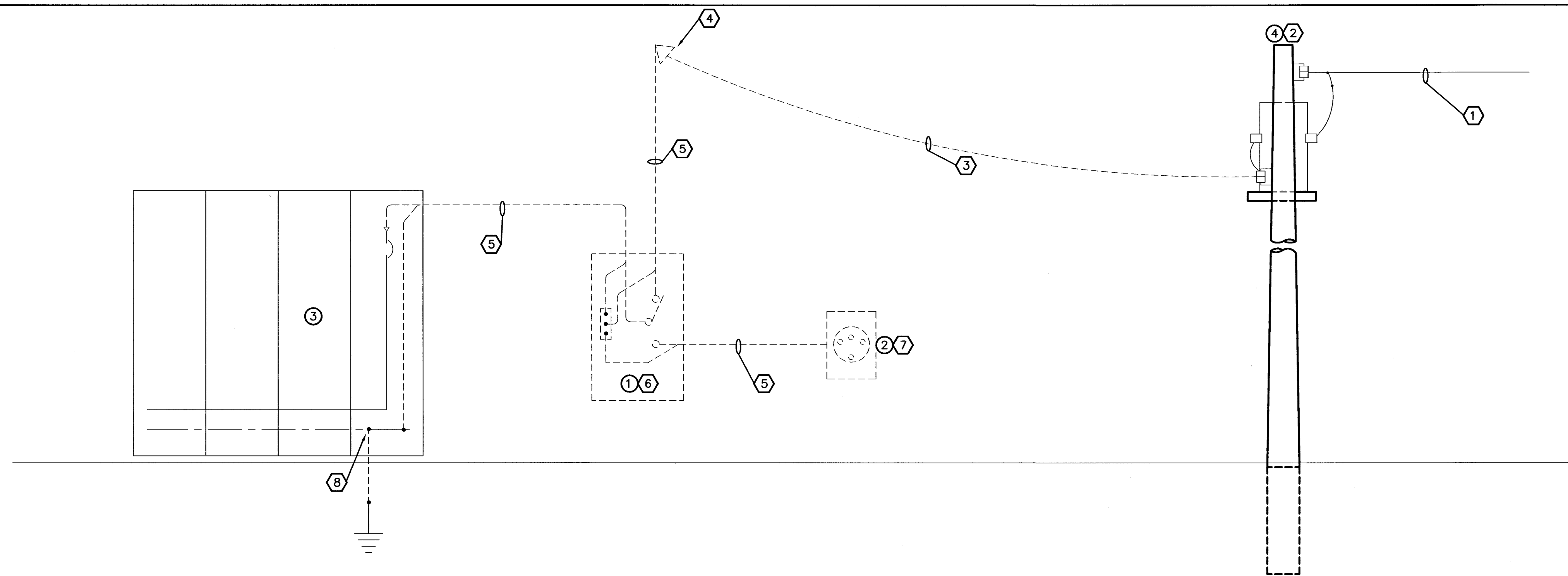


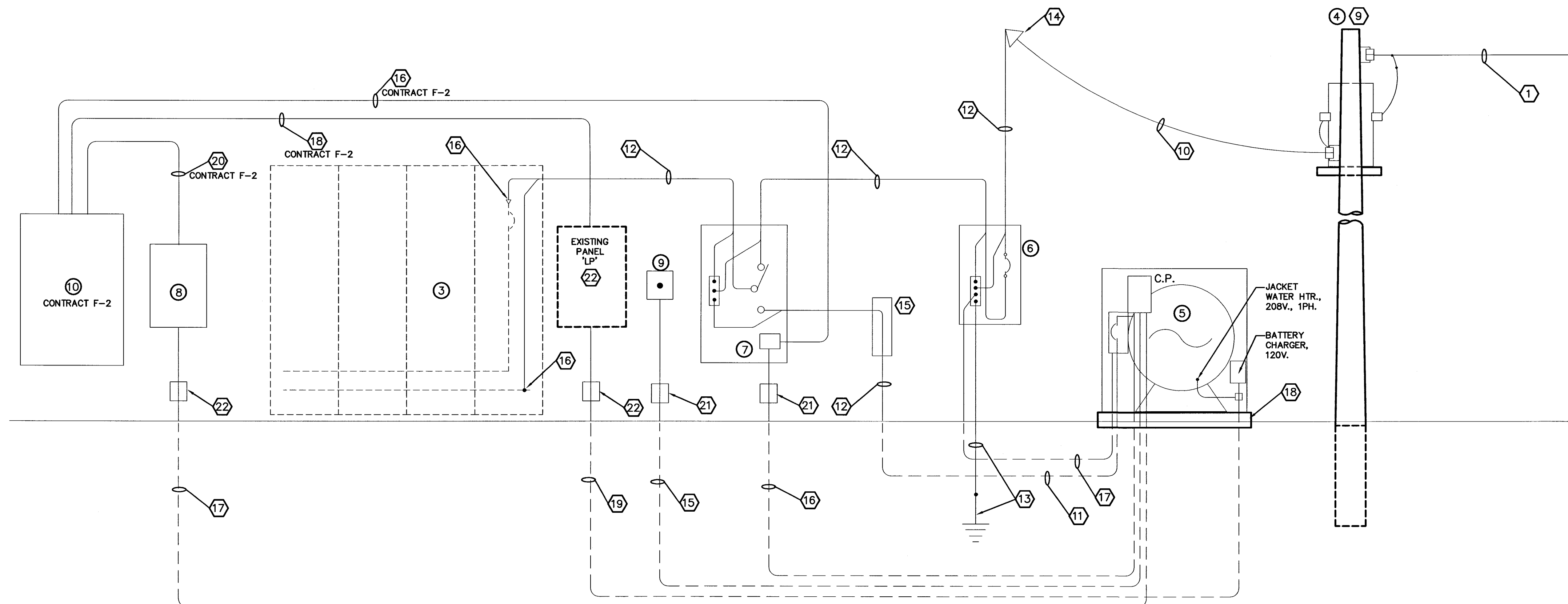
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ELECTRICAL DEMOLITION SERVICE DETAIL
SCALE: NONE

EQUIPMENT KEYNOTES:

- 1 EXIST. MANUAL TRANSFER SWITCH
- 2 EXIST. GENERATOR RECEPTACLE
- 3 EXIST. MOTOR CONTROL CENTER
- 4 EXIST. UTILITY (3) TRANSFORMER BANK AND SUPPORT STRUCTURE
- 5 NEW EMERGENCY ENGINE/GENERATOR, 250KW, 480V., 3PH., 3W. WITH EXTERIOR HOUSING AND XXX GALLON SKID MOUNTED FUEL TANK
- 6 NEW 3P-400A. ENCLOSED MAIN CIRCUIT BREAKER, GROUND BAR, U.L. LISTED FOR SERVICE ENTRANCE
- 7 NEW 400A., 480V., 3PH., 3W. AUTOMATIC TRANSFER SWITCH, NEMA 1 SURFACE ENCLOSURE, SOLID STATE CONTROL PANEL
- 8 NEW GENERATOR REMOTE ANNUNCIATOR PANEL
- 9 NEW GENERATOR REMOTE EMERGENCY STOP PUSH-BUTTON STATION
- 10 NEW INSTRUMENTATION/CONTROL RTU PANEL (CONTRACT F-2)



MODIFIED ELECTRICAL SERVICE DETAIL
SCALE: NONE

ELECTRICAL KEYNOTES:

- 1 EXIST. UTILITY AERIAL 12.47KV LINES TO REMAIN
- 2 EXIST. UTILITY TRANSFORMER BANK AND SUPPORT STRUCTURE TO REMAIN; UTILITY SHALL DISCONNECT EXIST. AERIAL SECONDARY CABLES
- 3 EXIST. UTILITY 480V., 3PH. AERIAL SECONDARY CABLES TO BE REMOVED BY THE UTILITY TO THE WEATHERHEAD
- 4 EXIST. WEATHERHEAD, CONDUIT AND CABLES TO BE REMOVED BY THE CONTRACTOR
- 5 EXIST. 4 #500MCM, 3 1/2"C. TO BE REMOVED BY THE CONTRACTOR
- 6 EXIST. MANUAL TRANSFER SWITCH, 400A., 480V., 3PH., 3W. WITH GROUND, TO BE REMOVED BY THE CONTRACTOR
- 7 EXIST. GENERATOR RECEPTACLE AND BOX, 400A., 480V., 4POLE, 4W., TO BE REMOVED BY THE CONTRACTOR
- 8 THE CONTRACTOR SHALL DISCONNECT THE EXIST. GROUNDING ELECTRODE CONDUCTOR FROM THE MOTOR CONTROL CENTER
- 9 THE UTILITY SHALL CONNECT NEW SECONDARY SERVICE ENTRANCE CABLES TO TRANSFORMERS
- 10 NEW 3 #500MCM, 1 #1/0 GND. AERIAL SERVICE ENTRANCE CABLES TO NEW WEATHERHEAD BY THE UTILITY
- 11 NEW U.G. 3 #500MCM, 1 #1/0 GND., 3 1/2"C.
- 12 NEW 3 #500MCM, 1 #1/0 GND., 3 1/2"C.
- 13 NEW #1/0 GROUND ELECTRODE CONDUCTOR AND 3/4" DIA. X 10' LONG COPPER CLAD GROUND ROD
- 14 NEW WEATHERHEAD, 3 #500MCM, 1 #1/0 GND., 3 1/2"C.
- 15 NEW NEMA 4X PULLBOX WITH REMOVABLE COVER; 12"x12"x30". MOUNT TOP AS HIGH AS POSSIBLE
- 16 CONNECT NEW CIRCUITING TO EXIST. MOTOR CONTROL CENTER MAIN LUGS AND GROUND BUS
- 17 NEW U.G. 1 #1/0 GND., 3/4"C.; CONNECT TO GROUND BAR IN MAIN CIRCUIT BREAKER ENCLOSURE.
- 18 NEW REINFORCED CONCRETE PAD WITH TURNED DOWN SIDES; MIN. 30" BELOW GRADE
- 14 NEW U.G. 3 #10, 1 #10G., AND 2 #12, 1 #12G., 1"C.
- 15 NEW 2 #14, 1 #14G., 3/4"C.; EMERGENCY SHUT-DOWN WIRING.
- 16 NEW 4 #12, 1 #12G. 3/4"C.
- 17 NEW 16 #14, 3/4"C.
- 18 NEW 2 #12, 1 #12G. 3/4"C.
- 19 NEW 3 #10, 1 #10G., AND 2 #12, 1 #12G., 1"C.
- 20 NEW 4 #14, 3/4"C.
- 21 NEW 6"x6"x4" NEMA 4X PULLBOX; MOUNT AS HIGH AS POSSIBLE
- 22 NEW 6"x6"x6" NEMA 4X PULLBOX; MOUNT AS HIGH AS POSSIBLE
- 22 PROVIDE (1) NEW 1P-20A. AND (1) 2P-20A. CIRCUIT BREAKERS IN EXIST. PANELBOARD

NOTES:

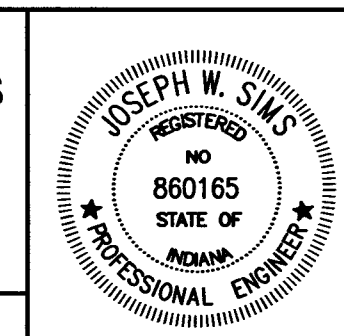
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| NO. | DESCRIPTION | DATE | BY |
|-----------|-------------------|--------|-----|
| 2 | RENUMBERED | 5/2004 | GCR |
| 1 | AS-BUILT REVISION | 5/2004 | GCR |
| REVISIONS | | | |

HOOSIER HILLS REGIONAL WATER DISTRICT
DIVISION "F" WATERWORKS SYSTEM IMPROVEMENTS
CONTRACT F-1

WATER TREATMENT PLANT
ELECTRICAL SERVICE DETAILS

GRW PROJECT NO. 2745 JWSA PROJECT NO. 2001-05



GRW Engineers, Inc.
Engineers, Architects, Planners
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CINCINNATI, OHIO
NASHVILLE, TENNESSEE
ARLINGTON, TEXAS

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| FILE NAME: F1-E4_Revise.DWG | SCALE: AS NOTED |
| CHECKED: JWS | SHEET NO. E4/566 |
| APPROVED: JWS | |