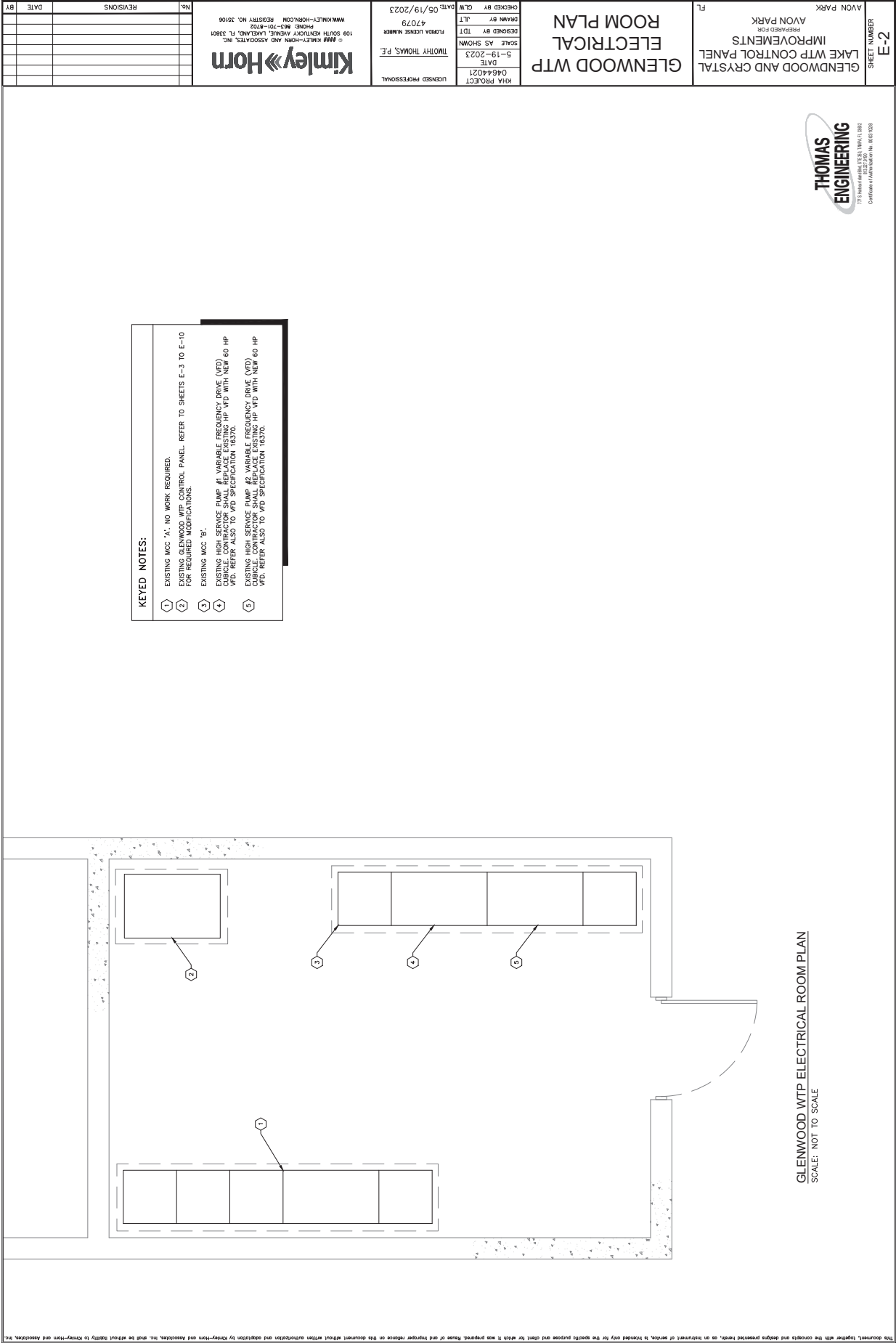
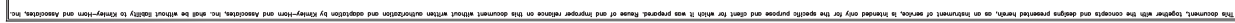
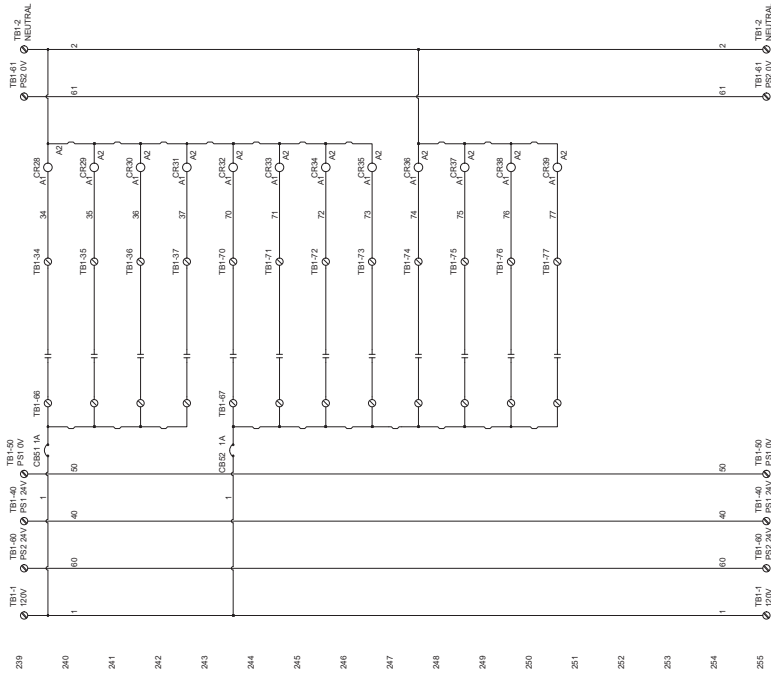
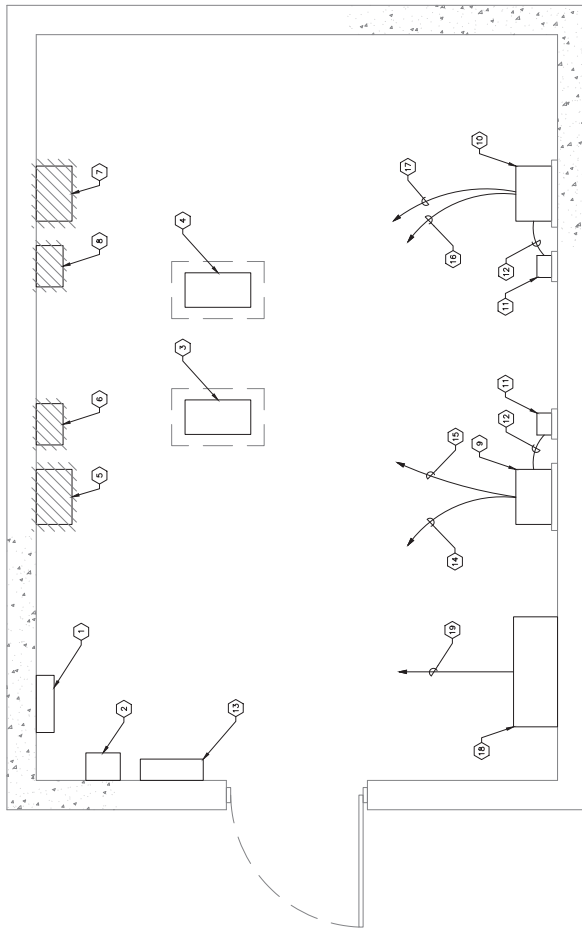






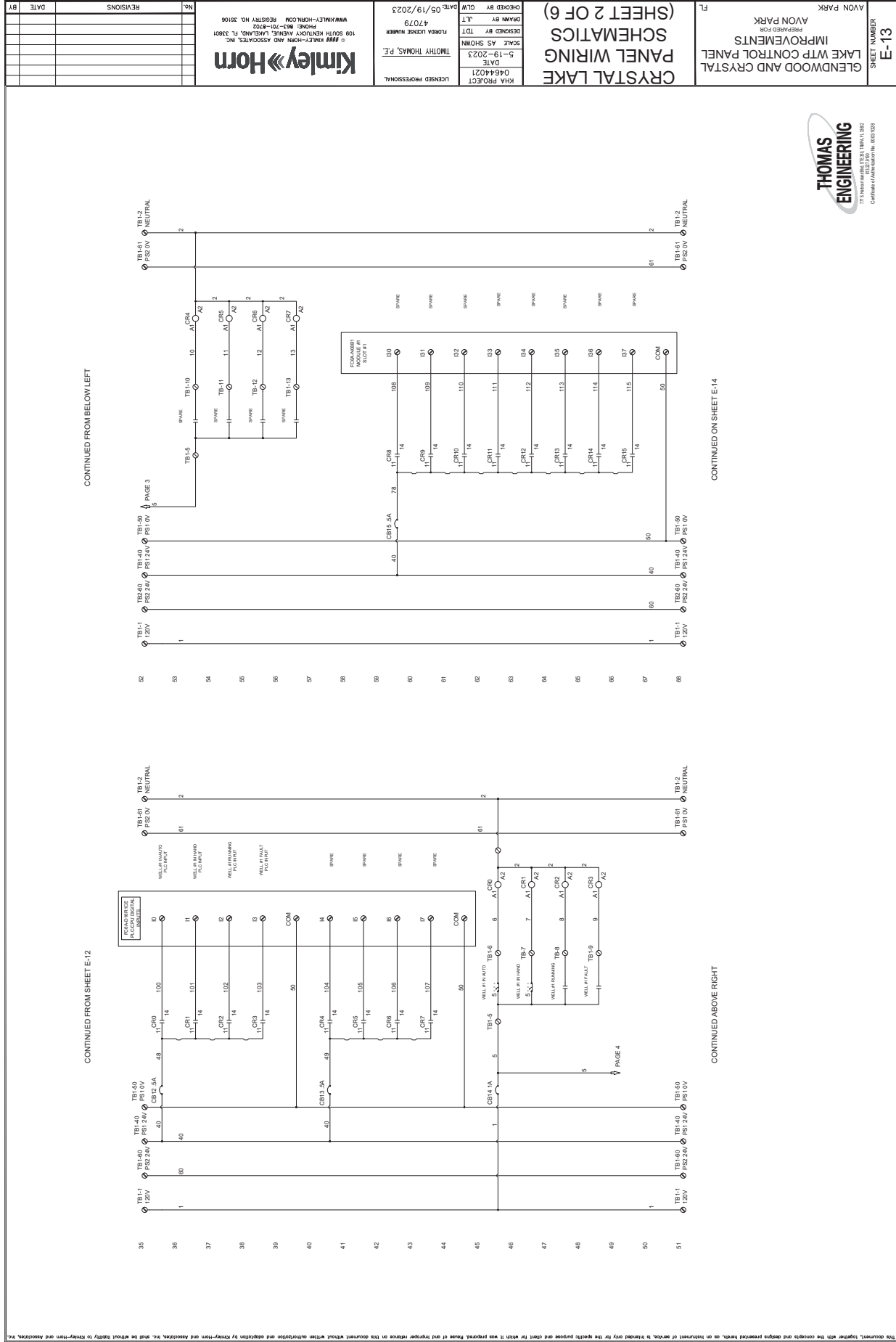
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CRYSTAL LAKE WTP ELECTRICAL ROOM PLAN

KEYED NOTES:

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|----|---|----|--|
| 1 | EXISTING 100A CIRCUIT BREAKER. PROVIDE AND INSTALL NEW SINGLE-POLE 120V, 250A CIRCUIT BREAKER TO FEED NEW CRISTAL KE LK PANEL. PANEL REQUIRED. | 12 | PROVIDE AND INSTALL 3- $\frac{1}{2}$ " Ø THIN CU + 1- $\frac{1}{2}$ " THIN CU GND FROM SPD TO VFD IN 1' UPGRAID, FLEXIBLE, NON-METALLIC CONDUIT. |
| 2 | EXISTING SINGLE-PHASE, 15KVA, 480-120V TRANSFORMER, NO WORK REQUIRED. | 13 | EXISTING 277/480V, 125A PANELBOARD. CONTRACTOR SHALL BEVE. EXISTING 3-POLE, 40A VFD BRANCH CIRCUIT BREAKERS IF CONFIRMED BY AMPERAGE CALCULATION. IF NOT, CONTRACTOR SHALL REPLACE WITH 40A BREAKERS BASED ON THE VFD SUPPLIER'S RECOMMENDATIONS. |
| 3 | EXISTING 400V, 25 HP HIGH SERVICE PUMP #1. | 14 | PROVIDE AND INSTALL 3- $\frac{1}{2}$ " THIN CU + 1- $\frac{1}{2}$ " Ø THIN CU GND IN 1' UPGRAID, FLEXIBLE, NON-METALLIC CONDUIT. |
| 4 | EXISTING HIGH SERVICE PUMP #1 VARIABLE FREQUENCY DRIVE (VFD) TO BE REMOVED. | 15 | PROVIDE AND INSTALL 3- $\frac{1}{2}$ " THIN CU + 1- $\frac{1}{2}$ " Ø THIN CU GND IN 1' UPGRAID, FLEXIBLE, NON-METALLIC CONDUIT. PROVIDE AND INSTALL 3- $\frac{1}{2}$ " THIN CU + 1- $\frac{1}{2}$ " Ø THIN CU GND IN 1' UPGRAID, FLEXIBLE, NON-METALLIC CONDUIT. PROVIDE AND INSTALL 3- $\frac{1}{2}$ " THIN CU + 1- $\frac{1}{2}$ " Ø THIN CU GND IN 1' UPGRAID, FLEXIBLE, NON-METALLIC CONDUIT. |
| 5 | EXISTING HIGH SERVICE PUMP #1 VFD SURGE PROTECTION DEVICE TO BE REMOVED. | 16 | PROVIDE AND INSTALL 3- $\frac{1}{2}$ " THIN CU + 1- $\frac{1}{2}$ " Ø THIN CU GND IN 1' UPGRAID, FLEXIBLE, NON-METALLIC CONDUIT. |
| 6 | EXISTING HIGH SERVICE PUMP #2 VARIABLE FREQUENCY DRIVE (VFD) TO BE REMOVED. | 17 | PROVIDE AND INSTALL 3- $\frac{1}{2}$ " THIN CU + 1- $\frac{1}{2}$ " Ø THIN CU GND IN 1' UPGRAID, FLEXIBLE, NON-METALLIC CONDUIT. |
| 7 | EXISTING HIGH SERVICE PUMP #2 VARIABLE FREQUENCY DRIVE (VFD) TO BE REMOVED. | 18 | PROVIDE AND INSTALL 3- $\frac{1}{2}$ " THIN CU + 1- $\frac{1}{2}$ " Ø THIN CU GND IN 1' UPGRAID, FLEXIBLE, NON-METALLIC CONDUIT. |
| 8 | EXISTING HIGH SERVICE PUMP #2 VFD SURGE PROTECTION DEVICE TO BE REMOVED. | 19 | PROVIDE AND INSTALL 3- $\frac{1}{2}$ " THIN CU + 1- $\frac{1}{2}$ " Ø THIN CU GND IN 1' UPGRAID, FLEXIBLE, NON-METALLIC CONDUIT. |
| 9 | PROVIDE AND INSTALL NEW 25 HP VFD FOR HIGH SERVICE PUMP #2. CONDITIONS: MOUNT VFD ON WALL WITH 1- $\frac{1}{2}$ " Ø X 1- $\frac{1}{2}$ " FLAT, STAINLESS STEEL UNISTRUT. REFER ALSO TO VFD SPECIFICATION 16370. | 20 | PROVIDE AND INSTALL 3- $\frac{1}{2}$ " THIN CU + 1- $\frac{1}{2}$ " Ø THIN CU GND IN 1' UPGRAID, FLEXIBLE, NON-METALLIC CONDUIT. |
| 10 | PROVIDE AND INSTALL NEW 25 HP VFD FOR HIGH SERVICE PUMP #2. CONDITIONS: MOUNT VFD ON WALL WITH 1- $\frac{1}{2}$ " Ø X 1- $\frac{1}{2}$ " FLAT, STAINLESS STEEL UNISTRUT. REFER ALSO TO VFD SPECIFICATION 16370. | 21 | PROVIDE AND INSTALL 3- $\frac{1}{2}$ " THIN CU + 1- $\frac{1}{2}$ " Ø THIN CU GND IN 1' UPGRAID, FLEXIBLE, NON-METALLIC CONDUIT. |
| 11 | PROVIDE AND INSTALL NEW SURGE PROTECTION DEVICE (SPD) FOR NEW VFD. CONDITIONS: MOUNT SPD ON WALL WITH 1- $\frac{1}{2}$ " Ø X 1- $\frac{1}{2}$ " FLAT, STAINLESS STEEL UNISTRUT. | 22 | PROVIDE AND INSTALL 3- $\frac{1}{2}$ " THIN CU + 1- $\frac{1}{2}$ " Ø THIN CU GND IN 1' UPGRAID, FLEXIBLE, NON-METALLIC CONDUIT. |



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