

sPHENIX

Infrastructure – Power Distribution – MVTX Racks Power Requirements Meeting

Power Distribution System Sketches

5/11/20

PLAN VIEW - PRELIMINARY

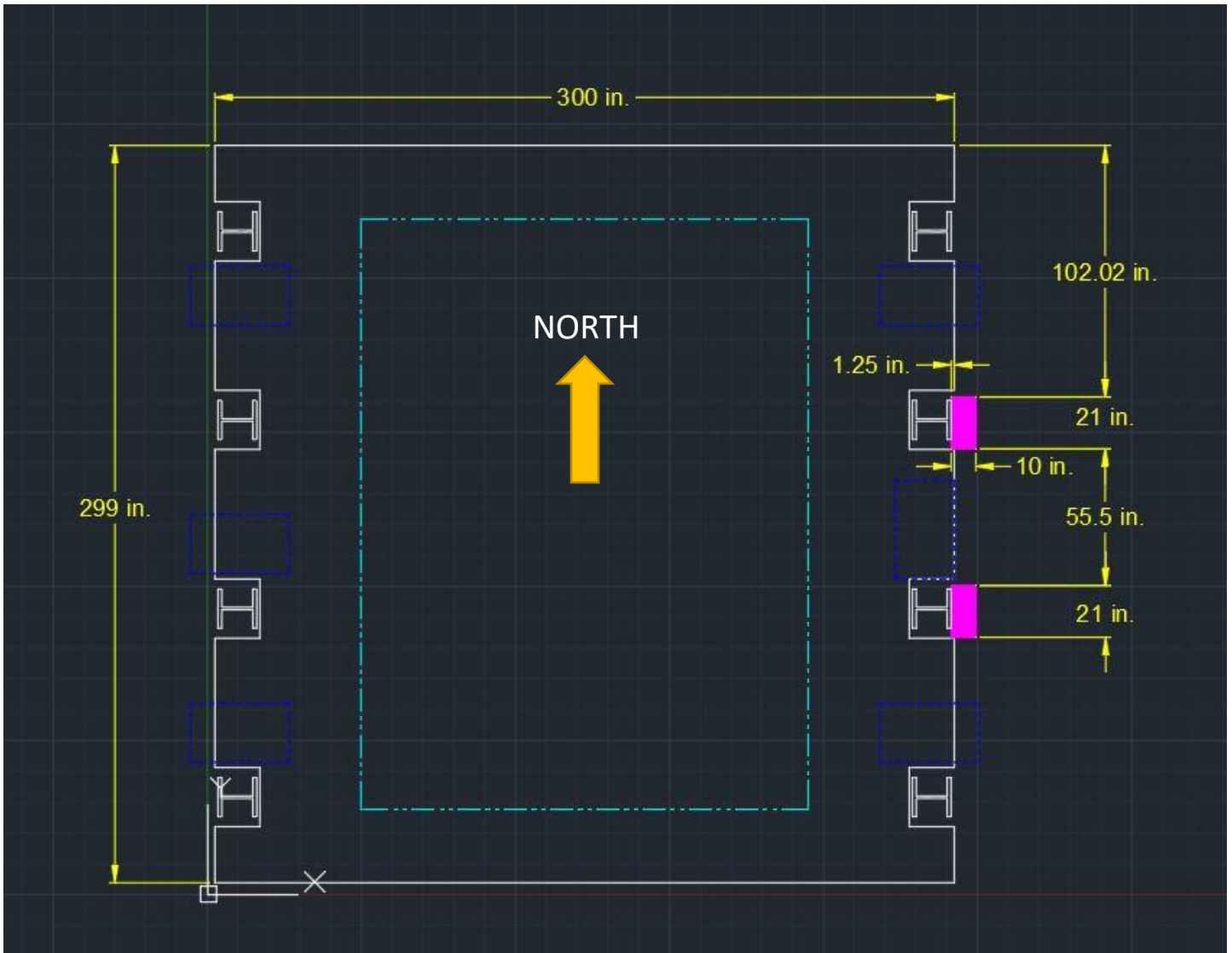


Figure 1: Bottom Platform.

PLAN VIEW - PRELIMINARY

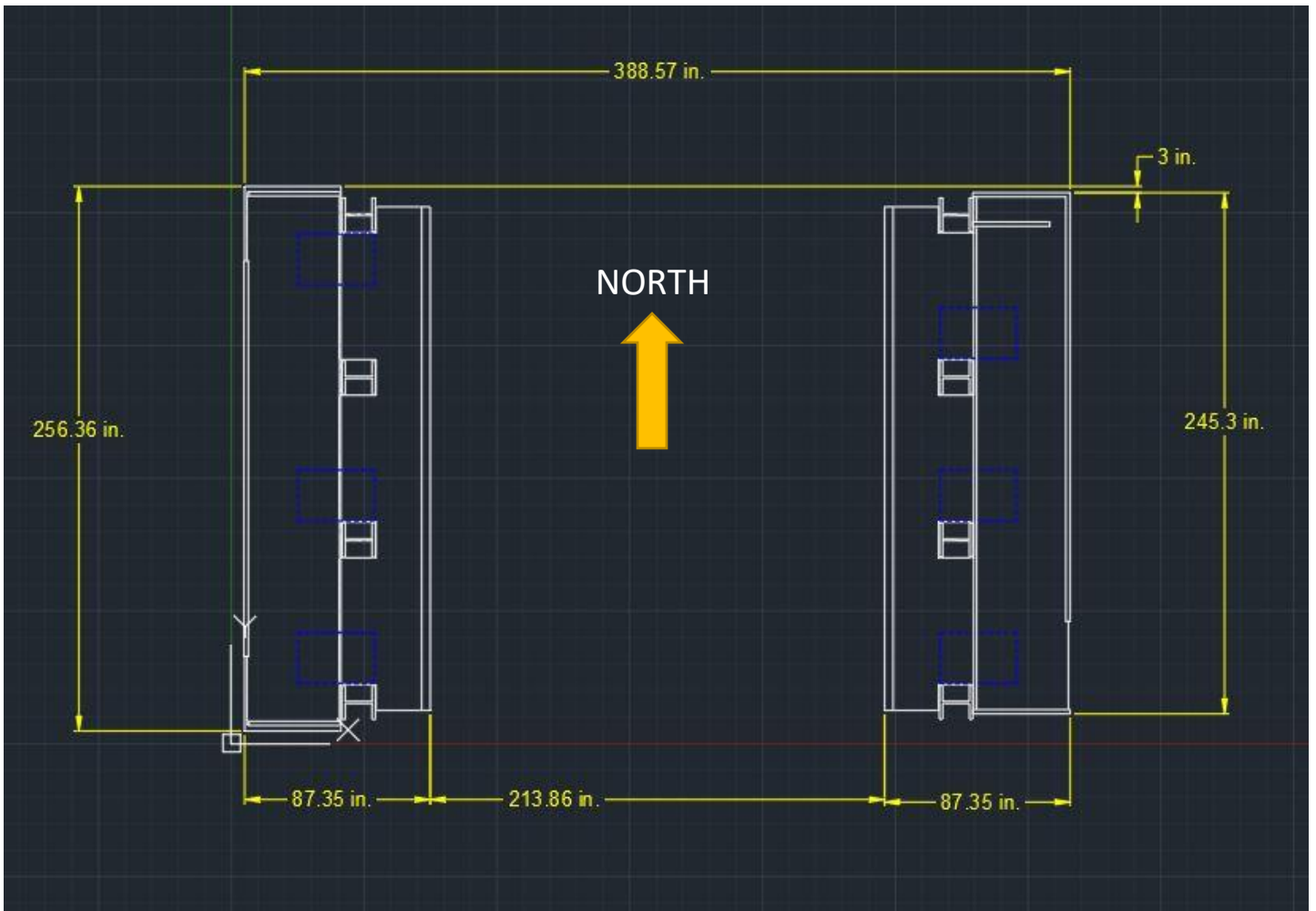


Figure 2: Middle Platforms

PLAN VIEW - PRELIMINARY

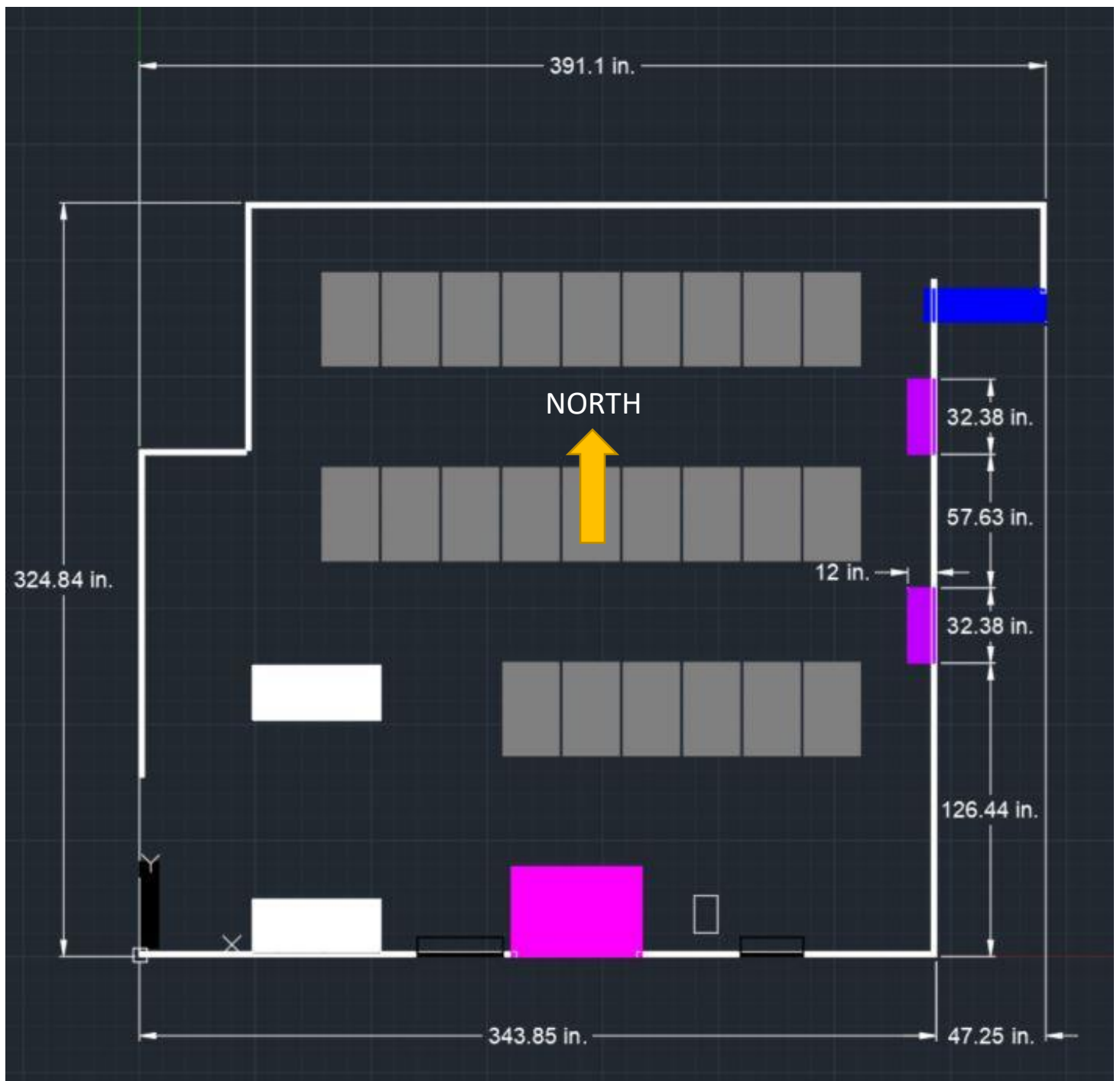
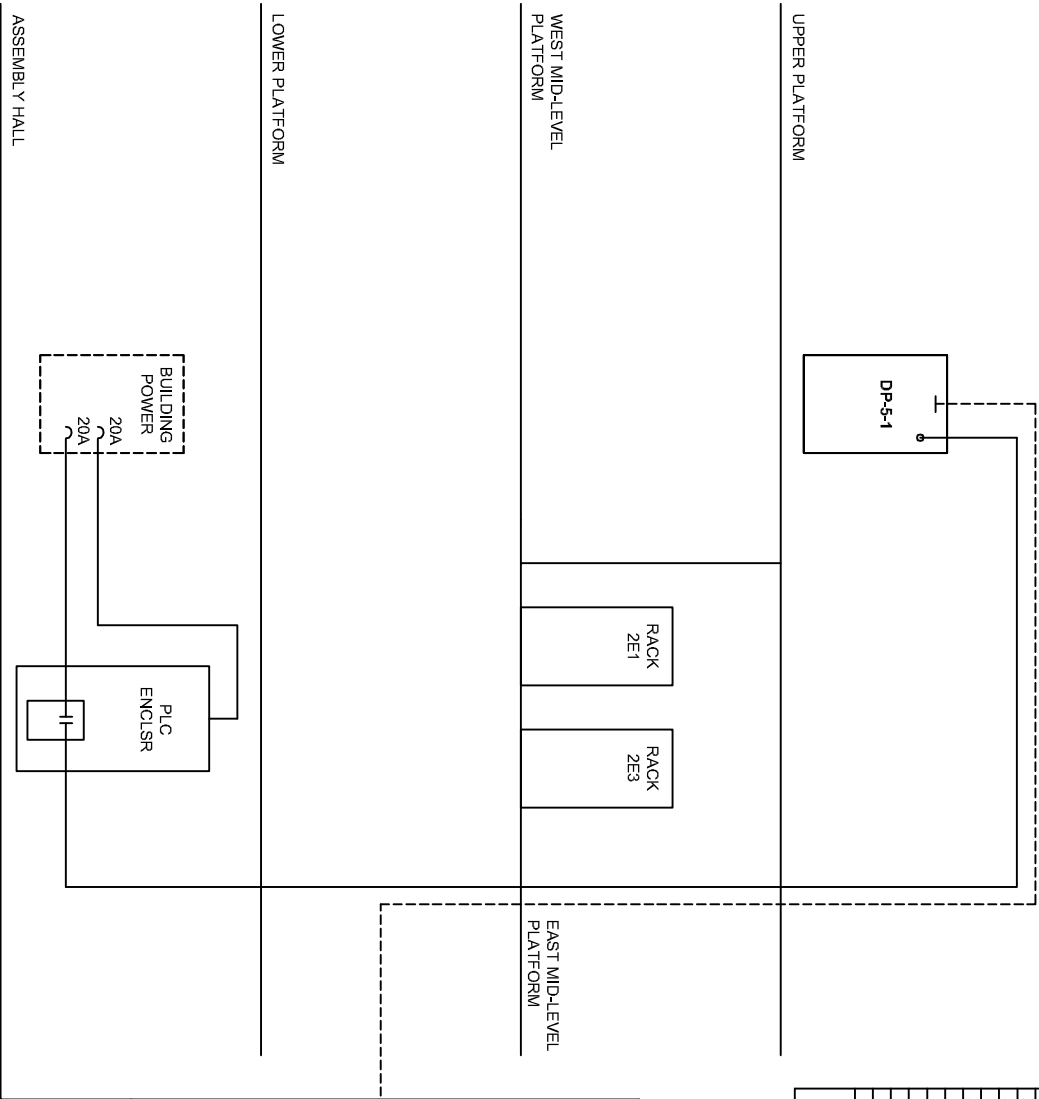
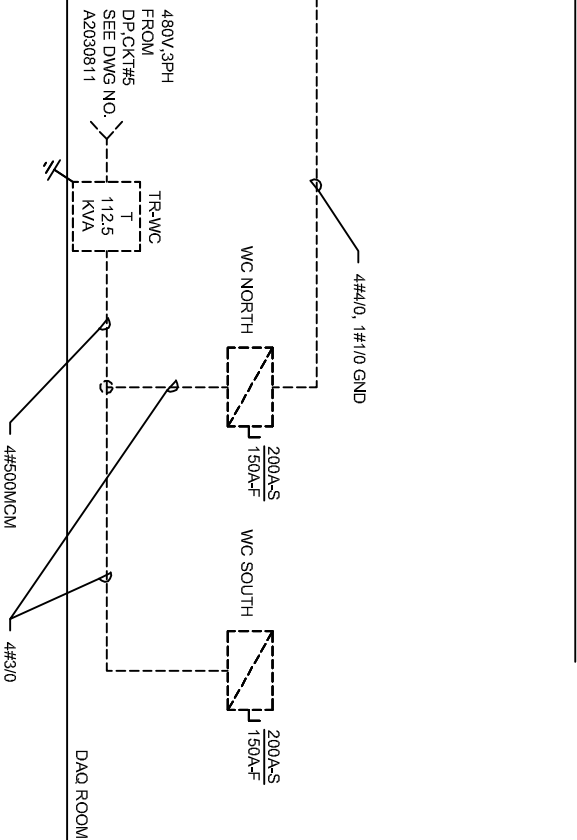


Figure 3: Top Platform

PARTIAL RISER - PRELIMINARY



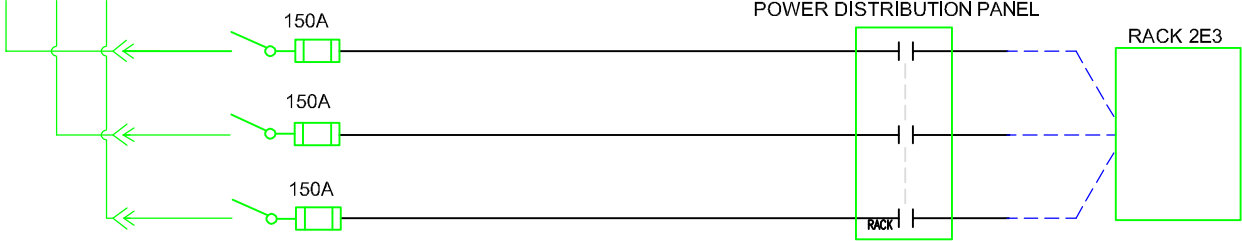
| PANEL NO. | | DPS-1 | | NEW - SAMPLE SCHEDULE | | | | SECTION | | 1 |
|-----------|-------|-----------|-------------|-----------------------|-------|-------------------------------|------|---------|-------------|------------------|
| VOLTS | PHASE | WIRE | | BUS | MAINS | UNBUNDLED INTERLOCKING RATING | | LOADING | | LOADING |
| 120/208 | 3 | 4 | | 255-A | W/O | | | | | SURFACE |
| DISC NO. | TYPE | EQUIPMENT | WIRE SIZE | LOAD | A | B | C | LOAD | WIRE SIZE | EQUIPMENT |
| 1 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 3 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 5 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 7 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 9 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 11 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 13 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 15 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 17 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 19 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 21 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 23 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 25 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 27 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 29 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 31 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 33 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 35 | 30 | RACK ### | 4#10, 1#10G | 670 | 1340 | 1340 | 670 | 670 | 4#10, 1#10G | RACK ### |
| 37 | 20 | SPARE | | | | | | | | SPARE |
| 39 | 20 | SPARE | | | | | | | | SPARE |
| 41 | 20 | SPARE | | | | | | | | SPARE |
| | | | | TOTAL VA BY PHASE | 8040 | 8040 | 8040 | | | TOTAL LOAD IN VA |
| | | | | | | | | | | 24120 |



INTERLOCK SYSTEM - PRELIMINARY

FED FROM XMFR112.5KVA
480/208

200A
DISC. SW.



PLC ENCLOSURE

