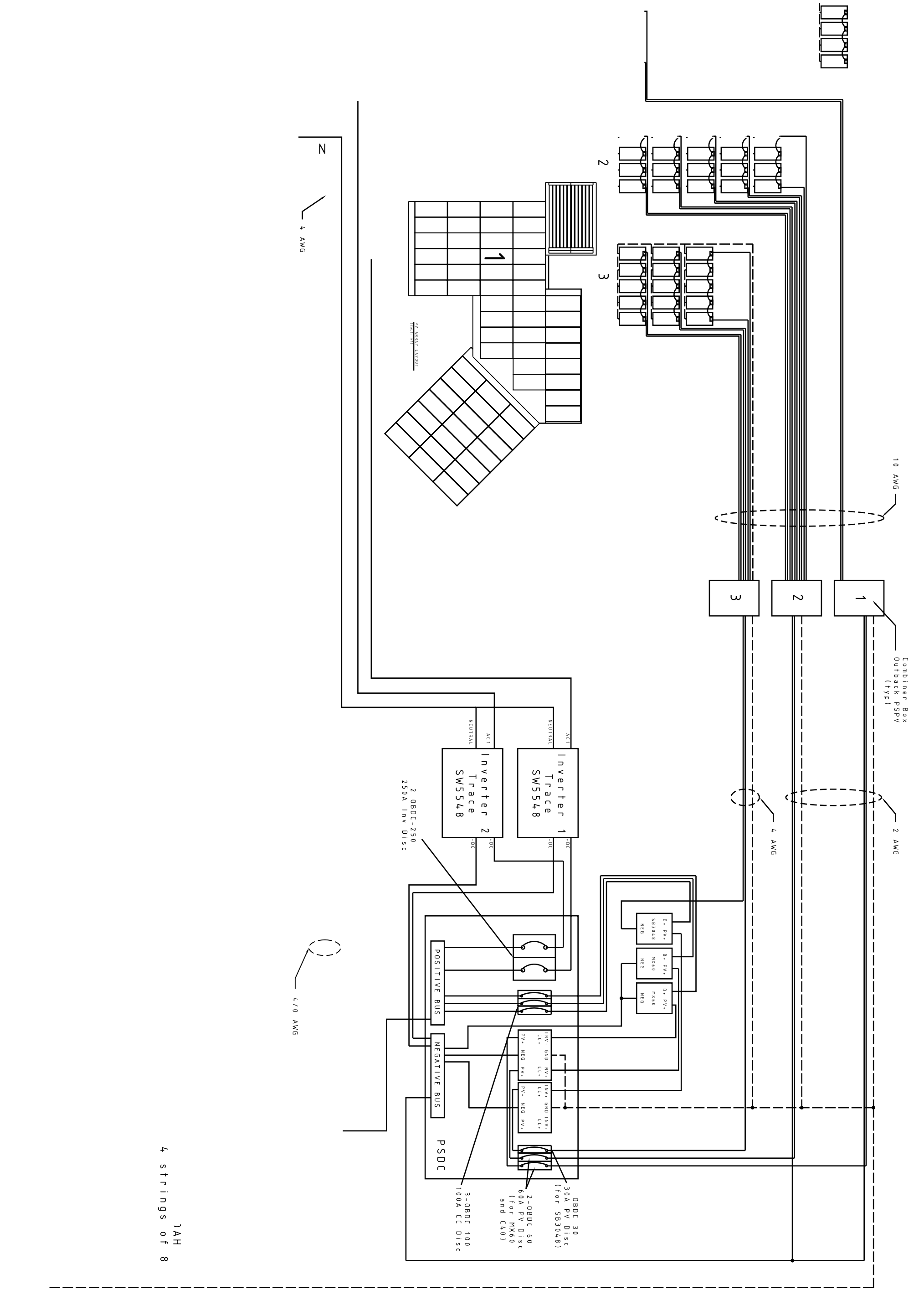


| |
|---------------|
| Checked |
| Date 7/7/03 |
| Scale NTS |
| Design MR |
| Job Decathlon |
| Sheet |
| E 1 |
| Of 8 Sheets |

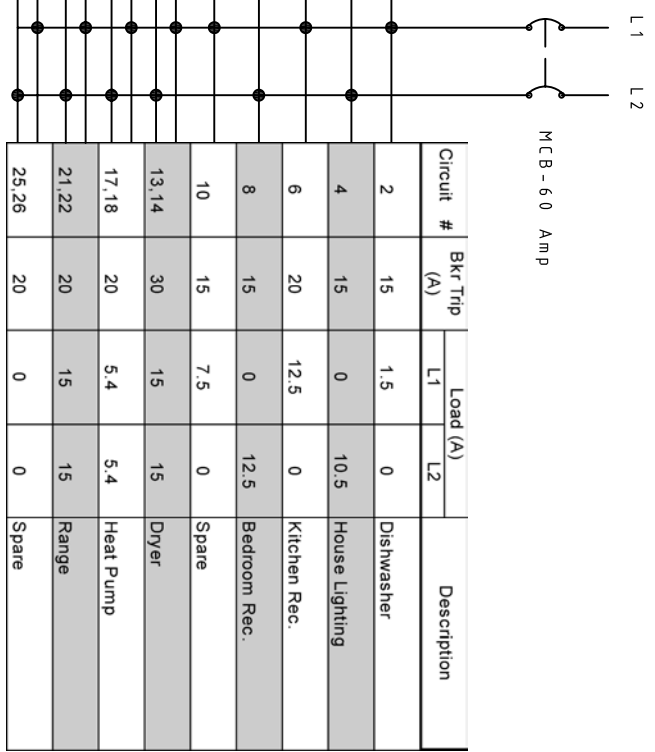


JAH
4 strings of 8

Branch Circuits

| Circuit | Location | Description | P _T [W] | E [volts] | I _L [A] | Circuit Breaker (A) | # Poles | Conductor (THW, Cu) | | | Length [ft] | | Load Contribution (A) | |
|---------------|---------------------|-----------------|--------------------|-----------|--------------------|---------------------|----------|---------------------|------------|------------|-------------|--------------|-----------------------|------|
| | | | | | | | | Phase | AWG | #10 | #12 | #14 | L1 | L2 |
| 1 | Kitchen | Refrigerator | 180 | 120 | 1.5 | 15 | 1 | L1 | #14 | 0 | 0 | 10 | 1.5 | 0 |
| 2 | Kitchen | Dishwasher | 300 | 120 | 2.5 | 15 | 1 | L1 | #14 | 0 | 0 | 16 | 2.5 | 0 |
| 3 | Living Rm & Outside | Rec. | 1260 | 120 | 10.5 | 20 | 1 | L2 | #12 | 0 | 58 | 0 | 0 | 10.5 |
| 4 | House | Lighting | 756 | 120 | 6.3 | 15 | 1 | L2 | #14 | 0 | 0 | 150 | 0 | 6.3 |
| 5 | Kitchen | Rec. | 1500 | 120 | 12.5 | 20 | 1 | L1 | #12 | 0 | 18 | 0 | 12.5 | 0 |
| 6 | Kitchen | Rec. | 1500 | 120 | 12.5 | 20 | 1 | L1 | #12 | 0 | 30 | 0 | 12.5 | 0 |
| 7 | Bath | GFCI Rec. | 1500 | 120 | 12.5 | 20 | 1 | L2 | #12 | 0 | 14 | 0 | 0 | 12.5 |
| 8 | Bedroom & Outside | Rec. | 900 | 120 | 7.5 | 15 | 1 | L2 | #14 | 0 | 0 | 38 | 0 | 7.5 |
| 9 | Tech. Pod | Rec. | 900 | 120 | 7.5 | 15 | 1 | L1 | #14 | 0 | 0 | 18 | 7.5 | 0 |
| 10 | Spare | | 0 | 120 | 0 | 15 | 1 | L1 | #14 | 0 | 0 | 0 | 0 | 0 |
| 11,12 | Laundry | Washing Machine | 600 | 240 | 2.5 | 20 | 2 | L1,L2 | #12 | 0 | 8 | 0 | 2.5 | 2.5 |
| 13,14 | Laundry | Dryer | 2400 | 240 | 10 | 30 | 2 | L1,L2 | #10 | 8 | 0 | 0 | 10 | 10 |
| 15,16 | Mechanical | Air Handler | 1296 | 240 | 5.4 | 20 | 2 | L1,L2 | #12 | 0 | 10 | 0 | 5.4 | 5.4 |
| 17,18 | Outside | Heat Pump | 2544 | 240 | 10.6 | 20 | 2 | L1,L2 | #12 | 0 | 12 | 0 | 10.6 | 10.6 |
| 19,20 | Tech. Pod | HP Water Heater | 1200 | 240 | 5 | 20 | 2 | L1,L2 | #12 | 0 | 8 | 0 | 5 | 5 |
| 20,21 | Kitchen | Range | 3600 | 240 | 15 | 20 | 2 | L1,L2 | #12 | 0 | 26 | 0 | 15 | 15 |
| 22,23 | Kitchen | Oven | 3600 | 240 | 15 | 20 | 2 | L1,L2 | #12 | 0 | 26 | 0 | 15 | 15 |
| 24,25 | Spare | | 0 | 240 | 0 | 20 | 2 | L1,L2 | #12 | 0 | 0 | 0 | 0 | 0 |
| Totals | | | 20436 | | 136.8 | | 8 | | 210 | 218 | 100 | 100.3 | | |

| Description | Load (A) | | Bkr Trip (A) | Circuit # |
|-------------------|----------|------|--------------|-----------|
| | L1 | L2 | | |
| Refrigerator | 1.5 | 0 | 15 | 1 |
| LR & Outside Rec. | 0 | 10.5 | 20 | 3 |
| Kitchen Rec. | 12.5 | 0 | 20 | 5 |
| Bathroom Rec. | 0 | 12.5 | 20 | 7 |
| Tech Pod Rec. | 7.5 | 0 | 15 | 9 |
| Washing Machine | 2.5 | 2.5 | 20 | 11,12 |
| Air Handler | 5.4 | 5.4 | 20 | 15,16 |
| HP Water Heater | 5 | 5 | 20 | 19,20 |
| Oven | 15 | 15 | 20 | 23,24 |



| Circuit # | Bkr Trip (A) | Load (A) | | Description |
|-----------|--------------|----------|------|----------------|
| | | L1 | L2 | |
| 2 | 15 | 1.5 | 0 | Dishwasher |
| 4 | 15 | 0 | 10.5 | House Lighting |
| 6 | 20 | 12.5 | 0 | Kitchen Rec. |
| 8 | 15 | 0 | 12.5 | Bedroom Rec. |
| 10 | 15 | 7.5 | 0 | Spare |
| 13,14 | 30 | 15 | 15 | Dryer |
| 17,18 | 20 | 5.4 | 5.4 | Heat Pump |
| 21,22 | 20 | 15 | 15 | Range |
| 25,26 | 20 | 0 | 0 | Spare |

| | |
|----------------------|----------|
| Total Load L1: | 105 |
| Total Load L2: | 105.3 |
| Panel Balance: | 0.28% |
| Total Load on Panel: | 25.2 kVA |

AC DISTRIBUTION PANEL