STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
DESIGN AND CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242

ADDENDUM NO. 1 TO PROJECT NO. 44674

CONSTRUCTION WORK, HVAC WORK, PLUMBING WORK & ELECTRICAL WORK
REHABILITATE KITCHEN –
BUILDING NO. 12
LAKEVIEW CORRECTIONAL FACILITY
9300 LAKE AVENUE
BROCTON, NY

April 28, 2014

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

C CONTRACT
SPECIFICATIONS

1. SECTION 087000 FINISH HARDWARE, PART 2 PRODUCTS, 2.4 FINISH HARDWARE, PARAGRAPH E, GROUP 5, NUMBER 8 THRESHOLD.

   CHANGE: 1 ea. Zero 545A x torx **to** 1 ea. by others.

   SECTION 114102 PREFEABRICATED WALKIN REFRIDGERATED BOXES
   PART 2 PRODUCTS, PARAGRAPH 2.02, DOOR JAMB HEATER CABLE - BOXES BELOW 33 DEGREES.

   DELETE: from title "**BOXES BELOW 33 DEGREES"**.

C CONTRACT
DRAWINGS

2. Drawing No. A601 – DOOR SCHEDULE, DOOR / FRAME TYPES, DETAILS AND ROOM FINISH SCHEDULE

   Reference DOOR SCHEDULE.

   ADD to HARDWARE, Door No. 122, hardware group no. 6.
   DOOR SCHEDULE REMARKS:
   CHANGE Note #1 undercut from 3/8" to 5/8".
   CHANGE Note #2 to Prefinish door and field paint frame.

Reference DOOR TYPES:

Door type FV, **CHANGE** location of the glass lite. Centerline of the glass lite to be 60" A.F.F.

Reference DOOR DETAIL #1:

ADD to DETAIL Note "Field apply bituminous coating to backs of frames and grout frames solid".

E CONTRACT
SPECIFICATIONS

3. SECTION 262713 DIGITAL METERING

   Delete specification section 262713 in its entirety, and replace with specification section 262713 attached to this Addendum.

E CONTRACT
DRAWINGS

4. Drawing No. E001– ELECTRICAL LEGENDS, NOTES, DIAGRAMS AND SCHEDULES.

   Reference: #7 PARTIAL POWER RISER DIAGRAM.

   CHANGE POWER RISER DIAGRAM and associated notes per sketch D-001 which is attached to this Addendum.

   ADD detail #8 DIGITAL METER CONNECTION DIAGRAM per sketch D-001 which is attached to this Addendum.

5. Drawing No. E004– ELECTRICAL PHASING DIAGRAM AND DETAILS

   Reference: #1 PARTIAL POWER RISER DIAGRAM –PHASE 1.

   CHANGE PARTIAL POWER RISER DIAGRAM and associated notes per sketch D-002 which is attached to this Addendum.

6. Drawing No. E004– ELECTRICAL PHASING DIAGRAMS AND DETAILS

   Reference: #2 PARTIAL POWER RISER DIAGRAM –PHASE 2.1
   #3 PARTIAL POWER RISER DIAGRAM –PHASE 2.2
   #4 PARTIAL POWER RISER DIAGRAM –PHASE 3,4,5.

   CHANGE PARTIAL POWER RISER DIAGRAMS for metering at main switchboard per sketch D-002 which is attached to this Addendum.

7. Drawing No. E004– ELECTRICAL PHASING DIAGRAM AND DETAILS.

   Reference: DETAIL NO. 5.

   ADD: "COOLER AND" to detail title.

8. Drawing No. E103– ELECTRICAL REMOVALS AND FLOOR PLANS, PHASE 3, 4, 5.

Reference: **#3 FLOOR PLAN – POWER**

ADD: Note #18 to all the cooler doors at rooms:

DAILY USE REFR. 11,BUTCHER SHOP 12, COOLER 13, BREAD COOLER 14, POTATO REFR 21, EGG REFR 22, FRUIT & VEG. REFR 23, STAPLES 32, DAIRY COOLER 42, VEGTABLE COOLER 43.

Reference: **#4 NOTES.**
ADD to drawing Notes:

Note #18 PROVIDE 120V POWER CONNECTION TO COOLER DOOR HEATER PROVIDED BY C-CONTRACTOR AT THE FOLLOWING COOLERS:## 11 (2 DOORS), 12,13, 14, 21,22,23,32,42, 43 (2 DOORS). PROVIDE KEYED DISCONNECT SWITCH AT EACH HEATER AND CONNECT TO RESPECTIVE COOLER EXISTING LIGHTING CIRCUIT. REFER TO DETAIL # 5 ON DWG E-004.

END OF ADDENDUM

Margaret F. Larkin
Acting Executive Director

SECTION 262713

DIGITAL METERING

PART 1 GENERAL

1.01 REFERENCES

A. IEEE, NEMA and ANSI.

1.02 SUBMITTALS

A. Waiver of Submittals: The "Waiver of Certain Submittal Requirements" in Section 013300 does not apply to this Section.

B. Submittals Package: Submit the shop drawings, product data, and quality control submittals specified below at the same time as a package.

C. Shop Drawings:
1. Bill of materials.
2. Composite wiring and/or schematic diagrams of the metering equipment as proposed to be installed (standard diagrams will not be acceptable).

D. Product Data:
1. Catalog sheets, specifications and installation instructions.
2. Name, address and telephone number of nearest fully equipped service organization.

E. Quality Control Submittals:
1. Company Field Advisor Data: Include:
   a. Name, business address and telephone number of Company Field Advisor secured for the required services.
   b. Certified statement from the Company listing the qualifications of the Company Field Advisor.
   c. Services and each product for which authorization is given by the Company, listed specifically for this project.

F. Contract Closeout Submittals:
1. Test Report: Final test report.
2. Certificate: Affidavit, signed by the Company Field Advisor and notarized, certifying that the metering meets the contract requirements and is operating properly.
3. Operation and Maintenance Data: Deliver 2 copies, covering the installed products, to the Director's Representative.

1.03 QUALITY ASSURANCE

A. List of Completed Installations: If brand names other than those specified are proposed for use, furnish the name, address, and telephone number of at least 5 comparable installations which can prove the proposed products have operated satisfactorily for 2 years.

B. Company Field Advisor: Secure the services of a Company Field Advisor for a minimum of 20 working hours for the following:
   1. Render advice regarding installation of the metering equipment.
   2. Adjusting and testing the metering equipment.
   3. Witness final test and then certify with an affidavit that the metering equipment is installed in accordance with the contract documents and is operating properly.
   4. Train facility personnel on the operation and maintenance of the metering equipment (minimum of 2 one hour sessions).
   5. Explain available service programs to facility supervisory personnel for their consideration.

C. Service Availability: A fully equipped service organization capable of guaranteeing response time within 48 hours to service calls shall be available to service the completed Work.

PART 2 PRODUCTS

2.01 ELECTRONIC POWER METER

A. Provide panel mounted meter to fit in the existing switchboard and to use existing 1600:5 CTs.

B. Basis of design: Eaton's: Power Xpert Meter 2250.

C. Acceptable Manufacturers: Electro Industries: Shark 200-V2, General Electric Co: PQM II (with I/O), Schneider Electric: ION 7330, Siemens/ITE: 9300.

   a. The listing of specific manufacturers above does not imply acceptance of their products that do not meet the specified ratings, features and functions. Manufacturers listed above are not relieved from meeting these specifications in their entirety. Products in compliance with the specification and manufactured by others not named will be considered only if pre-approved by the Engineer ten (10) days prior to bid date.

D. Multifunction power and energy meter (microprocessor based).
   1. Designed for use on 3-phase 4-wire systems. The Meter shall support 3-Element Wye, 2.5 Element Wye, 2 Element Delta, 4 wire Delta systems.
   2. 120/208V or universal voltage input
   3. The meter shall include a three-line, bright, min 0.5" LED display
      a. The meter shall fit in ANSI C39.1 Round cut-outs.
      b. The meter must display a % of Load Bar on the front panel to provide an analog feel. The % Load Bar shall have not less than 10 segments.
   4. True RMS 3-phase measurement of the following:
      a. Line and phase voltages.
      b. Phase and neutral currents.
      c. Real, Reactive, and Apparent total Power.
      d. Power demand.

e. Power factor .
f. Frequency

5. The meter shall provide user configured fixed window or sliding window demand. This shall allow the user to set up the particular utility demand profile.
   a. Readings for kW, kVAR, kVA and PF shall be calculated using utility demand features.
   b. All other parameters shall offer max and min capability over the user selectable averaging period.
   c. Voltage shall provide an instantaneous max and min reading displaying the highest surge and lowest sag seen by the meter

6. The meter shall provide sampling at 400+ samples per cycle on all channels measured readings simultaneously..
7. The meter shall provide Volts, Amps, kW, kVAR, PF, kVA, Frequency, kWh, kVAh, kVARh ,1 KYZ pulse output, and 256 Megabytes for data logging.
8. The meter shall record kWh and kVAh with data stored in 15-minute intervals for two months. The meter shall have three historical logs for trending profiles. Each log shall be capable of being programmed with up to 64 parameters. The user shall have the ability to allocate memory between the three historical logs in order to increase or decrease the memory allotted to each of the logs.
9. UL listed.
10. The meter shall have an accuracy of +/- 0.1% or better for Volts and Amps, and 0.2% for power and energy functions. The meter shall meet the accuracy requirements of IEC62053-22 (Class 0.2%) and ANSI C12.20 (Class 0.2%). The meter shall have a Frequency measurement accuracy of not less than 0.001 Hz.

11. The meter shall have the following additional ratings and features:

    a. Fault Current Withstand shall be 100 Amps for 10 seconds, 300 Amps for 3 seconds, and 500 Amps for 1 second.

    b. Meter shall be programmable for current to any CT ratio. The use of DIP switches for selecting fixed ratios shall not be acceptable

    c. Meter shall have a maximum burden of 0.005VA per phase, at the maximum at 11 Amperes.

    d. Meter to accept a pass through wire gauge dimension of 0.177” / 4.5 mm.

    e. The meter shall accept current inputs of class 10: (0 to 10A), 5 Amp Nominal Secondary.

12. Communication capabilities: the meter shall include 2 independent communication ports on the back with multiple protocols, including the following minimum capability:
    a. Serial Communication Format:
       i. One port shall provide RS485 communication speaking

Modbus ASCII, Modbus RTU, or DNP 3.0 protocol through back plate.

b. Network Communication Format:

i. Connection Type: RJ-45 10/100 Base-T Ethernet Network port

ii. Ethernet card shall allow auto transmit/receive detection for straight or null RJ45 cables.

ii. Protocols: Ethernet TCP/IP, Modbus TCP, BACnet/IP, SNMP v1 & v3 (Network), SMTP (email), HTTP, HTTPS, Atom Feed

c. The meter shall provide an optical IrDA port (through faceplate), which shall allow the unit to be set up and programmed using a laptop without need for a communication cable.

d. The meter shall be able to be configured and viewed from the on-board web server without the need for external software

13. The meter shall support a power supply of 90 to 265 Volts AC and 100 to 370 Volts DC. Universal AC/DC Supply shall be available and shall have a burden of less than 11VA.

14. Operating temperature shall be (-20 to +70) degrees C.

15. The meter shall have an extended 4-year warranty.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install the Work of this Section in accordance with the Company's printed instructions.

3.02 FIELD QUALITY CONTROL

A. Preliminary Test:

1. Preparation: Have the Company Field Advisor adjust the completed metering equipment and then operate it long enough to assure that it is performing properly.
2. Run a preliminary test for the purpose of:
   a. Determining whether the metering is in a suitable condition to conduct the acceptance test.
   b. Checking and adjusting equipment.
   c. Training facility personnel.

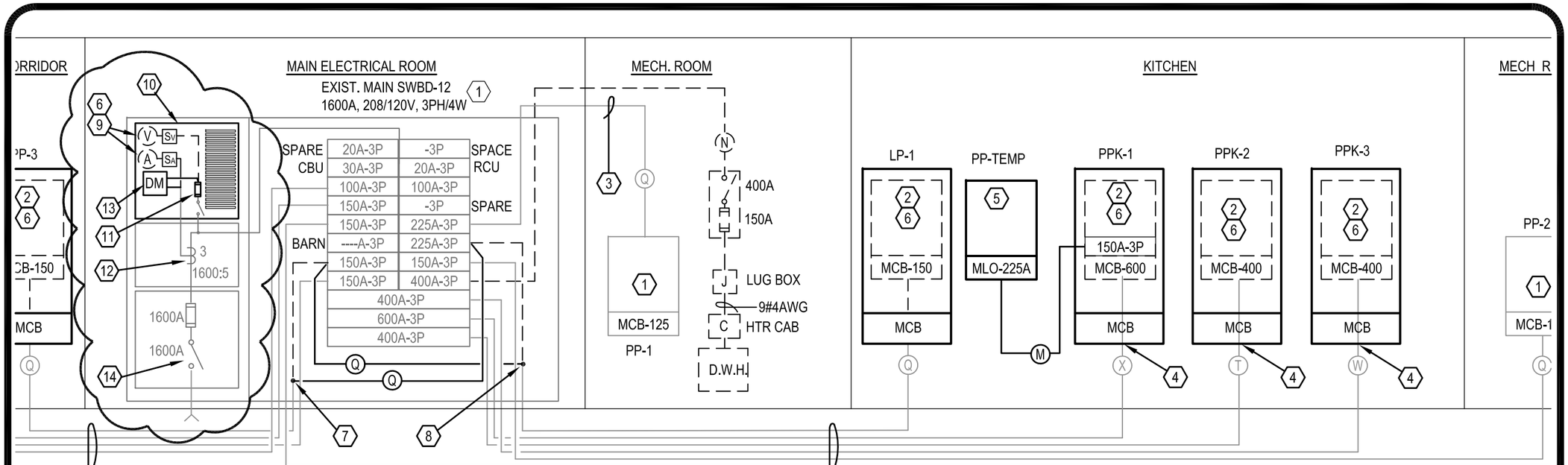
B. System Acceptance Test:

1. Preparation: Notify the Director's Representative at least 3 working days prior to the test so arrangements can be made to have a Facility Representative witness the test.
2. Make the following test:
   a. Individually test each meter installation and demonstrate to the witnesses that the meters are operating properly.
3. Supply all equipment necessary for system adjustment and testing.

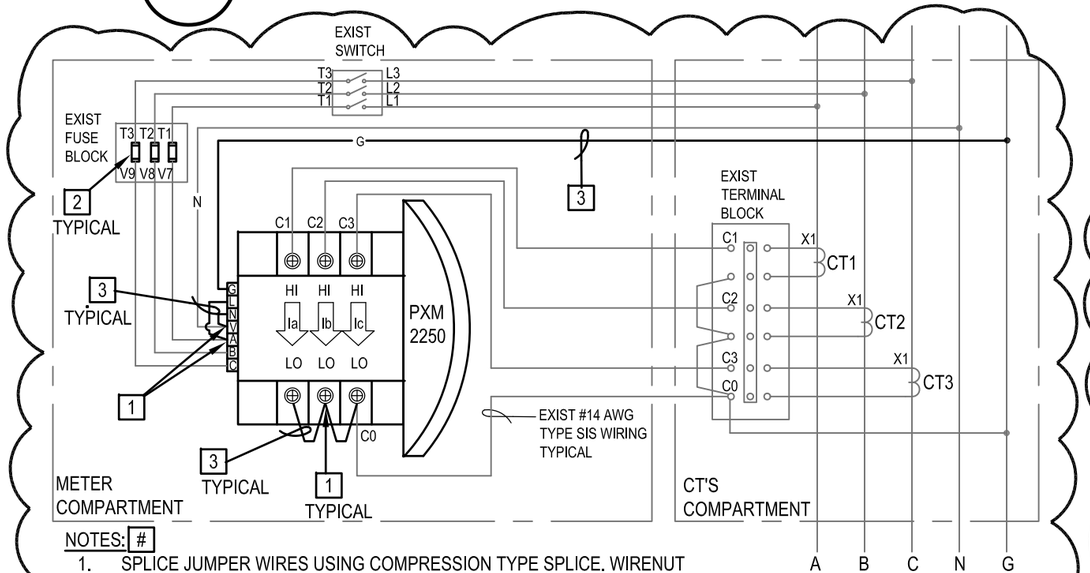
4. Submit written report of test results signed by Company Field Advisor and the Director's Representative.

END OF SECTION

RKD:rkd



7 PARTIAL POWER RISER DIAGRAM



NOTES: #

1. SPLICE JUMPER WIRES USING COMPRESSION TYPE SPLICE. WIRENUT CONNECTION IS NOT ACCEPTABLE.
2. REPLACE LIMITRON CLASS C KTK-R15 FUSES IN EXISTING FUSEHOLDER PER MANUFACTURER'S RECOMMENDATIONS.
3. PROVIDE ALL WIRING #14 AWG SIS TYPE.

8 DIGITAL METER CONNECTION DIAGRAM

NOTES: X

1. EXISTING EQUIPMENT TO REMAIN.
2. REPLACE EXISTING PANELBOARD. COORDINATE PANEL SHUTDOWN WITH DIRECTOR'S REPRESENTATIVE. REFER TO PANEL SCHEDULE AND NOTES ON DWG E-002.
3. EXISTING FEEDERS TO REMAIN.
4. REWORK EXISTING FEEDER TO MATCH PANELBOARD MAIN BREAKER LUGS.
5. PROVIDE TEMPORARY PANEL PP-TEMP AND CONNECT TO SPARE CIRCUIT BREAKER IN EXISTING PANEL PPK-1
6. PERFORM WORK ON PANEL AFTER NORMAL WORK HOURS WHEN KITCHEN IS NOT IN USE.
7. REWORK, EXTEND AND RECONNECT PP-3 FEEDER TO 225A BREAKER.
8. REWORK, EXTEND AND RECONNECT LP-1 FEEDER TO 150A BREAKER.
9. REMOVE EXISTING ANALOG VOLTMETER, AMMETER AND ASSOCIATED SELECTOR SWITCHES.
10. REMOVE EXISTING METER COMPARTMENT FRONT PANEL. PROVIDE METER COMPARTMENT FRONT PANEL WITH OPENING FOR DIGITAL METER, STANDARD GRAY FINISH, VENTILATION LOUVER AND HINGES TO MATCH REPLACED FRONT COVER.
11. REPLACE EXISTING VOLTMETER FUSES IN FUSEHOLDER WITH FUSE SIZE PER DIGITAL METER MANUFACTURERS REQUIREMENTS.
12. SHORT THE CURRENT TRANSFORMERS SECONDARY WINDING CIRCUITS ON SHORTING BLOCKS. CAUTION: CURRENT TRANSFORMER SECONDARY CIRCUIT MUST NEVER BE OPEN WHEN PRIMARY CURRENT IS FLOWING. UPON COMPLETION OF METER REPLACEMENT UN-SHORT SECONDARY WINDINGS OF CURRENT TRANSFORMERS.
13. PROVIDE DIGITAL MULTIFUNCTION POWER METER AS MANUFACTURED BY EATON, MODEL: POWER XPERT METER PXM2250. REFER TO SPECIFICATIONS SECTION: DIGITAL METERING. VERIFY BURDEN RATING OF EXISTING CT'S (B-#) FOR COMPATIBILITY WITH DIGITAL METER. CONNECT DIGITAL METER TO EXISTING METERING INSTRUMENTS. REFER TO DIGITAL METER CONNECTION DIAGRAM ON DWG E-001 DETAIL #8.
14. DEENERGIZE SWITCHBOARD PRIOR TO METER REPLACEMENT WORK. COORDINATE SWITCHBOARD SHUTDOWN WITH DIRECTOR'S REPRESENTATIVE

2 SYMBOLS

Sv ANALOG VOLTMETER SELECTOR SWITCH

SA ANALOG AMMETER SELECTOR SWITCH

REF. DWG E-001

17x11 PLOT SHEET

NYS OFFICE OF GENERAL SERVICES

Serving New York

ANDREW M. CUOMO
Governor

ROANN M. DESTITO
Commissioner

CONSULTANTS

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ELECTRICAL

REHABILITATE KITCHEN

BUILDING NO. 12

LAKEVIEW CF
930 LAKE AVENUE
BROCTON, NEW YORK

DEPPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION

MARK	DATE	DESCRIPTION
	04/28/14	ADDENDUM NO. 1

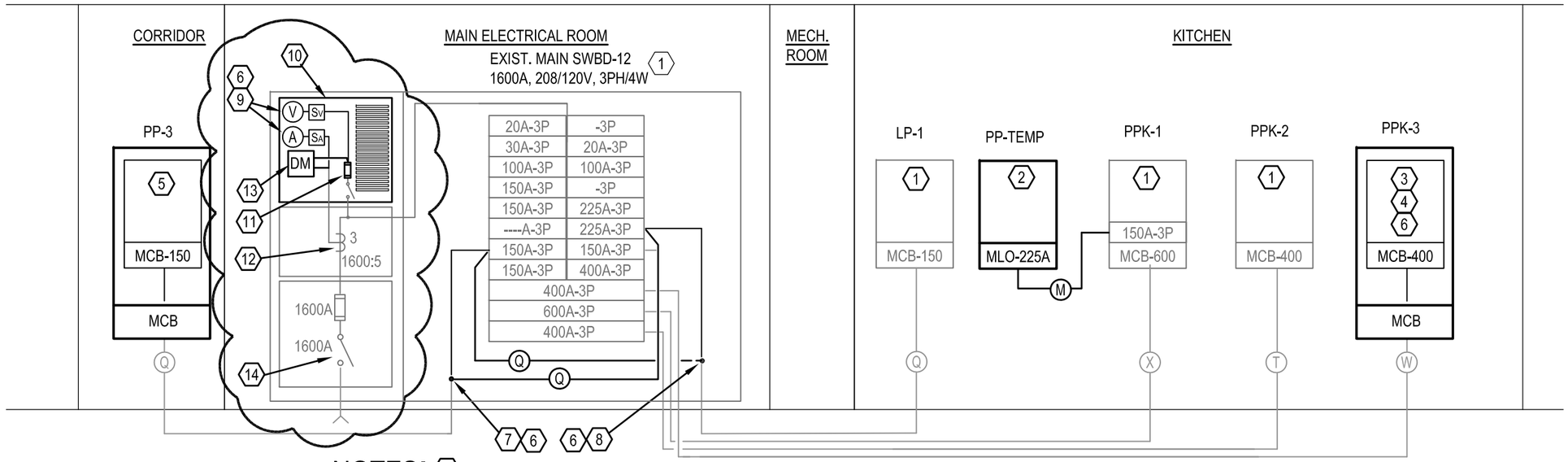
PROJECT NUMBER:	44674-E
DESIGNED BY:	RKD
DRAWN BY:	RKD
CHECKED BY:	
APPROVED BY:	JFD

SHEET TITLE

DIGITAL METERING

D-001

SHEET OF



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1 PARTIAL POWER RISER DIAGRAM-PHASE-1

REF. DWG E–004

17x11 PLOT SHEET

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PARTIAL POWER RISER DIAGRAM PHASE–1

D–002

SHEET OF