

PUMP STATION ELECTRICAL PLAN
 SCALE 1" = 5'-0"

THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

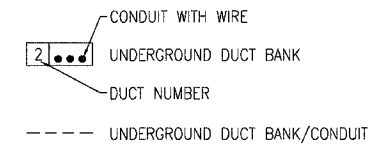
CALL J.U.L.I.E. FOR UTILITY INFORMATION
1-800-892-0123

DUCT BANK LEGEND

- 1 3 #2 XHHW, 1 #2 XHHW NEUTRAL, 1 #6 GND IN 2" PVC COATED GRSC FROM SERVICE BREAKER TO AUTO TRANSFER SWITCH. 1 #12 THWN, 1 #12 THWN NEUTRAL, 1 #12 GND IN 3/4" PVC COATED GRSC FROM PANELBOARD TO POLE LIGHT.
- 2 3 #2 XHHW, 1 #2 XHHW NEUTRAL, 1 #6 GND IN 2" PVC COATED GRSC FROM ENGINE GENERATOR SET BREAKER TO AUTO TRANSFER SWITCH. 12 #14 THWN, 1 #14 GND (CONTROL & ALARM WIRING) IN 3/4" PVC COATED GRSC FROM ENGINE GENERATOR SET TO AUTO TRANSFER SWITCH. 3 #10 THWN, 3 #10 THWN NEUTRAL, 1 #10 GND (BLOCK HEATER, BATTERY CHARGER, & GENERATOR SET CONVENIENCE RECEPT BRANCH CKTS) IN 3/4" PVC COATED GRSC FROM PANELBOARD TO ENGINE GENERATOR SET.
- 3 4-2" PVC COATED RIGID ALUMINUM OR PVC COATED GRSC FROM PUMP CONTROL PANEL TO PUMP STATION WET WELL. CONDUIT INSTALLATION SHALL CONFORM TO NEC 501.15(A)(4) "CLASS I, DIVISION 1 BOUNDARY".
- 4 1 #10 THWN, 1 #10 THWN NEUTRAL, 1 #10 GND IN 3/4" PVC COATED GRSC FROM PANELBOARD TO SUMP PUMP IN VALVE VAULT. PROVIDE EXPLOSION PROOF CONDUIT SEAL (FIRST FITTING) WHERE CONDUIT ENTERS THE VALVE VAULT.
- 5 2" PVC COATED GRSC FOR TELEPHONE SERVICE TO PUMP CONTROL PANEL. COORDINATE CONDUIT ROUTING WITH THE SERVING TELEPHONE CO.

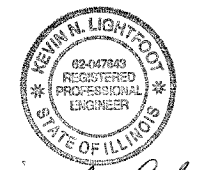
SHEET LEGEND

- 1 UTILITY SERVICE RISER POLE WITH UTILITY METER, SERVICE BREAKER/DISCONNECT, & 400W M.H. POLE LIGHT.
- 2 3/4" DIA x 10'L UL LISTED COPPERCLAD GND ROD. MIN BURY 24" BELOW GRADE. BOND GROUND RODS TOGETHER WITH #6 BARE STRANDED COPPER TO FORM A GROUND FIELD, MIN. BURY 30" BELOW GRADE. SPACE GROUND RODS 12' TO 15' APART. CONNECTIONS TO GND RODS SHALL BE EXOTHERMIC WELD. SEE ELECTRICAL ONE LINE DIAGRAM FOR ADDITIONAL INFORMATION.
- 3 AUTO TRANSFER SWITCH & CIRCUIT BREAKER PANELBOARD WITH SUPPORT STRUCTURE.
- 4 ENGINE GENERATOR SET, SEE SPECS. MAINTAIN 4' (MIN.) CLEAR WORKING SPACE ON EACH FACE/SIDE OF THE ENGINE GENERATOR SET.
- 5 3/4" DIA. x 10'L UL LISTED COPPERCLAD GND ROD. MIN. BURY 24" BELOW GRADE. BOND TO ENGINE GENERATOR SET FRAME AND BASE MOUNTED FUEL TANK WITH #6 AWG BARE STRANDED COPPER CONDUCTOR. CONNECT TO GND ROD WITH EXOTHERMIC WELD. BOND TO FUEL TANK & ENGINE FRAME WITH UL LISTED COMPRESSION TYPE GROUND LUGS, BOLTED TO THE FUEL TANK & ENGINE FRAME. PROVIDE 1" SCHED 40 PVC SLEEVE COORDINATED INTO GENERATOR SLAB FOR PROTECTION OF GND ELECTRODE CONDUCTOR. BOND GROUND ROD TO GND FIELD WITH #6 AWG BARE STRANDED COPPER CONDUCTOR, MIN. BURY 30" BELOW GRADE.
- 6 PUMP CONTROL PANEL IN NEMA 4X STAINLESS STEEL ENCL. SEE SPECS & DETAILS HEREIN.
- 7 PROVIDE TELEPHONE NETWORK INTERFACE MODULE AT PUMP CONTROL PANEL.
- 8 #6 BARE STRANDED COPPER GROUNDING ELECTRODE CONDUCTOR FROM WATER SERVICE PIPE (LINE SIDE OF SHUT-OFF VALVE) TO SERVICE DISCONNECT GROUND BUS. CONNECT TO WATER PIPE WITH UL LISTED PIPE CLAMP SUITABLE FOR DIRECT BURIAL IN EARTH & SIZED FOR THE RESPECTIVE PIPE & GROUND WIRE.



NOTES

1. CONTRACTOR SHALL COORDINATE ELECTRIC SERVICE & TELEPHONE SERVICE WITH THE RESPECTIVE UTILITY COMPANIES & THE OWNER'S REPRESENTATIVE.
2. CONDUIT SHALL BE BURIED 36" BELOW GRADE, WHERE SUBJECT TO VEHICULAR TRAFFIC, AND 24" BELOW GRADE AT AREAS NOT SUBJECT TO VEHICULAR TRAFFIC.
3. THE SERVING TELEPHONE COMPANY IS
VERIZON NORTH, INC.
1312 EAST EMPIRE
BLOOMINGTON, IL. 61701
ATTN. MR. MIKE HOPE
PHONE: 309-663-3156
4. COORDINATE ELECTRICAL WORK WITH PUMP STATION INSTALLATION, EXCAVATION WORK, WATER SERVICE, PIPING, & OTHER TRADES.



Kevin N. Lightfoot
 DATE: FEB. 2, 2005
 EXPIRES: NOV. 30, 2005

PUMP STATION ELECTRICAL PLAN			
FELL AVENUE			
BRIDGE REPLACEMENT			
DRAWN	MV 10/07/2004	DESIGNED	KNL 10/07/2004
CHECKED	KNL 10/09/2004	CHECKED	CAH
FILE:	03S2019	DATE:	2-2-05

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