

Furnish and install interposing relays in MCC cubicles to provide outputs for remote monitoring of motor controller status. Leave room for future control relays where positive (typ.).

**HEADWORKS MCC 4 ONE-LINE - EXISTING**  
NO SCALE

**Power Wiring Schedule Notes:**

a - 3#12, #12G, 3/4"  
Note: Power wiring schedule defines power circuitry to motor only. Contractor shall provide control and indication wiring as required by equipment supplier and/or as indicated on the schematics. Power and control wiring may be routed in common conduit where allowed by NEC, wire de-rating and conduit sizing shall be per NEC.

**Notes:**

- 1) Circuit numbers shown are new numbers per this contract. Install new numbers on new/modified circuits only.
- 2) Add equipment and wiring as shown to existing MCC.
- 3) Power and control wiring shown diagrammatically only; see equipment schematics and control panel riser sheet E4.03. Provide circuitry per NEC and specifications.
- 4) Provide new Scum Panel, see detail sh. E10.01. Reuse as indicated, reuse existing conduit if suitable.
- 5) Reuse existing MCC equipment. Reuse to new/relocated load indicated.
- 6) Furnish and install monitoring and control wiring from MCC 4 to input and output panel 4 (1/0-4). See I/O table in Appendix A of spec 16900 for wire count.
- 7) See Clarifier Control Panel details Sh. E4.03. See Sh. E11.01 for site layout.
- 8) Modify doors and barriers in existing MCC to accommodate revised equipment and usage.
- 9) Feeder from Bio-Solids building to Headworks to be replaced by new feeder from Chlorine building. Disconnect and remove existing conductors, conduit to remain, plug with plastic plug.
- 10) New feeder to MCC4, see one-line this sheet. Install spare conduit through wall above MCC and cap for future use.
- 11) Install 2" conduits through wall at 0'-0" ± AFF for instrument wiring.
- 12) Existing meter vault area is Class I Div. 2, no work in vault this contract.
- 13) Primary Sludge Pump control panel. Provide interconnecting and control wiring as per schematics.

- 4/e-m1
- 4/e-m2
- 4/e-m3
- 4/e-m4
- 4/e-m5
- 4/e-m11
- 4/e-m14
- 4/e-m24

Construct "high-hot" extension to existing MCC for termination of all monitoring and control wiring to individual cubicles of MCC. Install DIN rail mounted terminal strips or approved equal termination provisions.

WIREWAY

1A	2A	3A	4A
1B		3B	4B
1C	2B	3B	4C
1D	2C	3C	4D
(E)			(E)
1E	2D	3D	4E
(E)	2E	3E	4G
1F	2F	3F	4H
	2G	3G	
1G	2H	3H	

WIREWAY

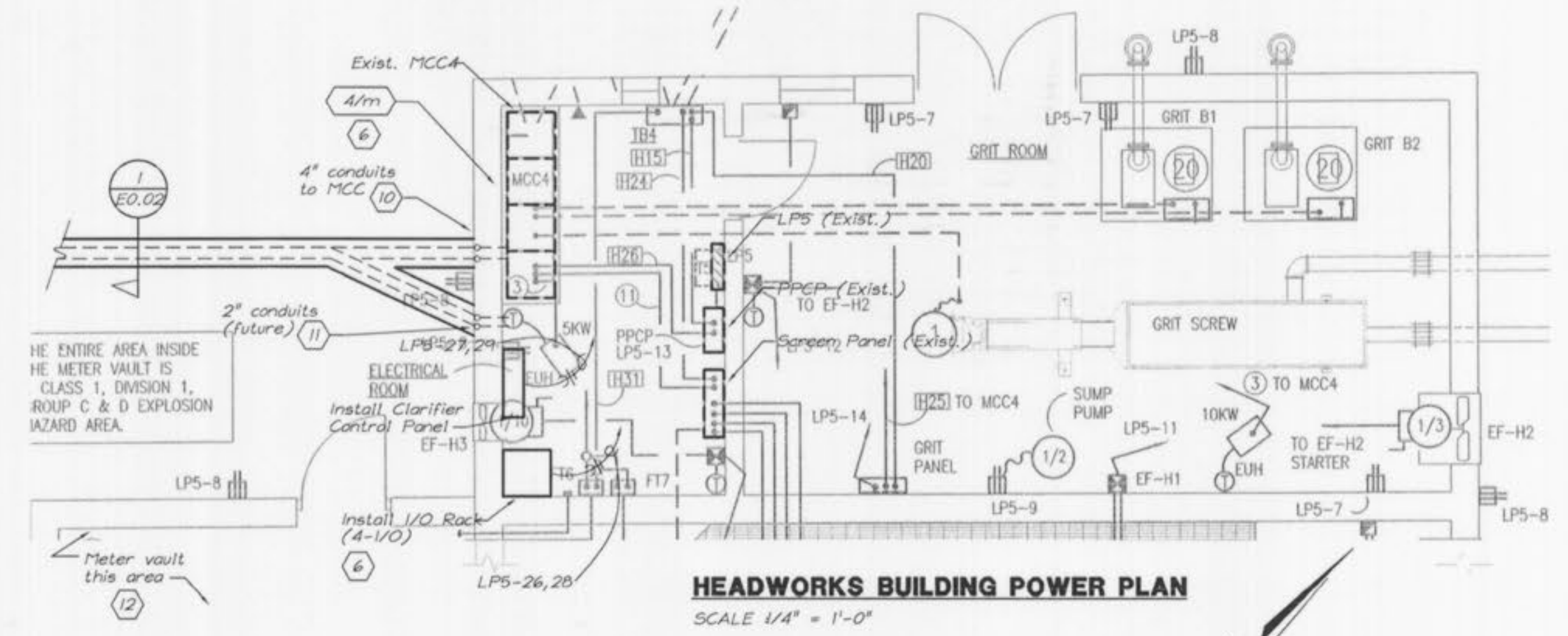
(E) indicates empty space, no breaker or equipment (typ.)

WIREWAY

1A	2A	3A	4A
1B	2B	3B	4B
1C	2C	3C	4D
			4E
1D	2D	3D	4F
			4G
1E	2E	3E	4H
1F	2G	3H	

WIREWAY

**HEADWORKS MCC 4 ELEVATION**  
NO SCALE



**HEADWORKS BUILDING POWER PLAN**  
SCALE 1/4" = 1'-0"