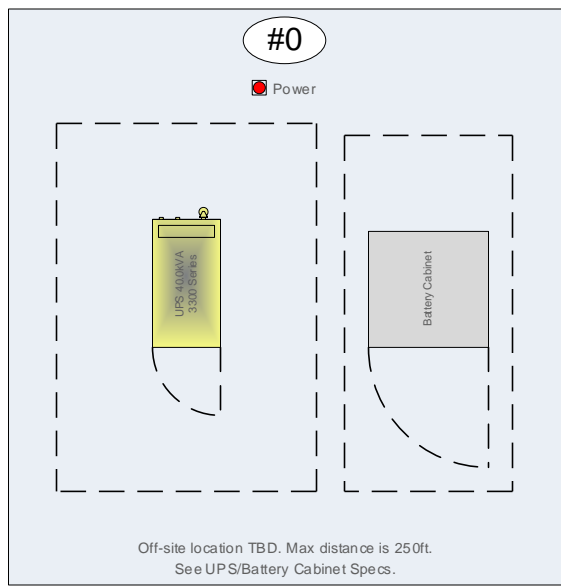
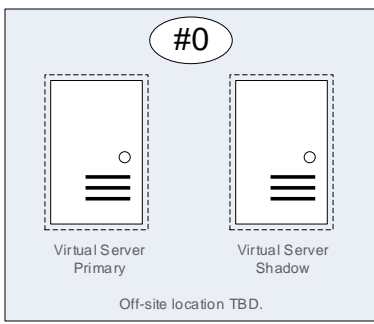
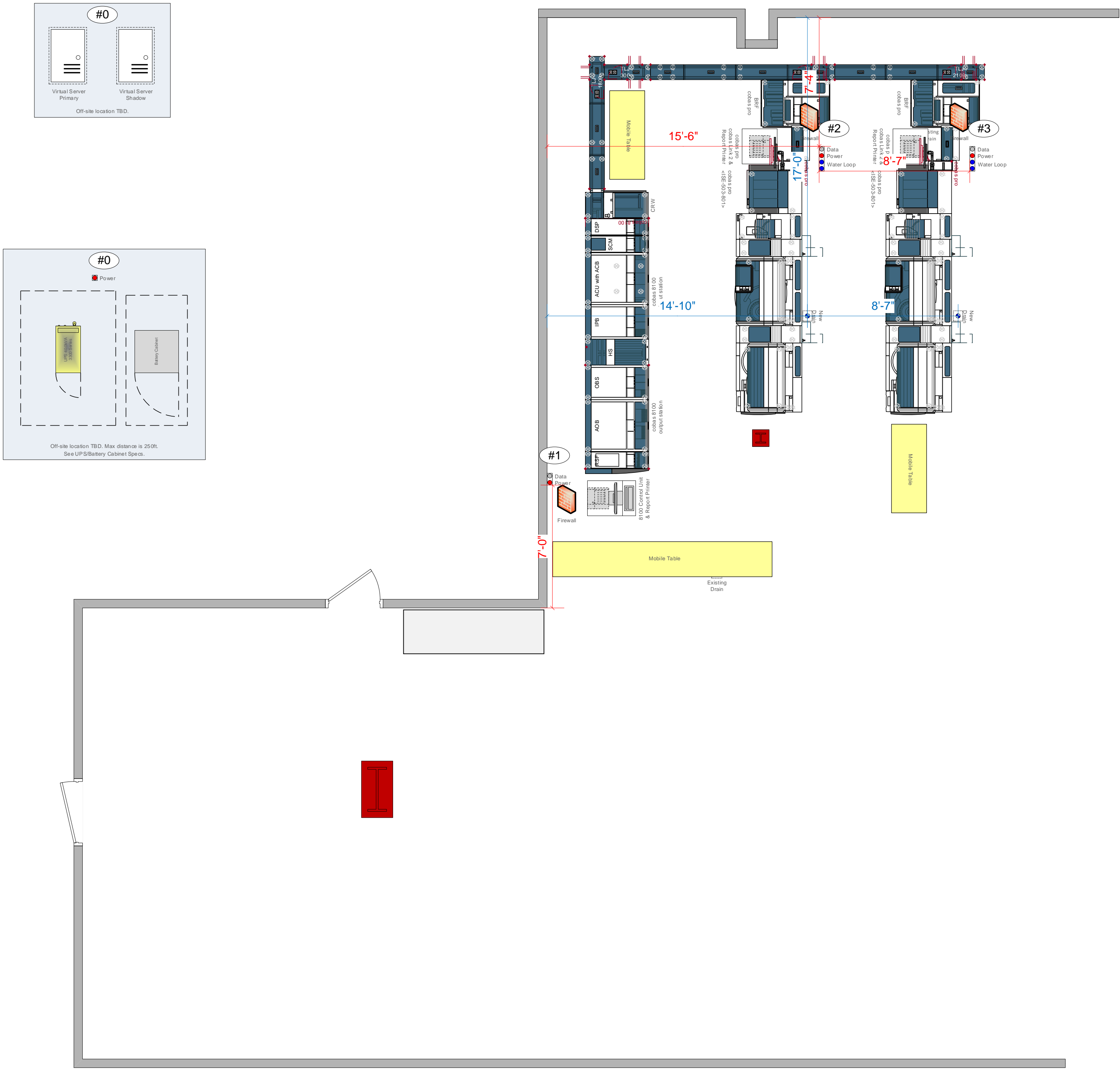


UTILITIES – CONSTRUCTION PLAN



- GENERAL NOTES:**
- 1.SIZE AND CONFIGURATION OF SYMBOLS SHOWN ON THE DRAWING ARE USED TO REPRESENT THE EXISTENCE OF, OR NEED FOR ADDITIONAL UTILITIES.
  - 2.CUSTOMER IS RESPONSIBLE FOR MEETING ALL LOCAL CODES.
  - 3.CUSTOMER IS RESPONSIBLE FOR CONTACTING EACH 3<sup>RD</sup> PARTY VENDOR TO OBTAIN TECHNICAL EQUIPMENT SPECIFICATIONS RELATED TO INSTALLATION OF INSTRUMENTS AND REQUIRED UTILITIES. ROCHE WILL PROVIDE TECHNICAL SPECIFICATIONS AND GENERAL LOCATIONS FOR UTILITIES OF ROCHE EQUIPMENT ONLY. CONNECTION TO 3<sup>RD</sup> PARTY SYSTEMS TO BE VERIFIED BY CUSTOMER.
  - 4.THIS DRAWING IS SUBJECT TO CHANGE.

PROJECT HISTORY:	
DATE:	DESCRIPTION:
10/25/22	DIM TOOL VERIFIED
10/28/22	ADDED IT GRID
11/02/22	LAYOUT/SITE CHANGE; LDA REMEDIATION

KEY LEGEND	
DATA POWER WATER LOOP W/SHUT OFF AIR CCM PSU	NEW FLOOR DRAIN EXISTING FLOOR DRAIN UTILITY LOCATION
x'-x" REFERENCE	x'-x" WATER/DRAIN x'-x" POWER

**ROCHE DIAGNOSTICS**  
9115 HAGUE ROAD  
INDIANAPOLIS, IN 46256

<b>SWC:</b>	LAUREL SPRAGUE
<b>LDA:</b>	FREDERICK McCARROLL
VAMC_FTHARRISON_CONSTRUCTIONPLAN110222FM-1	

VAMC FORT  
HARRISON  
HELENA, MT



EQUIPMENT SPECIFICATIONS

TOTAL SYSTEM HEAT LOAD  
BTU/HR (VALUES ROUNDED)

82,083

CUSTOMER'S POWER RESPONSIBILITY

AT UTILITY LOCATION	ROCHE SUPPLIED EQUIPMENT	POWERED FROM	NUMBER OF DEVICE POWER CABLES	PRIMARY POWER, VOLTS	POWER PROTECTION, AMPS	PHASE	RECEPTACLE TYPE	DEVICE'S UPS RATING, KVA	HEAT DISSIPATION, BTU/HR
0	UPS 40.0 kVA WITH BATTERY CABINET	FACILITY	0	208	150	3 PHASE 4 CONDUCTOR WITH GROUND	HARDWIRED FROM CUSTOMER'S FACILITIES DEPARTMENT	40.0	12,270
1	COBAS 8100 SYSTEM	UPS 40.0 kVA MAIN LUG PANEL (MLP)	5	208	30	SINGLE PHASE	NEMA L6-30R	5.2	24,064
1	REPORT PRINTER (from COBAS 8100)	FACILITY	1	120	20	SINGLE PHASE	NEMA 5-20R	0.0	2,048
1	COBAS 8100 CONTROL UNIT (PC & MONITOR)	UPS 40.0 kVA MAIN LUG PANEL (MLP)	2	120	20	SINGLE PHASE	NEMA 5-20R	0.8	1,550
1	FORTIGATE FIREWALL	UPS 40.0 kVA MAIN LUG PANEL (MLP)	1	120	20	SINGLE PHASE	NEMA 5-20R	0.0	61
2	REPORT PRINTER (from COBAS PRO)	FACILITY	1	120	20	SINGLE PHASE	NEMA 5-20R	0.0	1,877
2	COBAS_PRO <ISE/503/801>	UPS 40.0 kVA MAIN LUG PANEL (MLP)	1	208	50	SINGLE PHASE	HUBBELL 3762C (CORD) OR 3771 (WALL MOUNT)	10.0	19,107
2	COBAS LINK 2	UPS 40.0 kVA MAIN LUG PANEL (MLP)	1	120	20	SINGLE PHASE	NEMA 5-20R	0.0	0
2	FORTIGATE FIREWALL	UPS 40.0 kVA MAIN LUG PANEL (MLP)	1	120	20	SINGLE PHASE	NEMA 5-20R	0.0	61
3	REPORT PRINTER (from COBAS PRO)	FACILITY	1	120	20	SINGLE PHASE	NEMA 5-20R	0.0	1,877
3	COBAS_PRO <ISE/503/801>	UPS 40.0 kVA MAIN LUG PANEL (MLP)	1	208	50	SINGLE PHASE	HUBBELL 3762C (CORD) OR 3771 (WALL MOUNT)	10.0	19,107
3	COBAS LINK 2	UPS 40.0 kVA MAIN LUG PANEL (MLP)	1	120	20	SINGLE PHASE	NEMA 5-20R	0.0	0
3	FORTIGATE FIREWALL	UPS 40.0 kVA MAIN LUG PANEL (MLP)	1	120	20	SINGLE PHASE	NEMA 5-20R	0.0	61
									82,083

CUSTOMER'S DATA RESPONSIBILITY

AT UTILITY LOCATION	CUSTOMER SUPPLIED DATA CONNECTION	CONNECTION TYPE
1	DATA UTILITY	SEE CUSTOMER PROVIDED INTERFACE CONNECTIONS
2	DATA UTILITY	SEE CUSTOMER PROVIDED INTERFACE CONNECTIONS
3	DATA UTILITY	SEE CUSTOMER PROVIDED INTERFACE CONNECTIONS

CUSTOMER'S WATER/WASTE RESPONSIBILITY

AT UTILITY LOCATION	CUSTOMER SUPPLIED WATER CONNECTION	CONNECTION SIZE	DEIONIZED WATER SUPPLY RATE, LITERS/HR	MINIMUM FLOOR DRAIN INSIDE DIAMETER, INCHES
2	WATER UTILITY	5/8" BARBED HOSE FITTING W 1/2" ID	64	2
3	WATER UTILITY	5/8" BARBED HOSE FITTING W 1/2" ID	64	2
NOTE: TYPE 1 CLRW, UTILIZING A CONTINUOUS RECIRCULATION /POLISHING LOOP, WITH A MINIMAL VELOCITY OF 5 FT/SEC. AND A 0.2 MICRON OUTPUT FILTER. PLEASE REFER TO THE SPECIFIC INSTALLATION SITE REQUIREMENTS DOCUMENTATION.				


GENERAL NOTES:


- 1.SIZE AND CONFIGURATION OF SYMBOLS SHOWN ON THE DRAWING ARE USED TO REPRESENT THE EXISTENCE OF, OR NEED FOR ADDITIONAL UTILITIES.
- 2.CUSTOMER IS RESPONSIBLE FOR MEETING ALL LOCAL CODES.
- 3.CUSTOMER IS RESPONSIBLE FOR CONTACTING EACH 3<sup>RD</sup> PARTY VENDOR TO OBTAIN TECHNICAL EQUIPMENT SPECIFICATIONS RELATED TO INSTALLATION OF INSTRUMENTS AND REQUIRED UTILITIES. ROCHE WILL PROVIDE TECHNICAL SPECIFICATIONS AND GENERAL LOCATIONS FOR UTILITIES OF ROCHE EQUIPMENT ONLY. CONNECTION TO 3<sup>RD</sup> PARTY SYSTEMS TO BE VERIFIED BY CUSTOMER.
- 4.THIS DRAWING IS SUBJECT TO CHANGE.


PROJECT HISTORY:


DATE:	DESCRIPTION:
10/25/22	DIM TOOL VERIFIED
10/28/22	ADDED IT GRID
11/02/22	LAYOUT/SITE CHANGE; LDA REMEDIATION


KEY LEGEND


 DATA


 POWER


 WATER LOOP


 W/SHUT OFF


 AIR


 CCM PSU


 NEW FLOOR DRAIN


 EXISTING FLOOR DRAIN

 UTILITY LOCATION

 x mm.

 x'-x"

 x'-x"

 x'-x"

INSTALL

REFERENCE

WATER/DRAIN

POWER

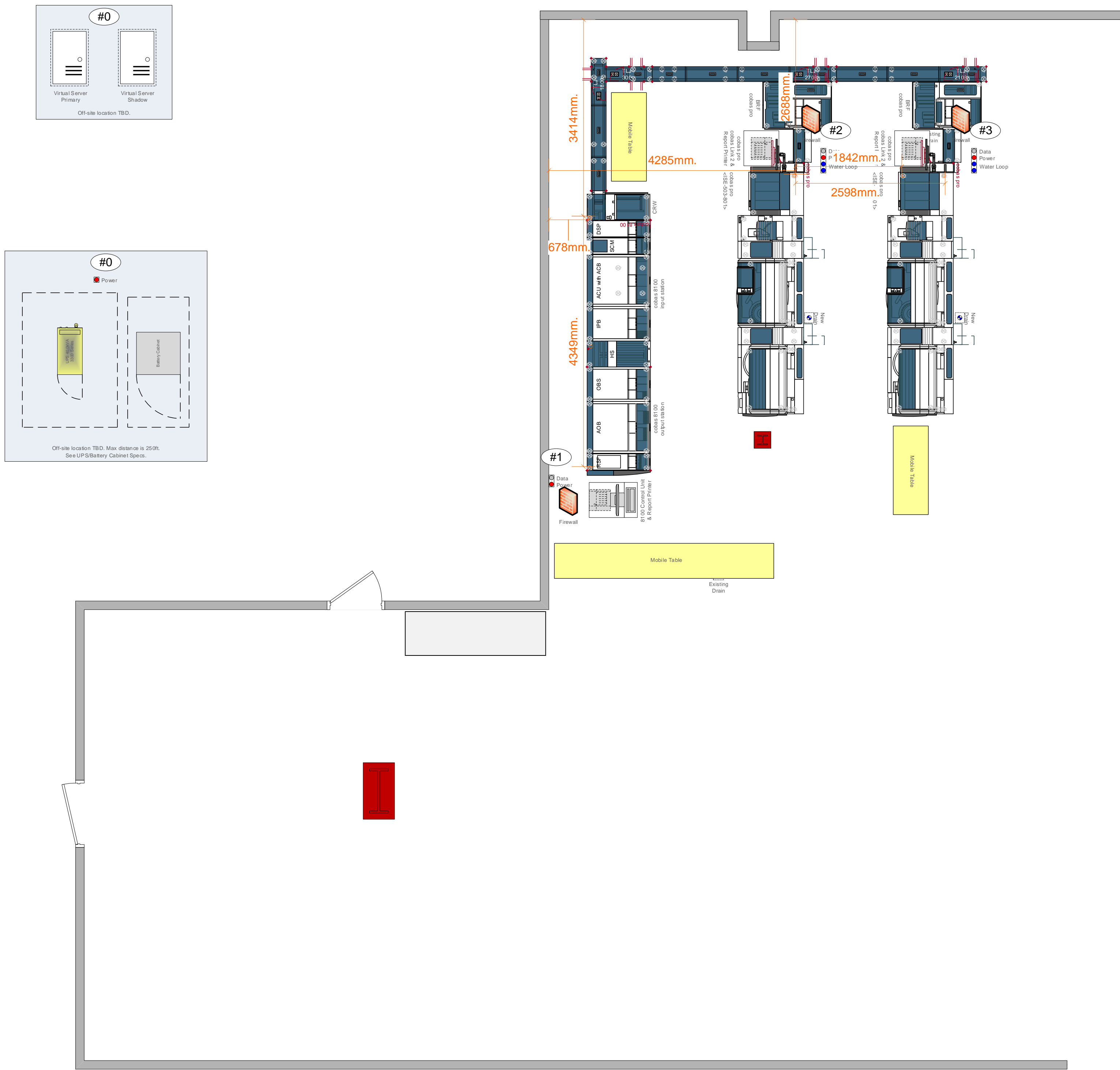


ROCHE DIAGNOSTICS  
9115 HAGUE ROAD  
INDIANAPOLIS, IN 46256

SWC:	LAUREL SPRAGUE
LDA:	FREDERICK McCARROLL
VAMC_FTHARRISON_CONSTRUCTIONPLAN110222FM-1	
VAMC FORT HARRISON HELENA, MT	
NOT TO SCALE	SHEET 2 OF 4



INSTALL – CONSTRUCTION PLAN



- GENERAL NOTES:**
- 1.SIZE AND CONFIGURATION OF SYMBOLS SHOWN ON THE DRAWING ARE USED TO REPRESENT THE EXISTENCE OF, OR NEED FOR ADDITIONAL UTILITIES.
  - 2.CUSTOMER IS RESPONSIBLE FOR MEETING ALL LOCAL CODES.
  - 3.CUSTOMER IS RESPONSIBLE FOR CONTACTING EACH 3<sup>RD</sup> PARTY VENDOR TO OBTAIN TECHNICAL EQUIPMENT SPECIFICATIONS RELATED TO INSTALLATION OF INSTRUMENTS AND REQUIRED UTILITIES. ROCHE WILL PROVIDE TECHNICAL SPECIFICATIONS AND GENERAL LOCATIONS FOR UTILITIES OF ROCHE EQUIPMENT ONLY. CONNECTION TO 3<sup>RD</sup> PARTY SYSTEMS TO BE VERIFIED BY CUSTOMER.
  - 4.THIS DRAWING IS SUBJECT TO CHANGE.

PROJECT HISTORY:	
DATE:	DESCRIPTION:
10/25/22	DIM TOOL VERIFIED
10/28/22	ADDED IT GRID
11/02/22	LAYOUT/SITE CHANGE; LDA REMEDIATION

KEY LEGEND	
DATA POWER WATER LOOP W/SHUT OFF AIR CCM PSU	NEW FLOOR DRAIN EXISTING FLOOR DRAIN UTILITY LOCATION
x mm. INSTALL x'-x" REFERENCE	x'-x" WATER/DRAIN x'-x" POWER

**ROCHE DIAGNOSTICS**  
9115 HAGUE ROAD  
INDIANAPOLIS, IN 46256

<b>SWC:</b>	LAUREL SPRAGUE
<b>LDA:</b>	FREDERICK McCARROLL

VAMC\_FTHARRISON\_CONSTRUCTIONPLAN110222FM-1

VAMC FORT  
HARRISON  
HELENA, MT

SCALE: ¼" = 1'-0"	SHEET 3 OF 4
-------------------	--------------

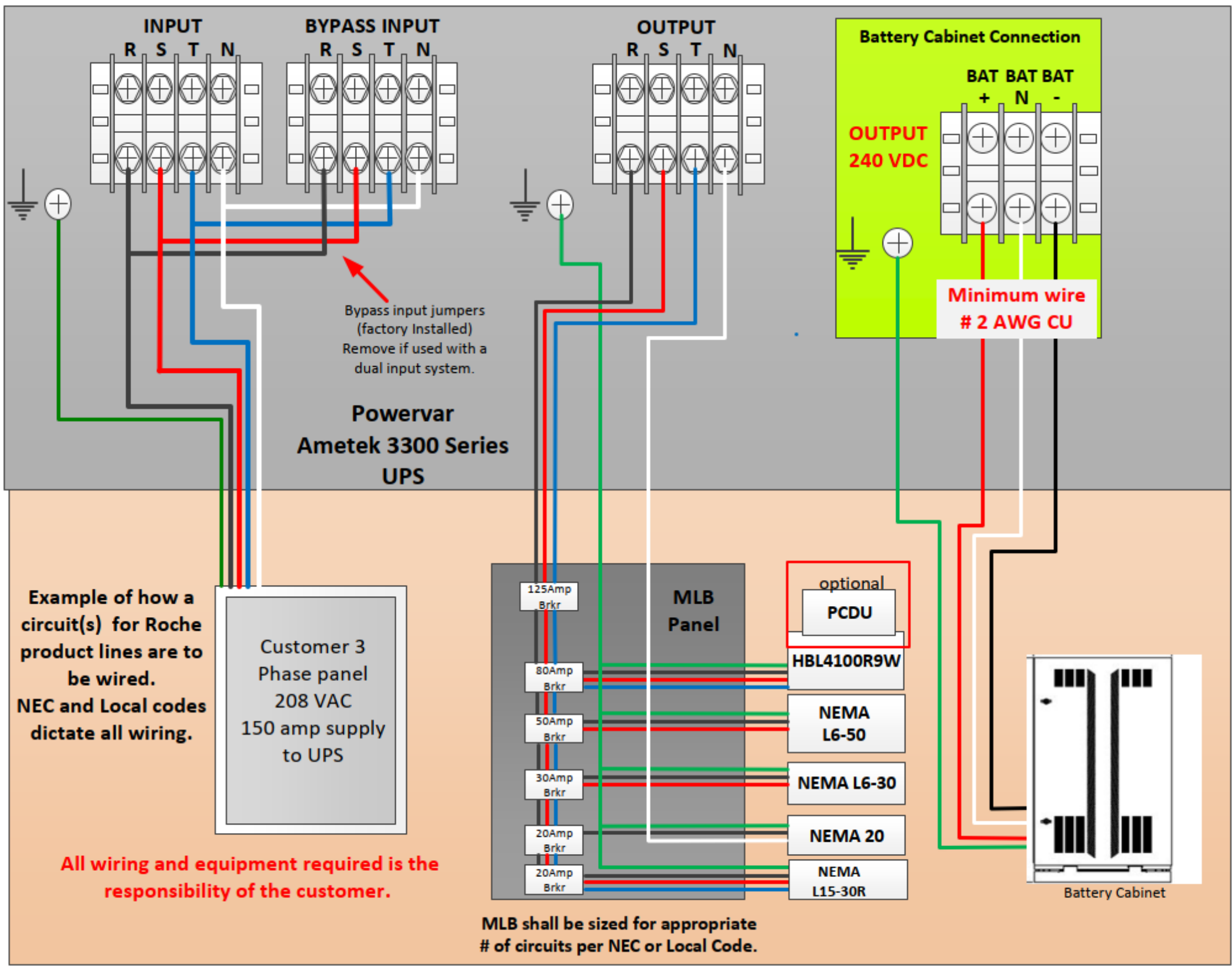
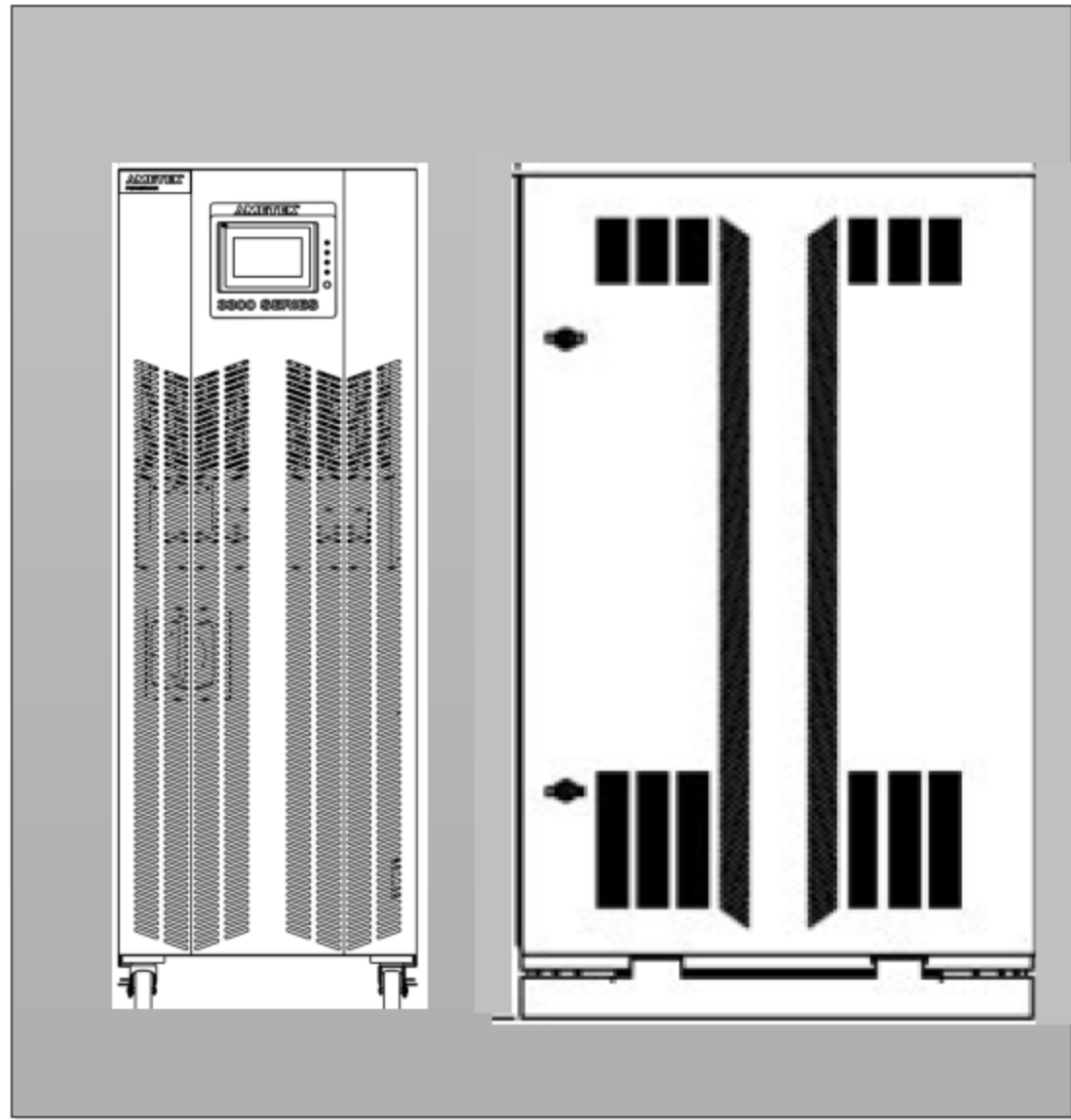


PowerVar 3300 Series UPS

SYSTEM DESCRIPTION:

- Qty (1) POWERVAR 3300 Series  
Uninterruptible Power Supply  
Rated for 40kVA/40kW
- 208-volt 3 phase 4 wire input, Single-Input
  - Input voltage range +15%, -15%
  - 208/120-volt 3-Phase 4 wire output
  - Low Input THD -1% @100% load, 2% @50% load
  - IGBT Inverter AND Rectifier
  - Static Transfer Bypass Switch
  - Internal Maintenance Bypass Switch
  - 94% Efficiency
  - Front and Top Access
  - Touch-Screen Display
  - Overload Capacity—300% for 140ms, 150% for 60s
  - Unit Output Rating 1:1 Power Factor
  - Parallelable units (X3)
  - Dual Input
  - Automatic input current walk in
  - Automatic UPS restart
  - Automatic retransfer
  - UL1778 approved
  - ISO9001 Quality Assurance Program
  - RS485 / 232 Communication Ports
  - SNMP Compatible
  - MODBUS Compatible

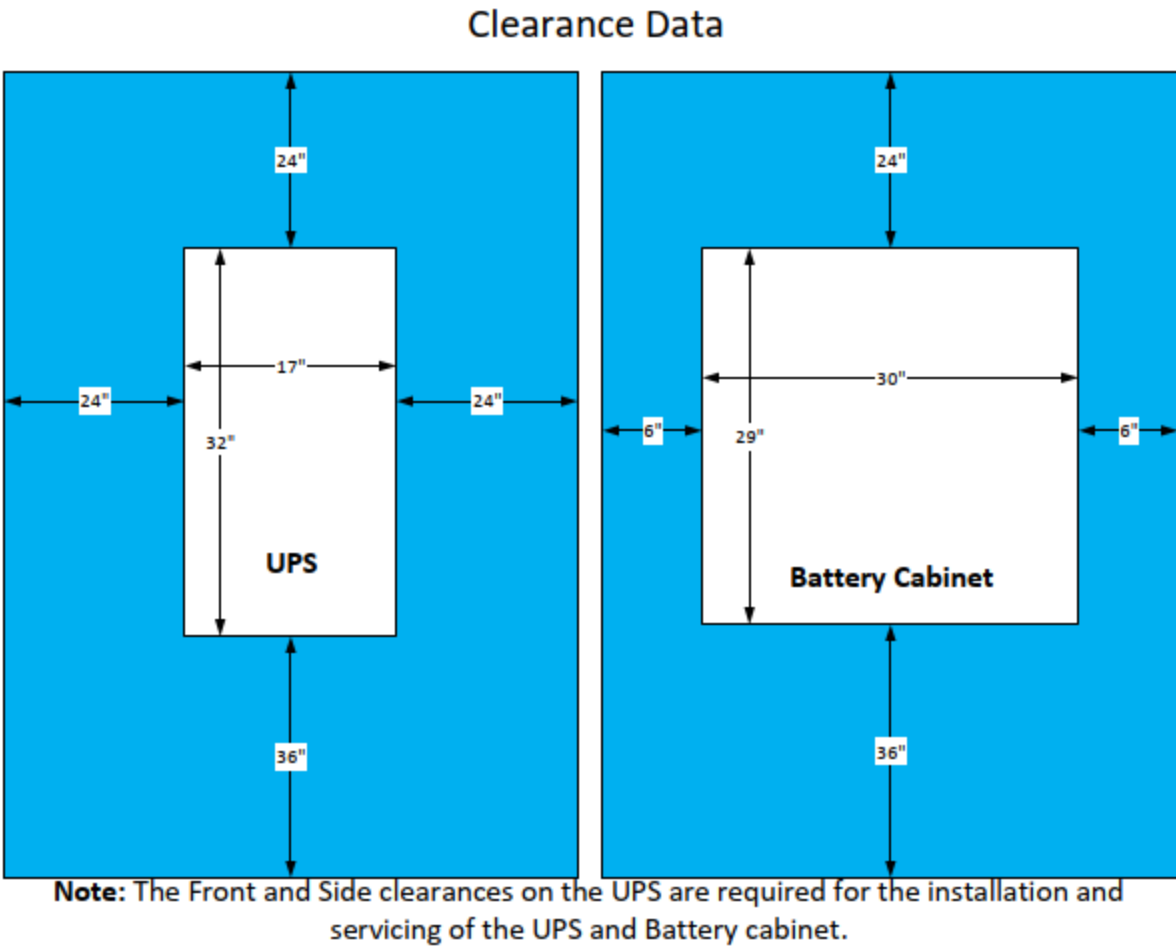
- Qty (1) Battery Cabinet  
For a 40kVA/40kW
- Utilizing 65AH batteries
  - Flame Retardant type
  - Model E6520
  - 8 minute battery backup at full load



Facility Information

System Heat Load = 12270 BTU/Hr  
(UPS and Batteries)

Weight    UPS = 353 Lb. / 161 kg  
Battery Cabinet = 1300 Lb. / 590 kg



A minimum of 6" spacing must be maintained between the UPS and battery cabinet as long as the UPS is connected with flexible conduit.

A required 24" spacing must be maintained between the UPS and battery cabinet if rigid conduit is used to install the UPS.

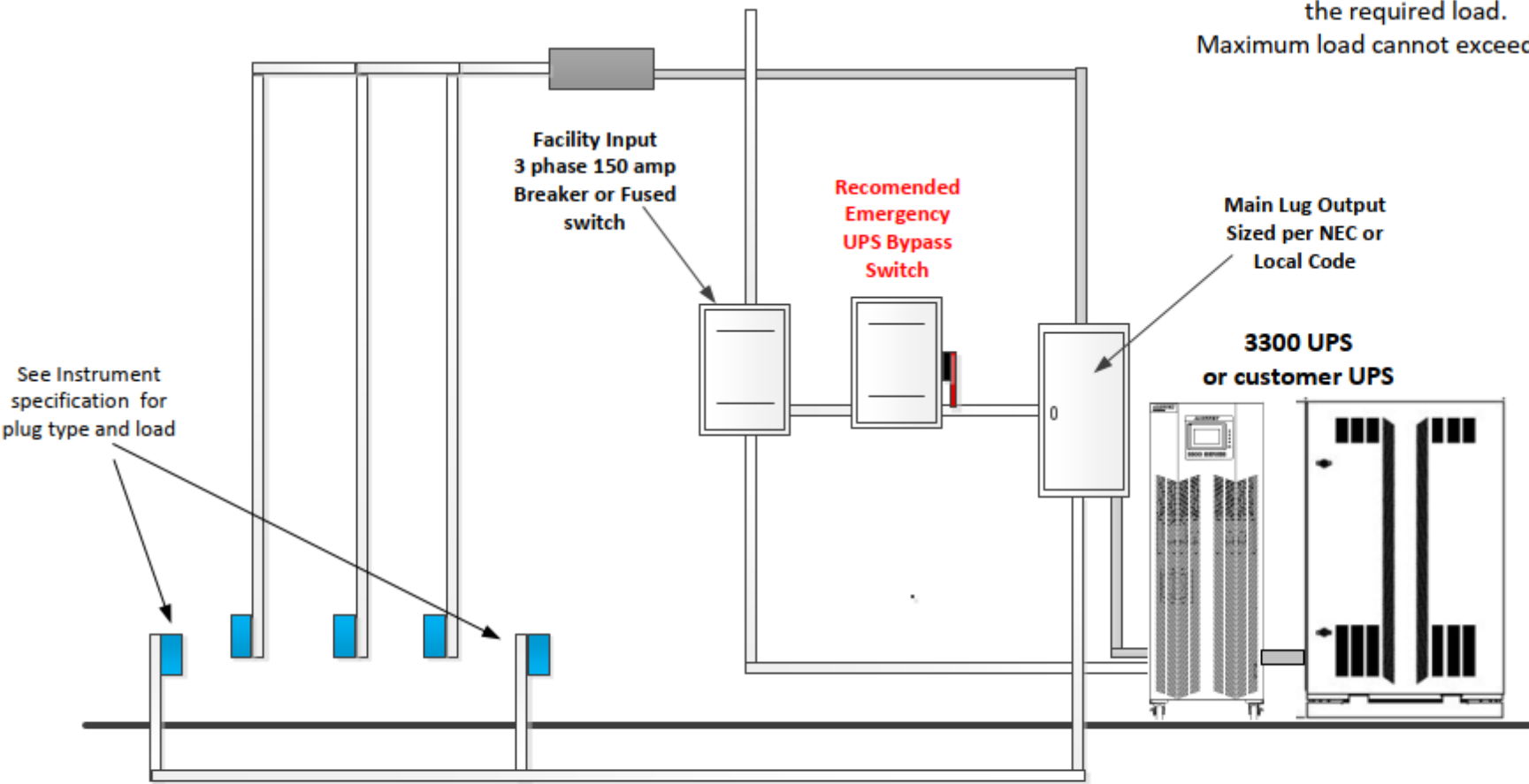
POWERVER 3300 SERIES UPS

CIRCUIT DIAGRAM

CLEARANCE SPECIFICATIONS

Recommended Installation

Circuits shall be directly wired from the Main Lug Output to the appropriate receptacle based on location and product being powered.



All Facility wiring and equipment to and from the UPS must be installed in accordance with NEC, Local codes and is the responsibility of the account and their electrical contractor.

RECOMMENDED INSTALLATION

Optional PCDU – Power Conditioning Distribution Unit

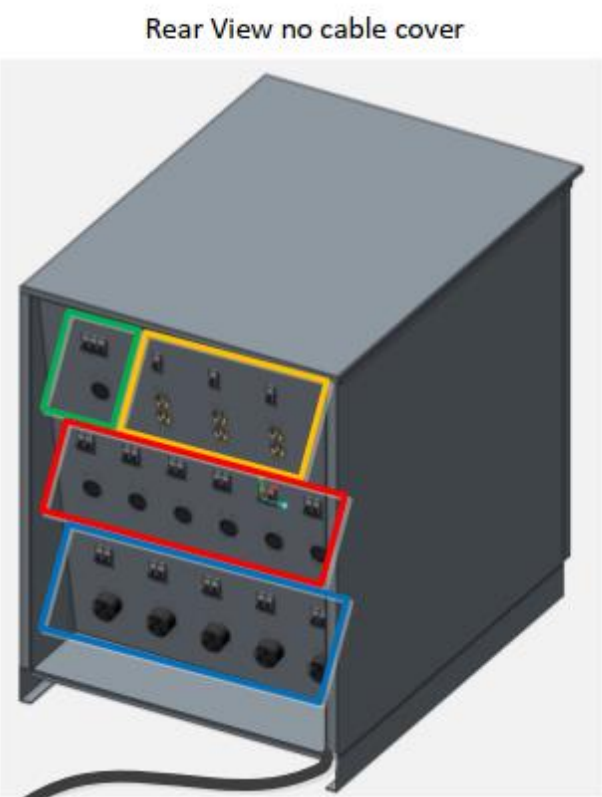
- BTU = 2561 BTU/hr
- Dimension: W x D X H 28.1" x 41.4" x 39.5"  
713 x 1052 x 1003 mm
- Weight: 762 lbs (346 KG)
- 1 – 3 phase 20 amp Receptacle HBL2720 (NEMA L15-30R) Plug= HBL2721
  - 3 – Duplex 20 amp receptacle 120 vac (NEMA 5-20R)
  - 6 – 30 amp Receptacle HBL2620 (NEMA L6-30R) Plug= HBL2621
  - 5 – 50 Amp Receptacle HBL3771 (non-NEMA) Plug= HBL3763C

The Input Cable length will be 8 ft. and it will be terminated with a HBL4100P9W

Customer may want to consider the FW60100 for installation with the HBL4100R9W



The Hubbell HBL4100R9W receptacle is provided by the customer.



A PCDU shall only be used if necessary.

Recommended: All circuits shall be directly wired from the Main Lug Output to the appropriate receptacle based on location and product being powered.

The PCDU is designed for the c8100 and c8000 product line.

NOT for use with CCM and cobas P product line.

OPTIONAL PCDU

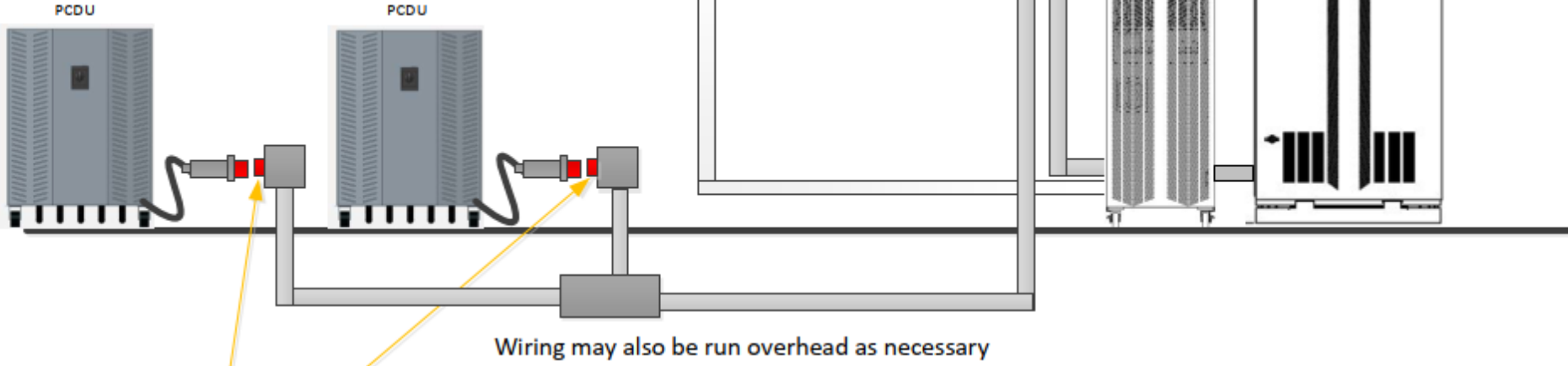
Optional PCDU

A PCDU shall only be used if necessary.

Recommended: All circuits shall be directly wired from the Main Lug Output to the appropriate receptacle based on location and product being powered.

The PCDU is designed for the c8100 and c8000 product line.

NOT for use with CCM and cobas P product line.



HBL4100R9W  
100 Amp Receptacle

All Facility wiring and equipment to and from the UPS must be installed in accordance with NEC, Local codes and is the responsibility of the account and their electrical contractor.

OPTIONAL PCDU INSTALLATION



ROCHE DIAGNOSTICS  
9115 HAGUE ROAD  
INDIANAPOLIS, IN 46256