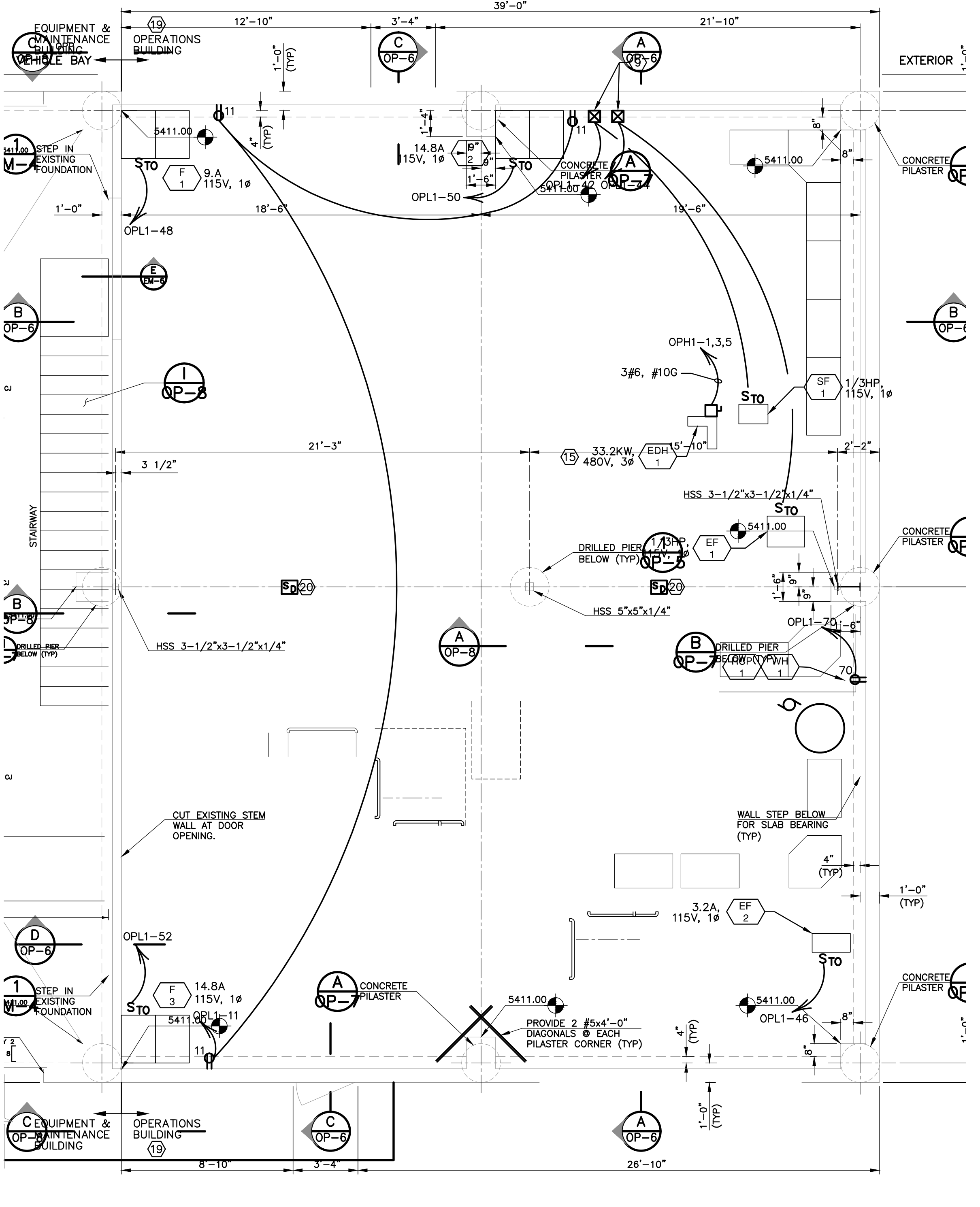


1 LOWER LEVEL ELECTRICAL POWER AND SIGNAL PLAN  
 EOP-2 SCALE: 1/4" = 1'-0"



2 UPPER LEVEL ELECTRICAL POWER AND SIGNAL PLAN  
 EOP-2 SCALE: 1/4" = 1'-0"

**GENERAL NOTES**

- A. UNO, USE CONCEALED WIRING METHODS AND RACEWAYS IN FINISHED AREAS AND PROVIDE FLUSH MOUNTED DEVICES. IT SERVER ROOM, MECHANICAL ROOM, AND UPPER LEVEL MAY HAVE EXPOSED RACEWAYS AND DEVICES. IN UPPER LEVEL, LOCATE SYSTEMS CLOSE TO WALLS AND CEILINGS TO ALLOW FOR FUTURE FURRING AND FINISHES.
- B. CEILING SMOKE DETECTION DEVICES SHOWN ARE FOR EQUIPMENT PROTECTION ONLY. NOT REQUIRED BY CODE.
- C. COORDINATE DEVICES ABOVE AND BELOW COUNTERS WITH APPROVED CABINETRY SHOP DRAWINGS PRIOR TO ROUGH-IN. SEE ARCHITECTURAL DRAWINGS.
- D. FOR ALL VOICE/DATA OUTLET LOCATIONS, PROVIDE DOUBLE GANG BOX WITH SINGLE MUDRING, AND 3/4" C. WITH PULL CORD TO IT SERVER ROOM.

**KEYED NOTES**

- 1 FLUSH FLOOR BOX FOR CONCRETE FLOORS WITH SS COVERPLATE AND HINGES, (2) DUPLEX RECEPTACLES AND (4) VOICE/DATA PORTS.
- 2 PROVIDE 3/4"x8"x4" PLYWOOD BACKBOARD WITH FIRE RESISTANT PAINT FOR MOUNTING OWNER'S NETWORK EQUIPMENT.
- 3 PROVIDE 1/4"x2"x1/2" COPPER GROUND BAR ON BACKBOARD AND RUN #4 GROUNDING CONDUCTOR IN 3/4" C. TO MAIN GROUND BAR IN EQUIPMENT AND MAINTENANCE (EM) BUILDING ELECTRICAL EQUIPMENT ROOM.
- 4 UNDERGROUND CONDUIT FOR TELEPHONE SERVICE. SEE ESP-1 FOR CONTINUATION.
- 5 PROVIDE 120V, 20A CIRCUIT FOR FUME HOOD LIGHTS AND 5-20R RECEPTACLES. ALSO CONNECT FAN CONTROL SWITCH TO EF-1 AND SF-1 STARTERS.
- 6 VACUUM PUMP RECEPTACLE MOUNTED UNDER COUNTER. SWITCH MOUNTED ABOVE COUNTER.
- 7 METALLIC TWO CIRCUIT PLUGMOLD WITH RECEPTACLES 12" O.C. WIREMOLD OR EQUAL. MOUNT PLUGMOLD ±8" ABOVE COUNTER.
- 8 MOUNT RECEPTACLE ±2" ABOVE PLUGMOLD.
- 9 INTERLOCK WITH FUME HOOD FAN SWITCH.
- 10 FLUSH OUTLET BOX FOR SCADA SYSTEM TERMINAL. PROVIDE (2) 1" CONDUITS WITH PULL CORD FROM SCADA RTU CABINET IN EM BUILDING TO THIS LOCATION.
- 11 APPROXIMATE LOCATION OF EXISTING UNDERGROUND CONDUIT STUB-OUTS FOR FUTURE PRIMARY CLARIFIER POWER AND CONTROL CIRCUITS. THESE SHALL BE EXTENDED TO NORTH END OF OPERATIONS BUILDING FOUNDATION PER KEYNOTE 12.
- 12 EXTEND FUTURE PRIMARY POWER AND CONTROL CONDUITS TO ±5 FT. BEYOND FOUNDATION. PROVIDE PULL CORD AND CAP OFF.
- 13 (2) L6-20R RECEPTACLES (208V, 1Ø, 20A) FOR OWNER'S UPS FOR SERVERS AND COMPUTERS.
- 14 (1) DOUBLE-DUPLEX RECEPTACLE (120V, 1Ø) FOR OWNERS MISCELLANEOUS IT EQUIPMENT (MODEMS, ETC.).
- 15 UNIT FURNISHED WITH INTEGRAL DISCONNECT AND CONTACTOR.
- 16 INDOOR UNIT IDU-1 POWERED BY OUTDOOR UNIT ODU-1. PROVIDE WIRING BETWEEN UNITS PER MANUFACTURER'S INSTRUCTIONS.
- 17 INTERCOM AND GATE CONTROL FOR MAIN ENTRANCE GATE. MOUNT ABOVE PLUGMOLD AND ADJACENT TO WINDOW. EXTEND 1" C. AND INTERCOM WIRING FROM IT SERVER ROOM.
- 18 (2) 2" CONDUITS FOR SECURITY GATE CONTROL AND FUTURE CCTV CAMERA SIGNAL. SEE ESP-1 FOR CONTINUATION.
- 19 OUTLET BOX WITH BLANK COVERPLATE FOR FUTURE CCTV TERMINAL. MOUNT ABOVE PLUGMOLD AND EXTEND 1" C. WITH PULL CORD FROM IT SERVER ROOM.
- 20 TWO HOUR RATED WALL ASSEMBLY BETWEEN EM BUILDING AND OPERATIONS BUILDING. PROVIDE FIRESTOPPING AS REQUIRED TO MAINTAIN FIRE RATING.
- 21 PROVIDE CONNECTION TO SCADA RTU IN EM BUILDING.

| REVISIONS |            |  |
|-----------|------------|--|
| NO.       | DATE       | DESCRIPTION  |
| 1         | 08/29/2012 | ISSUED FOR BUILDING PERMIT SUBMITTAL TO PRRD (OPERATIONS BUILDING)         |
| 2         | 08/15/2012 | ISSUED FOR CONSTRUCTION PER PRRD BUILDING PERMIT #135220 (OPERATIONS BLDG) |
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**ELECTRICAL POWER AND SIGNAL PLAN**  
 HAROLD D. THOMPSON REGIONAL WATER RECLAMATION FACILITY  
 LOWER FOUNTAIN METROPOLITAN SEWAGE DISPOSAL DISTRICT

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|---|---|--------------------------------|
| DRAWN _____ SKC   | <b>GMS, INC.</b><br>CONSULTING ENGINEERS<br>611 N. WEBER, SUITE 300<br>COLORADO SPRINGS, COLORADO 80903 | <b>SHEET EOP-2</b><br>OF _____ |
| DESIGNED _____ DRF  |   |                                |
| CHECKED _____ RJS   |   |                                |
| DATE _____ MAY 2012<br>PROJECT NO. 20166.410<br>GMS FILE NO. 2599 |   |                                |

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