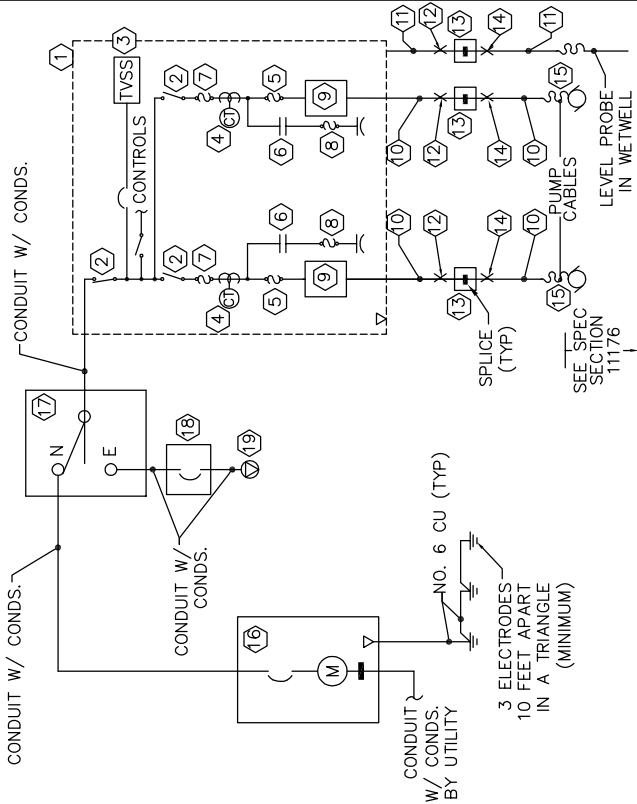


EQUIPMENT SCHEDULE

- ① PUMP CONTROL PANEL.
- ② DISCONNECT: HEAVY DUTY, 3 POLE. SIZE PER APPLICATION.
- ③ TRANSIENT VOLTAGE SURGE SUPPRESSION DEVICE. PROTECTION MODES: L-N, L-L, N-G. LIBERTY AII SERIES OR EQUAL. SIZE PER APPLICATION. PROVIDE LED INDICATORS AND ALARM CONTROLS.
- ④ CURRENT TRANSFORMER
- ⑤ FUSE: HIGH SPEED CLASS J, SHAWMUT OR BUSS SERIES.
- ⑥ CAPACITOR CONTRACTOR: NEMA RATED, SIZE PER APPLICATION.
- ⑦ FUSE: DUAL ELEMENT/TIME DELAY, CLASS RK1. SIZE PER APPLICATION.
- ⑧ POWER FACTOR CORRECTION CAPACITOR W/FUSES & FAILED CELL INDICATORS. SQUARE D CLASS 5810. SIZE PER APPLICATION. PROVIDE FOR PUMPS 7.5HP AND LARGER.
- ⑨ REDUCED VOLTAGE MOTOR STARTER WITH, LINE TRANSIENT VOLTAGE PROTECTION MODULE, ISOLATION CONTACTS, AND PUMP CONTROL. PROVIDE WITH DOOR MOUNTED HUMAN INTERFACE MODULE (HIM). ALLEN BRADLEY SMC-FLEX SERIES. NO SUBSTITUTIONS. SIZE PER APPLICATION.
- ⑩ CONDUIT WITH CABLES (MOTOR FEEDERS). SIZE PER APPLICATION.
- ⑪ CONDUIT WITH CABLE (MULTITRODE). SIZE PER APPLICATION.
- ⑫ CROUSE HINDS EYS CONDUIT SEAL. THE WETWELL IS A CLASS 1, DIV 1 AREA.
- ⑬ STAINLESS STEEL NEMA 4X JUNCTION BOX. 12" X 12" X 6" MIN. SIZE AS REQUIRED. SPLICE CABLES ON POWER DISTRIBUTION BLOCKS IN J-BOX, SQUARE D CLASS 9080 TYPE LB WITH CLEAR COVERS. LABEL COVERS FOR EACH PUMP AND MULTITRODE CABLE.
- ⑭ SPLIT CASE STYLE SEAL OFF. CROUSE HINDS EYSR SERIES.
- ⑮ SEWAGE LIFT PUMPS, SIZE PER APPLICATION.
- ⑯ COMBINATION METER/DISCONNECT. PROVIDE WITH TEST BYPASS SAFETY SOCKET AND MAIN CIRCUIT BREAKER. PROVIDE WITH A STAINLESS STEEL NEMA 3R ENCLOSURE. SIZE PER APPLICATION.



SINGLE LINE DIAGRAM

NO SCALE

CONTROL LEGEND

- Transformer
- Fuse
- Contractor
- Capacitor
- Circuit Breaker
- Push to Test Indicating Light. Letter indicates color.
- Industrial Control Relay. Number or letter indicates relay number.
- Pushbutton
- Normally Open Contact. Number indicates relay number.
- Normally Closed Contact. Number indicates relay number.
- Two Position Switch
- Electric Motor

EQUIPMENT SCHEDULE - CONTINUED

- ⑰ SAFETY SWITCH, 3 POLE, NEUTRAL BUS, DOUBLE THROW. PROVIDE IN A STAINLESS STEEL ENCLOSURE. SIZE PER APPLICATION.
- ⑱ PORTABLE GENSET CIRCUIT BREAKER: MOLDED CASE CIRCUIT BREAKER IN STAINLESS STEEL NEMA 3R ENCLOSURE. SIZE PER APPLICATION.
- ⑲ PORTABLE GENERATOR RECEPTACLE. CROUSE HINDS AREA204126S22, WITH BACK BOX, ANGLE ADAPTER, AND REVERSE SERVICE INSULATORS. SIZE PER APPLICATION.
- ⑳ PROVIDE A 480V, 3Ø, 4W SERVICE TO THE LIFT STATION. OTHER VOLTAGES MAY BE ALLOWED ONLY WITH WRITTEN PERMISSION FROM THE CBJ WASTEWATER DEPARTMENT COLLECTIONS SECTION.
- ㉑ SIZE ALL CONDUCTORS, CONDUIT, EQUIPMENT, ETC. PER APPLICATION. PERFORM ALL WORK PER THE NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES.

NOTES:

- 1. PROVIDE STAINLESS STEEL CABLE GRIPS FOR CABLES IN WETWELL. LOCATE ADJACENT TO NEAREST PUMP.
- 2. PROVIDE PHASE INVERTERS AS REQUIRED TO PROVIDE 480V, 3Ø POWER TO THE SEWAGE LIFT PUMPS. SEE NOTE 20, THIS SHEET.

SCALE:

NTS

DATE:

1/18/00

DRAWN BY:

STAFF

CHECKED BY:

JB/STAFF

APPROVED BY:

DRWA

REVISED:

8/14/2011

CITY AND BOROUGH OF JUNEAU, ALASKA

**PUMP STATION
SINGLE LINE DIAGRAM**

STANDARD 220-10