



# CITY OF CANNON BEACH

## **WATER RESILIENCY PHASE 1 – SEISMIC IMPROVEMENTS**

### **ADDENDUM TO ITB - 2**

DATE: November 21, 2023

TO: Potential Bidders

The following change(s) are hereby added to and made part of ITB for the Water Resiliency Phase 1: Seismic Improvements Project.

Questions, Answers, and Revisions: The following is based on questions received after Addendum 1 was issued on November 2/3, 2023.

**ADDENDUM 2 – This addendum package consists of 26 pages in total.**

### **PLAN REVISIONS – Revised plans consist of 11 pages as described below:**

1. Plan Sheet – Cover Sheet
  - a. Sheet index updated with revision clouds to show which sheets have been updated with addendum 2 changes.
2. Plan Sheet – C002
  - a. The Butterfly valve in the existing vault on inlet pipe to remain.
  - b. The Butterfly valve between vault and the reservoir on the inlet pipe is to be removed.
3. Plan Sheet – C100
  - a. Added general note “all construction related signage shall be installed at the city’s public works yard.”
4. Plan Sheet – C102
  - a. Added general note “all construction related signage shall be installed at the city’s public works yard.”
  - b. Revised north reservoir shutdown note 3 to read “Contractor shall minimize the shutdown to no more than 1 week time period”.
  - c. Estimated quantities revised.
    - i. Connect to existing main = 1
    - ii. 8” Check valve = 1
    - iii. 8” Gate valve with actuator = 1
5. Plan Sheet – C103
  - a. Changed the 8” gate valve with actuator to an 8” check valve located on the inlet pipe .
  - b. Changed location of 4” flex-Tend and tee.
  - c. Added north reservoir shutdown and draining procedure notes.
  - d. Added Flex-Tend installation notes.
  - e. Added note on Flex-Tend restraints.

6. Plan Sheet – C104
  - a. Added general note “all construction related signage shall be installed at the city’s public works yard.”
  - b. Revised south reservoir shutdown notes.
  - c. Added (now optional) temporary bypass notes.
  - d. Estimated quantities revised.
    - i. Connect to existing main = 1
    - ii. 12” Gate valve with actuator = 1
  - e. Clarified that the 12” gate valves shown on the plan sheet are new and shall be furnished and installed regardless of whether the temporary bypass is used or not.
    - i. Added valve numbers to correlate with the tank shutdown and draining notes.
7. Plan Sheet – C105
  - a. Removed the 12” gate valve with actuator located on the inlet pipe – Detail 3.
  - b. Defined pipe material changes outside of vault – Detail 3.
  - c. Added south reservoir draining procedure notes-detail.
  - d. Added Flex-Tend installation notes.
8. Plan Sheet E101
  - a. Added keynote 10 “provide 1-5/8” galvanized unistrut secured to existing ladder, ladder supports and concrete at base of tank. secure 3/4” conduit routed to RTU to unistrut with dielectric spacers and galvanized conduit straps.”
9. Plan Sheet E102
  - a. Added a second conduit and wire line
    - i. ¾” C, 14#14
10. Plan Sheet E601
  - a. Added callout to North Reservoir One-Line Diagram – Electrical & Controls detail.
11. Plan Sheet E701
  - a. Updated Swing Out Panel.

**SPECIFICATION REVISIONS: Revised specifications consist of 11 pages.**

1. Specification Section 00 41 00 – Bid Form
  - a. Changed Bid Item 20, 8” GATE VALVE WITH ACTUATOR quantity from 2 to 1.
  - b. Changed Bid Item 21, 12” GATE VALVE WITH ACTUATOR quantity from 2 to 1.
  - c. Added Bid Item 22 – 8” Check Valve with a quantity of 1
  - d. Renumbered Bid Items #s 22-28 to 23-29 due to the addition of new bid item 22.
2. Specification Section 01 22 00 – Unit Prices
  - a. Removed and replaced payment paragraph in section 1.01 “P” with the following:
    - i. Payment. The payment under these items for Flexends includes all compensation for labor, equipment and material necessary for the work except for any specific portions which are identified to be paid for under separate items. “Flexend” includes the purchase, delivery and installation of the Flexend units located at the North and South Reservoirs including preparation of subgrade, bedding, provision and installation of protective poly sleeve, adjustment, backfilling using appropriate granular material (pea gravel or coarse sand), compaction, gaskets, bolts, washers, nuts, restrained connections, disinfection and testing of each unit for watertightness and placement of tracer wire.
  - b. Removed and replaced title in section 1.01 “T” with the following:
    - i. 8” Check Valve (Bid Item 22) and 12” Check Valve (Bid Item 23)
  - c. Removed and replaced the payment paragraph and Bid Item # in section 1.01 “U” with the following:

- i. Payment. The payment for work constructed under this item includes clearing, excavation and disposal of waste material, trench bracing, dewatering, furnishing and installing the assembly and bedding, native or granular backfill and its compaction, and surface restoration. Each hydrant assembly shall include furnishing and installing fittings with joint restraint, gate valve, valve box/lid, riser, thrust blocks, piping, and hydrant as specified in the technical specifications or shown on the Drawings and standard details titled "Fire Hydrant Assembly". Thrust blocks shall be as per the technical specifications or shown on the Drawings and standard detail titled "Standard Thrust Block". Payment will be made per each assembly listed in the bid schedule.

d. Updated Bid Item #s in sections 1.01 "V, W, X, and Y"

#### QUESTIONS - 10/31/2023

1. Q. Can you provide the name and contact information for the SCADA integrator that installed and/or programmed the existing systems on site? If not, can the original programming files, system as-builts, and access permissions be provided for another integrator to take over?

**Response: The original SCADA integrator is unknown. Correct Equipment is the contact for the programming files and access permissions. There are no as-builts for the existing system.**

**Correct Equipment Contact – Tim Owens,**  
**503-582-0555 Ext. 210**  
[timo@correctequipment.com](mailto:timo@correctequipment.com)

#### QUESTIONS - 11/15/2023 - from Brent Boles of Inland Electric with Responses

1. Q. It has been implied that supplier of the Mission RTU - Correct equipment is to be the systems integrator for this project. They have communicated that they will not be an integrator for this project but would be willing to speak to the system integrator about how to tie into their systems. Who is the City's preferred system integrator? They are also stating that they will not bid the Control panels.

**Response: There is no anticipated system integrator for the work. According to Correct equipment, the programming changes to the system will be addressed by Correct Equipment/Mission based on receipt of an email notification outlining the revisions that are required or have been made. The city does not have a preferred system integrator.**

2. Q. The Instrumentation and controls drawings are not complete. Will the design engineer produce complete drawings for the integrator to design and build LCP 200 and LCP 300?

**Response: Conceptual I&C drawings have been provided with the intent that the I&C contractor provides detailed I&C drawings; this is spelled out in Specification section 48 09 00 – 1.04 and 1.05**

3. Q. The specification 18 09 00 make it the responsibility of the integrator to correct existing conditions at their own expense. Will the integrator be held responsible for the functionality of the existing RTU and RTU performance?

**Response: If there are functional issues with the RTU's this will constitute a change order and the Contractor will be able to negotiate for additional compensation.**

4. Q. The specification imply that it will be the integrators resolve all manufacturers discrepancies and requirements for installation. Has the engineer selected and specified equipment that has been confirmed to be compatible?

**Response: It is our understanding that the equipment is fully compatible as specified.**

5. Q. In the instrumentation specification it lists that 3 reservoir control panels, Street isolation valve panel and the configuration of Mission RTU's. Please verify that there are now only 2 reservoir panels to be provided and that all mission RTU's are existing, functional and have enough capacity to accommodate this project.

**Response: There are only two panels, located at the north and south reservoir respectively. All RTU's are currently functional and have capacity to accommodate the project with the addition of the items shown in the plans. The master unit is located at the public works yard.**

[End of Questions]

**ADDENDUM 2 – This addendum package consists of 26 pages in total.**



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Karen La Bonte  
Public Works Director



# ENGINEERING PLANS - ADDENDUM 2

## FOR

# WATER RESILIENCY PROJECT

## PHASE 1 - SEISMIC IMPROVEMENTS

CITY OF CANNON BEACH, OR 97110

PREPARED FOR:  
**CITY OF CANNON BEACH**  
163 E. GOWER, PO BOX 368  
CANNON BEACH, OREGON 97110  
CONTACT: KAREN LA BONTE  
PHONE: (503) 436-8068  
EMAIL: LABONTE@CI.CANNON-BEACH.OR.COM



VICINITY MAP  
NOT TO SCALE

PREPARED BY:



**WINDSOR  
ENGINEERS**  
Vancouver, WA  
Duluth + Minneapolis, MN  
www.windsorengineers.com

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PROJECT NUMBER: 20198.3



CONTACT: TRAVIS TORMANEN  
PHONE: (360) 903-9281  
EMAIL: TTORMANEN@WINDSORENGINEERS.COM

### SHEET INDEX

G001	COVER SHEET
G002	CIVIL NOTES AND ABBREVIATIONS
G003	LEGENDS
G004	KEY PLAN - NORTH
G005	KEY PLAN - CENTER
G006	KEY PLAN - SOUTH
C000	EXISTING CONDITIONS AND DEMOLITION PLAN - MAIN RESERVOIR
1	C001 EXISTING CONDITIONS AND DEMOLITION PLAN - NORTH RESERVOIR
	C002 EXISTING DETAILS - NORTH RESERVOIR
	C003 EXISTING CONDITIONS AND DEMOLITION PLAN - TOLOVANA RESERVOIR
	C004 EXISTING DETAILS - SOUTH TOLOVANA RESERVOIR
1	C100 SITE & EROSION CONTROL PLAN - MAIN RESERVOIR
	C102 SITE & EROSION CONTROL PLAN - NORTH RESERVOIR
	C103 VAULT AND VALVE DETAILS - NORTH RESERVOIR
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	C190 SITE DETAILS
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	C591 WATER DETAILS
	E001 COVER SHEET - ELECTRICAL
1	E101 SITE PLAN - SOUTH TOLOVANA RESERVOIR
	E102 SITE PLAN - NORTH RESERVOIR
	E201 PUBLIC WORKS YARD - ELECTRICAL BUILDING
	E501 DETAILS - ELECTRICAL
	E502 DETAILS - ELECTRICAL
1	E601 RESERVOIR ONE-LINE DIAGRAM
	E701 TYPICAL CONTROL PANEL ELEVATIONS
	E801 SCADA NETWORK DIAGRAM

CITY OF CANNON BEACH	
BY _____	DATE _____
PUBLIC WORKS DIRECTOR	
BY _____	DATE _____
CITY ENGINEER	
BY _____	DATE _____
COMMUNITY DEVELOPMENT DIRECTOR	
BY _____	DATE _____
FIRE MARSHAL	

### REVISIONS: 1

1	11/22/2023	ADDENDUM 2



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CALL 2 BUSINESS DAYS BEFORE YOU DIG.  
CAUTION: UTILITY INFORMATION IS APPROXIMATE.  
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Revisions: 1

1	11/22/2023	ADDENDUM 2

LINE IS 1" ON FULL  
SCALE DRAWING



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EXPIRES: 06-30-24

WATER RESILIENCY PROJECT  
PHASE 1 - SEISMIC IMPROVEMENTS  
CITY OF CANNON BEACH, OR 97110

ENGINEERING PLAN  
Issue Date: 11/22/2023

Project Manager: TWT  
Drawn by: TJM  
Checked by: MRL

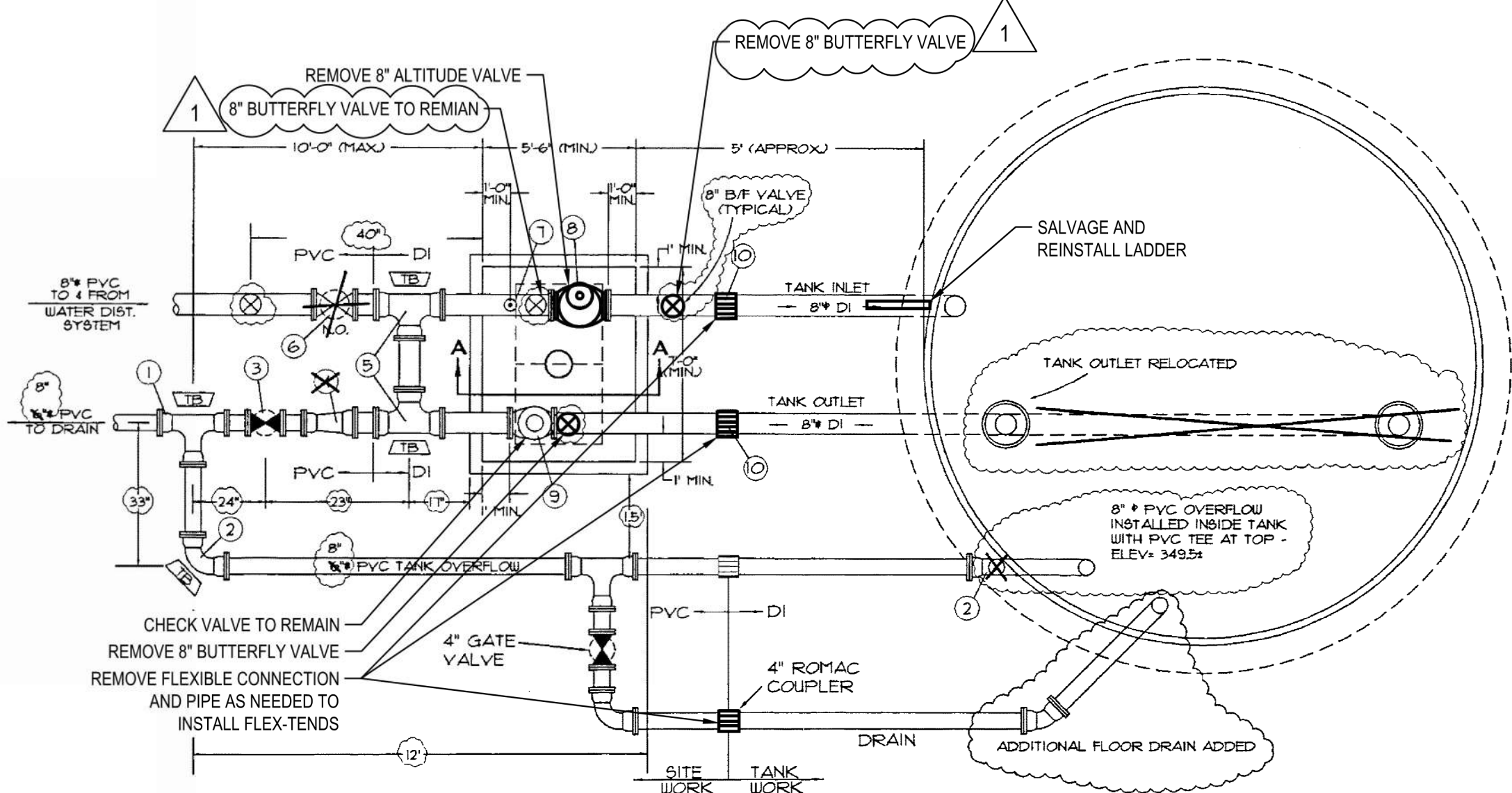
EXISTING DETAILS - NORTH RESERVOIR

C002



OUTLET VALVE - PRATT GROUNDHOG, 8"  
RUBBER SEAT BUTTERFLY  
MANUFACTURE DATE - 1995, SERIAL  
NUMBER - 1 7588-2  
DIMENSION FLANGE TO FLANGE IS 7 1/4",  
OVERALL INCLUDING CHECK VALVE IS 33"

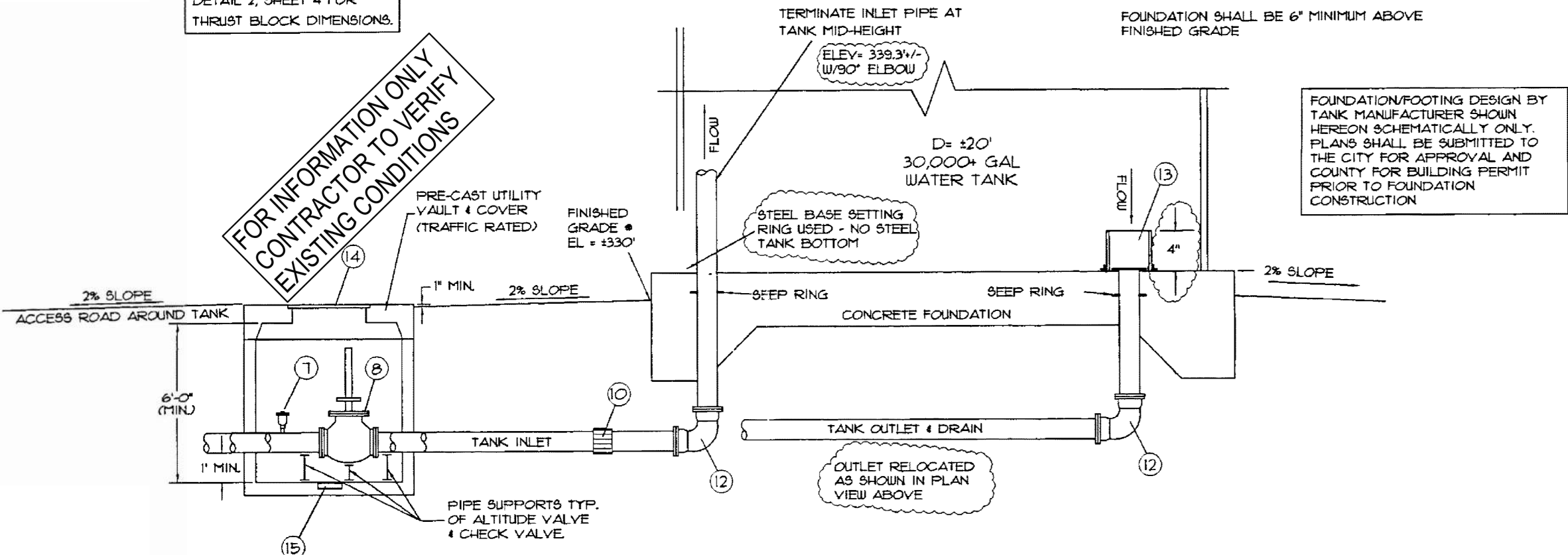
INLET VALVE  
LABEL IS MISSING; LOOKS LIKE PRATT  
GROUNDHOG (SAME AS OUTLET)  
MANUFACTURE DATE - 1998, NUMBER ON  
GEAR DRIVE IS MDT-25, NUMBER ON VALVE  
BODY IS 1230733  
DIMENSION FLANGE TO FLANGE IS 7 1/2",  
OVERALL INCLUDING ALTITUDE VALVE IS 32"



NOTE:  
"TB" = THRUST BLOCK. SEE  
DETAIL 2, SHEET 4 FOR  
THRUST BLOCK DIMENSIONS.

#### TANK PIPING LAYOUT - PLAN VIEW

SCALE: 1/4" = 1'



#### TANK PIPING LAYOUT - SECTION A-A

SCALE: 1/4" = 1'

#### PIPING COMPONENT TABLE

COMPONENT NUMBER	DESCRIPTION
1	6"x6"x6" MUMUMU DI TEE
2	6" MUMU DI 90° STD. ELBOW
3	6" GATE VALVE (NORMALLY CLOSED), WITH VALVE BOX
4	8"x6" MUMU DI REDUCER
5	8"x8"x8" MUMUMU DI TEE
6	6" GATE VALVE (NORMALLY OPEN), WITH VALVE BOX
7	RELEASE VALVE
8	8" ALTITUDE VALVE
9	8" SPRING-ACTUATED CHECK VALVE
10	8" FLEXIBLE CONNECTION
11	6" FLEXIBLE CONNECTION
12	6" MUMU DI 90° STD. ELBOW
13	REMOVABLE SILT STOP (NOT USED - ADDITIONAL DEPRESSED DRAIN INSTALLED IN FLOORS)
14	2 DOOR GALV. STEEL ACCESS HATCH (TRAFFIC RATED)
15	VAULT SUMP (WITH 2" DRAIN PIPE WITH SCREENED END TO DAYLIGHT ON SLOPE - STATION 3+25.47 LT)

#### TANK DATA

TYPE: GLASS-FUSED-TO-STEEL  
MANUFACTURER: FUSION TANKS & SILOS, ENGLAND  
CONSTRUCTED BY: DUNNIRE ASSOCIATES, INC.  
1003 PIONEER RD, DALLAS, OR 97338  
FLOOR: CONCRETE SLAB WITH STEEL BASE-SETTING RING  
TANK BASE ELEVATION: 330' (NGVD '29' DATUM)  
HEIGHT: 21.1' (INCLUDING ROOF) 20.3' TO BRIM  
DIAMETER: 16.8' NOMINAL  
CAPACITY: 30,211 US GALLONS-BRIMFULL  
SIDE ACCESS HATCH: DIAMETER = 31" (GALV.)  
ROOF INSPECTION HATCH: DIAMETER = 24" (GALV.)  
ROOF: 17' LIGHT DUTY ROOF ASSEMBLY (TYPICAL BEAM ROOF TYPE) (WEIGHT = 1900LB.)  
TANK COLOR: FOREST GREEN  
SNOW LOAD: 25 PSF, WIND LOAD: 100 MPH, SEISMIC LOADING: ZONE 4  
CATHODIC TANK PROTECTION: NOT REQUIRED

FOR INFORMATION ONLY  
CONTRACTOR TO VERIFY  
EXISTING CONDITIONS

#### NOTES:

- ASBUILT DRAWINGS OBTAINED FROM CITY OF CANNON BEACH 2002 HLB RECORD PLAN SET.
- THE ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION.



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Revisions:

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1	11/22/2023	ADDENDUM 2

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WATER RESILIENCY PROJECT  
PHASE 1 - SEISMIC IMPROVEMENTS  
CITY OF CANNON BEACH, OR 97110

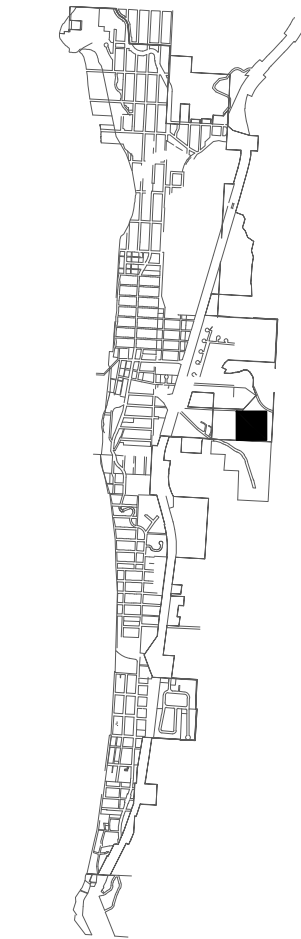
ENGINEERING PLAN

Issue Date: 11/22/2023

Project Manager: TWT  
Drawn by: TJM  
Checked by: MRL

SITE & EROSION CONTROL PLAN -  
MAIN RESERVOIR

C100



KEY MAP  
Scale: NTS

PLAN

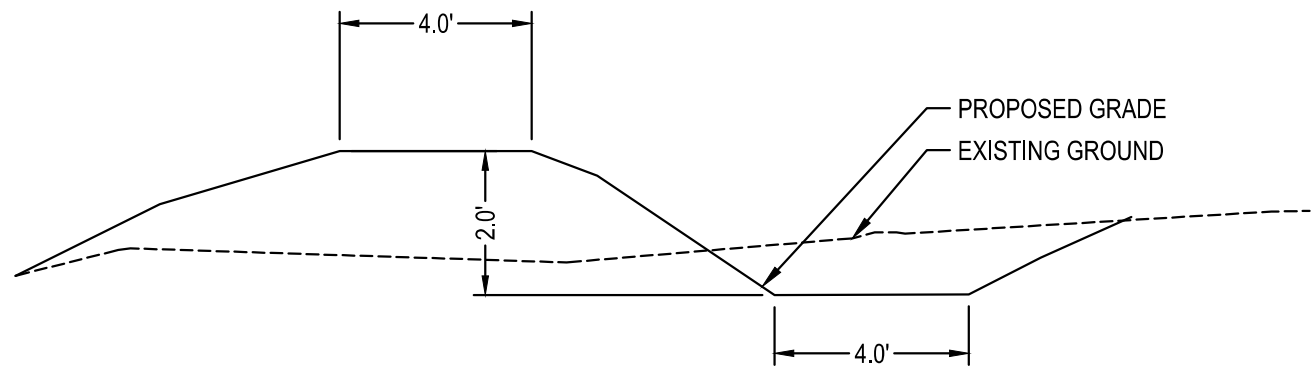
SCALE: 1" = 20'

0 20' 40'



1 BERM / SWALE SECTION

SCALE: 1" = 10'



MAIN RESERVOIR ESTIMATED QUANTITIES		
ITEM	UNITS	QUANTITY
TEMPORARY SIGNS	LS	0.33
SITE GRADING	SY	500
SEDIMENT FENCE	LF	200
SEDIMENT BARRIER, TYPE 3	LF	50
EROSION CONTROL	EA	1
TEMPORARY SEEDING	AC	0.10
PERMANENT SEEDING	AC	0.10
MULCHING, STRAW	AC	0.10
MULCHING, HYDROMULCH	SY	500
ESTIMATED CUT	CY	29.4
ESTIMATED FILL	CY	14.6

GENERAL SHEET NOTES:

1. ALL CONSTRUCTION RELATED SIGNAGE SHALL BE POSTED AND AVAILABLE AT THE CITY'S PUBLIC WORKS YARD.

1

100 SITE PLAN NOTES

- 100 EXISTING CHAIN LINK FENCE
- 101 DRIVEWAY ACCESS EDGE
- 102 DISTURBED AREA TO BE SEEDED
- 103 CONSTRUCTION FENCE
- SEED AND BLANKET SWALE BOTTOM AND SEED AND MULCH REMAINDER OF DISTURBED AREAS.
- 104 USE OREGON COAST RANGE ECO-REGION SEED MIX
- 105 BUSINESS OREGON AND OTHER CONSTRUCTION RELATED SIGNS

110 EROSION CONTROL / OVERALL GRADING

- 110 INSTALL SILT FENCE
- 111 INSTALL SEDIMENT BARRIER

300 STORMWATER

- 300 EXISTING 6" UNDERDRAIN
- 301 EXISTING STORM STRUCTURE
- 302 EXISTING DAYLIGHT PIPE - INLET = 187.5 OUTLET = 186.5
- 303 EXISTING CONCRETE PIPE
- 304 EXISTING HDPE PIPE

500 WATER

- 500 EXISTING WATER TRUNK LINE
- 501 EXISTING ALTITUDE CONTROL VALVE AND VAULT
- 502 EXISTING RESERVOIR TANK
- 503 EXISTING PUMP HOUSE
- 504 EXISTING FIRE HYDRANT
- 505 EXISTING DI OVERFLOW PIPE
- 506 EXISTING DI WATER PIPE
- 507 EXISTING PVC WATER LINE
- 508 EXISTING ASBESTOUS CONCRETE WATER LINE
- 509 EXISTING VAULT
- 510 EXISTING ROOF HATCH
- 511 EXISTING ROOF VENT
- 512 SEISMIC VALVE VAULT
- 513 SEISMIC VALVE CONTROL PANEL
- 514 FLEX-TEND WITH 12" EXTEND ABILITY
- 515 FLEX-TEND WITH 4" EXTEND ABILITY
- 516 WATER SERVICE AND GATE VALVE
- 517 MANHOLE, ISOLATION VALVE AND VALVE CONTROLS  
PLACE MANHOLE CASTING OUTSIDE OF TRAVEL LANES
- 518 WATERLINE: CONNECT TO EXISTING
- 519 FUTURE RESERVOIR
- 520 WATER PIPE
- 521 BLOW OFF HYDRANT
- 522 FIRE HYDRANT - WATER FILL STATION  
INSTALL STD FIRE HYDRANT (MUELLER SUPER CENTURION A423 HYDRANT) ASSEMBLY PER DETAIL RD264- SHEET C590 , INCLUDING:  
(1) 8" X 6" MJ X FLG X FLG TEE & THRUST BLOCK  
(1) 8" GATE VALVE, FLG X MJ  
INSTALL 6" HDPE DR11 FOR HYDRANT SERVICE  
RESTRAIN ALL PIPE JOINTS ON EACH SIDE OF TEE AND TO HYDRANT.  
IPS-MJ ADAPTER W/PIPE STIFFENER AND ACCESSORY KIT AT ALL MJ HDPE/DI CONNECTIONS

600 DRY UTILITIES

- 600 EXISTING OVERHEAD POWER POLE
- 601 EXISTING OVERHEAD POWER
- 602 EXISTING CELLULAR CONTROL BOX
- 603 EXISTING UTILITY BOX
- 604 UNDERGROUND POWER AND COMMUNICATIONS



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1	11/22/2023	ADDENDUM 2

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PHASE 1 - SEISMIC IMPROVEMENTS**  
CITY OF CANNON BEACH, OR 97110

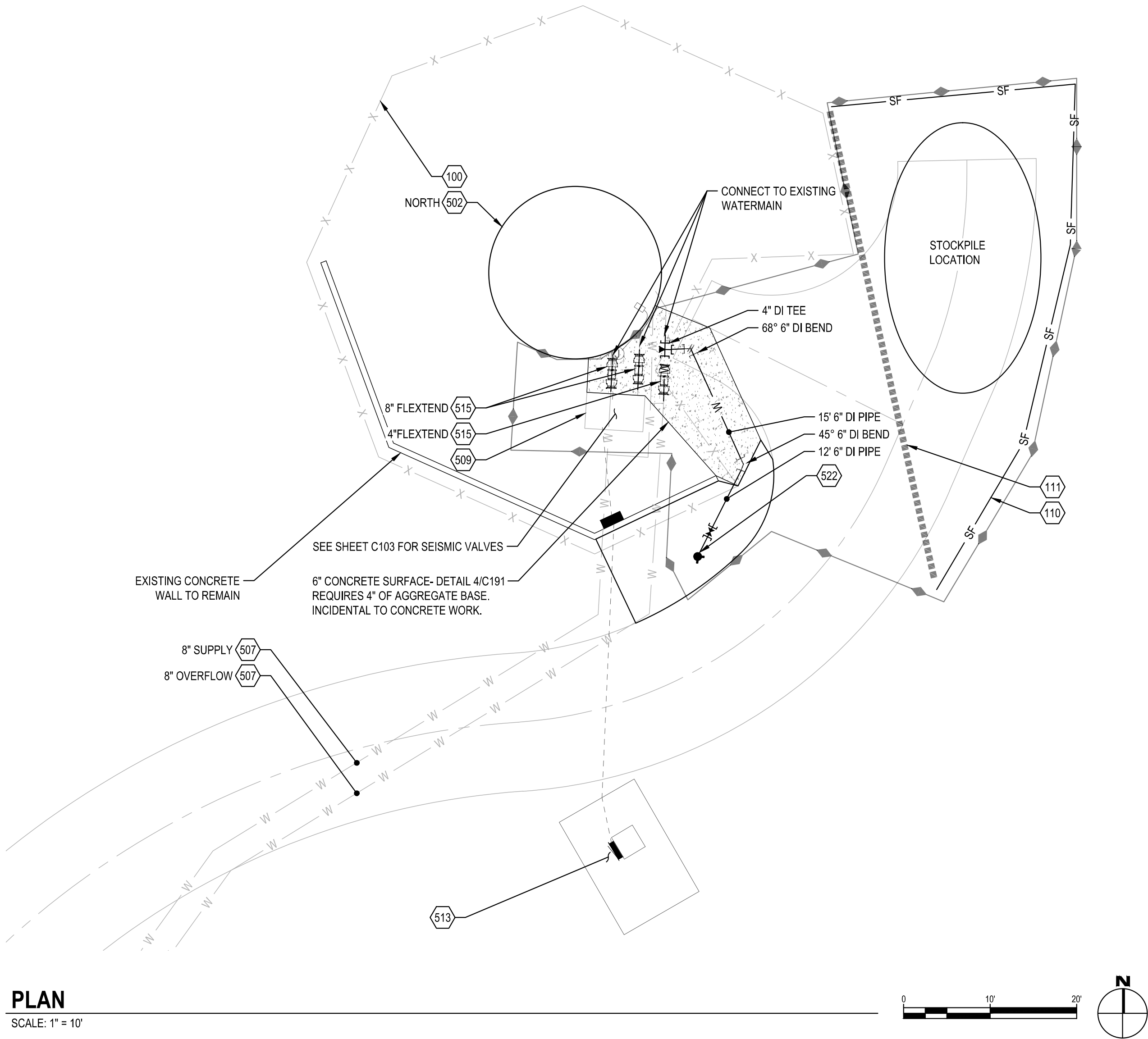
**ENGINEERING PLAN**

Issue Date: 11/22/2023

Project Manager TWT  
Drawn by TJM  
Checked by MRL

**SITE & EROSION CONTROL PLAN -  
NORTH RESERVOIR**

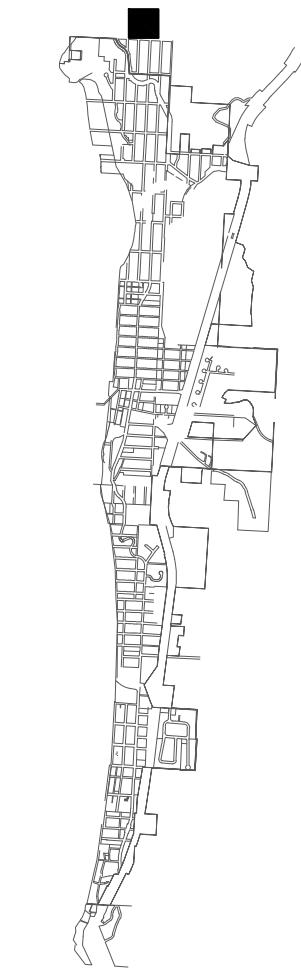
**C102**



**PLAN**

SCALE: 1" = 10'

0 10' 20'



**KEY MAP**

Scale: NTS

NORTH RESERVOIR ESTIMATED QUANTITIES		
ITEM	UNITS	QUANTITY
TEMPORARY SINGS	LS	0.33
SEDIMENT FENCE	LF	100
SEDIMENT BARRIER, TYPE 3	LF	100
EROSION CONTROL	EA	1
TEMPORARY SEEDING	AC	0.01
PERMANENT SEEDING	AC	0.01
MULCHING, STRAW	AC	0.01
MULCHING, HYDROMULCH	SY	30
6 INCH CONCRETE SURFACING	SY	30
CONNECTION TO EXISTING MAIN	EA	1
8" CHECK VALVE	EA	1
8" GATE VALVE WITH ACTUATOR	EA	1
4" FLEXTEND	EA	1
8" FLEXTEND	EA	2
HYDRANT ASSEMBLIES	EA	1
8 INCH DUCTILE IRON PIPE	LF	10
DI PIPE TEES, 4"x4"	EA	1
DI PIPE REDUCER, 6" TO 4"	EA	1

**GENERAL SHEET NOTES:**

1. ALL CONSTRUCTION RELATED SIGNAGE SHALL BE POSTED AND AVAILABLE AT THE CITY'S PUBLIC WORKS YARD.
2. CITY, CONTRACTOR, AND ENGINEER TO HAVE A MEETING TO DISCUSS COORDINATION, RESPONSIBILITIES, AND LIMITATIONS RELATED TO WATER SHUTDOWNS.

**NORTH RESERVOIR SHUTDOWN NOTES:**

1. PROVIDE THE CITY ONE WEEK NOTICE BEFORE REQUIRING WATER SHUT DOWN TO PERFORM WORK.
2. CITY WILL BE ABLE TO DRAIN THE NORTH RESERVOIR PRIOR TO CONNECTION WORK. ESTIMATED TIME TO DRAIN TANK IS 30-60 MIN.
3. CONTRACTOR SHALL MINIMIZE THE SHUTDOWN TO NO MORE THEN 1 WEEK TIME PERIOD.
4. THE CITY WILL REFILL THE TANK UPON COMPLETION OF THE WORK PERFORMED DURING THE SHUTDOWN PERIOD.

**100 SITE PLAN NOTES**

- 100 EXISTING CHAIN LINK FENCE
- 101 DRIVEWAY ACCESS EDGE
- 102 DISTURBED AREA TO BE SEEDED
- 103 CONSTRUCTION FENCE
- SEED AND BLANKET SWALE BOTTOM AND SEED AND MULCH REMAINDER OF DISTURBED AREAS.
- 104 USE OREGON COAST RANGE ECO-REGION SEED MIX
- 105 BUSINESS OREGON AND OTHER CONSTRUCTION RELATED SIGNS

**110 EROSION CONTROL / OVERALL GRADING**

- 110 INSTALL SILT FENCE
- 111 INSTALL SEDIMENT BARRIER

**300 STORMWATER**

- 300 EXISTING 6" UNDERDRAIN
- 301 EXISTING STORM STRUCTURE
- 302 EXISTING DAYLIGHT PIPE - INLET = 187.5 OUTLET = 186.5
- 303 EXISTING CONCRETE PIPE
- 304 EXISTING HDPE PIPE

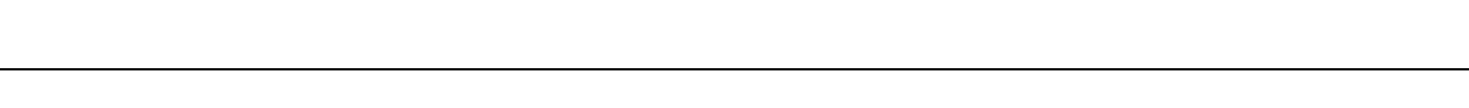
**500 WATER**

- 500 EXISTING WATER TRUNK LINE
- 501 EXISTING ALTITUDE CONTROL VALVE AND VAULT
- 502 EXISTING RESERVOIR TANK
- 503 EXISTING PUMP HOUSE
- 504 EXISTING FIRE HYDRANT
- 505 EXISTING DI OVERFLOW PIPE
- 506 EXISTING DI WATER PIPE
- 507 EXISTING PVC WATER LINE
- 508 EXISTING ASBESTOUS CONCRETE WATER LINE
- 509 EXISTING VAULT
- 510 EXISTING ROOF HATCH
- 511 EXISTING ROOF VENT
- 512 SEISMIC VALVE VAULT
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- 514 FLEX-TEND WITH 12" EXTEND ABILITY
- 515 FLEX-TEND WITH 4" EXTEND ABILITY
- 516 WATER SERVICE AND GATE VALVE
- 517 MANHOLE, ISOLATION VALVE AND VALVE CONTROLS
- 518 PLACE MANHOLE CASTING OUTSIDE OF TRAVEL LANES
- 519 WATERLINE: CONNECT TO EXISTING
- 519 FUTURE RESERVOIR
- 520 WATER PIPE
- 521 BLOW OFF HYDRANT
- 522 FIRE HYDRANT - WATER FILL STATION
- INSTALL STD FIRE HYDRANT (MUELLER SUPER CENTURION A423 HYDRANT) ASSEMBLY PER DETAIL RD264- SHEET C590 , INCLUDING:  
(1) 8" X 6" MJ X FLG X FLG TEE & THRUST BLOCK  
(1) 8" GATE VALVE, FLG X MJ  
INSTALL 6" HDPE DR11 FOR HYDRANT SERVICE  
RESTRAIN ALL PIPE JOINTS ON EACH SIDE OF TEE AND TO HYDRANT.  
IPS-MJ ADAPTER W/PIPE STIFFENER AND ACCESSORY KIT AT ALL MJ HDPE/DI CONNECTIONS

**600 DRY UTILITIES**

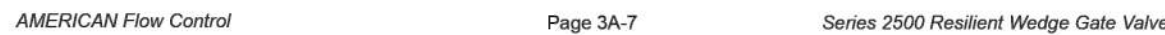
- 600 EXISTING OVERHEAD POWER POLE
- 601 EXISTING OVERHEAD POWER
- 602 EXISTING CELLULAR CONTROL BOX
- 603 EXISTING UTILITY BOX
- 604 UNDERGROUND POWER AND COMMUNICATIONS





- ## **FLEX-TEND INSTALLATION:**
- Installation
- Note: In many applications it may be desirable to leave the unit on the shipping skid during the assembly procedure. This ensures that the unit remains in straight alignment during assembly. If the skid is removed the ball joints can deflect and the expansion setting can change during the installation process. If coating is damaged, touch up may be required. Touch up kits are available.
- Below Ground Installation
- 1) Unbolt and remove protective end covers.
  - 2) Remove polyethylene sleeve, gasket materials and other packing materials from the inside of unit.
  - 3) Inspect the interior of the unit and remove any dirt and or foreign material.
  - 4) Inspect each end connection and remove any dirt and or foreign material.
  - 5) For buried applications, with the skid still intact, place the polyethylene sleeve in an Accordion pattern over one end of the connecting piping.
  - 6) Assemble End Connections
    - A) Assembly of flanged joint connections:
      - i. Place flange O-ring in groove of the flange.
      - ii. Position the unit's flange against the connecting pipe flange.
      - iii. Inspect the O-ring for proper position.
      - iv. Install and tighten the flange bolts.
    - B) Assembly of mechanical joint connections using the EBAA Iron, Inc. MEGALUG® Mechanical Joint Restraint suitable for the adjacent pipe material:
      - i. Series 1100 MEGALUG for restraining Ductile Iron Pipe.
      - ii. Series 2000PV MEGALUG for restraining AWWA C900 or C905 PVC Pipe.
      - iii. FLEX-9005 may have a restrained plain-end, install mechanical joint gasket provided and insert the restrained plain-end into mechanical joint connection and torque bolts in accordance to AWWA C600.
      - iv. Please reference the installation instructions for the appropriate EBAA Iron mechanical joint restraint.
  - 7) Remove the shipping skid if still attached.
  - 8) Once the pipe end connections are made and the shipping skid is removed, slide the polyethylene sleeve over the unit and finish installing the polyethylene sleeve per ANSI/AWWA C105/A231.5. Bedding recommendations include: installation of polyethylene sleeve, use of cohesion-less granular backfill (like pea gravel or sand), slope sided trenches and shallow bury.
- Additional Information may be found at [www.ebaa.com](http://www.ebaa.com)

OR APPROVED EQUAL.  
(OTHER SUPPLIERS; AUMA, IIMTORQUE,  
ETC.)



REGISTERED PROFESSIONAL  
ENGINEER  
60239PE  
Travis Tormanen  
OREGON  
Month 9, 1999  
TRAVIS W. TORMANEN  
EXPIRES: 06-30-24

**ENGINEERING PLAN**  
Issue Date: 11/22/2023

# C103

Project Manager	<u>TWT</u>
Drawn by	<u>TJM</u>
Checked by	<u>MRL</u>



PLOT DATE: 11/20/2023 2:05 PM - FILE: C:\Users\larcus.le@OneDrive - Windsor Engineers\05\_Projects\2020\20198.3 Cannon Beach Seismic Values\02\_Drawings\01\_Final Sheets\0198.3\_site.dwg



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CAUTION: UTILITY INFORMATION IS APPROXIMATE.  
VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION.

Revisions:

1

1	11/22/2023	ADDENDUM 2

LINE IS 1" ON FULL  
SCALE DRAWING



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EXPIRES: 06-30-24

WATER RESILIENCY PROJECT  
PHASE 1 - SEISMIC IMPROVEMENTS  
CITY OF CANNON BEACH, OR 97110

ENGINEERING PLAN

Issue Date: 11/22/2023

Project Manager: TWT  
Drawn by: TJM  
Checked by: MRL

SITE & EROSION CONTROL PLAN -  
TOLOVANA RESERVOIR

C104

### OPTIONAL BYPASS SHEET NOTES:

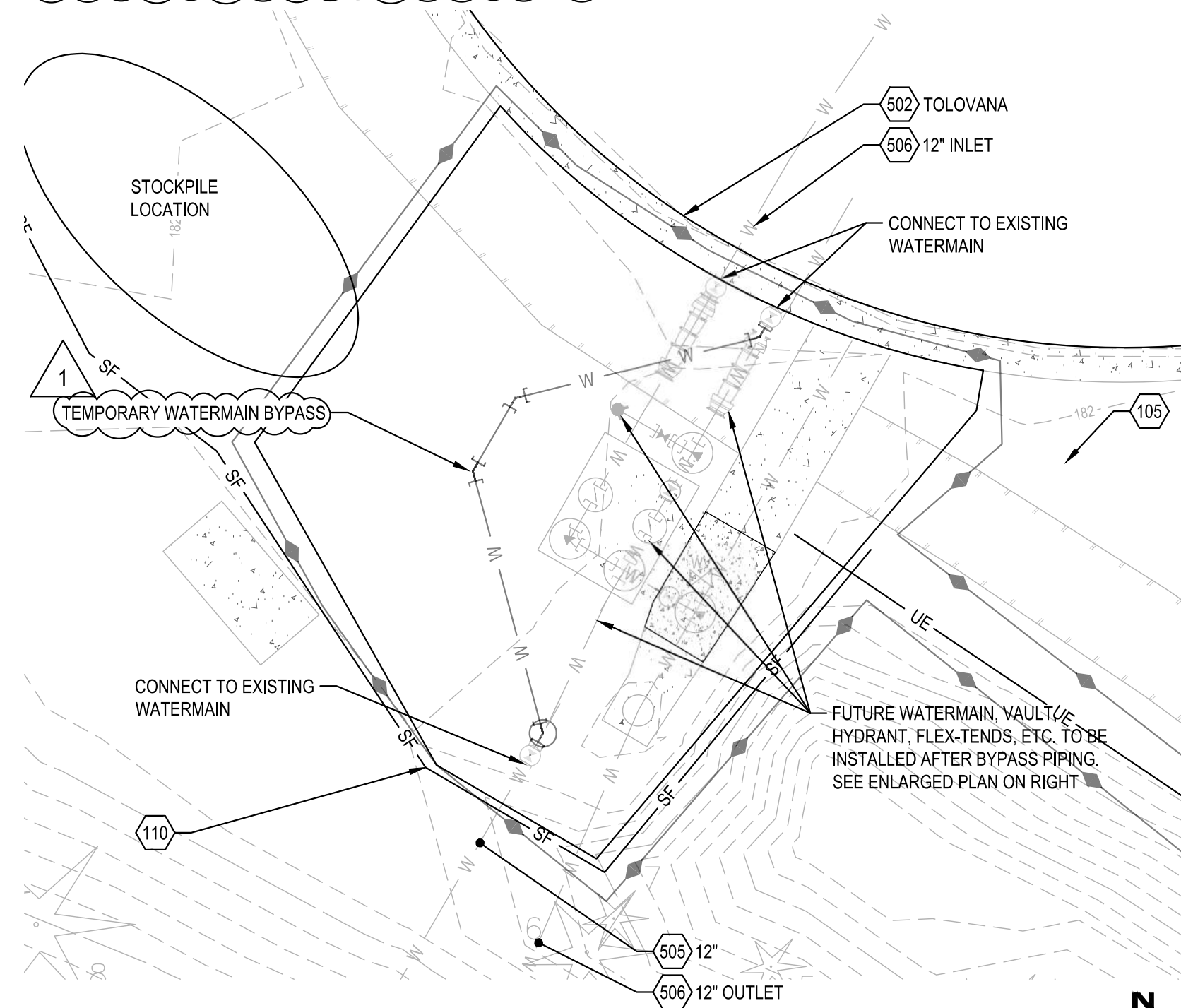
- TEMPORARY BYPASS IS OPTIONAL.
- THE BYPASS ALLOWS THE CONTRACTOR A LONGER WORKING TIME FRAME TO INSTALL THE VAULT, VALVES, ACTUATOR, AND PIPES THEN THE PROPOSED 2 WEEK SHUTDOWN TIME FRAME AT THE SOUTH RESERVOIR.
- SEE SHEET C105 FOR ADDITION TEMPORARY BYPASS INFORMATION, DESIGN AND CONTRACTIBILITY OF THE BYPASS IS THE RESPONSIBILITY OF THE CONTRACTOR.

### SOUTH RESERVOIR SHUTDOWN NOTES:

- PROVIDE THE CITY ONE WEEK NOTICE BEFORE REQUIRING WATER SHUTDOWN TO PERFORM WORK.
- CITY WILL DRAIN THE SOUTH RESERVOIR PRIOR TO THE SHUTDOWN PERIOD.
- TANK MAY REMAIN OFFLINE FOR 2 WEEKS.
- INSTALLATION OF VALVE 3 REQUIRED WITHIN 48 HOURS TO BE ABLE TO SUPPLY WATER TO TWO RESIDENTS.
- IF TEMPORARY BYPASS OPTION IS USED IT SHALL BE INSTALLED BEFORE FEBRUARY 23RD.
- TANK WILL ONLY BE DRAINED ONCE. USE OF VALVES 1-3 WILL BE USED TO SHUTOFF WATER IN THE WORK AREA FOR ANY FUTURE OR UNFINISHED WORK.
- SEE SHEET C105 FOR ADDITION RESERVOIR INFORMATION.

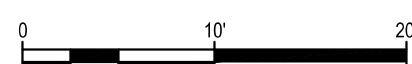
### SOUTH RESERVOIR QUANTITIES

ITEM	UNITS	QUANTITY
TEMPORARY SIGNS	LS	0.33
TEMPORARY WATERMAIN BYPASS	LS	1
SEDIMENT FENCE	LF	150
SEDIMENT BARRIER, TYPE 3	LF	50
SEEDING MOBILIZATION	LS	1
TEMPORARY SEEDING	AC	0.10
PERMANENT SEEDING	AC	0.10
MULCHING, STRAW	AC	0.10
MULCHING, HYDROMULCH	SY	500
6 INCH CONCRETE SURFACING	SY	10
CONNECTION TO EXISTING MAIN	EA	1
12" GATE VALVE	EA	4
12" CHECK VALVE	EA	2
12" GATE VALVE WITH ACTUATOR	EA	1
12" FLEXTEND	EA	2
HYDRANT ASSEMBLIES	EA	1
10' x 8' VAULT	EA	1
12 INCH HDPE PIPE	LF	20
12 INCH DUCTILE IRON PIPE	LF	80
DI PIPE TEES, 12"x12"	EA	1
DI PIPE CROSS, 12"	EA	1
DI PIPE 45° BEND, 6"	EA	2
DI PIPE 90° BEND, 12"	EA	1
DI PIPE SLEEVE, 12"	EA	1



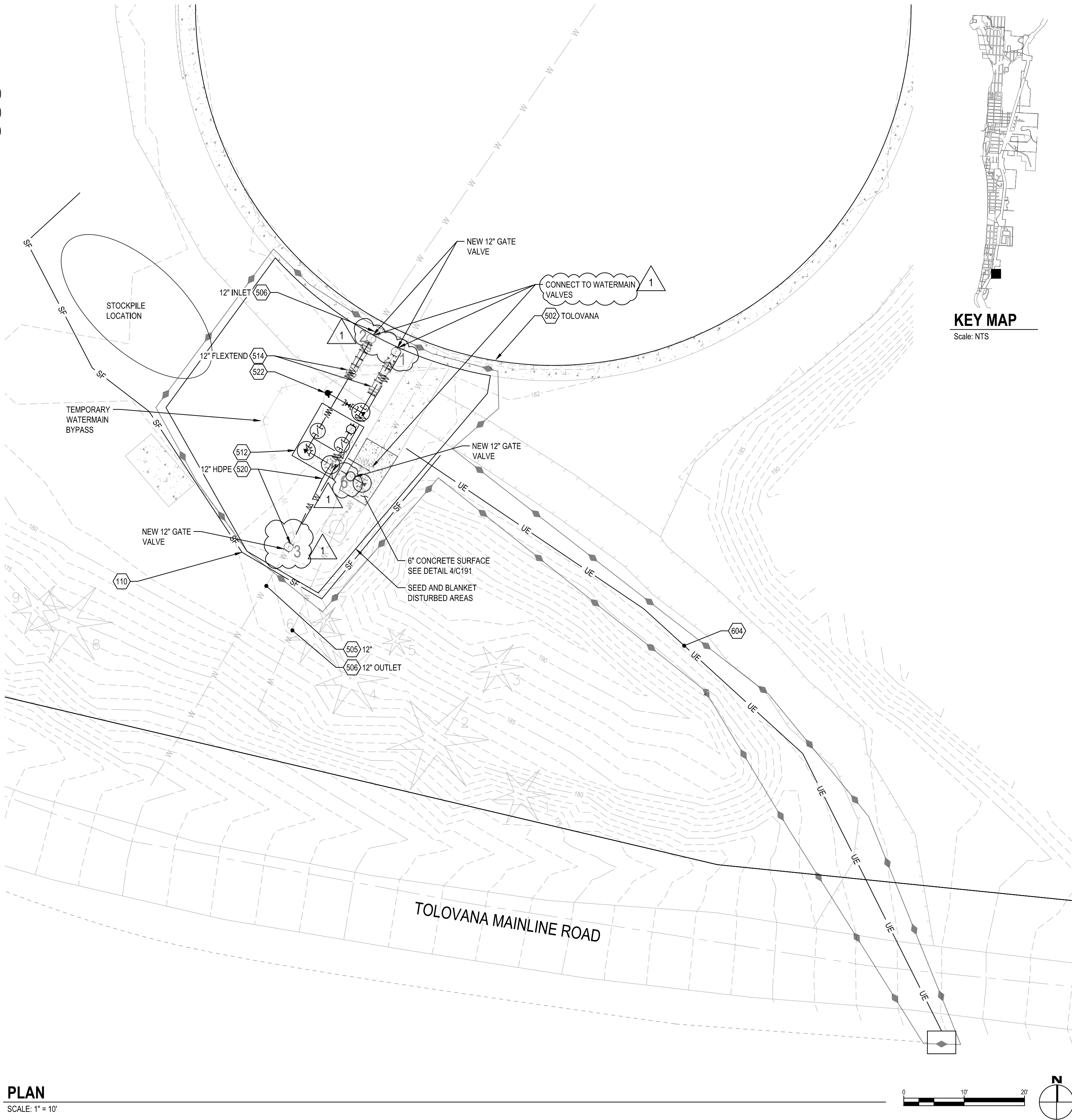
### OPTIONAL TEMPORARY BYPASS PLAN

SCALE: 1" = 10'



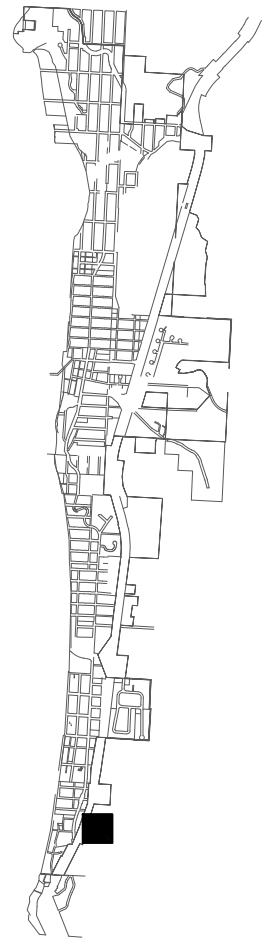
### PLAN

SCALE: 1" = 10'



### KEY MAP

Scale: NTS



### GENERAL SHEET NOTES:

- ALL CONSTRUCTION RELATED SIGNAGE SHALL BE POSTED AND AVAILABLE AT THE CITY'S PUBLIC WORKS YARD.
- ALL WATERMAIN PIPE SHALL BE DUCTILE IRON UNLESS OTHERWISE NOTED.
- FLEX-TENDS TO BE INSTALLED BETWEEN RESERVOIR AND VAULT
- 6" DI HYDRANT ASSEMBLY TO BE INSTALLED BETWEEN FLEX-TENDS AND GATE VALVE VAULT
- ELECTRIC CONTROL PANEL AND POWER TO BE INSTALLED
- CITY, CONTRACTOR, AND ENGINEER TO HAVE A MEETING TO DISCUSS COORDINATION, RESPONSIBILITIES, AND LIMITATIONS RELATED TO WATER SHUTDOWNS.

### 100 SITE PLAN NOTES

- EXISTING CHAIN LINK FENCE
- DRIVEWAY ACCESS EDGE
- DISTURBED AREA TO BE SEEDED
- CONSTRUCTION FENCE
- SEED AND BLANKET SWALE BOTTOM AND SEED AND MULCH REMAINDER OF DISTURBED AREAS.
- USE OREGON COAST RANGE ECO-REGION SEED MIX
- BUSINESS OREGON AND OTHER CONSTRUCTION RELATED SIGNS

### 110 EROSION CONTROL / OVERALL GRADING

- INSTALL SILT FENCE
- INSTALL SEDIMENT BARRIER

### 300 STORMWATER

- EXISTING 6" UNDERDRAIN
- EXISTING STORM STRUCTURE
- EXISTING DAYLIGHT PIPE - INLET = 187.5' OUTLET = 186.5'
- EXISTING CONCRETE PIPE
- EXISTING HDPE PIPE

### 500 WATER

- EXISTING WATER TRUNK LINE
- EXISTING ALTITUDE CONTROL VALVE AND VAULT
- EXISTING RESERVOIR TANK
- EXISTING PUMP HOUSE
- EXISTING FIRE HYDRANT
- EXISTING DI OVERFLOW PIPE
- EXISTING DI WATER PIPE
- EXISTING PVC WATER LINE
- EXISTING ASBESTOS CONCRETE WATER LINE
- EXISTING VAULT
- EXISTING ROOF HATCH
- EXISTING ROOF VENT
- SEISMIC VALVE VAULT
- SEISMIC VALVE CONTROL PANEL
- FLEX-TEND WITH 12" EXTEND ABILITY
- FLEX-TEND WITH 4" EXTEND ABILITY
- WATER SERVICE AND GATE VALVE
- MANHOLE, ISOLATION VALVE AND VALVE CONTROLS
- PLACE MANHOLE CASTING OUTSIDE OF TRAVEL LANES
- WATERLINE, CONNECT TO EXISTING
- FUTURE RESERVOIR
- WATER PIPE
- BLOW OFF HYDRANT
- FIRE HYDRANT - WATER FILL STATION
- INSTALL STD FIRE HYDRANT (MUELLER SUPER CENTURION A423 HYDRANT) ASSEMBLY PER DETAIL RD254, SHEET C590 , INCLUDING:  
(1) 8" X 6" MJ X FLG X FLG TEE & THRUST BLOCK  
(1) 6" GATE VALVE, FLG X MJ  
INSTALL 6" HDPE DR11 FOR HYDRANT SERVICE  
RESTRAIN ALL PIPE JOINTS ON EACH SIDE OF TEE AND TO HYDRANT.  
IPS-MJ ADAPTER W/PIPE STIFFENER AND ACCESSORY KIT AT ALL MJ HOPE/DI CONNECTIONS

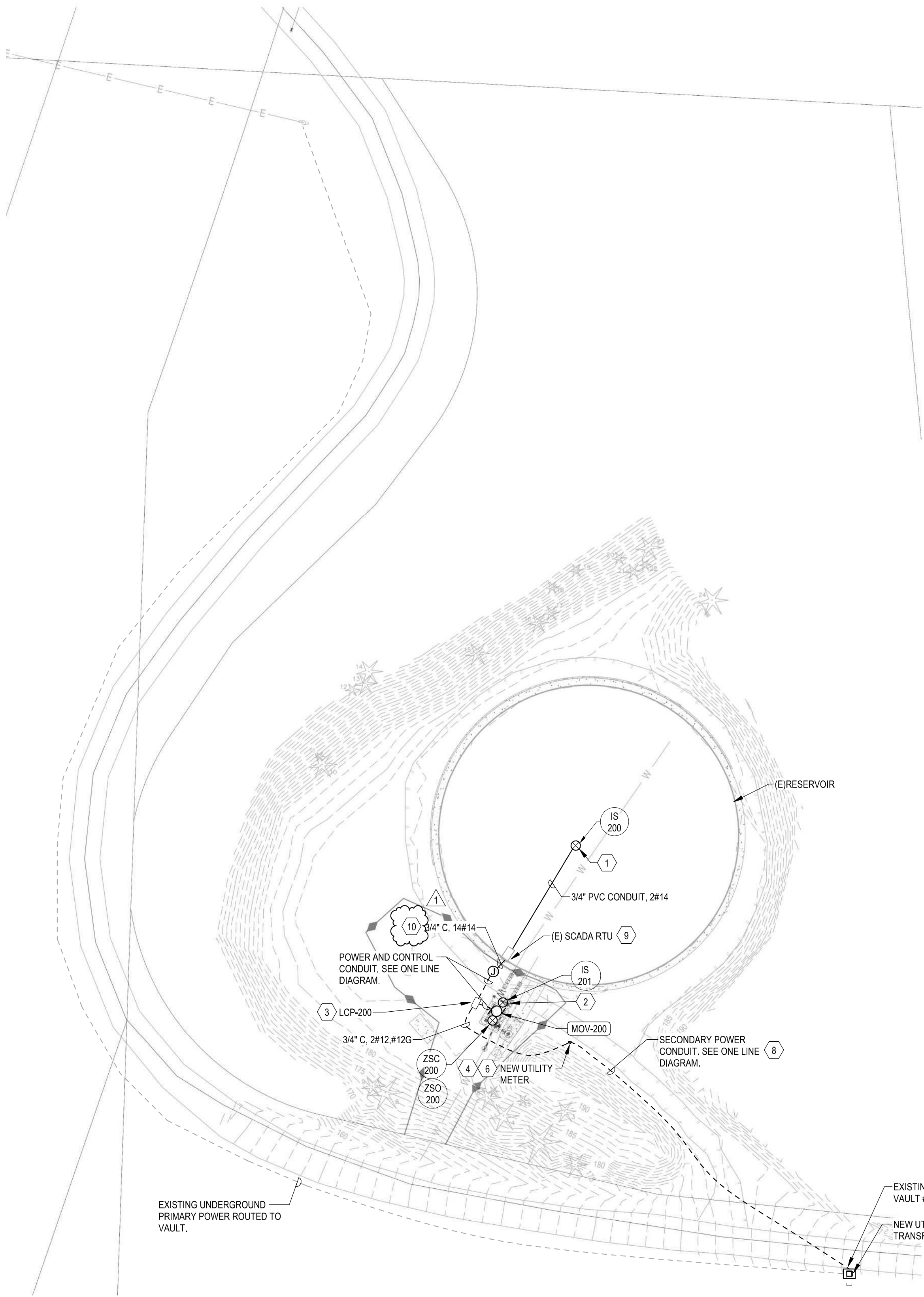
### 600 DRY UTILITIES

- EXISTING OVERHEAD POWER POLE
- EXISTING OVERHEAD POWER
- EXISTING CELLULAR CONTROL BOX
- EXISTING UTILITY BOX
- UNDERGROUND POWER AND COMMUNICATIONS









1 SOUTH/TOLOVANA RESERVOIR SITE PLAN  
SCALE: 1/32" = 1'-0"

GENERAL SHEET NOTES

- A. EXISTING ELECTRICAL AND INSTRUMENTATION EQUIPMENT IS APPROXIMATE. CONTRACTOR TO VERIFY EXACT LOCATIONS.  
B. REFER TO GENERAL SHEET DRAWINGS G004, G005, AND G006 FOR SITE LOCATIONS AND KEY PLANS.  
C. ALL UNDERGROUND CONDUITS SHALL BE A MINIMUM OF 24" BELOW GRADE.  
D. ALL CONDUIT SHALL HAVE MINIMUM 12" OF SEPARATION FROM ANY OTHER COMMUNICATION OR GAS FACILITIES AND SHALL BE MINIMUM OF 36" FROM ANY WATER OR SEWER LINES.  
E. GRAY LINES INDICATE EXISTING TO REMAIN. BOLD LINES INDICATE NEW SCOPE.  
F. DASHED CONDUIT LINETYPE INDICATES UNDERGROUND ROUTING. COORDINATE NEW UNDERGROUND CONDUITS WITH EXISTING CONDITIONS.

KEYNOTES

- 1 PROVIDE RESERVOIR INTRUSION SWITCH. SEE INSTALLATION DETAIL ON SHEET E501. INTRUSION SWITCH SHALL BE WIRED TO EXISTING MISSION SCADA RTU TO MONITOR SWITCH STATUS.  
2 PROVIDE VAULT INTRUSION SWITCH. SEE INSTALLATION DETAIL ON SHEET E501. INTRUSION SWITCH SHALL BE WIRED TO EXISTING MISSION SCADA RTU TO MONITOR SWITCH STATUS.  
3 SEE DETAIL SHEET E501. FIELD COORDINATE EXACT LOCATION.  
4 INSTALL UTILITY METER PER PACIFICORP REQUIREMENTS. SEE DETAIL ON SHEET E502.  
5 SEE SHEET E601 FOR DIVISION OF RESPONSIBILITY MATRIX.  
6 FIELD COORDINATE EXACT LOCATION WITH CITY AND PACIFICORP.  
7 CONNECT TO EXISTING PULL BOX PER PACIFICORP REQUIREMENTS. FURNISH NEW TRANSFORMER VAULT LID PER REQUIREMENTS ON SHEET E502. STORE NEW LID ONSITE NEAR VAULT TO BE INSTALLED BY PACIFICORP.  
8 COORDINATE FINAL CONDUIT AND TRENCHING ROUTING WITH CITY OF CANNON BEACH WATER DEPARTMENT PRIOR TO INSTALLATION.  
9 EXISTING SCADA RTU IS MISSION MYDRO 850. REFER TO MANUFACTURER INSTALLATION INSTRUCTIONS TO ACCOMMODATE ADDITIONAL INPUTS AND OUTPUTS. SCADA AND VALVE PROGRAMMING BY CONTRACTOR.  
10 PROVIDE 1-5/8" GALVANIZED UNISTRUT SECURED TO EXISTING LADDER, LADDER SUPPORTS AND CONCRETE AT BASE OF TANK. SECURE 3/4" CONDUIT ROUTED TO RTU TO UNISTRUT WITH DIELECTRIC SPACERS AND GALVANIZED CONDUIT STRAPS.



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Revisions:

#		
1	11/22/2023	ADDENDUM 2

LINE IS 1" ON FULL  
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WATER RESILIENCY PROJECT  
PHASE 1 - SEISMIC IMPROVEMENTS  
CITY OF CANNON BEACH, OR 97110

ENGINEERING PLAN

Issue Date: 11/22/2023

Project Manager TWT  
Drawn by JRB  
Checked by SEW

SITE PLAN -  
SOUTH/TOLOVANA  
RESERVOIR

E101

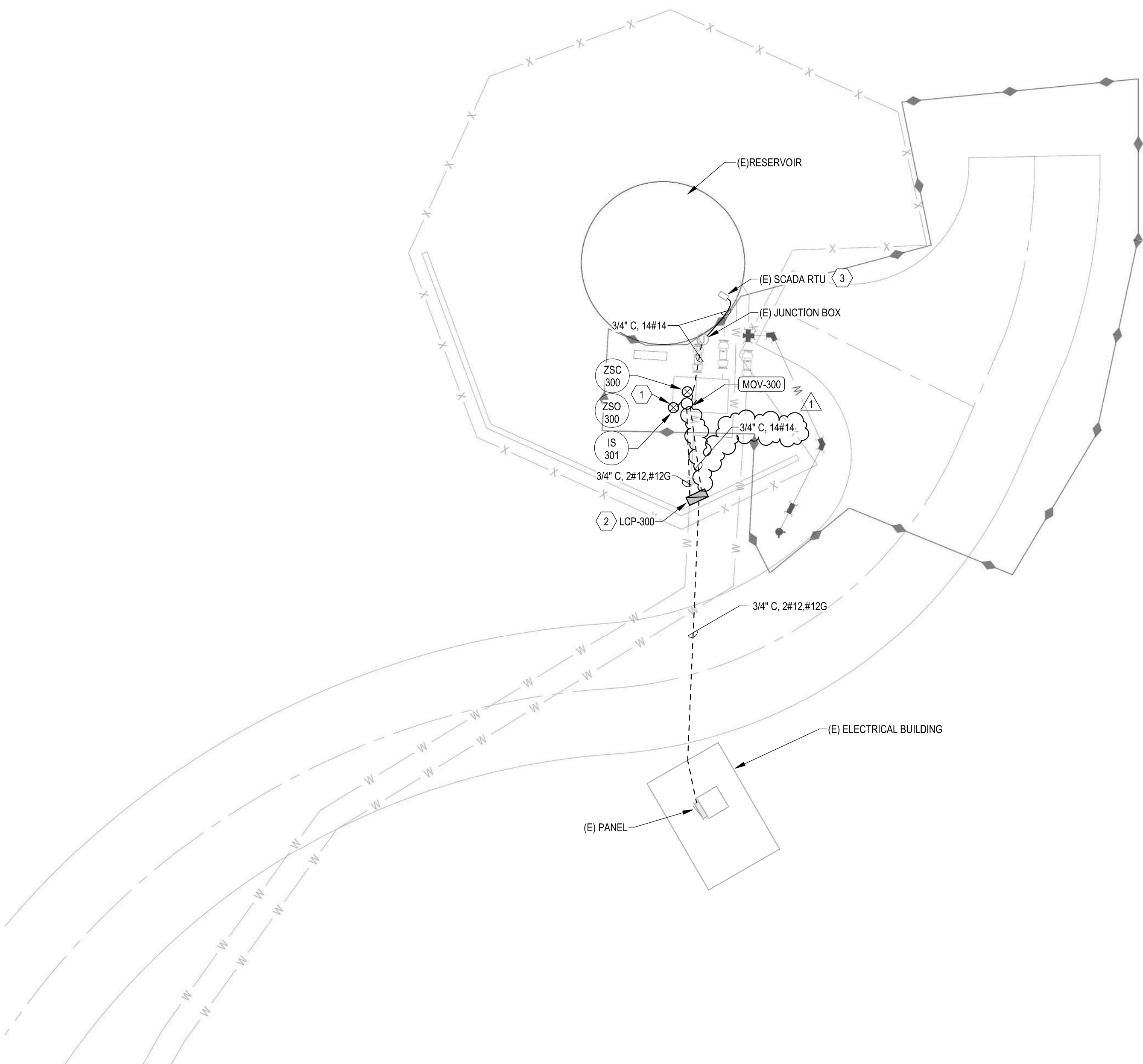


GENERAL SHEET NOTES

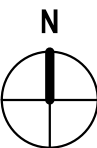
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E. GRAY LINES INDICATE EXISTING TO REMAIN. BOLD LINES INDICATE NEW SCOPE.  
F. DASHED CONDUIT LINETYPE INDICATES UNDERGROUND ROUTING. COORDINATE NEW UNDERGROUND CONDUITS WITH EXISTING CONDITIONS.

KEYNOTES

- 1 PROVIDE VAULT INTRUSION SWITCH. SEE INSTALLATION DETAIL ON SHEET E501. INTRUSION SWITCH SHALL BE WIRED TO EXISTING MISSION SCADA RTU TO MONITOR SWITCH STATUS.  
2 CONTROL PANEL MOUNTED TO EXISTING CONCRETE WALL. FINAL CONTROL PANEL LOCATION TO BE APPROVED BY OWNER/ENGINEER. PROVIDE 20A, 120V CIRCUIT TO LOCAL CONTROL PANEL FROM EXISTING PANEL.  
3 EXISTING SCADA RTU IS MISSION MYDRO 850. REFER TO MANUFACTURER INSTALLATION INSTRUCTIONS TO ACCOMMODATE ADDITIONAL INPUTS AND OUTPUTS. SCADA AND VALVE PROGRAMMING BY CONTRACTOR.



1 NORTH RESERVOIR SITE PLAN  
SCALE: 1/8" = 1'-0"

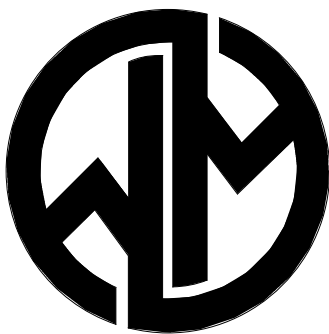


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1	11/22/2023	ADDENDUM 2

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PHASE 1 - SEISMIC IMPROVEMENTS  
CITY OF CANNON BEACH, OR 97110

ENGINEERING PLAN  
Issue Date:11/22/2023

Project Manager TWT  
Drawn by JRB  
Checked by SEW

SITE PLAN - NORTH  
RESERVOIR

E102

PLOT DATE: 11/16/2021 9:53 AM - FILE: C:\Users\JoelB\OneDrive - Windsor Engineers\20198.3 Cannon Beach Seismic Valves\02\_Drawings\00\_BIM 360 files\CAD Links\20198.3\_BRDR.dwg

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UTILITY CONTACT  
BRET DORSEY  
Bret.Dorsey@Pacifcorp.com  
503-861-6010.

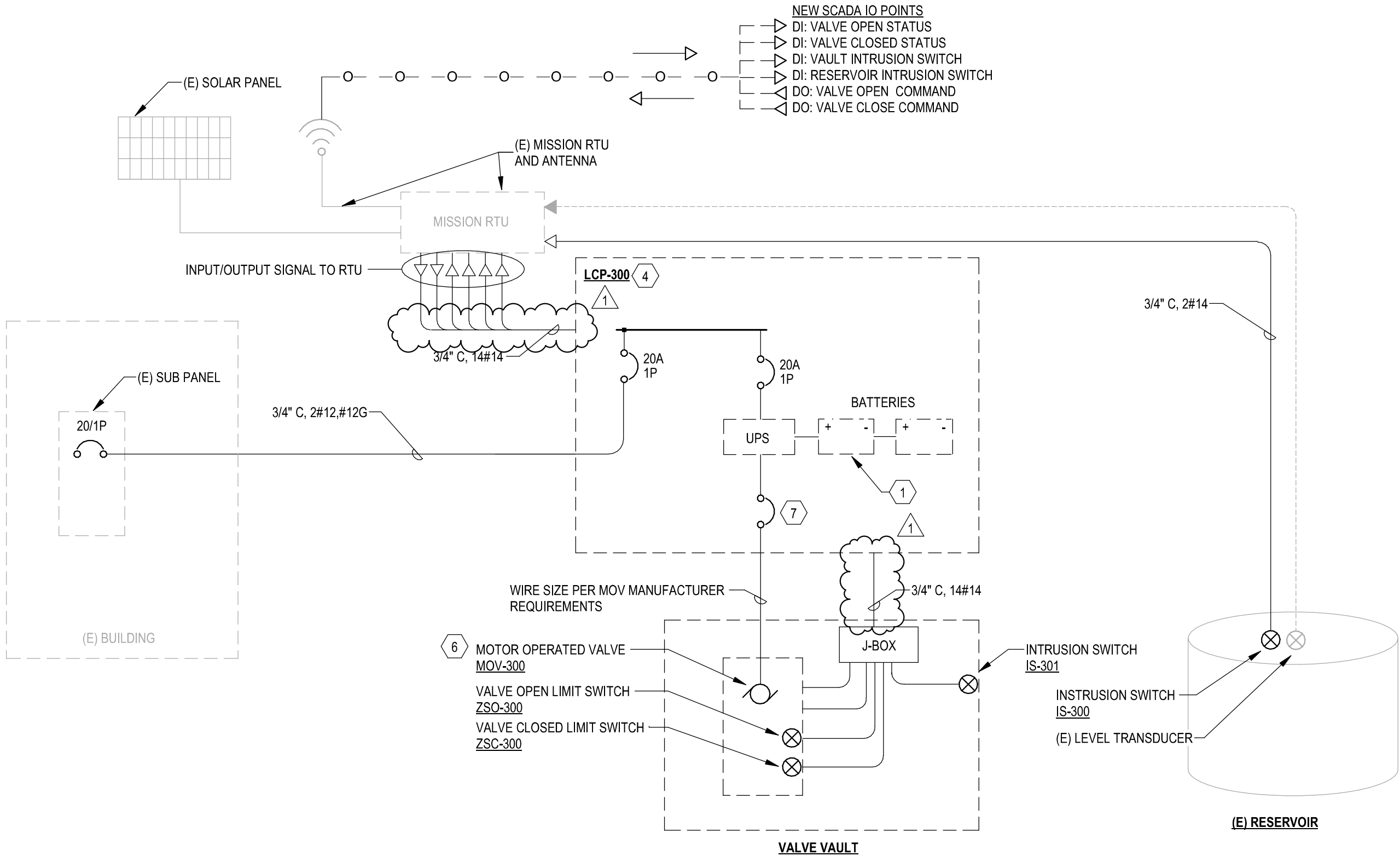
SCOPE ITEM	ELEC. CONTRACTOR	UTILITY CO.
TRENCHING - EXCAVATING, BACKFILL, PAVING/RESTORATION	X	
METER BASE	X	
UNDERGROUND VAULTS EXCAVATION	X	
UNDERGROUND VAULTS INSTALLATION	X	
CONDUIT AND INSTALLATION	X	
CONDUCTORS (WIRE) INSTALLATION		X
TRANSMISSION LINE INSTALLATION		X
RISER INSTALLATION		X
TRANSFORMER INSTALLATION		X

GENERAL SHEET NOTES

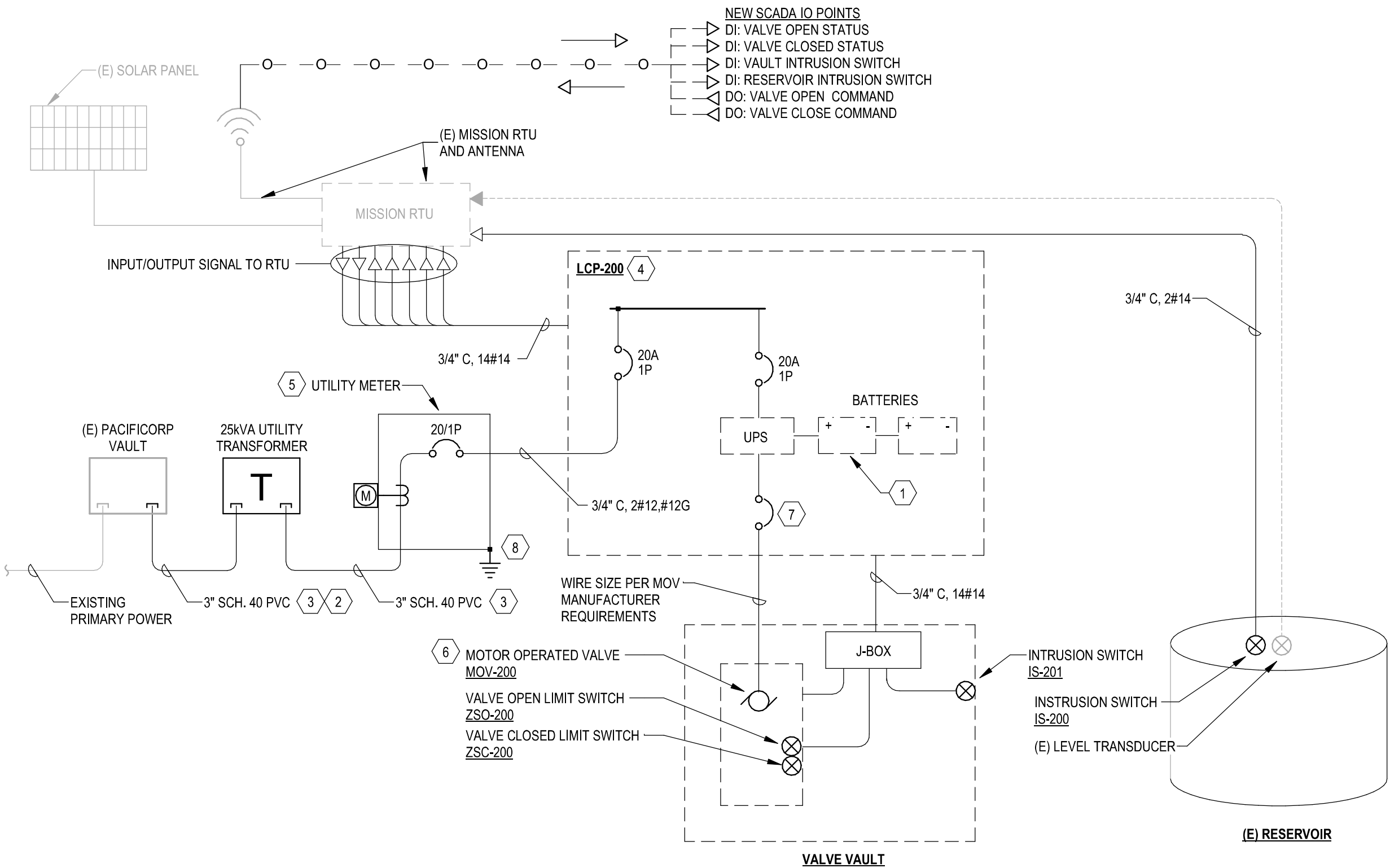
- A. GRAY LINES INDICATE EXISTING TO REMAIN. BOLD LINES INDICATE NEW SCOPE.
- B. DASHED CONDUIT LINETYPE INDICATES UNDERGROUND ROUTING. COORDINATE NEW UNDERGROUND CONDUITS WITH EXISTING CONDITIONS.
- C. NEW SCADA AND VALVE PROGRAMMING BY CONTRACTOR.

KEYNOTES

1. PROVIDE BATTERY BACKUP. BATTERY SHALL HAVE CAPACITY TO COMPLETE A MINIMUM OF (2) CLOSE/OPEN CYCLES IN THE EVENT OF A POWER OUTAGE.SEE SPECIFICATION FOR MORE INFORMATION.
2. PRIMARY CONDUIT SHALL BE 36" BELOW GRADE.
3. PRIMARY AND SECONDARY CONDUITS PER PACIFICORP ELECTRIC SERVICE REQUIREMENTS. TRENCHING SHALL BE INSPECTED AND APPROVED BY PACIFICORP BEFORE BACKFILL.
4. PROVIDE NECESSARY RELAYS, TERMINAL BLOCKS, CIRCUIT BREAKERS, ETC. REQUIRED TO ENSURE COMPLETE CONTROL AND SCADA INTEGRATION TO THE MOTOR OPERATED VALVE. SUBMIT CONTROL SYSTEM SCHEMATICS FOR APPROVAL PRIOR TO INSTALLATION. SEE TYPICAL PANEL LAYOUT DRAWING
5. PROVIDE STAINLESS STEEL METERMMAIN COMBO, 120V/240V, 1PH, 3W, MIN. 100A RATED, 22KAIC, NEMA 3R. PROVIDE 100A/2P MAIN BREAKER AND (1) 20A/1P OUTPUT BREAKER. SEE INSTALLATION DETAIL ON SHEET E601. ACCEPTABLE METER SOCKETS SHALL BE PER PACIFIC POWER REQUIREMENTS AND APPROVE
6. ROTORK AUTOMATIC ELECTRIC ACTUATOR, FULL CLOSE, NON-THROTTLING, N.O. PILOT. VALVE CLOSING ON EARTHQUAKE ALERT, (24 VDC APPLIED TO CONTROL ASSEMBLY) AND OPENS AFTER RESET (0 VDC APPLIED TO CONTROL ASSEMBLY) SEE SPECIFICATIONS FOR FURTHER INFORMATION.
7. PROVIDE CIRCUIT PROTECTION AND WIRE SIZE PER MOTOR ACTUATED VALVE MANUFACTURER REQUIREMENTS.
8. PROVIDE (2) DRIVEN GROUND RODS, MIN. 8-FT SEPARATION PER NEC 250.52(A)(5). PROVIDE #8 CU GROUND WIRE FROM GROUND LUG TO GROUND RODS.



2 NORTH RESERVOIR ONE-LINE DIAGRAM - ELECTRICAL & CONTROLS  
NOT TO SCALE



1 TOLOVANA RESERVOIR ONE-LINE DIAGRAM - ELECTRICAL & CONTROLS  
NOT TO SCALE



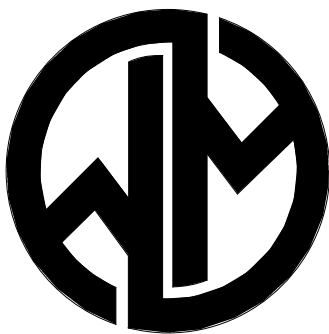
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Revisions:

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1	11/22/2023	ADDENDUM 2

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WATER RESILIENCY PROJECT  
PHASE 1 - SEISMIC IMPROVEMENTS  
CITY OF CANNON BEACH, OR 97110

ENGINEERING PLAN

Issue Date: 11/22/2023

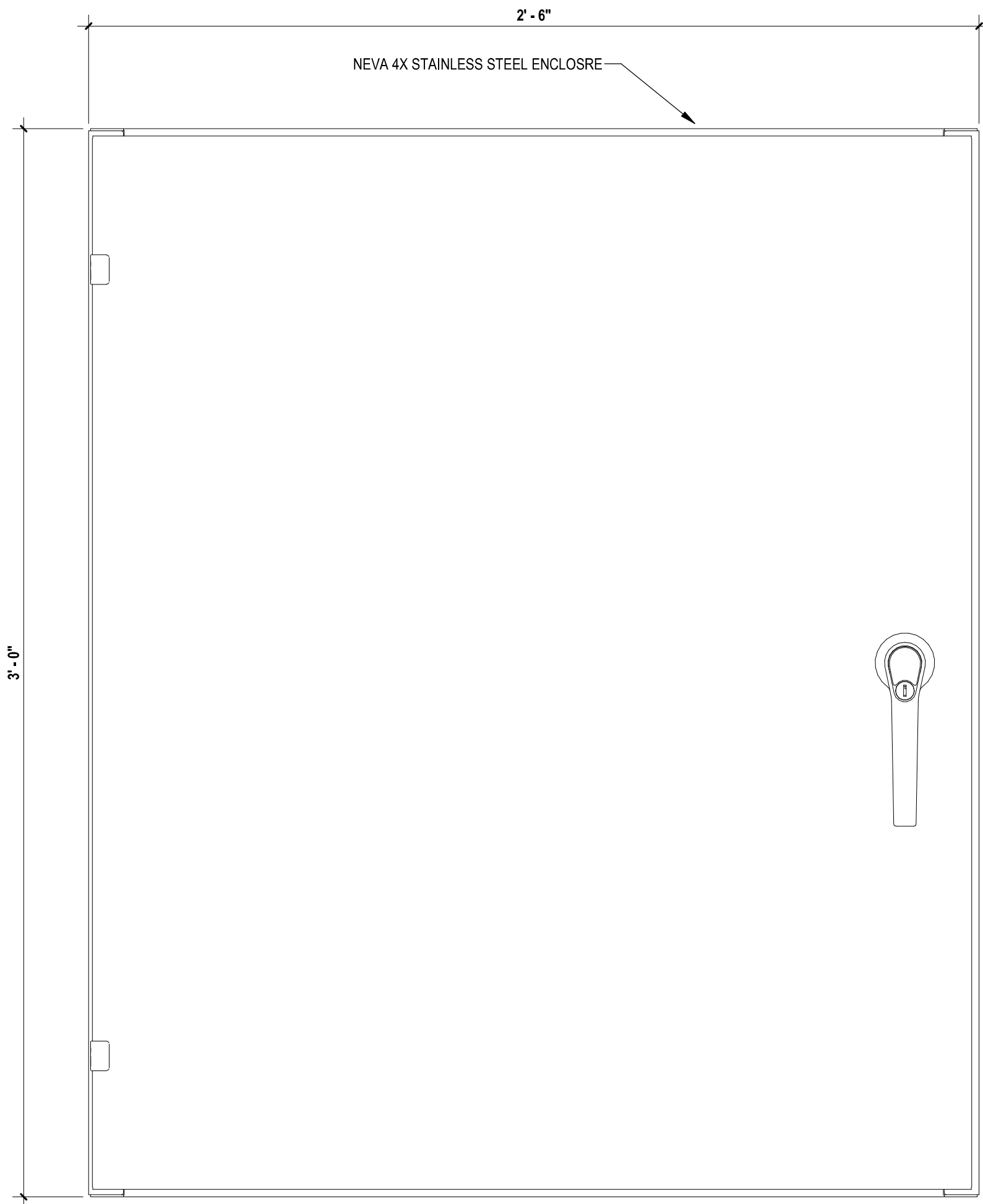
Project Manager: TWT  
Drawn by: JRB  
Checked by: SEW

RESERVOIR ONE-LINE  
DIAGRAM

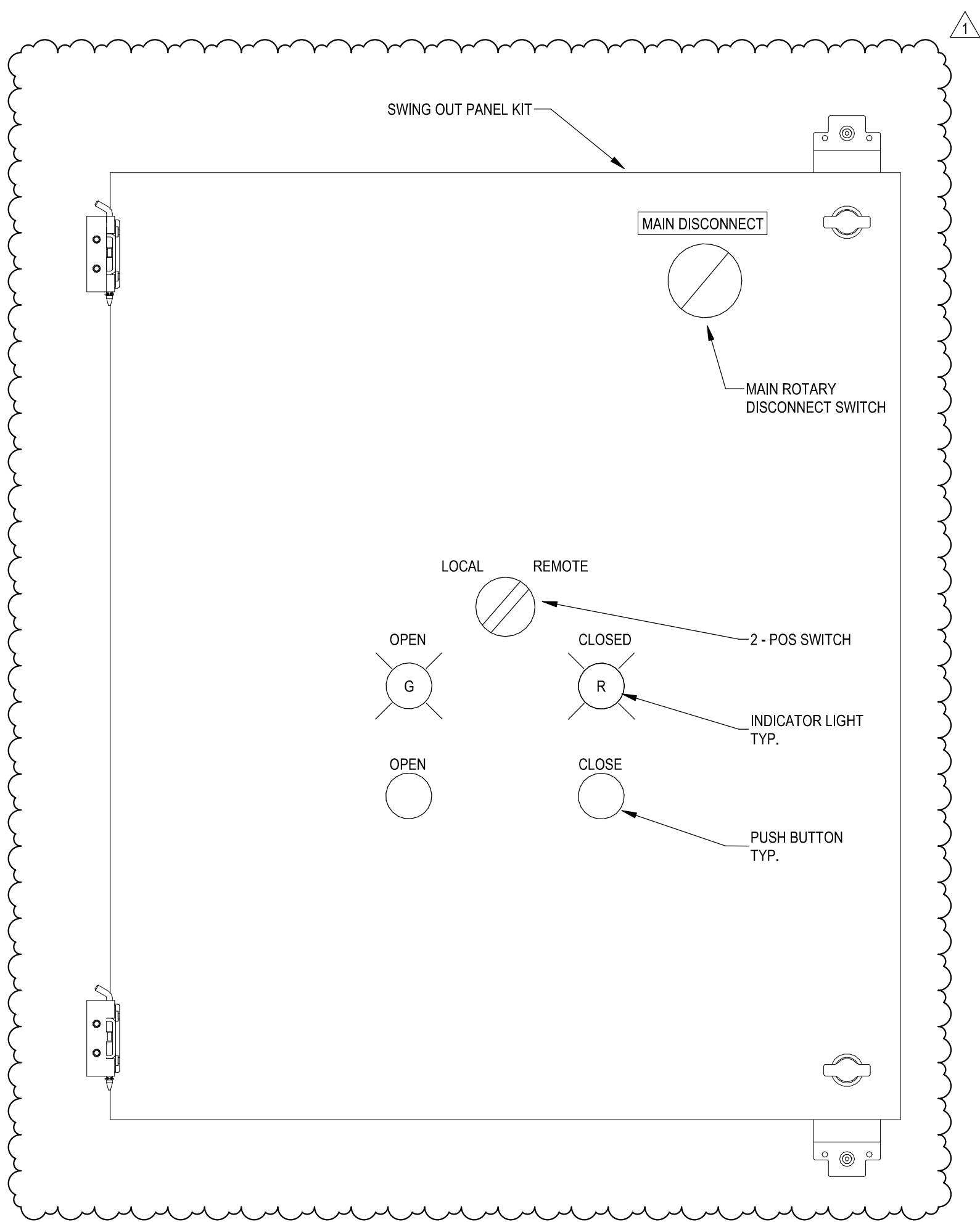
E601

GENERAL SHEET NOTES

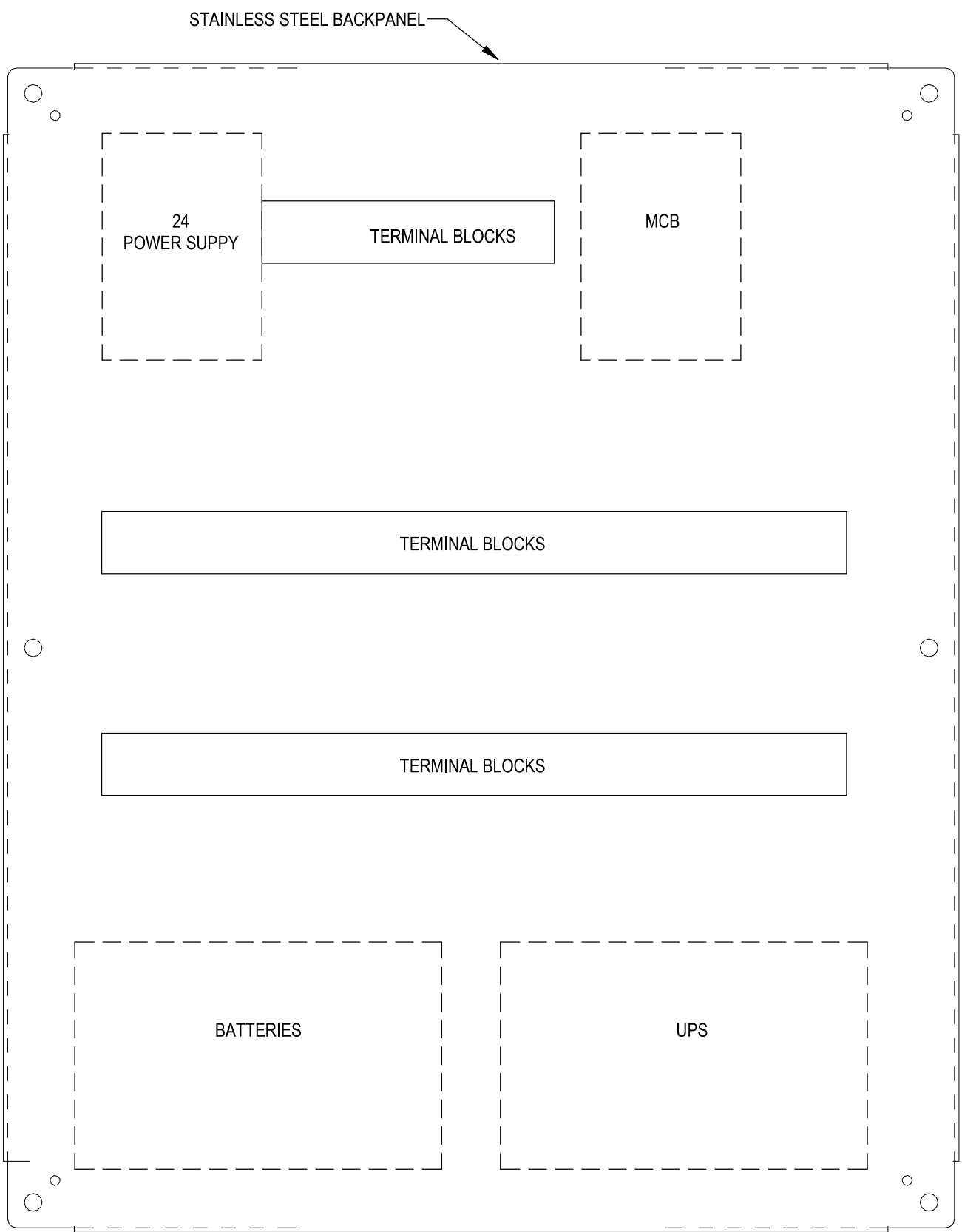
- A. THIS CUSTOM CONTROL PANEL ELEVATION IS A GENERAL ARRANGEMENT DRAWING AND SHOWS MAJOR COMPONENTS ONLY. NOT ALL MATERIALS NECESSARY FOR FABRICATION. SEE WIRING DIAGRAMS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.



ENCLOSURE EXTERIOR



SWING OUT PANEL



BACK PANEL



Know what's **below.**  
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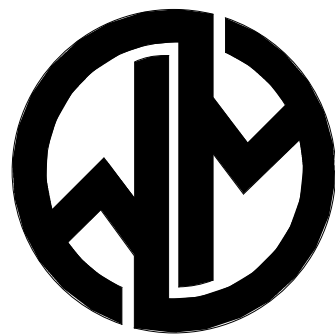
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WATER RESILIENCY PROJECT  
PHASE 1 - SEISMIC IMPROVEMENTS  
CITY OF CANNON BEACH, OR 97110

ENGINEERING PLAN  
Issue Date: 11/22/2023

Project Manager TWT  
Drawn by JRB  
Checked by SEW

TYPICAL CONTROL  
PANEL ELEVATIONS

E701

**SECTION 00 41 00  
BID FORM**

BID OF \_\_\_\_\_ (hereinafter called "Bidder"), organized and existing under the laws of the State of Oregon, doing business as \_\_\_\_\_. (Insert "a joint venture", "a corporation", "a partnership" or "an individual" as applicable.)

To City of Cannon Beach [hereinafter called "OWNER"]

1. The undersigned Bidder, in compliance with your invitation for bids, including the ADVERTISEMENT FOR BIDS and the INSTRUCTIONS TO BIDDERS, for

**PROJECT NAME: Cannon Beach Water Resiliency Project Phase 1 – Seismic Improvements**

having examined the plans and specifications with related documents and having examined the site of the project work, and being familiar with all the conditions pertaining to the construction of the project, hereby offers to furnish all labor, materials, equipment and supplies necessary to construct the project in accordance with the contract documents within the time set forth therein, and at the unit prices stated below. The prices are to cover all the costs connected with performing the work required under the contract documents, of which this bid is a part.

2. The Bidder submits the unit prices set forth herein as those at which the Bidder will perform the work involved. The extensions in the column headed "Total" are made for the sole purpose of facilitating comparison of bids and if there are any discrepancies between the unit prices and the total amounts shown, the unit prices shall govern.

3. The Bidder certifies, under penalty of perjury, by the submission of this bid, that all requirements of ORS 279C.838-840 (Prevailing Wage Rate Laws) will be complied with throughout the course of this contract. The Bidder further certifies, under penalty of perjury, that the Bidder is a resident bidder, as defined by ORS 279A.120 (1)(b), of the State of Oregon. The Bidder further certifies, under penalty of perjury, that the Bidder is, to the best of the Bidder's knowledge, not in violation of any tax laws described in ORS 305.380 (4).

4. The Bidder acknowledges receipt of the following Addenda numbered \_\_\_\_\_ through \_\_\_\_\_. The Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of bid security. The Bidder agrees that this bid shall be good and may not be withdrawn for a period of 90 calendar days after the scheduled closing date for receiving bids.

5. The Bidder agrees to comply with all the federal, state and local laws, ordinances, rules and regulations that are pertinent to construction contracts of this character even though such laws may not have been quoted or referred to in the contract documents.

6. Upon receipt of written Notice of Award, Bidder will execute the Contract attached within 10 calendar days and deliver a Surety Bond or Bonds as required by the contract documents. The Bid Security accompanying this bid is to become the property of the Owner in the event the contract and bonds are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the Owner caused thereby.

7. The Bidder agrees to commence work under this contract within 10 calendar days after issuance to the Bidder of written Notice to Proceed by the Owner. The Bidder agrees to substantially complete the project on or before the dates or within the number of calendar days indicated in Section 2 of the Contract, with such extensions of time as are provided in the General Conditions. The Bidder accepts the provisions of the Contract regarding liquidated damages (Section 20 of the General Conditions of the Agreement) in the event of failure to complete the work of the project on or before the dates or within the number of calendar

days indicated in Section 2 of the Contract, with such extensions of time as are provided in the General Conditions.

8. The Bidder declares that the only persons or parties interested in this bid are those named herein, that this bid is in all respects fair and without fraud, and that it is made without collusion with any other bidder and without collusion with any representatives of the Owner. The Bidder hereby represents that no employee of the Owner, or any partnership or corporation in which an employee of the Owner has an interest, has or will receive any remuneration of any description from the Bidder, either directly or indirectly, in connection, except as specifically declared in writing.

9. The Bidder certifies that the Bidder has not discriminated against minority, women or emerging small business enterprises in obtaining any required subcontracts.

10. The Bidder will complete the work for the following prices in accordance with the Schedule of Contract Prices as follows:

#### **SCHEDULE OF CONTRACT PRICES**

<b>No.</b>	<b>Item</b>	<b>Units</b>	<b>Qty</b>	<b>Unit Price</b>	<b>Total Price</b>
	<b>PART 1 - SITE IMPROVEMENTS</b>				
1	MOBILIZATION	LS	1	\$	\$
2	TEMPORARY SIGNS	LS	1	\$	\$
3	EROSION CONTROL	EA	3	\$	\$
4	REMOVE CONCRETE SURFACING	SY	40	\$	\$
5	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1	\$	\$
6	REMOVE VALVES	EA	8	\$	\$
7	REMOVE PIPE	LF	100	\$	\$
8	PORTLAND CEMENT CONC. PAVEMENT SAW CUTTING	LF	60	\$	\$
9	REMOVE & REINSTALL FENCE	LS	1	\$	\$
10	REMOVE & REINSTALL LADDER	LS	1	\$	\$
11	EXCAVATION AND EMBANKMENT	LS	1	\$	\$
12	6 INCH CONCRETE SURFACING	SY	40	\$	\$
<b>SUBTOTAL PART 1 - STREET IMPROVEMENTS</b>				<b>\$</b>	<b>\$</b>

No.	Item	Units	Qty	Unit Price	Total Price
<b>PART 2 - RESERVOIR IMPROVEMENTS</b>					
13	TEMPORARY WATERMAIN BYPASS	EA	1	\$	\$
14	CONNECT TO EXISTING WATERMAIN	EA	2	\$	\$
15	4" FLEXTEND	EA	1	\$	\$
16	8" FLEXTEND	EA	2	\$	\$
17	12" FLEXTEND	EA	2	\$	\$
18	10' x 8' VAULT	EA	1	\$	\$
19	12" GATE VALVE	EA	4	\$	\$
20	8" GATE VALVE WITH ACTUATOR	EA	1	\$	\$
21	12" GATE VALVE WITH ACTUATOR	EA	1	\$	\$
22	8" CHECK VALVE	EA	1	\$	\$
23	12" CHECK VALVE	EA	2	\$	\$
24	HYDRANT ASSEMBLIES	EA	2	\$	\$
25	12 INCH HDPE PIPE	LF	20	\$	\$
26	8 INCH DUCTILE IRON PIPE	LF	10	\$	\$
27	12 INCH DUCTILE IRON PIPE	LF	80	\$	\$
28	SHAKE ALERT CONTROL	LS	1	\$	\$
29	ELECTRICAL SYSTEMS	LS	2	\$	\$
<b>SUBTOTAL PART 2 - RESERVOIR IMPROVEMENTS</b>				<b>\$</b>	<b>\$</b>

<b>CONSTRUCTION BID SUMMARY</b>	
<b>CONSTRUCTION BID PART 1 - SITE IMPROVEMENTS</b>	<b>\$</b>
<b>CONSTRUCTION BID PART 2 - RESERVOIR IMPROVEMENTS</b>	<b>\$</b>
<b>TOTAL-BID</b>	<b>\$</b>

The following documents are attached to and made a condition of this bid:

- A. The required Bid Security enclosed with the Bid Form
- B. The First-Tier Subcontractor Disclosure Form submitted in a separate envelope within two hours after the date and time of the bid opening.
- C. The Bidder Responsibility Information Form.

Respectfully Submitted,

Name of Firm \_\_\_\_\_

Address \_\_\_\_\_

Federal Employer I.D. No. \_\_\_\_\_

State Employer I.D. No. \_\_\_\_\_

State C.C.B. Registration No. \_\_\_\_\_

Telephone \_\_\_\_\_

Fax No. \_\_\_\_\_

By:

Name \_\_\_\_\_

(Signature)

Title \_\_\_\_\_

(Please Print)

If Corporation, Attest \_\_\_\_\_

(Secretary of Corporation)

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2023

**END OF SECTION**

**SECTION 01 22 00  
UNIT PRICES**

**PART 1 GENERAL**

**1.01 COSTS INCLUDED**

- A. Unit Prices shown on the Bid Form shall include full compensation for all required submittals, labor, materials, tools, equipment, plant, transportation, services and other incidentals; erection or installation of an item of the Work, testing and inspection overhead and profit required to provide a complete and operable installation. For Lump Sum items, the contractor may be required to provide a breakdown-schedule of values for each lump sum bid item.
- B. Mobilization (Item 1)
  - 1. Payment. The payment for mobilization consists of the costs associated with mobilization to perform the work and includes equipment, material and labor move-in costs, costs for bonds, insurance, costs for the training and use of project management software and miscellaneous start-up costs. The cost of demobilization shall be incidental to other items of work listed in the Bid Schedule.
  - 2. Measurement. The bid item for Mobilization shall be measured lump sum. The amounts paid for mobilization in the Contract progress payment will be calculated and based on the percent of the original Contract Amount that is earned from other Contract items, not including advances on Materials, and as follows:
    - a) When 5 percent is earned, either 50 percent of the amount for mobilization or 5 percent of the original Contract Amount, whichever is the least.
    - b) When 10 percent is earned, either 100 percent of mobilization or 10 percent of the original Contract Amount, whichever is the least.
    - c) When all Work is completed, amount of mobilization exceeding 10 percent of the original Contract Amount.
    - d) This schedule of mobilization progress payments will not limit or preclude progress payments otherwise provided by the Contract.
    - e) Payment will be included in payment made for the appropriate items under which this Work is required.
- C. Temporary Signs (Item 2)
  - 1. Payment. The payment under this item for temporary signs includes all labor, equipment, and material necessary for the work except for any specific portions which are identified to be paid for under separate items. Temporary Signs shall include but not be limited to: obtaining Owner provided temporary project sign, furnishing a backboard and support posts and frame system, provide installation and maintenance, and all other items or work specified in the technical specification and required by the Contract Documents relating to this item. Payment includes removal and delivery to the Owner and clean up of the installation site.
  - 2. Measurement. Payment shall be made per the lump-sum (LS) bid price.



D. Erosion Control (Bid Item 3)

1. Payment. The payment for Erosion Control includes all labor, equipment, and material necessary for erosion control including placing, removing, and maintaining erosion control features as shown on the Drawings and in compliance with the current local Erosion Control Ordinance, updates to the SWPPP, maintenance and repair to the BMPs, other site stabilization material, equipment and installation, watering, mowing, weed removal, and establishment of vegetation. Temporary and permanent seed mix to be the same. Mulching type straw for temporary and mulching type hydromulch for permanent applications.
2. Measurement. Payment shall be made per each bid price with separate item for each of the Reservoir sites.

E. Remove Concrete Surfacing (Bid Item 4)

1. Payment. The payment for work constructed under this item includes but is not limited to all labor, equipment, and material necessary to provide removal of existing concrete pavement at the North and South Reservoirs as shown on the plans. Payment will include removal, disposal off site, protection of the work and work area, and other items necessary in order to provide a complete removal.
2. Measurement. Payment shall be per the square yard (SY) bid price based on the amount determined by the Owner/Engineer. Additional damaged sections shall be removed, recut and replaced at the Contractors sole expense.

F. Removal of Structures and Obstructions (Bid Item 5)

1. Payment. The payment under this item for Removal of Structures and Obstructions includes all compensation for labor, equipment and material necessary for the work except for any specific portions which are identified to be paid under separate items. Structure Removal includes the removal of the existing valve vault at the South Reservoir (Tolovana) and any other items encountered during site work at all three reservoir locations. Work includes the legal disposal offsite of any materials removed.
2. Measurement. Payment shall be made per the lump-sum (LS) bid price.

G. Remove Valves (Bid Item 6)

1. Payment. The payment under this item for Remove Valves includes all compensation for labor, equipment and material necessary for the work except for any specific portions which are identified to be paid for under separate items. Remove Valves includes the removal of the existing valves located at the North and South Reservoirs and any other valves encountered during site work at all three reservoir locations and directed to be removed. Work includes the legal disposal offsite of any materials removed.
2. Measurement. Payment shall be made per Each (EA) bid price.

H. Remove Pipe (Bid Item 7)

1. Payment. The payment under this item for Remove Pipe includes all compensation for labor, equipment and material necessary for the work except for any specific portions which are identified to be paid for under separate items. Remove Pipe includes the removal of the existing pipe located at the North and South Reservoirs and any other valves encountered during site work at all three

reservoir locations and directed to be removed. Work includes the legal disposal offsite of any materials removed.

2. Measurement. Payment shall be made per Lineal Foot (LF) bid price and shall be measured in the field.

I. Portland Cement Concrete Pavement Sawcutting (Bid Item 8)

1. Payment. The payment under this item for Sawcutting includes all compensation for labor, equipment and material necessary for the work except for any specific portions which are identified to be paid for under separate items. Concrete sawcutting includes the sawcutting for the removal of the existing concrete slabs located at the North and South Reservoirs. Work includes the legal disposal offsite of any materials removed.
2. Measurement. Payment shall be made per Lineal Foot (LF) bid price as measured in the field. Additional sawcutting required due to damage by the Contractor shall be solely borne by the Contractor.

J. Remove and Reinstall Fence (Bid Item 9)

1. Payment. The payment under this item for Remove and Reinstall Fence includes all compensation for labor, equipment and material necessary for the work. Remove and Reinstall Fence includes the removal of the existing fence and gate if necessary to accommodate the work located at the North Reservoir. If fencing is not removed no payment will be made for this bid item.
2. Measurement. Payment shall be made per Lump Sum (LS) bid price.

K. Remove and Reinstall Ladder (Bid Item 10)

1. Payment. The payment under this item for Remove and Reinstall Ladder includes all compensation for labor, equipment and material necessary for the work. Remove and Reinstall Ladder includes the removal of the existing ladder, safe storage of all pieces and connectors and reinstallation at the North Reservoir. The resulting installation will result in a safe installation for the intended use. If Ladder Removal is not required no payment will be made for this bid item.
2. Measurement. Payment shall be made per Lump Sum (LS) bid price.

L. Excavation and Embankment (Bid Item 11)

1. Payment. The payment under this item for Excavation and Embankment includes all compensation for labor, equipment and material necessary for the work except for any specific portions which are identified to be paid for under separate items. Excavation and Embankment includes the stripping and removal and offsite disposal of the sod, stockpiling and protection (covering) of topsoil for topping of completed embankments or excavations, grading and compaction as required for work at each of the reservoirs. Dust and moisture control shall be included in this item. Surplus material may be placed at the main reservoir site if approved by the Owner. Work includes the legal disposal offsite of any materials removed.
2. Measurement. Payment shall be made per Lump Sum (LS) bid price as shown in the plans.

M. 6 Inch Concrete Surfacing (Bid Item 12)

1. Payment. The payment under this item for 6 Inch Concrete Surfacing includes all compensation for labor, equipment and material necessary for the work except for any specific portions which are identified to be paid for under separate items. 6 inch Concrete bid item includes the fine grading of the area to be replaced, compaction of the subgrade, installation of 4 inches of Aggregate Base rock including grading, conditioning and compaction, forming and the placement, finishing and curing of Class 3300 concrete. Work will include submittal of joint plan, finishing and curing as required. Work includes the legal disposal offsite of any remaining materials and final cleanup of the site. This work will be at both the North and South Reservoir sites.
2. Measurement. Payment shall be made per Square Yard (SY) bid price as measured by the Engineer in the field.

N. Temporary Water Main Bypass (Bid Item 13)

1. Payment. The payment under this item for Temporary Water Main Bypass includes all compensation for labor, equipment and material necessary for the work except for any specific portions which are identified to be paid under separate items. Temporary Bypass includes excavation and backfill (if buried), supply, installation, restraint, pressure testing and disinfection, tie-in connection and removal of the bypass at the South Reservoir (Tolovana) upon final project completion. Work includes the legal disposal offsite of any materials removed.
2. Measurement. Payment shall be made per Each (EA) bid price; if no bypass is installed there will be no payment for this item.

O. Connect to Existing Water Main (Bid Item 14)

1. Payment. The payment under this item for Connection to the Existing Water Main includes all compensation for labor, equipment and material necessary for the work except for any specific portions which are identified to be paid for under separate items. Connection to the Existing Water Main includes all new connections required at both Reservoir (North and South Reservoirs). Work includes excavation, subgrade preparation, cleaning of pipes, disinfection of the connections and testing for leakage at each connection that is made, backfill and compaction.
2. Measurement. Payment shall be made per Each (EA) bid price.

P. 4" Flexextend (Bid Item 15), 8" Flexextend (Bid Item 16) and 12" Flexextend (Bid Item 17)

1. Payment. The payment under these items for Flexextends includes all compensation for labor, equipment and material necessary for the work except for any specific portions which are identified to be paid for under separate items. "Flexextend" includes the purchase, delivery and installation of the Flexextend units located at the North and South Reservoirs including preparation of subgrade, bedding, provision and installation of protective poly sleeve, adjustment, backfilling using appropriate granular material (pea gravel or coarse sand), compaction, gaskets, bolts, washers, nuts, restrained connections at the reservoir, disinfection and testing of each unit for watertightness and placement of tracer wire.
2. Measurement. Payment shall be made per Each (EA) bid price.

Q. 10' x 8' Vault (Bid Item 18)

1. Payment. The payment for work constructed under this bid item includes furnishing and installing of the vault, excavation, dewatering, bedding, backfill and its compaction as shown on the plans, details and standard details. This item also includes penetrations and flexible couplings, installation of tracer wire and temporary surface restoration. Payment will include all items described in the contract documents (as described in the technical specifications) and include double H 20 traffic rated lid, access ladder, fall protection and the design and installation of pipe supports.
2. Measurement. Measurement for 10' x 8' Vault will be on a per each (EA) basis for each completed installation.

R. 12" Gate Valve (Bid Item 19)

1. Payment. The payment for work constructed under this bid item includes furnishing and installing of the valve, pipe bedding, trenching, trench backfill and its compaction as shown on the plans, details and standard details. This item also includes dewatering, disinfection, testing, installation of tracer wire and temporary surface restoration. Payment will include all gaskets, bolts, washers, nuts, coatings, operators (as described in the technical specifications) and access boxes, cleaning, disinfection and leak testing as required.
2. Measurement. Measurement for service connections will be on a per each (EA) basis for each completed installation.

S. 8" Gate Valve with Actuator (Bid Item 20) and 12" Gate Valve with Actuator (Bid Item 21)

1. Payment. The payment for work constructed under this bid item includes furnishing and installing of the valve, actuator, power and communication connections and operating functions as shown in the contract documents. This item also includes coatings, disinfection, testing, installation of tracer wire and any other necessary components. Payment will include all gaskets, bolts, washers, nuts, coatings, operators (as described in the technical specifications), connectors, cleaning, disinfection and leak testing as required. The contractor shall provide replacement makeup spools for each actuated valve; costs will be included in this bid item.
2. Measurement. Measurement for Valves with actuators will be on a per each (EA) basis for each completed installation.

T. 8" Check Valve (Bid Item 22) and 12" Check Valve (Bid Item 23)

1. Payment. The payment for work constructed under this bid item includes furnishing and installing of the valve, disinfection, testing, and installation of tracer wire. Payment will include all gaskets, bolts, washers, nuts, coatings, operators (as described in the technical specifications), cleaning, disinfection and leak testing as required.
2. Measurement. Measurement for service connections will be on a per each (EA) basis for each completed installation.

U. Hydrant Assembly (Bid Item 24)

1. Payment. The payment for work constructed under this item includes clearing, excavation and disposal of waste material, trench bracing, dewatering, furnishing and installing the assembly and bedding, native or granular backfill and its compaction, and surface restoration. Each hydrant assembly shall include furnishing and installing fittings with joint restraint, gate valve, valve box/lid, riser, thrust blocks, piping, and hydrant as specified in the technical specifications or shown on the Drawings and standard details titled "Fire Hydrant Assembly". Thrust blocks shall be as per the technical specifications or shown on the Drawings and standard detail titled "Standard Thrust Block". Payment will be made per each assembly listed in the bid schedule.
2. Measurement. Payment shall be per each (EA) assembly, complete, in-place.

V. 12" HDPE Pipe (Bid Item 25)

1. Payment. The payment for work constructed under this bid item includes clearing, potholing existing utility crossings, excavation and disposal of waste material, dewatering, furnishing and installing pipe and bedding, all required joint restraints or welding, native or granular backfill and its compaction as required, cleaning, disinfecting and testing installed water main pipe, support and restoration of utilities, tracer wire, restrained connections, and all other items of work associated with the water main pipe specified in the technical specifications or shown on the Drawings unless specifically listed as a payment item herein. Payment shall be for the various combinations of pipe size, installation type, backfill requirements, and field conditions.
2. Measurement. The quantities for payment shall be by the lineal foot (LF) based on the length of the water main pipe measured in place after completion and acceptance of the work. Measurement shall be the slope-distance along the finish ground surface along the pipe centerline measured to the nearest foot through the centerline of fittings, flexible couplings, vaults or points designated on the contract drawings unless otherwise specified in other bid items.

W. 8" Ductile Iron Pipe (Bid Item 26) and 12" Ductile Iron Pipe (Bid Item 27)

1. Payment. The payment for work constructed under this bid item includes clearing, potholing existing utility crossings if necessary, excavation and disposal of waste material, dewatering, furnishing and installing pipe and bedding, all required joint restraints, native, granular backfill and its compaction as required, restoration, cleaning, disinfecting and testing installed water main pipe, support and restoration of utilities, trace wire, and all other items of work associated with the water main pipe specified in the technical specifications or shown on the Drawings unless specifically listed as a payment item herein. Payment shall be for the various combinations of pipe size, installation type, backfill requirements, and field conditions.
2. Measurement. The quantities for payment shall be by the lineal foot (LF) and be the length of the water main pipe measured in place after completion and acceptance of the work. Measurement shall be the slope-distance along the finish surface along the pipe centerline measured to the nearest foot through the centerline of fittings, flexible couplings, vaults or points designated on the contract drawings unless otherwise specified in other bid items.

X. Shake Alert (Bid Item 28)

1. Payment. The payment for work constructed under this item includes provision of communication with the new actuated valves and control panels, custom panels for other devices, installation and connection for new monitoring switches, configuration of the SCADA system as discussed in the Technical documents, programming and integration with the city system, provision and installation of new ShakeAlert system and integration with existing city systems, complete documentation and operations manuals, testing and commissioning of the system as described in the contract documents. Price shall include the purchase of 3 years of licensing and software maintenance.
2. Measurement. Payment shall be Lump Sum (LS).

Y. Electrical Systems (Bid Item 29)

1. Payment. The payment for work constructed under this item includes excavation, installation of new conduits, conductors, panels, power and controls to the new actuated valves and control panels, backfilling of trenches, custom panels for other devices, installation and connection for new monitoring technology, configuration as discussed in the Technical documents, integration with the city system, complete documentation and operations manuals, testing and commissioning of the system as described in the contract documents.
2. Measurement. Payment shall be Lump Sum (LS).

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**