

ISSUED FOR PERMITS	DATE 7-15-25

ARCHITECTURAL DESIGN  
 RESIDENTIAL COMMERCIAL INDUSTRIAL  
**G.A.V. ASSOCIATES, INC.**  
 34051 RICHARD LAKE RD., STE. 100A  
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ADDITIONS AND RENOVATIONS TO:  
 ISLAMIC ASSOC. OF GREATER DETROIT  
 879 WEST AUBURN ROAD  
 ROCHESTER HILLS, MICHIGAN

ADDITIONS AND RENOVATIONS TO:  
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 879 WEST AUBURN ROAD  
 ROCHESTER HILLS, MICHIGAN

DRAWN: M.B.	DESIGNED: M.B.	CHECKED: J.M.
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SCALE :

FILE NAME :

JOB #: 25025

SHEET TITLE  
 ELECTRICAL LEGEND, SYMBOLS AND SHEET INDEX  
 SHEET #

E.000



**ELECTRICAL SYMBOLS LIST**

SYMBOLS	DESCRIPTION
	CONDUIT RUN EXPOSED
	CONDUIT RUN CONCEALED
	HOME RUN TO PANEL
	FLEXIBLE CONDUIT
	CONDUIT TURNED DOWN
	CONDUIT TURNED UP
	INDICATES 480V, 3Ø SWITCHBOARD, CIRCUIT #1
	INDICATES 480V, 3Ø POWER PANELBOARD (DP-4), CIRCUIT #1
	INDICATES 208V, 3Ø POWER PANELBOARD (DP-3), CIRCUIT #1
	INDICATES PANEL LP-D, BRANCH CIRCUIT #7
	LIGHTING AND RECEPTACLE PANEL (NORMAL - SURFACE)
	POWER PANEL (NORMAL - SURFACE)
	EXISTING SWBD OR NEW SWITCHBOARD
	PANEL DESIGNATION
	POWER CONNECTION
	DUPLEX RECEPTACLE, GROUNDING TYPE, WALL MOUNTED 18" AFF
	OVER THE COUNTER DUPLEX RECEPTACLE, 6" ABOVE COUNTER
	OVER THE COUNTER DUPLEX RECEPTACLE, GROUND FAULT INTERRUPTER, WALL MOUNTED 6" ABOVE COUNTER
	WEATHERPROOF DUPLEX RECEPTACLE
	LIGHTING CONTACTOR #1
	SINGLE POLE SWITCH
	SINGLE POLE SWITCH WITH A SMALL LETTER "a" INDICATE CTRL DESIGNATION
	3-WAY SWITCH, OR 4-WAY SWITCH
	MANUAL SWITCH WITH THERMAL OVERLOAD PROTECTION
	DIMMER CONTROL SWITCH STATION
	WA-200 (WATTSTOPPER) OCCUPANCY SENSOR
	WT-2250 (WATTSTOPPER) ULTRASONIC OCCUPANCY SENSOR WITH 120/24V POWER PACK - CORRIDORS
	WT-1105 (WATTSTOPPER) ULTRASONIC OCCUPANCY SENSOR WITH 120/24V POWER PACK - BATHROOMS
	DT-200 (WATTSTOPPER) DUAL TECHNOLOGY OCCUPANCY SENSOR WITH 120/24V POWER PACK - CLASSROOMS
	DISCONNECT SWITCH - FUSED
	DISCONNECT SWITCH - UNFUSED
	JUNCTION BOX OR PULL BOX - SIZED PER NEC
	SINGLE PHASE MOTOR
	THREE PHASE MOTOR
	2'x4' FLUORESCENT LIGHTING FIXTURE AS INDICATED ON THE SCHEDULE
	2'x4' NIGHTLIGHT & EMERGENCY FLUORESCENT LIGHTING FIXTURE AS INDICATED ON THE SCHEDULE
	LED EXIT LIGHT - WALL MOUNTED OR CEILING MOUNTED
	EMERGENCY LIGHT - W/90 MINUTES NICAD BATTERY MAINTENANCE FREE
	DUCT SMOKE DETECTOR (R - RETURN, OR S-SUPPLY)

**GENERAL REQUIREMENTS**

- A. CODES:
1. THE WORK SHALL COMPLY WITH THE CURRENT NATIONAL ELECTRIC CODE AND ALL APPLICABLE CODES.
  2. GROUND-Fault PROTECTION OF EQUIPMENT SHALL BE PROVIDED FOR SOLIDLY GROUNDED WYE ELECTRIC SERVICES OF MORE THAN 150 VOLTS TO GROUND BUT NOT EXCEEDING 1000 VOLTS PHASE-TO-PHASE FOR EACH SERVICE DISCONNECT RATED 1000 AMPERES OR MORE PER MEC 250.95
  3. GROUND-Fault PROTECTION SYSTEMS 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. A WRITTEN RECORD OF THIS TEST SHALL BE MADE AND SHALL BE AVAILABLE TO THE AUTHORITY HAVING JURISDICTION PER MEC 230.93(C)
- B. COORDINATION:
1. THE WORK SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES TO AVOID INTERFERENCE. REFER TO CIVIL, ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS FOR CEILING HEIGHTS, ROOM FINISHES, DOOR SWINGS, BUILDING DIMENSIONS, LOCATION AND SIZES OF DUCTS, PIPES AND MECHANICAL EQUIPMENT ETC.. PROVIDE ADDITIONAL SUPPORT FOR RACEWAYS, BOXES, SWITCHES, CIRCUIT BREAKERS, MOTOR CONTROLLERS, FIXTURES AND THE LIKE. WHERE THE BUILDING STRUCTURE IS NOT ADAPTED OR SUITABLE FOR MOUNTING THE SAME DIRECTLY THERE ON. RACEWAYS SHALL NOT BE USED AS SUPPORTS FOR BOXES OR OTHER ELECTRICAL EQUIPMENT.
  2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT ALL EQUIPMENT FURNISHED UNDER OTHER TRADES IS COMPATIBLE WITH THE ELECTRICAL FEEDER PROVIDED UNDER THE ELECTRICAL TRADE. CASES OF DISCREPANCY MUST BE BROUGHT TO THE ENGINEER ATTENTION.
  3. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERALLY THE LOCATIONS OF MATERIALS AND EQUIPMENT. THESE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE.
- C. TESTING:
1. THE CONTRACTOR SHALL MAKE ALL TESTS, ADJUSTMENTS, AND TRIAL OPERATIONS REQUIRED TO PLACE THE SYSTEM IN BALANCED AND SATISFACTORY OPERATING CONDITION.

**SITE ELECTRICAL NOTES**

1. COORDINATE ALL NEW ELECTRICAL UNDERGROUND WORK WITH NEW AND EXISTING UNDERGROUND UTILITIES BEFORE INSTALLATION.
2. PROVIDE WATERTIGHT HUBS AT CONDUIT ENTRANCES TO ALL ENCLOSURES MOUNTED OUTDOOR AND TO ALL WATERTIGHT (NEMA 4) ENCLOSURES MOUNTED INDOORS.
3. ALL EXISTING DUCTS, MANHOLES, ETC. ARE APPROXIMATE LOCATIONS ONLY. THE ELECTRICAL CONTRACTOR SHALL VERIFY EXACT LOCATIONS IN THE FIELD.
4. EXACT LOCATIONS MAYBE ADJUSTED IN THE FILED TO AVOID EXISTING AND UNEXPECTED CONSTRUCTION OBSTACLES.
5. IT SHALL BE THE CONTRACTOR RESPONSIBILITY TO EXERCISE EXTREME CAUTION WHILE EXCAVATING TO AVOID DAMAGE TO ANY BURIED UTILITY LINES, PIPING, CONDUIT, ETC.. THE CONT. SHALL REPAIR OR REPLACE TO THE OWNER SATISFACTION ANY AND ALL DAMAGED UTILITY LINES, PIPING, CONDUIT, ETC.. WHICH MAY BECOME DAMAGED DURING EXCAVATION OF THE NEW WORK AT NO EXTRA CHARGE TO THE OWNER.

**FIRE ALARM SYSTEM**

1. MODIFY EXISTING FIRE ALARM TO COMPLY WITH MBC SECTION 907.2.1 AND PER NFPA 72-2010
2. ELECTRICAL CONTRACTOR TO SUBMIT FIRE ALARM SYSTEM SHOP DRAWINGS WITH SUPPORTING DOCUMENTATION UNDER SEPARATE PERMIT REQUIREMENT TO BUILDING DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF THIS WORK (MBC 107.2.2)
3. PROVIDE VOICE ALARM SYSTEM THROUGHOUT BOTH BUILDINGS EXISTING AND NEW AS REQUIRED PER MBC 907.2.1.1

**ABBREVIATIONS**

A	AMPS
AC	ALTERNATE CURRENT
ACCU	AIR COOLED CONDENSING UNIT
AFF	ABOVE FINISH FLOOR
AMP	AMPLIFIER
BKR	BREAKER
C,CND	CONDUIT
CUH	CABINET UNIT HEATER
CAT. NO.	CATALOG NUMBER
CKT.	CIRCUIT
CLG.	CEILING
CONT.	CONTRACTOR
C/T	CURRENT TRANSFORMER
D.E.CO.	DETROIT EDISON COMPANY
DN.	DOWN
DISC.	DISCONNECT
ELECT.	ELECTRICAL
EF	EXHAUST FAN
EXIST.	EXISTING
F	FIRE
FACP	FIRE ALARM CONTROL PANEL
FIXT.	FIXTURE
FL	FLOOR
GND..G.	GROUND
GI	GROUND FAULT INTERRUPT
HD	HEAT DETECTOR
HP	HORSE POWER
IT	INFORMATION TECHNOLOGY
KVA	KILO VOLT AMPERE
L.LTG.	LIGHTING
M.A.U.	MAKE-UP AIR UNIT
M.B.	MAIN BREAKER
MECH.	MECHANICAL
MIC	MICROPHONE
MIN.	MINIMUM
MTD	MOUNTED
N.T.S.	NOT TO SCALE
NO.	NUMBER
PNL	PANEL
PWR	POWER
R	RECEPTACLE
RM	ROOM
SD	SMOKE DETECTOR
SHT	SHEET
SW	SWITCH
SWBD	SWITCHBOARD
TYP.	TYPICAL
VA	VOLT AMPERE
V	VOLT
W	WATTS
W/	WITH
W/O	WITHOUT
WP	WEATHER PROOF
XFMR	TRANSFORMER

**GENERAL NOTES & SPECIFICATIONS**

1. CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY CHECK THE FIELD CONDITIONS PRIOR TO SUBMITTING HIS BID.
2. CONTRACTOR SHALL BE PREPARED TO WORK CONTINUOUSLY AND EXPEDITIOUSLY TO COMPLETE THE WORK RIGHT ON SCHEDULE FOR A COMPLETE LIGHTING AND POWER SYSTEM.
3. CONTRACTOR SHALL OBTAIN ALL PERMITS AND PAY ALL FEES.
4. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, CODES AND REGULATIONS AS WELL AS APPLICABLE CURRENT STANDARDS.
5. CABINETS, MOTOR FRAMES, STARTERS, CONDUIT SYSTEM, PANELBOARDS, ETC., SHALL BE GROUNDED IN ACCORDANCE WITH THE LATEST N.E.C. AND LOCAL CODES.
6. MATERIALS SHALL BE NEW AND BEAR THE U.L. LABEL OR LISTING, WHEREVER STANDARDS HAVE BEEN ESTABLISHED.
7. COORDINATE EXACT LOCATION AND MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES AND ELECTRICAL DEVICES WITH OTHER TRADES BEFORE INSTALLATION.
8. ALL WALL MOUNTED CONTROL DEVICES, LIGHTING SWITCHES SHALL BE 4'-0" A.F.F. UNLESS OTHERWISE NOTED ON THE DRAWINGS. SWITCHES SHALL BE 20A, 120/277V, 1 POLE, 2 POLE, 3 AND 4 WAY AS INDICATED, HUBBELL #1221 SERIES OR EQUAL.
9. WALL MOUNTED DISCONNECT SWITCHES AND CONTROL PANELS SHALL BE 6'-0" TO TOP ABOVE FINISH FLOOR.
10. EXPANSION FITTINGS SHALL BE PROVIDED FOR ALL CONDUIT CROSSING BUILDING EXPANSION JOINTS.
11. ALL WEATHERPROOF (WP) DUPLEX RECEPTACLES SHALL BE INSTALLED HORIZONTALLY SUCH THAT COVER DOORS OPEN UPWARD.
12. ALL PENETRATIONS OF FIRE WALLS OR FLOORS SHALL BE SEALED AFTER INSTALLATION OF CONDUIT WITH A FIRE RETARDANT SEALANT THAT IS RATED THE SAME AS THE FIRE WALL OR FLOOR.
13. PROVIDE A GREEN GROUND CONDUCTOR IN ALL SYSTEMS CONDUITS INCLUDING BRANCH CIRCUIT CONDUITS FOR LIGHTING AND RECEPTACLES PER NEC TABLE 250-95.
14. ALL CONDUIT SHALL BE 3/4"EMT (MIN.) AND THEY SHALL BE OF SIZES REQUIRED TO ACCOMMODATE NUMBER OF CONDUCTORS IN ACCORDANCE WITH NEC WIRING TABLES OR AS INDICATED ON DRAWINGS, WHICHEVER IS LARGER.
15. FEEDERS SHALL BE TYPE "THW" OR "XHHW", AND ALL 120 VAC LIGHTING AND RECEPTACLE CIRCUITS RUN 2#12 (THWN/THHN) MIN. + GND IN 3/4" MIN. TO THE LIGHTING PANELBOARD INDICATED UNLESS NOTED OTHERWISE. HOME RUN TO PANEL IF MORE THAN 80' SHALL BE #10 IN 3/4" C. OR CONTRACTOR SHALL USE A CONDUCTOR SO THAT VOLTAGE DROP IS LESS THAN 2%. ALL WIRE SHALL BE COPPER, HAVE 600 VOLT INSULATION AND INSTALLED IN CONDUIT.
16. RECEPTACLES SHALL BE DUPLEX GROUNDING TYPE 20A, 125V, HUBBELL #5362 OR EQUAL. SPECIAL PURPOSE RECEPTACLES 30A, 40A, 50A-2P OR 3P, ETC., SHALL BE SPECIFICATIONS GRADE.
17. WALL PLATES FOR SWITCHES, RECEPTACLES AND TELEPHONE OUTLETS SHALL BE SUPER STAINLESS STEEL, TYPE 302, HUBBELL #93000 SERIES OR EQUAL.
18. SINGLE PHASE MOTOR STARTERS SHALL HAVE MANUAL TOGGLE SWITCH WITH THERMAL OVERLOADS. FLUSH MOUNTED WITH PILOT LIGHT, ALLEN-BRADLEY #600 OR EQUAL.
19. THREE PHASE MOTOR STARTERS SHALL BE MAGNETIC TYPE, WITH FUSED CONTROL TRANSFORMER (120 VOLT SECONDARY) AND AUXILIARY CONTACTS AS REQUIRED, ALLEN BRADLEY #712 OR EQUAL.
20. DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE, FUSED OR NON-FUSED AS INDICATED, IN A NEMA 1 OR 12 ENCLOSURE, DISCONNECT SWITCHES INSTALLED OUTDOOR SHALL BE NEMA 3R ENCLOSURE, EATON, SQUARE D, OR G.E.
21. SWITCHBOARD, OR PANELBOARDS SHALL BE SIEMENS, SQUARE D, EATON, OR G.E. SIZE ON THE DRAWINGS.
22. FOR BRANCH CIRCUIT PANELBOARD TERMINATION AND CIRCUITRY, REFER TO PANEL SCHEDULES.
23. FOR TYPE OF LIGHTING FIXTURES REFER TO LIGHTING FIXTURE SCHEDULE.
24. ALL ELECTRICAL EQUIPMENT MOUNTED ON EXTERIOR WALLS SHALL HAVE A 1/2" MIN. AIR SPACE BETWEEN WALL AND EQUIPMENT. PROVIDE A NON-CORROSIVE SPACERS AND BRACKETS AS REQUIRED.
25. VERIFY ALL ROUGH-IN LOCATIONS, FINAL CONNECTIONS, MOUNTING HEIGHTS, VOLTAGES AND PHASES WITH OTHER TRADES EQUIPMENT SUPPLIERS SHOP DRAWINGS PRIOR TO INSTALLATION OF EQUIPMENT. FAILURE TO DO SO SHALL RESULT IN NO EXTRA CHARGE TO THE OWNER.
26. EXACT LOCATIONS OF ELECTRICAL EQUIPMENT MAYBE ADJUSTED IN THE FIELD TO AVOID EXISTING AND UNEXPECTED CONSTRUCTION OBSTACLES.
27. VERIFY EXACT LOCATION OF ALL CONTROL PANELS ETC., FOR MECHANICAL EQUIPMENT, AND WIRE ACCORDINGLY FOR A COMPLETE FUNCTIONAL SYSTEM.
28. VOICE/DATA/VIDEO CABLES, IT DEVICES, IT EQUIPMENT, AND TERMINATION SHALL BE BY THE SELECTED IT SUPPLIER. HOWEVER, THE 1" C RACEWAY SYSTEM IS BY THIS CONTRACT. RACEWAY SYSTEM SHALL BE COMPLETE WITH ALL FITTINGS & BOXES, ETC.
29. FIRE ALARM SYSTEM - MATCH EXISTING FIELD DEVICES FOR A COMPLETE ADDRESSABLE SYSTEM WITH FULL BATTERY BACK-UP SYSTEM AS REQUIRE PER NFPA-72.
30. THE ELECTRICAL CONTRACTOR SHALL FURNISH FIVE (5) COPIES OF SHOP DRAWINGS TO THE ENGINEER FOR THE ENGINEER'S APPROVAL. CHECKING SHOP DRAWINGS IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE.
31. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERALLY THE LOCATIONS OF MATERIAL AND EQUIPMENT. THESE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE.
32. THE ELECTRICAL CONTRACTOR IS REQUIRE TO MARK-UP AS BUILT DOCUMENTS ON A DAILY BASIS AND RETURN THE ONE COMPLETE SET OF RED MARK-UPS TO THE ARCHITECT AT THE COMPLETION OF THE PROJECT.
33. WHEN THE JOB IS COMPLETED, THE CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH CERTIFICATE OF APPROVAL FROM THE LOCAL INSPECTION AUTHORITY. THE CONTRACTOR SHALL GIVE THE OWNER A WRITTEN GUARANTEE THAT HE WILL MAKE GOOD, AT HIS OWN EXPENSE, ANY DEFECTS IN MATERIALS OR WORKMANSHIP WHICH MAY DEVELOP WITHIN TWO (2) YEARS FROM THE DATE OF FINAL ACCEPTANCE.

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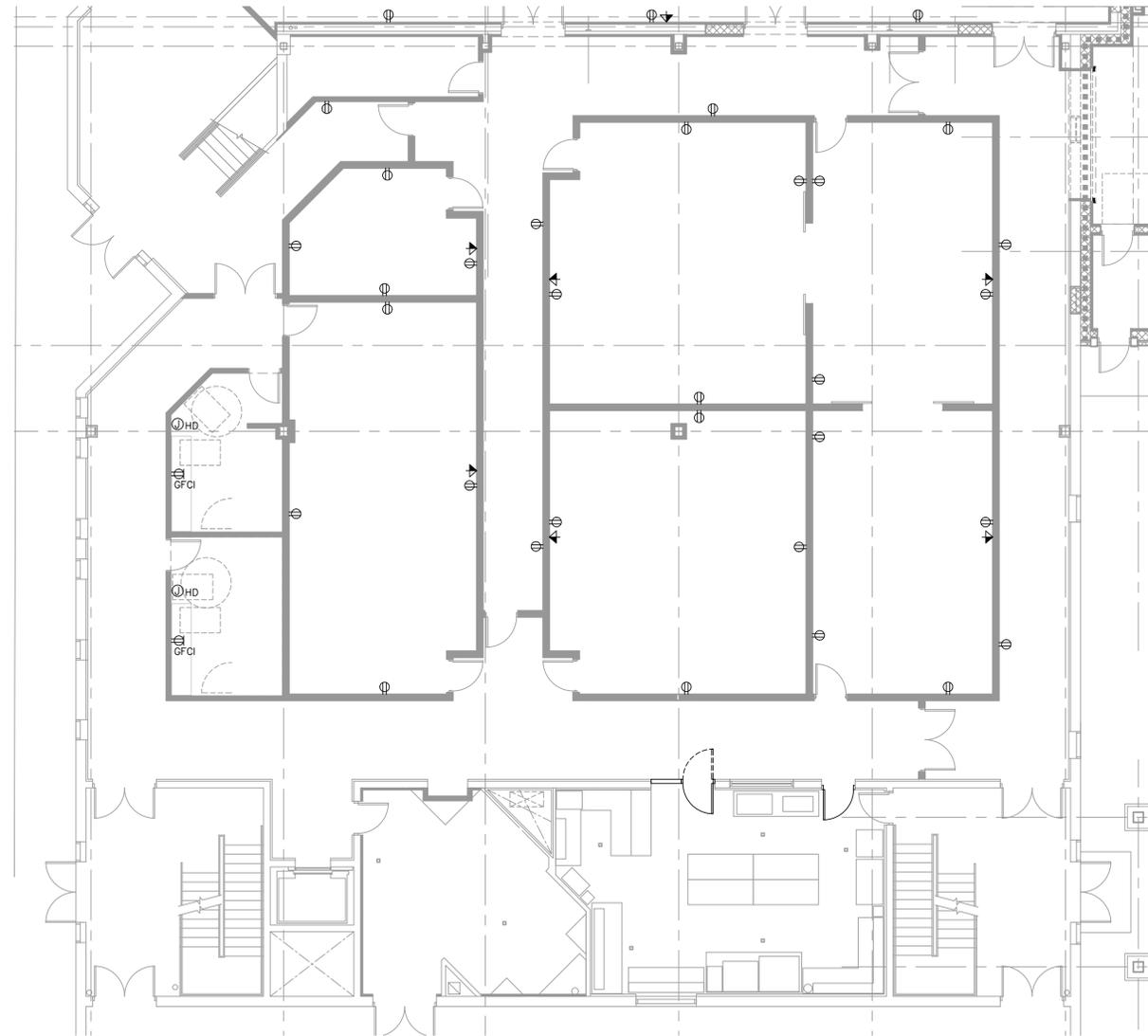
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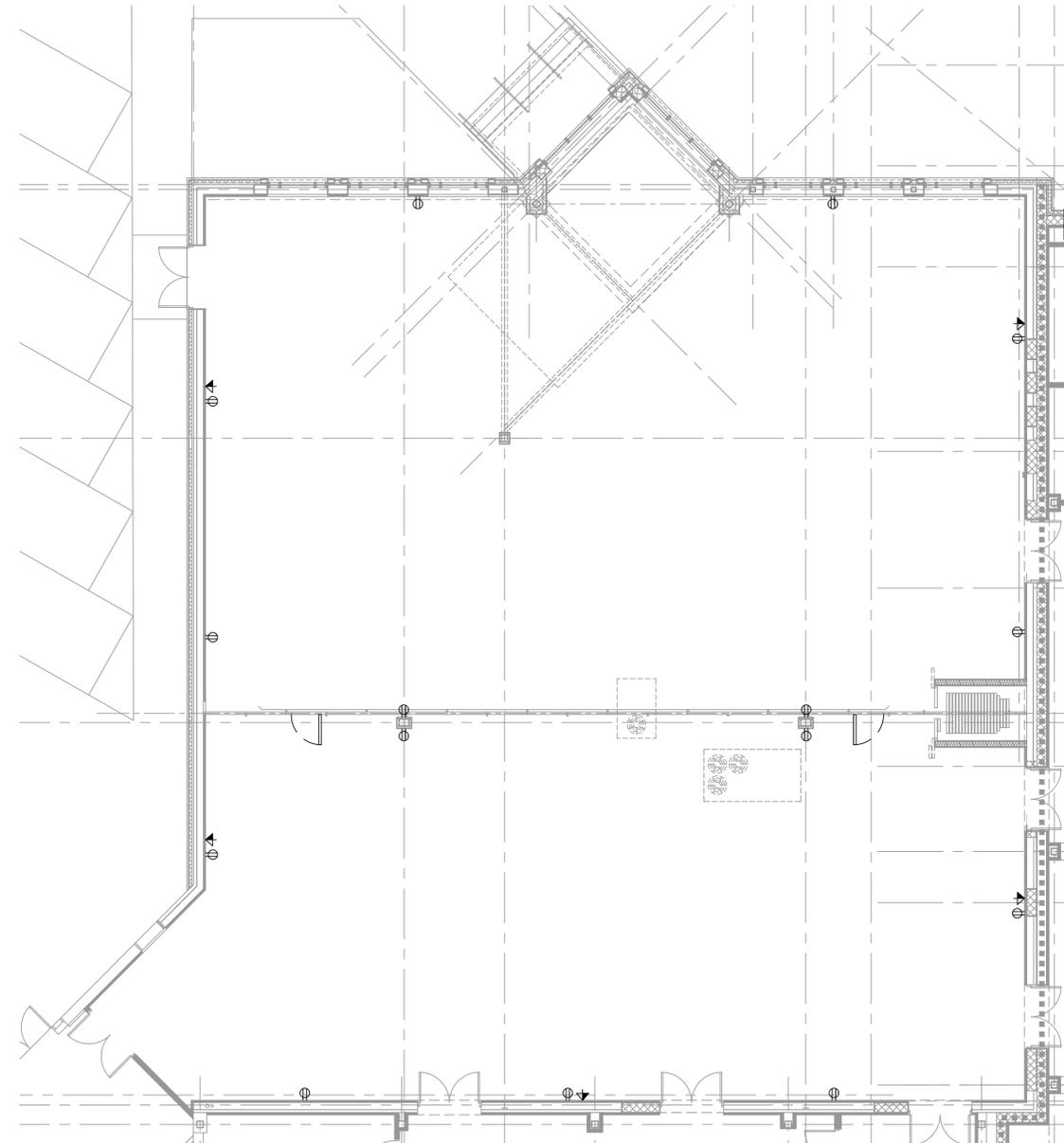


**NOTES:**

1. FOR GENERAL NOTES SEE SHEET E.000.
2. ELECT. CONT. TO COORDINATE WITH MECH. TRADE FOR INTERLOCKING OF MECHANICAL EQUIPMENT AS INDICATED ON THE MECHANICAL DRAWINGS.
3. REFER TO MECHANICAL SCHEDULES FOR EQUIPMENT SUPPLIED WITH THEIR OWN DISCONNECT SWITCHES.
4. ELECT. CONT. TO COORDINATE EXACT MOUNTING HEIGHTS FOR WIRING DEVICES WITH OWNER AND EQUIPMENT SUPPLIERS AND RECEPTACLES NEMA CONFIGURATION PRIOR TO INSTALLATION.
5. REWORK THE EXISTING BRANCH CIRCUIT TO RECONNECT ALL THE NEW RECEPTACLES.
6. UPDATE THE EXISTING PANEL SCHEDULES TO REFLECT THE NEW INSTALLATION AS REQUIRED.



NORTH  
 PARTIAL POWER – FIRST FLOOR PLAN  
 SCALE: 1/8" = 1'-0"



NORTH  
 PARTIAL POWER – FIRST FLOOR PLAN  
 SCALE: 1/8" = 1'-0"



ADDITIONS AND RENOVATIONS TO:  
 ISLAMIC ASSOC. OF GREATER DETROIT  
 879 WEST AUBURN ROAD  
 ROCHESTER HILLS, MICHIGAN

DRAWN:	DESIGNED:	CHECKED:
M.B.	M.B.	J.M.

SCALE :

FILE NAME :

JOB #: 25025

SHEET TITLE  
 PARTIAL POWER –  
 FIRST FLOOR PLAN

SHEET #  
 E.200

ISSUED FOR PERMITS	DATE 7-15-25

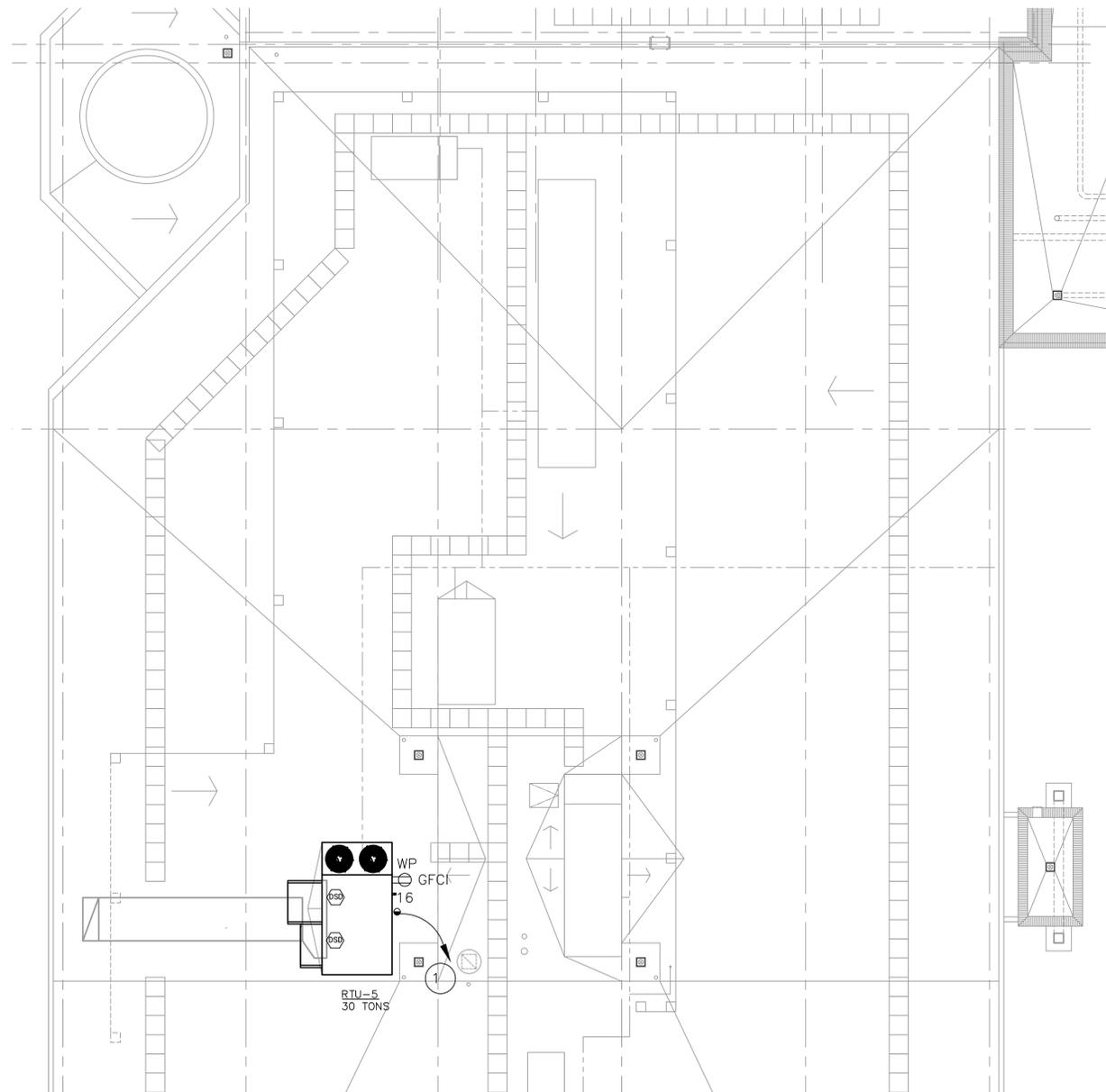
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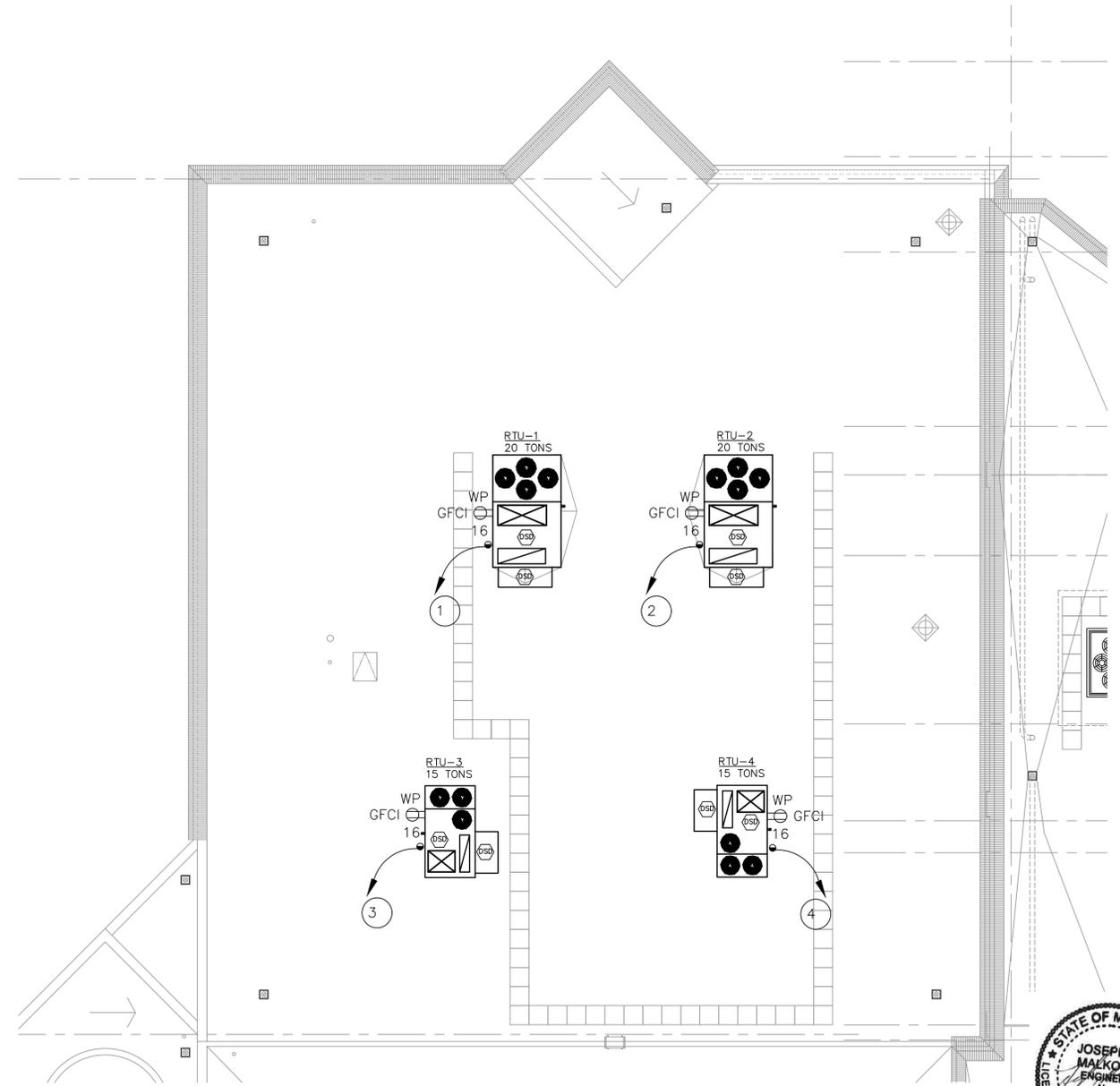


**NOTES:**

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3. REFER TO MECHANICAL SCHEDULES FOR EQUIPMENT SUPPLIED WITH THEIR OWN DISCONNECT SWITCHES.
4. ELECT. CONT. TO COORDINATE EXACT MOUNTING HEIGHTS FOR WIRING DEVICES WITH OWNER AND EQUIPMENT SUPPLIERS AND RECEPTACLES NEMA CONFIGURATION PRIOR TO INSTALLATION.
5. ALL BRANCH CIRCUIT SHOWN ARE FED FROM RP-2C. UNLESS OTHERWISE NOTED.



**PARTIAL POWER ROOF PLAN**  
 SCALE: 1/8" = 1'-0"



**PARTIAL POWER ROOF PLAN**  
 SCALE: 1/8" = 1'-0"



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 879 WEST AUBURN ROAD  
 ROCHESTER HILLS, MICHIGAN

DRAWN: M.B.	DESIGNED: M.B.	CHECKED: J.M.
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SCALE :

FILE NAME :

JOB #: 25025

SHEET TITLE  
 ELECTRICAL ROOF PLAN

SHEET #  
 E. 201

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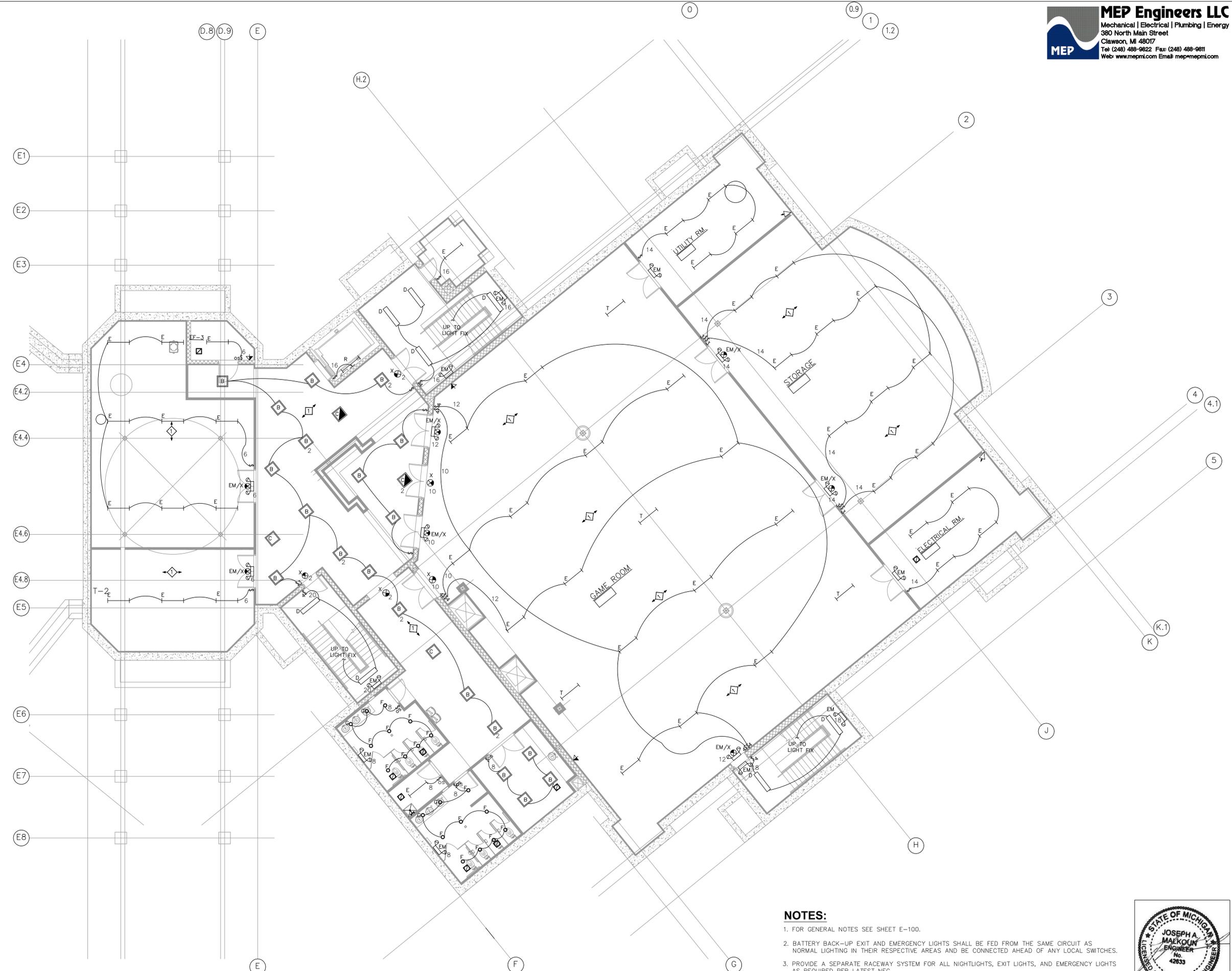
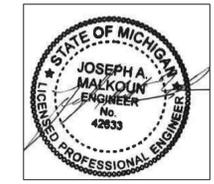
SCALE :

FILE NAME :

JOB #: 25025

SHEET TITLE  
 LIGHTING BASEMENT  
 FLOOR PLAN  
 (EXISTING)  
 SHEET #

E.202



- NOTES:**
- FOR GENERAL NOTES SEE SHEET E-100.
  - BATTERY BACK-UP EXIT AND EMERGENCY LIGHTS SHALL BE FED FROM THE SAME CIRCUIT AS NORMAL LIGHTING IN THEIR RESPECTIVE AREAS AND BE CONNECTED AHEAD OF ANY LOCAL SWITCHES.
  - PROVIDE A SEPARATE RACEWAY SYSTEM FOR ALL NIGHTLIGHTS, EXIT LIGHTS, AND EMERGENCY LIGHTS AS REQUIRED PER LATEST NEC.
  - ALL BRANCH CIRCUIT SHOWN ON THE FLOOR PLAN ARE FED FROM PANEL LP-D. U.O.N.

EXISTING LIGHTING - BASEMENT FLOOR PLAN (FOR REFERENCE ONLY)  
 SCALE: 1/8"=1'-0"

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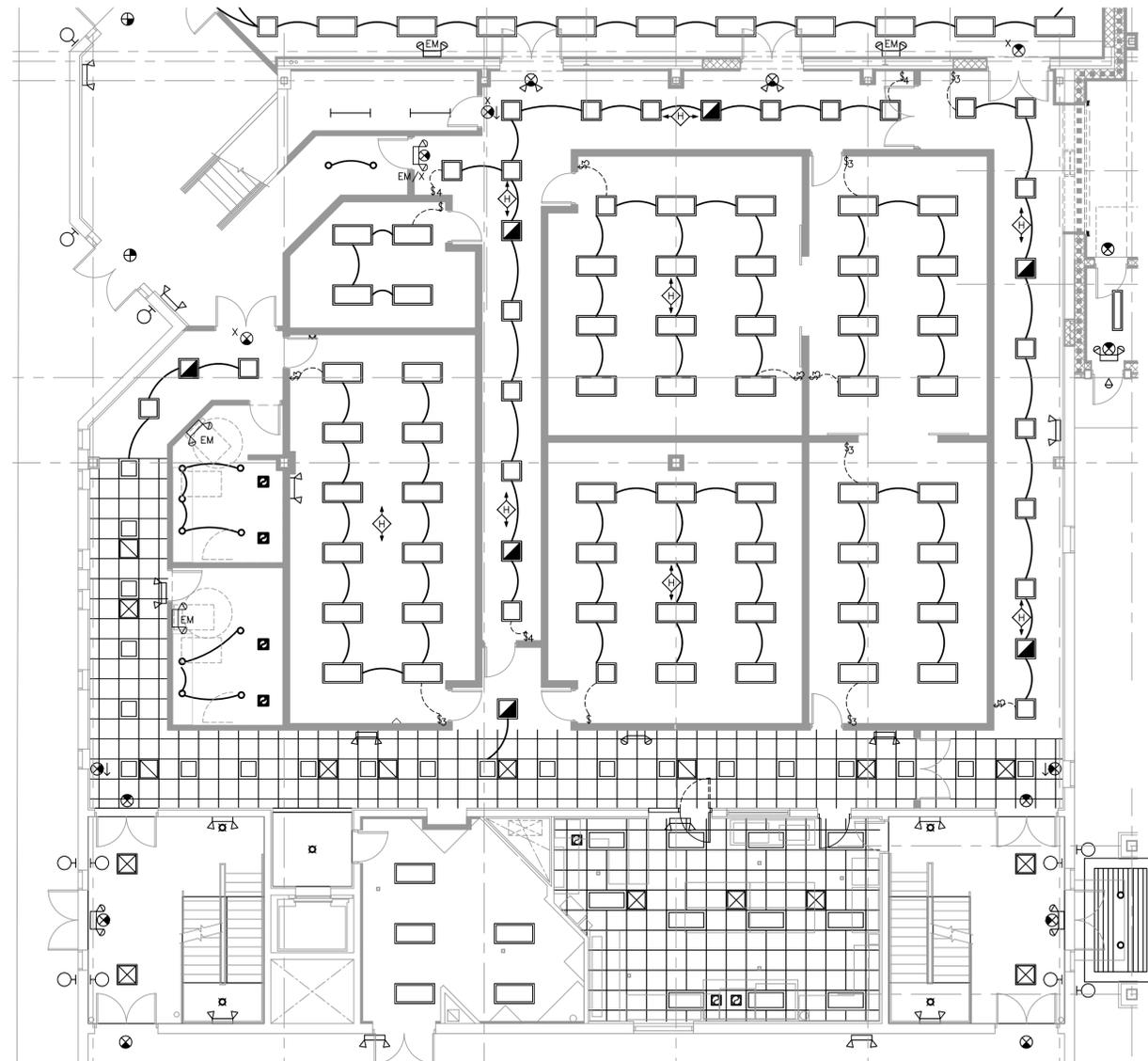
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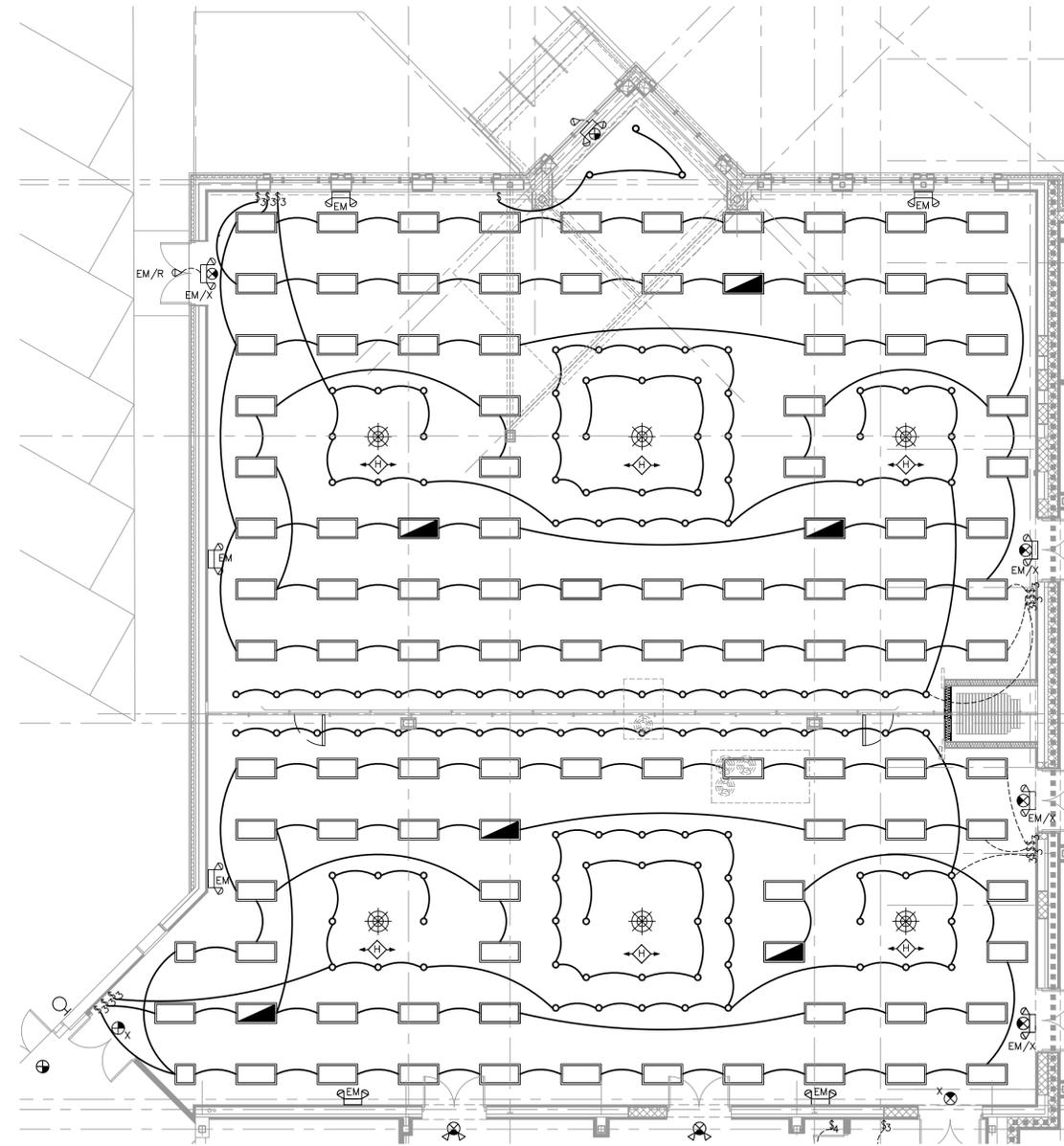


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- BATTERY BACK-UP EXIT AND EMERGENCY LIGHTS SHALL BE FED FROM THE SAME CIRCUIT AS NORMAL LIGHTING IN THEIR RESPECTIVE AREAS AND BE CONNECTED AHEAD OF ANY LOCAL SWITCHES.
- PROVIDE A SEPARATE RACEWAY SYSTEM FOR ALL NIGHTLIGHTS, EXIT LIGHTS, AND EMERGENCY LIGHTS AS REQUIRED PER LATEST NEC.
- REWORK ALL EXISTING LIGHTING BRANCH CIRCUIT TO RECONNECT ALL THE NEW LIGHTING FIXTURE AS SHOWN.
- UPDATE THE EXISTING LIGHTING PANEL SCHEDULES TO REFLECT THE NEW INSTALLATION AS REQUIRED.
- VERIFY EXISTING LIGHTING FIXTURES VOLTAGE PRIOR TO PURCHASING OF NEW LIGHTING FIXTURE FOR THIS AREA. PROVIDE NEW LIGHTING FIXTURES WITH THE CORRECT VOLTAGE. AS REQUIRED.



NORTH  
 PARTIAL LIGHTING – FIRST FLOOR PLAN  
 SCALE: 1/8" = 1'-0"



NORTH  
 PARTIAL LIGHTING – FIRST FLOOR PLAN  
 SCALE: 1/8" = 1'-0"



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SHEET TITLE  
 PARTIAL LIGHTING –  
 FIRST FLOOR PLAN

SHEET #  
 E.300

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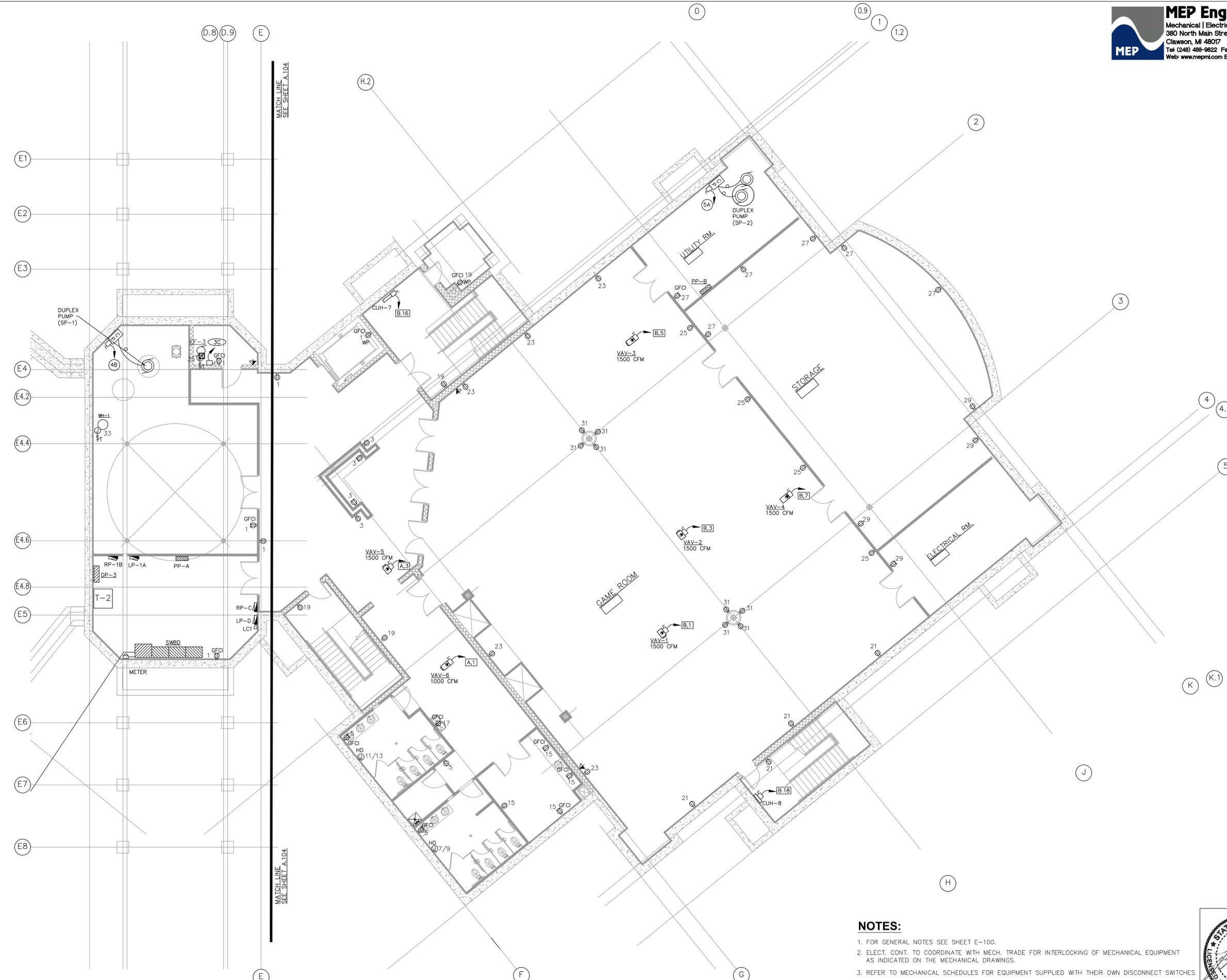
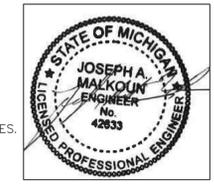
SCALE :

FILE NAME :

JOB #: 25025

SHEET TITLE  
 POWER BASEMENT FLOOR PLAN (EXISTING)  
 SHEET #

E. 301



EXISTING POWER – BASEMENT FLOOR PLAN (FOR REFERENCE ONLY)  
 SCALE: 1/8"=1'-0"

- NOTES:**
- FOR GENERAL NOTES SEE SHEET E-100.
  - ELECT. CONT. TO COORDINATE WITH MECH. TRADE FOR INTERLOCKING OF MECHANICAL EQUIPMENT AS INDICATED ON THE MECHANICAL DRAWINGS.
  - REFER TO MECHANICAL SCHEDULES FOR EQUIPMENT SUPPLIED WITH THEIR OWN DISCONNECT SWITCHES.
  - ELECT. CONT. TO COORDINATE EXACT MOUNTING HEIGHTS FOR WIRING DEVICES WITH OWNER AND EQUIPMENT SUPPLIERS AND RECEPTACLES NEMA CONFIGURATION PRIOR TO INSTALLATION.
  - ALL BRANCH CIRCUIT SHOWN ARE FED FROM RP-C, UNLESS OTHERWISE NOTED.

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 COMMERCIAL  
 INDUSTRIAL  
**G.A.V. ASSOCIATES, INC.**  
 34051 ORCHARD LAKE RD., STE. 100A  
 FARMINGTON, MICHIGAN 48336  
 PH: (248) 988-0191  
 WEB: WWW.GAVASSOCIATES.COM



ADDITIONS AND RENOVATIONS TO:  
 ISLAMIC ASSOC. OF GREATER DETROIT  
 879 WEST AUBURN ROAD  
 ROCHESTER HILLS, MICHIGAN

DRAWN:	DESIGNED:	CHECKED:
M.B.	M.B.	J.M.

SCALE :

FILE NAME :

JOB # : 25025

SHEET TITLE  
 RISER DIAGRAM  
 AND MDP LOAD  
 CALCULATION  
 SHEET #

E.400



### EXISTING MAIN SWITCHBOARD - (SWBD)

MOUNTING: FLOOR MT'D SERVICE: 2500A, 480/277V, 3Ø, 4W, COPPER BUS ENCLOSURE: NEMA 1  
 LOCATION: BASEMENT - ELECT. ROOM MANUFACTURERS: EATON, SIEMENS, SCHNEIDER, OR G.E. RATING: 100,000 AIC

DESIGNATION	LOAD DESCRIPTION	LOAD			SWITCH SWITCH/FUSE	FEEDER/CONDUIT	REMARKS
		TON	KVA	FLA			
1A	INCOMING LINE & CT SECTION	-	-	-	2500AS/2500AF, 3P	4F24	
1B	MAIN SWITCH	-	-	-	2500AS/2500AF, 3P	4F24	BOLTED PRESSURE SW
2A	EXISTING MDP	809	960	-	1600AS/1600AF, 3P	4F22	
2B	DP-4 - 2ND FLOOR	421	506	-	800AS/800AF, 3P	4F19	
2C	500KVA XFMR (T-2)	320	385	-	800AS/800AF, 3P	3F19	
3A	NEW ELEVATOR	33.0	40.0	-	60AS/60AF, 3P	3F04	
3B	SPARE	-	-	-	800AS/800AF, 3P	-	
3C	SPARE	-	-	-	400AS/300AF, 3P	-	
4A	SPARE	-	-	-	600AS/600AF, 3P	-	
4B	SPACE	-	-	-	-	-	
4C	SPACE	-	-	-	-	-	

CONNECTED LOAD: 1583 1891  
 DEMAND LOAD: 1266 1513

### EXISTING DISTRIBUTION PANEL - (DP-3)

MOUNTING: FLOOR MT'D SERVICE: 1600A, MLO, 208/120V, 3Ø, 4W, COPPER BUS ENCLOSURE: NEMA 1  
 LOCATION: BASEMENT FLOOR - ELECT ROOM MANUFACTURERS: EATON, SIEMENS, SCHNEIDER, OR G.E. RATING: 100,000 AIC

DESIGNATION	LOAD DESCRIPTION	LOAD			SWITCH SWITCH/FUSE	FEEDER/CONDUIT	REMARKS
		TON	KVA	FLA			
1	LP-1A - 1ST FLOOR	21.2	59.0	-	200AS/200AF, 3P	4F12	
2	RP-1B - 1ST FLOOR	29.0	80.0	-	200AS/200AF, 3P	4F12	
3	RP-C - BASEMENT	17.0	47.0	-	200AS/200AF, 3P	4F12	
4	LP-D - BASEMENT	22.3	62.0	-	200AS/200AF, 3P	4F12	
5	LP-2A - 2ND FLOOR	12.5	35.0	-	200AS/200AF, 3P	4F12	
6	RP-2C - 2ND FLOOR	34.5	95.0	-	200AS/200AF, 3P	4F12	
7	PP-A - BASEMENT	47.0	130	-	200AS/200AF, 3P	4F12	
8	PP-B - BASEMENT	66.0	183	-	200AS/200AF, 3P	4F12	
9	PP-2A - 2ND FLOOR	63.0	175	-	200AS/200AF, 3P	4F12	
10	SPARE	-	-	-	200AS/200AF, 3P	-	
11	SPARE	-	-	-	60AS/60AF, 3P	-	
12	SPARE	-	-	-	60AS/60AF, 3P	-	
13	SPACE	-	-	-	-	-	
14	SPACE	-	-	-	-	-	

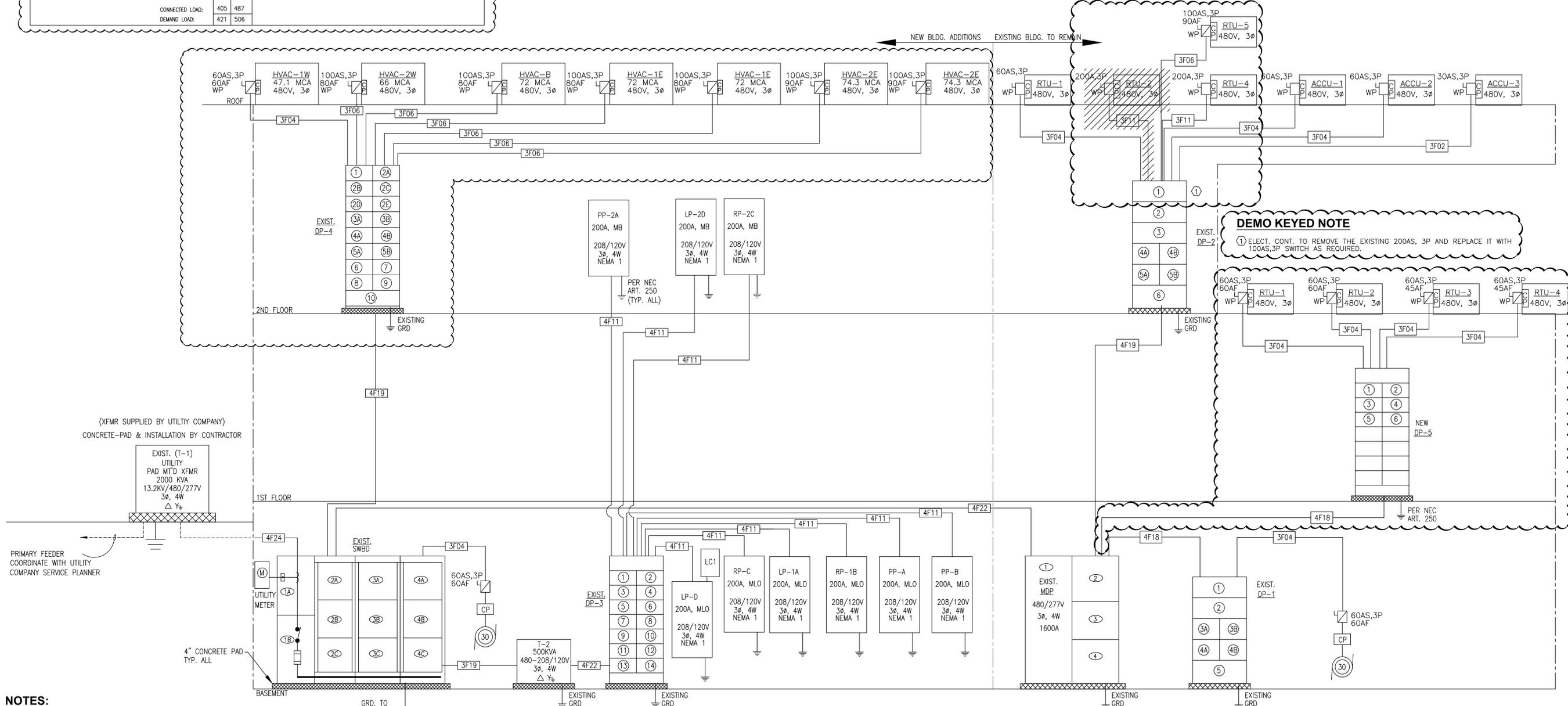
CONNECTED LOAD: 320 886  
 DEMAND LOAD: 288 797

### EXISTING DISTRIBUTION PANEL - (DP-4)

MOUNTING: FLOOR MT'D SERVICE: 800A, MS, 480/277V, 3Ø, 4W, COPPER BUS ENCLOSURE: NEMA 1  
 LOCATION: SECOND FLOOR - UTILITY ROOM MANUFACTURERS: SIEMENS RATING: 100,000 AIC

DESIGNATION	LOAD DESCRIPTION	LOAD			SWITCH SWITCH/FUSE	FEEDER/CONDUIT	REMARKS
		TON	KVA	FLA			
1	SPARE	-	-	-	200AS/200AF, 3P	-	
2A	HVAC-B	60	72	-	100AS/80AF, 3P	3F06	
2B	HVAC-1E	60	72	-	100AS/80AF, 3P	3F06	
2C	HVAC-1E	60	72	-	100AS/80AF, 3P	3F06	
2D	HVAC-2E	62	74.3	-	100AS/90AF, 3P	3F06	
2E	HVAC-2E	62	74.3	-	100AS/90AF, 3P	3F06	
3A	HVAC-1W	40	47.1	-	60AS/60AF, 3P	3F04	
3B	HVAC-2W	55	66	-	100AS/80AF, 3P	3F06	
4A	SPARE	-	-	-	60AS/60AF, 3P	-	
4B	SP-1	2.0	2.4	-	30AS/15AF, 3P	3F01	
5A	SP-2	2.0	2.4	-	30AS/15AF, 3P	3F01	
6B	EF-2	2.0	2.4	-	30AS/15AF, 3P	3F01	
7	EF-1	1.0	1.5	-	30AS/15AF, 3P	3F01	
8	SPARE	-	-	-	60AS/60AF, 3P	-	
9	SPARE	-	-	-	100AS/100AF, 3P	-	
10	MAIN SWITCH	-	-	-	800AS/800AF, 3P	4F19	

CONNECTED LOAD: 405 487  
 DEMAND LOAD: 421 506



**DEMO KEYED NOTE**  
 ① ELECT. CONT. TO REMOVE THE EXISTING 200AS, 3P AND REPLACE IT WITH 100AS, 3P SWITCH AS REQUIRED.

- NOTES:**
- FOR GENERAL NOTES SEE SHEET E.000.
  - ELECT. CONT. TO COORDINATE THE SERVICE ENTRANCE EQUIP'T LOCATIONS & INSTALLATIONS WITH UTILITY CO., AND THE OWNER PRIOR TO INSTALLATION.
  - REQUIRE 2000A, 480/277V, 3Ø, 4W, SECONDARY SERVICE ENTRANCE.
  - PROVIDE GROUNDING ELECTRODE CONDUCTOR SIZES AND POINTS OF CONNECTION TO THE CONCRETE ENCASED ELECTRODE. COMPLY WITH ARTICLE 250.50, 250.52(A)(3), 250.66(B).

**EXIST. POWER DISTRIBUTION - RISER DIAGRAM @480/277V, 3Ø, 4W SYSTEM**  
 N.T.S.

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