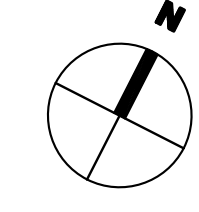


**A ELECTRICAL PLAN**  
 0' 1' 2' 4' 3/8"=1'-0"



- KEYED NOTES:**
- ① RELOCATED CHLORINE ANALYZER. RECONNECT POWER CONTROLS AS REQUIRED. FIELD VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
  - ② EXISTING FLOW METER TRANSMITTER TO BE REPLACED IN SAME LOCATION. RECONNECT POWER AND CONTROLS AS REQUIRED. FIELD VERIFY ALL REQUIREMENTS.
  - ③ CONNECT RTU CONTROL PANEL TO SCADA VIA COMMUNICATION INTERFACE.
  - ④ UTILITY COMPANY TRANSFORMER REPLACED IN SAME LOCATION. CONNECT TO EXISTING CONDUCTORS. COORDINATE ALL WORK WITH THE UTILITY COMPANY AND THE OWNER.

- PLAN NOTES:**
1. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
  2. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
  3. FOR CONNECTION REQUIREMENTS TO MECHANICAL UNITS, SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE.
  4. FOR CONNECTION REQUIREMENTS TO PROCESS UNITS, SEE PROCESS EQUIPMENT CONNECTION SCHEDULE.
  5. ALL PENETRATIONS IN THE RATED WALLS AND CEILINGS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES. THE SEALANT SHALL HAVE A T-RATING OF ONE HOUR.
  6. CONTROL JUNCTION BOXES SHALL BE SIZED PER THE N.E.C. AS A MINIMUM.
  7. RUN ALL CONTROL CABLES IN SEPARATE CONDUITS FROM POWER CIRCUITS. RUN SHIELDED CABLES (ANALOG) CONDUITS AT LEAST 12" FROM ANY OTHER CONDUIT.
  8. SEE CONTROL CABLES CONDUIT SCHEDULE FOR CONTROL CABLE CONDUIT SIZING REQUIREMENTS.
  9. FURNISH AND INSTALL ALL CONDUIT AND WIRING AS REQUIRED FOR COMPLETE FUNCTIONALITY OF EQUIPMENT AS SPECIFIED AND AS IDENTIFIED BY THE MANUFACTURER. COORDINATE FIELD WIRING REQUIREMENTS WITH EQUIPMENT MANUFACTURER. REFER TO SPECIFICATIONS DIVISION 11000 AND EQUIPMENT SHOP DRAWINGS FOR EXACT REQUIREMENTS.
  10. REFER TO CIVIL DRAWINGS AND SECTIONS FOR EXACT EQUIPMENT LOCATIONS.
  11. LOCATE CONTROLS CONDUIT AND JUNCTION BOXES SO AS NOT TO INTERFERE WITH EQUIPMENT OPERATION, MAINTENANCE, OR REPLACEMENT. IN WET WELL: PROVIDE STAINLESS STEEL KELLEMS STRAIN RELIEF SUPPORTED FROM TOP WET WELL FOR PUMP CABLES AND LEVEL CONTROL SYSTEM. PROVIDE STAINLESS STEEL HOOKS IN STRUCTURE TO ACCEPT GRIP EYES.
  12. A CONDUIT FOR ANALOG CABLE SHALL TERMINATE IN EQUIPMENT ENCLOSURE AS CLOSE AS POSSIBLE TO THE TERMINALS. CABLES SHALL NOT PASS NEAR TO CABLES OR EQUIPMENT OPERATING ABOVE 24V.
  13. INTERNAL AND EXTERNAL I/O SHALL BE LANDED ON TERMINAL STRIPS.
  14. I/O IDENTIFIED ON CONTROL DIAGRAM SHEETS ARE FOR INPUTS & OUTPUTS EXTERNAL TO THE EQUIPMENT CONTROL PANEL. I/O NECESSARY FOR THE COMPLETE FUNCTIONALITY OF THE EQUIPMENT (INTERNAL I/O) SHALL BE PROVIDED BY THE EQUIPMENT MANUFACTURER. THE CONTRACTOR SHALL FURNISH & INSTALL CONDUIT AND WIRE REQUIRED FOR COMPLETE FUNCTIONALITY OF EQUIPMENT AS SPECIFIED AND AS IDENTIFIED BY THE MANUFACTURER. THE CONTRACTOR SHALL COORDINATE WITH EQUIPMENT MANUFACTURER TO DETERMINE FIELD WIRING REQUIREMENTS.

|   |                |                       |           |
|---|----------------|-----------------------|-----------|
| No.   | Issued for Bid | CL                    | 4/30/2019 |
|   | Revision       | By                    | Date      |
| CITY OF WICHITA, KANSAS                       |                |                       |           |
| <b>ELECTRICAL PLAN</b>                        |                |                       |           |
| 37TH STREET BOOSTER PUMP STATION IMPROVEMENTS |                |                       |           |
|   |                |                       |           |
|   |                |                       |           |
| Designed by RWW                               |                | Job No. 34-170920-000 |           |
| Drawn by MAL                                  |                | Date DECEMBER 2018    |           |
|   |                | Sht. E4.1 of          |           |