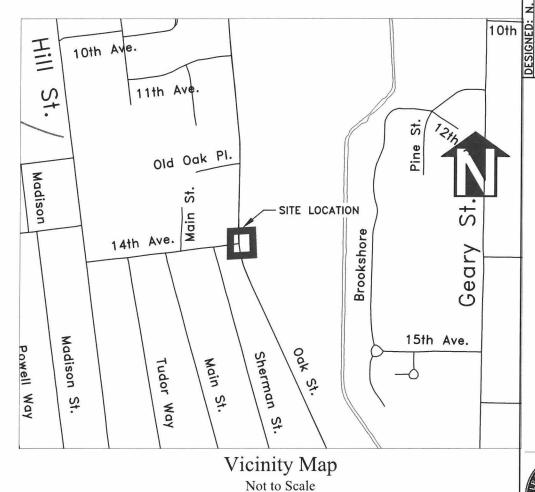
CITY OF ALBANY SS-19-04, 14TH & OAK LIFT STATION UPGRADE

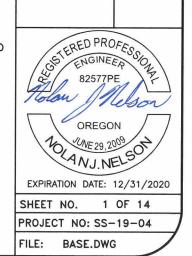
| | SHEET INDEX |
|------------|-------------------------------------|
| SHEET # | SHEET TITLE |
| 1 | COVER |
| 2 | SITE OVERVIEW |
| 3 | SITE PLAN |
| 4 | DEMOLITION |
| 5 | NEW STATION PROFILE |
| 6 | ELECTRICAL JUNCTION BOX DETAILS |
| 7 | ELECTRICAL SYMBOLS & ABBREVIATIONS |
| 8 | ELECTRICAL SYMBOLS |
| 9 | ONE-LINE DIAGRAM & CONDUIT SCHEDULE |
| 10 | ELECTRICAL DEMOLITION SITE PLAN |
| 11 | ELECTRICAL SITE PLAN |
| 12 | PUMP STATION AND CLASSIFIED AREA |
| 13 | PANEL SCHEDULES |
| 14 | ELECTRICAL DETAILS |





GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF ALBANY STANDARD CONSTRUCTION SPECIFICATIONS AND ASSOCIATED STANDARD DRAWINGS. THE CURRENT VERSION OF THE CITY OF ALBANY STANDARD CONSTRUCTION SPECIFICATIONS CAN BE FOUND ON THE CITY'S WEBSITE AT WWW.CITYOFALBANY.NET.
- 2. UTILITIES SHOWN ARE FOR REFERENCE ONLY. FOR A FIELD LOCATE, CALL THE UTILITIES NOTIFICATIONS CENTER AT 1-800-332-2344.
- 3. ALL EXCAVATIONS SHALL BE BACKFILLED OR STEEL SHEETED BY THE END OF EACH WORKING DAY.
- 4. OPERATING ACCESS FOR CITY MAINTENANCE PERSONNEL TO EXISTING AND NEW WATER VALVES AND MANHOLES SHALL BE CONTINUOUSLY MAINTAINED BY THE CONTRACTOR DURING ALL CONSTRUCTION ACTIVITIES.
- 5. CONTRACTOR SHALL VERIFY ALL EXISTING PIPE ELEVATIONS, PIPE DIAMETERS, AND PIPE MATERIALS AT CONNECTION AND ABANDONMENT LOCATIONS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO ENGINEER PRIOR TO BEGINNING WORK.
- 6. ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1987).
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION PREVENTION SEDIMENT CONTROL (EPSC) MEASURES IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED BY THE CITY OF ALBANY, AND VEGETATION/LANDSCAPING IS ESTABLISHED. FOR GUIDANCE, REFER TO THE CITY OF ALBANY EPSC MANUAL WHICH CAN BE FOUND AT www.cityofalbany.net.
- 8. CONTRACTOR SHALL MAINTAIN ACCESS TO MAILBOXES DURING CONSTRUCTION AND RELOCATE MAILBOXES TO PERMANENT LOCATIONS AFTER CONSTRUCTION. DAMAGED MAILBOXES SHALL BE REPLACED AT CONTRACTOR'S EXPENSE. SEE STANDARD DRAWINGS NO. 202A AND 202B.



PUBLIC WORKS DEPARTMENT

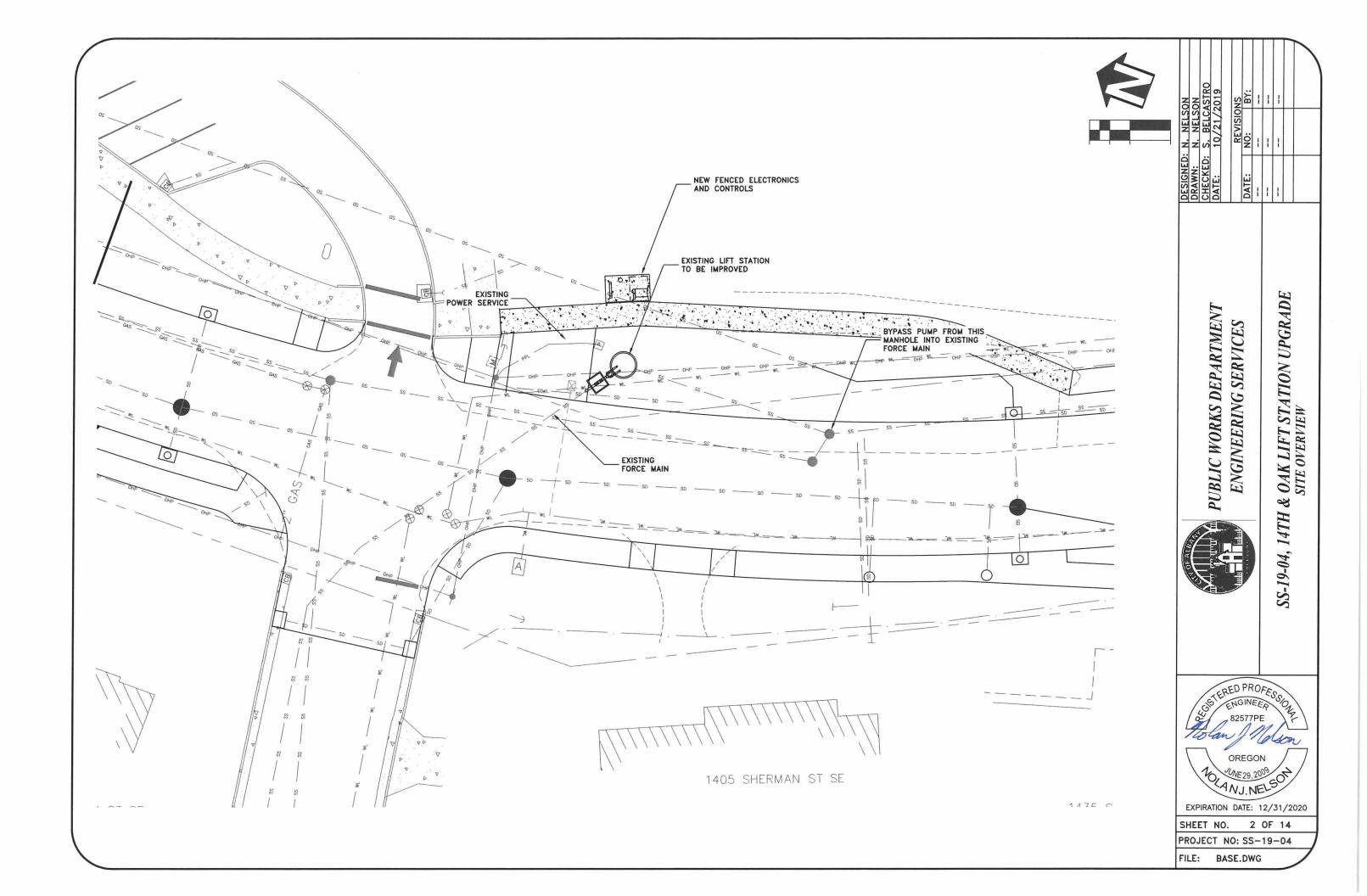
ENGINEERING SERVICES

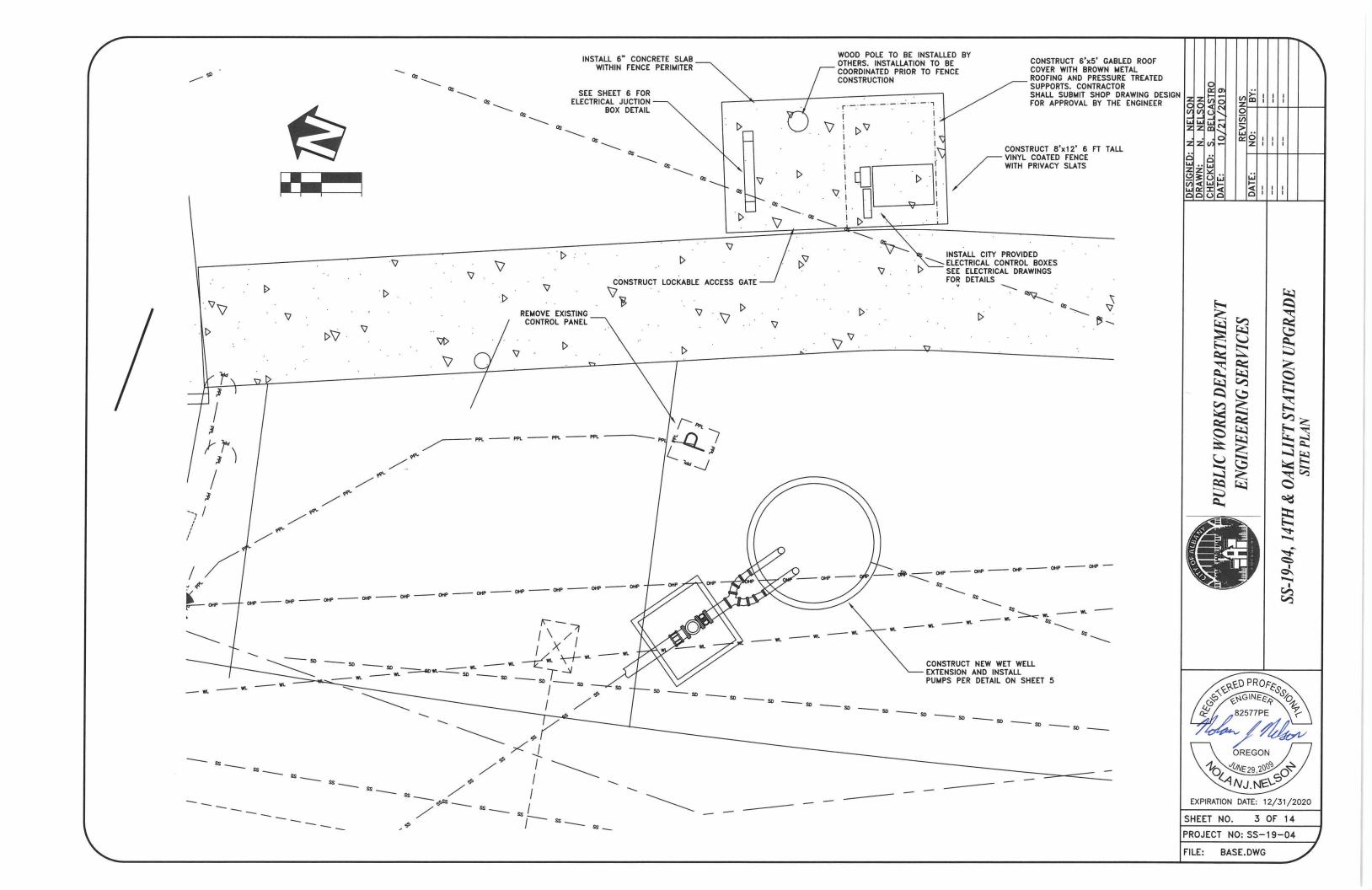
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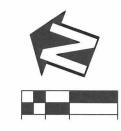
OAK LIFT. COVER

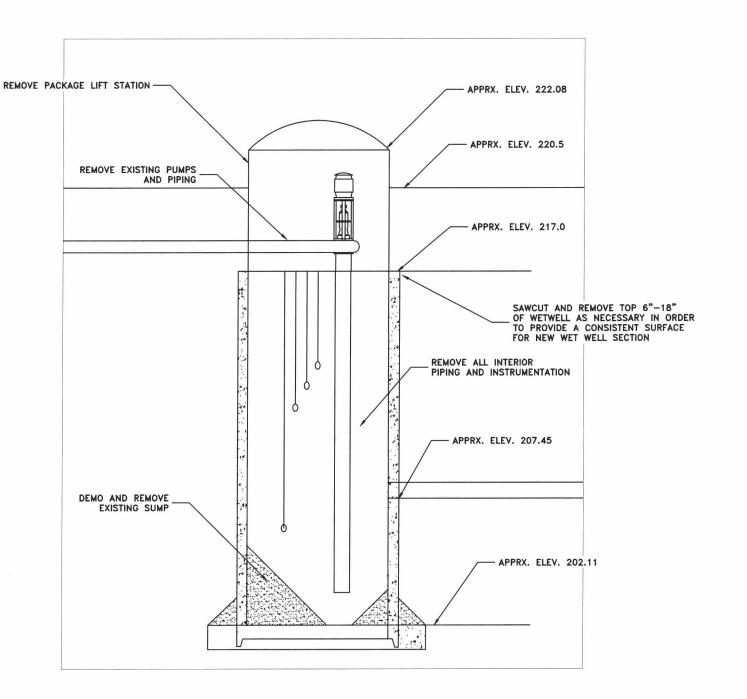
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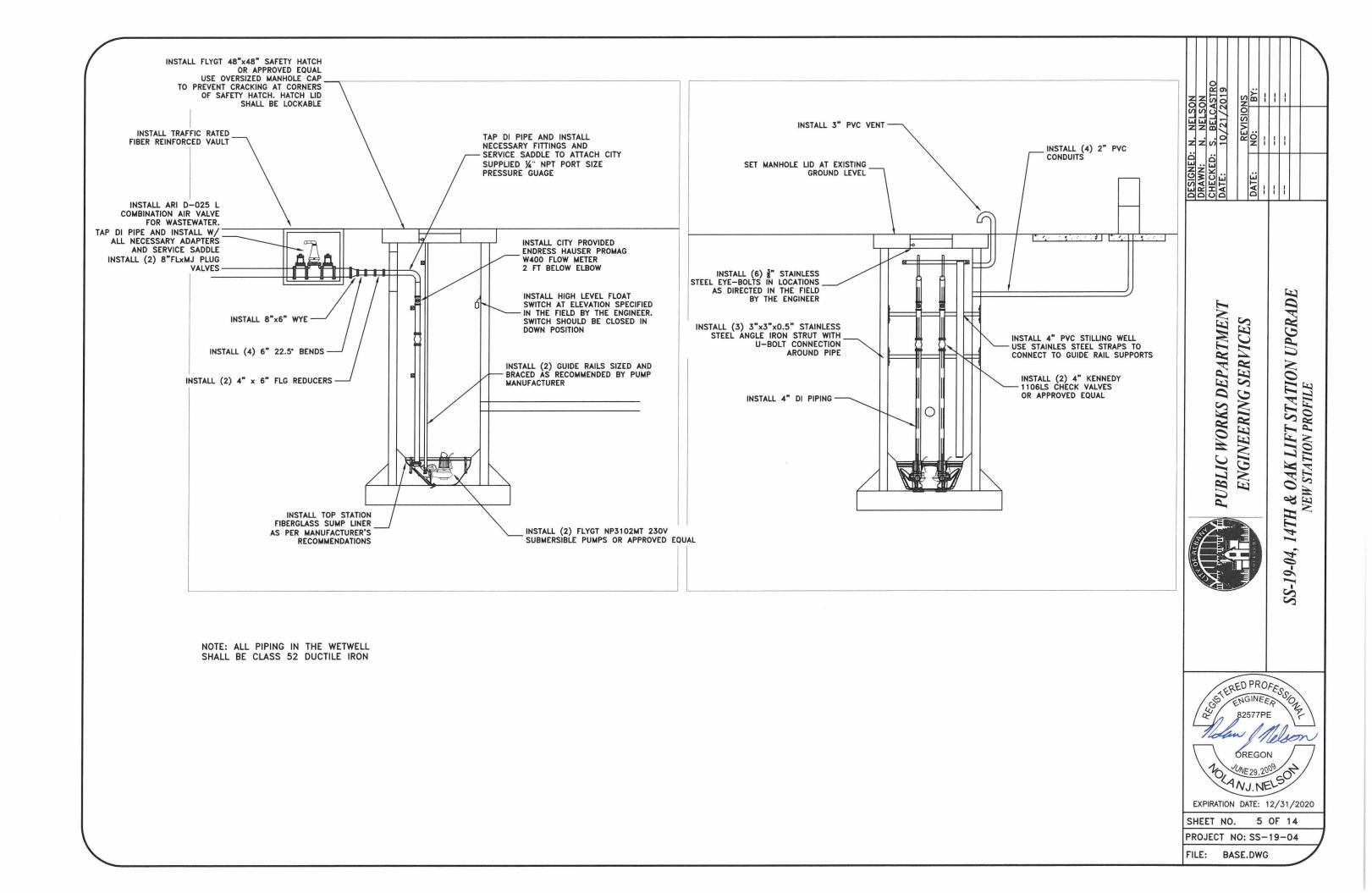
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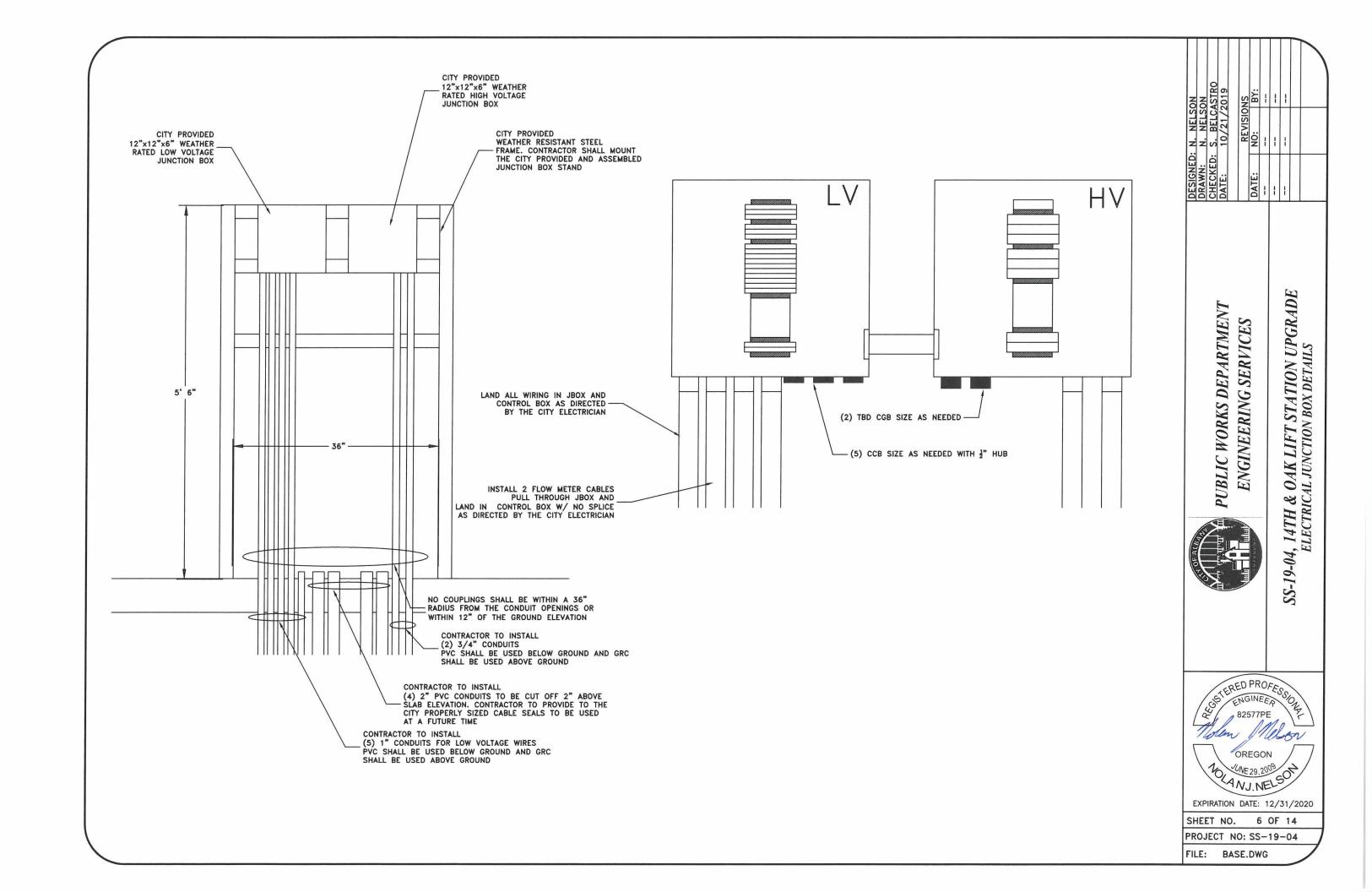
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STERED PROFESSION B2577PE 82577PE OREGON JUNE 29, 2009 10,4NJ.NELSON EXPIRATION DATE: 12/31/2020

4 OF 14 SHEET NO.

PROJECT NO: SS-19-04





Electrical Abbreviations, General Notes, & Symbol Legend

Abbreviations

| Apprev | riations | | |
|--------|--|--------|--|
| | | | |
| Α | AMPERE | MCA | MINIMUM CIRCUIT AMPACITY |
| AC | ALTERNATING CURRENT, AIR CONDITIONING UNIT | MCC | MOTOR CONTROL CENTER |
| AHJ | AUTHORITY HAVING JURISDICTION | MCP | MOTOR CIRCUIT PROTECTOR |
| Al | ANALOG INPUT | MDF | MAIN DISTRIBUTION FRAME |
| AIC | AVAILABLE INTERRUPTING CAPACITY | MHz | MEGAHERTZ |
| AF | AMPERE FRAME / AMPERE FUSED | MISC | MISCELLANEOUS |
| AFC | ABOVE FINISHED CEILING | MLO | MAIN LUGS ONLY |
| AFF | ABOVE FINISHED FLOOR | MOCP | MAXIMUM OVERCURRENT PROTECTION |
| AFG | ABOVE FINISHED GRADE | | |
| ANSI | AMERICAN NATIONAL STANDARDS INSTITUTE | N | NEUTRAL |
| | | NAC | NOTIFICATION APPLIANCE CIRCUIT |
| AO | ANALOG OUTPUT | | |
| ARMS | ARC FLASH REDUCTION MAINTENANCE SYSTEM | N/A | NOT APPLICABLE |
| AT | AMPERE TRIP | NC | NORMALLY CLOSED |
| AV | AUDIO / VIDEO | NEC | NATIONAL ELECTRICAL CODE |
| AWG | AMERICAN WIRE GAUGE | NEMA | NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION |
| | | NEX | REPLACE EXISTING WIRING DEVICE AND FACEPLATE WITH NEW. |
| BAS | BUILDING AUTOMATION SYSTEM | | BACK BOX AND CONDUIT SHALL REMAIN. |
| BFG | BELOW FINISHED GRADE | NL | NIGHT LIGHT |
| BLDG | BUILDING | NO | NORMALLY OPEN |
| | | NTS | NOT TO SCALE |
| С | CONDUIT | | |
| CAT | CATEGORY | OC | ON CENTER |
| CB | CIRCUIT BREAKER | OFCI | OWNER FURNISHED, CONTRACTOR INSTALLED |
| CFCI | CONTRACTOR FURNISHED, CONTRACTOR INSTALLED | OFOI | OWNER FURNISHED, OWNER INSTALLED |
| | | OFOI | OWNER FORMSHED, OWNER INSTALLED |
| CFOI | CONTRACTOR FURNISHED, OWNER INSTALLED | a | DUACE |
| CKT | CIRCUIT | Ø | PHASE |
| CPT | CONTROL POWER TRANSFORMER | | |
| CR | CONTROL RELAY | PB | PULL BOX, PANIC BUTTON, PUSH BUTTON |
| CU | COPPER | PE | PHOTE EYE |
| | | PNL | PANEL |
| dB | DECIBAL | POE | POWER OVER ETHERNET |
| DC | DIRECT CURRENT | PTZ | PAN, TILT, ZOOM |
| DI | DIGITAL INPUT | | · · · · · · · · · · · · · · · · · · · |
| DIM | DIMENSION | RD | LOCATION OF RELOCATED DEVICE / EQUIPMENT |
| DIV | DIVISION | REX | REMOVE EXISTING DEVICE / EQUIPMENT |
| DO | DIGITAL OUTPUT | RF | RADIO FREQUENCY |
| | | | |
| DTL | DETAIL | RFI | REQUEST FOR INFORMATION |
| DWG | DRAWING | RR | REMOVE AND RELOCATE EXISTING DEVICE / EQUIPMENT |
| | | | |
| EIP | ETHERNET IP | SLC | SIGNALING LINE CIRCUIT |
| EL | ELEVATION | SPD | SURGE PROTECTION DEVICE |
| EMT | ELECTRICAL METALLIC TUBING | STD | STANDARD |
| EOLR | END OF LINE RESISTOR | SW | SWITCH |
| ETR | EXISTING DEVICE SHALL REMAIN | | |
| | | T/M | THERMAL MAGNETIC CIRCUIT BREAKER |
| FACP | FIRE ALARM CONTROL PANEL | TBD | TO BE DETERMINED |
| FF | FINISH FLOOR | TV | TELEVISION / MONITOR OUTLET |
| FLA | FULL LOAD AMPERES | TVSS | TRANSIENT VOLTAGE SURGE SUPPRESSOR |
| FT | FOOT, FEET | TYP | TYPICAL |
| FBO | FURNISHED BY OTHERS | | 11110/12 |
| 1 00 | 1 OTANIONED DI OTTIERO | UH | UNIT HEATER |
| G, GND | GROUND | UG | UNDERGROUND |
| | GROUND FAULT CIRCUIT INTERRUPTER | | |
| GFCI | GROUND FAULT CIRCUIT INTERRUPTER | UL | UNDERWRITERS LABORATORIES |
| | LIAND HOLE | UPS | UNINTERRUPTIBLE POWER SUPPLY |
| HH | HAND HOLE | UON | UNLESS OTHERWISE NOTED |
| HP | HORSEPOWER | USB | UNIVERSAL SERIAL BUS |
| 10 | IDENTIFICATION. | | V(0) T0 V(0) T: 0= |
| ID | IDENTIFICATION | V | VOLTS, VOLTAGE |
| IDC | INITIATING DEVICE CIRCUIT | VA | VOLT-AMPERE |
| IDF | INTERMEDIATE DISTRIBUTION FRAME | VFD | VARIABLE FREQUENCY DRIVE |
| IEEE | INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS | | |
| IG | ISOLATED GROUND | W | WATT, WIRE |
| IT | INFORMATION TECHNOLOGY | WAN | WIDE AREA NETWORK |
| | | WAP | WIRELESS ACCESS POINT |
| JB | JUNCTION BOX | WI-FI | WIRELESS FIDELITY |
| 02 | | W/ | WITH |
| KAIC | THOUSAND AMPS INTERRUPTING CURRENT | W/O | WITHOUT |
| | | | |
| KCMIL | THOUSAND CIRCULAR MILS | WP | WEATHERPROOF |
| KVA | KILOVOLT-AMPERE | \/E\4E | TDANCEODAED |
| KW | KILOWATT | XFMR | TRANSFORMER |
| | | | 140 (= |
| LAN | LOCAL AREA NETWORK | Υ | WYE |
| LED | LIGHT EMITTING DIODE | | |
| LS | LIMIT SWITCH | +72 | MOUNTING UNITS EXPRESSED IN INCHES TO CENTERLINE ABOVE |
| LSI | ELECTRONIC TRIP UNIT ADJUSTABLE LONG TIME DELAY, SHORT TIME | | FINISHED FLOOR OR GRADE. |
| | DELAY, INSTANTANEOUS TRIP | | |
| LSIG | ELECTRONIC TRIP UNIT WITH ADJUSTABLE LONG TIME DELAY, SHORT TIME | 1P | ONE POLE |
| | DELAY, INSTANTANEOUS TRIP, AND GROUND FAULT | 2P | TWO POLE |
| LV | LOW VOLTAGE | 3P | THREE POLE |
| _• | | 4P | FOUR POLE |
| | | | |

General Electrical Notes

- ALL LIGHTING BRANCH CIRCUITS SHALL BE 2#10, 1#10G IN 3/4" CONDUIT, UON.
- 2. ALL 20-AMP RECEPTACLE AND HARDWIRED BRANCH CIRCUITS SHALL BE 2#12, 1#12G IN 3/4" CONDUIT, UON.
- 3. ALL EXIT SIGNS SHALL BE WIRED TO THE LOCAL LIGHTING BRANCH CIRCUIT AHEAD OF ALL SWITCHING.
- 4. PROVIDE 0-10V DIMMING CONDUCTORS TO ALL LUMINAIRES WHICH ARE CONTROLLED BY 0-10V DIMMERS SHOWN ON THE DRAWINGS.

Annotation

- (N) INDICATES NEW EQUIPMENT.
- INDICATES EXISTING EQUIPMENT TO REMAIN.
- (D) INDICATES EXISTING EQUIPMENT TO BE
- DEMOLISHED.
- (RP) INDICATES EXISTING EQUIPMENT TO REPLACED WITH NEW.
- (RD) INDICATED EXISTING EQUIPMENT OR DEVICE TO BE REMOVED AND REINSTALLED.
- CONDUIT & CONDUCTOR CALLOUT. REFER TO CONDUIT & CONDUCTOR SCHEDULE.
- KEYED NOTE CALLOUT. REFER TO CORRESPONDING SHEET KEYNOTES.
- KEYED NOTE CALLOUT. REFER TO CORRESPONDING SHEET KEYNOTES.
- MECHANICAL EQUIPMENT CALLOUT. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE.

 DETAIL CALLOUT. REFER TO DETAIL AND SHEET AS
- INDICATED ON CALLOUT.

 (XX'-XX") FIXTURE MOUNTING CALLOUT. HEIGHT ABOVE
- FINISHED FLOOR (A.F.F.)

 XXXXX

 EQUIPMENT CALLOUT. REFER TO NEMA
- CONNECTION SCHEDULE.

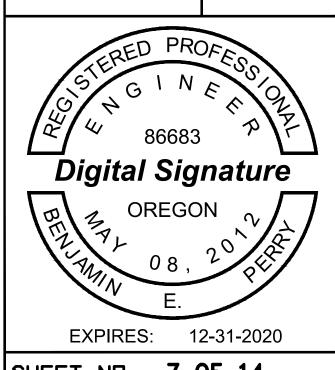
 SECTION CALLOUT. REFER TO SECTION AND SHEET
 AS INDICATED ON CALLOUT.
 - ELEVATION CALLOUT. REFER TO ELEVATION AND SHEET AS INDICATED ON CALLOUT.

| | | 2019 | SNE | ΒYι | - | | | |
|-------|---------|------|-----------|------|---|------|--|--|
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| | | | | | | | | |

PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES

SYMBOLS





SHEET NO. 7 OF 14
PROJECT NO: SS-19-04

Electrical Symbol Legend

Power Distribution

- DUPLEX RECEPTACLE, MOUNTED AT 18" AFF, UON.
- SIMPLEX RECEPTACLE, MOUNTED AT 18" AFF, UON.
- QUADPLEX RECEPTACLE. MOUNTED AT 18" AFF. UON.
- GFCI DUPLEX RECEPTACLE, MOUNTED AT 18" AFF,
- GFCI QUADPLEX RECEPTACLE, MOUNTED AT 18"
- AFF, UON. TAMPERPROOF DUPLEX RECEPTACLE, MOUNTED
- AT 18" AFF, UON.
- TAMPERPROOF QUADPLEX RECEPTACLE, MOUNTED AT 18" AFF, UON.
- SWITCHED DUPLEX RECEPTACLE, MOUNTED AT 18"
- NEMA SPECIAL RECEPTACLE, MOUNTED AT 18" AFF, UON. NEMA CONFIGURATION AS INDICATED.
- CENTER HATCHED RECEPTACLE TO BE WIRED TO **EMERGENCY CIRCUIT.**
- RECEPTACLE MOUNTED ON CEILING.
- DISCONNECT SWITCH.
- 4 FUSED DISCONNECT SWITCH.
- 4 ENCLOSED CIRCUIT BREAKER
- COMBINATION STARTER.
- FLOORBOX COMBINATION POWER & DATA.
- FLOORBOX POWER.
- POKETHRU COMBINATION POWER & DATA.
- POKETHRU POWER.
- POWER/DATA POLE.
- PANELBOARD SURFACE MOUNT.

MAIN DISTRIBUTION PANEL.

- PANELBOARD FLUSH MOUNT
- UTILITY CT METER

Drawing Symbol Variables

- THREE WAY SWITCH.
- FOUR WAY SWITCH.
- QUANTITY OF JACKS AND HORIZONTAL CABLES. ΑV MOUNTED ADJACENT TO SMARTBOARD.
- MOUNTED HORIZONTALLY AT 4" ABOVE
- COUNTERTOP.
- CL CLOCK.

С

DR

- DUAL RELAY.
- RED EMERGENCY SWITCH.
- EL **ELEVATOR RECALL** LF
- LOW FREQUENCY.
- LV LOW VOLTAGE SWITCH
- MOTOR RATED TOGGLE SWITCH. 0 INTEGRAL OCCUPANCY SENSOR.
- ADA PHONE, VERIFY HEIGHT WITH ARCHITECT /
- ΤK MOUNTED IN TOE KICK OF CASEWORK.
- TV MOUNTED ADJACENT TO TV AT 60" AFF, UON. V
- VANDAL RESISTANT. WG WIREGUARD.
- WP WEATHERPROOF SWITCH.

Lighting

- TROFFER LUMINAIRE, SURFACE OR RECESS MOUNTED AS INDICATED ON THE DRAWINGS.
- DOWNLIGHT LUMINAIRE, SURFACE, RECESS, OR PENDANT MOUNTED AS INDICATED ON THE
- UNDERCABINET LUMINAIRE

DRAWINGS.

- EMERGENCY BATTERY PACK LUMINAIRE, WALL OR CEILING MOUNTED.
- PENDANT MOUNTED LUMINAIRE.
- LINEAR WALL MOUNTED LUMINAIRE
- **BOLLARD LUMINAIRE.**
- SITE LUMINAIRE POLE MOUNTED. NUMBER OF HEADS AS SHOWN.
- TRACK LUMINAIRE
- WALL MOUNTED LUMINAIRE.

ON DRAWINGS.

SPOT LUMINAIRE.

- EXIT SIGN, WALL OR CEILING MOUNTED, SINGLE FACE WITH DIRECTIONAL CHEVRONS AS SHOWN
- ON DRAWINGS. EXIT SIGN, WALL OR CEILING MOUNTED, DOUBLE FACE WITH DIRECTIONAL CHEVRONS AS SHOWN
- HALF HATCHED LUMINAIRE TO BE WIRED TO **EMERGENCY CIRCUIT**
- FULL HATCHED LUMINAIRE TO BE WIRED TO NIGHTLIGHT CIRCUIT.
- WALL WASH LUMINAIRE POINTED IN DIRECTION AS

Raceways

- CONDUIT AND/OR CONDUCTORS INSTALLED ABOVE GRADE, CONCEALED IN WALL OR CEILING SPACE. CONDUIT AND/OR CONDUCTORS INSTALLED BELOW
- GRADE, BELOW SLAB.
- CONDUIT TURNED DOWN.
 - CONDUIT TURNED UP.
 - CONDUIT DIRECT CONNECTION TO EQUIPMENT.

CONDUIT STUBBED AND CAPPED.

- FLEXIBLE CONNECTION TO EQUIPMENT.
- CONDUIT / WIRING CONTINUATION.
- HOMERUN TO PANELBOARD.
 - CABLE TRAY. SIZE AND TYPE AS INDICATED ON DRAWINGS.

Low Voltage

- ETHERNET OUTLET MOUNTED AT 18" AFF, UON.
- COAXIAL OUTLET MOUNTED AT 18" AFF, UON.
- PHONE OUTLET MOUNTED AT 18" AFF, UON.
- LOW VOLTAGE OUTLET CEILING MOUNTED.
- WIRELESS ACCESS POINT CEILING MOUNTED.
- WIRELESS ACCESS POINT WALL MOUNTED.
- DIGITAL CLOCK.
- FLOORBOX DATA.
- POKETHRU DATA.

One-Line Diagram

- CIRCUIT BREAKER.
- DRAWOUT CIRCUIT BREAKER.
- ENCLOSED CIRCUIT BREAKER.
- -XH-MOTOR STARTER CONTACT.
 - DISCONNECT SWITCH.
- **ENCLOSED DISCONNECT SWITCH**
 - **FUSED DISCONNECT SWITCH**
- **ENCLOSED FUSED DISCONNECT SWITCH**
- CURRENT TRANSFORMER METER.
- FUSE, RATING AS SHOWN ON DRAWINGS ____
 - GENERATOR, CONFIGURATION AS INDICATED ON DRAWING.
- GROUND ROD.
- GROUND. MOTOR, RATED AS INDICATED ON DRAWINGS.
- NEMA CONNECTION. PANEL.
- MINI POWER CENTER
- ST)— SHUNT TRIP HTR HEATER.

- RA REMOTE ANNUNCIATOR
- BATT **BATTERY CHARGER** SURGE SUPPRESSION DEVICE
- DIGITAL METER. VARIABLE FREQUENCY DRIVE.
- SOFT STARTER. TRANSFER SWITCH, WITH FUSES OR BREAKERS AS
- SHOWN ON DRAWINGS.
 - TRANSFORMER.

Miscellaneous

- JUNCTION BOX (ROUND, SQUARE, OCTAGONAL).
- THERMOSTAT.
- RELAY.
- CORD REEL.
- MOTOR / EXHAUST FAN.
- CEILING FAN. UTILITY POLE.
- WEATHERHEAD.
- GROUND ROD.
- SURFACE RACEWAY / WIREMOLD.

FIRE RATED BACKBOARD

GROUND ROD WITH TEST WELL.

Access Control & Security

- ACCESS CONTROL DOOR CONTACT. PROVIDE 3/4" CONDUIT FROM DOOR FRAME TO ACCESSIBLE CEILING OR SECURITY JUNCTION BOX AS SHOWN ON THE DRAWINGS.
- ACCESS CONTROL CARD READER. PROVIDE 3/4" CONDUIT FROM DOOR FRAME TO ACCESSIBLE CEILING OR SECURITY JUNCTION BOX AS SHOWN ON THE DRAWINGS.
- ACCESS CONTROL ELECTRIC STRIKE. PROVIDE 3/4" CONDUIT FROM DOOR FRAME TO ACCESSIBLE CEILING OR SECURITY JUNCTION BOX AS SHOWN ON THE DRAWINGS.
- ACCESS CONTROL KEY PAD. PROVIDE 3/4" CONDUIT FROM DOOR FRAME TO ACCESSIBLE CEILING OR SECURITY JUNCTION BOX AS SHOWN ON THE DRAWINGS.
- ACCESS CONTROL MAGNETIC LOCK. PROVIDE 3/4" CONDUIT FROM DOOR FRAME TO ACCESSIBLE CEILING OR SECURITY JUNCTION BOX AS SHOWN ON THE DRAWINGS.
- ACCESS CONTROL REQUEST TO EXIT. PROVIDE 3/4" CONDUIT FROM DOOR FRAME TO ACCESSIBLE CEILING OR SECURITY JUNCTION BOX AS SHOWN ON THE DRAWINGS.
- ACCESS CONTROL SECURITY JUNCTION BOX. SIZED AS RECOMMENDED BY SECURITY SYSTEM MANUFACTURER.
- ACCESS CONTROL CAMERA / INTERCOM
- ACCESS CONTROL PANIC BUTTON.
- SECURITY CAMERA - CEILING MOUNTED. PROVIDE
- ONE (1) CAT6. SECURITY CAMERA - WALL MOUNTED. PROVIDE
- INTRUSION SENSOR CEILING MOUNTED.
- INTRUSION SENSOR WALL MOUNTED.
- INTRUSION KEYPAD.

ONE (1) CAT6.

Switches

- SINGLE POLE SWITCH MOUNTED AT 42" AFF, UON.
- LOW VOLTAGE 0-10 VOLT DIMMING SWITCH -
- MOUNTED AT 42" AFF, UON. OCCUPANCY SENSOR - CEILING OR WALL MOUNTED.
- OCCUPANCY SENSOR POWER PACK.

ADA DOOR PUSHPLATE.

PUSHBUTTON, SINGLE.

- PHOTOCELL CEILING OR WALL MOUNTED.
- **EMERGENCY STOP SWITCH. MUSHROOM HEAD**
- PUSHBUTTON, DOUBLE.

EJC EJC BEP 10/11/2019

SYMBOLS

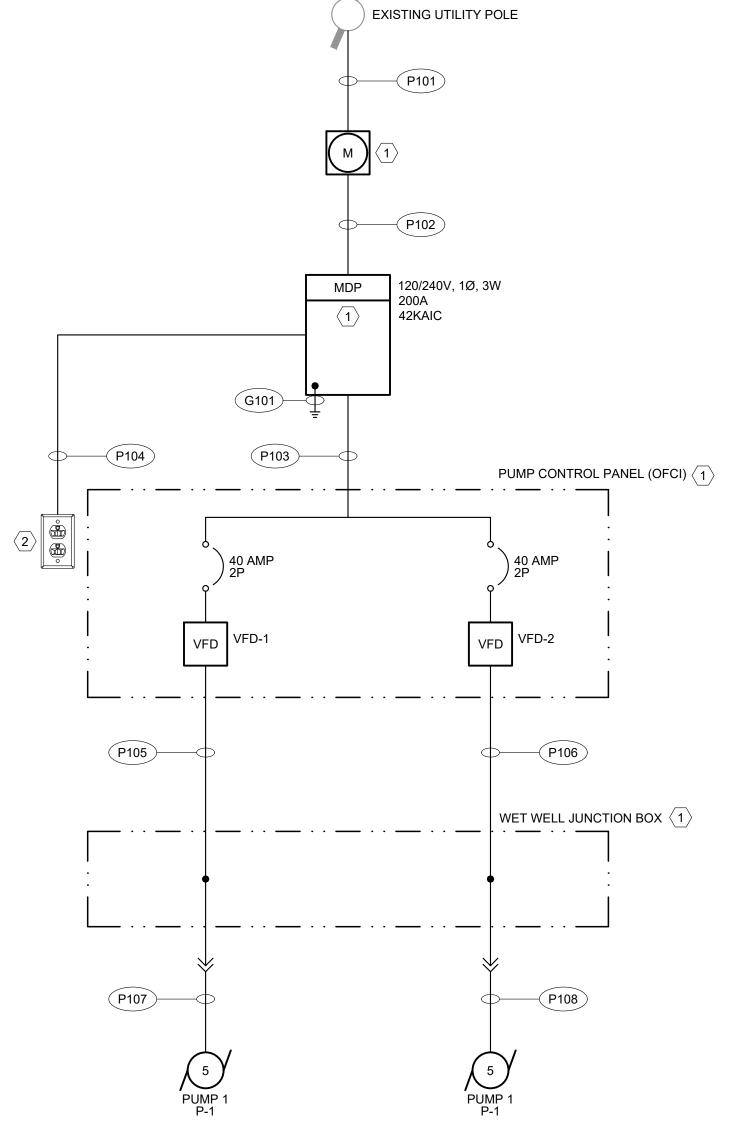
EPARTMENT





SHEET NO. 8 OF 14 PROJECT NO:SS-19-04

| TERMINATE ALL CONDUITS IN OFCI ENCLOSURES AS DIRECTED BY THE OWNER. COORDINATE THE NSTALLATION OF ALL CONDUIT TERMINATION LOCATIONS WITH OWNER PRIOR TO INSTALLATION. | | | | | | | | | | | | \ |
|---|--------|-------|-----------------|--------|---|-------|-----|----------|----------|---|--|---|
| SHEET KEY NOTES | | | | 119 | | NS | ΒYι | ļ | ! | ļ | | |
| OWNER FURNISHED, CONTRACTOR INSTALLED. PROVIDE WEATHERPROOF GFCI RECEPTACLE TO | | | | /20 | | 10 | | <u>'</u> | _ | | | ┨ |
| BE MOUNTED ON THE EXTERIOR OF THE PUMP CONTROL PANEL. COORDINATE LOCATION WITH OWNER. | EJC | EJC | BEP | 10/11/ | • | REVIS | Ü | - | - | | | |
| | SIGNED | 2AWN: | JECKED ! | ٩TE؛ | | | ATE | ! | | - | | |
| | 百 | Ä | ت | Ď | | | Ω | _ | <u> </u> | • | | - |



| | | | | | | | P | OWER CONDUIT / CONDUCTO | R SCHEDULE | | |
|------------------|----------|-----------|-----------------------------|-------------------|-----------|---------|-------|-------------------------|--------------------------|--|----------------|
| CONDUIT ID CONDU | DUIT | | CONE | DUCTORS PER CO | NDUIT | | FROM | TO. | DECODIDATION | OUEET KEY NOTE | |
| NO. | QUANTITY | SIZE | UNGROUNDED | GROUNDED | GROUNDING | CABLE | SPARE | FROIVI | ТО | DESCRIPTION | SHEET KEY NOTE |
| P101 | 1 | 3.0 INCH | - | - | - | - | - | EXISTING UTILITY POLE | CT METER | INSTALL PER PP&L STANDARDS | - |
| P102 | 1 | 2.0 INCH | 1 - #3/0 | 1 - #3/0 | - | - | - | CT METER | PANEL MDP | - | - |
| P103 | 1 | 2.0 INCH | 2 - #8 2 - #8 1 - #12 | - - 1 - #12 | 1 - #10 | - | - | PANEL MDP | PUMP CONTROL PANEL (PCP) | TWO PUMP CIRCUITS, ONE 120-VOLT LIGHTING CIRCUIT | - |
| P104 | 1 | 1.0 INCH | 1 - #12 | 1 - #12 | 1 - #12 | - | - | PANEL MDP | PCP RECEPTACLE | - | - |
| P105 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #10 | - | - | VFD-1 | WET WELL JUNCTION BOX | - | - |
| P106 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #10 | - | - | VFD-2 | WET WELL JUNCTION BOX | - | - |
| P107 | 1 | 2.0 INCH | - | - | - | 1 - MSC | - | JUNCTION BOX (JB-HV) | PUMP (P-1) | PUMP CABLE | - |
| P108 | 1 | 2.0 INCH | - | - | - | 1 - MSC | - | JUNCTION BOX (JB-HV) | PUMP (P-2) | PUMP CABLE | - |
| P109 | - | - | - | - | - | - | - | - | - | - | - |
| P110 | 2 | 1.0 INCH | - | - | - | - | - | PUMP CONTROL PANEL | VALVE VAULT | SPARE FOR FUTURE | - |

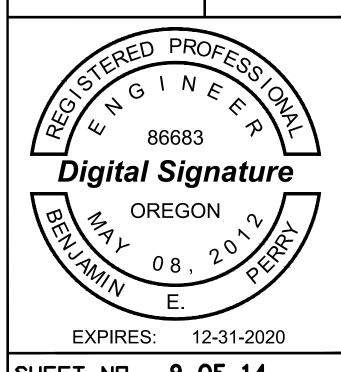
| CONTROL CONDUIT / CONDUCTOR SCHEDULE | | | | | | | | | | | | |
|--------------------------------------|----------------------------------|----------|------------|----------|-----------|---------|-------|----------------------|--------------------|--|----------------|--|
| CONDUIT ID | D CONDUIT CONDUCTORS PER CONDUIT | | | | | FROM | ТО | DESCRIPTION | OUEET KEVANOTE | | | |
| NO. | QUANTITY | SIZE | UNGROUNDED | GROUNDED | GROUNDING | CABLE | SPARE | FROM | 10 | DESCRIPTION | SHEET KEY NOTE | |
| C101 | 1 | 1.0 INCH | - | - | - | 1 - MSC | - | PUMP CONTROL PANEL | JUNCTION BOX JB-LV | FLOW METER | - | |
| C102 | 1 | 1.0 INCH | - | - | - | 1 - MSC | - | PUMP CONTROL PANEL | JUNCTION BOX JB-LV | FLOW METER | - | |
| C103 | 1 | 1.0 INCH | 2 - #14 | - | 1 - #14 | 2 - TSP | - | PUMP CONTROL PANEL | JUNCTION BOX JB-LV | EMERGENCY HIGH FLOAT, PRESSURE, AND RADER | - | |
| C104 | 1 | 1.0 INCH | - | - | - | - | - | PUMP CONTROL PANEL | VALVE VAULT | VIA LOW VOLTAGE JUNCTION BOX SPARE FOR FUTURE | - | |
| C105 | 1 | 2.0 INCH | - | - | - | 2 - MSC | - | JUNCTION BOX (JB-LV) | WET WELL | FLOW METERS | - | |
| C106 | 1 | 2.0 INCH | - | - | - | 3 - MSC | - | JUNCTION BOX (JB-LV) | WET WELL | EMERGENCY HIGH FLOAT, PRESSURE SENSOR, AND RADAR | - | |
| C107 | 1 | 2.5 INCH | - | - | - | - | - | PUMP CONTROL PANEL | RADIO ANTENNA POLE | PROVIDE 20-FEET OF VERTICAL CONDUIT RISER ON POLE AS DIRECTED BY CITY. | - | |

| | | | | | | | | GROUNDING SCHEDULE | | | |
|------------|----------|---------------------------|-------|---------|--------|-------------|----------------|--------------------|----------------------------|-------------|----------------|
| CONDUIT ID | CON | CONDUIT CONDUCTOR FROM TO | | | | DESCRIPTION | SHEET KEY NOTE | | | | |
| NO. | QUANTITY | SIZE | POWER | NEUTRAL | GROUND | CABLE | SPARE | FROW | 10 | DESCRIPTION | SHEET RET NOTE |
| G101 | 1 | 0.75 INCH | - | - | 1 - #4 | - | - | PANEL MDP | GROUNDING ELECTRODE SYSTEM | - | - |
| G102 | 1 | 0.75 INCH | - | - | 1 - #6 | - | - | RADIO TOWER | GROUNDING ELECTRODE SYSTEM | - | - |

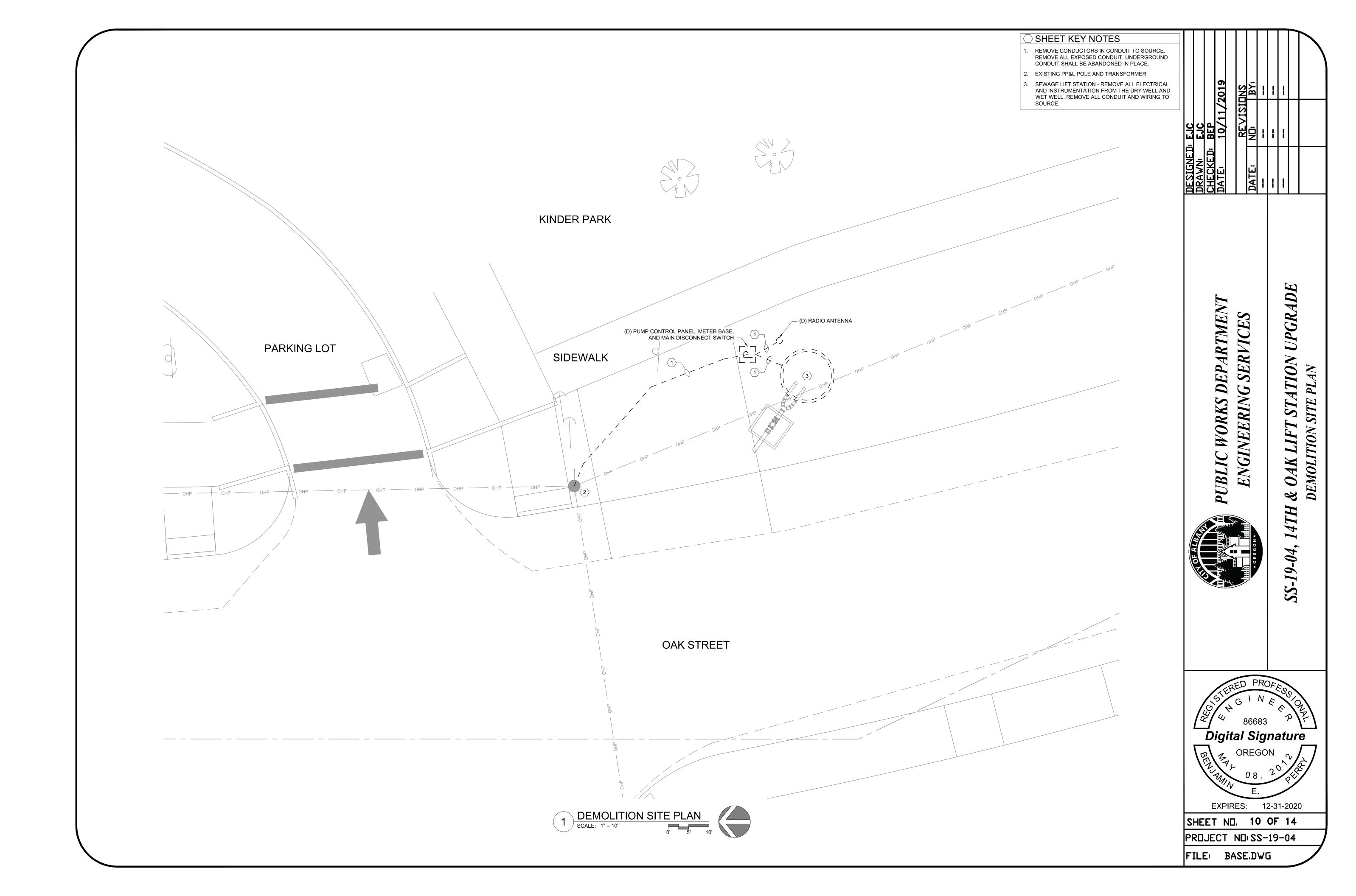
PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES

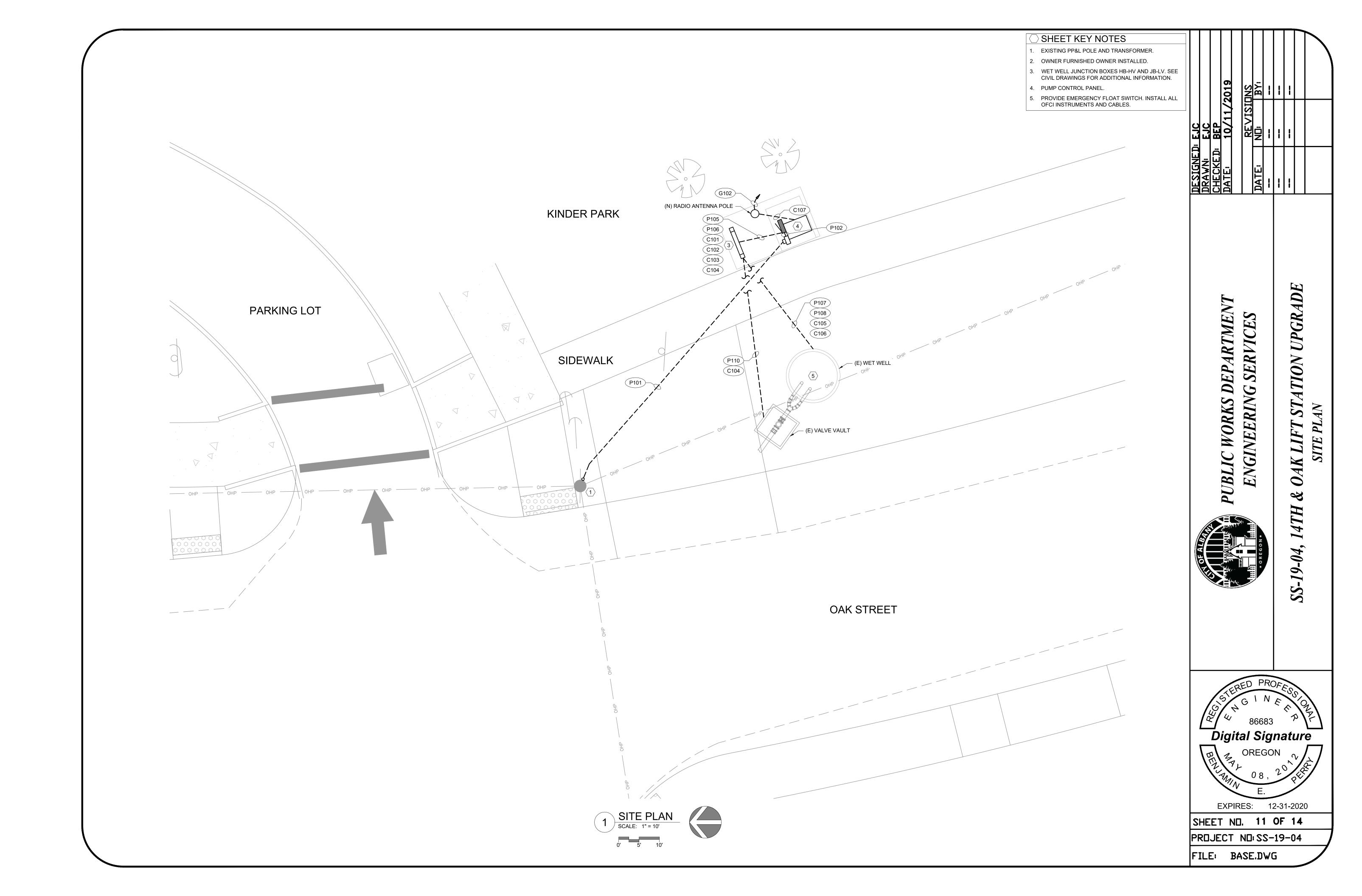
14, 14TH & OAK LIFT STATION UPGRADE ONE-LINE DIAGRAM & CONDUIT SCHEDULE

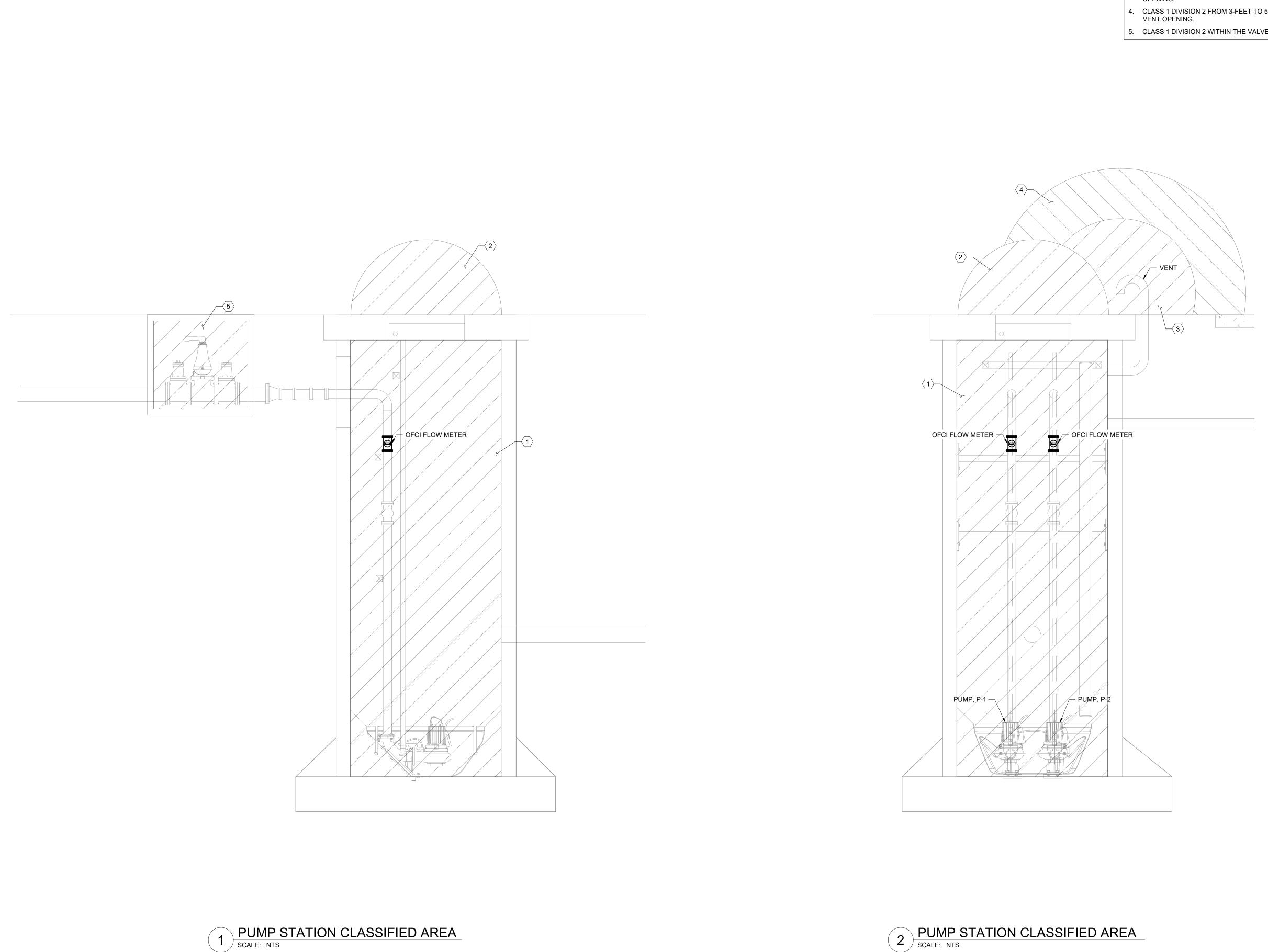




SHEET NO. 9 OF 14 PROJECT NO:SS-19-04









- CLASS 1 DIVISION 1 WITHIN THE WET WELL.
- 2. CLASS 1 DIVISION 2 WITHIN 3-FEET OF THE HATCH.
- 3. CLASS 1 DIVISION 1 WITHIN 3-FEET OF THE VENT OPENING.
- 4. CLASS 1 DIVISION 2 FROM 3-FEET TO 5-FEET OF THE VENT OPENING.
- 5. CLASS 1 DIVISION 2 WITHIN THE VALVE VAULT.

BEP 10/11/2019

WORKS DEPARTMENT SERVICES **PUBLIC**

CLASSIFIED AREA

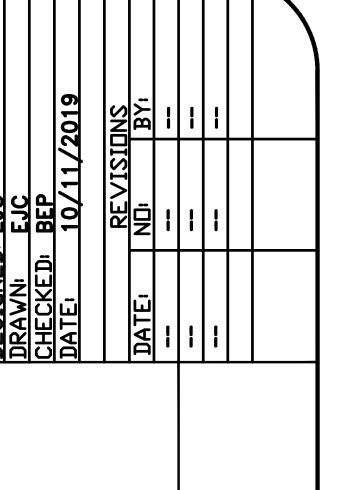
STATION





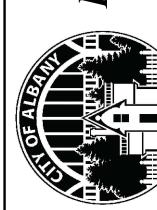
SHEET NO. 12 OF 14 PROJECT NO: SS-19-04

| PANEL NAME: MDP | | | | | | LOCATION: | PUMP STA | TION | | | |
|---|-----------|-------|--|-----------------------------|------------|---|----------------|---|----------|------|--------------------------|
| <u>VOLT/PHASE:</u> 120/240V, 1Ø | | | | | | FED FROM: | UTILITY ME | TER | | | |
| NUM. POLES: 40 | | | | | | BREAKER I | MOUNTING: | BOLTED | | | |
| AIC RATING: 100,000 | | | | | | MAIN BREA | KER AMPS: | 200 | | | |
| NOTES: | | | | | | BUS RATING | S AMPS: | 225 | | | |
| | LOAD | VOLT | -AMP | TRIP | CIRCUIT | CIRCUIT | TRIP | VOLT•AMP | | LOAD | |
| LOAD DESCRIPTION | TYPE | L1 | L2 | RATING AMPS | NUMBER | NUMBER | RATING AMPS | L1 | L2 | TYPE | LOAD DESCRIPTION |
| PUMP 1 | M1 | 10000 | | 40 | 1 | 2 | 20 | 180 | | L | PUMP STATION LIGHTING |
| P-1 | M1 | | 10000 | 40 | 3 | 4 | 20 | | 180 | R | PUMP CONTROL PANEL |
| PUMP 2 | М | 10000 | | | 5 | 6 | 20 | 360 | | R | PUMP STATION RECEPTACLES |
| P-2 | М | | 10000 | 40 | 7 | 8 | 20 | | - | | SPARE |
| SPARE | | - | | 20 | 9 | 10 | 20 | - | | | SPARE |
| SPARE | | | - | 20 | 11 | 12 | 20 | | - | | SPARE |
| SPARE | | - | | 20 | 13 | 14 | 20 | - | | | SPARE |
| SPARE | | | - | 20 | 15 | 16 | 20 | | - | | SPARE |
| SPARE | | - | | 20 | 17 | 18 | 20 | - | | | SPARE |
| SPARE | | | - | 20 | 19 | 20 | 20 | | _ | | SPARE |
| SPARE | | - | | 20 | 21 | 22 | 20 | - | | | SPARE |
| SPARE | | | - | 20 | 23 | 24 | 20 | | - | | SPARE |
| SPARE | | - | | 20 | 25 | 26 | 20 | - | | | SPARE |
| SPARE | | | - | 20 | 27 | 28 | 20 | | - | | SPARE |
| SPARE | | - | | 20 | 29 | 30 | 20 | - | | | SPARE |
| SPARE | | | - | 20 | 31 | 32 | 20 | | - | | SPARE |
| SPARE | | - | | 20 | 33 | 34 | 20 | - | | | SPARE |
| SPARE | | | - | 20 | 35 | 36 | 20 | | - | | SPARE |
| SPARE | | - | | 20 | 37 | 38 | 20 | - | | | SPARE |
| SPARE | | | - | 20 | 39 | 40 | 20 | | - | | SPARE |
| | | | | | | | | | • | | , |
| TOTAL LOAD: | | 20000 | 20000 | | | ТС | OTAL LOAD: | 540 | 180 | | |
| | | | | 1 | | | ı | г | | ı | |
| COMBINED LOAD: | | 20540 | 20180 | CONNE | CTED LOAD: | 40720 | DEN | IAND LOAD: | 45,765 | | |
| | | | | | | | DEMA | NDS AMPS: | 191 | | |
| d Type Key General Purpose Re Lighting Largest Motor Motor Appliance HVAC Kitchen Transformer | eceptacle | | Demand Fac 100% First 7 125% Load 125% FLA 100% Load 50% Load 100% Load 65% Load 100% Load | <u>ctor</u> 10kVA, 50% t | thereafter | Connected L 540 180 20,000 20,000 0 0 | <u>oad</u> | Demand Load 540 225 25,000 20,000 0 0 | <u>d</u> | | |



PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES

OAK LIFT STATION UPGRADE PANEL SCHEDULES



Digital Signature

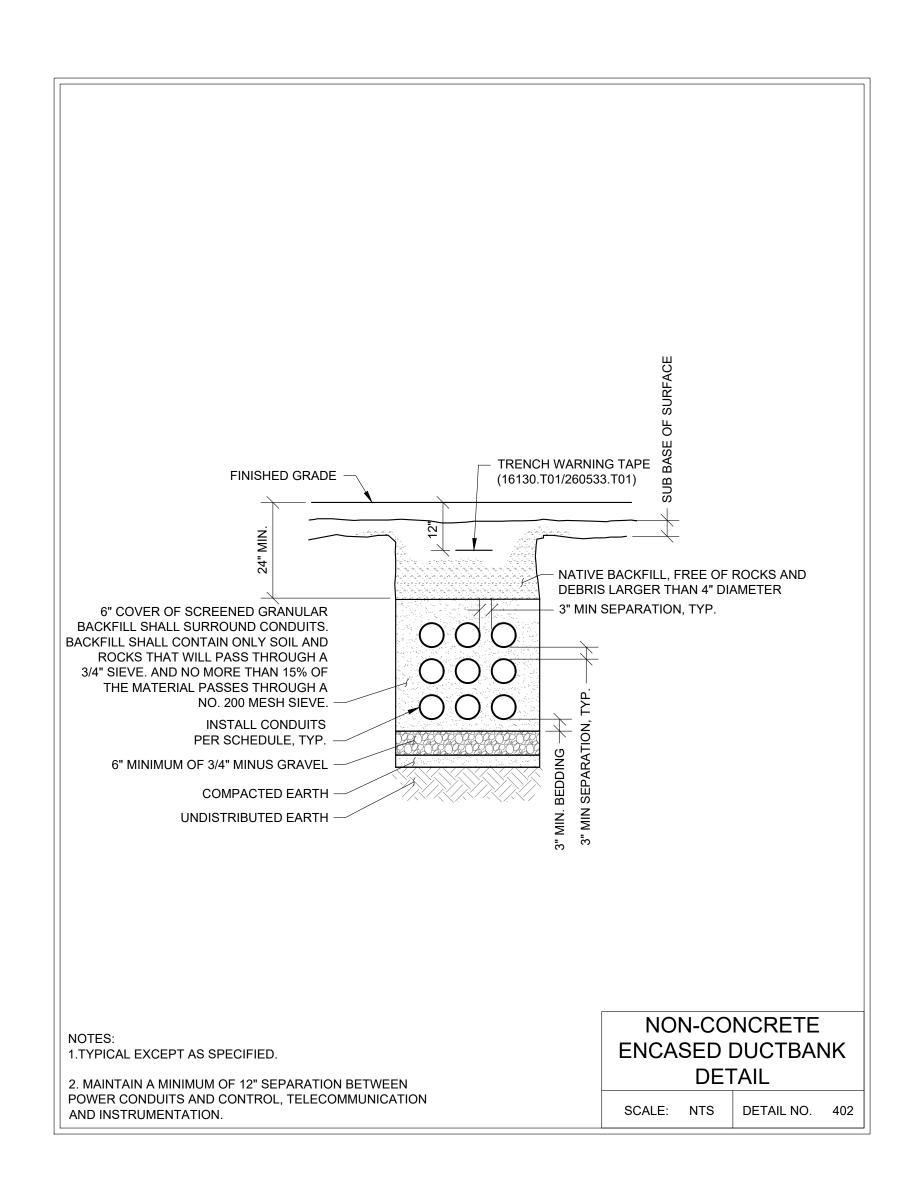
OREGON

OREGON

EXPIRES: 12-31-2020

SHEET NO. 13 OF 14

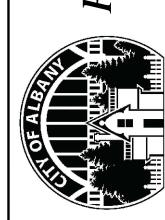
PROJECT NO SS-19-04

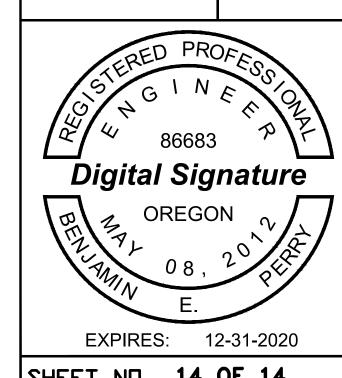




STATION

ELECTRICAL





SHEET NO. 14 OF 14

PROJECT NO:SS-19-04