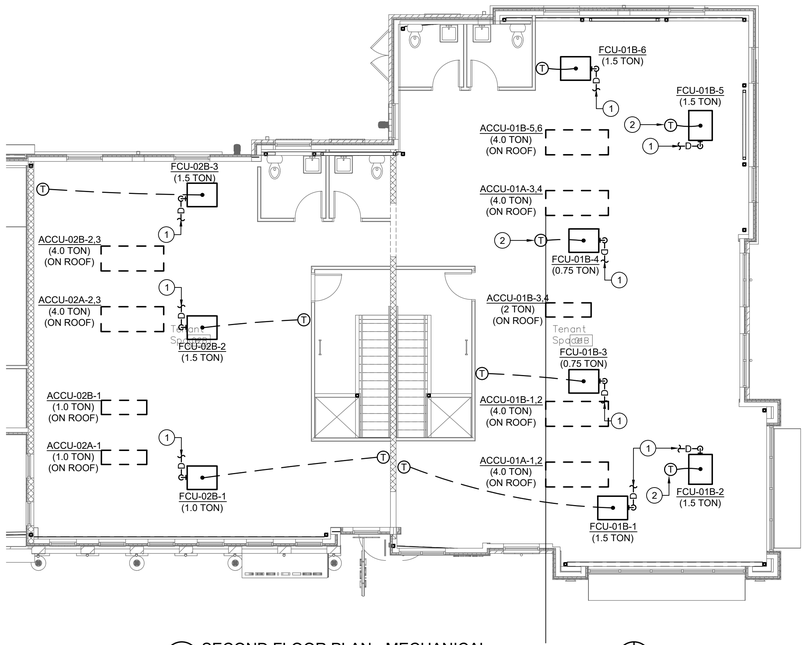
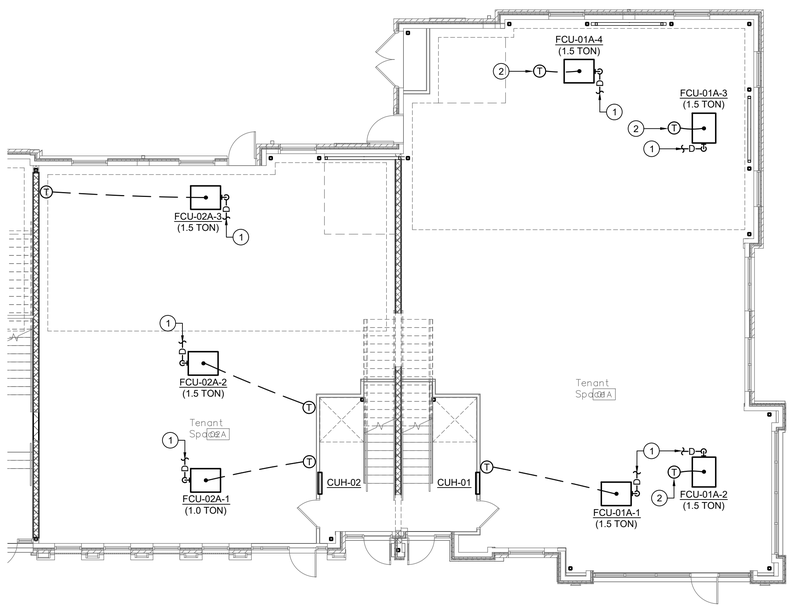


2 SECOND FLOOR PLAN - MECHANICAL
1/8"=1'-0"



1 FIRST FLOOR PLAN - MECHANICAL
1/8"=1'-0"

DISCLAIMER:
THIS DRAWING IS THE PROPERTY OF HENRY MILLER MECHANICAL. IT MUST NOT BE REPRODUCED IN ANY MANNER, NOT SHALL IT BE SUBMITTED TO OUTSIDE PARTIES FOR ANY REASON WITHOUT WRITTEN CONSENT OF HENRY MILLER MECHANICAL. IT SHALL BE USED ONLY AS A MEANS OF REFERENCE OF WORK DESIGNED, FURNISHED AND INSTALLED BY HENRY MILLER MECHANICAL.

HENRY MILLER MECHANICAL

ELECTRIC UNIT HEATER SCHEDULE

UNIT CALLOUT	UNIT INFORMATION MFG	MODEL NO.	CAP (KW)	VOLT/ PHASE	NOTES
CUH-01	TRANE	UHWA	5.0	208/1	1
CUH-02	TRANE	UHWA	5.0	208/1	1

NOTES:
1. PROVIDE WITH MOUNTING KIT AND REMOTE TEMPERATURE SENSOR.

AIR COOLED CONDENSING UNIT SCHEDULE

UNIT CALLOUT	SYSTEM	SEER	UNIT INFORMATION MFG	MODEL NO.	VOLT/ PHASE	CONDENSING INFORMATION # OF COMP	TONS	THC (MBH)	AMB TEMP (°F)	NOTES
ACCU-01A-1,2	FCU-01A-1,2	14	LENNOX	MPC048S4M-1P MS HP	208/1	1	4	48	100	1
ACCU-01A-3,4	FCU-01A-3,4	14	LENNOX	MPC048S4M-1P MS HP	208/1	1	4	48	100	1
ACCU-01B-1,2	FCU-01A-1,2	14	LENNOX	MPC048S4M-1P MS HP	208/1	1	4	48	100	1
ACCU-01B-3,4	FCU-01A-3,4	14	LENNOX	MPC024S4M-1P MS HP	208/1	1	2	24	100	1
ACCU-01B-5,6	FCU-01A-3,4	14	LENNOX	MPC048S4M-1P MS HP	208/1	1	4	48	100	1
ACCU-02A-1	FCU-02A-1	14	LENNOX	MPC012S4S-1P MS HP	208/1	1	1	12	100	1
ACCU-02A-2,3	FCU-02A-2,3	14	LENNOX	MPC048S4M-1P MS HP	208/1	1	4	48	100	1
ACCU-02B-1	FCU-02B-1	14	LENNOX	MPC012S4S-1P MS HP	208/1	1	1	12	100	1
ACCU-02B-2,3	FCU-02B-2,3	14	LENNOX	MPC048S4M-1P MS HP	208/1	1	4	48	100	1

NOTES:
1. SUPPLY WITH LOW AMBIENT KIT FOR OPERATION DOWN TO 0°F.

FAN COIL UNIT SCHEDULE

UNIT CALLOUT	UNIT INFORMATION MFG	MODEL NO.	FLOW (CFM)	VOLT/ PHASE	MCA (AMPS)	MOCP (AMPS)	HEAT PUMP INFORMATION EAT (°F)	LAT (°F)	CAP (BTUH)	DX COIL INFORMATION EAT (°F)	LAT (°F)	SHC (MBH)	THC (MBH)	NOTES
FCU-01A-1	LENNOX	MMDB018S4	675	208/1	--	--	70	99.0	21141	80	59	15.3	14.4	
FCU-01A-2	LENNOX	MMDB018S4	675	208/1	--	--	70	99.0	21141	80	59	15.3	14.4	
FCU-01A-3	LENNOX	MMDB018S4	675	208/1	--	--	70	99.0	21141	80	59	15.3	14.4	
FCU-01A-4	LENNOX	MMDB018S4	675	208/1	--	--	70	99.0	21141	80	59	15.3	14.4	
FCU-01B-1	LENNOX	MMDB018S4	675	208/1	--	--	70	99.0	21141	80	59	15.3	14.4	
FCU-01B-2	LENNOX	MMDB018S4	675	208/1	--	--	70	99.0	21141	80	59	15.3	14.4	
FCU-01B-3	LENNOX	MMDB009S4	343	208/1	--	--	72	99.0	10002	80	59.5	7.6	9	
FCU-01B-4	LENNOX	MMDB009S4	343	208/1	--	--	72	99.0	10002	80	59.5	7.6	9	
FCU-01B-5	LENNOX	MMDB018S4	675	208/1	--	--	70	99.0	21141	80	59	15.3	14.4	
FCU-01B-6	LENNOX	MMDB018S4	675	208/1	--	--	70	99.0	21141	80	59	15.3	14.4	
FCU-02A-1	LENNOX	MMDB012S4	343	208/1	--	--	70	97.0	10002	80	56.9	8.6	10.8	
FCU-02A-2	LENNOX	MMDB018S4	675	208/1	--	--	70	99.0	21141	80	59	15.3	14.4	
FCU-02A-3	LENNOX	MMDB018S4	675	208/1	--	--	70	99.0	21141	80	59	15.3	14.4	
FCU-02B-1	LENNOX	MMDB012S4	343	208/1	--	--	70	97.0	10002	80	56.9	8.6	10.8	
FCU-02B-2	LENNOX	MMDB018S4	675	208/1	--	--	70	99.0	21141	80	59	15.3	14.4	
FCU-02B-3	LENNOX	MMDB018S4	675	208/1	--	--	70	99.0	21141	80	59	15.3	14.4	

NOTES:

GENERAL NOTES:

1. PRIOR TO SUBMITTING BID, VISIT THE JOB SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS OF THE PROJECT. REVIEW GENERAL NOTES, SPECIFICATIONS AND OTHER DISCIPLINE'S DRAWINGS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, TENANT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO SUBMISSION OF BID.
2. REFER TO ARCHITECTURAL DRAWINGS FOR RELATED CONSTRUCTION DETAILS AS APPLICABLE TO THE PLUMBING SYSTEMS. VERIFY CHASE AND PENETRATION LOCATIONS SHOWN ON THE ARCHITECTURAL DRAWINGS THAT ARE INTENDED FOR PIPING MEET REQUIREMENTS.
3. INSTALL PIPING PARALLEL TO BUILDING LINES, UNLESS NOTED OTHERWISE.
4. COORDINATE LOCATION OF EQUIPMENT AND SUPPORTS WITH LOCATION OF ACCESS PANELS/DOORS TO ENABLE SERVICE OF EQUIPMENT. IF NO ACCESS PANEL IS SHOWN, PROVIDE ACCESS PANEL IN SIZE REQUIRED FOR MAINTENANCE OF EQUIPMENT. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.
5. SEAL PENETRATIONS THROUGH BUILDING COMPONENTS IN ACCORDANCE WITH LOCAL CODES. FIREPROOF PENETRATIONS THROUGH FIRE RATED COMPONENTS IN ACCORDANCE WITH U.L. REQUIREMENTS.

PLAN NOTES:

(1) 3/4" HVAC CONDENSATE DRAIN. ROUTE TONEAREST FLOOR DRAIN/SINK AND TERMINATE.
(2) HANG THERMOSTAT LOOSE WITH 50' OF ROLLED UP THERMOSTAT WIRE.

GENERAL

(1)	MECHANICAL NOTE REFERENCE
(2)	DEMOLITION NOTE REFERENCE
(3)	REVISION NOTE REFERENCE
	CONNECT TO EXISTING WORK

HVAC

D	HVAC CONDENSATE DRAIN
RS	REFRIGERANT SUCTION
RD	REFRIGERANT DISCHARGE
RL	REFRIGERANT LIQUID
T	THERMOSTAT
T_S	TEMPERATURE SENSOR
S_D	DUCT MOUNTED SMOKE DETECTOR
	SUPPLY DIFFUSER
	RETURN GRILLE/EXHAUST REGISTER
	RETURN AND EXHAUST AIR FLOW INDICATOR
	DUCT MOUNTED MANUAL BALANCING DAMPER
	DUCT MOUNTED FIRE/SMOKE, FIRE, AND SMOKE DAMPER

3 MECHANICAL SYMBOLS

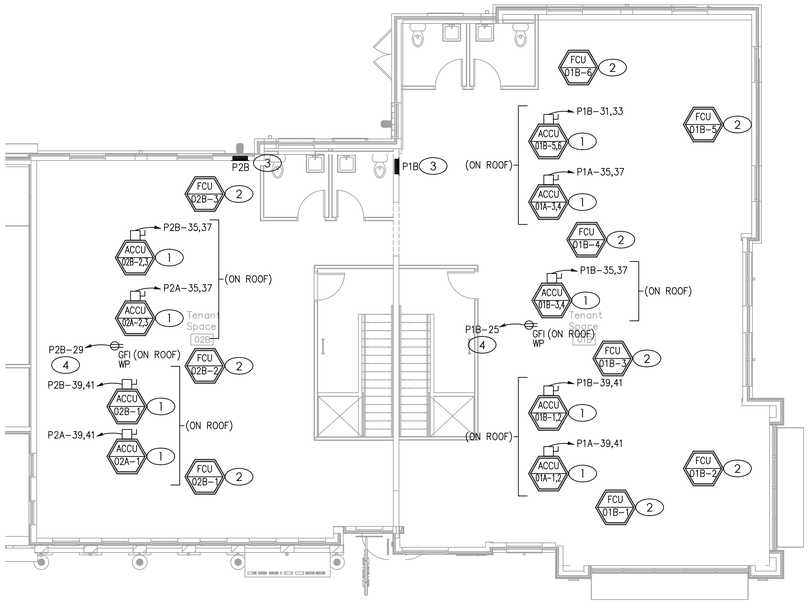
STATE OF MISSOURI
MIJHAEL B. WELCH
NUMBER PE-2006029713
PROFESSIONAL ENGINEER
2-03-23

NLV SHELL
420 SW LONGVIEW BLVD.
LEE'S SUMMIT, MO 64081

AEC
ARCHITECTURAL ENGINEERING CONSORTIUM, INC
MECHANICAL • ELECTRICAL • PLUMBING
STRUCTURAL • FIRE PROTECTION
WWW.AECONSORT.COM
10233 MILLSTONE DRIVE, #4112
LENEXA, KS 66220
P: 816-916-4075

JOB NO.:	2310200
DATE:	02/03/2023
REVISIONS:	
DESIGNED BY:	MBW
DRAWN BY:	ELS
CHECKED BY:	MBW
SHEET NO.	M101

Q:\MWEC\PROJECTS\2023\2310200E - NLV SHELL\DRAWINGS\NVL SHELL - MECHANICAL.DWG : 2/3/2023 9:49:39 AM : welch

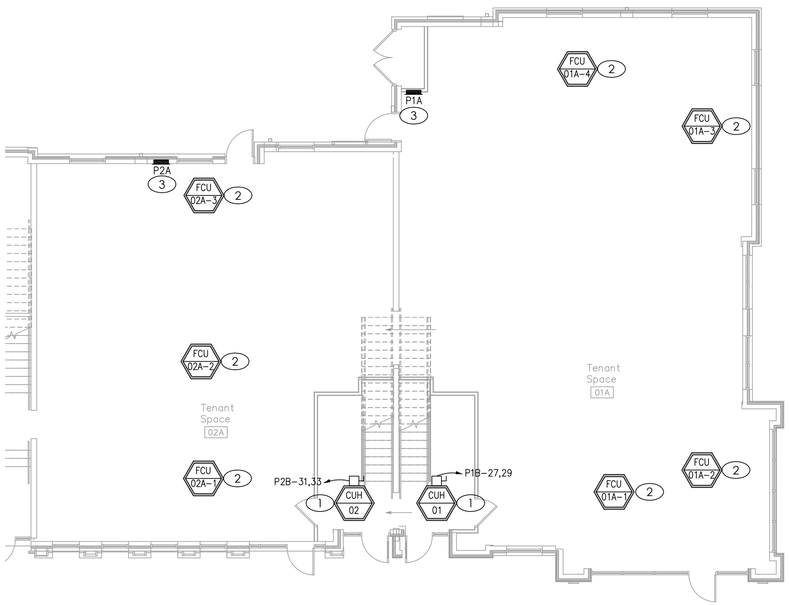


POWER PLAN - 2ND FLOOR

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

3

NORTH

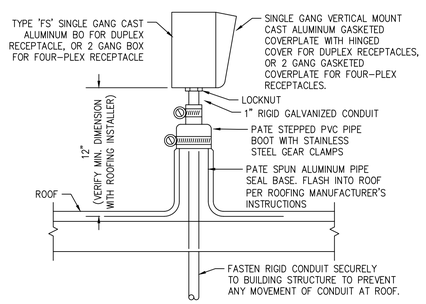


POWER PLAN - 1ST FLOOR

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

2

NORTH



ROOF RECEPTACLE MOUNTING DETAIL

SCALE : NO SCALE

1

GENERAL NOTES

A. DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL PLANS OR FIELD MEASUREMENTS FOR DIMENSIONS.

B. ALL WORK SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70) AND ALL LOCAL BUILDING CODES AND AMENDMENTS.

C. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACE AVAILABLE, AND WITHOUT INTERFERENCES.

D. THIS CONTRACTOR SHALL PERFORM ALL WORK INDICATED AND/OR AS REQUIRED FOR THE PROPER INSTALLATION AND OPERATION OF THE ELECTRICAL SYSTEMS.

E. ALL WIRING SHALL BE IN APPROVED RACEWAY.

F. WIRE SIZE SHALL BE MINIMUM #12 AWG, THWN SOLID COPPER UNLESS OTHERWISE NOTED. PROVIDE GROUND WIRE WHERE REQUIRED BY CODE. INCREASE WIRE SIZE TO COMPENSATE FOR VOLTAGE DROP WHERE TOTAL LENGTH OF ANY BRANCH CIRCUIT EXCEEDS 100 FEET.

G. ROUTE ALL EXPOSED, RIGID CONDUIT TIGHT TO STRUCTURE, PARALLEL TO BUILDING LINES AND IN UNISTRUT CABLE/PIPE TRAY WHERE POSSIBLE. COORDINATE CONDUIT ROUTING AND INSTALLATION WITH OTHER TRADES PRIOR TO ROUGH-IN. SUPPORT CONDUIT FROM STRUCTURE NOT ROOF DECK. MAINTAIN 2" MIN SPACING FROM BOTTOM OF ROOF DECK TO PREVENT ROOFING SCREWS FROM PENETRATING CONDUITS.

(#) KEYED PLAN NOTES

1. MAKE CONNECTION TO DIVISION 23 EQUIPMENT PER MANUFACTURER'S LITERATURE AND NEC REQUIREMENTS. COORDINATE WORK WITH DIVISION 23 CONTRACTOR PRIOR TO CONSTRUCTION.
2. LINE SET CONDUIT & CONDUCTORS BETWEEN OUTDOOR & INDOOR UNITS TO BE RUN BY DIVISION 23 CONTRACTOR AS PART OF UNIT LINE SET. CONDUCTOR TERMINATIONS AT OUTDOOR & INDOOR UNITS TO BE COMPLETED BY DIVISION 26 CONTRACTOR. COORDINATE WORK WITH DIVISION 23 CONTRACTOR PRIOR TO CONSTRUCTION.
3. LOCATION OF EXISTING PANELBOARD TO REMAIN. VERIFY EXACT LOCATION ON SITE PRIOR TO START OF WORK.
4. GFCI-PROTECTED RECEPTACLE WITH IN-USE WEATHERPROOF COVER FOR MAINTENANCE OF ROOFTOP HVAC EQUIPMENT. CONFIRM THAT A MAINTENENCE RECEPTACLE EXISTS WITHIN 25'-0" OF EACH ROOFTOP HVAC UNIT. REFER TO DETAIL 1 ON THIS SHEET FOR MORE INFORMATION.

ELECTRICAL SPECIFICATIONS

PART I - GENERAL

A. CONDITIONS

1. PROVIDE FIRE STOP ON ALL PIPING THAT PENETRATES RATED WALLS. METHOD OF FIRE STOP SHALL MEET WALL RATING. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE RATED WALLS. THIS CONTRACTOR SHALL PROVIDE FIRE RATED ENCLOSURES AROUND ALL ROUGH-IN BOXES, PANELS, ETC. THAT ARE LOCATED IN FIRE RATED WALLS AND SHALL FIRE CAULK ALL OPENINGS IN RATED ASSEMBLIES.

C. CODES, REGULATIONS, AND STANDARDS

2. THE INSTALLATION SHALL COMPLY WITH APPLICABLE LOCAL AND STATE CODES AND ORDINANCES, WITH THE REGULATIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE AND WITH THE REQUIREMENTS OF THE POWER, TELEPHONE, AND CATV COMPANIES FURNISHING SERVICES TO THIS INSTALLATION.
3. THE LATEST EDITIONS OF THE FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS, AND CODES ARE MINIMUM REQUIREMENTS:
   A. THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION STANDARDS.
   B. THE NATIONAL ELECTRICAL CODE, INCLUDING LOCAL AMENDMENTS.
   C. UNDERWRITER LABORATORIES INCORPORATED STANDARDS.
   D. AMERICAN NATIONAL STANDARDS INSTITUTE.
   E. INTERNATIONAL BUILDING CODE.

H. DRAWINGS

1. THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT AND LOCATIONS OF THE ELECTRICAL WORK DATA PRESENTED ON THESE DRAWINGS ARE AS ACCURATE AS PLANNING CAN DETERMINE, BUT FIELD VERIFICATION OF ALL DIMENSIONS, LOCATIONS, LEVELS, ETC., TO SUIT FIELD CONDITIONS IS REQUIRED. REVIEW ALL ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS AND ADJUST ALL WORK TO MEET THE REQUIREMENTS OF CONDITIONS SHOWN. THE ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS. DISCREPANCIES BETWEEN DIFFERENT PLANS, OR BETWEEN DRAWINGS AND SPECIFICATIONS, OR REGULATIONS AND CODES GOVERNING THE INSTALLATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BEFORE THE DATE OF BID OPENING. IF DISCREPANCIES ARE NOT REPORTED, THE CONTRACTOR SHALL BID THE GREATER QUANTITY OR BETTER QUALITY, AND APPROPRIATE ADJUSTMENTS WILL BE MADE AFTER CONTRACT AWARD. CONTRACTOR SHALL BE RESPONSIBLE TO FIELD MEASURE AND CONFIRM MOUNTING HEIGHTS AND LOCATION OF ELECTRICAL EQUIPMENT WITH RESPECT TO COUNTERS, RADIATION, ETC. DO NOT SCALE DISTANCES OFF THE ELECTRICAL DRAWINGS, USE ACTUAL BUILDING DIMENSIONS.

I. COOPERATION WITH OTHER CONTRACTORS

1. COORDINATE HVAC AND PLUMBING EQUIPMENT CONNECTION REQUIREMENTS WITH HVAC AND PLUMBING CONTRACTORS.

PART II - PRODUCTS AND EXECUTION

A. MATERIALS

1. ALL MATERIALS SHALL BE NEW AND OF QUALITY AS SPECIFIED ON THE PLANS OR SPECIFICATIONS AND MUST CARRY THE UNDERWRITER'S LABORATORIES APPROVAL COVERING THE PURPOSE FOR WHICH THEY ARE USED, IN ADDITION TO MEETING ALL REQUIREMENTS OF THE CURRENT APPLICABLE CODES AND REGULATIONS.

D. WIRE

1. CONDUCTOR SIZES SHOWN ON THE DRAWINGS ARE BASED ON COPPER WIRE. UNLESS OTHERWISE SPECIFIED, ALL WIRE SHALL BE TYPE XHHW OR SE FOR FEEDERS OR BRANCH CIRCUITS LARGER THAN 4 AWG, TYPE THHN/THWN INSULATION FOR FEEDERS AND BRANCH CIRCUITS 4 AWG AND SMALLER. ALL BRANCH CIRCUIT WIRING SHALL BE COPPER.
2. MC CABLE WITH COPPER CONDUCTORS AND GROUND WIRE MAY BE USED WHERE PERMITTED.

E. CONDUIT

1. ALL WIRING SHALL BE INSTALLED IN LISTED METALLIC CONDUIT EXCEPT AS PERMITTED IN OTHER SECTIONS. RGS, WITH A 20 MIL PVC COATING WILL BE USED WHEN IN CONTACT WITH EARTH. IMC MAY BE USED IN INDOOR LOCATIONS NOT IN CONTACT WITH THE EARTH. EMT MAY BE USED IN INDOOR LOCATIONS NOT IN CONTACT WITH EARTH, NOT IN CONCRETE SLABS OR WALLS AND NOT SUBJECT TO DAMAGE. PVC MAY BE USED IN OR BELOW CONCRETE AND DIRECT BURIED IN EARTH. FLEXIBLE STEEL CONDUIT SHALL BE USED FOR INDOOR FINAL CONNECTIONS TO EQUIPMENT IN LENGTHS NOT TO EXCEED 72". LIQUID-TIGHT FLEXIBLE STEEL CONDUIT SHALL BE FOR OUTDOOR FINAL CONNECTIONS TO EQUIPMENT NOT TO EXCEED 48".
2. FITTINGS AND CONDUIT BODIES SHALL BE STEEL. DIECAST FITTINGS ARE NOT ACCEPTABLE.
3. CONDUIT SIZES SHALL BE AS REQUIRED BY CODE AND AS INDICATED OR SPECIFIED.
4. ALL EMPTY CONDUIT SYSTEMS SHALL HAVE A 200 LB. TEST NYLON PULL STRING TO FACILITATE INSTALLATION OF FUTURE WIRE.
5. WIRING, CONDUITS, AND OUTLETS SHALL BE CONCEALED WITH THE BUILDING STRUCTURE, EXCEPT THAT CERTAIN MOTOR AND LIGHTING FEEDER CONDUITS MAY BE RUN EXPOSED IN CERTAIN AREAS AS INDICATED ON THE DRAWINGS.
6. CONDUIT PENETRATION THROUGH ROOF SHALL HAVE ROOF FLASHING WITH CAULK TYPE COUNTER FLASHING SLEEVE. INSTALLATION SHALL BE WATERTIGHT.
7. CONDUITS SHALL BE ROUTED PARALLEL AND PERPENDICULAR TO THE STRUCTURE.

C WIRING DEVICES

1. WALL SWITCHES SHALL BE SPECIFICATION GRADE AC SILENT TYPE SWITCHES, 20A 120/277 VOLT.
2. RECEPTACLES SHALL BE SPECIFICATION GRADE, DUPLEX TYPE. NEMA5-20R, 20 AMPERE, 120VOLT GROUNDED TYPE. SPECIAL APPLICATION RECEPTACLES SHALL BE INDICATED ON PLANS. MOUNT WITH THE GROUND DOWN.
3. DEVICE PLATES SHALL BE EQUAL TO SIERRA SMOOTH-LINE PLASTIC WALL PLATES. COLOR SHALL BE WHITE, UNLESS OTHERWISE NOTED.
4. RECEPTACLES IN OUTDOOR AND WET LOCATIONS SHALL BE INSTALLED WITH A HINGED OUTLET COVER/ENCLOSURE CLEARLY MARKED AND U.L. LISTED SUITABLE FOR WET LOCATIONS WHILE IN USE, EQUAL TO TAYMAC SPECIFICATION GRADE.

Q. GUARANTEE

1. GUARANTEE ALL MATERIAL FURNISHED AND ALL WORKMANSHIP PERFORMED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF WORK. ANY DEFECTS DEVELOPING WITHIN THIS PERIOD, TRACEABLE TO MATERIAL FURNISHED AS A PART OF THIS SECTION OR WORKMANSHIP PERFORMED HEREUNDER, SHALL BE MADE GOOD AT NO EXPENSE TO THE OWNER.

SYMBOLS LEGEND

NOTE: THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ETC, ARE NECESSARILY USED ON THE DRAWINGS.

POWER DISTRIBUTION

- 120/208V, 3 PHASE, 4 WIRE PANELBOARD, UNO

POWER DEVICES

- GFI WP — DUPLEX RECEPTACLE WITH WEATHERPROOF COVERPLATE
- DISCONNECT SWITCH - SIZE AND TYPE NOTED

AUXILIARY SYSTEMS

- EF 1 — MECHANICAL EQUIP. CONNECTION, SEE SCHED. ON MECH. PLAN

GENERAL

- CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING
- CONDUIT RUN BELOW FLOOR OR GRADE
- P1-3,5,7 — HOMERUN TO PANELBOARD, INFORMATION AT ARROWS ARE CIRCUIT NUMBERS AND PANELBOARD FOR TERMINATION. REFER TO ASSOCIATED NOTE FOR BRANCH CIRCUIT CONDUCTOR SIZES.
- INDICATES 1/2" CONDUIT CONCEALED IN CEILING OR WALL WITH (3) CONDUCTORS. (1) PHASE, (1) NEUTRAL AND (1) GROUND WIRE. ALL ARE #12 AWG UNLESS NOTED OTHERWISE.
- (E) OR ETR: DENOTES EXISTING ITEM/EQUIPMENT TO REMAIN

JSC ENGINEERS
MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

STATE OF MISSOURI
JESSEY P. MORRIS
NUMBER PE-2019041526
PROFESSIONAL ENGINEER
02-24-2023

PROJECT:
NLV SHELL - POWER TO HVAC UNITS
420 SW LONGVIEW BLVD.
LEE'S SUMMIT, MO

ORIGINAL: 02.24.2023

REVISIONS: DATE / DESCRIPTION
1
2
3
4
5

ISSUED:
PERMIT

SHEET TITLE:
ELECTRICAL PLAN

JOB NO.: 23-031
SHEET:
E101

PANELBOARD: P2B (EXISTING)

BUS AMPS: 225A
MAIN SIZE/TYPE: 200A MCB
VOLTS/PHASE: 208Y/120V, 3PH, 4W
SECTION: 1

FED FROM: MDP
AIC RATING: FCA +10% MINIMUM FULLY RATED
SERVES: P2B
MOUNTING: RECESSED
LOCATION: BACK OF HOUSE

LINE-SIDE LUGS: MECHANICAL
EQUIPMENT GROUND BUS

CKT NO.	DESCRIPTION	VOLTAMPS/PHASE A	B	C	WIRE NO.	BKR AMP	P	P	BKR AMP	WIRE NO.	VOLTAMPS/PHASE A	B	C	DESCRIPTION	CKT NO.
1	*LTG - TENANT SPACE P3A*	500			12	20	1	1	20	12	180			*RCPT - BY PANEL*	2
3	SPARE					20	1	1	20	12		1,200		*PWR - SIGNAGE 1*	4
5	SPARE					20	1	1	20	12			1,200	*PWR - SIGNAGE 2*	6
7	SPARE					20	1	1	20	12	1,200			*PWR - SIGNAGE 3*	8
9	SPARE					20	1	1	20	12		1,200		*PWR - HEAT TRACE*	10
11	SPARE					20	1	1	20					SPARE	12
13	SPARE					20	1	1	20					SPARE	14
15	SPARE					20	1	1	20					SPARE	16
17	SPARE					20	1	1	20					SPARE	18
19	SPARE					20	1	1	20					SPARE	20
21	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	22
23	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	24
25	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	26
27	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	28
29	RCPT - ROOFTOP MAINTENANCE			180	12	20	1	1						PROVISIONAL SPACE	30
31	PWR - CUH-2 (HACR)	2,500			10	30	2	1						PROVISIONAL SPACE	32
33			2,500					1						PROVISIONAL SPACE	34
35	PWR - ACCU-02B-2,3 (HACR)			3,640	6	50	2	1						PROVISIONAL SPACE	36
37		3,640						1						PROVISIONAL SPACE	38
39	PWR - ACCU-02B-1 (HACR)		1,352		12	15	2	1						PROVISIONAL SPACE	40
41				1,352				1						PROVISIONAL SPACE	42
	SUBTOTAL	6,640	3,852	5,172							1,380	2,400	1,200	SUBTOTAL	

		LOAD	CONN. VA	DF	LOAD	CONN. VA	DF
TOTAL PHASE A - VA	8,020	COOLING	9,984	0	REFRIG		1.00
AMPS	67	HEATING	14,984	1.00	SIGN/DISP	3,600	1.25
TOTAL PHASE B - VA	6,252	LIGHTING	500	1.25	KITCHEN		1.00
AMPS	52	RECEPTACLES	360	1.0/.5	EXISTING		1.00
TOTAL PHASE C - VA	6,372	MOTORS		1.00	LRG MOTOR		1.25
AMPS	53	SUPP HEAT		1.00	SHOWWNDW		1.25
TOTAL PNLBD - VA	20,644	MISC EQUIP	1,200	1.00	LTG TRACK		1.00
AMPS	57						

TOTAL DEMAND
21,669 VA
60 A

PANELBOARD NOTES
DESCRIPTION IN ITALICS = EXISTING LABELED LOAD TO REMAIN

SIGN/DISPLAY - SIGNAGE & DISPLAY CASE

PANELBOARD: P1B (EXISTING)

BUS AMPS: 225A
MAIN SIZE/TYPE: 200A MCB
VOLTS/PHASE: 208Y/120V, 3PH, 4W
SECTION: 1

FED FROM: MDP
AIC RATING: FCA +10% MINIMUM FULLY RATED
SERVES: P1B
MOUNTING: RECESSED
LOCATION: BACK OF HOUSE

LINE-SIDE LUGS: MECHANICAL
EQUIPMENT GROUND BUS

CKT NO.	DESCRIPTION	VOLTAMPS/PHASE A	B	C	WIRE NO.	BKR AMP	P	P	BKR AMP	WIRE NO.	VOLTAMPS/PHASE A	B	C	DESCRIPTION	CKT NO.
1	*LTG - TENANT SPACE P1B*	500			12	20	1	1	20	12	180			*RCPT - BY PANEL*	2
3	SPARE					20	1	1	20	12		1,200		*PWR - SIGNAGE 1*	4
5	SPARE					20	1	1	20	12			1,200	*PWR - SIGNAGE 2*	6
7	SPARE					20	1	1	20	12	1,200			*PWR - HEAT TRACE*	8
9	SPARE					20	1	1	20					SPARE	10
11	SPARE					20	1	1	20					SPARE	12
13	SPARE					20	1	1	20					SPARE	14
15	SPARE					20	1	1	20					SPARE	16
17	SPARE					20	1	1	20					SPARE	18
19	SPARE					20	1	1	20					SPARE	20
21	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	22
23	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	24
25	RCPT - ROOFTOP MAINTENANCE	180			12	20	1	1						PROVISIONAL SPACE	26
27	PWR - CUH-1 (HACR)		2,500		10	30	2	1						PROVISIONAL SPACE	28
29				2,500				1						PROVISIONAL SPACE	30
31	PWR - ACCU-01B-5,6 (HACR)	3,640			6	50	2	1						PROVISIONAL SPACE	32
33			3,640					1						PROVISIONAL SPACE	34
35	PWR - ACCU-01B-3,4 (HACR)			2,548	10	30	2	1						PROVISIONAL SPACE	36
37		2,548						1						PROVISIONAL SPACE	38
39	PWR - ACCU-01B-1,2 (HACR)		3,640		6	50	2	1						PROVISIONAL SPACE	40
41				3,640				1						PROVISIONAL SPACE	42
	SUBTOTAL	6,868	9,780	8,688							1,380	1,200	1,200	SUBTOTAL	

		LOAD	CONN. VA	DF	LOAD	CONN. VA	DF
TOTAL PHASE A - VA	8,248	COOLING	19,656	0	REFRIG		1.00
AMPS	69	HEATING	24,656	1.00	SIGN/DISP	2,400	1.25
TOTAL PHASE B - VA	10,980	LIGHTING	500	1.25	KITCHEN		1.00
AMPS	92	RECEPTACLES	360	1.0/.5	EXISTING		1.00
TOTAL PHASE C - VA	9,888	MOTORS		1.00	LRG MOTOR		1.25
AMPS	82	SUPP HEAT		1.00	SHOWWNDW		1.25
TOTAL PNLBD - VA	29,116	MISC EQUIP	1,200	1.00	LTG TRACK		1.00
AMPS	81						

TOTAL DEMAND
29,841 VA
83 A

PANELBOARD NOTES
DESCRIPTION IN ITALICS = EXISTING LABELED LOAD TO REMAIN

SIGN/DISPLAY - SIGNAGE & DISPLAY CASE

PANELBOARD: P2A (EXISTING)

BUS AMPS: 225A
MAIN SIZE/TYPE: 200A MCB
VOLTS/PHASE: 208Y/120V, 3PH, 4W
SECTION: 1

FED FROM: MDP
AIC RATING: FCA +10% MINIMUM FULLY RATED
SERVES: P2A
MOUNTING: RECESSED
LOCATION: BACK OF HOUSE

LINE-SIDE LUGS: MECHANICAL
EQUIPMENT GROUND BUS

CKT NO.	DESCRIPTION	VOLTAMPS/PHASE A	B	C	WIRE NO.	BKR AMP	P	P	BKR AMP	WIRE NO.	VOLTAMPS/PHASE A	B	C	DESCRIPTION	CKT NO.
1	*LTG - TENANT SPACE P2A*	500			12	20	1	1	20	12	180			*RCPT - BY PANEL*	2
3	SPARE					20	1	1	20	12		1,200		*PWR - SIGNAGE 1*	4
5	SPARE					20	1	1	20	12			1,200	*PWR - SIGNAGE 2*	6
7	SPARE					20	1	1	20	12	1,200			*PWR - SIGNAGE 3*	8
9	SPARE					20	1	1	20	12		1,200		*PWR - HEAT TRACE*	10
11	SPARE					20	1	1	20					SPARE	12
13	SPARE					20	1	1	20					SPARE	14
15	SPARE					20	1	1	20					SPARE	16
17	SPARE					20	1	1	20					SPARE	18
19	SPARE					20	1	1	20					SPARE	20
21	SPARE						1	1						PROVISIONAL SPACE	22
23	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	24
25	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	26
27	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	28
29	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	30
31	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	32
33	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	34
35	PWR - ACCU-02A-2,3 (HACR)			3,640	6	50	2	1						PROVISIONAL SPACE	36
37		3,640						1						PROVISIONAL SPACE	38
39	PWR - ACCU-02A-1 (HACR)		1,352		12	15	2	1						PROVISIONAL SPACE	40
41				1,352				1						PROVISIONAL SPACE	42
	SUBTOTAL	4,140	1,352	4,992							1,380	2,400	1,200	SUBTOTAL	

		LOAD	CONN. VA	DF	LOAD	CONN. VA	DF
TOTAL PHASE A - VA	5,520	COOLING	9,984	1.00	REFRIG		1.00
AMPS	46	HEATING	9,984	0	SIGN/DISP	3,600	1.25
TOTAL PHASE B - VA	3,752	LIGHTING	500	1.25	KITCHEN		1.00
AMPS	31	RECEPTACLES	180	1.0/.5	EXISTING		1.00
TOTAL PHASE C - VA	6,192	MOTORS		1.00	LRG MOTOR		1.25
AMPS	52	SUPP HEAT		1.00	SHOWWNDW		1.25
TOTAL PNLBD - VA	15,464	MISC EQUIP	1,200	1.00	LTG TRACK		1.00
AMPS	43						

TOTAL DEMAND
16,489 VA
46 A

PANELBOARD NOTES
DESCRIPTION IN ITALICS = EXISTING LABELED LOAD TO REMAIN

SIGN/DISPLAY - SIGNAGE & DISPLAY CASE

PANELBOARD: P1A (EXISTING)

BUS AMPS: 225A
MAIN SIZE/TYPE: 200A MCB
VOLTS/PHASE: 208Y/120V, 3PH, 4W
SECTION: 1

FED FROM: MDP
AIC RATING: FCA +10% MINIMUM FULLY RATED
SERVES: P1A
MOUNTING: RECESSED
LOCATION: BACK OF HOUSE

LINE-SIDE LUGS: MECHANICAL
EQUIPMENT GROUND BUS

CKT NO.	DESCRIPTION	VOLTAMPS/PHASE A	B	C	WIRE NO.	BKR AMP	P	P	BKR AMP	WIRE NO.	VOLTAMPS/PHASE A	B	C	DESCRIPTION	CKT NO.
1	*LTG - TENANT SPACE P1A*	500			12	20	1	1	20	12	180			*RCPT - BY PANEL*	2
3	SPARE					20	1	1	20	12		1,200		*PWR - SIGNAGE 1*	4
5	SPARE					20	1	1	20	12			1,200	*PWR - SIGNAGE 2*	6
7	SPARE					20	1	1	20	12	1,200			*PWR - SIGNAGE 3*	8
9	SPARE					20	1	1	20	12		1,200		*PWR - HEAT TRACE*	10
11	SPARE					20	1	1	20					SPARE	12
13	SPARE					20	1	1	20					SPARE	14
15	SPARE					20	1	1	20					SPARE	16
17	SPARE					20	1	1	20					SPARE	18
19	SPARE					20	1	1	20					SPARE	20
21	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	22
23	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	24
25	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	26
27	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	28
29	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	30
31	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	32
33	PROVISIONAL SPACE						1	1						PROVISIONAL SPACE	34
35	PWR - ACCU-01A-3,4 (HACR)			3,640	6	50	2	1						PROVISIONAL SPACE	36
37		3,640						1						PROVISIONAL SPACE	38
39	PWR - ACCU-01A-1,2 (HACR)		3,640		6	50	2	1						PROVISIONAL SPACE	40
41				3,640				1						PROVISIONAL SPACE	42
	SUBTOTAL	4,140	3,640	7,280							1,380	2,400	1,200	SUBTOTAL	

		LOAD	CONN. VA	DF	LOAD	CONN. VA	DF
TOTAL PHASE A - VA	5,520	COOLING	14,560	1.00	REFRIG		1.00
AMPS	46	HEATING	14,560	0	SIGN/DISP	3,600	1.25
TOTAL PHASE B - VA	6,040	LIGHTING	500	1.25	KITCHEN		1.00
AMPS	50	RECEPTACLES	180	1.0/.5	EXISTING		1.00
TOTAL PHASE C - VA	8,480	MOTORS		1.00	LRG MOTOR		1.25
AMPS	71	SUPP HEAT		1.00	SHOWWNDW		1.25
TOTAL PNLBD - VA	20,040	MISC EQUIP	1,200	1.00	LTG TRACK		1.00
AMPS	56						

TOTAL DEMAND
21,065 VA
58 A

PANELBOARD NOTES
DESCRIPTION IN ITALICS = EXISTING LABELED LOAD TO REMAIN

SIGN/DISPLAY - SIGNAGE & DISPLAY CASE

PANELBOARD SCHEDULES

SCALE : N/A

1

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02-24-2023

PROJECT:
NLV SHELL - POWER TO HVAC UNITS
420 SW LONGVIEW BLVD.
LEE'S SUMMIT, MO

ORIGINAL: 02.24.2023
REVISIONS: DATE / DESCRIPTION
1
2
3
4
5

ISSUED:
PERMIT

SHEET TITLE:
PANELBOARD SCHEDULES

JOB NO.: 23-031
SHEET:
E102