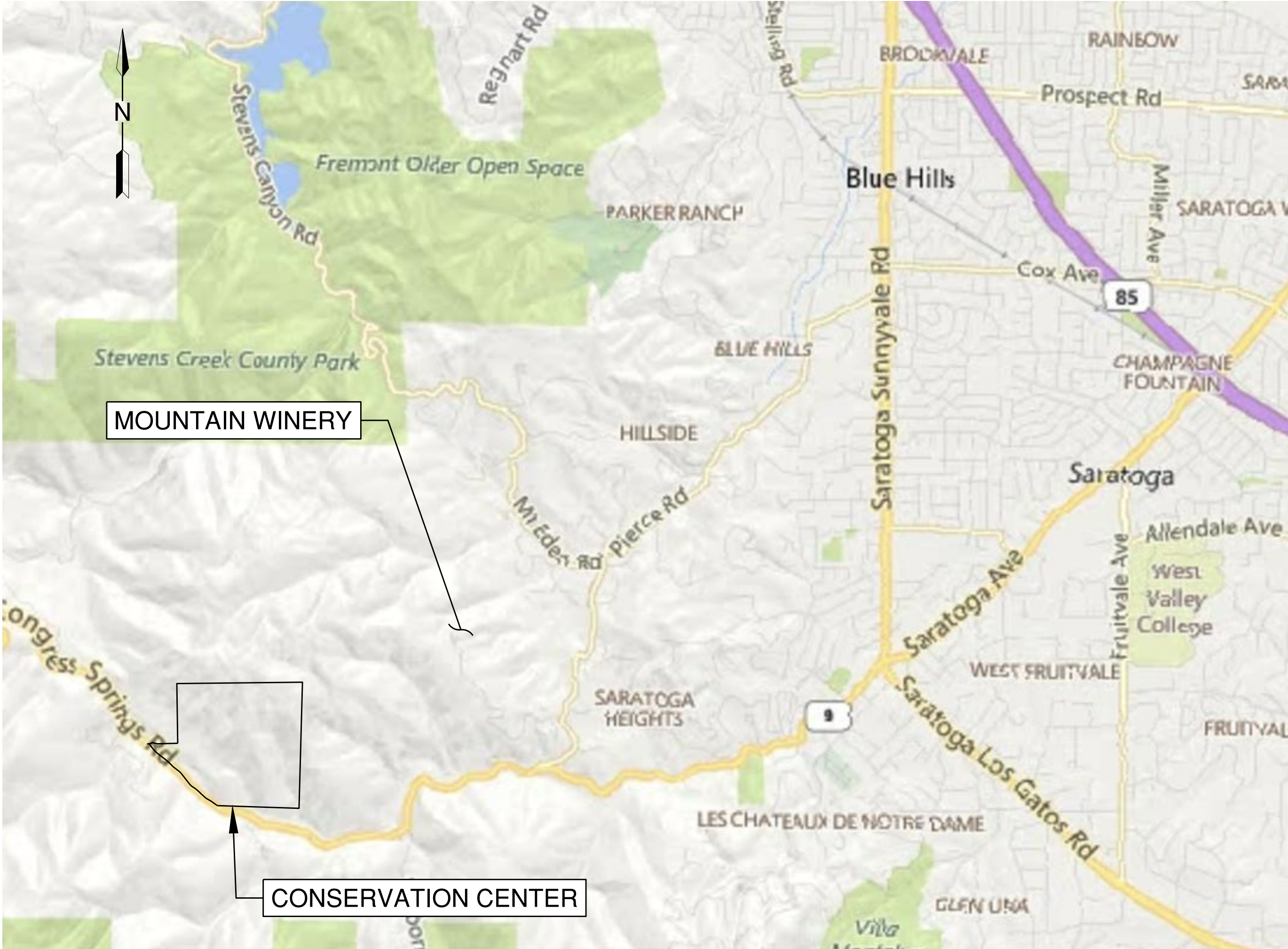


CONSERVATION CENTER FOR WILDLIFE CARE
24103 CONGRESS SPRINGS ROAD
SARATOGA, CALIFORNIA

WATER SERVICE

DRAWING INDEX

SHEET NO.	DWG NO.	TITLE
1	T1	TITLE SHEET
2	C1	OVERALL PLAN
3-10	C1-C9	PIPELINE LAYOUT PLANS
11	PS1.0	AIR-GAP TANK AND BOOSTER PUMP STATION SITE PLAN
12	PS1.1	AIR-GAP TANK AND BOOSTER PUMP STATION PLAN AND SECTIONS
13	PS2.0	INTERMEDIATE TANK AND BOOSTER PUMP STATION SITE PLAN
14	PS2.1	INTERMEDIATE TANK AND BOOSTER PUMP STATION PLAN AND SECTIONS
15	PS3.0	BREAK TANK SITE PLAN
16	PS3.1	BREAK TANK PLAN AND SECTIONS



LOCATION MAP

2000 0 4000 8000
SCALE: 1 INCH = 2000 FEET

GRADING

1. GRADING FOR INSTALLATION OF THE FOUNDATIONS AND RETAINING WALLS FOR THE WATER SERVICE PUMP STATION AND TANK SITES:

IMPROVEMENT	EARTHWORK QUANTITY (cubic yards)		MAXIMUM DEPTH (feet)	
	CUT	FILL	CUT	FILL
Driveway, Access Road				
Building Pad				
Landscaping				
Other Improvements	130	0	5.5 ft	0
TOTAL	130	0	5.5 ft	0

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SARATOGA, CA



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SANTA CLARA, CA 95050
(408) 246-4848

ISSUES AND REVISIONS

NO.	DATE	DESCRIPTION
1	8/28/2020	

PROJECT NUMBER
16011.00

SHEET TITLE
TITLE SHEET

SCALE
1" = 2000'

SHEET NUMBER

NOTES

1. WATER INFRASTRUCTURE INCLUDED IN PREVIOUS COUNTY BUILDING PERMIT
WITHIN CONSERVATION CENTER PROPERTY LIMITS.

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T1



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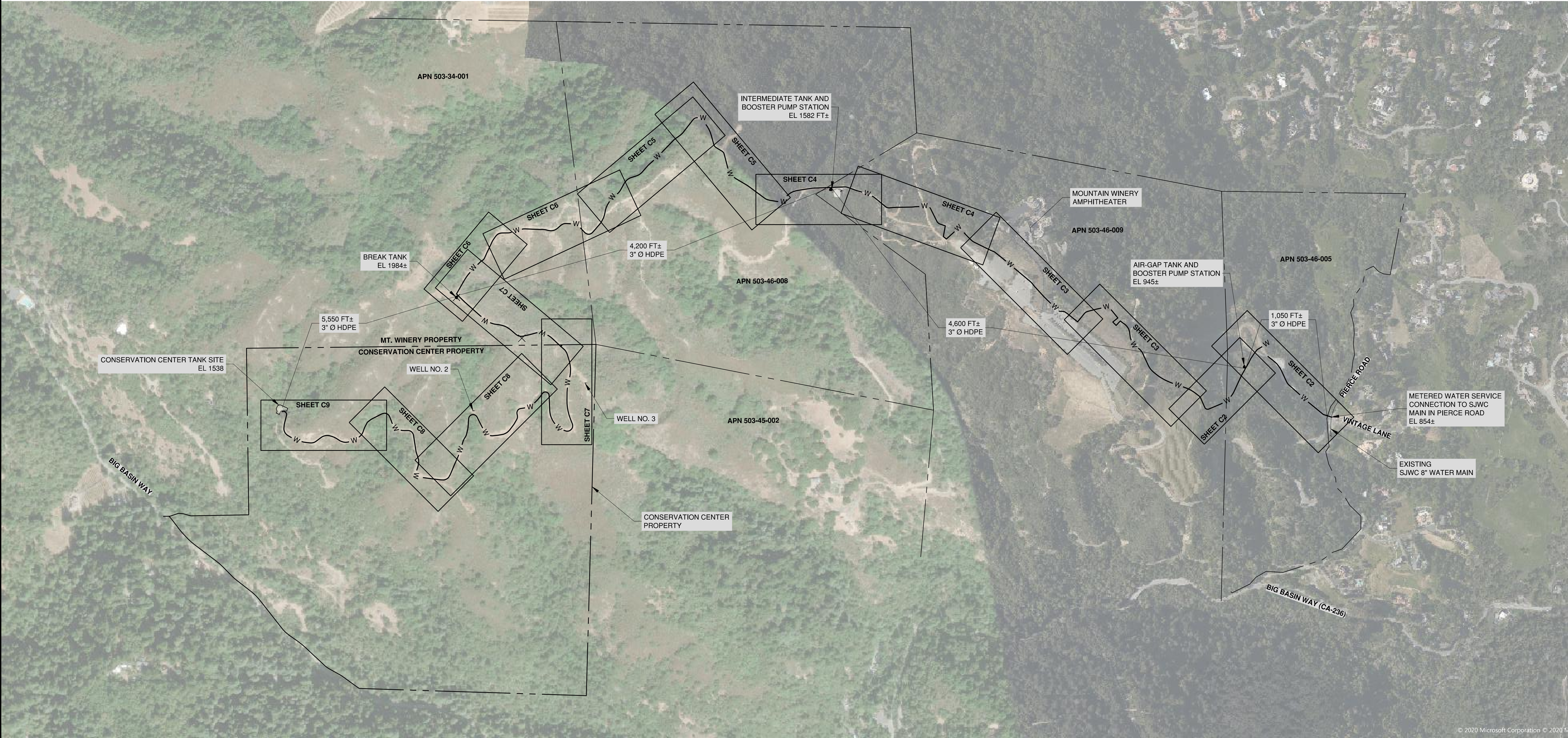
ISSUES AND REVISIONS	
NO.	DESCRIPTION
8/26/2020	

PROJECT NUMBER
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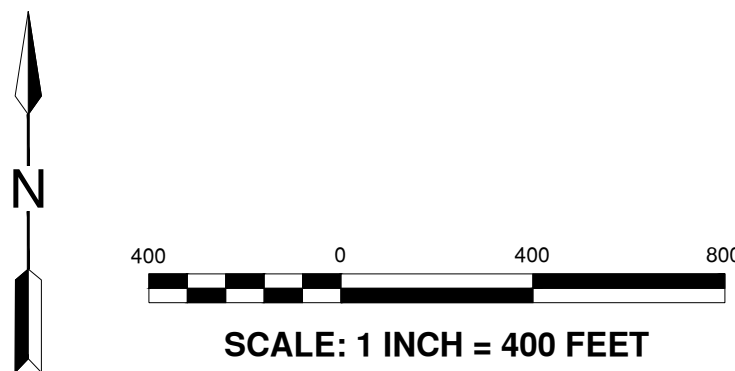
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OVERALL PLAN

SCALE
1" = 400'

SHEET NUMBER

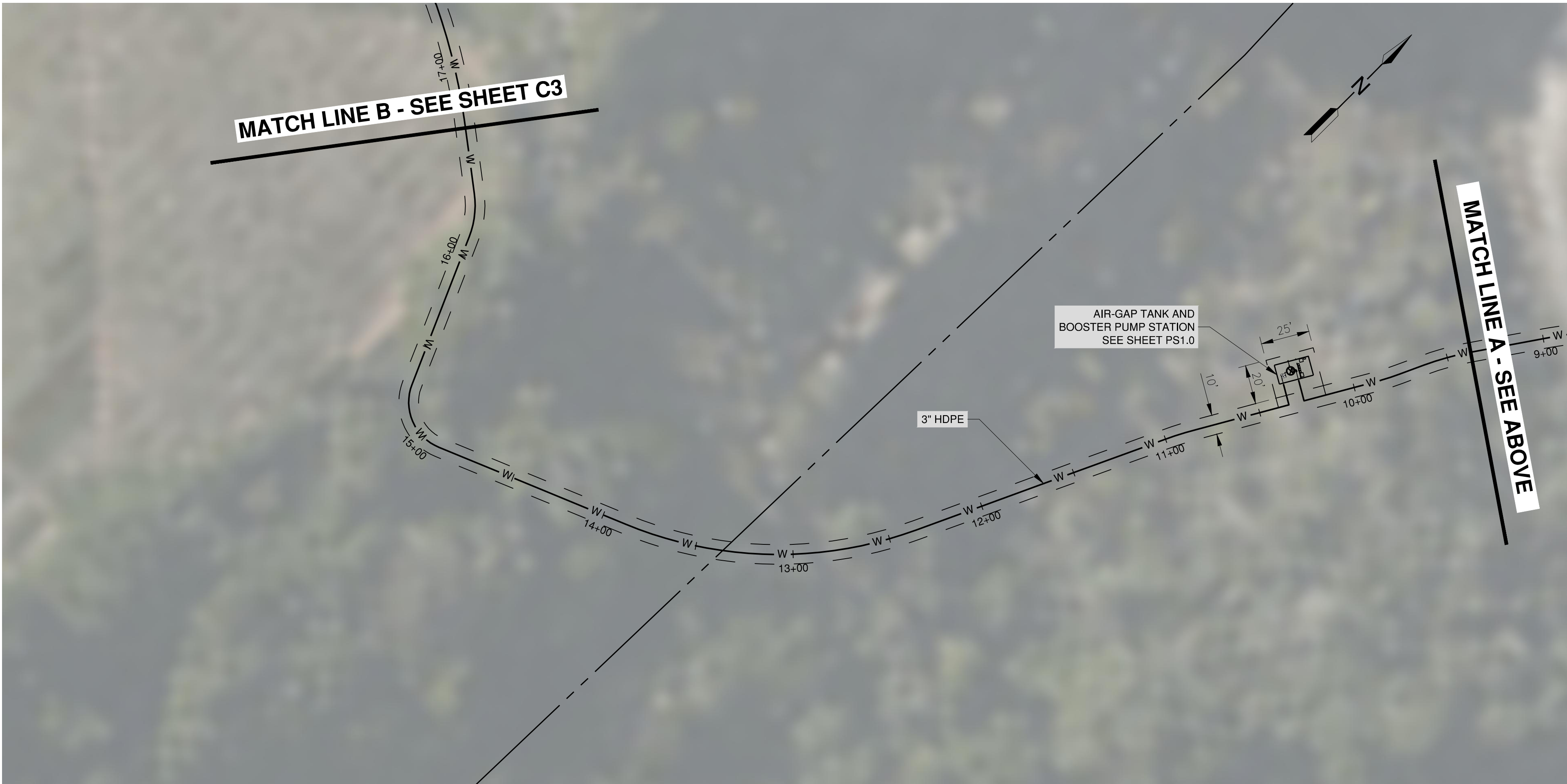


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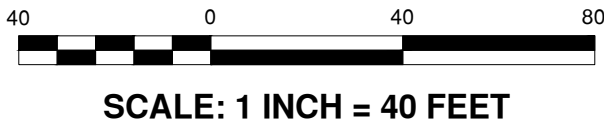


- NOTES
1. WATER INFRASTRUCTURE INCLUDED IN PREVIOUS COUNTY BUILDING PERMIT WITHIN CONSERVATION CENTER PROPERTY LIMITS.

PRELIMINARY - NOT FOR CONSTRUCTION



PRELIMINARY - NOT FOR CONSTRUCTION



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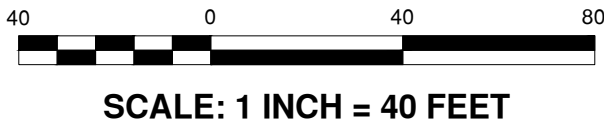
SHEET TITLE
PIPELINE PLAN

SCALE
1" = 40'

SHEET NUMBER



PRELIMINARY - NOT FOR CONSTRUCTION



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ISSUES AND REVISIONS	
NO.	DATE
1	8/28/2020

DESCRIPTION	
1	ISSUES AND REVISIONS

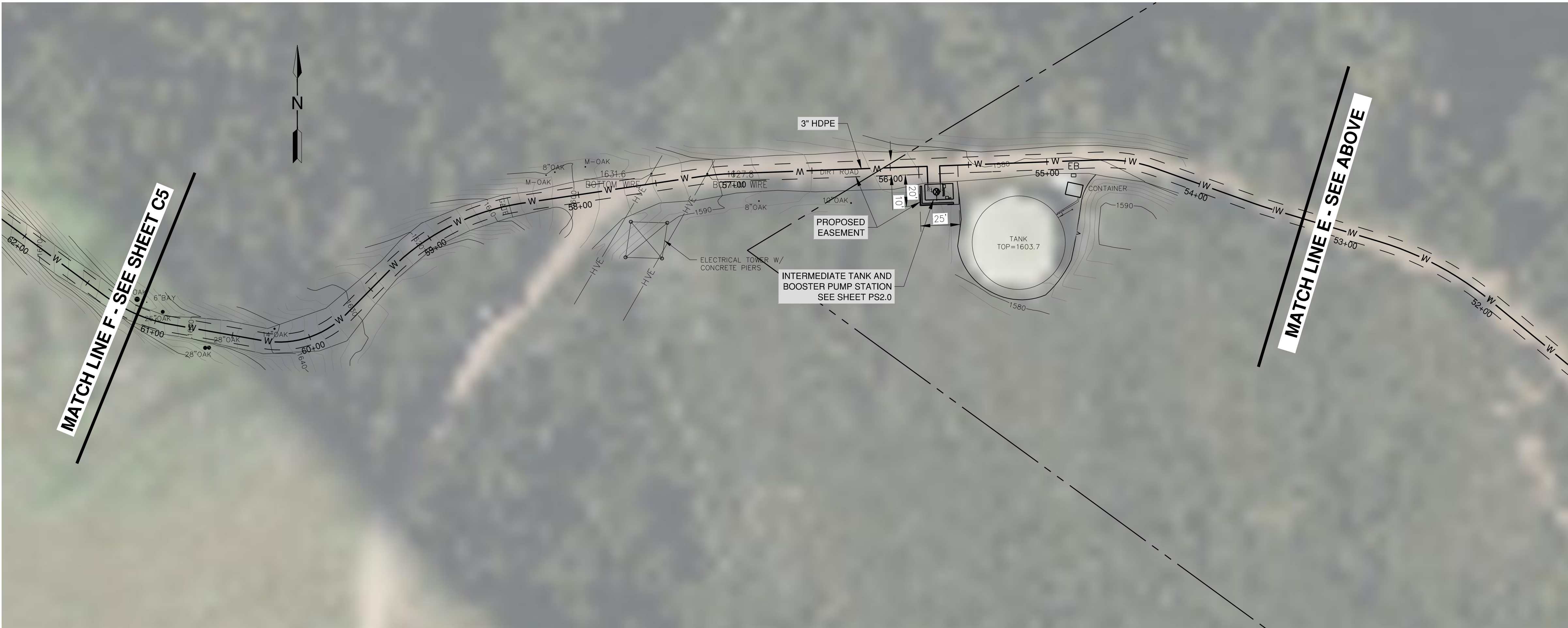
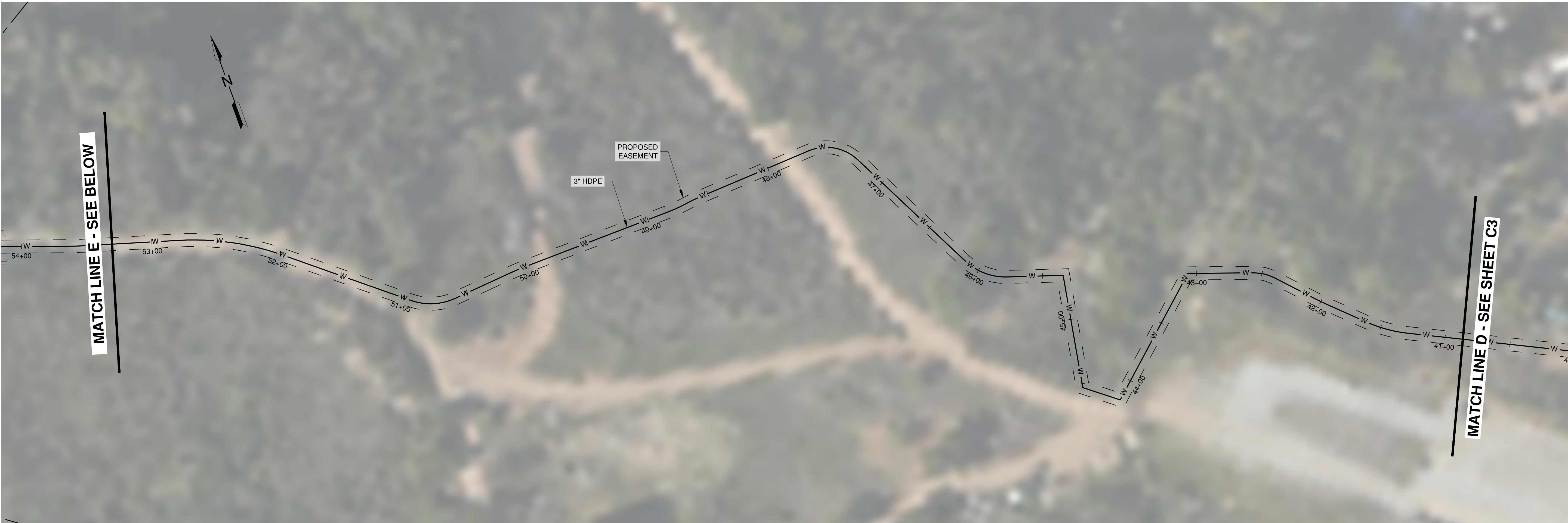
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16011.00

SHEET TITLE
PIPELINE PLAN

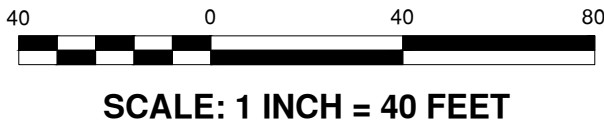
SCALE
1" = 40'

SHEET NUMBER

C3



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ISSUES AND REVISIONS	
NO.	DATE
1	8/28/2020

PROJECT NUMBER
16011.00

SHEET TITLE
PIPELINE PLAN

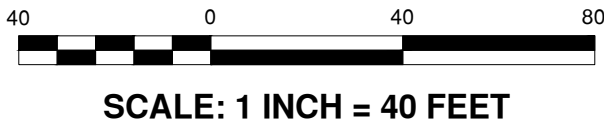
SCALE
1" = 40'

SHEET NUMBER

C4



PRELIMINARY - NOT FOR CONSTRUCTION



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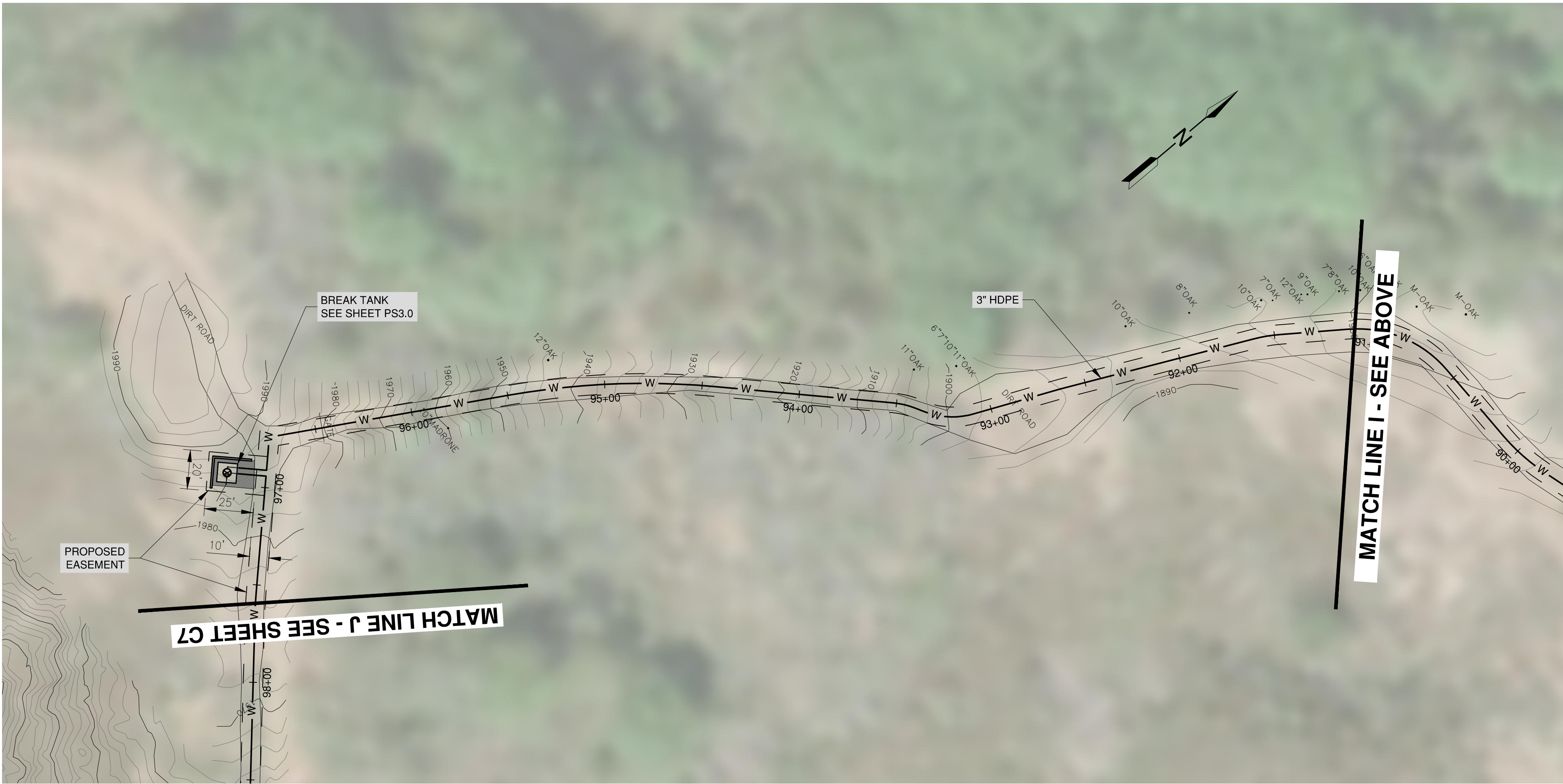


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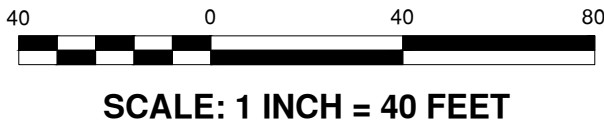
ISSUES AND REVISIONS	
NO.	DATE
1	8/26/2020

PROJECT NUMBER	
16011.00	
SHEET TITLE	
PIPELINE PLAN	
SCALE	
1" = 40'	
SHEET NUMBER	

C5



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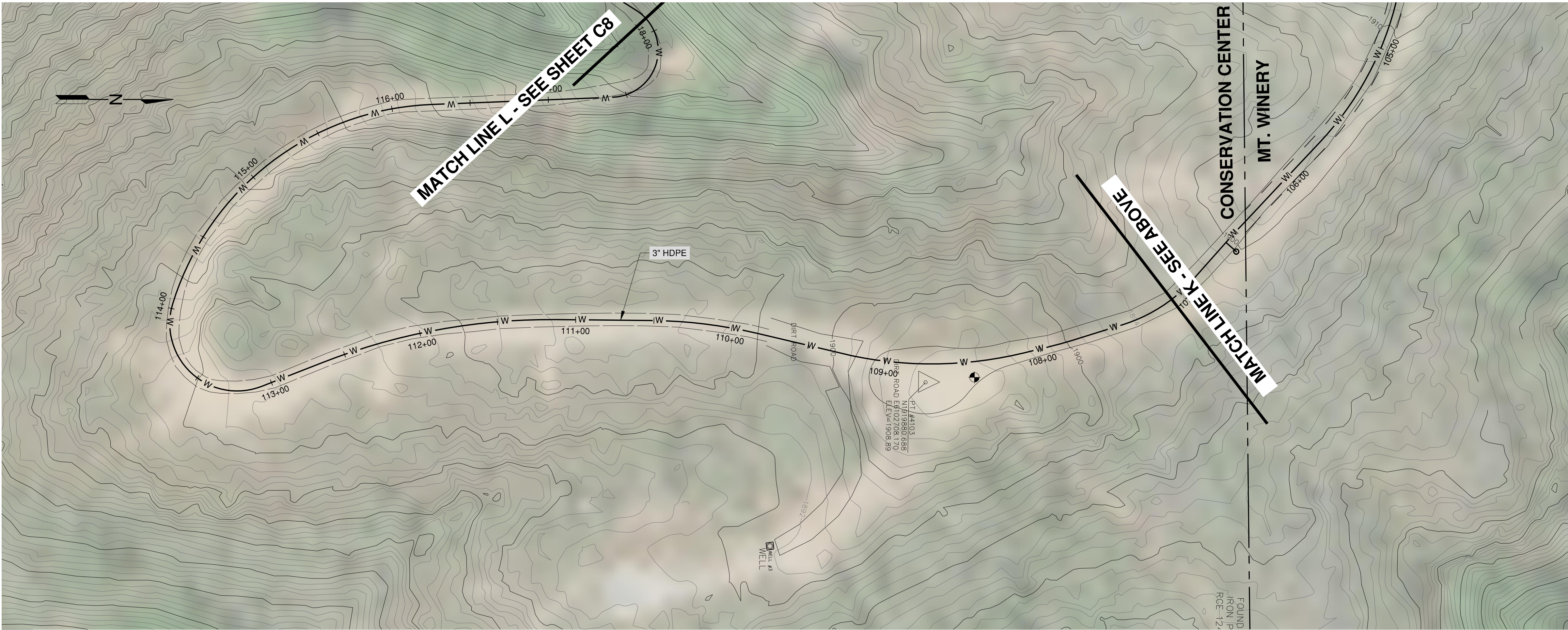
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NO.	DATE
1	8/26/2020

PROJECT NUMBER	
16011.00	
SHEET TITLE	
PIPELINE PLAN	
SCALE	
1" = 40'	
SHEET NUMBER	

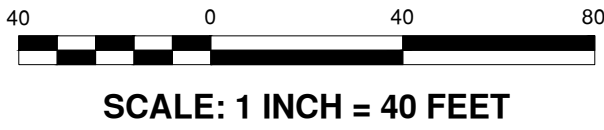
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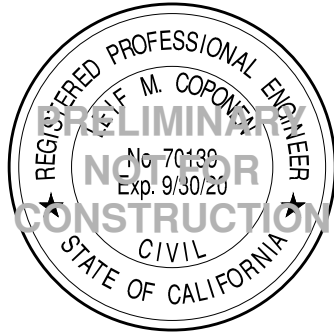
- NOTES
1. WATER INFRASTRUCTURE INCLUDED IN PREVIOUS COUNTY BUILDING PERMIT WITHIN CONSERVATION CENTER PROPERTY LIMITS.



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ISSUES AND REVISIONS	
NO.	DATE
1	8/28/2020

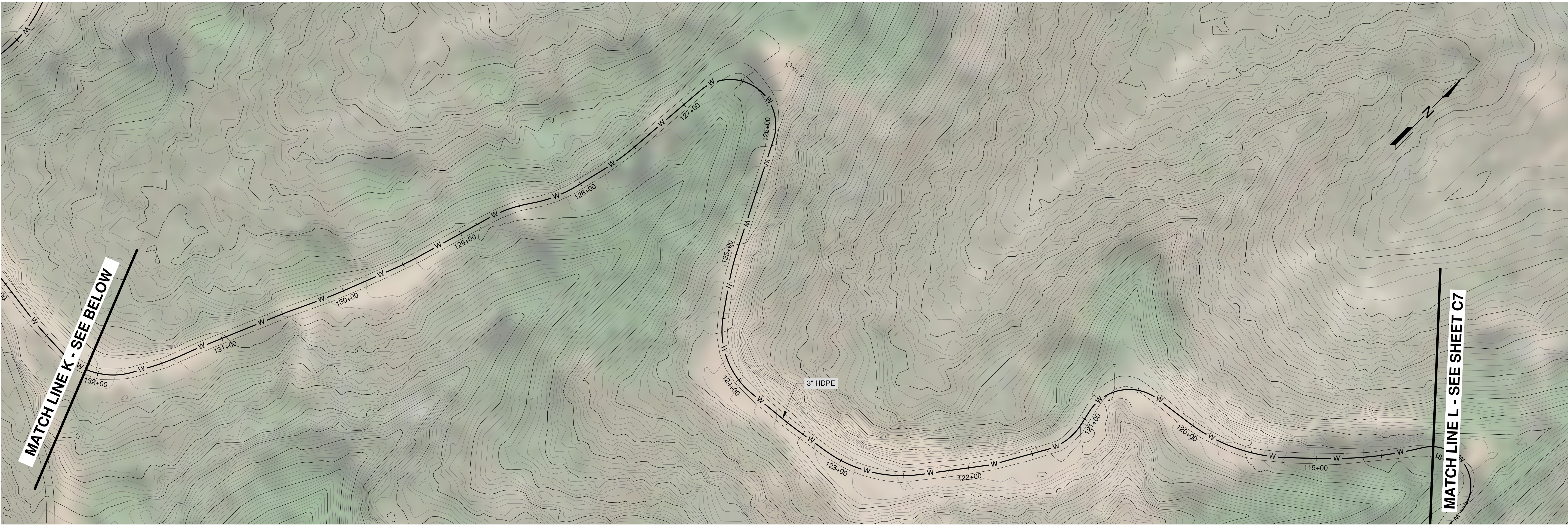
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1	ISSUES AND REVISIONS

PROJECT NUMBER	16011.00
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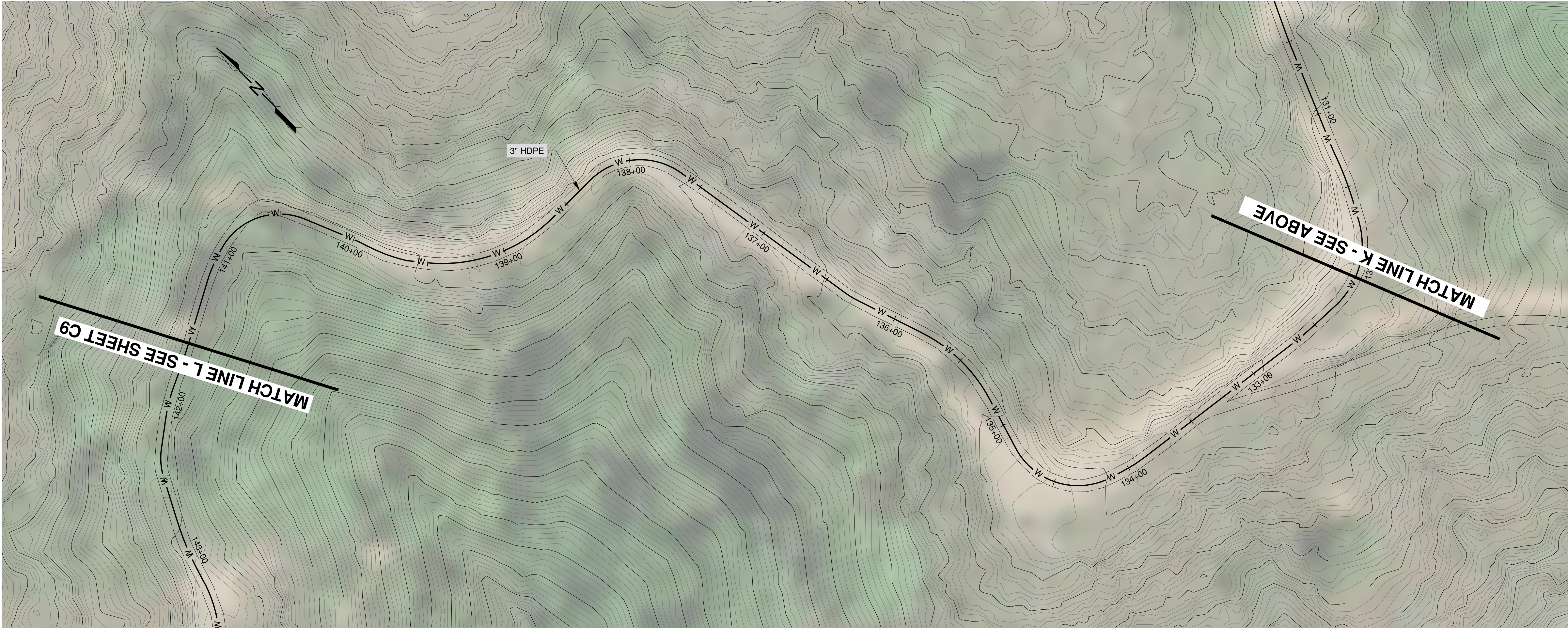
SHEET TITLE	PIPELINE PLAN
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SCALE	1" = 40'
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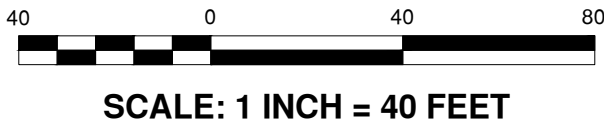
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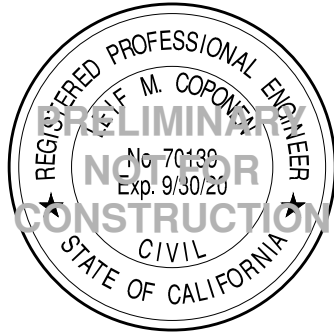
- NOTES
1. WATER INFRASTRUCTURE INCLUDED IN PREVIOUS COUNTY BUILDING PERMIT WITHIN CONSERVATION CENTER PROPERTY LIMITS.



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ISSUES AND REVISIONS	
NO.	DATE
1	8/26/2020

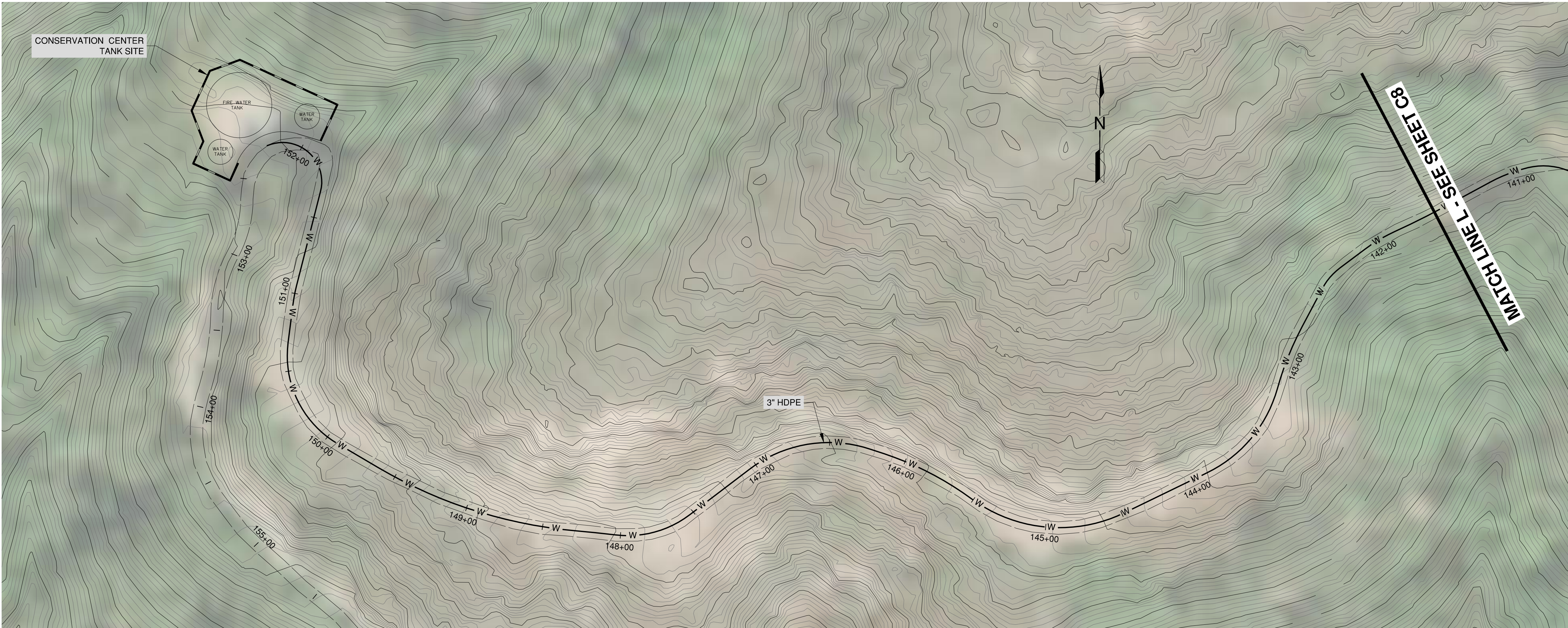
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PROJECT NUMBER
16011.00

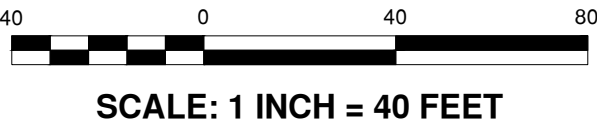
SHEET TITLE
PIPELINE PLAN

SCALE
1" = 40'

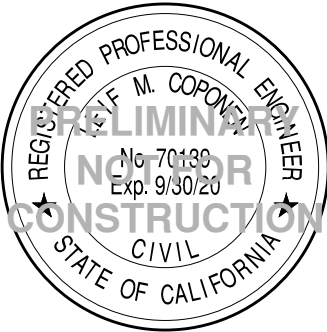
SHEET NUMBER



- NOTES
1. WATER INFRASTRUCTURE INCLUDED IN PREVIOUS COUNTY BUILDING PERMIT WITHIN CONSERVATION CENTER PROPERTY LIMITS.



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SARATOGA, CA



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ISSUES AND REVISIONS	
NO.	DATE
1	8/28/2020

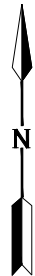
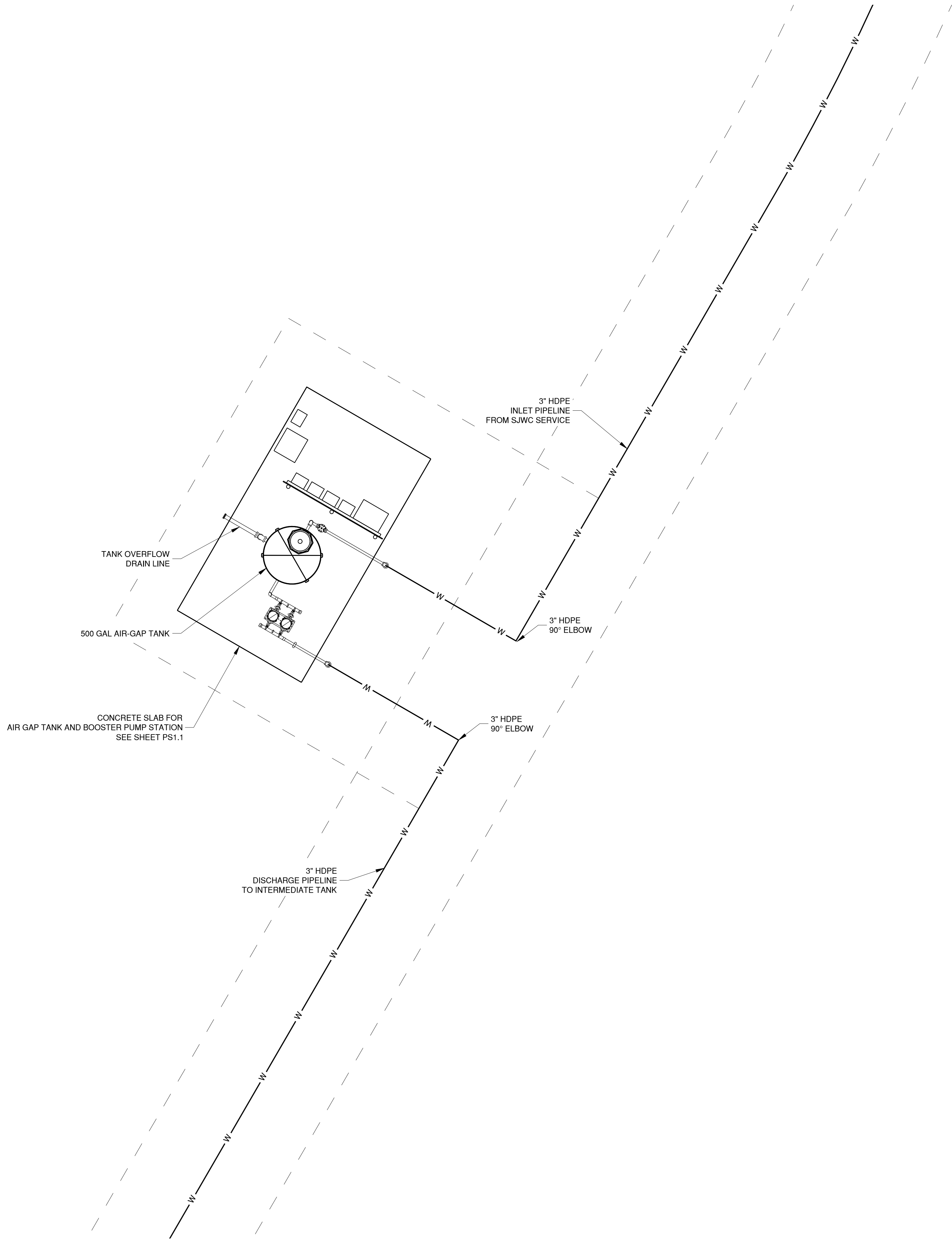
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SHEET TITLE
PIPELINE PLAN

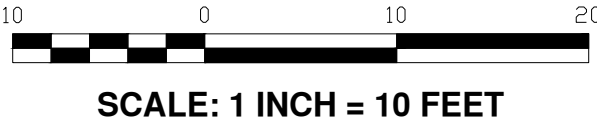
SCALE
1" = 40'

SHEET NUMBER

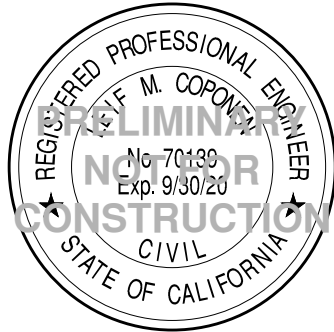
C9



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ISSUES AND REVISIONS	
NO.	DATE
1	8/28/2020

PROJECT NUMBER
16011.00

SHEET TITLE
AIR-GAP TANK AND
BOOSTER PUMP STATION
SITE PLAN

SCALE
1" = 4'-0"

SHEET NUMBER

PS1.0



NOTES

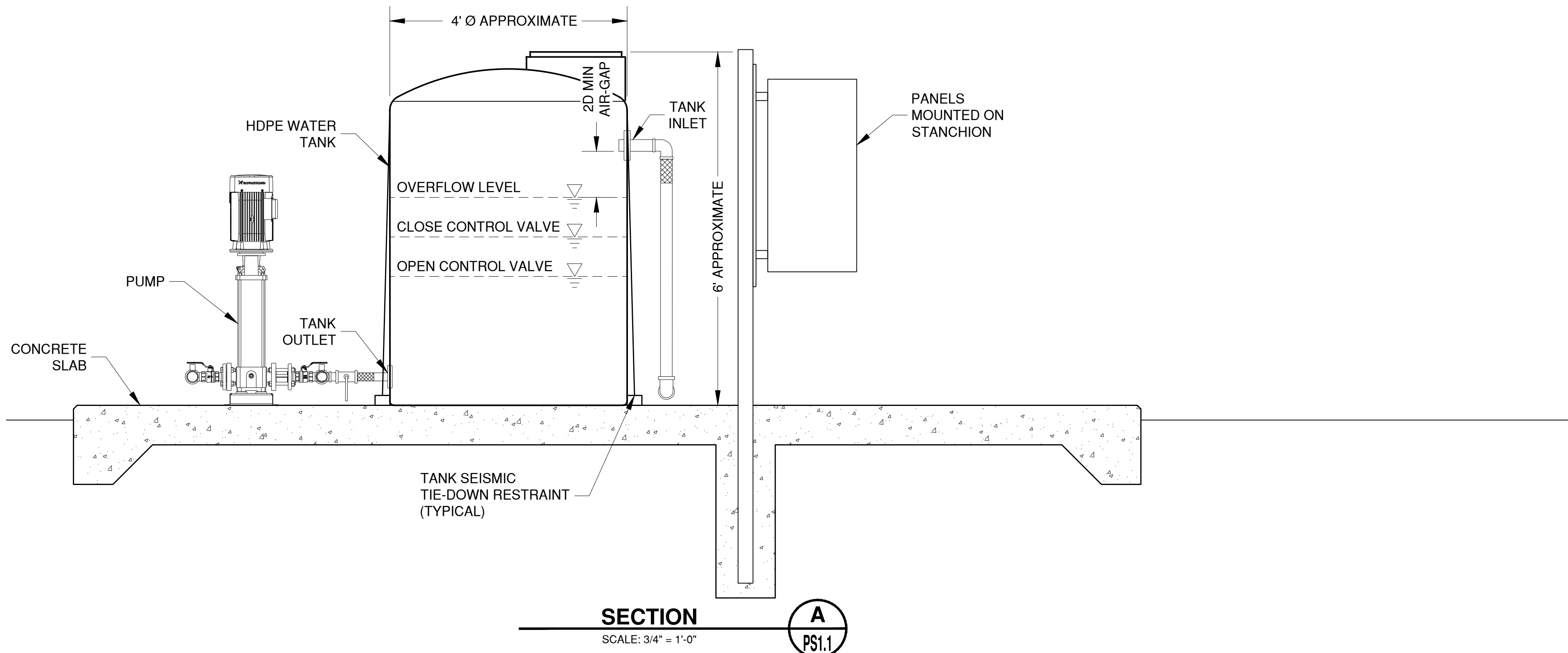
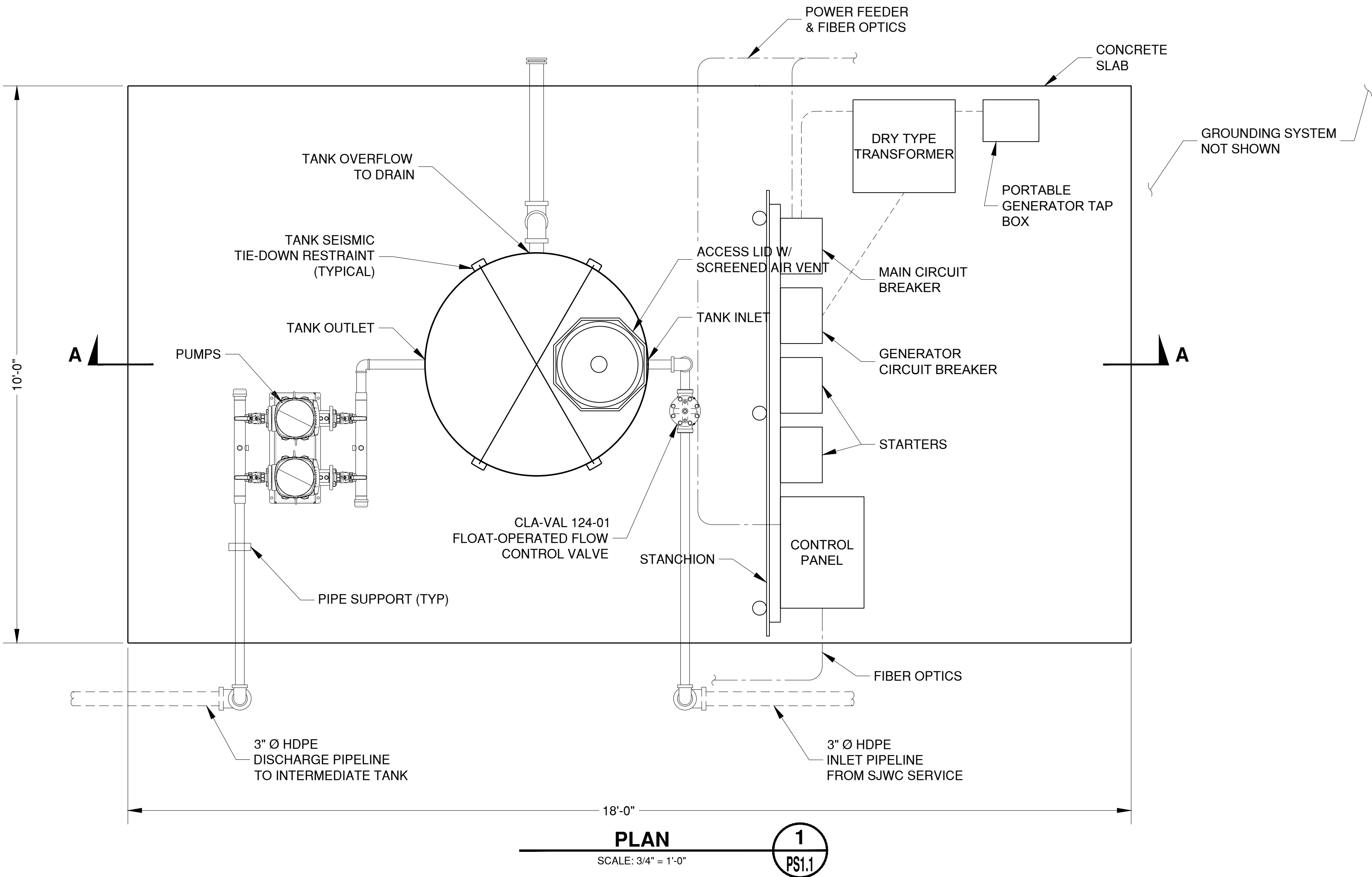
GENERAL:
1. ALL COMPONENTS IN CONTACT WITH DRINKING WATER SHALL BE NSF-61 CERTIFIED FOR DRINKING WATER USE.

TANK:
1. FLOAT-OPERATED FLOW CONTROL VALVE TO BE CALIBRATED TO A FLOW RATE OF APPROXIMATELY 30 GPM (GALLONS PER MINUTE).
2. INSTALL 3/4" Ø COPPER TUBING FROM
• INLET-SIDE OF FLOW CONTROL VALVE TO CLA-VAL CF1-C1 FLOAT CONTROL SUPPLY PORT
• COVER OF FLOW CONTROL VALVE TO CLA-VAL CF1-C1 FLOAT CONTROL PORT 1

PUMP STATION:
1. FOR THE AIR-GAP BOOSTER PUMP STATION, PUMPS SHALL BE GRUNDFOS MODEL CR 5-24, RATED FOR PUMPING 20 GPM AT 680 FEET OF TDH (TOTAL DYNAMIC HEAD). PUMP MOTORS SHALL BE RATED FOR 7.5 HORSEPOWER EACH AND DESIGNED FOR ____ VOLT, ____ PHASE POWER SUPPLY.
2. ALL PUMP STATION COMPONENTS AND ELECTRICAL CONDUIT CONNECTIONS SHALL BE RATED FOR OUTDOOR USE.
3. PUMPS SHALL BE CONTROLLED TO START AND STOP BASED ON ____ LEVEL SIGNALS FROM THE INTERMEDIATE TANK.
4. PUMPS SHALL BE CONTROLLED TO ALTERNATE.

ANCHORAGE:
1. BOOSTERPAQ, PUMP CONTROL PANEL, AND HYDRO-PNEUMATIC TANK SHALL BE SEISMICALLY ANCHORED TO CONCRETE SLAB. CONTRACTOR SHALL PROVIDE SEISMIC CALCULATIONS AND DETAILS CONFORMING TO THE CALIFORNIA BUILDING CODE, VERIFYING THAT SEISMIC LOADS ARE PROPERLY RESISTED. CALCULATIONS SHALL BE REVIEWED BY THE ENGINEER.

PIPE AND VALVES
1. STAINLESS STEEL PIPE
• STEEL PIPE SHALL BE SCHEDULE 40 STAINLESS STEEL CONFORMING TO ANSI/ASTM A312.
• PIPE SHALL BE THREADED UNLESS OTHERWISE NOTED.
2. VALVES
• GATE VALVES SHALL BE RESILIENT SEATED GATE VALVES CONFORMING TO AWWA C509.
• BALL VALVES SHALL BE NO-LEAD BRASS AND NSF-61 CERTIFIED. BALL VALVES SHALL BE STOCKHAM MODEL LF-T-255-FB-P, OR EQUAL.
3. PIPE SUPPORT
• UNISTRUT AND HARDWARE SHALL BE STAINLESS STEEL, TYPE 316.



ISSUES AND REVISIONS	
NO.	DATE
1	8/26/2020

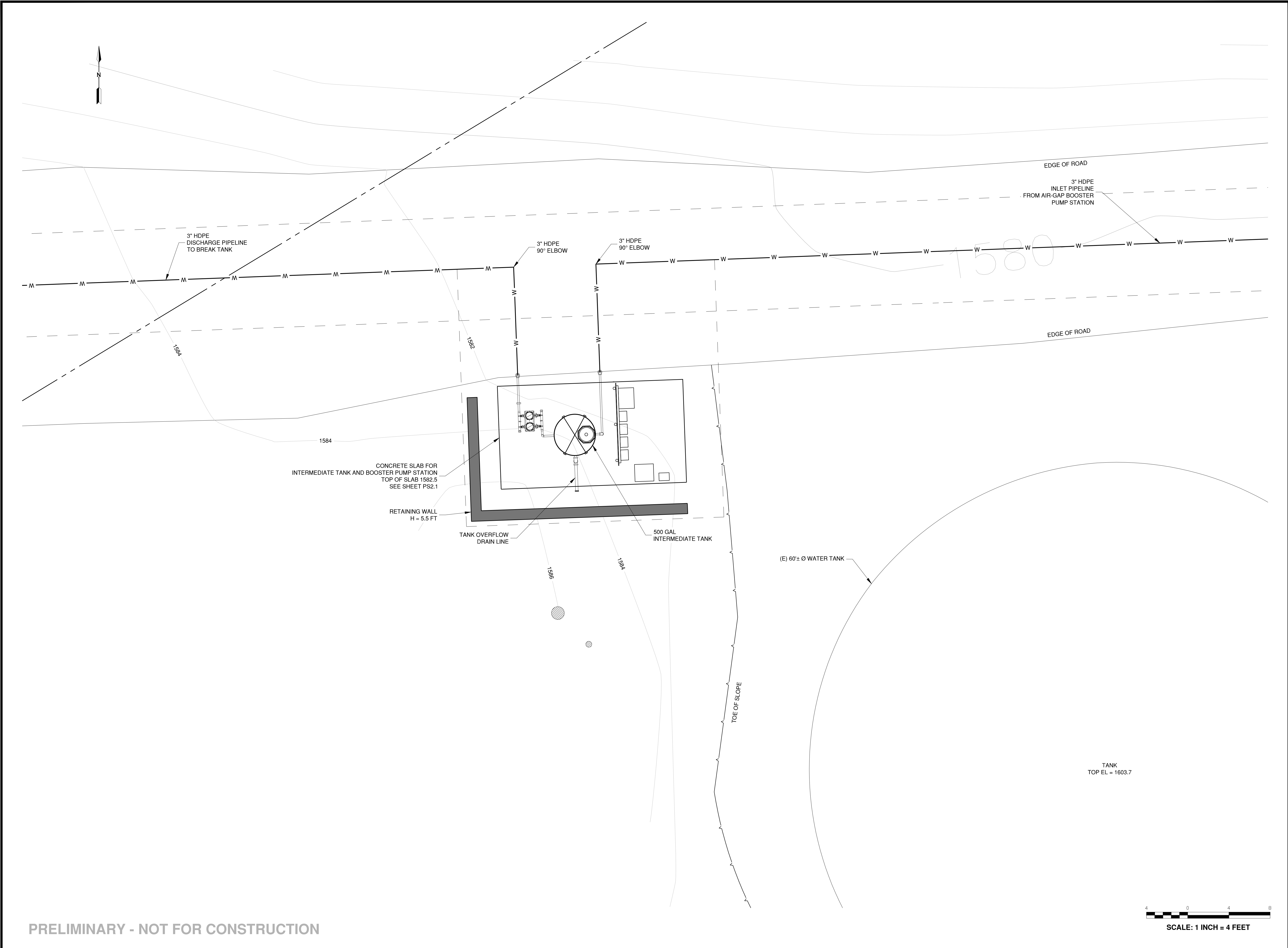
DESCRIPTION	
1	ISSUES AND REVISIONS

PROJECT NUMBER	
1	16011.00

SHEET TITLE	
1	AIR-GAP TANK AND BOOSTER PUMP STATION PLAN AND SECTIONS

SCALE	
1	3/4" = 1'-0"

SHEET NUMBER	
1	PS1.1



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ISSUES AND REVISIONS	
NO.	DATE
1	8/28/2020

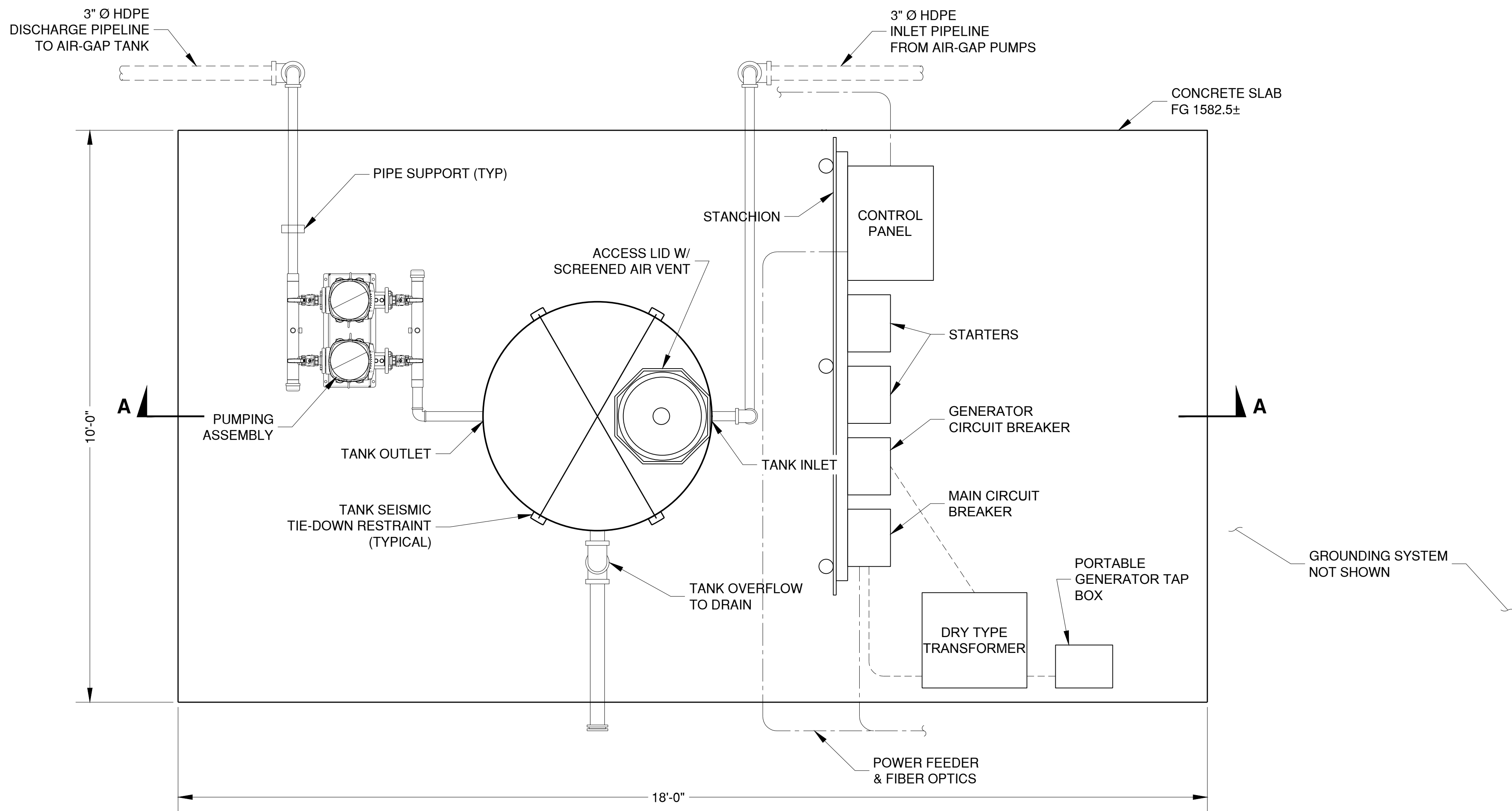
PROJECT NUMBER
16011.00

SHEET TITLE
INTERMEDIATE TANK AND
BOOSTER PUMP STATION
SITE PLAN

SCALE
1" = 4'-0"

SHEET NUMBER

PS2.0

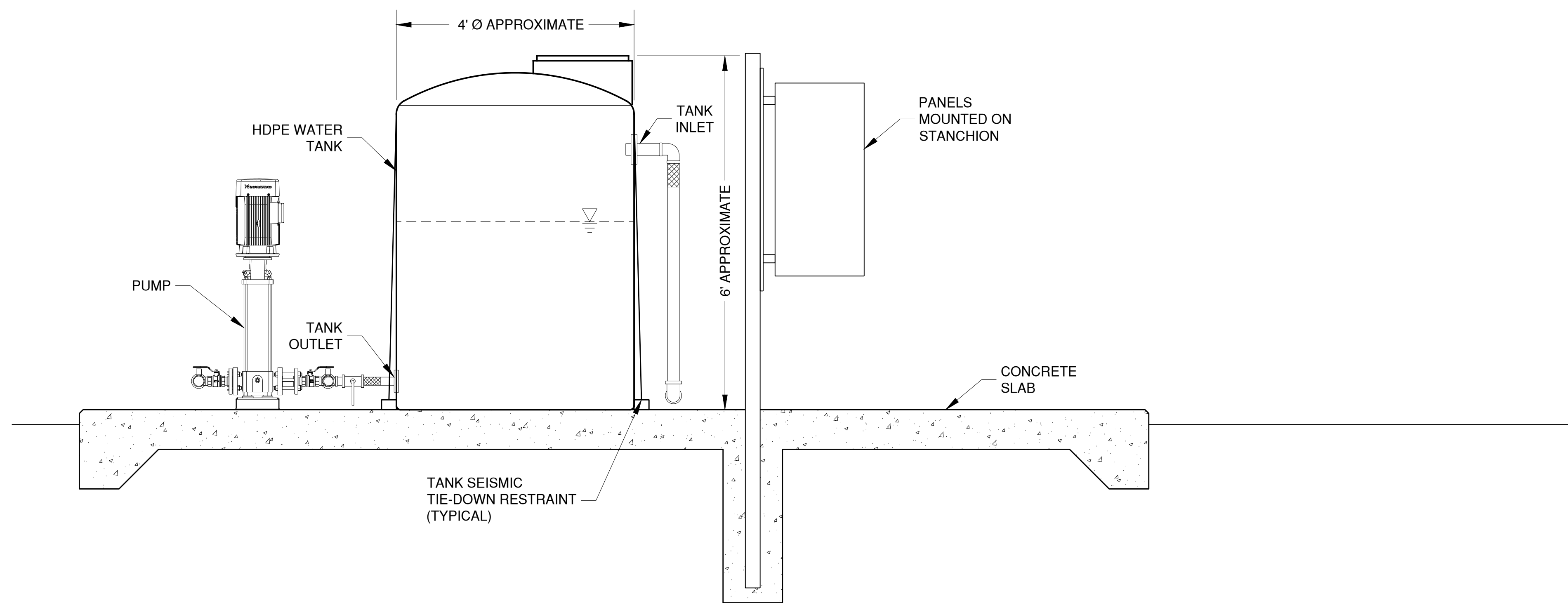


PLAN

SCALE: 3/4" = 1'-0"

1

PS2.1



SECTION

SCALE: 3/4" = 1'-0"

A

PS2.1

NOTES

GENERAL:

1. ALL COMPONENTS IN CONTACT WITH DRINKING WATER SHALL BE NSF-61 CERTIFIED FOR DRINKING WATER USE.

PUMP STATION:

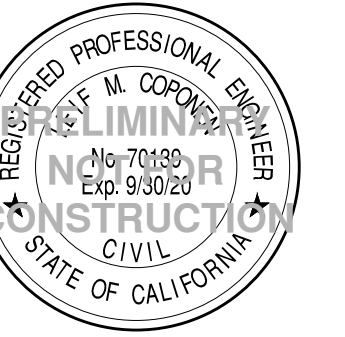
2. FOR THE INTERMEDIATE BOOSTER PUMP STATION, PUMPS SHALL BE GRUNDFOS MODEL CR 5-16, RATED FOR PUMPING 20 GPM AT 450 FEET OF TDH (TOTAL DYNAMIC HEAD). PUMP MOTORS SHALL BE RATED FOR 5 HORSEPOWER EACH AND DESIGNED FOR ___ VOLT, ___ PHASE POWER SUPPLY.
3. ALL PUMP STATION COMPONENTS AND ELECTRICAL CONDUIT CONNECTIONS SHALL BE RATED FOR OUTDOOR USE.
4. PUMPS SHALL BE CONTROLLED TO START AND STOP BASED ON LEVEL SIGNALS FROM THE BREAK TANK.
5. PUMPS SHALL BE CONTROLLED TO ALTERNATE.

ANCHORAGE:

1. BOOSTERPAQ, PUMP CONTROL PANEL, AND HYDRO-PNEUMATIC TANK SHALL BE SEISMICALLY ANCHORED TO CONCRETE SLAB. CONTRACTOR SHALL PROVIDE SEISMIC CALCULATIONS AND DETAILS CONFORMING TO THE CALIFORNIA BUILDING CODE. VERIFYING THAT SEISMIC LOADS ARE PROPERLY RESISTED. CALCULATIONS SHALL BE REVIEWED BY THE ENGINEER.

PIPE AND VALVES

1. STAINLESS STEEL PIPE
 - STEEL PIPE SHALL BE SCHEDULE 40 STAINLESS STEEL CONFORMING TO ANSI/ASTM A312.
 - PIPE SHALL BE THREADED UNLESS OTHERWISE NOTED.
2. VALVES
 - GATE VALVES SHALL BE RESILIENT SEATED GATE VALVES CONFORMING TO AWWA C509.
 - BALL VALVES SHALL BE NO-LEAD BRASS AND NSF-61 CERTIFIED. BALL VALVES SHALL BE STOCKHAM MODEL LF-T-255-FB-P, OR EQUAL.
3. PIPE SUPPORT
 - UNISTRUT AND HARDWARE SHALL BE STAINLESS STEEL, TYPE 316.



ISSUES AND REVISIONS

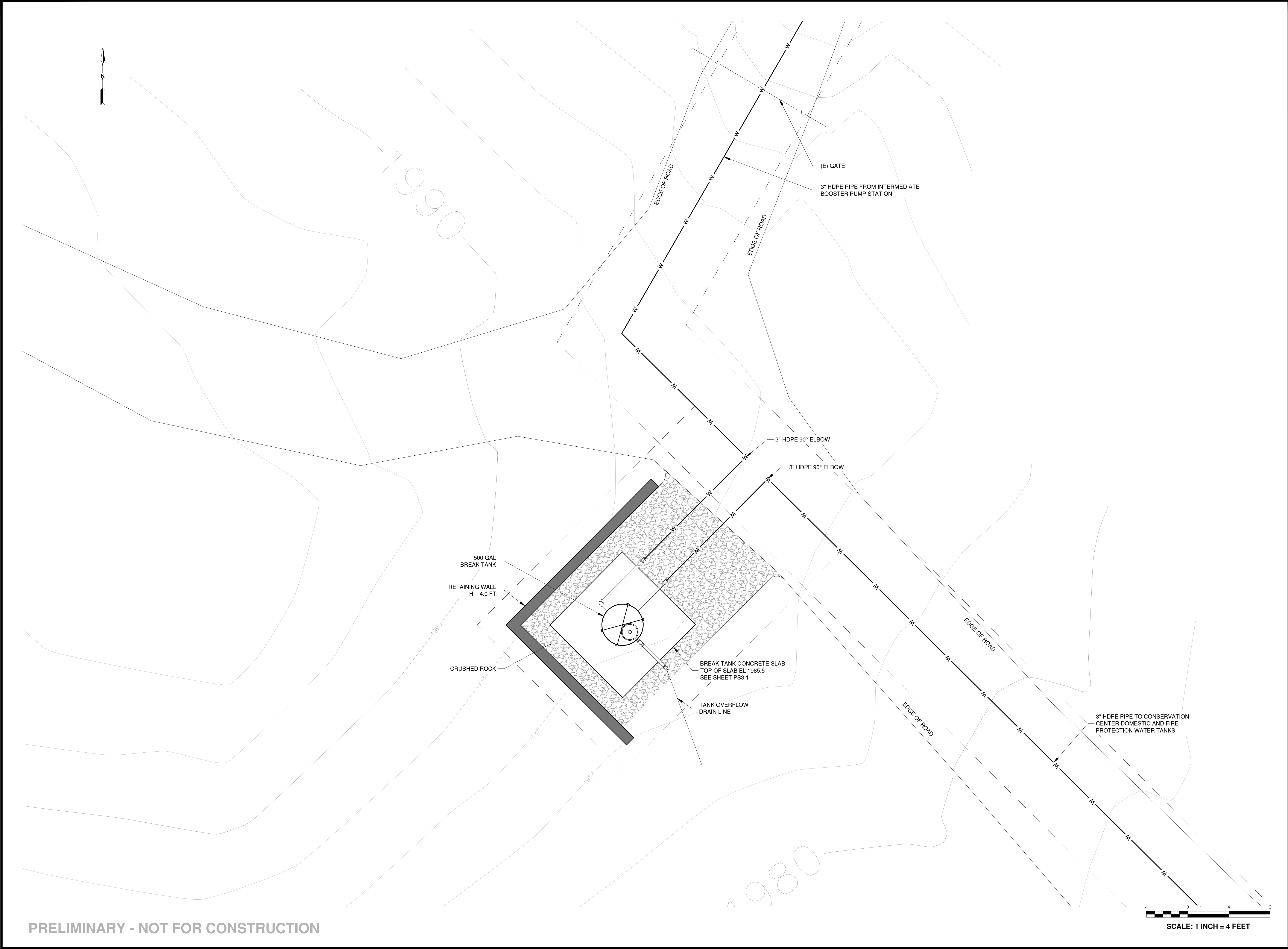
NO.	DATE	DESCRIPTION
1	8/26/2020	

PROJECT NUMBER
16011.00

SHEET TITLE
INTERMEDIATE TANK AND
BOOSTER PUMP STATION
PLAN AND SECTIONS

SCALE
3/4" = 1'-0"

SHEET NUMBER



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ELLISON CONSERVATION
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ISSUES AND REVISIONS	
NO.	DATE
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SHEET TITLE
BREAK TANK SITE PLAN

SCALE
1" = 4'-0"

SHEET NUMBER
PS3.0

PS3.0



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ISSUES AND REVISIONS	
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1	8/26/2020

PROJECT NUMBER
16011.00

SHEET TITLE
BREAK TANK
PLAN AND SECTIONS

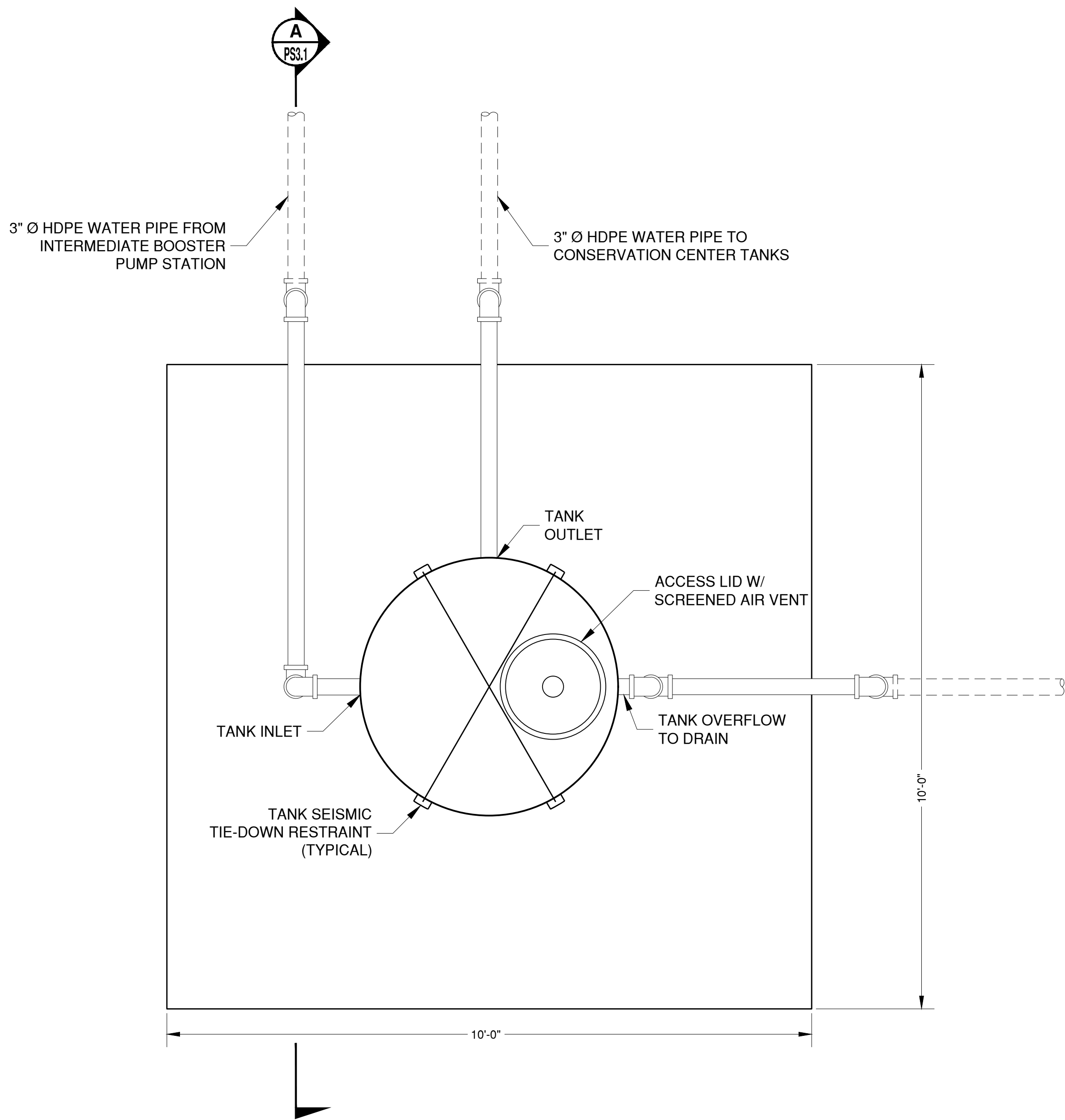
SCALE
3/4" = 1'-0"

SHEET NUMBER

PS3.1

NOTES

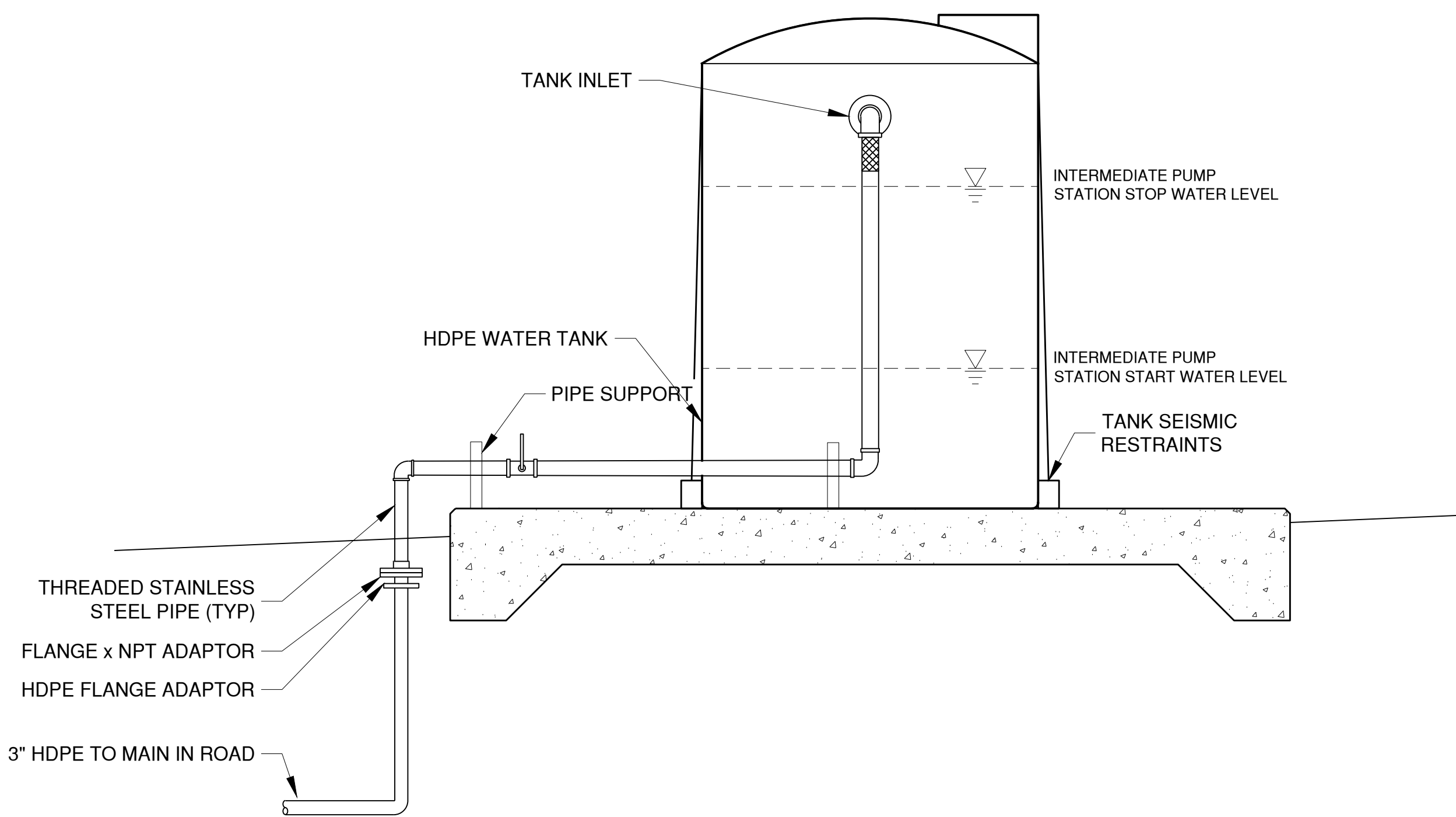
- TANKS:
1. HDPE WATER STORAGE TANK SHALL BE NSF 61 CERTIFIED FOR DRINKING WATER. ALL PIPING COMPONENTS, INCLUDING PIPE, FITTINGS, VALVES, AND ALL APPURTENANCES SHALL BE NSF 61 CERTIFIED FOR DRINKING WATER. CONTRACTOR SHALL SUBMIT CERTIFICATIONS PRIOR TO ORDERING OR COMMENCING CONSTRUCTION.
 2. TANKS SHALL BE FURNISHED WITH NSF 61 CERTIFIED LOCKING ACCESS LIDS.
 3. TOP OF TANKS SHALL BE EQUIPPED WITH A VENT TO ALLOW AIR INFLOW AND OUTFLOW. VENTILATION CAPACITY DATA SHALL BE SUBMITTED FOR REVIEW.
 4. TANK SHALL BE EQUIPPED WITH A FLOAT-OPERATED LEVEL INDICATOR.
 5. CONTRACTOR SHALL PROVIDE CALCULATIONS AND DETAILS FOR SEISMIC RESTRAINT OF TANKS. CALCULATIONS AND DETAILS SHALL MEET THE SITE-SPECIFIC SEISMIC REQUIREMENTS AND CONFORM TO ASCE 7 AND THE 2016 CALIFORNIA BUILDING CODE. CALCULATIONS SIGNED BY AN ENGINEER REGISTERED IN THE STATE OF CALIFORNIA SHALL BE SUBMITTED FOR APPROVAL.
 6. TANK SHALL BE EQUIPPED WITH A ULTRASONIC LEVEL TRANSDUCER. ULTRASONIC LEVEL TRANSMITTER SIGNAL SHALL BE SENT TO THE INTERMEDIATE BOOSTER PUMP STATION. WHEN THE WATER LEVEL DROPS TO A SET LEVEL (150 GALLONS), THE INTERMEDIATE BOOSTER PUMP STATION SHALL BE STARTED. WHEN A HIGHER SET LEVEL IS REACHED (350 GALLONS) IN THE TANK, THE PUMP STATION SHALL BE STOPPED.
 7. TANK SHALL BE EQUIPPED WITH HIGH AND LOW LEVEL FLOATS FOR REDUNDANT CONTROL AND ALARMS.
 8. ALL INLETS AND OUTLETS SHALL HAVE ISOLATION VALVES. ALL CONNECTIONS TO THE TANK SHALL HAVE FLEXIBLE CONNECTIONS. FLEXIBLE CONNECTIONS SHALL BE AS REQUIRED TO ACCOMMODATE SEISMIC MOVEMENT AND FLEXING OF THE TANK WALL PER THE RECOMMENDATIONS OF THE TANK MANUFACTURER.



BREAK TANK PLAN

SCALE: 3/4" = 1'-0"

1
PS3.1



SECTION

SCALE: 3/4" = 1'-0"

A
PS3.1