TO MODULAR FURNITURE. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BEGINNING WORK.
3. PROVIDE JUNCTION BOX FOR AQUASTAT, 16A, 120V/1PH. COORDINATE EXACT LOCATION WITH PLUMBING PLANS PRIOR TO BEGINNING WORK.

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Revisions:

Project Number: 20068.100
Drawn By:

Title: PARTIAL MEZZANINE SPECIAL SYSTEMS PLANS

E308

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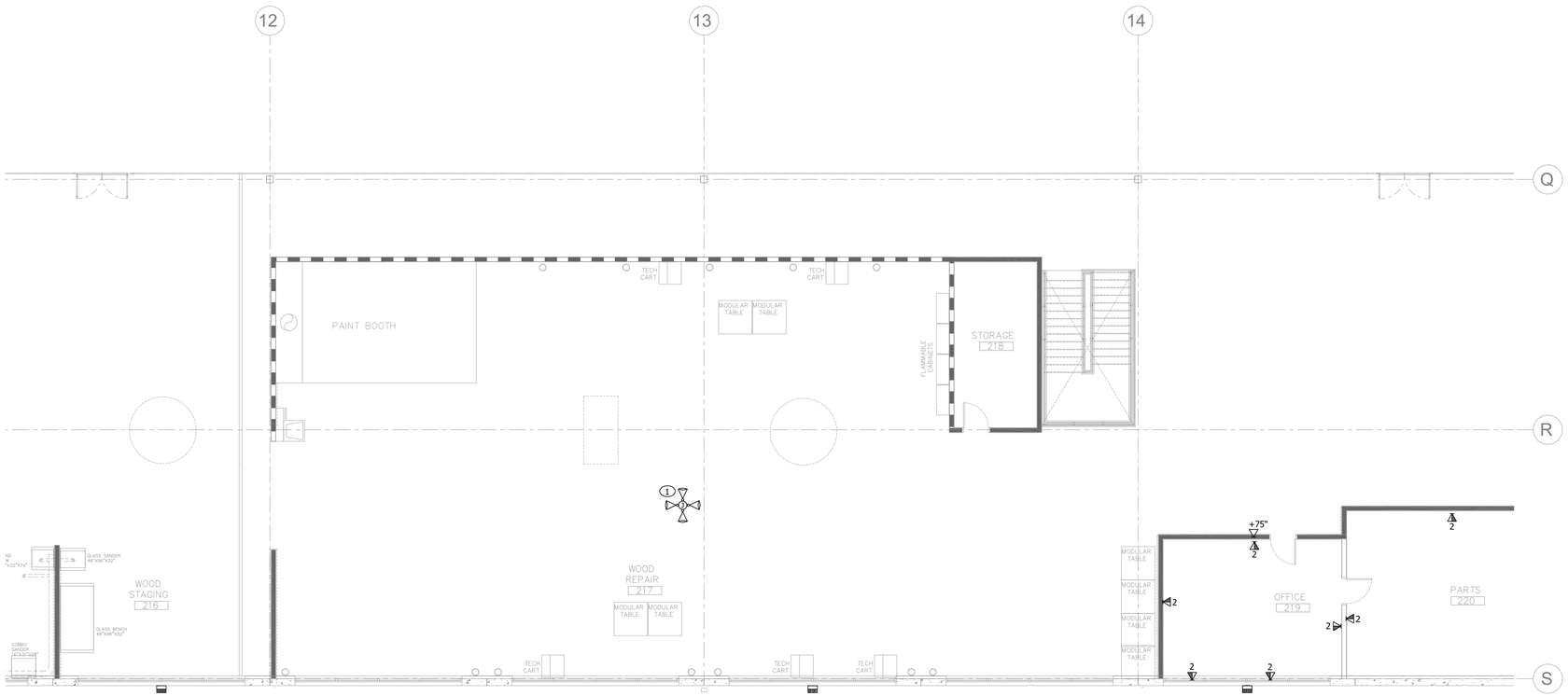
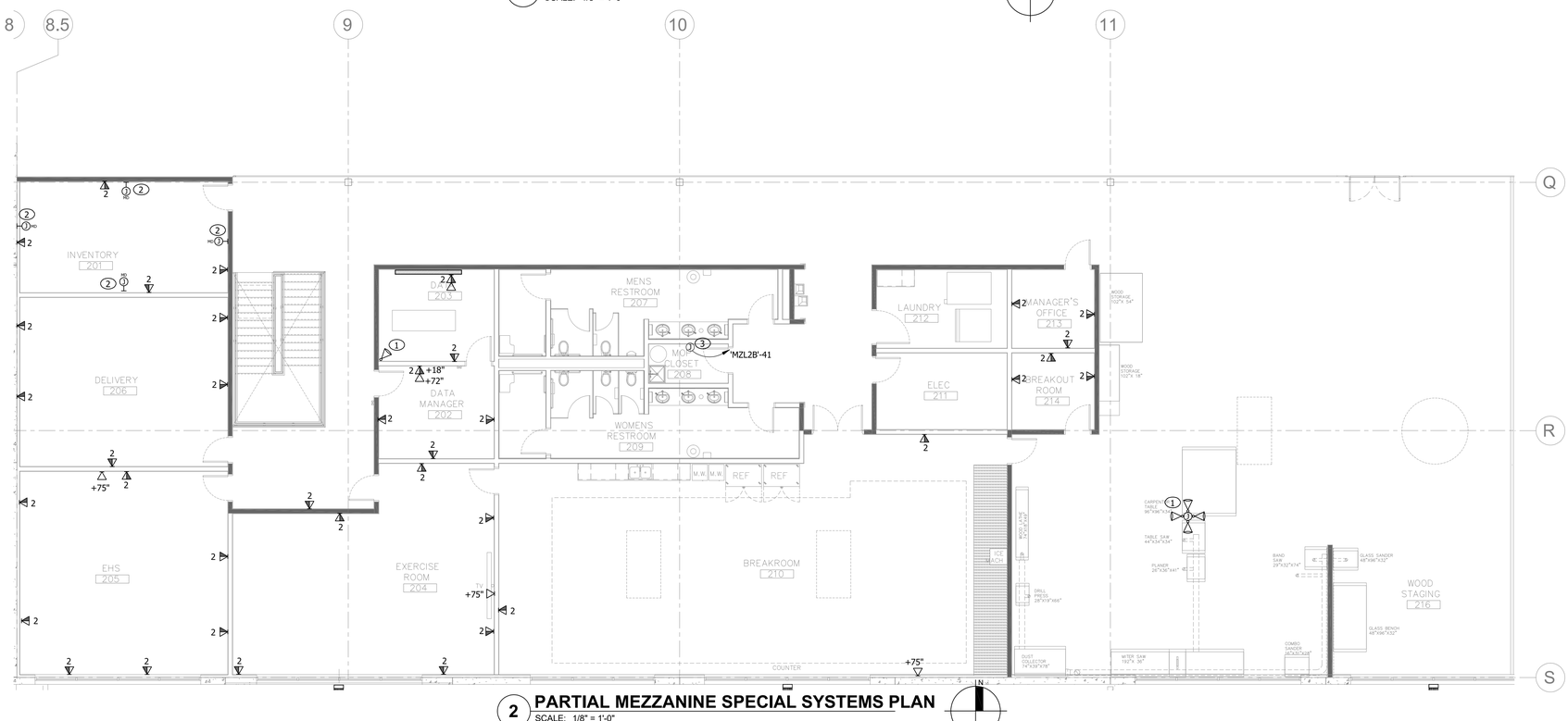


1 WH MEZZ SPECIAL SYSTEMS PLAN - WEST MIDDLE

SCALE: 1/8" = 1'-0"



2 PARTIAL MEZZANINE SPECIAL SYSTEMS PLAN

SCALE: 1/8" = 1'-0"

KEYED NOTES:

1. PROVIDE SECURITY CAMERA MOUNTED AT +18'-0" AFF. RUN 3/4" CONDUIT TO CAMERA AS REQUIRED.
2. PROVIDE WALL MOUNTED JUNCTION BOX WITH 1-1/2" E.C. STUBBED INTO ACCESSIBLE CEILING SPACE FOR CONNECTION TO MODULAR FURNITURE. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ARCHITECTURAL PLANS AND MANUFACTURER'S SPECIFICATIONS PRIOR TO BENEFITTING WORK.
3. PROVIDE JUNCTION BOX FOR AQUASTAT, 16A, 120V/1PH. COORDINATE EXACT LOCATION WITH PLUMBING PLANS PRIOR TO BEGINNING WORK.

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Title: PARTIAL MEZZANINE SPECIAL SYSTEMS PLANS

E309

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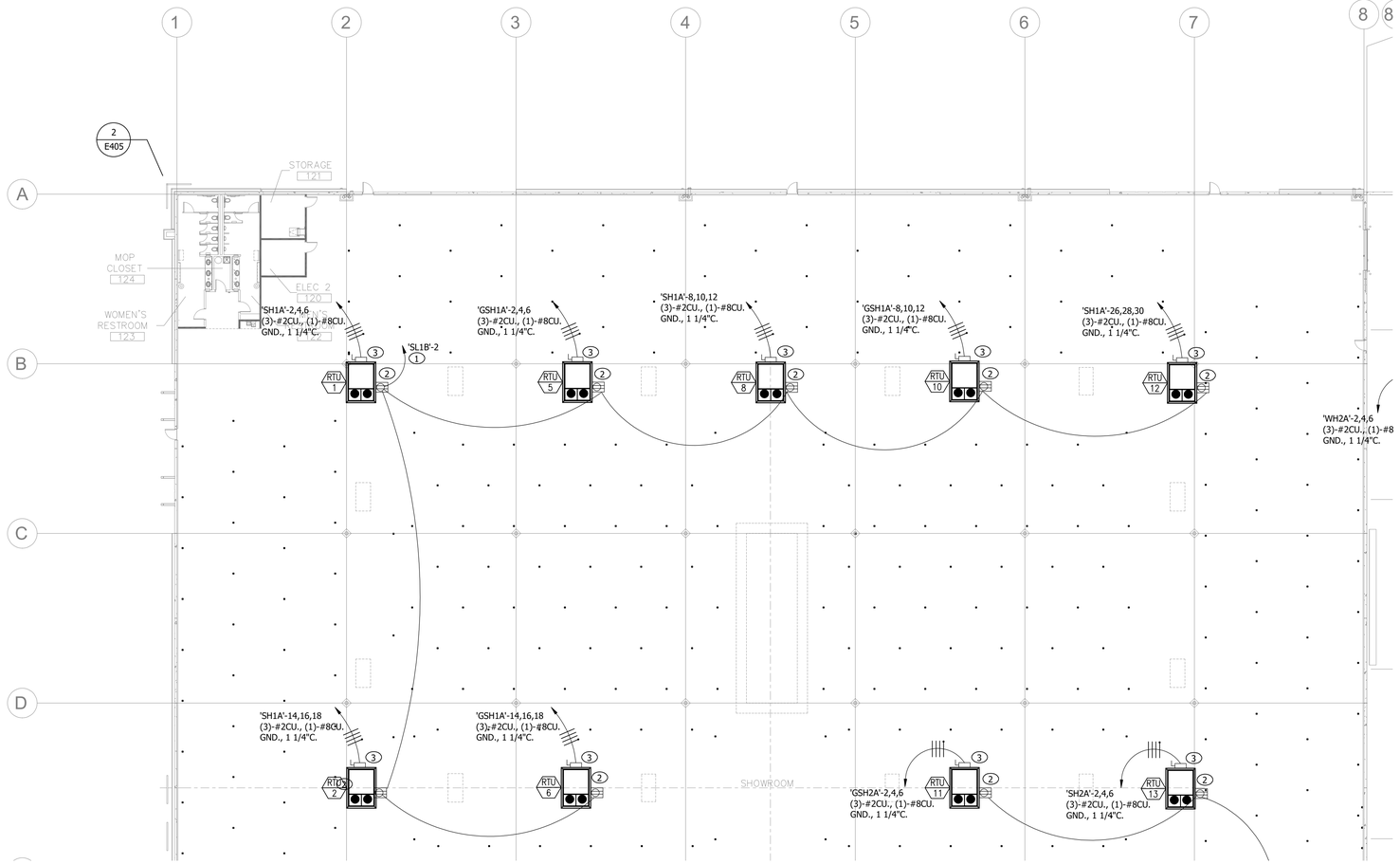

1 SHOWROOM HVAC POWER PLAN-NORTH

SCALE: 1" = 20'-0"

GENERAL NOTES

A. CONDUIT FOR ALL ROOFTOP MECHANICAL UNITS SHALL BE RUN UNDER THE ROOF. NO EXPOSED CONDUIT RUNS ON ROOF.

B. MECHANICAL PLANS CALL FOR THE RTU UNITS TO HAVE THERMOSTAT/CONTROLLERS WITH QUANTITIES AND LOCATIONS COORDINATED BY OWNER. ELECTRICAL CONTRACTOR TO PROVIDE ¾" CONDUIT FROM THERMOSTAT/CONTROLLER TO RESPECTIVE RTU FOR CONTROL WIRING. COORDINATE FINAL THERMOSTAT/CONTROLLER LOCATIONS WITH MECHANICAL CONTRACTOR AND OWNER PRIOR TO BEGINNING WORK.

#KEYED NOTES:

1. FEED WITH #8S THROUGH-OUT.
2. 20A 125V 2P, 3W WEATHERPROOF G.F.C.I. SERVICE OUTLET FOR MAINTENANCE PURPOSES PER NEC 210-63. ENCLOSURE AND CLEAR COVER SHALL BE UV STABILIZED POLYCARBONATE AND COMPLY WITH NEC 406.9(B)(1).
3. 100A, 3P+E.G., 600V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 3R ENCLOSURE WITH (3) 80A TIME-DELAY FUSES (RK1 TYPE).

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BUILDING KEY PLAN

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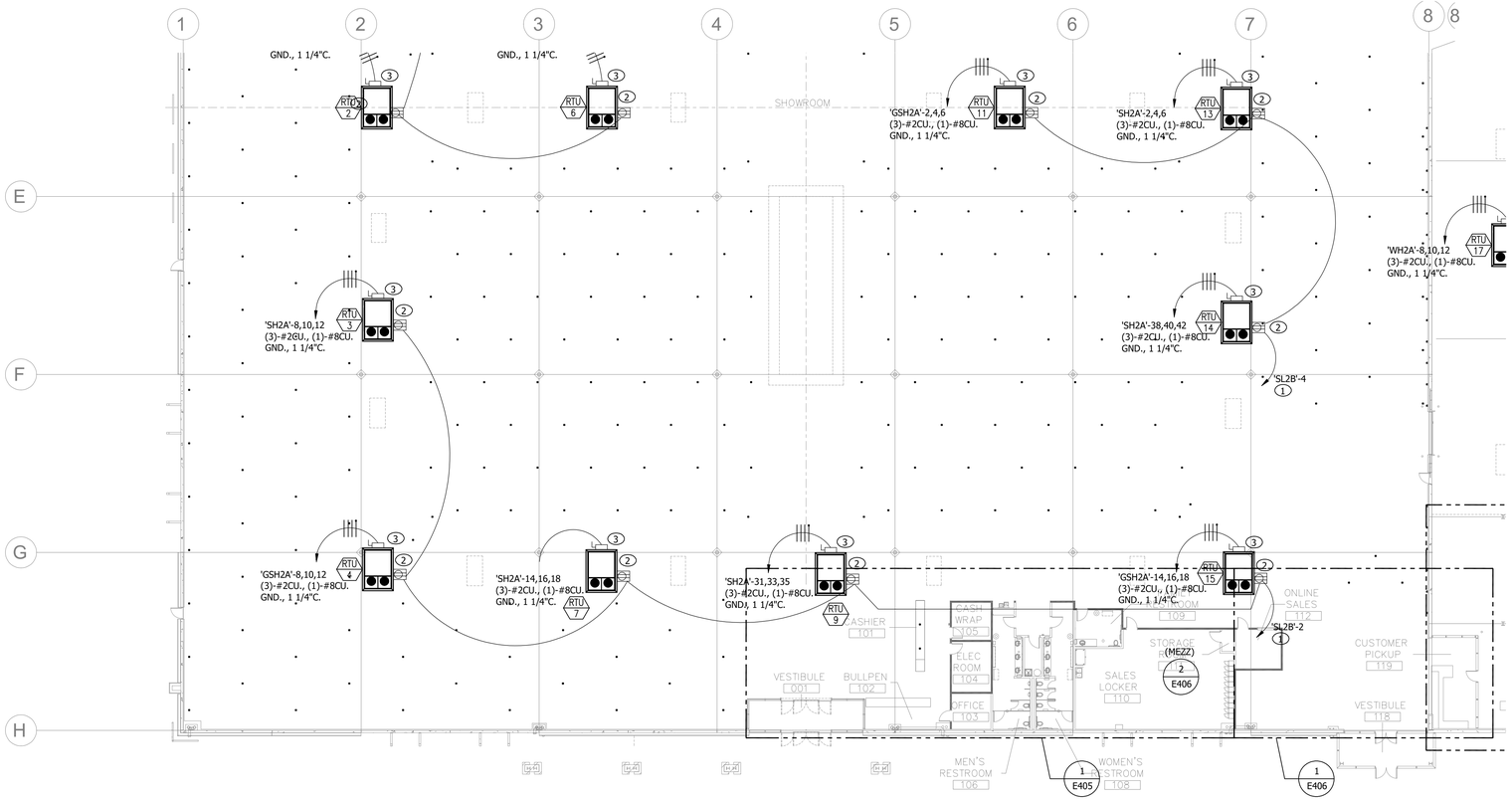
JOB # 21-120A

Project Number: 20068.100
Drawn By:
Title: PARTIAL SHOWROOM HVAC POWER PLAN

E401



1 SHOWROOM HVAC POWER PLAN-SOUTH

SCALE: 1" = 20'-0"

GENERAL NOTES

A. CONDUIT FOR ALL ROOFTOP MECHANICAL UNITS SHALL BE RUN UNDER THE ROOF. NO EXPOSED CONDUIT RUNS ON ROOF.

B. MECHANICAL PLANS CALL FOR THE RTU UNITS TO HAVE THERMOSTAT/CONTROLLERS WITH QUANTITIES AND LOCATIONS COORDINATED BY OWNER. ELECTRICAL CONTRACTOR TO PROVIDE $\frac{3}{4}$" CONDUIT FROM THERMOSTAT/CONTROLLER TO RESPECTIVE RTU FOR CONTROL WIRING. COORDINATE FINAL THERMOSTAT/CONTROLLER LOCATIONS WITH MECHANICAL CONTRACTOR AND OWNER PRIOR TO BEGINNING WORK.

(#) KEYED NOTES:

1. FEED WITH #8S THROUGH-OUT.
2. 20A 125V 2P, 3W WEATHERPROOF G.F.C.I. SERVICE OUTLET FOR MAINTENANCE PURPOSES PER NEC 210-63. ENCLOSURE AND CLEAR COVER SHALL BE UV STABILIZED POLYCARBONATE AND COMPLY WITH NEC 406.9(B)(1).
3. 100A, 3P+E.G., 600V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 3R ENCLOSURE WITH (3) 80A TIME-DELAY FUSES (RK1 TYPE).

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Drawn By:
Title: PARTIAL SHOWROOM HVAC POWER PLAN

E401 | MATCHLINE | E402 | MATCHLINE | E403 | MATCHLINE | E404

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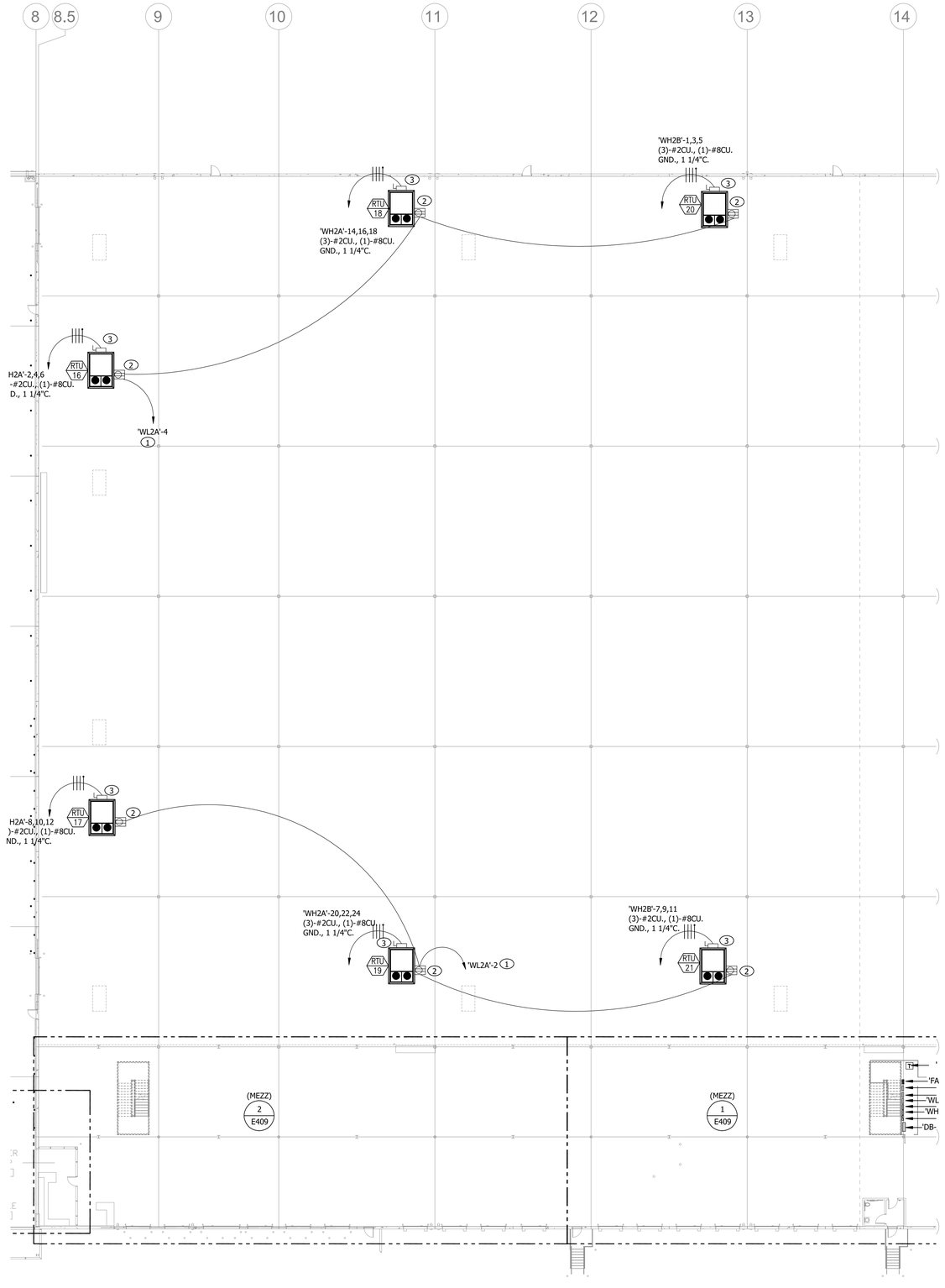
E402



1 WAREHOUSE HVAC POWER PLAN - WEST

SCALE: 1" = 20'-0"

GENERAL NOTES

A. CONDUIT FOR ALL ROOFTOP MECHANICAL UNITS SHALL BE RUN UNDER THE ROOF. NO EXPOSED CONDUIT RUNS ON ROOF.

B. MECHANICAL PLANS CALL FOR THE REMAINING RTU UNITS TO HAVE THERMOSTAT/CONTROLLERS WITH QUANTITIES AND LOCATIONS COORDINATED BY OWNER. ELECTRICAL CONTRACTOR TO PROVIDE $\frac{3}{4}$" CONDUIT FROM THERMOSTAT/CONTROLLER TO RESPECTIVE RTU FOR CONTROL WIRING. COORDINATE FINAL THERMOSTAT/CONTROLLER LOCATIONS WITH MECHANICAL CONTRACTOR AND OWNER PRIOR TO BEGINNING WORK.

C. UNDERNEATH MEZZANINE VERTICAL CONDUITS ARE TO BE RUN WITHIN WIDE FLANGE WEB. ELECTRICAL CONTRACTOR TO CONFIRM FINAL INSTALLATION ALLOWS FOR COLUMN PROTECTORS TO FIT.

#KEYED NOTES:

1. FEED WITH #8S THROUGH-OUT.
2. 20A 125V 2P, 3W WEATHERPROOF G.F.C.I. SERVICE OUTLET FOR MAINTENANCE PURPOSES PER NEC 210-63. ENCLOSURE AND CLEAR COVER SHALL BE UV STABILIZED POLYCARBONATE AND COMPLY WITH NEC 406.9(B)(1).
3. 100A, 3P+E.G., 600V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 3R ENCLOSURE WITH (3) 80A TIME-DELAY FUSES (RK1 TYPE).
4. EXPLOSION PROOF EXHAUST FAN. ALL ELECTRICAL COMPONENTS SERVING THIS FAN SHALL BE EXPLOSION PROOF.
5. FAN TO BE INTERLOCKED WITH BATTERY CHARGER PANEL 'BH1' SO THAT UPON FAILURE OF FAN, 'BH1' IS DE-ENERGIZED. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
6. SIZE 0, 120V, 1P FULL-VOLTAGE, NON-REVERSING COMBO-MAGNETIC STARTER IN NEMA 3R ENCLOSURE. PROVIDE PROPERLY SIZED OVERLOAD HEATERS. CONTROL COIL VOLTAGE SHALL BE 120V. REFER TO MECHANICAL PLANS FOR LOCATION OF H-O-A SELECTOR SWITCH. PROVIDE FUSES PER MANUFACTURERS RECOMMENDATION.

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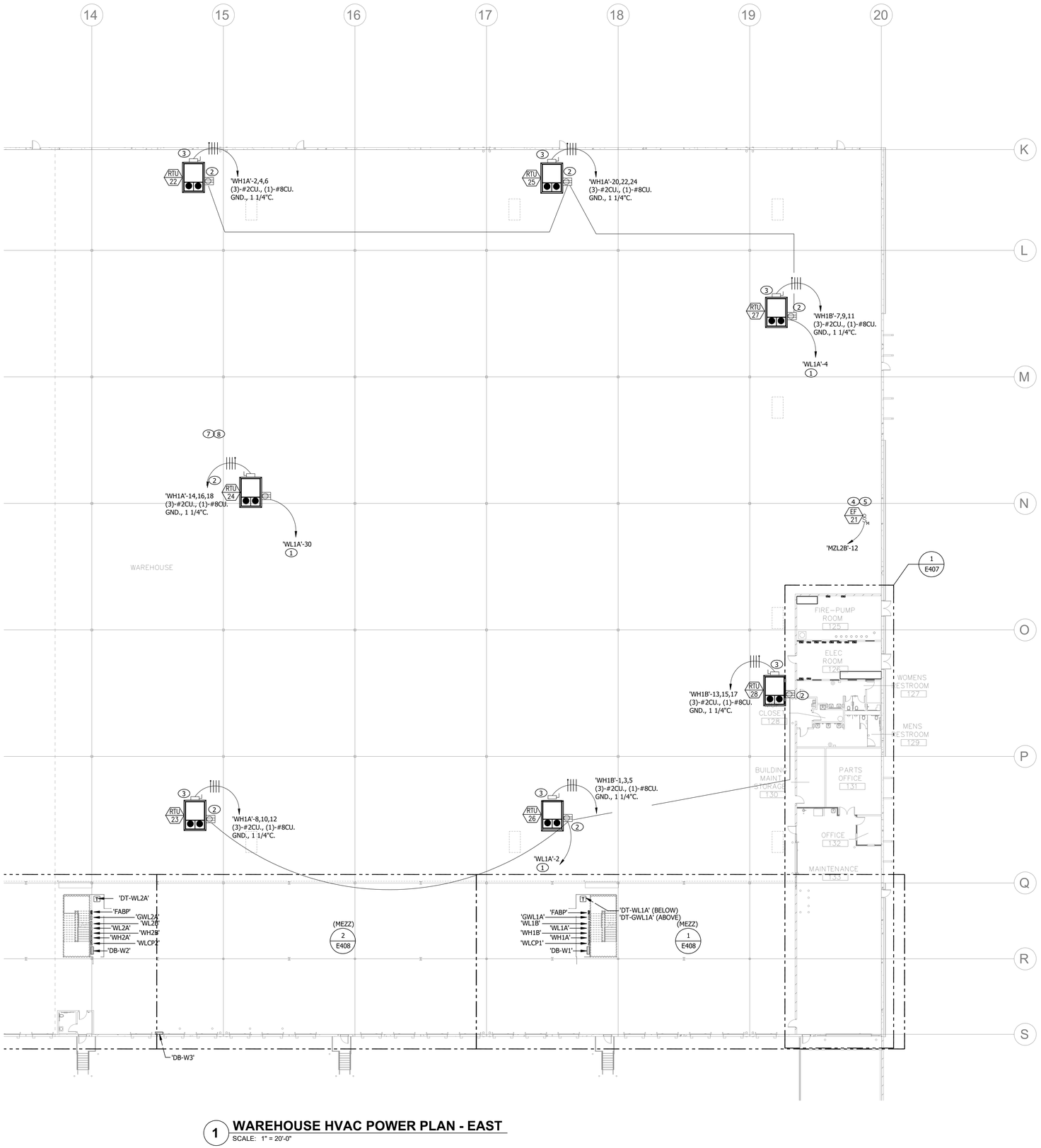
JOB # 21-120A

Project Number: 20068.100
Drawn By:
Title: PARTIAL WAREHOUSE HVAC POWER PLAN

E403



1 WAREHOUSE HVAC POWER PLAN - EAST

SCALE: 1" = 20'-0"

GENERAL NOTES

A. CONDUIT FOR ALL ROOFTOP MECHANICAL UNITS SHALL BE RUN UNDER THE ROOF. NO EXPOSED CONDUIT RUNS ON ROOF.

B. MECHANICAL PLANS CALL FOR THE REMAINING RTU UNITS TO HAVE THERMOSTAT/CONTROLLERS WITH QUANTITIES AND LOCATIONS COORDINATED BY OWNER. ELECTRICAL CONTRACTOR TO PROVIDE 3/4" CONDUIT FROM THERMOSTAT/CONTROLLER TO RESPECTIVE RTU FOR CONTROL WIRING. COORDINATE FINAL THERMOSTAT/CONTROLLER LOCATIONS WITH MECHANICAL CONTRACTOR AND OWNER PRIOR TO BEGINNING WORK..

C. UNDERNEATH MEZZANINE VERTICAL CONDUITS ARE TO BE RUN WITHIN WIDE FLANGE WEB. ELECTRICAL CONTRACTOR TO CONFIRM FINAL INSTALLATION ALLOWS FOR COLUMN PROTECTORS TO FIT.

#KEYED NOTES:

1. FEED WITH #8S THROUGH-OUT.
2. 20A 125V 2P, 3W WEATHERPROOF G.F.C.I. SERVICE OUTLET FOR MAINTENANCE PURPOSES PER NEC 210-63. ENCLOSURE AND CLEAR COVER SHALL BE UV STABILIZED POLYCARBONATE AND COMPLY WITH NEC 406.9(B)(1).
3. 100A, 3P+E.G., 600V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 3R ENCLOSURE WITH (3) 80A TIME-DELAY FUSES (RK1 TYPE).
4. EXPLOSION PROOF EXHAUST FAN. ALL ELECTRICAL COMPONENTS SERVING THIS FAN SHALL BE EXPLOSION PROOF.
5. FAN TO BE INTERLOCKED WITH BATTERY CHARGER PANEL 'BH1' SO THAT UPON FAILURE OF FAN, 'BH1' IS DE-ENERGIZED. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
6. SIZE 0, 120V, 1P FULL-VOLTAGE, NON-REVERSING COMBO-MAGNETIC STARTER IN NEMA 3R ENCLOSURE. PROVIDE PROPERLY SIZED OVERLOAD HEATERS. CONTROL COIL VOLTAGE SHALL BE 120V. REFER TO MECHANICAL PLANS FOR LOCATION OF H-O-A SELECTOR SWITCH. PROVIDE FUSES PER MANUFACTURERS RECOMMENDATION.

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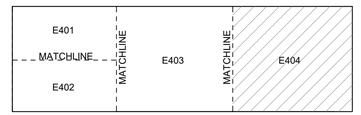

BUILDING KEY PLAN

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JOB # 21-120A

Project Number: 20068.100
Drawn By:
Title: PARTIAL WAREHOUSE HVAC POWER PLAN

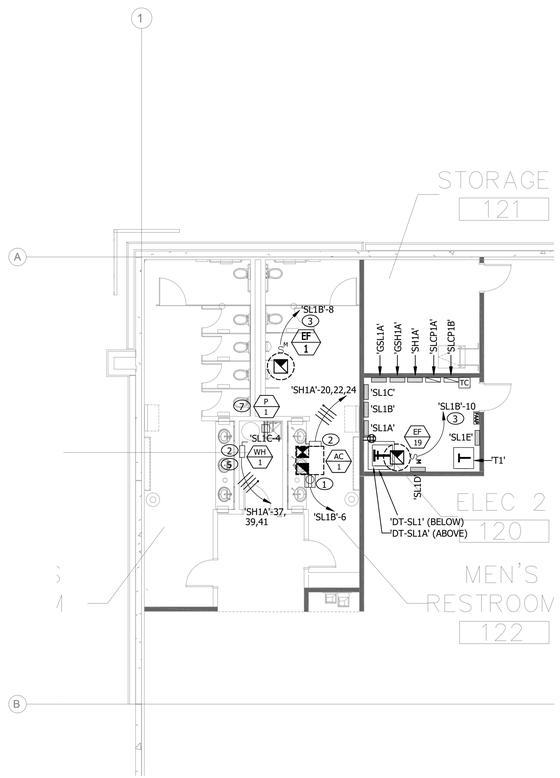
E404

GENERAL NOTES

A. CONDUIT FOR ALL ROOFTOP MECHANICAL UNITS SHALL BE RUN UNDER THE ROOF. NO EXPOSED CONDUIT RUNS ON ROOF.

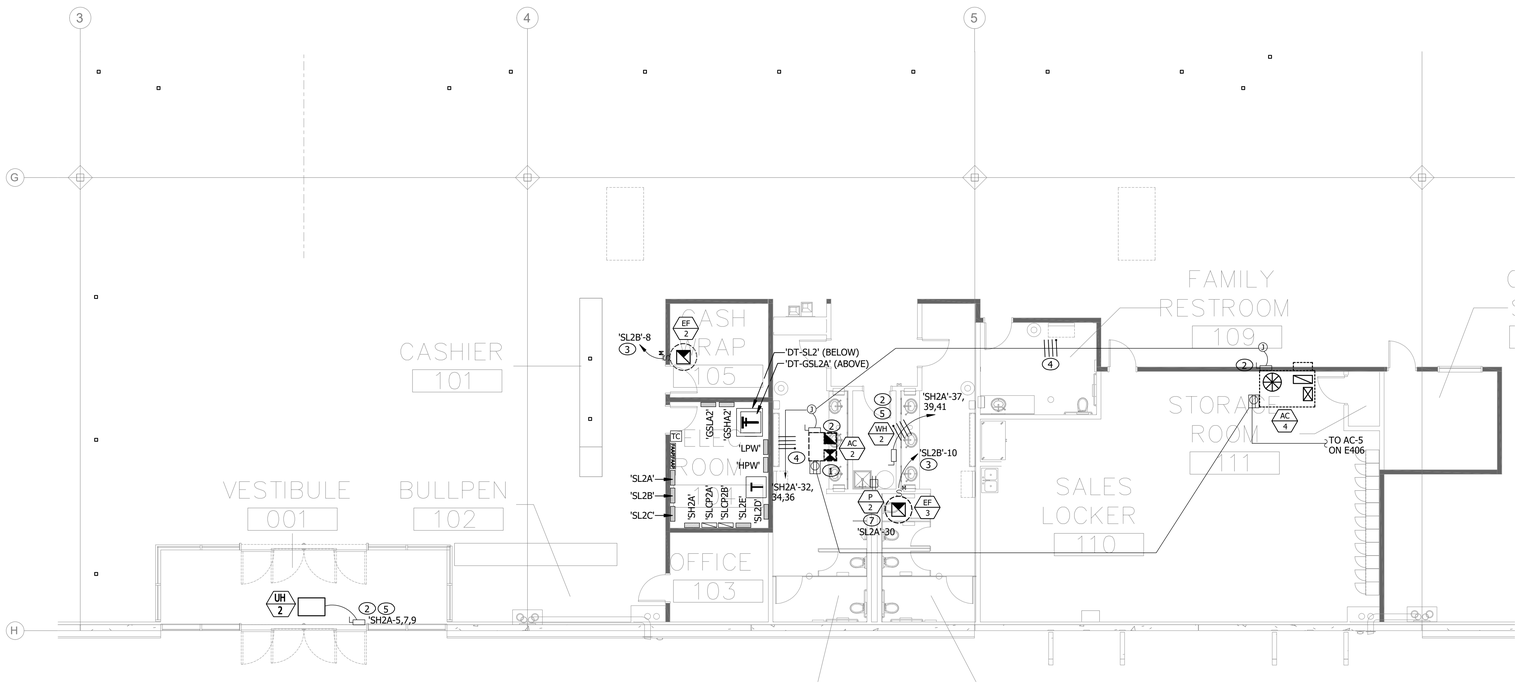
#KEYED NOTES:

1. 20A 125V 2P, 3W WEATHERPROOF G.F.C.I. SERVICE OUTLET FOR MAINTENANCE PURPOSES PER NEC 210-63. ENCLOSURE AND CLEAR COVER SHALL BE UV STABILIZED POLYCARBONATE AND COMPLY WITH NEC 406.9(B)(1).
2. 30A, 3P+E.G., 600V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 3R ENCLOSURE WITH FUSES SIZED PER MANUFACTURERS RECOMMENDATIONS.
3. ROUTE THRU TIMECLOCK. TIMECLOCK TO BE CONTROLLED BY THE ENERGY MANAGEMENT CONTROL SYSTEM.
4. 1"C WITH (3)-#6CU., (1)-#8CU. GND.
5. 3/4"C WITH (3)-#10CU., (1)-#10CU. GND.
6. JUNCTION BOX MOUNTED AT HEIGHT REQUIRED FOR CONNECTION TO GAS WATER HEATER CONTROL CIRCUIT. PROVIDE FINAL CONNECTION PER MANUFACTURER'S RECOMMENDATIONS.
7. 20A, 125V, 2P, 3W OUTLET MOUNTED AT HEIGHT REQUIRED FOR CONNECTION TO RECIRCULATING PUMP.



2 ENLARGED HVAC POWER PLAN-SHOWROOM OFFICES

SCALE: 1/8" = 1'-0"



1 ENLARGED HVAC POWER PLAN- SHOWROOM ENTRY

SCALE: 1/8" = 1'-0"

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Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: ENLARGED MAIN ENTRY OFF. HVAC POWER PLANS

E405

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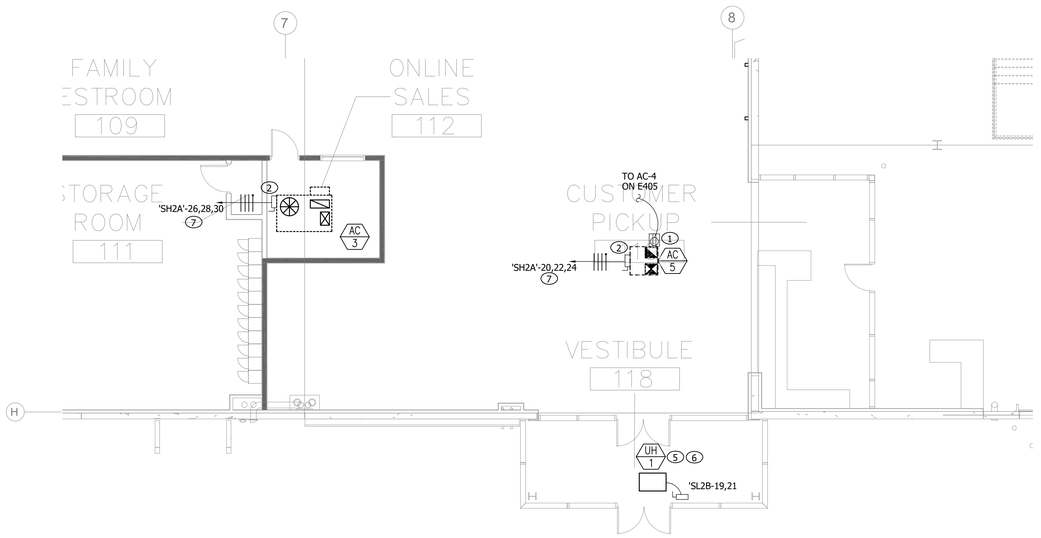
GENERAL NOTES

A. CONDUIT FOR ALL ROOFTOP MECHANICAL UNITS SHALL BE RUN UNDER THE ROOF. NO EXPOSED CONDUIT RUNS ON ROOF.

#KEYED NOTES:

1. 20A 125V 2P, 3W WEATHERPROOF G.F.C.I. SERVICE OUTLET FOR MAINTENANCE PURPOSES PER NEC 210-63. ENCLOSURE AND CLEAR COVER SHALL BE UV STABILIZED POLYCARBONATE AND COMPLY WITH NEC 406.9(B)(1).
2. 30A, 3P+E.G., 600V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 3R ENCLOSURE WITH FUSES SIZED PER MANUFACTURERS RECOMMENDATION.
3. 1"C WITH (3)-#6CU., (1)-#8CU. GND.
4. 3/4"C WITH (3)-#10CU., (1)-#10CU. GND.
5. 30A, 2P+E.G., 250V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 3R ENCLOSURE WITH FUSES SIZED PER MANUFACTURERS RECOMMENDATION.
6. 3/4"C WITH (2)-#10CU., (1)-#10CU. GND.
7. 3/4"C WITH (3)-#8CU., (1)-#8CU. GND.



1 **ENLARGED HVAC POWER PLAN-CAFE-CUSTOMER PICKUP**
SCALE: 1/8" = 1'-0"

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ARIZONA, U.S.A.

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JABS HEIGHTS & TUTT BOULEVARD
COLORADO SPRINGS, CO

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:
Title: CAFE CUST-PICKUP SALES MEZZ HVAC POWER

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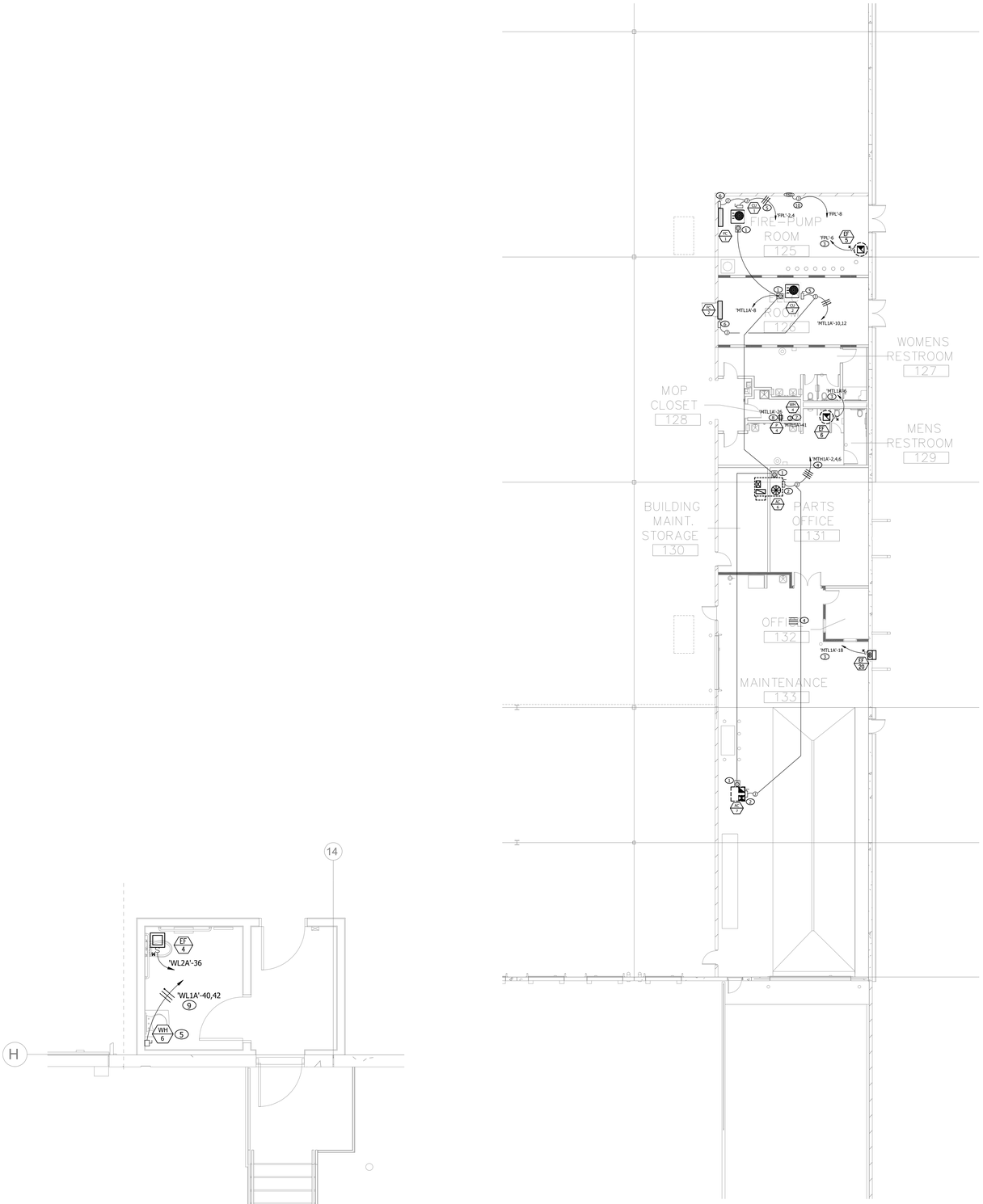
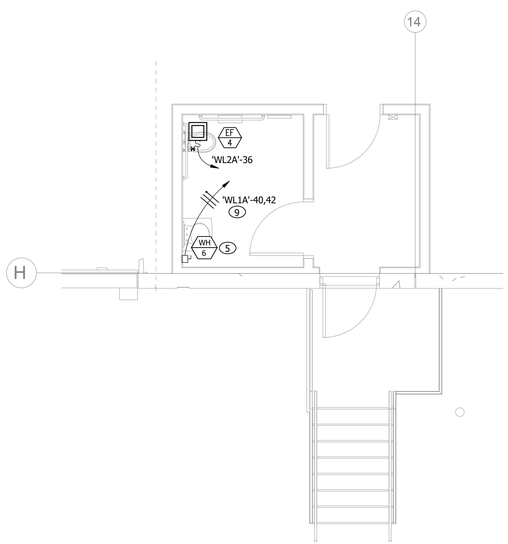
JOB # 21-120A

E406





2 WAREHOUSE RESTROOM HVAC POWER PLAN

SCALE: 1/4" = 1'-0"

1 ENLARGED HVAC POWER PLAN- MAINTENANCE

SCALE: 1/8" = 1'-0"

GENERAL NOTES

A. CONDUIT FOR ALL ROOFTOP MECHANICAL UNITS SHALL BE RUN UNDER THE ROOF. NO EXPOSED CONDUIT RUNS ON ROOF.

#KEYED NOTES:

1. 20A 125V 2P, 3W WEATHERPROOF G.F.C.I. SERVICE OUTLET FOR MAINTENANCE PURPOSES PER NEC 210-63. ENCLOSURE AND CLEAR COVER SHALL BE UV STABILIZED POLYCARBONATE AND COMPLY WITH NEC 406.9(B)(1).
2. 30A, 3P+E.G., 600V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 3R ENCLOSURE WITH FUSES SIZED PER MANUFACTURERS RECOMMENDATIONS.
3. ROUTE THRU TIMECLOCK. TIMECLOCK TO BE CONTROLLED BY THE ENERGY MANAGEMENT CONTROL SYSTEM.
4. 1"C WITH (3)-#4CU., (1)-#8CU. GND.
5. 30A, 2P+E.G., 250V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 3R ENCLOSURE WITH FUSES SIZED PER MANUFACTURERS RECOMMENDATIONS.
6. 30A, 2P+E.G., 250V, NON-FUSIBLE DISCONNECT SWITCH, NEMA 1 ENCLOSURE. INDOOR UNIT IS POWERED FROM OUTDOOR UNIT.
7. JUNCTION BOX MOUNTED AT HEIGHT REQUIRED FOR CONNECTION TO GAS WATER HEATER CONTROL CIRCUIT. PROVIDE FINAL CONNECTION PER MANUFACTURER'S RECOMMENDATIONS.
8. 20A, 125V, 2P, 3W OUTLET MOUNTED AT HEIGHT REQUIRED FOR CONNECTION TO RECIRCULATING PUMP.
9. 3/4"C WITH (2)-#10CU., (1)-#10CU. GND.
10. JUNCTION BOX MOUNTED AT HEIGHT REQUIRED FOR CONNECTION TO FIRE SMOKE DAMPER. PROVIDE DEDICATED 120-VOLT CIRCUIT TO PANEL INDICATED. BREAKER TO HAVE HANDLE "LOCK-ON" DEVICE.

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Case #:
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Title: ENLARGED MAINTENANCE HVAC POWER PLAN

E407

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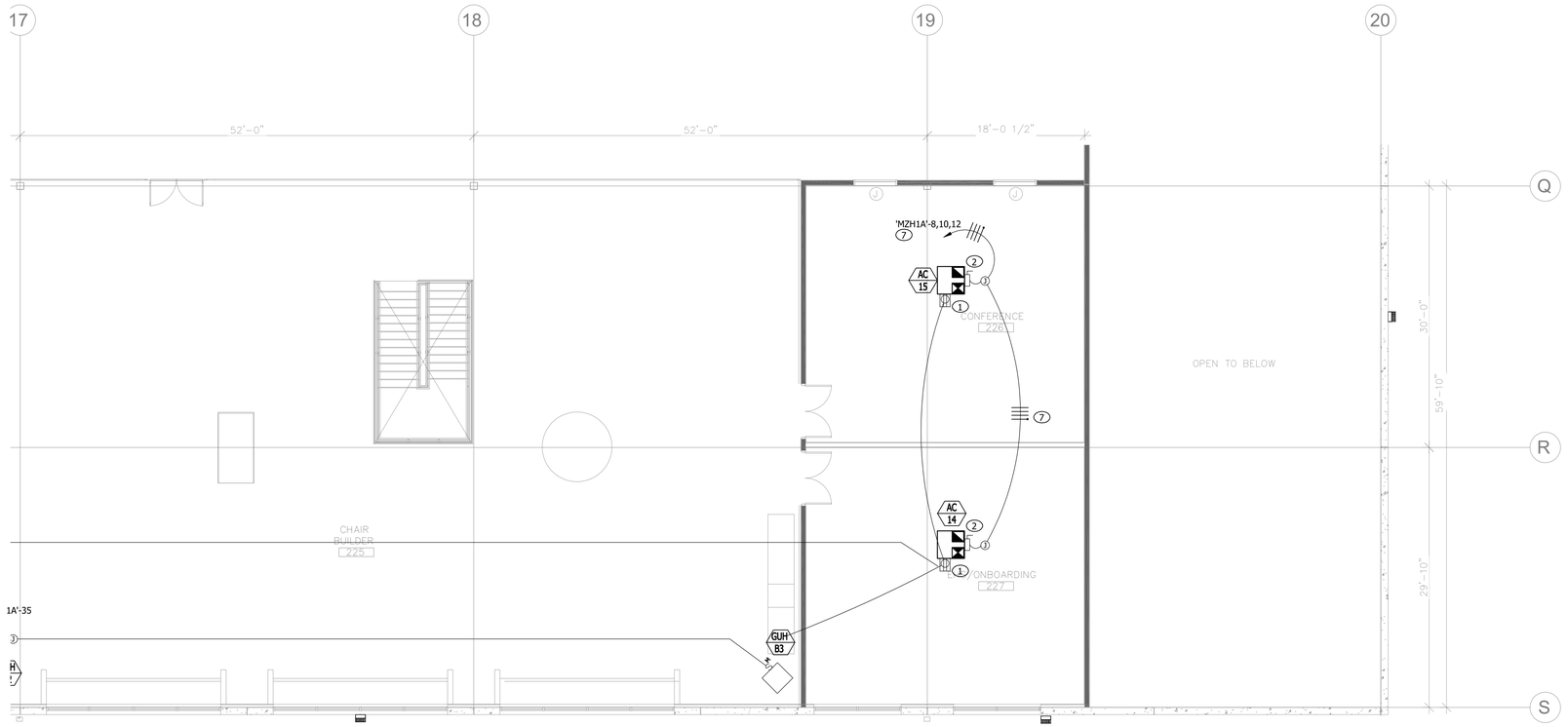
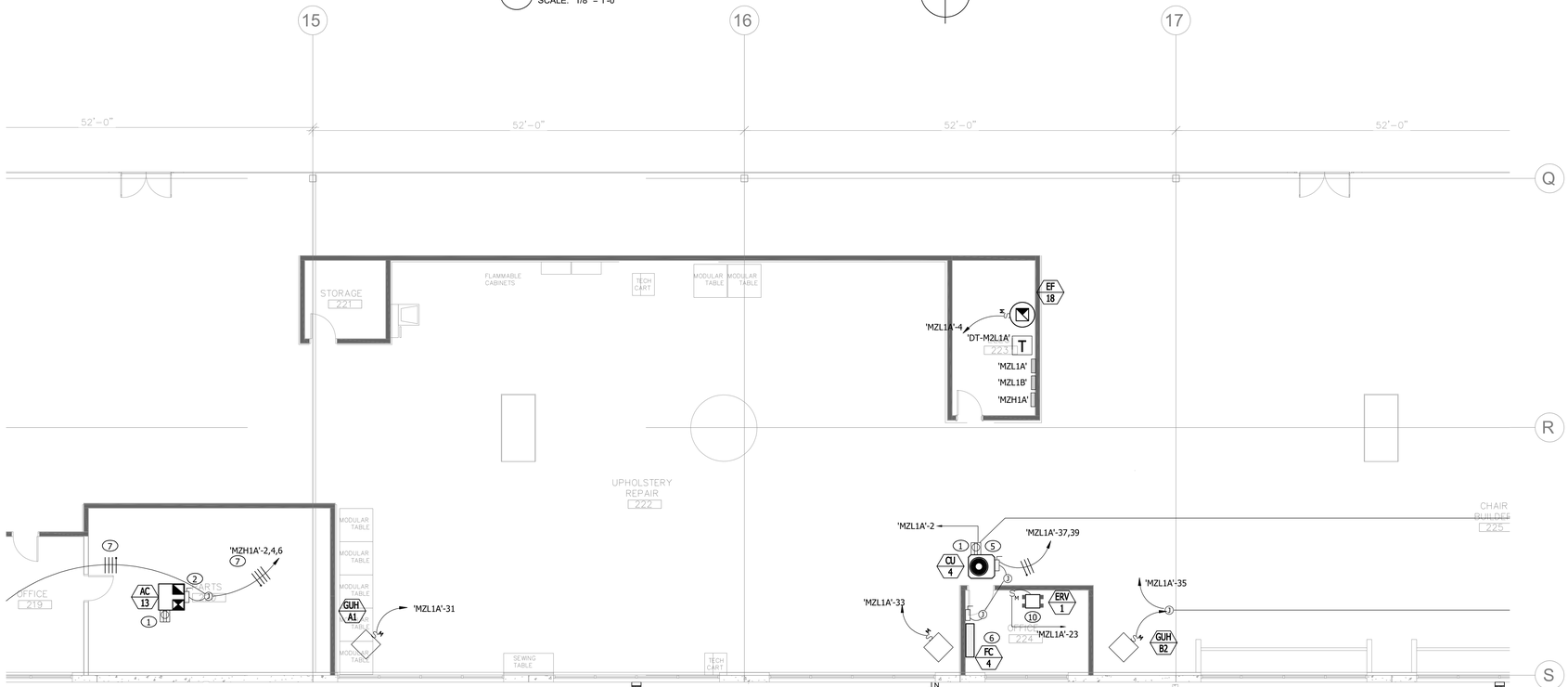


1 PARTIAL MEZZANINE HVAC POWER PLAN

SCALE: 1/8" = 1'-0"



2 PARTIAL MEZZANINE HVAC POWER PLAN

SCALE: 1/8" = 1'-0"

GENERAL NOTES

A. CONDUIT FOR ALL ROOFTOP MECHANICAL UNITS SHALL BE RUN UNDER THE ROOF. NO EXPOSED CONDUIT RUNS ON ROOF.

#KEYED NOTES:

(NOT ALL NOTES MAY BE USED ON THIS SHEET)

1. 20A 125V 2P, 3W WEATHERPROOF G.F.C.I. SERVICE OUTLET FOR MAINTENANCE PURPOSES PER NEC 210-63. ENCLOSURE AND CLEAR COVER SHALL BE UV STABILIZED POLYCARBONATE AND COMPLY WITH NEC 406.9(B)(1).
2. 30A, 3P+E.G., 600V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 3R ENCLOSURE WITH FUSES SIZED PER MANUFACTURERS RECOMMENDATIONS.
3. ROUTE THRU TIMECLOCK. TIMECLOCK TO BE CONTROLLED BY THE ENERGY MANAGEMENT CONTROL SYSTEM.
4. 1"C WITH (3)-#6CU., (1)-#8CU. GND.
5. 30A, 2P+E.G., 250V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 3R ENCLOSURE WITH FUSES SIZED PER MANUFACTURERS RECOMMENDATIONS.
6. 30A, 2P+E.G., 250V, NON-FUSIBLE DISCONNECT SWITCH, NEMA 1 ENCLOSURE. INDOOR UNIT IS POWERED FROM OUTDOOR UNIT.
7. 3/4"C WITH (3)-#8CU., (1)-#10CU. GND.
8. PROVIDE LOCAL WALL SWITCH FOR EXHAUST FAN. COORDINATE EXACT LOCATION WITH MECHANICAL PLANS PRIOR TO BEGINNING WORK.
9. 3/4"C WITH (2)-#10CU., (1)-#10CU. GND.
10. INTERLOCK START-STOP OF UNIT WITH START-STOP OF FC4.

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Case #:
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Revisions:

Project Number: 20068.100
Drawn By:
Title: PARTIAL MEZZANINE HVAC POWER PLANS

E408

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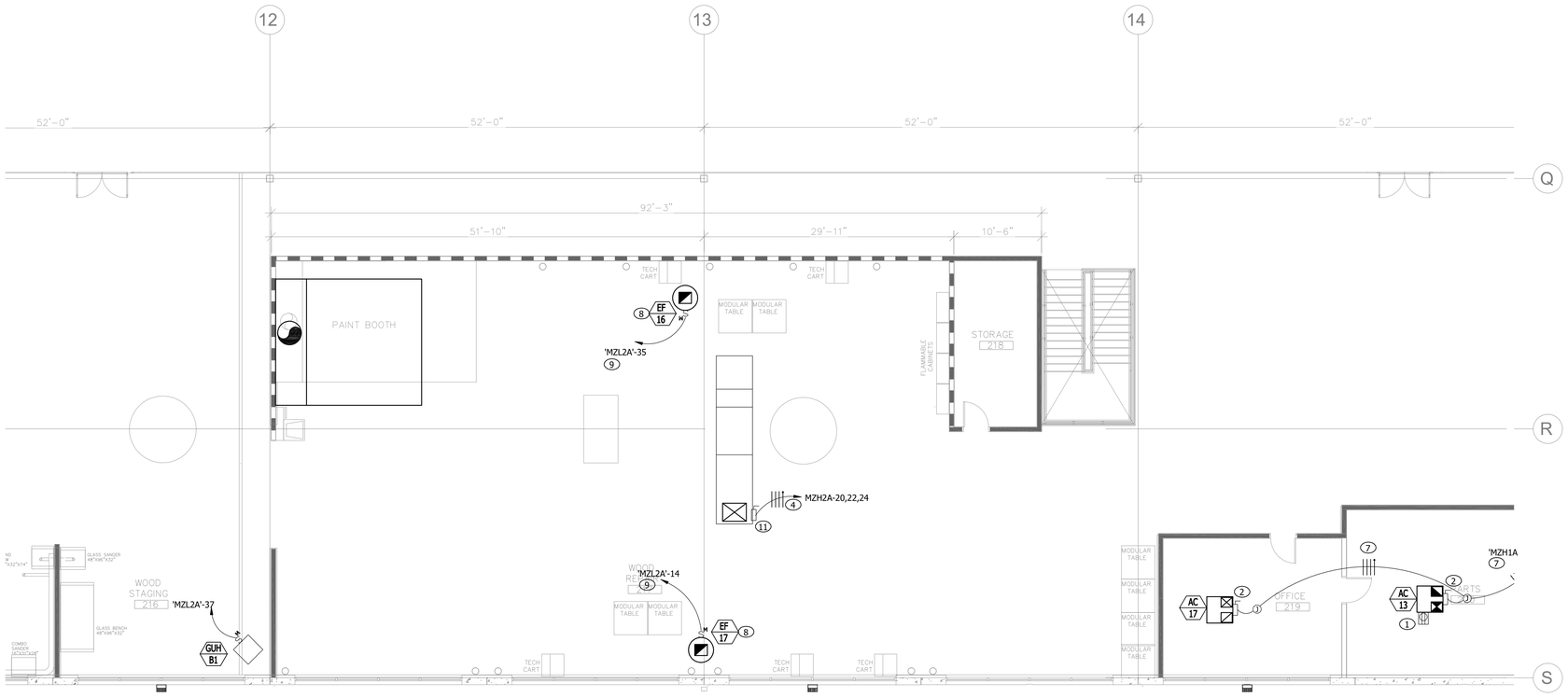
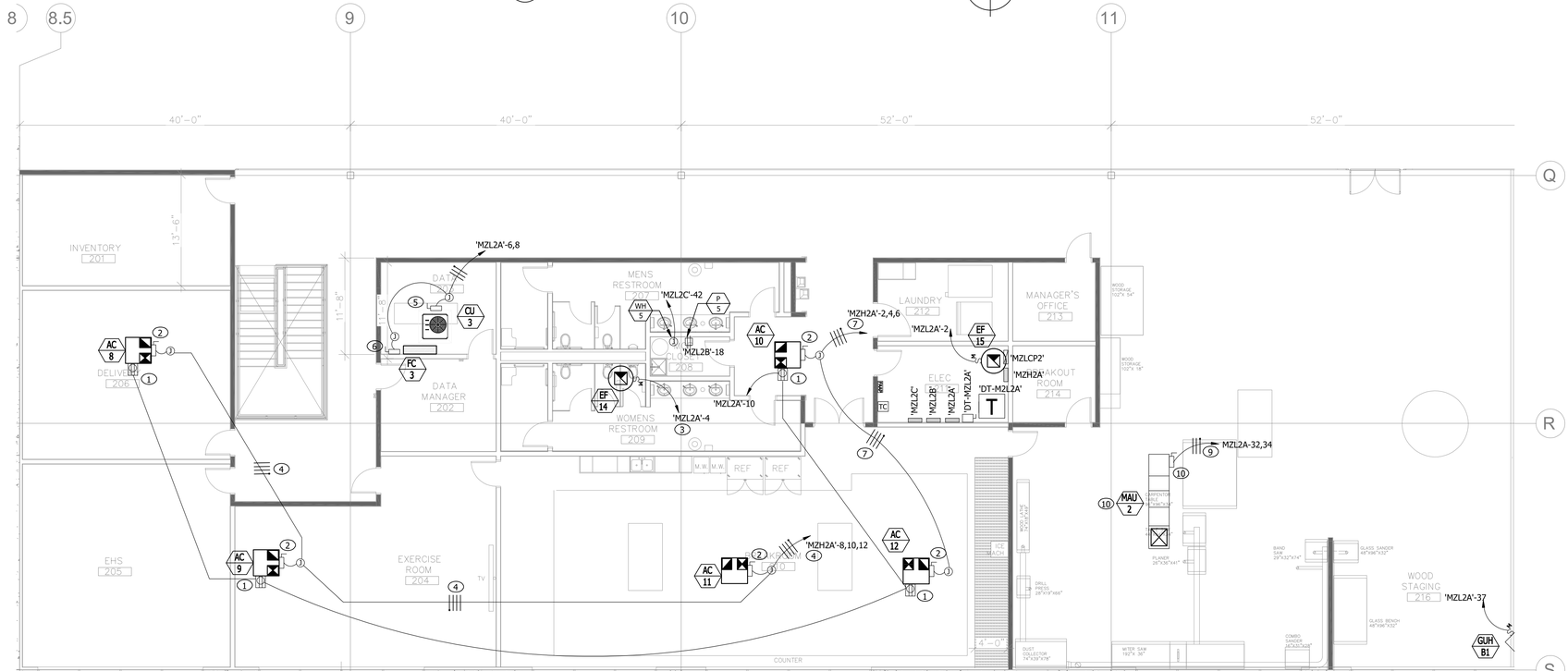


1 WH MEZZ HVAC POWER PLAN - WEST MIDDLE

SCALE: 1/8" = 1'-0"



2 PARTIAL MEZZANINE HVAC POWER PLAN

SCALE: 1/8" = 1'-0"

GENERAL NOTES

A. CONDUIT FOR ALL ROOFTOP MECHANICAL UNITS SHALL BE RUN UNDER THE ROOF. NO EXPOSED CONDUIT RUNS ON ROOF.

#KEYED NOTES:

(NOT ALL NOTES MAY BE USED ON THIS SHEET)

1. 20A 125V 2P, 3W WEATHERPROOF G.F.C.I. SERVICE OUTLET FOR MAINTENANCE PURPOSES PER NEC 210-63. ENCLOSURE AND CLEAR COVER SHALL BE UV STABILIZED POLYCARBONATE AND COMPLY WITH NEC 406.9(B)(1).
2. 30A, 3P+E.G., 600V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 3R ENCLOSURE WITH FUSES SIZED PER MANUFACTURERS RECOMMENDATIONS.
3. ROUTE THRU TIMECLOCK. TIMECLOCK TO BE CONTROLLED BY THE ENERGY MANAGEMENT CONTROL SYSTEM.
4. 1"C WITH (3)-#6CU., (1)-#8CU. GND.
5. 30A, 2P+E.G., 250V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 3R ENCLOSURE WITH FUSES SIZED PER MANUFACTURERS RECOMMENDATIONS.
6. 30A, 2P+E.G., 250V, NON-FUSIBLE DISCONNECT SWITCH, NEMA 1 ENCLOSURE. INDOOR UNIT IS POWERED FROM OUTDOOR UNIT.
7. 3/4"C WITH (3)-#8CU., (1)-#10CU. GND.
8. PROVIDE LOCAL WALL SWITCH FOR EXHAUST FAN. COORDINATE EXACT LOCATION WITH MECHANICAL PLANS PRIOR TO BEGINNING WORK.
9. 3/4"C WITH (2)-#10CU., (1)-#10CU. GND.
10. 30A, 2P+E.G., 250V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 4X ENCLOSURE WITH FUSES SIZED PER MANUFACTURERS RECOMMENDATIONS. INTERLOCK WITH DUST COLLECTOR.
11. 60A, 3P+E.G., 600V, FUSIBLE DISCONNECT SWITCH, HEAVY-DUTY, NEMA 4X ENCLOSURE WITH FUSES SIZED PER MANUFACTURERS RECOMMENDATIONS.

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Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: PARTIAL MEZZANINE HVAC POWER PLANS

E409

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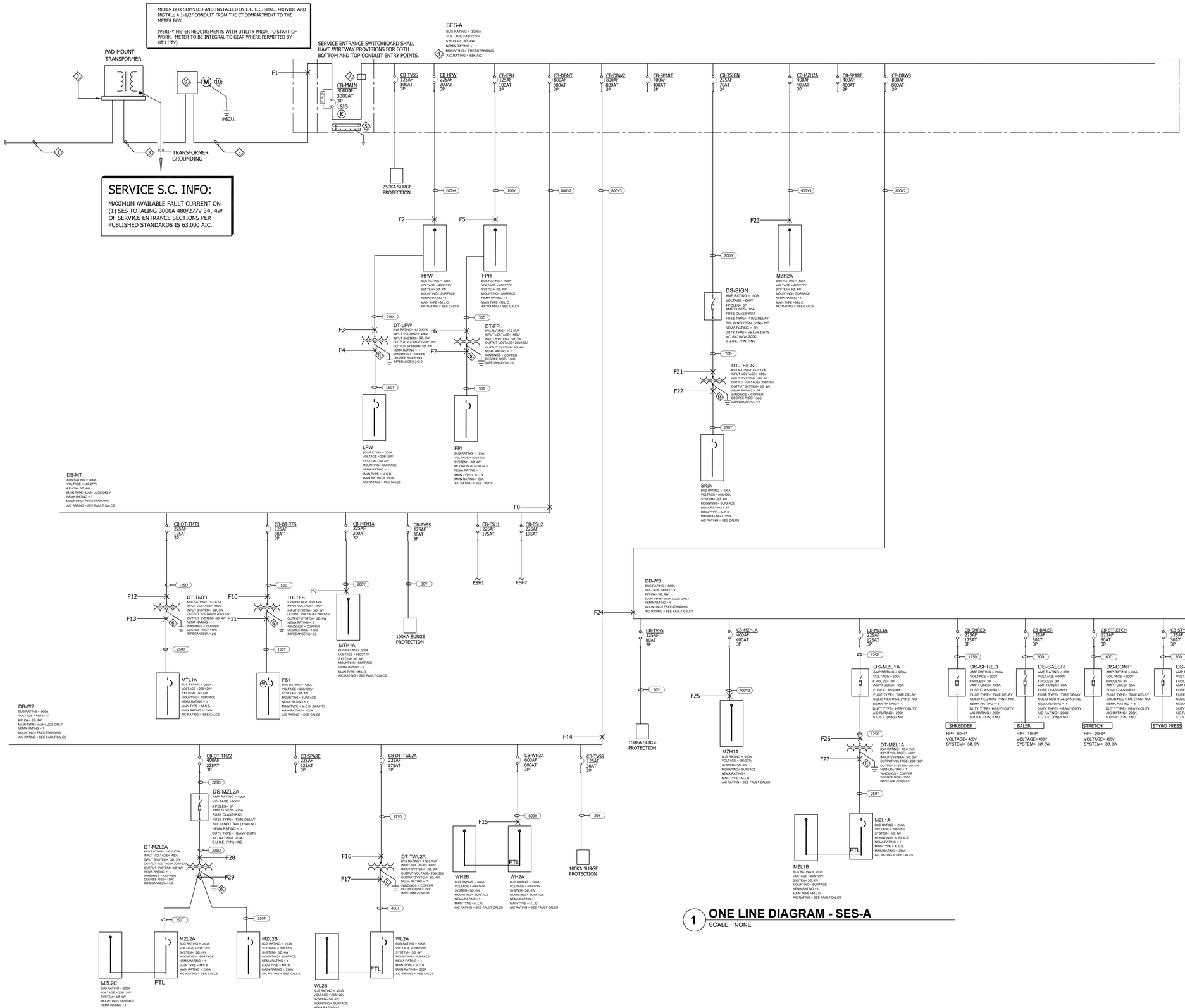

SERVICE S.C. INFO:

MAXIMUM AVAILABLE FAULT CURRENT ON (1) SES TOTALING 3000A 480/277V 3Ø, 4W OF SERVICE ENTRANCE SECTIONS PER PUBLISHED STANDARDS IS 63,000 AIC.

KEYED NOTES:

(NOT ALL NOTES USED ON THIS SHEET)

1. (2)-4"C WITH PULLSTRING FOR PRIMARY CABLES (CABLES FURNISHED AND INSTALLED BY LOCAL UTILITY). MINIMUM BURIAL DEPTH SHALL BE 48" BELOW FINISHED GRADE.
2. CONTRACTOR SHALL FURNISH AND INSTALL TRANSFORMER PAD AND GROUNDING PER LOCAL UTILITY ELECTRIC DISTRIBUTION CONSTRUCTION STANDARDS.
3. (16)-4"C EACH WITH 500KCMIL CU. CONDUCTORS. MINIMUM BURIAL DEPTH SHALL BE 36" BELOW FINISHED GRADE.
4. PROVIDE 4" HIGH CONCRETE PAD FOR EXTERIOR MOUNTED SERVICE ENTRANCE SECTION. PAD SHALL EXTEND 3' BEYOND THE LEADING EDGE OF THE NEW SES, AND EXTEND 6" ON EACH SIDE OF THE SES.
5. REFER TO SERVICE GROUNDING DETAIL ON SHEET E-514.
6. REFER TO DRY-TYPE TRANSFORMER GROUNDING DETAIL ON SHEET E-514.
7. PROVIDE SCHNEIDER ELECTRIC POWERLOGIC PM8000 SERIES METER. PROVIDE ALL NECESSARY CABLES, CT'S, BREAKERS/FUSE BLOCKS, ENCLOSURE AND HARDWARE TO CONNECT COMPLETE PER EQUIPMENT MANUFACTURER. (EQUAL/ALTERNATE IS ACCEPTABLE - METER SHALL BE BACNET COMPATIBLE).
8. TRANSFORMER TO BE MOUNTED UP HIGH ON WALL ABOVE PANEL.
9. PROVIDE METERING TRANSFORMER CABINET PER LOCAL UTILITY SERVICE STANDARDS. WINDOW CT'S TO BE FURNISHED AND INSTALLED BY LOCAL UTILITY COMPANY.
10. PROVIDE IT RATED METER ENCLOSURE (3-PHASE) PER LOCAL UTILITY REQUIREMENTS. EXTEND 1-1/2" RIGID CONDUIT WITH PULLSTRING FROM METER ENCLOSURE TO NEW METERING TRANSFORMER CABINET. PROVIDE BUSHINGS ON BOTH ENDS OF THE CONDUIT. PROVIDE A 5/8" * 8' GROUND ROD WITH #6CU. GROUND WIRE CONNECTED TO METER SOCKET GROUND LUG.

1 ONE LINE DIAGRAM - SES-A

SCALE: NONE

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Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:
Title: ONE LINE DIAGRAM - SES-A

E511

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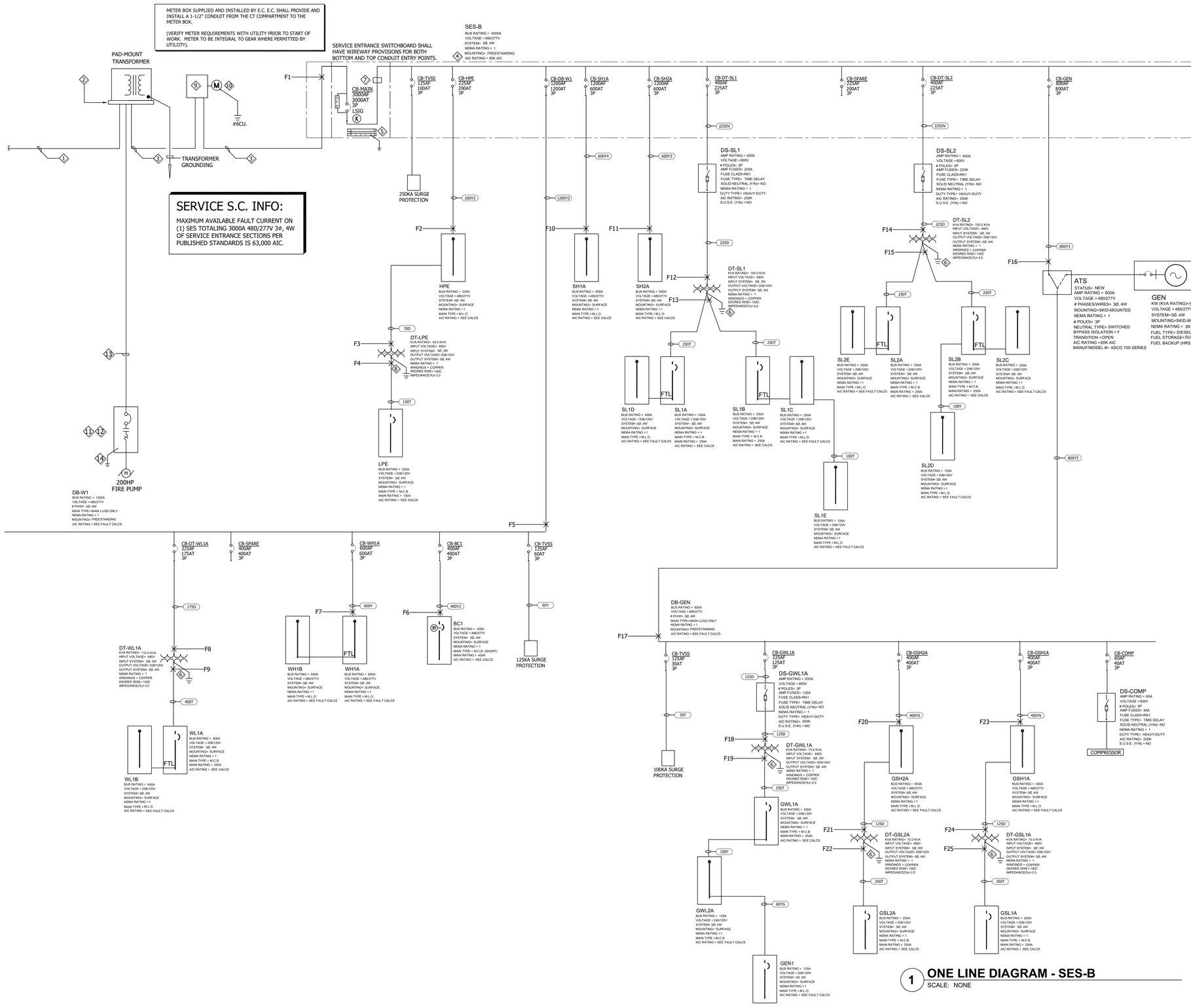
JOB # 21-120A



SERVICE S.C. INFO:

MAXIMUM AVAILABLE FAULT CURRENT ON (1) SES TOTALING 3000A 480/277V 3ø, 4W OF SERVICE ENTRANCE SECTIONS PER PUBLISHED STANDARDS IS 63,000 AIC.

1 ONE LINE DIAGRAM - SES-B
SCALE: NONE

KEYED NOTES:

(NOT ALL NOTES USED ON THIS SHEET)

1. (2)-4"C WITH PULLSTRING FOR PRIMARY CABLES (CABLES FURNISHED AND INSTALLED BY LOCAL UTILITY). MINIMUM BURIAL DEPTH SHALL BE 48" BELOW FINISHED GRADE.
2. CONTRACTOR SHALL FURNISH AND INSTALL TRANSFORMER PAD AND GROUNDING PER LOCAL UTILITY ELECTRIC DISTRIBUTION CONSTRUCTION STANDARDS.
3. (16)-4"C EACH WITH 500KCMIL CU. CONDUCTORS. MINIMUM BURIAL DEPTH SHALL BE 36" BELOW FINISHED GRADE.
4. PROVIDE 4" HIGH CONCRETE PAD FOR EXTERIOR MOUNTED SERVICE ENTRANCE SECTION. PAD SHALL EXTEND 3' BEYOND THE LEADING EDGE OF THE NEW SES, AND EXTEND 6" ON EACH SIDE OF THE SES.
5. REFER TO SERVICE GROUNDING DETAIL ON SHEET E-514.
6. REFER TO DRY-TYPE TRANSFORMER GROUNDING DETAIL ON SHEET E-514.
7. PROVIDE SCHNEIDER ELECTRIC POWERLOGIC PM8000 SERIES METER. PROVIDE ALL NECESSARY CABLES, CT'S, BREAKERS/FUSE BLOCKS, ENCLOSURE AND HARDWARE TO CONNECT COMPLETE PER EQUIPMENT MANUFACTURER. (EQUAL/ALTERNATE IS ACCEPTABLE - METER SHALL BE BACNET COMPATIBLE).
8. TRANSFORMER TO BE MOUNTED UP HIGH ON WALL ABOVE PANEL.
9. PROVIDE METERING TRANSFORMER CABINET PER LOCAL UTILITY SERVICE STANDARDS. WINDOW CT'S TO BE FURNISHED AND INSTALLED BY LOCAL UTILITY COMPANY.
10. PROVIDE IT RATED METER ENCLOSURE (3-PHASE) PER LOCAL UTILITY REQUIREMENTS. EXTEND 1-1/2" RIGID CONDUIT WITH PULLSTRING FROM METER ENCLOSURE TO NEW METERING TRANSFORMER CABINET. PROVIDE BUSHINGS ON BOTH ENDS OF THE CONDUIT. PROVIDE A 3/4" * 10' GROUND ROD WITH #6CU. GROUND WIRE CONNECTED TO METER SOCKET GROUND LUG.
11. FIRE PUMP CONTROLLER AND FIRE PUMP ARE PROVIDED BY SPRINKLER CONTRACTOR. FIRE PUMP CONTROLLER IS SUSE RATED, MAXIMUM 200HP, 480V, 3PH, 100,000AIC RATING AND INCLUDES AN INTEGRAL CIRCUIT BREAKER. PROVIDE GROUNDING, GROUNDING, NEUTRAL AND INSTALLATION PER NEC 250-24(B), NEC 250.24(D), NEC 230.70(C).
12. ALL DISCONNECTING DEVICES AND OVERCURRENT PROTECTIVE DEVICES THAT ARE UNIQUE TO THE FIRE PUMP LOADS SHALL COMPLY WITH 695.4(B)(1) THROUGH (B)(5).
13. 4"C WITH (4)-#500KCMIL CU., (1)-#2CU. GND.
14. REFER TO 400A MAIN GROUNDING DETAIL ON SHEET E514.

Bdg
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Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: ONE LINE DIAGRAM - SES-B

E512

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JOB # 21-120A

FEEDER SCHEDULE		COPPER (CU)					ALUMINUM (AL)			
	FEEDER AMPERAGE/ STYLE (D. T, Y, SP)	# CONDUCTORS/ WIRE SIZE	GROUND CONDUCTOR	CONDUIT SIZE	QUANTITY OF CONDUITS		# CONDUCTORS/ WIRE SIZE	GROUND CONDUCTOR	CONDUIT SIZE	QUANTITY OF CONDUITS
	20D	(3) #10	(1) #10	0.75	1					
	30D	(3) #10	(1) #10	0.75	1					
	40D	(3) #8	(1) #8	1	1					
	50D	(3) #6	(1) #8	1	1					
	50DV1	(3)-#1	(1) #2	1.5	1					
	50DV2	(3) #1/0	(1) #1	2	1					
	50DV3	(3)-#2	(1) #2	1.5	1					
	70D	(3) #4	(1) #8	1.25	1					
	70D2	(3) #2	(1) #6	1.25	1					
	70D3	(3) #1	(1) #4	1.5	1					
	70D4	(3) #1/0	(1) #2	2	1					
	70D5	(3) #2/0	(1) #2	2	1					
	90D	(3) #2	(1) #8	1.5	1					
	100D	(3) #1	(1) #6	1.5	1					
	125D	(3) #1/0	(1) #6	2	1					
	125D2	(3) #1/0	(1) #4	2	1					
	125D3	(3) #2/0	(1) #2	2	1					
	125D4	(3) #250KCMIL	(1) #1	3	1					
	150D	(3) #1/0	(1) #6	2	1		(3) #3/0	(1) #4	2	1
	175D	(3) #2/0	(1) #6	2	1		(3) #4/0	(1) #4	2.5	1
	200D	(3) #3/0	(1) #6	2	1		(3) #250KCMIL	(1) #4	2.5	1
	225D	(3) #4/0	(1) #4	2.5	1		(3) #350KCMIL	(1) #2	3	1
	225DV	(3) #500KCMIL	(1) #1	4	1		(3) #250KCMIL	(1) #1	3	2
	450D	(3) #4/0	(1) #2	2.5	2		(3) #350KCMIL	(1) #1/0	3	2
	100T	(4) #1	(1) #6	1.5	1					
	150T	(4) #1/0	(1) #6	2	1		(4) #3/0	(1) #4	2	1
	200T	(4) #3/0	(1) #4	2.5	1		(4) #250KCMIL	(1) #4	2.5	1
	225T	(4) #4/0	(1) #2	2.5	1		(4) #350KCMIL	(1) #2	3	1
	250T	(4) #250KCMIL	(1) #2	3	1		(4) #350KCMIL	(1) #2	3	1
	400T3	(4) #3/0	(1) #1	2.5	2		(4) #250KCMIL	(1) #1	3	2
	500T	(4) #250KCMIL	(1) #1/0	3	2		(4) #350KCMIL	(1) #1/0	3	2
	1000T	(4) #500KCMIL	(1) #2/0	4	3		(4) #350KCMIL	(1) #4/0	4	3
	60Y2	(4) #1	(1) #2	2	1					
	60Y3	(4) #1/0	(1) #1	2	1					
	100Y	(4) #1	(1) #6	1.5	1					
	100Y2	(4) #1/0	(1) #4	2	1					
	125Y	(4) #1/0	(1) #6	2	1					
	125Y2	(4) #2/0	(1) #4	2	1		(4) #4/0	(1) #2	2.5	1
	150Y	(4) #1/0	(1) #6	2	1		(4) #3/0	(1) #4	2	1
	150Y2	(4)-#3/0	(1)-#4	2.5	1					
	150Y3	(4)-#250KCMIL	(1)-#2	3	1					
	175Y	(4) #2/0	(1) #6	2	1		(4) #4/0	(1) #4	2.5	1
	200Y	(4) #3/0	(1) #6	2.5	1		(4) #250KCMIL	(1) #4	2.5	1
	200Y2	(4) #4/0	(1) #4	2.5	1		(4) #350KCMIL	(1) #2	3	1
	200Y3	(4) #250KCMIL	(1) #4	3	1		(4) #350KCMIL	(1) #2	3	1
	200Y4	(4)-#350KCMIL	(1)-#2	3	1		(4)#500 KCMIL	(1) #1	4	1
	200Y5	(4)-#500KCMIL	(1)-#1	3	1		(4)#750 KCMIL	(1) #2/0	4	1
	225Y	(4) #4/0	(1) #4	2.5	1		(4) #350KCMIL	(1) #2	3	1
	225Y2	(4) #4/0	(1) #1	3	2		(4) #350KCMIL	(1) #2/0	3	2
	225Y3	(4)-#350KCMIL	(1)-#1	3	1		(4)#500 KCMIL	(1) #1/0	4	1
	225Y4	(4) #500KCMIL	(1) #1	4	1		(4) #750KCMIL	(1) #2/0	4	1
	250Y	(4) #250KCMIL	(1) #4	3	1		(4) #350KCMIL	(1) #2	3	1
	225YV	(4) #500KCMIL	(1) #1	4	1		(4) #250KCMIL	(1) #1	3	2
	300Y	(4) #350KCMIL	(1) #4	3	1		(4) #500KCMIL	(1) #2	3	1
	300Y2	(4) #3/0	(1) #2	2.5	2		(4) #250KCMIL	(1) #1	3	2
	300Y3	(4) #500KCMIL	(1) #2	4	1		(4) #250KCMIL	(1) #1	3	2
	400Y	(4) #500KCMIL	(1) #2	4	1		(4) #250KCMIL	(1) #1	3	2
	400Y3	(4) #3/0	(1) #2	2.5	2		(4) #250KCMIL	(1) #1	3	2
	400Y2	(4) #4/0	(1) #1	2.5	2		(4) #350KCMIL	(1) #1/0	3	2
	400Y4	(4)-#350KCMIL	(1)-#2/0	3	2		(4)#500 KCMIL	(1) #3/0	4	2
	400Y5	(4) #250KCMIL	(1) #2	3	2		(4) #350KCMIL	(1) #1/0	3	2
	400Y6	(4) #500KCMIL	(1) #4/0	4	2		(4) #350KCMIL	(1) #250	4	3
	400Y7	(4)-#350KCMIL CU	(1)-#4/0	4	3		(4)#500 KCMIL	(1) #250	4	3
	400Y8	(4) #500KCMIL	(1) #350KCMIL	4	3		(4) #750KCMIL	(1)-500MCMIL	4	3
	500Y	(4) #250KCMIL	(1) #2	3	2		(4) #350KCMIL	(1) #1/0	3	2
	500Y2	(4)-#500KCMIL	(1)-#3/0	4	2		(4)#500 KCMIL	(1) #250	4	3
	600Y	(4) #350KCMIL	(1) #1	3	2		(4) #500KCMIL	(1) #2/0	4	2
	600Y2	(4) #350KCMIL	(1)-#2/0	4	3		(4) #500KCMIL	(1) #4/0	4	3
	600Y3	(4) #500KCMIL	(1)- #250	4	3		(4) #600KCMIL	(1)-350MCMIL	4	4
	600Y4	(4) #500KCMIL	(1)-#350	4	4		(4) #750KCMIL	(1)-500CMIL	4	4
	600Y5	(4)-#600KCMIL	(1)-#350	4	4					
	700Y	(4) #500KCMIL	(1) #1/0	4	2		(4) #350KCMIL	(1) #3/0	4	3
	800Y2	(4) #600KCMIL	(1) #1/0	4	2		(4) #500KCMIL	(1) #3/0	4	3
	800Y3	(4) #350KCMIL	(1) #1/0	3	3		(4) #500KCMIL	(1) #3/0	4	3
	1200Y	(4) #350KCMIL	(1) #3/0	4	4		(4) #500KCMIL	(1) #250KCMIL	4	4
	1200Y2	(4) #500KCMIL	(1) #4/0	4	4		(4) #500KCMIL	(1) #350KCMIL	4	4
	1600Y	(4) #500KCMIL	(1) #4/0	4	5		(4) #500KCMIL	(1) #350KCMIL	4	6
	2000Y	(4) #500KCMIL	(1) #250KCMIL	4	6		(4) #500KCMIL	(1) #500KCMIL	4	7
	3000Y	(4) #500KCMIL	(1) #500KCMIL	4	8		(4) #500KCMIL	(1) #600KCMIL	4	10

FEEDERS NOTED ON ONE-LINE ARE BASED UPON COPPER TABLE. AL IS ACCEPTABLE FOR FEEDERS ABOVE 125A. DISTANCE LIMITATIONS SHOULD BE TAKEN INTO ACCOUNT WHEN SELECTING ALTERNATE (AL) FEEDER.

IT SHALL BE ACCEPTABLE TO UTILIZE MORE PARALLEL RUNS IN LIEU OF LARGER WIRE AS DESIRED.
WHERE WIRE SIZE IS INCREASED THE E.C. SHALL COORDINATE LUG TERMINATIONS IN PANELS AND EQUIPMENT

FAULT CURRENT CALCULATIONS SES-A

THE FOLLOWING CALCULATIONS ARE BASED ONT THE "POINT-BY-POINT" METHOD WHERE:

Fault Point	Equipment	Source (Fault Point)	Source I (amps)	Conduit Type	Conductor Type	Wire/Bus Size	'C' value	E (volts) Line Side	L (length)	X'FMR KVA	X'FMR Z	Xfmr E (volts) Pri Side	Xfmr E (volts) Sec Side	Isc (Amps)	Motor Contribution (Amps)	Isc Total (Amps)	Equip. AIC Rating
1	SES A		63,000											63,000	1,604	64,604	**65K**
2	HPW	1	64,604	**NM**	**CU**	1 Set(s) of 350 KCML	22737	480	856					6,608	0	6,608	**14K**
3	DT-LPW (PRI)	2	6,608	**M**	**CU**	1 Set(s) of 4	3806	480	5					6,408	0	6,408	
4	DT-LPW (SEC)	3	6,408			1 Set(s) of	#N/A			45	2	480	208	4,394	0	4,394	**10K**
5	FPH	1	64,604	**NM**	**CU**	1 Set(s) of 1	7493	480	18					41,413	56	41,469	**65K**
6	DT-FPL (PRI)	5	41,469	**M**	**CU**	1 Set(s) of 10	982	480	5					23,537	0	23,537	
7	DT-FPL (SEC)	6	23,537			1 Set(s) of	#N/A			15	2	480	208	2,007	0	2,007	**10K**
8	DB-MT	1	64,604	**NM**	**CU**	2 Set(s) of 600 KCML	28033	480	20					59,644	184	59,828	**65K**
9	MTH1A	8	59,828	**NM**	**CU**	1 Set(s) of 3/0	13923	480	5					55,524	132	55,656	**65K**
10	DT-TFS (PRI)	8	59,828	**NM**	**CU**	1 Set(s) of 6	2430	480	28					17,155	0	17,155	
11	DT-TFS (SEC)	10	17,155			1 Set(s) of	#N/A			30	2	480	208	3,771	16	3,787	**10K**
12	DT-TMT1 (PRI)	8	59,828	**NM**	**CU**	1 Set(s) of 1/0	9317	480	10					48,573	0	48,573	
13	DT-TMT1 (SEC)	12	48,573			1 Set(s) of	#N/A			75	2	480	208	9,535	104	9,639	**10K**
14	DB-W2	1	64,604	**NM**	**CU**	3 Set(s) of 350 KCML	22737	480	600					21,178	244	21,422	**35K**
15	WH2A	14	21,422	**NM**	**CU**	2 Set(s) of 350 KCML	22737	480	8					21,135	216	21,351	**35K**
16	DT-TWL2A (PRI)	14	21,422	**NM**	**CU**	1 Set(s) of 2/0	11424	480	20					18,869	0	18,869	
17	DT-TWL2A (SEC)	16	18,869			1 Set(s) of	#N/A			112.5	3	480	208	8,409	28	8,437	**22K**
18																	
19																	
20																	
21	DT-TSIGN (PRI)	1	64,604	**M**	**CU**	1 Set(s) of 2/0	10755	480	1025					2,783	0	2,783	
22	DT-TSIGN (SEC)	21	2,783			1 Set(s) of	#N/A			45	2	480	208	3,168	0	3,168	**10K**
23	MZH2A	1	64,604	**NM**	**CU**	2 Set(s) of 250 KCML	18594	480	605					13,480	0	13,480	**35K**
24	DB-W3	1	64,604	**NM**	**CU**	2 Set(s) of 600 KCML	28033	480	430					23,173	1,120	24,293	**35K**
25	MZH1A	24	24,293	**NM**	**CU**	2 Set(s) of 3/0	13923	480	165					15,989	0	15,989	**35K**
26	DT-MZL1A (PRI)	24	24,293	**NM**	**CU**	1 Set(s) of 1/0	9317	480	165					9,518	0	9,518	
27	DT-MZL1A (SEC)	26	9,518			2 Set(s) of	#N/A			75	2	480	208	7,068	0	7,068	**10K**
28	DT-MZL2A (PRI)	14	21,422	**M**	**CU**	1 Set(s) of 4/0	15082	480	30					18,567	0	18,567	
29	DT-MZL2A (SEC)	28	18,567			1 Set(s) of	#N/A			150	4	480	208	8,383	0	8,383	**10K**

FAULT CURRENT CALCULATIONS SES-B

THE FOLLOWING CALCULATIONS ARE BASED ONT THE "POINT-BY-POINT" METHOD WHERE:

Fault Point	Equipment	Source (Fault Point)	Source I (amps)	Conduit Type	Conductor Type	Wire/Bus Size	'C' value	E (volts) Line Side	L (length)	X'FMR KVA	X'FMR Z	Xfmr E (volts) Pri Side	Xfmr E (volts) Sec Side	Isc (Amps)	Motor Contribution (Amps)	Isc Total (Amps)	Equip. AIC Rating
1	SES B		63,000											63,000	418	63,418	**65K**
2	HPE	1	63,418	**NM**	**CU**	1 Set(s) of 4/0	16673	480	20					49,759	0	49,759	**65K**
3	DT-LPE (PRI)	2	49,759	**M**	**CU**	1 Set(s) of 4	3806	480	5					40,262	0	40,262	
4	DT-LPE (SEC)	3	40,262			1 Set(s) of	#N/A			45	2	480	208	5,859	0	5,859	**10K**
5	DB-W1	1	63,418	**NM**	**CU**	4 Set(s) of 500 KCML	26706	480	220					43,104	120	43,224	**65K**
6	BC1	5	43,224	**NM**	**CU**	2 Set(s) of 4/0	16673	480	235					20,591	0	20,591	**35K**
7	WH1A	5	43,224	**NM**	**CU**	2 Set(s) of 350 KCML	22737	480	8					42,070	0	42,070	**65K**
8	DT-WL1A (PRI)	5	43,224	**NM**	**CU**	1 Set(s) of 2/0	11424	480	20					33,953	0	33,953	
9	DT-WL1A (SEC)	8	33,953			1 Set(s) of	#N/A			112.5	3	480	208	9,198	276	9,474	**22K**
10	SH1A	1	63,418	**NM**	**CU**	4 Set(s) of 500 KCML	26706	480	1065					19,327	0	19,327	**35K**
11	SH2A	1	63,418	**NM**	**CU**	3 Set(s) of 500 KCML	26706	480	860					18,348	0	18,348	**35K**
12	DT-SL1 (PRI)	1	63,418	**NM**	**CU**	1 Set(s) of 500 KCML	26706	480	1084					6,164	0	6,164	
13	DT-SL1 (SEC)	12	6,164			1 Set(s) of	#N/A			150	4	480	208	6,015	22	6,037	**10K**
14	DT-SL2 (PRI)	1	63,418	**NM**	**CU**	1 Set(s) of 500 KCML	26706	480	820					7,901	0	7,901	
15	DT-SL2 (SEC)	14	7,901			1 Set(s) of	#N/A			150	4	480	208	6,631	0	6,631	**10K**
16	ATS	1	63,418	**M**	**CU**	3 Set(s) of 350 KCML	19704	480	30					56,819	0	56,819	**65K**
17	DB-GEN	16	56,819	**M**	**CU**	3 Set(s) of 350 KCML	19704	480	10					54,915	0	54,915	**65K**
18	DT-GWL1A (PRI)	17	54,915	**NM**	**CU**	1 Set(s) of 1/0	9317	480	195					10,669	0	10,669	
19	DT-GWL1A (SEC)	18	10,669			1 Set(s) of	#N/A			75	2	480	208	7,322	0	7,322	**10K**
20	GSH2A	17	54,915	**NM**	**CU**	2 Set(s) of 500 KCML	26706	480	825					13,524	0	13,524	**14K**
21	DT-GSL2A (PRI)	20	13,524	**M**	**CU**	1 Set(s) of 1/0	8925	480	8					12,957	0	12,957	
22	DT-GSL2A (SEC)	21	12,957			1 Set(s) of	#N/A			75	2	480	208	7,728	0	7,728	**10K**
23	GSH1A	17	54,915	**NM**	**CU**	2 Set(s) of 500 KCML	26706	480	1060					11,133	0	11,133	**14K**
24	DT-GSL1A (PRI)	23	11,133	**M**	**CU**	1 Set(s) of 1/0	8925	480	8					10,746	0	10,746	
25	DT-GSL1A (SEC)	24	10,746			1 Set(s) of	#N/A			75	2	480	208	7,338	0	7,338	**10K**

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PRELIMINARY NOT FOR CONSTRUCTION
KRAEMER CONSULTING ENGINEERS, PLLC ARIZONA, U.S.A.

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:
Title: FEEDER SCHEDULE

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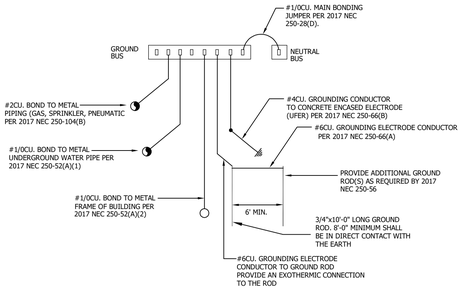
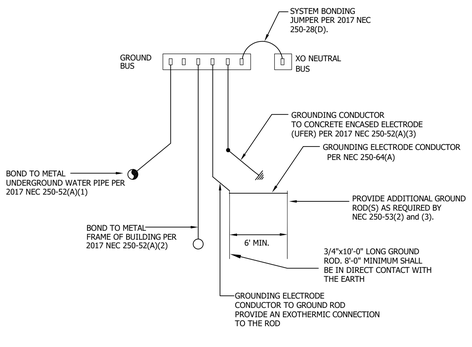
E513



400 AMP GROUNDING DETAIL – FIRE PUMP CONTROLLER

SCALE: NONE

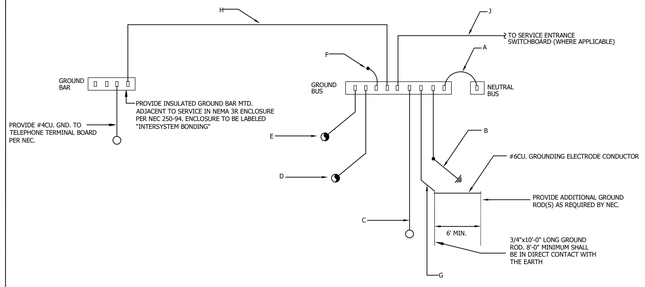


3-PHASE DRY-TYPE TRANSFORMER GROUNDING CHART

System shall be grounded by one of the following methods.
Preference 1 or 2 are to be used first. If 1 or 2 is not available then Preferences 3 or 4 are to be used. Wiring is Copper

		Preference 1	Preference 2	Preference 3	Preference 4
XFMR KVA	Xfmr Bonding Jumper	Xfmr Ground Electrode Building Steel 250-66	Xfmr Ground Electrode Cold Water Piping 250-66	Xfmr Ground Electrode UFER 250-66	Xfmr Ground Electrode Ground Rods 250-66
3	1 # 8	1 # 8	1 # 8	1 # 4	1 # 6
6	1 # 8	1 # 8	1 # 8	1 # 4	1 # 6
9	1 # 8	1 # 8	1 # 8	1 # 4	1 # 6
15	1 # 8	1 # 8	1 # 8	1 # 4	1 # 6
30	1 # 6	1 # 6	1 # 6	1 # 4	1 # 6
45	1 # 4	1 # 4	1 # 4	1 # 4	1 # 6
75	1 # 2	1 # 2	1 # 2	1 # 4	1 # 6
112.5	1 # 1/0	1 # 1/0	1 # 1/0	1 # 4	1 # 6
150	1 # 2/0	1 # 2/0	1 # 2/0	1 # 4	1 # 6
225	1 #3/0	1 #3/0	1 #3/0	1 # 4	1 # 6
300	1 # 4/0	1 #3/0	1 #3/0	1 # 4	1 # 6
500	1 #350	1 #3/0	1 #3/0	1 # 4	1 # 6
750	1 # 500	1 #3/0	1 #3/0	1 # 4	1 # 6
1000	1 # 500	1 #3/0	1 #3/0	1 # 4	1 # 6
1500	1 #750	1 #3/0	1 #3/0	1 # 4	1 # 6

DRY-TYPE TRANSFORMER GROUNDING DETAIL - 3 PHASE (NEC 2017) #



Service Grounding per NEC 2017 (Copper Conductor)

SES Amperage	A. Bonding Jumper per NEC 250-28(D) Per Table 250-102(C1)	B. Grounding Conductor to Concrete Encased Electrode (UFER) per 250-66(B)	C. Bond to Metal Frame of Building per NEC 250-52(A)(2) per Table 250-66	D. Bond to Metal Underground Water Pipe per NEC 250-52(A)(1) per Table 250-66	E. Bond to Metal Piping (Gas, Sprinkler) per NEC 250-104(B), Table 250-122	F. Supply Side Equipment Bonding Jumper to Equipment Enclosure per NEC 250-102(C), Table 250-066	G. Grounding conductor to ground rod per 250-66(A). Provide exothermic weld to rod.	H. Intersystem Bonding Termination per NEC 250-94	J. Grounding Electrode Conductor to Service entrance switchboard (Where applicable)
100	#6	#4	#6	#6	#6	#6	#6	#6	#6
200	#2	#4	#2	#2	#6	#2	#6	#6	#2
400	#1/0	#4	#1/0	#1/0	#2	#1/0	#6	#6	#1/0
600	#2/0	#4	#2/0	#2/0	#1	#2/0	#6	#6	#3/0
800	#2/0	#4	#2/0	#2/0	#1	#2/0	#6	#6	#3/0
1000	#4/0	#4	#3/0	#3/0	#2/0	#4/0	#6	#6	#3/0
1200	#4/0	#4	#3/0	#3/0	#3/0	#4/0	#6	#6	#3/0
1600	#350	#4	#3/0	#3/0	#4/0	#350	#6	#6	#3/0
2000	#500	#4	#3/0	#3/0	#250	#500	#6	#6	#3/0
2500	#500	#4	#3/0	#3/0	#350	#500	#6	#6	#3/0
3000	#600	#4	#3/0	#3/0	#500	#600	#6	#6	#3/0
3600	#750	#4	#3/0	#3/0	#500	#750	#6	#6	#3/0
4000	#750	#4	#3/0	#3/0	#500	#750	#6	#6	#3/0

Bonding of other metal piping systems (medical gas, pneumatic) shall be sized in accordance with 250-104(B), Table 250-122, based upon the overcurrent device feeding the equipment.

Grounding Detail - Main Service (2017 NEC) 1

GEAR LINEUP IS DIAGRAMATIC ONLY. EQUIPMENT LINE-UP (RIGHT TO LEFT V/S LEFT TO RIGHT) SHALL BE DETERMINED IN THE FIELD AND BE BASED ON FIELD CONDITIONS.

ALL BREAKERS RATED 1000 AMPS AND LARGER SHALL BE EQUIPPED WITH AN ADJUSTABLE INSTANTANEOUS TRIP SETTING. SIGNAGE AT EACH BREAKER SHALL BE PROVIDED INDICATING THE FOLLOWING:

"REDUCE THE INSTANTANEOUS TRIP SETTING OF THIS BREAKER PRIOR TO PERFORMING MAINTENANCE WITHIN THE ARC FLASH HAZARD BOUNDARY. SET THE INSTANTANEOUS TRIP SETTING BACK TO NORMAL WHEN COMPLETE".

THIS PROVISION IS INTENDED TO COMPLY WITH NEC 240.87 (B)(5).

CIRCUIT BREAKERS

UNLESS NOTED OTHERWISE, ALL BREAKERS SHOWN ON THIS DRAWING AND ON THE PANEL SCHEDULE DRAWINGS SHALL HAVE AN INTERRUPTING RATING (AIC) EQUAL TO THE EQUIPMENT AIC RATING TO WHICH THEY ARE CONNECTED.

UTILITY COORDINATION

THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE RESPECTIVE UTILITY COMPANY REPRESENTATIVES WITHIN (2) WEEKS OF AWARD OF CONTRACT AND FURNISH EACH REPRESENTATIVE (2) COMPLETE SETS OF CONSTRUCTION DOCUMENTS. PROVIDE ALL TRENCHING, SECONDARY CONDUIT AND CABLING, METERING TRANSFORMER CABINET, METER ENCLOSURE, ETC. PER LATEST UTILITY SERVICE REQUIREMENT STANDARDS. VERIFY TRENCH ROUTING, SERVICE LOCATIONS, ETC. WITH UTILITY COMPANY DESIGN CONSTRUCTION DRAWINGS AND SPECIFICATIONS PRIOR TO COMMENCING REQUIRED WORK.

ELECTRICAL EQUIPMENT LABELING

1. ELECTRICAL EQUIPMENT, SUCH AS SWITCHBOARDS, PANELBOARDS, DISCONNECT SWITCHES, ENCLOSED CIRCUIT BREAKERS, INDUSTRIAL CONTROL PANELS, METERING ENCLOSURES AND MOTOR CONTROL CENTERS SHALL BE FIELD MARKED WITH AN ARC-FLASH HAZARD WARNING LABEL PER NFPA-70, SECTION 110.16.
2. ELECTRICAL SERVICE EQUIPMENT SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT AND THE DATE THE FAULT CALCULATION WAS PERFORMED PER NFPA-70, SECTION 110-24.
3. ALL SWITCHBOARDS AND PANELBOARDS SHALL BE MARKED TO INDICATE THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLY ORIGINATES PER NFPA-70, SECTION 408.4(B).
4. PER NFPA-70, SECTION 408.4(A), EVERY CIRCUIT AND CIRCUIT MODIFICATION SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT AND SPECIFIC PURPOSE OR USE. THE IDENTIFICATION SHALL BE INCLUDED IN A CIRCUIT DIRECTORY THAT IS LOCATED ON THE FACE OR INSIDE OF THE PANEL DOOR IN THE CASE OF A PANELBOARD AND LOCATED AT EACH SWITCH OR CIRCUIT BREAKER IN A SWITCHBOARD.
5. ELECTRICAL CONTRACTOR SHALL PROVIDE A LABEL/PLAQUE AT EACH PANEL, SWITCHBOARD, TRANSFORMER, ETC. INDICATING THE COLOR OF EACH CONDUCTOR INSTALLED PER PHASE BASED ON THE SERVING VOLTAGE AT THAT LOCATION.

REQUIRED BY CONTRACTOR

1. COORDINATION STUDY OF OVERCURRENT PROTECTIVE DEVICES THRU-OUT TO DETERMINE OPTIMUM SETTINGS OF CIRCUIT BREAKERS.
2. SET ALL CIRCUIT BREAKERS AT RECOMMENDED SETTINGS AT COMPLETION OF PROJECT.
3. PROVIDE ARC-FLASH STUDY AND ALL REQUIRED LABELS AT PANELS.
4. PROVIDE HI-POT TEST PRIOR TO ENERGIZING SERVICE.
5. MEGGER FEEDERS PRIOR TO ENERGIZING THE SERVICE.
6. THE GROUND-FAULT PROTECTION SYSTEM SHALL BE PERFORMANCE TESTED WHEN FIRST INSTALLED ON SITE. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH INSTRUCTIONS THAT SHALL BE PROVIDED WITH THE EQUIPMENT. (PER NEC 230-95)

ARC FLASH REDUCTION

FOR SERVICE EQUIPMENT WITH A MAIN BREAKER RATED 1200-AMPS OR MORE, A PERMANENT ARC FLASH LABEL SHALL BE FIELD OR FACTORY APPLIED TO THE SERVICE EQUIPMENT. THE LABEL SHALL MEET THE REQUIREMENTS OF 110.21(B) AND CONTAIN THE FOLLOWING INFORMATION; NOMINAL SYSTEM VOLTAGE, AVAILABLE FAULT CURRENT AT THE SERVICE OVERCURRENT PROTECTIVE DEVICES, THE CLEARING TIME OF SERVICE OVERCURRENT PROTECTIVE DEVICES BASED ON THE AVAILABLE FAULT CURRENT AT THE SERVICE EQUIPMENT AND THE DATE THE LABEL WAS APPLIED.

THE BREAKER LARGER SHALL BE EQUIPPED WITH AN ADJUSTABLE INSTANTANEOUS TRIP SETTING. SIGNAGE AT EACH BREAKER SHALL BE PROVIDED INDICATING THE FOLLOWING:

"REDUCE THE INSTANTANEOUS TRIP SETTING OF THIS BREAKER PRIOR TO PERFORMING MAINTENANCE WITHIN THE ARC FLASH HAZARD BOUNDARY. SET THE INSTANTANEOUS TRIP SETTING BACK TO NORMAL WHEN COMPLETE".

THIS PROVISION IS INTENDED TO COMPLY WITH NEC 240.87 (B)(5).

ELECTRICAL SERVICE ENTRANCE EQUIPMENT AND METERING EQUIPMENT SHALL BE MANUFACTURED TO BE IN COMPLIANCE WITH THE LATEST STANDARDS SET FORTH BY THE UTILITY COMPANY. THE DESIGN IS BASED UPON A MAXIMUM AVAILABLE FAULT CURRENT PER PUBLISHED INFORMATION OR WRITTEN INFORMATION OBTAINED FROM THE LOCAL UTILITY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE LOCAL UTILITY COMPANY FOR SITE SPECIFIC MAXIMUM FAULT CURRENT VALUE AND MAKE NECESSARY ADJUSTMENTS TO THE SWITCHGEAR AND PANELBOARD AIC RATINGS. THE CONTRACTOR SHALL SUBMIT MANUFACTURER'S SHOP DRAWINGS TO THE UTILITY COMPANY'S METER SHOP AND, IF APPLICABLE, THEIR SOLAR GROUP FOR REVIEW AND APPROVAL. NO EQUIPMENT SHALL BE RELEASED BY THE CONTRACTOR PRIOR TO WRITTEN APPROVAL FROM BOTH ENTITIES WITHIN THE UTILITY COMPANY.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ELECTRICAL SERVICE ENTRANCE EQUIPMENT TO THE UTILITY METERING SHOP AND SOLAR INTERCONNECTION GROUP (WHERE APPLICABLE) FOR THEIR REVIEW AND APPROVAL PRIOR TO ORDERING THE EQUIPMENT. IF CONTRACTOR, AT HIS/HER OWN RISK, INSTALLS UNDERGROUND CONDUITS OR RELEASES THE ELECTRICAL EQUIPMENT PRIOR TO WRITTEN APPROVAL FROM BOTH THE UTILITY METER SHOP AND/OR UTILITY SOLAR INTERCONNECTION GROUP (WHERE APPLICABLE), ANY MODIFICATIONS TO THE INSTALLED CONDUITS/EQUIPMENT THAT NEEDS TO TAKE PLACE BASED UPON COMMENTS FROM THE UTILITY METER SHOP/SOLAR INTERCONNECTION GROUP, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COSTS ASSOCIATED WITH THESE MODIFICATIONS.

Butler Design Group Inc.
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KRAEMER CONSULTING ENGINEERS, PLLC
PRELIMINARY NOT FOR CONSTRUCTION
ARIZONA, U.S.A.

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:

Title: ONE-LINE DIAGRAM DETAILS, NOTES

E514

Kraemer Consulting Engineers, PLLC.
Mechanical and Electrical Engineers
2050 West Whispering Wind Dr., Suite 158
Phoenix, Arizona 85085-2864
(602) 285-1669
(602) 285-4450 - fax
JOB # 21-120A

LOCATION = SEE PLAN

SWITCHBOARD

SES-A

STATUS=NEW
MANUFACTURER= TBD
SWBD SERIES = TBD
UTILITY= COLORADO SPRINGS

BUS RATING = 3000A
VOLTAGE =480/277V
SYSTEM= 3Ø, 4W
MOUNTING=FREE-STANDING
NEMA RATING = 1
E.U.S.E.R.C.= YES
FEED TYPE = BOTTOM

MAIN RATING= 3000A
MAIN TYPE= M.C.B.
AIC RATING = 65K
HORIZONTAL BUSSING= YES
FULLY RATED
VERTICAL BUSSING= FULL HEIGHT
VERTICAL BUSSING= YES
FULLY RATED

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
TERMINATIONS = 75°C CU
# SECTIONS= 1
BUS EXTENSION PROVISIONS = YES

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1					12.90			12.90			8	
		SURGE PROTECTOR	125AF			9.90		9.90	225AF	Panel 'HPW'	8	2
			100AT				8.88	8.88	200AT		8	
3	8			5.65	121.67			116.02			8	
	8	Panel 'FPH'	125AF	6.95		123.93		116.98	800AF	Panel 'DBMT'	8	4
	8		100AT	4.81			118.61	113.80	800AT		8	
5	8			73.53	73.53							
	8	Panel 'DBW3'	800AF	70.60		70.60			400AF			6
	8		800AT	69.73			69.73		225AT			
7	8			9.23	45.94			36.71			8	
	8	Panel 'SIGN'	225AF	10.47		46.60		36.13	400AF	Panel 'MZH2A'	8	8
	8		70AT	7.41			42.66	35.25	400AT		8	
9					181.57			181.57			8	
		SPARE	400AF			179.38		179.38	1600AF	Panel 'DBW2'	8	10
			400AT				177.70	177.70	1600AT		8	
11					0.00							12
						0.00						
							0.00					
13					0.00							14
						0.00						
							0.00					
15					0.00							16
						0.00						
							0.00					
17					0.00							18
						0.00						
							0.00					

FEED THRU LOADS/PHASE (WHERE APPLICABLE)				
MEASURED PEAK DEMAND		0.00	0.00	0.00
PHASE TOTALS (KVA/Phase)		435.61	430.40	417.58
DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**	**1283.59**		**1544**
LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**	**1352.54**		**1627**

CIRCUIT NUMBERING BY POLE POSITION
CIRCUIT BREAKERS FEEDING A/C EQUIPMENT
Connected AMPS SHALL BE "HACR" RATED.
Demand AMPS ALL BREAKERS SHALL BE FULLY RATED

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps
0	**Exterior Lighting**	18.73	1.25	23.41	Phase (A) 1571.82
1	**Lighting - Continuous**	80.86	1.25	101.08	Phase (B) 1553.03
2	**Receptacles**	51.98	0.60	30.99	Phase (C) 1506.76
3	**Special Loads**	127.80	1.00	127.80	
4	**Motors**	246.23	1.00	246.23	
5	**Kitchen (Commercial)**	0.00	0.65	0.00	Per Table 220.56
6	**HVAC Heating**	2.40	1.00	0.00	Larger of the two loads per NEC 220-60
7	**HVAC Cooling**	485.80	1.00	485.80	Larger of the two loads per NEC 220-60
9	**MDF/IDF/Server Equipment**	0.00	1.00	0.00	
10	**Miscellaneous - Non Continuous**	0.00	1.25	0.00	
11	**Miscellaneous - Continuous**	269.79	1.25	337.24	
12	**Modular Furniture Outlets**	0.00	1.00	0.00	
13	**Peak Demand per 220-87**	0.00	1.56	0.00	
	Subtotals	1283.59		1352.54	
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps) 1373
					Spare Capacity Load (%) 46%
	Total KVA	1283.59		1352.54	

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for
Load Code "8" are dispersed amongst Load Codes "0-7" and "9-10" respectively.

PANELBOARD

FPH

STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 100A
VOLTAGE =480/277V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN RATING= 100A
MAIN TYPE= M.L.O.
AIC RATING = 65K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
SKIRT TYPE= NONE
SECTIONS= 1

LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	1	LIGHTING	20/1	0.28	0.78			0.50	20/3	JOCKEY PUMP CONTROLLER	4	2
3		SPARE	20/1			0.50		0.50			4	4
5		SPARE	20/1				0.50	0.50			4	6
7		SPARE	20/1		3.60			3.60	20/3	BOOSTER PUMP BP_1	4	8
9		SPARE	20/1			3.60		3.60			4	10
11		SPARE	20/1				3.60	3.60			4	12
13		SPARE	20/1		1.27			1.27	30/3	PANEL 'FPL'	8	14
15		SPARE	20/1			2.85		2.85			8	16
17		SPARE	20/1				0.71	0.71			8	18

FEED THRU LOADS/PHASE (WHERE APPLICABLE)				
SUB-FEED BREAKER				DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ
MEASURED PEAK DEMAND (KW*1.25*1.25)		0.00	0.00	0.00 CIRCUIT NUMBERING BY POLE POSITION
PHASE TOTALS (KVA/Phase)		5.65	6.95	4.81 CIRCUIT BREAKERS FEEDING A/C EQUIPMENT
DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**	**17.41**		**21** **Connected AMPS** SHALL BE "HACR" RATED.
LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**	**17.48**		**21** **Demand AMPS** ALL BREAKERS SHALL BE FULLY RATED

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A) 20.39
1	**Interior Lighting**	0.28	1.25	0.35	Phase (B) 25.08
2	**Receptacles**	0.54	1.00	0.54	Phase (C) 17.35
3	**Special Loads**	1.92	1.00	1.92	
4	**Motors**	12.40	1.00	12.40	
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60
7	**HVAC Cooling**	2.27	1.00	2.27	Larger of the two loads per NEC 220-60
9	**Non-Coincedental Loads**	0.00	0.00	0.00	
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**
11	**Miscellaneous - Continuous**	0.00	1.25	0.00	
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (A) 20.64 Phase (B) 25.08 Phase (C) 17.35
	Subtotals	17.41		17.48	
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps) 79
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%) 79%
	Total KVA	17.41		17.48	**HIGH PHASE** **25.08**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for
Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD

FPL

STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 125A
VOLTAGE =208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN RATING= 50A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
SECTIONS= 1
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	3	FACP	20/1	0.12	0.99			0.87	15/2	MECH CU_1 FC_1	7	2
3	3	FIRE PUMP CONTROLLER	20/1	1.80		2.67		0.87			7	4
5	2	FIRE PUMP ROOM	20/1	0.18			0.71	0.53	20/1	MECH EF_5	7	6
7	2	FIRE PUMP ROOM	20/1	0.18	0.28			0.10	20	FIRE SMOKE DAMPER	4	8
9	2	FIRE PUMP ROOM	20/1	0.18		0.18				SPACE		10
11		SPARE	20/1				0.00			SPACE		12
13		SPARE	20/1		0.00					SPACE		14
15		SPARE	20/1			0.00				SPACE		16
17		SPARE	20/1				0.00			SPACE		18

FEED THRU LOADS/PHASE (WHERE APPLICABLE)				
SUB-FEED BREAKER				DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ
MEASURED PEAK DEMAND (KW*1.25*1.25)		0.00	0.00	0.00 CIRCUIT NUMBERING BY POLE POSITION
PHASE TOTALS (KVA/Phase)		1.27	2.85	0.71 CIRCUIT BREAKERS FEEDING A/C EQUIPMENT
DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**	**4.83**		**13** **Connected AMPS** SHALL BE "HACR" RATED.
LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**	**4.83**		**13** **Demand AMPS** ALL BREAKERS SHALL BE FULLY RATED

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A) 10.58
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B) 23.73
2	**Receptacles**	0.54	1.00	0.54	Phase (C) 5.90
3	**Special Loads**	1.92	1.00	1.92	
4	**Motors**	0.10	1.00	0.10	
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60
7	**HVAC Cooling**	2.27	1.00	2.27	Larger of the two loads per NEC 220-60
9	**Non-Coincedental Loads**	0.00	0.00	0.00	
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**
11	**Miscellaneous - Continuous**	0.00	1.25	0.00	
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (A) 10.58 Phase (B) 23.73 Phase (C) 5.90
	Subtotals	4.83		4.83	
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps) 37
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%) 73%
	Total KVA	4.83		4.83	**HIGH PHASE** **23.73**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for
Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD

HPW

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 225A
VOLTAGE =480/277
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 14K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
SKIRT TYPE= NONE
SECTIONS= 1

LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	0	LIGHTING POLES PARKING	20/1	1.37	2.10			0.73	20/1	LIGHTING EXTERIOR BUILDING	0	2
3	0	LIGHTING POLES PARKING	20/1	1.37		2.16		0.79	20/1	LIGHTING EXTERIOR BUILDING	0	4
5	0	LIGHTING POLES PARKING	20/1	2.06			5.02	2.96	20/1	LIGHTING TOWERS SOUTH	0	6
7	0	LIGHTING POLES PARKING	20/1	2.06	5.02			2.96	20/1	LIGHTING TOWERS SOUTH	0	8
9	0	LIGHTING POLES WALKWAY	20/1	0.56		3.52		2.96	20/1	LIGHTING TOWERS NORTHWEST	0	10
11		SPARE	20/1				0.00		20/1	SPARE		12
13		SPARE	20/1		0.00				20/1	SPARE		14
15		SPARE	20/1			0.00			20/1	SPARE		16
17		SPARE	20/1				0.00		20/1	SPARE		18
19		SPARE	20/1		0.00				20/1	SPARE		20
21		SPARE	20/1			0.00			20/1	SPARE		22
23		SPARE	20/1				0.00		20/1	SPARE		24
25		SPACE			0.00					SPACE		26
27		SPACE				0.00				SPACE		28
29		SPACE					0.00			SPACE		30
31		SPACE			0.00					SPACE		32
33		SPACE				0.00				SPACE		34
35		SPACE					0.00			SPACE		36
37		SPACE			5.78			5.78	70/3	PANEL LPW	8	38
39		SPACE				4.22		4.22			8	40
41		SPACE					3.86	3.86			8	42

FEED THRU LOADS/PHASE (WHERE APPLICABLE)				
SUB-FEED BREAKER				DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ
MEASURED PEAK DEMAND (KW*1.25*1.25)		0.00	0.00	0.00 CIRCUIT NUMBERING BY POLE POSITION
PHASE TOTALS (KVA/Phase)		12.90	9.90	8.88 CIRCUIT BREAKERS FEEDING A/C EQUIPMENT
DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**	**31.67**		**38** **Connected AMPS** SHALL BE "HACR" RATED.
LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**	**39.00**		**47** **Demand AMPS** ALL BREAKERS SHALL BE FULLY RATED

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)
0	**Exterior Lighting**	17.81	1.25	22.26	Phase (A) 46.53
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B) 35.70
2	**Receptacles**	0.36	1.00	0.36	Phase (C) 32.04
3	**Special Loads**	2.00	1.00	2.00	
4	**Motors**	0.00	1.00	0.00	
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60
9	**Non-Coincedental Loads**	0.00	0.00	0.00	
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**
11	**Miscellaneous - Continuous**	11.50	1.25	14.38	
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (A) 57.01 Phase (B) 43.98 Phase (C) 39.73
	Subtotals	31.67		39.00	
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps) 153
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%) 77%
	Total KVA	31.67		39.00	**HIGH PHASE** **57.01**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for
Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD

LPW

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 225A
VOLTAGE =208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN RATING= 150A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	3	RECEPT SEASONAL LIGHTING	20/1	0.54	0.74			0.20	20/1	TIMECLOCK	3	2
3	3	RECEPT SEASONAL LIGHTING	20/1	0.36		0.72		0.36	20/1	TMB	2	4
5	3	RECEPT SEASONAL LIGHTING	20/1	0.36			1.36	1.00	20/1	BUILDING SIGN	11	6
7	3	RECEPT SEASONAL LIGHTING	20/1	0.54	1.54			1.00	20/1	BUILDING SIGN	11	8
9		SPARE	20/1			1.00		1.00	20/1	BUILDING SIGN	11	10
11		SPARE	20/1				1.00	1.00	20/1	BUILDING SIGN	11	12
13		SPARE	20/1		1.00			1.00	20/1	BUILDING SIGN	11	14
15		SPARE	20/1			1.00		1.00	20/1	BUILDING SIGN	11	16
17		SPARE	20/1				0.00		20/1	SPARE		18
19		SPARE	20/1		1.00			1.00	20/1	CAGE SIGN	11	20
21		SPARE	20/1			0.00			20/1	SPARE		22
23		SPARE	20/1				0.00		20/1	SPARE		24
25	11	MONUMENT SIGN	20/1	1.50	1.50				20/1	SPARE		26
27	11	MONUMENT SIGN	20/1	1.50		1.50			20/1	SPARE		28
29	11	MONUMENT SIGN	20/1	1.50			1.50		20/1	SPARE		30
31		SPARE	20/1		0.00					SPACE		32
33		SPACE				0.00				SPACE		34
35		SPACE					0.00			SPACE		36
37		SPACE			0.00					SPACE		38
39		SPACE				0.00				SPACE		40
41		SPACE					0.00			SPACE		42

FEED THRU LOADS/PHASE (WHERE APPLICABLE)				
SUB-FEED BREAKER				DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ
MEASURED PEAK DEMAND (KW*1.25*1.25)		0.00	0.00	0.00 CIRCUIT NUMBERING BY POLE POSITION
PHASE TOTALS (KVA/Phase)		5.78	4.22	3.86 CIRCUIT BREAKERS FEEDING A/C EQUIPMENT
DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**	**13.86**		**38** **Connected AMPS** SHALL BE "HACR" RATED.
LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**	**16.74**		**46** **Demand AMPS** ALL BREAKERS SHALL BE FULLY RATED

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A) 48.13
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B) 35.14
2	**Receptacles**	0.36	1.00	0.36	Phase (C) 32.14
3	**Special Loads**	2.00	1.00	2.00	
4	**Motors**	0.00	1.00	0.00	
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60
9	**Non-Coincedental Loads**	0.00	0.00	0.00	
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**
11	**Miscellaneous - Continuous**	11.50	1.25	14.38	
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (A) 57.50 Phase (B) 42.43 Phase (C) 39.43
	Subtotals	13.86		16.74	
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps) 104
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%) 69%
	Total KVA	13.86		16.74	**HIGH PHASE** **57.50**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for
Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

CIRCUIT BREAKER LEGEND (APPLIES TO ALL PANEL SCHEDULES)

○ Provide lock-off device for breaker per NFPA-70, Section 422-31(b). ● Provide lock-on device for breaker per NFPA-70, Section 700-12(F).

◇ Provide lock-off device to simultaneously disconnect all ungrounded conductors per NEC 605.

◆ Provide breaker with handle "lock-on" device for dedicated fire alarm circuit. The primary power circuit disconnecting means shall have a red marking and identified as "fire alarm circuit control.

◈ Provide lock-off device to simultaneously disconnect all ungrounded conductors per NFPA-70, Section 210-4(B).

⬓ Existing load connected/reconnected to new breaker in new panelboard

⧫ Provide lock-off device to simultaneously disconnect all ungrounded conductors per NEC 600.6

PER NEC 210.4(B)(D)
THE UNGROUNDED AND GROUNDED CONDUCTORS OF EACH MULTIWIRE BRANCH CIRCUIT SHALL BE GROUPED BY WIRE TIES OR SIMILAR MEANS IN AT LEAST ONE LOCATION WITHIN THE PANELBOARD OR OTHER POINT OF ORIGINATION. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS TO COMPLY WITH THIS NEC ARTICLE.

DISTRIBUTION PANEL

DB-MT

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 800A
VOLTAGE =480/277V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=STANDARD
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 65K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
NEUTRAL BUS (RATING) = 100%
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
	8			15.60	17.37			1.78			8	
1	8	Panel 'MTL1A'	225AF	16.91		18.36		1.45	125AF	Panel 'FS1'	8	2
	8		125AT	11.96			14.18	2.22	50AT		8	
	8			21.98	21.98							
3	8	Panel 'MTH1A'	225AF	21.96		21.96			125AF	SURGE PROTECTOR		4
	8		200AT	22.96			22.96		30AT			
5					38.33			38.33			11	
						38.33		38.33	225AF	ESH1	11	6
							38.33	38.33	175AT		11	
7					38.33			38.33			11	
						38.33		38.33	225AF	ESH2	11	8
							38.33	38.33	175AT		11	
9					0.00							10
						0.00						
							0.00					
11					0.00							12
						0.00						
							0.00					
13					0.00							14
						0.00						
							0.00					
15					0.00							16
						0.00						
							0.00					
17					0.00							18
						0.00						
							0.00					

FEED THRU LOADS/PHASE (WHERE APPLICABLE)				
MEASURED PEAK DEMAND		0.00	0.00	0.00 CIRCUIT NUMBERING BY POLE POSITION
PHASE TOTALS (KVA/Phase)		116.02	116.98	113.80 CIRCUIT BREAKERS FEEDING A/C EQUIPMENT
DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**	**346.80**		**417** **Connected AMPS** SHALL BE "HACR" RATED.
LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**	**405.17**		**487** **Demand AMPS** ALL BREAKERS SHALL BE FULLY RATED

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A) 418.63
1	**Lighting - Continuous**	3.30	1.25	4.13	Phase (B) 422.09
2	**Receptacles**	10.20	0.99	10.10	Phase (C) 410.64
3	**Special Loads**	25.61	1.00	25.61	
4	**Motors**	12.36	1.00	12.36	
5	**Kitchen (Commercial)**	0.00	0.65	0.00	Per Table 220.56
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60
7	**HVAC Cooling**	64.75	1.00	64.75	Larger of the two loads per NEC 220-60
9	**MDF/IDF/Server Equipment**	0.00	1.00	0.00	
10	**Miscellaneous - Non Continuous**	0.00	1.25	0.00	
11	**Miscellaneous - Continuous**	230.58	1.25	288.23	
12	**Modular Furniture Outlets**	0.00	1.00	0.00	
13	**Peak Demand per 220-87**	0.00	1.56	0.00	
	Subtotals	346.80		405.17	
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps) 313
					Spare Capacity Load (%) 39%
	Total KVA	346.80		405.17	

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for
Load Code "8" are dispersed amongst Load Codes "0-7" and "9-10" respectively.

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OWNERSHIP OF INSTRUMENTS OF SERVICE
ALL DRAWINGS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, notes and other documents and instruments prepared by the design profess

MTL1A

PANELBOARD
STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN RATING= 250A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	2	RECEPT MAINT. OFFICES	20/1	1.08	1.78			0.70	20/1	MECH EF_13	4	2
3	2	RECEPT MAINT. OFFICES	20/1	1.08		1.61		0.53	20/1	MECH EF_11	4	4
5	4	HAND DRYER	20/1	1.00			1.53	0.53	20/1	MECH EF_6	4	6
7	4	HAND DRYER	20/1	1.00	1.72			0.72	20/1	RECEPT ROOF	2	8
9	3	WELDER	50/2	3.00		3.86		0.86	15/2	MECH CU_2 FC_2	7	10
11	3			3.00			3.86	0.86			7	12
13	2	RECEPT MAINT. BAY	20/1	0.90	3.90			3.00	50/2	WELDER	3	14
15	2	RECEPT MAINT. BAY	20/1	1.08		4.08		3.00			3	16
17	3	EOF	20/1	0.60			1.30	0.70	20/1	MECH EF_20	4	18
19	4	MECH MOTORIZED DOOR	20/1	1.34	2.54			1.20	20/3	PLASMA CUTTER	3	20
21	3	HAND SINK	20/1	0.70		1.90		1.20			3	22
23	3	ICE MAKER	20/2	0.96			2.16	1.20			3	24
25	3			0.96	2.06			1.10	20/1	RP-4, WH-4 CONTROL	3	26
27	3	TOWEL DISPENSER	20/1	0.60		2.52		1.92	20/1	AQUASTAT	3	28
29		SPARE	20/1				0.12	0.12	20/1	OIL/WATER SEPARATOR PANEL	3	30
31	2	RECEPT CORD REEL	20/1	1.20	2.40			1.20	20/3	FIREBALL PUMP	4	32
33	2	RECEPT CORD REEL	20/1	1.20		2.40		1.20			4	34
35	2	RECEPT CORD REEL	20/1	1.20			2.40	1.20			4	36
37	2	RECEPT CORD REEL	20/1	1.20	1.20				20/1	SPARE		38
39	2	RECEPT MAINT 132	20/1	0.54		0.54			20/1	SPARE		40
41	11	WH-4	20/1	0.60			0.60		20/1	SPARE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			15.60	16.91	11.96			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		Connected KVA	44.46		123	Connected AMPS		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		Demand KVA	44.51		124	Demand AMPS		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	129.87
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	140.79
2	**Receptacles**	10.20	0.99	10.10	Phase (C)	99.59
3	**Special Loads**	22.55	1.00	22.55		
4	**Motors**	9.39	1.00	9.39		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	1.72	1.00	1.72	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.60	1.25	0.75		
					Phase (A)	129.45
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	140.48
					Phase (C)	100.74
	Subtotals	44.46		44.51		
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps)	101
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%)	45%
	Total KVA	44.46		44.51	**HIGH PHASE**	**140.48**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

FS1

PANELBOARD
STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 125A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN RATING= 100A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	1	LIGHTING FUEL STATION CANOPY	20/1	0.93	1.34			0.41	20/1	SINGLE DISPENSER	3	2
3		SPACE SWITCHED NEUTRAL GFCI	20/1			0.00		0.41	20/1	SPACE SWITCHED NEUTRAL GFCI		4
5	3	TOPKAT SYSTEM	20/1	1.08			1.49	0.41	20/1	DOUBLE DISPENSER	3	6
7		SPACE SWITCHED NEUTRAL GFCI	20/1		0.00				20/1	SPACE SWITCHED NEUTRAL GFCI		8
9	3	VEEDER ROOT CONSOLE	20/1	0.36		0.72		0.36	20/1	EMERGENCY SHUT OFF SWITCH	3	10
11		SPACE SWITCHED NEUTRAL GFCI	20/1				0.00		20/1	SWITCHED NEUTRAL GFCI		12
13	3	VEEDER ROOT OVERFILL ALARM	20/1	0.24	0.44			0.20	20/1	FUEL TANK TURBINE	3	14
15		SPACE SWITCHED NEUTRAL GFCI	20/1			0.73		0.73	20/2	PUMP	4	16
17		SPARE	20/1				0.73	0.73			4	18
19		SPARE	20/1		0.00				20/1	SPACE SWITCHED NEUTRAL GFCI		20
21		SPARE	20/1			0.00			20/1	SPARE		22
23		SPARE	20/1				0.00		20/1	SPARE		24
25		SPARE	20/1		0.00				20/1	SPARE		26
27		SPARE	20/1			0.00			20/1	SPARE		28
29		SPARE	20/1				0.00		20/1	SPARE		30
31		SPARE	20/1		0.00				20/1	SPARE		32
33		SPARE	20/1			0.00			20/1	SPARE		34
35		SPARE	20/1				0.00		20/1	SPARE		36
37		SPARE	20/1		0.00				20/1	SPARE		38
39		SPARE	20/1			0.00			20/1	SPARE		40
41		SPARE	20/1				0.00		20/1	SPARE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			1.78	1.45	2.22			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		Connected KVA	5.45		15	Connected AMPS		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		Demand KVA	5.68		16	Demand AMPS		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	14.81
1	**Interior Lighting**	0.93	1.25	1.16	Phase (B)	12.09
2	**Receptacles**	0.00	1.00	0.00	Phase (C)	18.49
3	**Special Loads**	3.06	1.00	3.06		
4	**Motors**	1.46	1.00	1.46		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
					Phase (A)	16.74
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	12.09
					Phase (C)	18.49
	Subtotals	5.45		5.68		
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps)	84
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%)	84%
	Total KVA	5.45		5.68	**HIGH PHASE**	**18.49**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

MTH1A

PANELBOARD
STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 225A
VOLTAGE = 480/277
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
FULLY/SERIES= FULLY
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 65K
BRANCH BREAKER TYPE= BOLT-ON
FEED THRU LUGS = NO

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	1	LIGHTING MAINTENANCE BAY	20/1	0.47	10.44			9.97	60/3	AC-6, AC-7	7	2
3	1	LIGHTING MAINTENANCE BAY	20/1	0.45		10.42		9.97			7	4
5	1	LIGHTING	20/1	1.45			11.42	9.97			7	6
7		SPARE	20/1		1.04			1.04	20/3	MECH EC_01	7	8
9		SPARE	20/1			1.04		1.04			7	10
11		SPARE	20/1				1.04	1.04			7	12
13		SPARE	20/1		3.33			3.33	20/3	MECH EUH 1	7	14
15		SPARE	20/1			3.33		3.33			7	16
17		SPARE	20/1				3.33	3.33			7	18
19		SPARE	20/1		3.33			3.33	20/3	MECH EUH 2	7	20
21		SPACE				3.33		3.33			7	22
23		SPACE					3.33	3.33			7	24
25		SPACE			3.33			3.33	20/3	MECH EUH 3	7	26
27		SPACE				3.33		3.33			7	28
29		SPACE					3.33	3.33			7	30
31		SPACE			0.00					SPACE		32
33		SPACE				0.00				SPACE		34
35		SPACE					0.00			SPACE		36
37	4	MOTORIZED DOOR MAINT BAY	20/3	0.50	0.50					SPACE		38
39	4			0.50		0.50				SPACE		40
41	4			0.50			0.50			SPACE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			21.98	21.96	22.96			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		Connected KVA	66.90		80	Connected AMPS		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		Demand KVA	67.50		81	Demand AMPS		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	79.32
1	**Interior Lighting**	2.37	1.25	2.96	Phase (B)	79.23
2	**Receptacles**	0.00	1.00	0.00	Phase (C)	82.86
3	**Special Loads**	0.00	1.00	0.00		
4	**Motors**	1.50	1.00	1.50		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	63.03	1.00	63.03	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
					Phase (A)	79.75
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	79.63
					Phase (C)	84.17
	Subtotals	66.90		67.50		
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps)	119
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%)	59%
	Total KVA	66.90		67.50	**HIGH PHASE**	**84.17**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

DB-W3

DISTRIBUTION PANEL
STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 800A
VOLTAGE = 480/277V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=STANDARD
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 35K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
NEUTRAL BUS (RATING) = 100%
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
					21.30			21.30		60 HP	4	
1		SURGE PROTECTION	125AF			21.30		21.30	225AF	SHREDDER	4	2
			80AT				21.30	21.30	175AT		4	
	4			7.48	11.36			3.88		10 HP	4	
3	4	HE-GO STRETCH	125AF	7.48		11.36		3.88	125AF	BALER	4	4
	4		60AT	7.48			11.36	3.88	30AT		4	
	4			5.54	5.54							
5	4	STYRO PRESS	125AF	5.54		5.54			125AF	SPARE		6
	4		30AT	5.54			5.54		60AT			
	8			21.54	35.33			13.79			8	
7	8	Panel 'MZH1A'	400AF	19.16		32.40		13.24	225AF	Panel 'MZL1A'	8	8
	8		400AT	19.73			31.53	11.80	125AT		8	
9					0.00	0.00	0.00					10
11					0.00	0.00	0.00					12
13					0.00	0.00	0.00					14
15					0.00	0.00	0.00					16
17					0.00	0.00	0.00					18
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		MEASURED PEAK DEMAND			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			73.53	70.60	69.73			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		Connected KVA	213.86		257	Connected AMPS		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		Demand KVA	230.72		278	Demand AMPS		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	265.32
1	**Lighting - Continuous**	18.82	1.25	23.53	Phase (B)	254.74
2	**Receptacles**	14.04	0.86	12.02	Phase (C)	251.61
3	**Special Loads**	14.40	1.00	14.40		
4	**Motors**	121.25	1.00	121.25		
5	**Kitchen (Commercial)**	0.00	0.65	0.00	Per Table 220.56	
6	**HVAC Heating**	1.80	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	43.55	1.00	43.55	Larger of the two loads per NEC 220-60	
9	**MDF/IDF/Server Equipment**	0.00	1.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.25	0.00		
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
12	**Modular Furniture Outlets**	0.00	1.00	0.00		
13	**Peak Demand per 220-87**	0.00	1.56	0.00		
	Subtotals	213.86		214.74		
	Largest Motor		63.90 0.25	15.98	Spare Capacity (Amps)	#VALUE!
					Spare Capacity Load (%)	#VALUE!
	Total KVA	213.86		230.72		

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-10" respectively.

WH2A

DISTRIBUTION PANEL
STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 600A
VOLTAGE = 480/277V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=STANDARD
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 35K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
NEUTRAL BUS (RATING) = 100%
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00	17.95			16.95	80/3	RTU-16	7	2
3	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00		17.95		16.95			7	4
5	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00			17.95	16.95			7	6
7	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00	17.95			16.95	80/3	RTU-17	7	8
9	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00		17.95		16.95			7	10
11	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00			17.95	16.95			7	12
13	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00	17.95			16.95	80/3	RTU-18	7	14
15	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00		17.95		16.95			7	16
17	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00			17.95	16.95			7	18
19	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00	17.95			16.95	80/3	RTU-19	7	20
21	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00		17.95		16.95			7	22
23	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00			17.95	16.95			7	24
25	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00	1.00				20/1	SPARE		26
27	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00		1.00			20/1	SPARE		28
29	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00			1.00		20/1	SPARE		30
31	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00	1.00				20/1	SPARE		32
33	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00		1.00			20/1	SPARE		34
35	1	LIGHTING RACKS W. CENTER WHS	20/1	1.00			2.65	1.65	20/1	LIGHTING PERIMETER WAREHOUSE	1	36
37	1	LIGHTING CORRIDOR & RESTROOM	20/1	0.40	2.20			1.80	20/1	LIGHTING PERIMETER WAREHOUSE	1	38
39	1	LIGHTING SOUTH WAREHOUSE	20/1	1.19		2.69		1.50	20/1	LIGHTING PERIMETER WAREHOUSE	1	40
41	1	LIGHTING SOUTH WAREHOUSE	20/1	1.12			2.77	1.65	20/1	LIGHTING PERIMETER WAREHOUSE	1	42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)			49.14	49.14	49.14	(Panel 'WH2B')				
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			125.14	125.63	127.36			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		Connected KVA	378.12		455	Connected AMPS		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		Demand KVA	399.44		480	Demand AMPS		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	451.53
1	**Interior Lighting**	27.31	1.25	34.14	Phase (B)	453.30
2	**Receptacles**	0.00	1.00	0.00	Phase (C)	459.54
3	**Special Loads**	0.00	1.00	0.00		
4	**Motors**	45.71	1.00	45.71		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	305.10	1.00	305.10	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
					Phase (A)	476.38
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	478.59
					Phase (C)	486.39
	Subtotals	378.12		384.94		
	Largest Motor		58.00 0.25	14.50	Spare Capacity (Amps)	120
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%)	20%
	Total KVA	378.12		399.44	**HIGH PHASE**	**486.39**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

WH2B

DISTRIBUTION PANEL
STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 600A
VOLTAGE = 480/277V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=STANDARD
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 35K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
NEUTRAL BUS (RATING) = 100%
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	7	RTU-20	80/3	16.95	16.95					SPACE		2
3	7			16.95		16.95				SPACE		4
5	7			16.95			16.95			SPACE		6
7	7	RTU-21	80/3	16.95	16.95					SPACE		8
9	7			16.95		16.95				SPACE		10
11	7			16.95			16.95			SPACE		12
13	4	COMPRESSOR	80/3	15.24	15.24					SPACE		14
15	4			15.24		15.24				SPACE		16
17	4			15.24			15.24			SPACE		18
19		SPACE			0.00					SPACE		20
21		SPACE				0.00				SPACE		22
23		SPACE					0.00			SPACE		24
25		SPACE			0.00					SPACE		26
27		SPACE				0.00				SPACE		28
29		SPACE					0.00			SPACE		30
31		SPACE			0.00					SPACE		32
33		SPACE				0.00				SPACE		34
35		SPACE					0.00			SPACE		36
37		SPACE			0.00					SPACE		38
39		SPACE				0.00				SPACE		40
41		SPACE					0.00			SPACE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ	

PANELBOARD

SH2A

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 600A
VOLTAGE = 480/277
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 35K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
SKIRT TYPE= NONE
SECTIONS= 1

LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	1	LIGHTING EXIT PATH	20/1	2.98	20.70			2.90	40/1	SIGNAGE FACE 1 SEC 101 LINE1	11	2
3	1	LIGHTING	20/1	0.47		18.19		3.42	40/1	SIGNAGE FACE 1 SEC 101 LINE2	11	4
5	6	UH-2	30/3	5.00			22.72	2.90	40/1	SIGNAGE AFW LOGO	11	6
7	6			5.00	22.72			3.42	40/1	SPARE	11	8
9	6			5.00		22.72		3.42	40/1	SPACE	11	10
11	1	LIGHTING	20/1	1.86			19.58	3.42	40/1	SPACE	11	12
13	1	LIGHTING	20/1	0.72	18.44			2.90	40/1	SPACE	11	14
15	1	LIGHTING	20/1	0.90		18.62		3.42	40/1	SPACE	11	16
17	1	LIGHTING	20/1	0.33			18.05			SPACE	11	18
19	1	LIGHTING	20/1	0.49	4.06							
21	1	LTG - SHOWROOM	20/1	1.74		5.31						
23	1	LTG - SHOWROOM	20/1	2.37			5.94					
25	1	LTG - SHOWROOM	20/1	2.37	5.94							
27	1	LTG - SHOWROOM	20/1	1.42		4.99						
29		SPARE	20/1				3.57					
31	7	RTU-9	90/3	17.72	23.43							
33	7			17.72		23.43						
35	7			17.72			23.43					
37	11	WH 2	20/3	2.67	20.39							
39	11			2.67		20.39						
41	11			2.67			20.39					

FEED THRU LOADS/PHASE (WHERE APPLICABLE)					
SUB-FEED BREAKER					DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ
MEASURED PEAK DEMAND (KW*1.25*1.25)					CIRCUIT NUMBERING BY POLE POSITION
PHASE TOTALS (KVA/Phase)	115.68	113.65	113.68		CIRCUIT BREAKERS FEEDING A/C EQUIPMENT
DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**	**343.01**	**413**	**Connected AMPS**	SHALL BE "HACR" RATED.
LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**	**348.43**	**419**	**Demand AMPS**	ALL BREAKERS SHALL BE FULLY RATED

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA
0	**Exterior Lighting**	0.00	1.25	0.00
1	**Interior Lighting**	15.65	1.25	19.56
2	**Receptacles**	0.00	1.00	0.00
3	**Special Loads**	0.00	1.00	0.00
4	**Motors**	0.00	1.00	0.00
5	**Kitchen (Commercial)**	0.00	***	0.00
6	**HVAC Heating**	15.00	1.00	0.00
7	**HVAC Cooling**	304.35	1.00	304.35
9	**Non-Coincedental Loads**	0.00	0.00	0.00
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00
11	**Miscellaneous - Continuous**	8.01	1.25	10.01
	Peak Demand per 220-87	0.00	1.00	0.00
	Subtotals	343.01		333.93
	Largest Motor		0.25	14.50
	Largest AC Unit		0.25	0.00
	Total KVA	343.01		348.43

Phase amps (Connected)

Phase (A)	417.41
Phase (B)	410.10
Phase (C)	410.20

Per Table 220.56
Larger of the two loads per NEC 220-60
Larger of the two loads per NEC 220-60

Phase amps (Demand)

Phase (A)	425.15
Phase (B)	416.00
Phase (C)	416.13
Spare Capacity (Amps)	181
Spare Capacity Load (%)	30%
HIGH PHASE	**425.15**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD

SIGN

STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 225A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN RATING= 150A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
SECTIONS= 1

LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1		SPARE	20/1		2.90			2.90	40/1	SIGNAGE FACE 1 SEC 101 LINE1	11	2
3	11	SIGNAGE HOURS OF OPERATION	20/1	0.72		4.14		3.42	40/1	SIGNAGE FACE 1 SEC 101 LINE2	11	4
5	11	SIGNAGE AFW LOGO	20/1	1.08			3.98	2.90	40/1	SIGNAGE FACE 1 SEC 201 LINE1	11	6
7		SPARE	20/1		3.42			3.42	40/1	SIGNAGE FACE 1 SEC 201 LINE2	11	8
9		SPACE				2.90		2.90	40/1	SIGNAGE FACE 1 SEC 101 LINE1	11	10
11		SPACE					3.42	3.42	40/1	SIGNAGE FACE 1 SEC 101 LINE2	11	12
13		SPACE			2.90			2.90	40/1	SIGNAGE FACE 1 SEC 201 LINE1	11	14
15		SPACE				3.42		3.42	40/1	SIGNAGE FACE 1 SEC 201 LINE2	11	16
17		SPACE					0.00			SPACE		18

FEED THRU LOADS/PHASE (WHERE APPLICABLE)					
SUB-FEED BREAKER					DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ
MEASURED PEAK DEMAND (KW*1.25*1.25)	0.00	0.00	0.00		CIRCUIT NUMBERING BY POLE POSITION
PHASE TOTALS (KVA/Phase)	9.23	10.47	7.41		CIRCUIT BREAKERS FEEDING A/C EQUIPMENT
DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**	**27.11**	**75**	**Connected AMPS**	SHALL BE "HACR" RATED.
LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**	**33.89**	**94**	**Demand AMPS**	ALL BREAKERS SHALL BE FULLY RATED

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA
0	**Exterior Lighting**	0.00	1.25	0.00
1	**Interior Lighting**	0.00	1.25	0.00
2	**Receptacles**	0.00	1.00	0.00
3	**Special Loads**	0.00	1.00	0.00
4	**Motors**	0.00	1.00	0.00
5	**Kitchen (Commercial)**	0.00	***	0.00
6	**HVAC Heating**	0.00	1.00	0.00
7	**HVAC Cooling**	0.00	1.00	0.00
9	**Non-Coincedental Loads**	0.00	0.00	0.00
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00
11	**Miscellaneous - Continuous**	27.11	1.25	33.89
	Peak Demand per 220-87	0.00	1.00	0.00
	Subtotals	27.11		33.89
	Largest Motor		0.25	0.00
	Largest AC Unit		0.25	0.00
	Total KVA	27.11		33.89

Phase amps (Connected)

Phase (A)	76.86
Phase (B)	87.19
Phase (C)	61.68

Per Table 220.56
Larger of the two loads per NEC 220-60
Larger of the two loads per NEC 220-60

Phase amps (Demand)

Phase (A)	96.07
Phase (B)	108.99
Phase (C)	77.10
Spare Capacity (Amps)	56
Spare Capacity Load (%)	37%
HIGH PHASE	**108.99**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD

MZH2A

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 400A
VOLTAGE = 480/277
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = YES

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 35K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
SKIRT TYPE= NONE
SECTIONS= 1

LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	1	LIGHTING	20/1	2.42	9.76			7.34	40/3	AC-10, AC-12	7	2
3	1	LIGHTING	20/1	2.86		10.20		7.34			7	4
5	1	LIGHTING	20/1	3.12			10.46	7.34			7	6
7		SPARE	20/1		10.96			10.96	50/3	AC-8, AC-9, AC-11	7	8
9		SPARE	20/1			10.96		10.96			7	10
11	1	LIGHTING	20/1	1.76			12.72	10.96			7	12
13	1	LIGHTING	20/1	1.54	6.06			4.52	30/3	MECH (1) AC_5T	7	14
15	1	LIGHTING S MEZZ STAIRWELL	20/1	0.07		4.59		4.52			7	16
17	1	LIGHTING S MEZZ STAIRWELL	20/1	0.07			4.59	4.52			7	18
19	1	LIGHTING	20/1	2.45	9.93			7.48	60/3	MAU-1	4	20
21	1	LIGHTING	20/1	2.90		10.38		7.48			4	22
23		SPARE	20/1				7.48	7.48			4	24
25		SPARE	20/1		0.00					SPACE		26
27		SPARE	20/1			0.00				SPACE		28
29		SPARE	20/1				0.00			SPACE		30
31		SPACE			0.00					SPACE		32
33		SPACE				0.00				SPACE		34
35		SPACE					0.00			SPACE		36
37		SPACE			0.00					SPACE		38
39		SPACE				0.00				SPACE		40
41		SPACE					0.00			SPACE		42

FEED THRU LOADS/PHASE (WHERE APPLICABLE)					
SUB-FEED BREAKER					DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ
MEASURED PEAK DEMAND (KW*1.25*1.25)	0.00	0.00	0.00		CIRCUIT NUMBERING BY POLE POSITION
PHASE TOTALS (KVA/Phase)	36.71	36.13	35.25		CIRCUIT BREAKERS FEEDING A/C EQUIPMENT
DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**	**108.10**	**130**	**Connected AMPS**	SHALL BE "HACR" RATED.
LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**	**118.01**	**142**	**Demand AMPS**	ALL BREAKERS SHALL BE FULLY RATED

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA
0	**Exterior Lighting**	0.00	1.25	0.00
1	**Interior Lighting**	17.19	1.25	21.49
2	**Receptacles**	0.00	1.00	0.00
3	**Special Loads**	0.00	1.00	0.00
4	**Motors**	22.44	1.00	22.44
5	**Kitchen (Commercial)**	0.00	***	0.00
6	**HVAC Heating**	0.00	1.00	0.00
7	**HVAC Cooling**	68.47	1.00	68.47
9	**Non-Coincedental Loads**	0.00	0.00	0.00
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00
11	**Miscellaneous - Continuous**	0.00	1.25	0.00
	Peak Demand per 220-87	0.00	1.00	0.00
	Subtotals	108.10		112.40
	Largest Motor		22.44	0.25	5.61
	Largest AC Unit		0.00	0.25	0.00
	Total KVA	108.10		118.01

Phase amps (Connected)

Phase (A)	132.47
Phase (B)	130.38
Phase (C)	127.20

Per Table 220.56
Larger of the two loads per NEC 220-60
Larger of the two loads per NEC 220-60

Phase amps (Demand)

Phase (A)	145.01
Phase (B)	142.39
Phase (C)	138.42
Spare Capacity (Amps)	258
Spare Capacity Load (%)	65%
HIGH PHASE	**145.01**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

CIRCUIT BREAKER LEGEND (APPLIES TO ALL PANEL SCHEDULES)

○ Provide lock-off device for breaker per NFPA-70, Section 422-31(b). ● Provide lock-on device for breaker per NFPA-70, Section 700-12(F).

◇ Provide lock-off device to simultaneously disconnect all ungrounded conductors per NEC 605.

◆ Provide breaker with handle "lock-on" device for dedicated fire alarm circuit. The primary power circuit disconnecting means shall have a red marking and identified as "fire alarm circuit control.

◈ Provide lock-off device to simultaneously disconnect all ungrounded conductors per NFPA-70, Section 210-4(B).

⬓ Existing load connected/reconnected to new breaker in new panelboard

◈ Provide lock-off device to simultaneously disconnect all ungrounded conductors per NEC 600.6

PER NEC 210.4(B)(D)
THE UNGROUNDED AND GROUNDED CONDUCTORS OF EACH MULTIWIRE BRANCH CIRCUIT SHALL BE GROUPED BY WIRE TIES OR SIMILAR MEANS IN AT LEAST ONE LOCATION WITHIN THE PANELBOARD OR OTHER POINT OF ORIGINATION. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS TO COMPLY WITH THIS NEC ARTICLE.

DISTRIBUTION PANEL

DB-W2

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 800A
VOLTAGE = 480/277V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=STANDARD
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 35K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
NEUTRAL BUS (RATING) = 100%
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	8	Panel 'WL2A'	225AF	14.06	139.20			125.14			8	
	8		175AT	14.74		140.37		125.63	600AF	Panel 'WH2A'	8	2
	8			15.36			142.72	127.36	600AT		8	
3		SURGE PROTECTION	125AF	0.00					225AF	SPARE		4
			30AT			0.00	0.00		225AT			
5	8	Panel 'DTMZL2'	400AF	42.38	42.38							6
	8		225AT	39.01		39.01						
	8			34.98			34.98					
7				0.00			0.00					8
9				0.00		0.00	0.00					10
11				0.00			0.00					12
13				0.00		0.00	0.00					14
15				0.00		0.00	0.00					16
17				0.00		0.00	0.00					18

FEED THRU LOADS/PHASE (WHERE APPLICABLE)					
MEASURED PEAK DEMAND	0.00	0.00	0.00		CIRCUIT NUMBERING BY POLE POSITION
PHASE TOTALS (KVA/Phase)	181.57	179.38	177.70		CIRCUIT BREAKERS FEEDING A/C EQUIPMENT
DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**	**538.65**	**648**	**Connected AMPS**	SHALL BE "HACR" RATED.
LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**	**540.33**	**650**	**Demand AMPS**	ALL BREAKERS SHALL BE FULLY RATED

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA
0	**Exterior Lighting**	0.92	1.25	1.15
1	**Lighting - Continuous**	41.27	1.25	51.59
2	**Receptacles**	26.84	0.69	18.42
3	**Special Loads**	83.87	1.00	83.87
4	**Motors**	77.78	1.00	77.78
5	**Kitchen (Commercial)**	0.00	0.65	0.00
6	**HVAC Heating**	0.60	1.00	0.00
7	**HVAC Cooling**	306.76	1.00	306.76
9	**MDF/IDF/Server Equipment**	0.00	1.00	0.00
10	**Miscellaneous - Non Continuous**	0.00	1.25	0.00
11	**Miscellaneous - Continuous**	0.60	1.25	0.75
12	**Modular Furniture Outlets**	0.00	1.00	0.00
13	**Peak Demand per 220-87**	0.00	1.56	0.00
	Subtotals	538.65		540.33
	Largest Motor		0.00	0.25	0.00
	Total KVA	538.65		540.33

Phase amps

Phase (A)	655.18
Phase (B)	647.26
Phase (C)	641.19
Spare Capacity (Amps)	150
Spare Capacity Load (%)	19%

Per Table 220.56
Larger of the two loads per NEC 220-60
Larger of the two loads per NEC 220-60

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

SH2A		
SIGN	MZH2A	DB-W2

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NOT FOR CONSTRUCTION
ARIZONA, U.S.A.

Case #:
Plan Check #:
Date: 10/15/24
Revisions:

Project Number: 20068.100
Drawn By:
Title: PANELBOARD SCHEDULES

E613

PANELBOARD
WL2A
STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 400A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = YES

MAIN RATING= 400A
MAIN TYPE= M.C.B.
AIC RATING = 22K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	2	RECEPT WAREHOUSE WEST WALL	20/1	0.72	1.80			1.08	20/1	RECEPT ROOF	2	2
3	2	RECEPT WAREHOUSE WEST WALL	20/1	0.72		1.44		0.72	20/1	RECEPT ROOF	2	4
5	2	RECEPT WAREHOUSE WEST WALL	20/1	0.72			0.72		20/1	SPARE		6
7	2	RECEPT WAREHOUSE WEST WALL	20/1	0.54	0.54				20/1	SPARE		8
9	2	RECEPT WAREHOUSE WEST WALL	20/1	0.36		0.36			20/1	SPARE		10
11	4	MOTORIZED DOOR	20/1	1.20			1.20		20/1	SPARE		12
13	4	MOTORIZED DOOR	20/1	1.20	1.20				20/1	SPARE		14
15	2	RECEPT WH DESK	20/1	0.72		0.72			20/1	SPARE		16
17	2	RECEPT WH DESK	20/1	0.72			0.72		20/1	SPARE		18
19	2	RECEPT TIMECLOCK	20/1	0.20	0.20				20/1	SPARE		20
21	1	RECEPT DOCK LIGHT & FAN	20/1	1.20		1.56		0.36	20/1	RECEPT CUSTOMER PU DESK	2	22
23	1	RECEPT DOCK LIGHT & FAN	20/1	1.20			1.56	0.36	20/1	RECEPT CUSTOMER PU DESK	2	24
25	1	RECEPT DOCK LIGHT & FAN	20/1	1.20	1.20				20/1	SPARE		26
27	1	RECEPT DOCK LIGHT & FAN	20/1	1.20		1.20			20/1	SPARE		28
29	1	RECEPT DOCK LIGHT & FAN	20/1	1.20			1.20		20/1	SPARE		30
31	1	RECEPT DOCK LIGHT & FAN	20/1	1.20	1.20				20/1	SPARE		32
33	1	RECEPT DOCK LIGHT & FAN	20/1	1.20		1.56		0.36	20/1	RECEPT RESTROOM/CORRIDOR	2	34
35	1	RECEPT DOCK LIGHT & FAN	20/1	1.20			2.06	0.86	20/1	EF_4	4	36
37	1	RECEPT DOCK LIGHT & FAN	20/1	1.20	2.40			1.20	20/1	MOTORIZED DOOR	4	38
39	1	RECEPT DOCK LIGHT & FAN	20/1	1.20		3.30		2.10	30/2	WH6	3	40
41	1	RECEPT DOCK LIGHT & FAN	20/1	1.20			3.30	2.10	---	* *	3	42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)			5.52	4.60	4.60	(Panel 'WL2B')				
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			14.06	14.74	15.36			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**44.16**		**123**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**47.69**		**132**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.92	1.25	1.15	Phase (A)	117.08
1	**Interior Lighting**	13.20	1.25	16.50	Phase (B)	122.74
2	**Receptacles**	7.58	1.00	7.58	Phase (C)	127.90
3	**Special Loads**	4.20	1.00	4.20		
4	**Motors**	18.26	1.00	18.26		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (A)	124.57
					Phase (B)	132.74
					Phase (C)	139.81
	Subtotals	44.16		47.69		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	118
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	47%
	Total KVA	44.16		47.69	**HIGH PHASE**	**139.81**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD
WL2B
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 400A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 22K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	4	IF-9	20/2	0.92	1.84			0.92	20/2	IF-10	4	2
3	4	" " "	---	0.92		1.84		0.92	---	" " "	4	4
5	4	IF-11	20/2	0.92			1.84	0.92	20/2	IF-8		6
7	4	" " "	---	0.92	1.84			0.92	---	" " "	4	8
9	4	IF-13	20/2	0.92		0.92			20/1	SPARE		10
11	4	" " "	---	0.92			0.92		20/1	SPARE		12
13	4	IF-15	20/2	0.92	0.92				20/1	SPARE		14
15	4	" " "	---	0.92		0.92			20/1	SPARE		16
17	4	IF-14	20/2	0.92			0.92		20/1	SPARE		18
19	4	" " "	---	0.92	0.92				20/1	SPARE		20
21	4	IF-12	20/2	0.92		0.92			20/1	SPARE		22
23	4	" " "	---	0.92			0.92		20/1	SPARE		24
25		SPACE			0.00					SPACE		26
27		SPACE				0.00				SPACE		28
29		SPACE					0.00			SPACE		30
31		SPACE			0.00					SPACE		32
33		SPACE				0.00				SPACE		34
35		SPACE					0.00			SPACE		36
37		SPACE			0.00					SPACE		38
39		SPACE				0.00				SPACE		40
41		SPACE					0.00			SPACE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			5.52	4.60	4.60			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**14.72**		**41**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**14.95**		**41**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.92	1.25	1.15	Phase (A)	45.96
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	38.30
2	**Receptacles**	0.00	1.00	0.00	Phase (C)	38.30
3	**Special Loads**	0.00	1.00	0.00		
4	**Motors**	13.80	1.00	13.80		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (A)	45.97
					Phase (B)	38.30
					Phase (C)	40.22
	Subtotals	14.72		14.95		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	209
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	83%
	Total KVA	14.72		14.95	**HIGH PHASE**	**45.97**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD
MZH1A
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 400A
VOLTAGE = 480/277
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = YES

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 35K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
SKIRT TYPE= NONE
SECTIONS= 1

LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	1	LIGHTING	20/1	2.75	10.99			7.34	40/3	AC-13, AC-17	7	2
3	1	LIGHTING	20/1	3.30		10.64		7.34			7	4
5	1	LIGHTING	20/1	3.70			11.04	7.34			7	6
7	1	LIGHTING	20/1	2.76	9.29			6.53	40/3	AC-14, AC-15	7	8
9	1	LIGHTING	20/1	1.92		8.45		6.53			7	10
11	1	LIGHTING	20/1	2.16			8.69	6.53			7	12
13	1	LIGHTING	20/1	2.16	2.16				20/1	SPARE		14
15	1	LIGHTING MEZZ STAIRWELL	20/1	0.07		0.07			20/1	SPARE		16
17		SPARE	20/1				0.00		20/1	SPARE		18
19		SPARE	20/1		0.00				20/1	SPARE		20
21		SPARE	20/1			0.00			20/1	SPARE		22
23		SPARE	20/1				0.00		20/1	SPARE		24
25		SPARE	20/1		0.00				20/1	SPARE		26
27		SPARE	20/1			0.00			20/1	SPARE		28
29		SPARE	20/1				0.00		20/1	SPARE		30
31		SPACE			0.00					SPACE		32
33		SPACE				0.00				SPACE		34
35		SPACE					0.00			SPACE		36
37		SPACE			0.00					SPACE		38
39		SPACE				0.00				SPACE		40
41		SPACE					0.00			SPACE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			21.54	19.16	19.73			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**60.43**		**73**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**65.14**		**78**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	77.72
1	**Interior Lighting**	18.82	1.25	23.53	Phase (B)	69.14
2	**Receptacles**	0.00	1.00	0.00	Phase (C)	71.19
3	**Special Loads**	0.00	1.00	0.00		
4	**Motors**	0.00	1.00	0.00		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	41.61	1.00	41.61	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (A)	84.64
					Phase (B)	73.91
					Phase (C)	76.48
	Subtotals	60.43		65.14		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	322
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	80%
	Total KVA	60.43		65.14	**HIGH PHASE**	**84.64**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD
BC1
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 400A
VOLTAGE = 480/277
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 35K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
SKIRT TYPE= NONE
SECTIONS= 1

LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	3	BATTERY CHARGE #1	40/3	8.31	16.62			8.31	40/3	BATTERY CHARGE #6	3	2
3	3			8.31		16.62		8.31			3	4
5	3			8.31			16.62	8.31			3	6
7	3	BATTERY CHARGE #2	40/3	8.31	16.62			8.31	40/3	BATTERY CHARGE #7	3	8
9	3			8.31		16.62		8.31			3	10
11	3			8.31			16.62	8.31			3	12
13	3	BATTERY CHARGE #3	40/3	8.31	8.31				40/3	SPARE		14
15	3			8.31		8.31						16
17	3			8.31			8.31					18
19	3	BATTERY CHARGE #4	40/3	8.31	8.31				40/3	SPARE		20
21	3			8.31		8.31						22
23	3			8.31			8.31					24
25	3	BATTERY CHARGE #5	40/3	8.31	13.85			5.54	30/3	BATTERY MOVER	3	26
27	3			8.31		13.85		5.54			3	28
29	3			8.31			13.85	5.54			3	30
31		SPACE			0.00					SPACE		32
33		SPACE				0.00				SPACE		34
35		SPACE					0.00			SPACE		36
37		SPACE			0.00					SPACE		38
39		SPACE				0.00				SPACE		40
41		SPACE					0.00			SPACE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			63.71	63.71	63.71			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**191.13**		**230**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**191.13**		**230**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	229.89
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	229.89
2	**Receptacles**	0.00	1.00	0.00	Phase (C)	229.89
3	**Special Loads**	191.13	1.00	191.13		
4	**Motors**	0.00	1.00	0.00		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (A)	229.89
					Phase (B)	229.89
					Phase (C)	229.89
	Subtotals	191.13		191.13		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	170
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	43%
	Total KVA	191.13		191.13	**HIGH PHASE**	**229.89**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD
MZL1A
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = YES

MAIN RATING= 250A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	2	RECEPT	20/1	0.90	1.62			0.72	20/1	RECEPT ROOF	2	2
3	2	RECEPT	20/1	0.54		1.07		0.53	20/1	MECH EF_18	4	4
5	2	RECEPT	20/1	0.72			2.16	1.44	20/1	RECEPT MOD FURN	2	6
7	2	FLOOR OUTLETS - 226	20/1	0.72	2.16			1.44	20/1	RECEPT MOD FURN	2	8
9	2	FLOOR OUTLETS - 226	20/1	0.72		2.16		1.44	20/1	RECEPT MOD FURN	2	10
11	4	IF-18	20/2	0.92			2.36	1.44	20/1	RECEPT MOD FURN	2	12
13	4	" " "	---	0.92	1.82			0.90	20/1	RECEPT	2	14
15	4	IF-17	20/2	0.92		1.82		0.90	20/1	RECEPT	2	16
17	4	" " "	---	0.92			0.92		20/1	SPARE		18
19	4	IF-19	20/2	0.92	0.92				20/1	SPARE		20
21	4	" " "	---	0.92		0.92			20/1	SPARE		22
23	4	ERV	15/1	0.60			0.60		20/1	SPARE		24
25		SPARE	20/1		1.20			1.20	20/1	TOOLS UPHOST. REPAIR	3	26
27		SPARE	20/1			1.20		1.20	20/1	TOOLS UPHOST. REPAIR	3	28
29		SPARE	20/1				1.20	1.20	20/1	TOOLS UPHOST. REPAIR	3	30
31	6	GUH-A1	15/1	0.60	1.80			1.20	20/1	TOOLS UPHOST. REPAIR	3	32
33	6	GUH-A2	15/1	0.60		1.80		1.20	20/1	TOOLS UPHOST. REPAIR	3	34
35	6	GUH-B2, B3	15/1	0.60			1.80	1.20	20/1	TOOLS UPHOST. REPAIR	3	36
37	7	CU4/FC4	15/2	0.97	1.87			0.90	20/1	RECEPT	2	38
39	7			0.97		1.87		0.90	20/1	RECEPT	2	40
41	2	RECEPT	20/1	0.36			0.36		20/1	SPARE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)			2.40	2.40	2.40	(Panel 'MZL1B')				
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			13.79	13.24	11.80			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**38.83**		**108**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**35.01**		**97**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	114.83
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	110.23
2	**Receptacles**	14.04	0.86	12.02	Phase (C)	98.26
3	**Special Loads**	14.40	1.00	14.40		
4	**Motors**	6.65	1.00	6.65		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	1.80	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	1.94	1.00	1.94	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (A)	103.15
					Phase (B)	99.85
					Phase (C)	88.52
	Subtotals	38.83		35.01		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	153
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	61%
	Total KVA	38.83		35.01	**HIGH PHASE**	**103.15**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD
MZL1B
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	3	TOOLS CHAIR REPAIR	20/1	1.20	1.20				20/1	SPARE		2
3	3	TOOLS CHAIR REPAIR	20/1	1.20		1.20			20/1	SPARE		4
5	3	TOOLS CHAIR REPAIR	20/1	1.20			1.20		20/1	SPARE		6
7	3	TOOLS CHAIR REPAIR	20/1	1.20	1.20				20/1	SPARE		8
9	3	TOOLS CHAIR REPAIR	20/1	1.20		1.20			20/1	SPARE		10
11	3	TOOLS CHAIR REPAIR	20/1	1.20			1.20		20/1	SPARE		12
13		SPARE	20/1		0.00				20/1	SPARE		14
15		SPARE	20/1			0.00			20/1	SPARE		16
17		SPARE	20/1				0.00		20/1	SPARE		18
19		SPARE	20/1		0.00				20/1	SPARE		20
21		SPACE				0.00				SPACE		22
23		SPACE					0.00			SPACE		24
25		SPACE			0.00					SPACE		26
27		SPACE				0.00				SPACE		28
29		SPACE					0.00			SPACE		30
31		SPACE			0.00					SPACE		32
33		SPACE				0.00				SP

LOCATION = SEE PLAN

SWITCHBOARD
SES-B
STATUS=NEW
MANUFACTURER= TBD
SWBD SERIES = TBD
UTILITY= COLORADO SPRINGS

BUS RATING = 3000A
VOLTAGE =480/277V
SYSTEM= 3Ø, 4W
MOUNTING=FREE-STANDING
NEMA RATING = 1
E.U.S.E.R.C.= YES
FEED TYPE = BOTTOM

MAIN RATING= 3000A
MAIN TYPE= M.C.B.
AIC RATING = 65K
HORIZONTAL BUSSING= YES
FULLY RATED
VERTICAL BUSSING=FULL HEIGHT
VERTICAL BUSSING= YES
FULLY RATED

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
TERMINATIONS = 75°C CU
# SECTIONS= 1
BUS EXTENSION PROVISIONS = YES

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
					5.64			5.64			8	
1		SURGE PROTECTION	125AF			7.38		7.38	225AF	Panel 'HPE'	8	2
			100AT				4.65	4.65	200AT		8	
	8			207.13	290.44			83.31			8	
3	8	Panel 'DBW1'	1200AF	209.88		292.05		82.17	1200AF	Panel 'SH1A'	8	4
	8		1200AT	206.44			288.79	82.35	600AT		8	
	8			40.61	156.29			115.68			8	
5	8	Panel 'DTSL1'	400AF	36.50		150.15		113.65	1200AF	Panel 'SH2A'	8	6
	8		225AT	33.22			146.90	113.68	600AT		8	
	8			47.39	182.92			135.54			8	
7	8	Panel 'DTSL2'	400AF	51.45		194.59		143.14	800AF	Panel 'DBGEN'	8	8
	8		225AT	40.96			178.05	137.09	800AT		8	
					0.00							
9						0.00			225AF	SPARE		10
							0.00		200AT			
					0.00							
11						0.00						12
							0.00					
					0.00							
13						0.00						14
							0.00					
					0.00							
15						0.00						16
							0.00					
					0.00							
17						0.00						18
							0.00					
	FEED THRU LOADS/PHASE (WHERE APPLICABLE)											
	MEASURED PEAK DEMAND				0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
	PHASE TOTALS (KVA/Phase)				635.29	644.16	618.39			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
	DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**		**1897.84**		**2283**	**Connected AMPS**		SHALL BE "HACR" RATED.		
	LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**		**1831.22**		**2203**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps	
0	**Exterior Lighting**	26.14	1.25	32.68	Phase (A)	2292.33
1	**Lighting - Continuous**	113.17	1.25	141.47	Phase (B)	2324.36
2	**Receptacles**	192.60	0.53	101.30	Phase (C)	2231.35
3	**Special Loads**	258.55	1.00	258.55		
4	**Motors**	49.48	1.00	49.48		
5	**Kitchen (Commercial)**	0.00	0.65	0.00	Per Table 220.56	
6	**HVAC Heating**	18.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	1208.49	1.00	1208.49	Larger of the two loads per NEC 220-60	
9	**MDF/IDF/Server Equipment**	0.00	1.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.25	0.00		
11	**Miscellaneous - Continuous**	31.40	1.25	39.25		
12	**Modular Furniture Outlets**	0.00	1.00	0.00		
13	**Peak Demand per 220-87**	0.00	1.56	0.00		
	Subtotals	1897.84		1831.22		
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps)	797
					Spare Capacity Load (%)	27%
	Total KVA	1897.84		1831.22		

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for
Load Code "8" are dispersed amongst Load Codes "0-7" and "9-10" respectively.

DISTRIBUTION PANEL
DB-W1
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 1200A
VOLTAGE = 480/277V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=STANDARD
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 65K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
NEUTRAL BUS (RATING) = 100%
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
					127.22			127.22			8	
1		SURGE PROTECTION	125AF			127.20		127.20	600AF	Panel 'WH1A'	8	2
			60AT				125.64	125.64	600AT		8	
					16.20			16.20			8	
3		SPARE	400AF			18.97		18.97	225AF	Panel 'WL1A'	8	4
			400AT				17.09	17.09	175AT		8	
					63.71			63.71			8	
5						63.71		63.71	400AF	Panel 'BC1'	8	6
							63.71	63.71	400AT		8	
					0.00							
7						0.00						8
							0.00					
					0.00							
9						0.00						10
							0.00					
					0.00							
11						0.00						12
							0.00					
					0.00							
13						0.00						14
							0.00					
					0.00							
15						0.00						16
							0.00					
					0.00							
17						0.00						18
							0.00					
	FEED THRU LOADS/PHASE (WHERE APPLICABLE)											
	MEASURED PEAK DEMAND				0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
	PHASE TOTALS (KVA/Phase)				207.13	209.88	206.44			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
	DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**		**623.44**		**750**	**Connected AMPS**		SHALL BE "HACR" RATED.		
	LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**		**635.53**		**764**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps	
0	**Exterior Lighting**	0.92	1.25	1.15	Phase (A)	747.38
1	**Lighting - Continuous**	43.30	1.25	54.13	Phase (B)	757.30
2	**Receptacles**	1.80	1.00	1.80	Phase (C)	744.91
3	**Special Loads**	203.01	1.00	203.01		
4	**Motors**	14.36	1.00	14.36		
5	**Kitchen (Commercial)**	0.00	0.65	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	355.95	1.00	355.95	Larger of the two loads per NEC 220-60	
9	**MDF/IDF/Server Equipment**	0.00	1.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.25	0.00		
11	**Miscellaneous - Continuous**	4.10	1.25	5.13		
12	**Modular Furniture Outlets**	0.00	1.00	0.00		
13	**Peak Demand per 220-87**	0.00	1.56	0.00		
	Subtotals	623.44		635.53		
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps)	436
					Spare Capacity Load (%)	36%
	Total KVA	623.44		635.53		

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for
Load Code "8" are dispersed amongst Load Codes "0-7" and "9-10" respectively.

PANELBOARD
HPE
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 225A
VOLTAGE = 480/277
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 65K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	0	LIGHTING POLES	20/1	1.37	2.46			1.09	20/1	LIGHTING EXTERIOR BUILDING	0	2
3	0	LIGHTING POLES	20/1	2.06		2.98		0.92	20/1	LIGHTING EXTERIOR BUILDING	0	4
5	0	LIGHTING POLES	20/1	1.43			1.43		20/1	SPARE		6
7		SPARE	20/1		0.00				20/1	SPARE		8
9		SPARE	20/1			0.00			20/1	SPARE		10
11		SPARE	20/1				0.00		20/1	SPARE		12
13		SPARE	20/1		0.00				20/1	SPARE		14
15		SPARE	20/1			0.00			20/1	SPARE		16
17		SPARE	20/1				0.00		20/1	SPARE		18
19		SPARE	20/1		0.00				20/1	SPARE		20
21		SPARE	20/1			0.00			20/1	SPARE		22
23		SPARE	20/1				0.00		20/1	SPARE		24
25		SPARE	20/1		0.00				20/1	SPARE		26
27		SPARE	20/1			0.00			20/1	SPARE		28
29		SPARE	20/1				0.00		20/1	SPARE		30
31	1	LIGHTING SES ROOM	20/1	0.44	0.44				20/1	SPARE		32
33		SPARE	20/1			0.00			20/1	SPARE		34
35		SPARE	20/1				0.00		20/1	SPARE		36
37	1	LIGHTING ZONE RISER ROOM	20/1	0.20	2.74			2.54	70/3	PANEL LPE	8	38
39		SPARE	20/1			4.40		4.40			8	40
41		SPARE	20/1				3.22	3.22			8	42
	FEED THRU LOADS/PHASE (WHERE APPLICABLE)											
	SUB-FEED BREAKER									DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
	MEASURED PEAK DEMAND (KW*1.25*1.25)				0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
	PHASE TOTALS (KVA/Phase)				5.64	7.38	4.65			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
	DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**		**17.67**		**21**	**Connected AMPS**		SHALL BE "HACR" RATED.		
	LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**		**21.43**		**26**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	6.87	1.25	8.59	Phase (A)	20.36
1	**Interior Lighting**	0.64	1.25	0.80	Phase (B)	26.63
2	**Receptacles**	0.18	1.00	0.18	Phase (C)	16.78
3	**Special Loads**	1.52	1.00	1.52		
4	**Motors**	0.96	1.00	0.96		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	7.50	1.25	9.38		
					Phase (A)	24.51
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	32.48
					Phase (C)	20.32
	Subtotals	17.67		21.43		
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps)	174
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%)	87%
	Total KVA	17.67		21.43	**HIGH PHASE**	**32.48**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for
Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD
WH1A
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 600A
VOLTAGE = 480/277
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = YES

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 65K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00	17.95			16.95	80/3	RTU-22	7	2
3	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00		17.95		16.95			7	4
5	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00			17.95	16.95			7	6
7	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00	17.95			16.95	80/3	RTU-23	7	8
9	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00		17.95		16.95			7	10
11	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00			17.95	16.95			7	12
13	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00	17.95			16.95	80/3	RTU-24	7	14
15	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00		17.95		16.95			7	16
17	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00			17.95	16.95			7	18
19	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00	17.95			16.95	80/3	RTU-25	7	20
21	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00		17.95		16.95			7	22
23	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00			17.95	16.95			7	24
25	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00	2.12			1.12	20/1	LIGHTING S WAREHOUSE	1	26
27	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00		2.05		1.05	20/1	LIGHTING S WAREHOUSE	1	28
29	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00			1.00		20/1	SPARE		30
31	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00	1.00					SPACE		32
33	1	LIGHTING RACKS E WAREHOUSE	20/1	1.00		1.00				SPACE		34
35	1	LIGHTING E WAREHOUSE	20/1	1.99			1.99			SPACE		36
37	1	LIGHTING E WAREHOUSE	20/1	1.45	1.45					SPACE		38
39	1	LIGHTING E WAREHOUSE	20/1	1.50		1.50				SPACE		40
41		SPARE	20/1				0.00			SPACE		42
	FEED THRU LOADS/PHASE (WHERE APPLICABLE)				50.85	50.85	50.85	(Panel 'WH1B')				
	SUB-FEED BREAKER									DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
	MEASURED PEAK DEMAND (KW*1.25*1.25)				0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
	PHASE TOTALS (KVA/Phase)				127.22	127.20	125.64			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
	DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**		**380.05**		**457**	**Connected AMPS**		SHALL BE "HACR" RATED.		
	LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**		**400.58**		**482**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	459.04
1	**Interior Lighting**	24.10	1.25	30.13	Phase (B)	458.97
2	**Receptacles**	0.00	1.00	0.00	Phase (C)	453.36
3	**Special Loads**	0.00	1.00	0.00		
4	**Motors**	0.00	1.00	0.00		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	355.95	1.00	355.95	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
					Phase (A)	484.22
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	484.13
					Phase (C)	477.12
	Subtotals	380.05		386.08		
	Largest Motor		58.00 0.25	14.50	Spare Capacity (Amps)	118
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%)	20%
	Total KVA	380.05		400.58	**HIGH PHASE**	**484.22**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for
Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

CIRCUIT BREAKER LEGEND (APPLIES TO ALL PANEL SCHEDULES)

○ Provide lock-off device for breaker per NFPA-70, Section 422-31(b). ● Provide lock-on device for breaker per NFPA-70, Section 700-12(F).

◇ Provide lock-off device to simultaneously disconnect all ungrounded conductors per NEC 605.

◆ Provide breaker with handle "lock-on" device for dedicated fire alarm circuit. The primary power circuit disconnecting means shall have a red marking and identified as "fire alarm circuit control.

◈ Provide lock-off device to simultaneously disconnect all ungrounded conductors per NFPA-70, Section 210-4(B).

⬓ Existing load connected/reconnected to new breaker in new panelboard

⧫ Provide lock-off device to simultaneously disconnect all ungrounded conductors per NEC 600.6

PER NEC 210.4(B)(D)
THE UNGROUNDED AND GROUNDED CONDUCTORS OF EACH MULTIWIRE BRANCH CIRCUIT SHALL BE GROUPED BY WIRE TIES OR SIMILAR MEANS IN AT LEAST ONE LOCATION WITHIN THE PANELBOARD OR OTHER POINT OF ORIGINATION. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS TO COMPLY WITH THIS NEC ARTICLE.

PANELBOARD
LPE
STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 225A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN RATING= 150A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	3	RECEPT SEASONAL LIGHTING	20/1	0.36	0.36				20/1	SPARE		2
3	3	RECEPT SEASONAL LIGHTING	20/1	0.54		0.54			20/1	SPARE		4
5		SPARE	20/1				0.18	0.18	20/1	RECEPT GENERATOR	2	6
7		SPARE	20/1		0.20			0.20	20/1	FACP	3	8
9		SPARE	20/1			0.12		0.12	20/1	TIMECLOCK	3	10
11		SPARE	20/1				0.00		20/1	TIMECLOCK TC2	3	12
13	4	MOTORIZED GATE	20/2	0.24	0.24				20/1	TIMECLOCK TC3	3	14
15	4			0.24		1.24		1.00	20/1	BUILDING SIGN	11	16
17	4	MOTORIZED GATE	20/2	0.24			1.24	1.00	20/1	BUILDING SIGN	11	18
19	4			0.24	0.24				20/1	SPARE		20
21	11	MONUMENT SIGN	20/1	1.50		1.50			20/1	SPARE		22
23	11	MONUMENT SIGN	20/1	1.50			1.50		20/1	SPARE		24
25	11	MONUMENT SIGN	20/1	1.50	1.50				20/1	SPARE		26
27	11	GATE SIGNAGE	20/1	1.00		1.00			20/1	SPARE		28
29	3	IRRIGATION CONTROLLER	20/1	0.30			0.30		20/1	SPARE		30
31		SPARE	20/1		0.00				20/1	SPARE		32
33		SPARE	20/1			0.00			20/1	SPARE		34
35	11	BUILDING SIGN E. 1	20/1				0.00		20/1	SPARE		36
37		SPARE	20/1		0.00				20/1	SPARE		38
39		SPARE	20/1			0.00			20/1	SPARE		40
41		SPARE	20/1				0.00		20/1	SPARE		42
	FEED THRU LOADS/PHASE (WHERE APPLICABLE)											
	SUB-FEED BREAKER									DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
	MEASURED PEAK DEMAND (KW*1.25*1.25)				0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
	PHASE TOTALS (KVA/Phase)				2.54	4.40	3.22			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
	DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**		**10.16**		**28**	**Connected AMPS**		SHALL BE "HACR" RATED.		
	LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**		**12.04**		**33**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	21.15
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	36.64
2	**Receptacles**	0.18	1.00	0.18	Phase (C)	26.81
3	**Special Loads**	1.52	1.00	1.52		
4	**Motors**	0.96	1.00	0.96		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	7.50	1.25	9.38		
					Phase (A)	24.27
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	43.93
					Phase (C)	32.02
	Subtotals	10.16		12.04		
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps)	117
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%)	78%
	Total KVA	10.16		12.04	**HIGH PHASE**	**43.93**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for
Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD
WH1B
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 600A
VOLTAGE = 480/277
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 65K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	7	RTU-26	80/3	16.95	16.95					SPACE		2
3	7			16.95		16.95				SPACE		4
5	7			16.95			16.95			SPACE		6
7	7	RTU-27	80/3	16.95	16.95					SPACE		8
9	7			16.95		16.95				SPACE		10
11	7			16.95			16.95			SPACE		12
13	7	RTU-28	80/3	16.95	16.95					SPACE		14
15	7			16.95		16.95				SPACE		16
17	7			16.95			16.95			SPACE		18
19		SPACE			0.00					SPACE		20
21		SPACE				0.00				SPACE		22
23		SPACE					0.00			SPACE		24
25		SPACE			0.00					SPACE		26
27		SPACE				0.00				SPACE		28
29		SPACE					0.00			SPACE		30
31		SPACE			0.00					SPACE		32
33		SPACE				0.00				SPACE		34
35		SPACE					0.00			SPACE		36
37		SPACE			0.00					SPACE		38
39		SPACE				0.00				SPACE		40
41		SPACE					0.00			SPACE		42
	FEED THRU LOADS/PHASE (WHERE APPLICABLE)											
	SUB-FEED BREAKER									DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
	MEASURED PEAK

PANELBOARD
WL1A
STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 400A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = YES

MAIN RATING= 400A
MAIN TYPE= M.C.B.
AIC RATING = 22K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	1	DOCK LIGHT & FAN	20/1	1.20	2.28			1.08	20/1	RECEPT ROOF	2	2
3	1	DOCK LIGHT & FAN	20/1	1.20		1.20			20/1	SPARE		4
5		SPARE	20/1				0.00		20/1	SPARE		6
7	1	DOCK LIGHT & FAN	20/1	1.20	1.20				20/1	SPARE		8
9	1	DOCK LIGHT & FAN	20/1	1.20		1.20			20/1	SPARE		10
11	1	DOCK LIGHT & FAN	20/1	1.20			1.20		20/1	SPARE		12
13	1	DOCK LIGHT & FAN	20/1	1.20	1.20				20/1	SPARE		14
15	1	DOCK LIGHT & FAN	20/1	1.20		4.84		3.64	50/2	WELDER	3	16
17	1	DOCK LIGHT & FAN	20/1	1.20			4.84	3.64			3	18
19	1	DOCK LIGHT & FAN	20/1	1.20	2.40			1.20	20/1	MOTORIZED DOOR	4	20
21	1	DOCK LIGHT & FAN	20/1	1.20		2.40		1.20	20/1	MOTORIZED DOOR	4	22
23	1	DOCK LIGHT & FAN	20/1	1.20			2.20	1.00	20/1	BATTERY MOVER 120V	3	24
25	1	DOCK LIGHT & FAN	20/1	1.20	1.20				20/1	SPARE		26
27	1	DOCK LIGHT & FAN	20/1	1.20		1.20			20/1	SPARE		28
29	1	DOCK LIGHT & FAN	20/1	1.20			1.20		20/1	SPARE		30
31	1	DOCK LIGHT & FAN	20/1	1.20	1.20				20/1	SPARE		32
33	1	DOCK LIGHT & FAN	20/1	1.20		1.20			20/1	SPARE		34
35	2	RECEPT ROOF	20/1	0.72			0.72		20/1	SPARE		36
37	3	TOOLS WAREHOUSE	20/1	1.20	1.20				20/1	SPARE		38
39	3	TOOLS WAREHOUSE	20/1	1.20		3.25		2.05	30/2	WH 6	11	40
41	3	TOOLS WAREHOUSE	20/1	1.20			3.25	2.05			11	42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)			5.52	3.68	3.68	(Panel 'WL1B')				
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			16.20	18.97	17.09			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**52.26**		**145**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**58.32**		**162**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.92	1.25	1.15	Phase (A)	134.90
1	**Interior Lighting**	19.20	1.25	24.00	Phase (B)	157.96
2	**Receptacles**	1.80	1.00	1.80	Phase (C)	142.31
3	**Special Loads**	11.88	1.00	11.88		
4	**Motors**	14.36	1.00	14.36		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	4.10	1.25	5.13		
					Phase (A)	149.89
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	177.22
					Phase (C)	158.49
	Subtotals	52.26		58.32		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	88
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	35%
	Total KVA	52.26		58.32	**HIGH PHASE**	**177.22**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD
MZL2A
STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = YES

MAIN RATING= 250A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	2	RECEPT	20/1	0.90	1.43			0.53	20/1	MECH EF_15	4	2
3	2	RECEPT	20/1	1.08		1.61		0.53	20/1	MECH EF_14	4	4
5	2	RECEPT	20/1	0.90			1.73	0.83	20/2	CU 3 FC 3	7	6
7	2	RECEPT-MAN BREAK	20/1	0.54	1.37			0.83			7	8
9	2	RECEPT-MAN BREAK	20/1	0.54		1.26		0.72	20/1	RECEPT ROOF	2	10
11	2	SPARE	20/1				0.18	0.72	20/1	RECEPT ROOF	2	12
13	3	TOOLS WOOD REPAIR	20/1	1.00	2.18			1.18	20/1	MECH EF_17	4	14
15	3	TOOLS WOOD REPAIR	20/1	1.00		1.00			20/1	SPARE		16
17	3	TOOLS WOOD REPAIR	20/1	1.00			1.40	0.40	20/1	LIGHTING SPRAY PAINT BOOTH	1	18
19	3	TOOLS WOOD REPAIR	20/1	1.00	2.80			1.80	20/1	TOOLS WOODSTAGING	3	20
21	3	TOOLS WOOD REPAIR	20/1	1.00		2.80		1.80	20/1	TOOLS WOODSTAGING	3	22
23	3	TOOLS WOOD REPAIR	20/1	1.00			2.80	1.80	20/1	TOOLS WOODSTAGING	3	24
25	3	TOOLS WOOD REPAIR	20/1	1.00	2.80			1.80	20/1	CHOPSAW	3	26
27	3	TOOLS WOOD REPAIR	20/1	1.00		2.80		1.80	20/1	TOOLS CARPENTER SHOP	3	28
29	3	TOOLS WOOD REPAIR	20/1	1.00			2.80	1.80	20/1	TOOLS CARPENTER SHOP	3	30
31	3	TOOLS WOOD REPAIR	20/1	1.00	1.80			0.80	20/2	MAU-2	3	32
33	3	TOOLS WOOD REPAIR	20/1	1.00		1.80		0.80	---	" " "	3	34
35	4	MECH EF_16	20/1	0.86			0.86		20/1	SPARE		36
37	6	GUH-A1	15/1	0.60	0.60				20/1	SPARE		38
39	3	TOOLS WOOD REPAIR	20/1	1.00		1.00			20/1	SPARE		40
41	3	TOOLS WOOD REPAIR	20/1	1.00			1.00		20/1	SPARE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)			14.21	12.88	12.48	(Panel 'MZL2C')				
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			27.18	25.15	23.26			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**75.59**		**210**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**74.03**		**205**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	226.36
1	**Interior Lighting**	0.76	1.25	0.95	Phase (B)	209.44
2	**Receptacles**	12.60	0.90	11.30	Phase (C)	193.65
3	**Special Loads**	49.97	1.00	49.97		
4	**Motors**	9.40	1.00	9.40		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.60	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	1.66	1.00	1.66	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.60	1.25	0.75		
					Phase (A)	217.35
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	206.33
					Phase (C)	192.80
	Subtotals	75.59		74.03		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	45
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	18%
	Total KVA	75.59		74.03	**HIGH PHASE**	**217.35**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD
MZL2B
STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = YES

MAIN RATING= 250A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	2	RECEPT RMS 201_206	20/1	1.08	2.28			1.20	20/1	TOOLS CARPENTER SHOP	3	2
3	2	RECEPT RMS 201_206	20/1	0.90		2.10		1.20	20/1	TOOLS CARPENTER SHOP	3	4
5	2	RECEPT RMS 201_206	20/1	0.90			0.90		20/1	SPARE		6
7	2	RECEPT	20/1	1.08	3.54			2.46	30/2	DUCT COLLECTOR CARPENTER	3	8
9	2	RECEPT	20/1	0.90		3.36		2.46			3	10
11	2	RECEPT	20/1	1.08			1.61	0.53	20/1	MECH EF_21	4	12
13	2	RECEPT	20/1	0.36	1.28			0.92	20/2	IF-16	4	14
15	2	RECEPT	20/1	0.36		1.28		0.92	---	" " "	4	16
17	3	EDF	20/1	0.60			0.65	0.05	20/1	RP-5	4	18
19	4	HAND DRYER	20/1	1.00	2.00			1.00	20/1	MICROWAVE BREAKROOM	3	20
21	4	HAND DRYER	20/1	1.00		2.00		1.00	20/1	MICROWAVE BREAKROOM	3	22
23	3	COMBOSANDER CARPENTER SHOP 215	20/1	1.32			2.32	1.00	20/1	MICROWAVE BREAKROOM	3	24
25	3	MITERSAW CARPENTER SHOP	20/1	1.70	2.70			1.00	20/1	MICROWAVE BREAKROOM	3	26
27	3	VENDING	20/1	0.60		1.60		1.00	20/1	EQUIPMENT BREAKROOM	3	28
29	3	VENDING	20/1	0.60			1.60	1.00	20/1	EQUIPMENT BREAKROOM	3	30
31	3	VENDING	20/1	0.60	1.40			0.80	20/1	GARB. DISP. BREAKROOM	3	32
33	3	VENDING	20/1	0.60		1.60		1.00	20/1	DISHWASHER BREAKROOM	3	34
35	3	EQUIPMENT BREAKROOM	20/1	1.00			1.80	0.80	20/1	EQUIPMENT BREAKROOM	3	36
37	3	EQUIPMENT BREAKROOM	20/1	1.00	2.00			1.00	20/1	EQUIPMENT BREAKROOM	3	38
39	3	EQUIPMENT BREAKROOM	20/1	1.00		1.93		0.93	20/2	ICE CUBE MACHINE	3	40
41	3	AQUASTAT	20/1	1.92			2.85	0.93			3	42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			15.20	13.86	11.73			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**40.78**		**113**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**40.78**		**113**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	126.53
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	115.42
2	**Receptacles**	6.66	1.00	6.66	Phase (C)	97.64
3	**Special Loads**	29.70	1.00	29.70		
4	**Motors**	4.42	1.00	4.42		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
					Phase (A)	126.53
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	115.42
					Phase (C)	97.64
	Subtotals	40.78		40.78		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	137
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	55%
	Total KVA	40.78		40.78	**HIGH PHASE**	**126.53**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD
MZL2C
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	2	RECEPT MOD FURN	20/1	1.08	1.20			0.12	20/1	TIMECLOCK	3	2
3	2	RECEPT MOD FURN	20/1	1.08		1.20		0.12	20/1	FA BOOSTER	3	4
5	2	RECEPT MOD FURN	20/1	1.08			1.44	0.36	20/1	RECEPT ELEC ROOM	2	6
7	2	RECEPT MOD FURN	20/1	1.08	1.20			0.12	20/1	LTG CONTROL PANEL	3	8
9	3	DRILL PRESS CARPENTER SHOP	20/1	1.08		1.08			20/1	SPARE		10
11	3	WOOD LATHE CARPENTER SHOP	20/1	1.32			1.32		20/1	SPARE		12
13	3	GLASSSANDER CARPENTER SHOP	20/1	0.74	1.10			0.36	20/1	EHS	2	14
15	1	LIGHTING PAINT BOOTH	20/1	0.36		0.72		0.36	20/1	EXERCISE ROOM	2	16
17		SPARE	20/1				0.36	0.36	20/1	EXERCISE ROOM	2	18
19	2	EHS	20/1	0.36	0.72			0.36	20/1	EXERCISE ROOM	2	20
21	2	EHS	20/1	0.36		0.72		0.36	20/1	EXERCISE ROOM	2	22
23	2	EHS	20/1	0.18			0.54	0.36	20/1	EXERCISE ROOM	2	24
25	3	COPIER	20/2	1.55	1.75			0.20	20/1	TIMECLOCK	3	26
27	3			1.55		1.55			20/1	SPARE		28
29	3	PLANAR CARPENTER SHOP	30/2	1.87			2.87	1.00	20/1	WASHER	3	30
31	3			1.87	3.87			2.00	30/3	DRYER	3	32
33	3	BAND SAW	20/2	1.25		3.25		2.00			3	34
35	3			1.25			3.25	2.00			3	36
37	4	PAINTBOOTH EXHAUST FAN	30/3	2.10	4.37			2.27	30/2	TABLE SAW CARPENTER SHOP	3	38
39	4			2.10		4.37		2.27			3	40
41	4			2.10			2.70	0.60	20/1	WH-5	11	42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			14.21	12.88	12.48			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**39.57**		**110**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**39.81**		**111**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	118.31
1	**Interior Lighting**	0.36	1.25	0.45	Phase (B)	107.28
2	**Receptacles**	7.74	1.00	7.74	Phase (C)	103.92
3	**Special Loads**	24.57	1.00	24.57		
4	**Motors**	6.30	1.00	6.30		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.60	1.25	0.75		
					Phase (A)	118.31
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	108.04
					Phase (C)	105.17
	Subtotals	39.57		39.81		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	139
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	56%
	Total KVA	39.57		39.81	**HIGH PHASE**	**118.31**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD
SH1A
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 600A
VOLTAGE = 480/277
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 35K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	1	LIGHTING EXIT PATH	20/1	1.06	18.79			17.73	90/3	RTU-1	7	2
3		SPARE	20/1			17.73		17.73			7	4
5	1	LIGHTING	20/1	0.75			18.48	17.73			7	6
7	1	LIGHTING	20/1	0.33	18.06			17.73	90/3	RTU-8	7	8
9	1	LIGHTING	20/1	1.04		18.77		17.73			7	10
11	1	LTG - SHOWROOM, EM	20/1	2.37			20.10	17.73			7	12
13	1	LTG - SHOWROOM	20/1	2.69	20.42			17.73	90/3	RTU-2	7	14
15	1	LTG - SHOWROOM, EM	20/1	2.37		20.10		17.73			7	16
17	1	LTG - SHOWROOM	20/1	2.37			20.10	17.73			7	18
19	1	LTG - SHOWROOM	20/1	2.37	5.64			3.27	20/3	AC1	7	20
21	1	LTG - SHOWROOM	20/1	1.90		5.17		3.27			7	22
23		SPARE	20/1				3.27	3.27			7	24
25		SPARE	20/1		17.73			17.73	90/3	RTU-12	7	26
27		SPARE	20/1			17.73		17.73			7	28
29		SPARE	20/1				17.73	17.73			7	30
31		SPARE	20/1		0.00					SPACE	7	32
33		SPARE	20/1			0.00				SPACE	7	34
35		SPARE	20/1				0.00			SPACE	7	36
37	11	WH 1	20/3	2.67	2.67					SPACE	7	38
39	11			2.67		2.67				SPACE	7	40
41	11			2.67			2.67			SPACE	7	42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			83.31	82.17	82.35			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**247.83**		**298**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**268.65**		**323**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	300.61
1	**Interior Lighting**	17.25	1.25	21.56	Phase (B)	296.50
2	**Receptacles**	0.00	1.00	0.00	Phase (C)	297.15
3	**Special Loads**	0.00	1.00	0.00		
4	**Motors**	0.00	1.00	0.00		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	222.57	1.00	222.57	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	8.01	1.25	10.01		
					Phase (A)	326.29
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	321.15
					Phase (C)	321.96
	Subtotals	247.83		254.15		
	Largest Motor		58.00	0.25	14.50	Spare Capacity (Amps)	277
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	46%
	Total KVA	247.83		268.65	**HIGH PHASE**	**326.29**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD
SL1A
STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = YES

MAIN RATING= 250A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES

SL1D

PANELBOARD

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1		SPARE	20/1		1.08			1.08	20/1	FLOOR BOXES N SHOW ROOM	2	2
3		SPARE	20/1			1.08		1.08	20/1	FLOOR BOXES N SHOW ROOM	2	4
5		SPARE	20/1				1.08	1.08	20/1	FLOOR BOXES N SHOW ROOM	2	6
7		SPARE	20/1		1.08			1.08	20/1	FLOOR BOXES N SHOW ROOM	2	8
9		SPARE	20/1			1.08		1.08	20/1	FLOOR BOXES N SHOW ROOM	2	10
11		SPARE	20/1				1.08	1.08	20/1	FLOOR BOXES N SHOW ROOM	2	12
13		SPARE	20/1		1.08			1.08	20/1	FLOOR BOXES N SHOW ROOM	2	14
15		SPARE	20/1			1.08		1.08	20/1	FLOOR BOXES N SHOW ROOM	2	16
17		SPARE	20/1				1.08	1.08	20/1	FLOOR BOXES N SHOW ROOM	2	18
19		SPARE	20/1		1.08			1.08	20/1	FLOOR BOXES N SHOW ROOM	2	20
21		SPARE	20/1			1.08		1.08	20/1	FLOOR BOXES N SHOW ROOM	2	22
23		SPARE	20/1				1.08	1.08	20/1	FLOOR BOXES N SHOW ROOM	2	24
25		SPARE	20/1		1.08			1.08	20/1	FLOOR BOXES N SHOW ROOM	2	26
27		SPARE	20/1			1.08		1.08	20/1	FLOOR BOXES N SHOW ROOM	2	28
29		SPARE	20/1				1.08	1.08	20/1	FLOOR BOXES N SHOW ROOM	2	30
31		SPARE	20/1		1.08			1.08	20/1	FLOOR BOXES N SHOW ROOM	2	32
33		SPARE	20/1			1.44		1.44	20/1	FLOOR BOXES N SHOW ROOM	2	34
35		SPARE	20/1				1.44	1.44	20/1	FLOOR BOXES N SHOW ROOM	2	36
37		SPARE	20/1		0.00				20/1	SPARE		38
39		SPARE	20/1			0.00			20/1	SPARE		40
41		SPARE	20/1				0.00		20/1	SPARE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			6.48	6.84	6.84			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**20.16**		**56**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**15.08**		**42**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	53.96
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	56.96
2	**Receptacles**	20.16	0.75	15.08	Phase (C)	56.96
3	**Special Loads**	0.00	1.00	0.00		
4	**Motors**	0.00	1.00	0.00		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
					Phase (A)	40.36
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	42.61
					Phase (C)	42.61
	Subtotals	20.16		15.08		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	208
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	83%
	Total KVA	20.16		15.08	**HIGH PHASE**	**42.61**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

SL1B

PANELBOARD

STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = YES

MAIN RATING= 250A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	2	FLOORBOXES NE SHOWROOM	20/1	1.44	2.70			1.26	20/1	RECEPT ROOF	2	2
3	2	FLOORBOXES NE SHOWROOM	20/1	1.44		1.44			20/1	SPARE		4
5	2	FLOORBOXES NE SHOWROOM	20/1	1.44			1.62	0.18	20/1	RECEPT ROOF	2	6
7	2	FLOORBOXES NE SHOWROOM	20/1	1.44	1.97			0.53	20/1	MECH EF 1	4	8
9	2	FLOORBOXES NE SHOWROOM	20/1	1.44		1.97		0.53	20/1	MECH EF 19	4	10
11	2	FLOORBOXES NE SHOWROOM	20/1	1.44			1.80	0.36	20/1	RECEPT ELEC ROOM	2	12
13	2	FLOORBOXES NE SHOWROOM	20/1	1.44	1.56			0.12	20/1	TIMECLOCK	3	14
15	2	FLOORBOXES NE SHOWROOM	20/1	1.44		1.56		0.12	20/1	BOOSTER PANEL	3	16
17	2	FLOORBOXES NE SHOWROOM	20/1	1.44			1.56	0.12	20/1	SLCP1	3	18
19	2	FLOORBOXES NE SHOWROOM	20/1	1.44	1.44				20/1	SPARE		20
21	2	FLOORBOXES NE SHOWROOM	20/1	1.44		1.44			20/1	SPARE		22
23	2	FLOORBOXES NE SHOWROOM	20/1	0.72			0.72		20/1	SPARE		24
25	2	FLOORBOXES NE SHOWROOM	20/1	1.08	1.08				20/1	SPARE		26
27	2	FLOORBOXES NE SHOWROOM	20/1	1.08		1.08			20/1	SPARE		28
29	2	FLOORBOXES NE SHOWROOM	20/1	0.72			0.72		20/1	SPARE		30
31		SPARE	20/1		0.00				20/1	SPARE		32
33		SPARE	20/1			0.00			20/1	SPARE		34
35		SPARE	20/1				0.00		20/1	SPARE		36
37		SPARE	20/1		0.00				20/1	SPARE		38
39		SPARE	20/1			0.00			20/1	SPARE		40
41		SPARE	20/1				0.00		20/1	SPARE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)			17.22	14.09	12.60			(Panel 'SL1C')		
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			25.97	21.58	19.02			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**66.57**		**185**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**40.97**		**114**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	216.23
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	179.70
2	**Receptacles**	61.20	0.58	35.60	Phase (C)	158.38
3	**Special Loads**	4.26	1.00	4.26		
4	**Motors**	1.11	1.00	1.11		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
					Phase (A)	138.49
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	110.10
					Phase (C)	92.55
	Subtotals	66.57		40.97		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	136
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	55%
	Total KVA	66.57		40.97	**HIGH PHASE**	**138.49**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

SL1C

PANELBOARD

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	2	FLOOR BOXES NW SHOWROOM	20/1	1.44	3.36			1.92	20/1	AQUASTAT	3	2
3	2	FLOOR BOXES NW SHOWROOM	20/1	1.08		1.13		0.05	20/1	RP-1	4	4
5	2	FLOOR BOXES NW SHOWROOM	20/1	1.44			1.44		20/1	SPARE		6
7	2	FLOOR BOXES NW SHOWROOM	20/1	1.44	9.54			8.10	100/3	PANEL SL1E	8	8
9	2	FLOOR BOXES NW SHOWROOM	20/1	1.44		8.64		7.20			8	10
11	2	FLOOR BOXES NW SHOWROOM	20/1	1.44			7.56	6.12			8	12
13	2	FLOOR BOXES NW SHOWROOM	20/1	1.44	1.44				20/1	SPARE		14
15	2	FLOOR BOXES NW SHOWROOM	20/1	1.44		1.44			20/1	SPARE		16
17	2	FLOOR BOXES NW SHOWROOM	20/1	1.44			1.44		20/1	SPARE		18
19	2	FLOOR BOXES NW SHOWROOM	20/1	1.44	1.44				20/1	SPARE		20
21	2	FLOOR BOXES NW SHOWROOM	20/1	1.44		1.44			20/1	SPARE		22
23	2	FLOOR BOXES NW SHOWROOM	20/1	1.08			1.08		20/1	SPARE		24
25	2	FLOOR BOXES NW SHOWROOM	20/1	1.44	1.44				20/1	SPARE		26
27	2	FLOOR BOXES NW SHOWROOM	20/1	1.44		1.44			20/1	SPARE		28
29	2	FLOOR BOXES NW SHOWROOM	20/1	1.08			1.08		20/1	SPARE		30
31		SPARE	20/1		0.00				20/1	SPARE		32
33		SPARE	20/1			0.00			20/1	SPARE		34
35		SPARE	20/1				0.00		20/1	SPARE		36
37		SPARE	20/1		0.00				20/1	SPARE		38
39		SPARE	20/1			0.00			20/1	SPARE		40
41		SPARE	20/1				0.00		20/1	SPARE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			17.22	14.09	12.60			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**43.91**		**122**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**28.93**		**80**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	143.39
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	117.34
2	**Receptacles**	39.96	0.63	24.98	Phase (C)	104.92
3	**Special Loads**	3.90	1.00	3.90		
4	**Motors**	0.05	1.00	0.05		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
					Phase (A)	99.00
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	76.33
					Phase (C)	65.59
	Subtotals	43.91		28.93		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	170
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	68%
	Total KVA	43.91		28.93	**HIGH PHASE**	**99.00**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

SL1E

PANELBOARD

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 125A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1		SPARE	20/1		1.08			1.08	20/1	FLOOR BOXES NW SHOWROOM	2	2
3		SPARE	20/1			1.08		1.08	20/1	FLOOR BOXES NW SHOWROOM	2	4
5		SPARE	20/1				1.08	1.08	20/1	FLOOR BOXES NW SHOWROOM	2	6
7	2	FLOOR BOXES NE SHOWROOM	20/1	1.08	2.16			1.08	20/1	FLOOR BOXES NW SHOWROOM	2	8
9	2	FLOOR BOXES NE SHOWROOM	20/1	1.08		2.16		1.08	20/1	FLOOR BOXES NW SHOWROOM	2	10
11	2	FLOOR BOXES NE SHOWROOM	20/1	1.08			2.16	1.08	20/1	FLOOR BOXES NW SHOWROOM	2	12
13	2	FLOOR BOXES NE SHOWROOM	20/1	1.08	2.16			1.08	20/1	FLOOR BOXES NW SHOWROOM	2	14
15	2	FLOOR BOXES NE SHOWROOM	20/1	1.08		2.16		1.08	20/1	FLOOR BOXES NW SHOWROOM	2	16
17	2	FLOOR BOXES NE SHOWROOM	20/1	1.08			2.16	1.08	20/1	FLOOR BOXES NW SHOWROOM	2	18
19	3	RECEPT OVERHEAD SIGNAGE	20/1	1.08	1.98			0.90	20/1	RECEPT WALL SHOWROOM	2	20
21	3	RECEPT OVERHEAD SIGNAGE	20/1	0.90		1.80		0.90	20/1	RECEPT WALL SHOWROOM	2	22
23		SPARE	20/1				0.72	0.72	20/1	RECEPT WALL SHOWROOM	2	24
25		SPARE	20/1		0.72			0.72	20/1	RECEPT WALL SHOWROOM	2	26
27		SPARE	20/1			0.00			20/1	SPARE		28
29		SPARE	20/1				0.00		20/1	SPARE		30
31		SPARE	20/1		0.00				20/1	SPARE		32
33		SPARE	20/1			0.00			20/1	SPARE		34
35		SPARE	20/1				0.00		20/1	SPARE		36
37		SPARE	20/1		0.00				20/1	SPARE		38
39		SPARE	20/1			0.00			20/1	SPARE		40
41		SPARE	20/1				0.00		20/1	SPARE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			8.10	7.20	6.12			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**21.42**		**59**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**16.70**		**46**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	67.45
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	59.95
2	**Receptacles**	19.44	0.76	14.72	Phase (C)	50.96
3	**Special Loads**	1.98	1.00	1.98		
4	**Motors**	0.00	1.00	0.00		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
					Phase (A)	53.26
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	47.22
					Phase (C)	38.59
	Subtotals	21.42		16.70		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	54
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	54%
	Total KVA	21.42		16.70	**HIGH PHASE**	**53.26**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

SL2A

PANELBOARD

STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = YES

MAIN RATING= 250A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1		SHOWROOM TRACK	20/1	1.80	2.60			0.80	20/1	RECEPT VENDING SALES LOCKER 110	3	2
3		SHOWROOM TRACK	20/1	1.80		2.60		0.80	20/1	RECEPT VENDING SALES LOCKER 110	3	4
5		SHOWROOM TRACK	20/1	1.80			2.60	0.80	20/1	RECEPT VENDING SALES LOCKER 110	3	6
7		SHOWROOM TRACK	20/1	1.80	1.80				20/1	SPARE		8
9		SHOWROOM TRACK	20/1	1.80		3.35		1.55	20/1	RECEPT VENDING SALES LOCKER 110	3	10
11		SHOWROOM TRACK	20/1	1.80			3.35	1.55	20/1	RECEPT VENDING SALES LOCKER 110	3	12
13		SPARE	20/1		0.80			0.80	20/1	RECEPT VENDING SALES LOCKER 110	3	14
15		SHOWROOM TRACK	20/1	1.80		2.60		0.80	20/1	RECEPT VENDING SALES LOCKER 110	3	16
17		SHOWROOM TRACK	20/1	1.80			2.60	0.80	20/1	RECEPT VENDING SALES LOCKER 110	3	18
19		SHOWROOM TRACK	20/1	1.80	2.60			0.80	20/1	RECEPT VENDING SALES LOCKER 110	3	20
21		SHOWROOM TRACK	20/1	1.80		3.00		1.20	20/1	DISHWASHER SALES LOCKER 110	3	22
23		SPARE	20/1				0.90	0.90	20/1	GARB DISB BREAKROOM	3	24
25		SPARE	20/1		0.60			0.60	20/1	RECEPT EDF	3	26
27		SPARE	20/1			1.92		1.92	20/1	AQUASTAT	3	28
29		SPARE	20/1				0.04	0.04	20/1	RP-2	4	30
31		SPARE	20/1		0.00				20/1	SPARE		32
33		SPARE	20/1			0.00			20/1	SPARE		34
35		SPARE	20/1				0.12	0.12	20/1	FLOW/TAMP	3	36
37		SPARE	20/1		0.00				20/1	SPARE		38
39		SPARE	20/1			0.00			20/1	SPARE		40
41		SPARE	20/1				0.00		20/1	SPARE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)			9.74	8.18	7.20			(Panel 'SL2E')		
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			18.14	21.65	16.81			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**56.60**		**157**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**56.92**		**158**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	18.00	1.25	22.50	Phase (A)	151.05
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	180.28
2	**Receptacles**	19.08	0.76	14.54	Phase (C)	139.99
3	**Special Loads**	18.04	1.00	18.04		
4	**Motors**	0.04	1.00	0.04		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	1.44	1.25	1.80		
					Phase (A)	148.10
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	182.43
					Phase (C)	143.46
	Subtotals	56.60		56.92		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	92
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	37%
	Total KVA	56.60		56.92	**HIGH PHASE**	**182.43**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

SL2E

PANELBOARD

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BU

PANELBOARD

SL2B

STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = YES

MAIN RATING= 250A
MAIN TYPE= M.C.B.
A/C RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	2	FLOOR BOXES SE SHOWROOM	20/1	1.08	2.34			1.26	20/1	RECEPT ROOF	2	2
3	2	FLOOR BOXES SE SHOWROOM	20/1	1.08		1.08			20/1	SPARE		4
5	2	FLOOR BOXES SE SHOWROOM	20/1	1.08			1.61	0.53	20/1	MECH EF_18	4	6
7	2	FLOOR BOXES SE SHOWROOM	20/1	1.08	1.61			0.53	20/1	MECH EF_2	4	8
9	2	FLOOR BOXES SE SHOWROOM	20/1	1.08		1.61		0.53	20/1	MECH EF_3	4	10
11	2	FLOOR BOXES SE SHOWROOM	20/1	1.08			1.80	0.72	20/1	RECEPT ROOF	2	12
13	2	FLOOR BOXES SE SHOWROOM	20/1	0.36	1.31			0.95	20/1	J-BOX HAND DRYER	4	14
15	11	RECEPT SIGNAGE	20/1	0.72		1.26		0.54	20/1	RECEPT ROOF	2	16
17	11	RECEPT SIGNAGE	20/1	0.90			1.85	0.95	20/1	J-BOX HAND DRYER	4	18
19	6	UH-1	20/2	1.50	2.45			0.95	20/1	J-BOX HAND DRYER	4	20
21	6	" "	---	1.50		2.22		0.72	20/1	RECEPT RESTROOMS	2	22
23		SPARE	20/1				0.00		20/1	SPARE		24
25		SPARE	20/1		0.00				20/1	SPARE		26
27		SPARE	20/1			0.83		0.83	20/2	MECH CU_1 FC_1	7	28
29		SPARE	20/1				0.83	0.83				30
31		SPARE	20/1		11.52			11.52	100/3	PANEL SL2D	8	32
33		SPARE	20/1			11.52		11.52			8	34
35		SPARE	20/1				10.44	10.44			8	36
37		SPARE	20/1		0.72			0.72	20/1	RECEPT SIGNAGE	11	38
39		SPARE	20/1			1.26		1.26	20/1	RECEPT WALL SHOW ROOM	2	40
41		SPARE	20/1				1.26	1.26	20/1	RECEPT WALL SHOW ROOM	2	42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)			9.66	9.48	6.36	(Panel 'SL2C')				
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			29.61	29.26	24.15			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**83.02**		**230**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**51.39**		**143**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	246.54
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	243.65
2	**Receptacles**	71.10	0.57	40.55	Phase (C)	201.10
3	**Special Loads**	0.48	1.00	0.48		
4	**Motors**	4.43	1.00	4.43		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	3.00	1.00	3.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	1.66	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	2.34	1.25	2.93		
					Phase (A)	159.17
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	146.77
					Phase (C)	121.98
	Subtotals	83.02		51.39		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	107
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	43%
	Total KVA	83.02		51.39	**HIGH PHASE**	**159.17**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD

SL2C

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
A/C RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	2	FLOORBOXES SE SHOWROOM	20/1	1.08	1.80			0.72	20/1	RECEPT CASHWARP	2	2
3	2	FLOORBOXES SE SHOWROOM	20/1	1.08		1.80		0.72	20/1	RECEPT SALES LOCKER 110	2	4
5	2	FLOORBOXES SE SHOWROOM	20/1	0.72			0.84	0.12	20/1	TIMECLOCK	3	6
7	2	FLOORBOXES SE SHOWROOM	20/1	1.08	1.44			0.36	20/1	RECEPT WAITING AREA 117	2	8
9	2	FLOORBOXES SE SHOWROOM	20/1	1.08		1.08			20/1	SPARE		10
11	2	FLOORBOXES SE SHOWROOM	20/1	0.72			0.72		20/1	SPARE		12
13	2	FLOORBOXES SE SHOWROOM	20/1	1.08	1.98			0.90	20/1	RECEPT ONLINE SALES 111	2	14
15	2	FLOORBOXES SE SHOWROOM	20/1	1.08		1.80		0.72	20/1	RECEPT ONLINE SALES 111	2	16
17	2	FLOORBOXES SE SHOWROOM	20/1	1.08			1.80	0.72	20/1	RECEPT OFFICE 112	2	18
19	2	FLOORBOXES SE SHOWROOM	20/1	1.08	1.08				20/1	SPARE		20
21	2	FLOORBOXES SE SHOWROOM	20/1	1.08		1.08			20/1	SPARE		22
23	2	FLOORBOXES SE SHOWROOM	20/1	1.08			1.08		20/1	SPARE		24
25	2	FLOORBOXES SE SHOWROOM	20/1	1.08	1.08				20/1	SPARE		26
27	2	FLOORBOXES SE SHOWROOM	20/1	1.08		1.20		0.12	20/1	FABP	3	28
29	2	FLOORBOXES SE SHOWROOM	20/1	1.08			1.20	0.12	20/1	TIMECLOCK	3	30
31	2	FLOORBOXES SE SHOWROOM	20/1	1.08	1.20			0.12	20/1	SLOP2	3	32
33	2	FLOORBOXES SE SHOWROOM	20/1	1.08		1.44		0.36	20/1	ELEC RM	2	34
35		SPARE	20/1				0.72	0.72	20/1	RECEPT TV	2	36
37		SPARE	20/1		1.08			1.08	20/1	FLOOR BOXES SE SHOWROOM	2	38
39		SPARE	20/1			1.08		1.08	20/1	FLOOR BOXES SE SHOWROOM	2	40
41		SPARE	20/1				0.00		20/1	SPARE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			9.66	9.48	6.36			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**25.50**		**71**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**17.99**		**50**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	80.44
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	78.94
2	**Receptacles**	25.02	0.70	17.51	Phase (C)	52.96
3	**Special Loads**	0.48	1.00	0.48		
4	**Motors**	0.00	1.00	0.00		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
					Phase (A)	56.60
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	55.55
					Phase (C)	37.66
	Subtotals	25.50		17.99		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	-50
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	0%
	Total KVA	25.50		17.99	**HIGH PHASE**	**56.60**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD

SL2D

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 125A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
A/C RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1		SPARE	20/1		1.44			1.44	20/1	FLOOR BOXES SW SHOWROOM	2	2
3		SPARE	20/1			1.08		1.08	20/1	FLOOR BOXES SW SHOWROOM	2	4
5	2	FLOOR BOXES SW SHOWROOM	20/1	1.08			1.80	0.72	20/1	FLOOR BOXES SW SHOWROOM	2	6
7	2	FLOOR BOXES SW SHOWROOM	20/1	1.08	2.52			1.44	20/1	FLOOR BOXES SW SHOWROOM	2	8
9	2	FLOOR BOXES SW SHOWROOM	20/1	1.08		2.52		1.44	20/1	FLOOR BOXES SW SHOWROOM	2	10
11	2	FLOOR BOXES SW SHOWROOM	20/1	1.08			2.52	1.44	20/1	FLOOR BOXES SW SHOWROOM	2	12
13	2	FLOOR BOXES SW SHOWROOM	20/1	1.08	2.52			1.44	20/1	FLOOR BOXES SW SHOWROOM	2	14
15	2	FLOOR BOXES SW SHOWROOM	20/1	1.08		2.52		1.44	20/1	FLOOR BOXES SW SHOWROOM	2	16
17	2	FLOOR BOXES SW SHOWROOM	20/1	1.08			2.52	1.44	20/1	FLOOR BOXES SW SHOWROOM	2	18
19	2	FLOOR BOXES SW SHOWROOM	20/1	1.08	2.52			1.44	20/1	FLOOR BOXES SW SHOWROOM	2	20
21	2	FLOOR BOXES SW SHOWROOM	20/1	1.08		2.52		1.44	20/1	FLOOR BOXES SW SHOWROOM	2	22
23	2	FLOOR BOXES SW SHOWROOM	20/1	1.08			2.52	1.44	20/1	FLOOR BOXES SW SHOWROOM	2	24
25		SPARE	20/1		1.44			1.44	20/1	FLOOR BOXES SW SHOWROOM	2	26
27		SPARE	20/1			1.44		1.44	20/1	FLOOR BOXES SW SHOWROOM	2	28
29		SPARE	20/1				1.08	1.08	20/1	FLOOR BOXES SW SHOWROOM	2	30
31		SPARE	20/1	1.08				1.08	20/1	FLOOR BOXES SW SHOWROOM	2	32
33		SPARE	20/1		1.44			1.44	20/1	FLOOR BOXES SW SHOWROOM	2	34
35		SPARE	20/1				0.00		20/1	SPARE		36
37		SPARE	20/1	0.00					20/1	SPARE		38
39		SPARE	20/1		0.00				20/1	SPARE		40
41		SPARE	20/1				0.00		20/1	SPARE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			11.52	11.52	10.44			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**33.48**		**93**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**21.74**		**60**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	95.93
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	95.93
2	**Receptacles**	33.48	0.65	21.74	Phase (C)	86.93
3	**Special Loads**	0.00	1.00	0.00		
4	**Motors**	0.00	1.00	0.00		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
					Phase (A)	62.29
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	62.29
					Phase (C)	56.45
	Subtotals	33.48		21.74		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	40
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	40%
	Total KVA	33.48		21.74	**HIGH PHASE**	**62.29**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

DISTRIBUTION PANEL

DB-GEN

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 800A
VOLTAGE = 480/277V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=STANDARD
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
A/C RATING = 65K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
NEUTRAL BUS (RATING) = 100%
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
					8.50			8.50			8	
1		SURGE PROTECTION	125AF 30AT			13.31		13.31	225AF 125AT	Panel 'GWL1A'	8	2
							8.93	8.93			8	
	8				118.18			58.45			8	
3	8	Panel 'GSH2A'	400AF	59.15		120.97		61.82	400AF	Panel 'GSH1A'	8	4
	8		400AT	58.90			119.29	60.40	400AT		8	
					8.86			8.86			4	
5						8.86		8.86	60AF	COMPRESSOR	4	6
							8.86	8.86	40AT		4	
					0.00							
7						0.00						8
							0.00					
					0.00							
9						0.00						10
							0.00					
					0.00							
11						0.00						12
							0.00					
					0.00							
13						0.00						14
							0.00					
					0.00							
15						0.00						16
							0.00					
					0.00							
17						0.00						18
							0.00					
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		MEASURED PEAK DEMAND			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			135.54	143.14	137.09			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**415.76**		**500**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**416.88**		**501**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps	
0	**Exterior Lighting**	0.35	1.25	0.44	Phase (A)	489.06
1	**Lighting - Continuous**	18.33	1.25	22.91	Phase (B)	516.48
2	**Receptacles**	17.10	0.79	13.55	Phase (C)	494.65
3	**Special Loads**	29.44	1.00	29.44		
4	**Motors**	26.58	1.00	26.58		
5	**Kitchen (Commercial)**	0.00	0.65	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	323.96	1.00	323.96	Larger of the two loads per NEC 220-60	
9	**MDF/IDF/Server Equipment**	0.00	1.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.25	0.00		
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
12	**Modular Furniture Outlets**	0.00	1.00	0.00		
13	**Peak Demand per 220-87**	0.00	1.56	0.00		
	Subtotals	415.76		416.88		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	299
						Spare Capacity Load (%)	37%
	Total KVA	415.76		416.88		

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-10" respectively.

PANELBOARD

GWL1A

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = YES

MAIN RATING= 250A
MAIN TYPE= M.C.B.
A/C RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	2	RECEPT WAREHOUSE STATION	20/1	0.36	0.96			0.60	20/1	IDF	3	2
3	2	RECEPT WAREHOUSE STATION	20/1	0.36		0.96		0.60	20/1	IDF	3	4
5	2	RECEPT COLUMNS WAREHOUSE	20/1	0.72			0.72		20/1	SPARE		6
7	2	RECEPT COLUMNS WAREHOUSE	20/1	0.36	0.36				20/1	SPARE		8
9	2	RECEPT COLUMNS WAREHOUSE	20/1	0.72		0.72			20/1	SPARE		10
11	2	RECEPT COLUMNS WAREHOUSE	20/1	0.54			0.54		20/1	SPARE		12
13		SPARE	20/1		0.00				20/1	SPARE		14
15		SPARE	20/1			0.00			20/1	SPARE		16
17		SPARE	20/1				0.00		20/1	SPARE		18
19		SPARE	20/1		0.00				20/1	SPARE		20
21		SPARE	20/1			0.00			20/1	SPARE		22
23		SPARE	20/1				0.00		20/1	SPARE		24
25		SPARE	20/1		0.00				20/1	SPARE		26
27		SPARE	20/1			0.00			20/1	SPARE		28
29		SPARE	20/1				0.00		20/1	SPARE		30
31		SPARE	20/1		0.00				20/1	SPARE		32
33		SPARE	20/1			0.00			20/1	SPARE		34
35		SPARE	20/1				0.00		20/1	SPARE		36
37		SPARE	20/1		7.18			7.18	100/3	PANEL GWL2A	8	38
39		SPARE	20/1			11.63		11.63			8	40
41		SPARE	20/1				7.67	7.67			8	42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			8.50	13.31	8.93			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED		**Connected KVA**	**30.74**		**85**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.		**Demand KVA**	**30.74**		**85**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	70.78
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	110.83
2	**Receptacles**	9.18	1.00	9.18	Phase (C)	74.39
3	**Special Loads**	21.56	1.00	21.56		
4	**Motors**	0.00	1.00	0.00		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
					Phase (A)	70.78
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (B)	110.83
					Phase (C)	74.39
	Subtotals	30.74		30.74		
	Largest Motor		0.00	0.25	0.00	Spare Capacity (Amps)	165
	Largest AC Unit		0.00	0.25	0.00	Spare Capacity Load (%)	66%
	Total KVA	30.74		30.74	**HIGH PHASE**	**110.83**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD

GWL2A

STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 125A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
A/C RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	3	IDF W WAREHOUSE	20/1	0.60	3.10			2.50	30/2	UPS ROOM 202	3	2
3	3	IDF W WAREHOUSE	20/1	0.60		3.10		2.50			3	4
5	3	IDF W WAREHOUSE	20/1	0.60			2.10	1.50	20/1	SERVER RACK ROOM 202	3	6
7	3	IDF W WAREHOUSE	20/1	0.60	2.10			1.50	20/1	SERVER RACK ROOM 202	3	8
9	2	RECEPT CUSTOMER PICKUP	20/1	0.36		1.86		1.50	20/1	SERVER RACK RO

(PANEL INCLUDED W/ GENERATOR AND SHOWN FOR REFERENCE ONLY)

PANELBOARD **GEN1**
STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 100A
VOLTAGE = 240/120V
SYSTEM= 1Ø, 3W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN RATING= 60A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B		LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1		MAIN CIRCUIT BREAKER	60/2		0.60			0.60	20/1	ENGINE OIL BATTERY HEATER	3	2
3						0.56		0.56	20/1	BATTERY CHARGER TRAN PUMP	4	4
5	3	COOLANT JACKET HEATER	40/2	3.21	3.81			0.60	20/1	ALT HEATER CONTRAL CAB HEATER	3	6
7	3			3.21		3.39		0.18	20/1	RECEPT GFCI	2	8
9		SPARE	20/2		0.10			0.10	20/1	LIGHTING	1	10
11	1	SPARE				0.00			20/1	SPARE		12
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		PEAK DEMAND PER 220-87 (WHERE APPLICABLE)/.80*1.25			0.00	0.00				CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			4.51	3.95				CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**		**8.46**		**41**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**		**8.49**		**41**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	37.55
1	**Lighting -Continuous**	0.10	1.25	0.13	Phase (B)	32.92
2	**Receptacles**	0.18	1.00	0.18	Phase (C)	0.00
3	**Special Loads**	7.62	1.00	7.62		
4	**Motors**	0.56	1.00	0.56		
5	**Kitchen (Commercial)**	0.00	0.65	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**MDF/IDF/Server Loads**	0.00	1.00	0.00		
10	**Miscellaneous - Non-Continuous**	0.00	1.00	0.00		
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
12	**Modular Furniture Outlets**	0.00	1.00	0.00		
13	**Peak Demand per 220-87**	0.00	1.56	0.00		
	Subtotals	8.46		8.49		
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps)	59
					Spare Capacity Load (%)	59%
	Total KVA	8.46		8.49		

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-12" respectively.

PANELBOARD **GSH2A**
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 400A
VOLTAGE = 480/277
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 14K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C		LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	1	LTG - SHOWROOM	20/1	2.21	19.94				17.73	90/3	RTU-11	7	2
3	1	LTG - SHOWROOM	20/1	2.37		20.10			17.73			7	4
5	1	LTG - SHOWROOM	20/1	2.37			20.10		17.73			7	6
7	1	LTG - SHOWROOM	20/1	0.95	18.68				17.73	90/3	RTU-4	7	8
9		LTG-LOADING AREA	20/1	0.35		18.08			17.73			7	10
11		SPACE					17.73		17.73			7	12
13		SPACE			17.73				17.73	90/3	RTU-15	7	14
15		SPACE				17.73			17.73			7	16
17		SPACE					17.73		17.73			7	18
19		SPACE			0.00						SPACE		20
21		SPACE				0.00					SPACE		22
23		SPACE					0.00				SPACE		24
25		SPACE			0.00						SPACE		26
27		SPACE				0.00					SPACE		28
29		SPACE					0.00				SPACE		30
31		SPACE			0.00						SPACE		32
33		SPACE				0.00					SPACE		34
35		SPACE					0.00				SPACE		36
37		SPACE			3.38				3.38	100/3	PANEL GSL2A VIA XFRMR	8	38
39		SPACE				3.24			3.24			8	40
41		SPACE					3.34		3.34			8	42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)											
		SUB-FEED BREAKER									DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00				CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			59.73	59.15	58.90				CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**		**177.78**		**214**	**Connected AMPS**			SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**		**179.84**		**216**	**Demand AMPS**			ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.35	1.25	0.44	Phase (A)	215.53
1	**Interior Lighting**	7.90	1.25	9.88	Phase (B)	213.43
2	**Receptacles**	4.68	1.00	4.68	Phase (C)	212.52
3	**Special Loads**	5.28	1.00	5.28		
4	**Motors**	0.00	1.00	0.00		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	159.57	1.00	159.57	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (A)	218.38
					Phase (B)	215.89
					Phase (C)	214.66
	Subtotals	177.78		179.84		
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps)	184
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%)	46%
	Total KVA	177.78		179.84	**HIGH PHASE**	**218.38**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD **GSL2A**
STATUS= NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = YES

MAIN RATING= 250A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1		SPARE	20/1		0.20			0.20	20/1	SLCP1 LTG CONTROL PANEL	3	2
3		SPARE	20/1			1.20		1.20	20/1	IDF S SHOWROOM	3	4
5		SPARE	20/1				0.90	0.90	20/1	RECEPT WAITING	2	6
7		SPARE	20/1		0.54			0.54	20/1	RECEPT WAITING	2	8
9		SPARE	20/1			0.00			20/1	SPARE	3	10
11		SPARE	20/1				0.00		20/1	SPARE		12
13		SPARE	20/1		0.36			0.36	20/1	RECEPT P.O.S	3	14
15		SPARE	20/1			0.36		0.36	20/1	RECEPT P.O.S	3	16
17		SPARE	20/1				0.36	0.36	20/1	RECEPT P.O.S	3	18
19		SPARE	20/1		0.00				20/1	SPARE		20
21		SPARE	20/1			0.00			20/1	SPARE		22
23		SPARE	20/1				0.00		20/1	SPARE		24
25		SPARE	20/1		1.08			1.08	20/1	RECEPT COLUMNS S SHOWROOM	2	26
27		SPARE	20/1			1.08		1.08	20/1	RECEPT COLUMNS S SHOWROOM	2	28
29		SPARE	20/1				1.08	1.08	20/1	RECEPT COLUMNS S SHOWROOM	2	30
31		SPARE	20/1		1.20			1.20	20/1	FREEZER CAFÉ	3	32
33		SPARE	20/1			0.60		0.60	20/1	BEV AIR REFRIG CAFÉ	3	34
35		SPARE	20/1				1.00	1.00	20/1	BEV AIR REFRIG GLASS DR CAFÉ	3	36
37		SPARE	20/1		0.00				20/1	SPARE		38
39		SPARE	20/1			0.00			20/1	SPARE		40
41		SPARE	20/1				0.00		20/1	SPARE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			3.38	3.24	3.34			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**		**9.96**		**28**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**		**9.96**		**28**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	28.15
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	26.98
2	**Receptacles**	4.68	1.00	4.68	Phase (C)	27.78
3	**Special Loads**	5.28	1.00	5.28		
4	**Motors**	0.00	1.00	0.00		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (A)	28.15
					Phase (B)	26.98
					Phase (C)	27.78
	Subtotals	9.96		9.96		
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps)	222
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%)	89%
	Total KVA	9.96		9.96	**HIGH PHASE**	**28.15**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD **GSH1A**
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 400A
VOLTAGE = 480/277
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 14K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C		LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1		SPACE							17.73	90/3	RTU-5	7	2
3	1	LTG - SHOWROOM	20/1	2.37		20.10			17.73			7	4
5	1	LTG - SHOWROOM	20/1	1.90			19.63		17.73			7	6
7	1	LTG - SHOWROOM	20/1	2.37	20.10				17.73	90/3	RTU-10	7	8
9	1	LTG - SHOWROOM	20/1	2.37		20.10			17.73			7	10
11	1	LTG - SHOWROOM	20/1	1.42			19.15		17.73			7	12
13		SPACE			19.34				19.34	90/3	RTU-6	7	14
15		SPACE				19.34			19.34			7	16
17		SPACE					19.34		19.34			7	18
19		SPACE			0.00						SPACE		20
21		SPACE				0.00					SPACE		22
23		SPACE					0.00				SPACE		24
25		SPACE			0.00						SPACE		26
27		SPACE				0.00					SPACE		28
29		SPACE					0.00				SPACE		30
31		SPACE			0.00						SPACE		32
33		SPACE				0.00					SPACE		34
35		SPACE					0.00				SPACE		36
37		SPACE			1.28				1.28	100/3	PANEL GSL1A VIA XFMR	8	38
39		SPACE				2.28			2.28			8	40
41		SPACE					2.28		2.28			8	42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)											
		SUB-FEED BREAKER									DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00				CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			58.45	61.82	60.40				CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**		**180.66**		**217**	**Connected AMPS**			SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**		**183.26**		**220**	**Demand AMPS**			ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	210.89
1	**Interior Lighting**	10.43	1.25	13.04	Phase (B)	223.05
2	**Receptacles**	3.24	1.00	3.24	Phase (C)	217.93
3	**Special Loads**	2.60	1.00	2.60		
4	**Motors**	0.00	1.00	0.00		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	164.39	1.00	164.39	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (A)	213.03
					Phase (B)	227.33
					Phase (C)	220.93
	Subtotals	180.66		183.26		
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps)	180
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%)	45%
	Total KVA	180.66		183.26	**HIGH PHASE**	**227.33**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD **GSL1A**
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 250A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN RATING= 250A
MAIN TYPE= M.C.B.
AIC RATING = 10K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1		SPARE	20/1		0.20			0.20	20/1	SLCP1 LTG CONTROL PANEL	3	2
3		SPARE	20/1			0.00			20/1	SPARE		4
5		SPARE	20/1				0.00		20/1	SPARE		6
7		SPARE	20/1		0.00				20/1	SPARE		8
9		SPARE	20/1			1.20		1.20	20/1	IDF W SHOWROOM	3	10
11		SPARE	20/1				1.20	1.20	20/1	IDF W SHOWROOM	3	12
13		SPARE	20/1		0.00				20/1	SPARE		14
15		SPARE	20/1			0.00			20/1	SPARE		16
17		SPARE	20/1				0.00		20/1	SPARE		18
19		SPARE	20/1		0.00				20/1	SPARE		20
21		SPARE	20/1			0.00			20/1	SPARE		22
23		SPARE	20/1				0.00		20/1	SPARE		24
25		SPARE	20/1		1.08			1.08	20/1	RECEPT COLUMNS N SHOWROOM	2	26
27		SPARE	20/1			1.08		1.08	20/1	RECEPT COLUMNS N SHOWROOM	2	28
29		SPARE	20/1				1.08	1.08	20/1	RECEPT COLUMNS N SHOWROOM	2	30
31		SPARE	20/1		0.00				20/1	SPARE		32
33		SPARE	20/1			0.00			20/1	SPARE		34
35		SPARE	20/1				0.00		20/1	SPARE		36
37		SPARE	20/1		0.00				20/1	SPARE		38
39		SPARE	20/1			0.00			20/1	SPARE		40
41		SPARE	20/1				0.00		20/1	SPARE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			1.28	2.28	2.28			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**		**5.84**		**16**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**		**5.84**		**16**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.00	1.25	0.00	Phase (A)	10.66
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	18.99
2	**Receptacles**	3.24	1.00	3.24	Phase (C)	18.99
3	**Special Loads**	2.60	1.00	2.60		
4	**Motors**	0.00	1.00	0.00		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (A)	10.66
					Phase (B)	18.99
					Phase (C)	18.99
	Subtotals	5.84		5.84		
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps)	209
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%)	93%
	Total KVA	5.84		5.84	**HIGH PHASE**	**18.99**

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-11" respectively.

PANELBOARD **WL1B**
STATUS=NEW
MANUFACTURER= TBD
PANEL SERIES = TBD

BUS RATING = 400A
VOLTAGE = 208/120V
SYSTEM= 3Ø, 4W
MOUNTING=SURFACE
TRIM=DOOR-IN-DOOR
NEMA RATING = 1
FEED THRU LUGS = NO

MAIN TYPE= MAIN LUGS ONLY
AIC RATING = 22K
FULLY/SERIES= FULLY
BRANCH BREAKER TYPE= BOLT-ON
FEED TYPE = BOTTOM
TERMINATIONS = 75°C CU

BUS MATERIAL= COPPER
GROUND BUS (COPPER) = YES
NEUTRAL BUS (COPPER) = YES
IG GROUND BUS (COPPER) = NO
SKIRT TYPE= NONE
# SECTIONS= 1
LOCATION = SEE PLAN

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	4	IF-3	20/2	0.92	1.84			0.92	20/2	IF-7	4	2
3	4	" " "	---	0.92		1.84		0.92	---	" " "	4	4
5	4	IF-5	20/2	0.92			1.84	0.92	20/2	IF-6		6
7	4	" " "	---	0.92	1.84			0.92	---	" " "	4	8
9	4	IF-1	20/2	0.92		0.92			20/1	SPARE		10
11	4	" " "	---	0.92			0.92		20/1	SPARE		12
13	4	IF-2	20/2	0.92	0.92				20/1	SPARE		14
15	4	" " "	---	0.92		0.92			20/1	SPARE		16
17	4	IF-4	20/2	0.92			0.92		20/1	SPARE		18
19	4	" " "	---	0.92	0.92				20/1	SPARE		20
21		SPARE	20/1			0.00			20/1	SPARE		22
23		SPARE	20/1				0.00		20/1	SPARE		24
25		SPARE	20/1		0.00					SPACE		26
27		SPARE	20/1			0.00				SPACE		28
29		SPARE	20/1				0.00			SPACE		30
31		SPACE			0.00					SPACE		32
33		SPACE				0.00				SPACE		34
35		SPACE					0.00			SPACE		36
37		SPACE			0.00					SPACE		38
39		SPACE				0.00				SPACE		40
41		SPACE					0.00			SPACE		42
		FEED THRU LOADS/PHASE (WHERE APPLICABLE)										
		SUB-FEED BREAKER								DESCRIPTION OF SUB-FEED 200A/3P PANEL XYZ		
		MEASURED PEAK DEMAND (KW*1.25*1.25)			0.00	0.00	0.00			CIRCUIT NUMBERING BY POLE POSITION		
		PHASE TOTALS (KVA/Phase)			5.52	3.68	3.68			CIRCUIT BREAKERS FEEDING A/C EQUIPMENT		
		DEMAND LOADS MAY VARY FROM CONNECTED	**Connected KVA**		**12.88**		**36**	**Connected AMPS**		SHALL BE "HACR" RATED.		
		LOADS BECAUSE OF CODE DIVERSITIES.	**Demand KVA**		**13.11**		**36**	**Demand AMPS**		ALL BREAKERS SHALL BE FULLY RATED		

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA	Phase amps (Connected)	
0	**Exterior Lighting**	0.92	1.25	1.15	Phase (A)	45.96
1	**Interior Lighting**	0.00	1.25	0.00	Phase (B)	30.64
2	**Receptacles**	0.00	1.00	0.00	Phase (C)	30.64
3	**Special Loads**	0.00	1.00	0.00		
4	**Motors**	11.96	1.00	11.96		
5	**Kitchen (Commercial)**	0.00	***	0.00	Per Table 220.56	
6	**HVAC Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	**HVAC Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	**Non-Coincedental Loads**	0.00	0.00	0.00		
10	**Miscellaneous - Non Continuous**	0.00	1.00	0.00	**Phase amps (Demand)**	
11	**Miscellaneous - Continuous**	0.00	1.25	0.00		
	Peak Demand per 220-87	0.00	1.00	0.00	Phase (A)	45.97
					Phase (B)	30.64
					Phase (C)	32.56
	Subtotals	12.88		13.11		
	Largest Motor		0.00 0.25	0.00	Spare Capacity (Amps)	214
	Largest AC Unit		0.00 0.25	0.00	Spare Capacity Load (%)	85%
	Total KVA	12.88