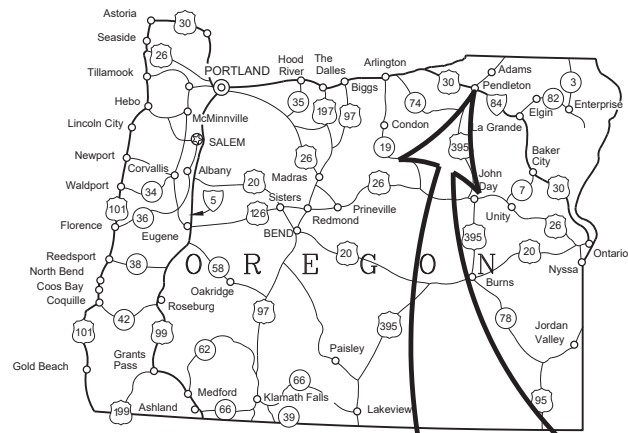


CITY OF PENDLETON, OREGON WASTEWATER TREATMENT PLANT CLARIFIER REHABILITATION 2024

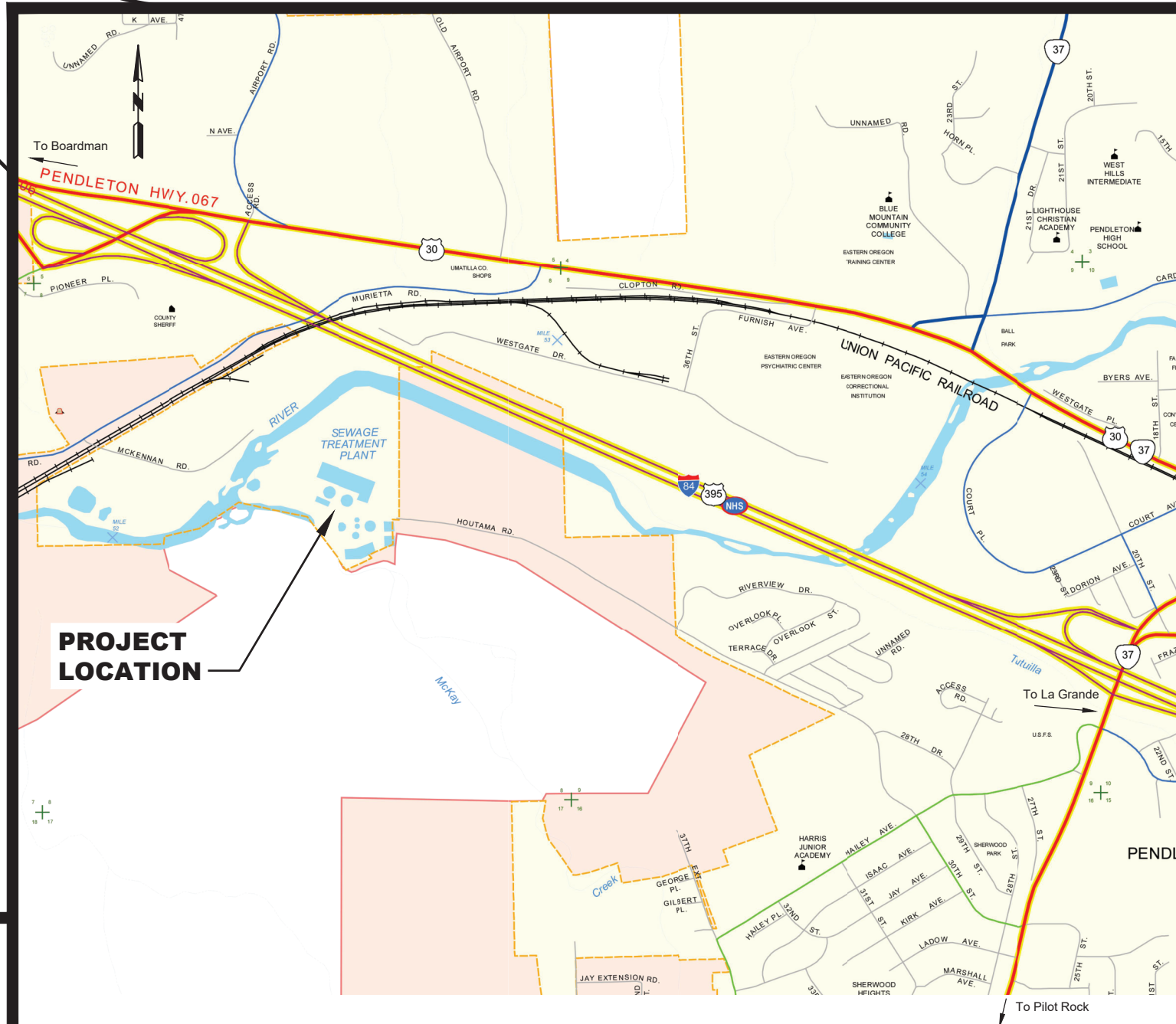


CITY COUNCIL

JOHN H. TURNER, Mayor
KEVIN MARTIN
CAROLE L. INNES
SALLY BRANDSEN
MCKENNON McDONALD
LINDA K. NEUMAN
DALE PRIMMER
ADDISON SCHULBERG
STEVE CAMPBELL

CITY OFFICIALS

BOB PATTERSON, Public Works Director
MARK MILNE, Wastewater Superintendent
KYLE WILLMAN, WWTRRF Technician



VICINITY MAP
N. T. S.

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

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PLAN LEGEND

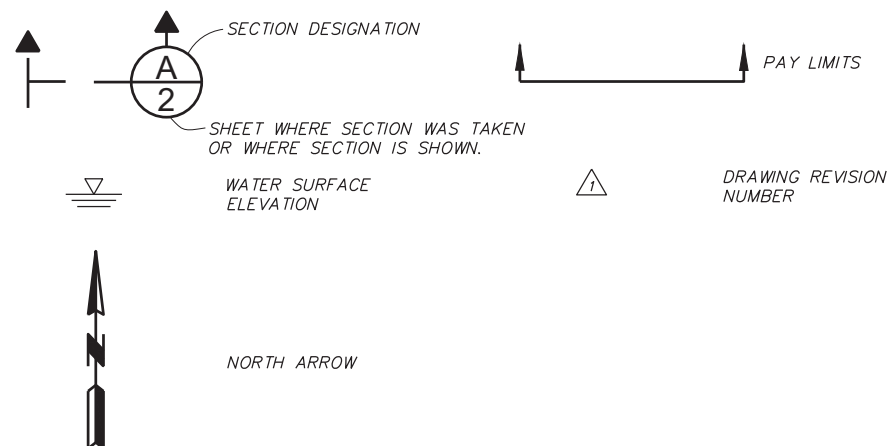
UTILITIES

	EXISTING	PROPOSED
WATER LINE	- - - - W - - - - W - -	
POTABLE WATER	- - - - PW - - - - PW - - - - PW -	
UTILITY WATER	- - - - UW - - - - UW - - - - UW -	- - - - UW - - - - UW - - - - UW -
VALVE		
FIRE HYDRANT		
YARD HYDRANT		
SEWER LINE	- - - - SS - - - - SS - - - - SS -	
PRESSURE SEWER LINE	- - - - PS - - - - PS - - - - PS -	
SLUDGE	- - - - SL - - - - SL - - - - SL -	
WASTE ACTIVATED SLUDGE	- - - - WAS - - - - WAS - - - - WAS -	
CLEANOUT		
AIR RELEASE VALVE		
VALVE		
BURIED POWER	- - - - P - - - - P - - - - P - -	
DRAIN	- - - - DR - - - - DR - - - - DR -	
ABANDONED UTILITY	- - - -  - - - -	
CAP		
STANDPIPE		

SITE SURVEY

INDEX CONTOUR	- - - - 750 - - - -
INTERMEDIATE CONTOUR	- - - - 749 - - - -
CENTERLINE	- - - - - - - -
CONTROL POINT	
SPOT ELEVATION	 FG 2147.0
BUILDING	

DRAFTING



GENERAL NOTES

1. THE EXISTING PIPING AS SHOWN IS BASED UPON INFORMATION PROVIDED BY OTHERS. WHERE KNOWN, ALL EXISTING PIPE MATERIALS ARE CALLED OUT ON THE DRAWINGS. SOME DISCREPANCIES AND OMISSION IN LOCATION, TYPE AND SIZE WILL LIKELY OCCUR.
2. CONTRACTOR TO PROVIDE ACCESS TO THE EXISTING PLANT AT ALL TIMES FOR OPERATING PERSONNEL.
3. CONTRACTOR IS RESPONSIBLE FOR SITE SECURITY AT ALL TIMES.
4. SEE "GENERAL REQUIREMENTS" FOR SEQUENCING OF CONSTRUCTION. ALL SEQUENCING SHALL BE COORDINATED WITH THE OWNER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL TRADES TO AVOID CONFLICTS BETWEEN PIPING, ELECTRICAL, ETC. WHERE CONFLICTS EXIST BETWEEN PIPING AND ELECTRICAL CONDUITS, THE ELECTRICAL CONDUIT SHALL BE ADJUSTED AS REQUIRED TO AVOID THE CONFLICT.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED EROSION CONTROL PROCEDURES. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO CONTROL SITE RUNOFF AND MINIMIZE SEDIMENTATION INTO THE SURROUNDING AREAS, INCLUDING, BUT NOT LIMITED TO SILT FENCING, MULCHING, EROSION CONTROL MATTING, ETC. ANY VIOLATIONS DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE BORNE SOLELY BY THE CONTRACTOR AT NO COST TO THE OWNER.
7. THE DESIGN ELEMENTS SHOWN IN THESE DRAWINGS ARE BASED OFF OF AN H40A-HT TOW-BRO CLARIFIER AS MANUFACTURED BY EVOQUA WATER TECHNOLOGIES. IF CONTRACTOR ELECTS TO USE EQUIPMENT BY ANOTHER CLARIFIER MANUFACTURER IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS, THEN CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING DESIGN ELEMENTS AND DETAILS AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM. ALL SUCH DEVIATIONS SHALL BE AS APPROVED BY THE CLARIFIER MANUFACTURER AND SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.



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CITY OF PENDLETON
WASTEWATER TREATMENT PLANT
CLARIFIER REHABILITATION

LEGEND AND GENERAL NOTES

SHEET

G-001

1 OF 12

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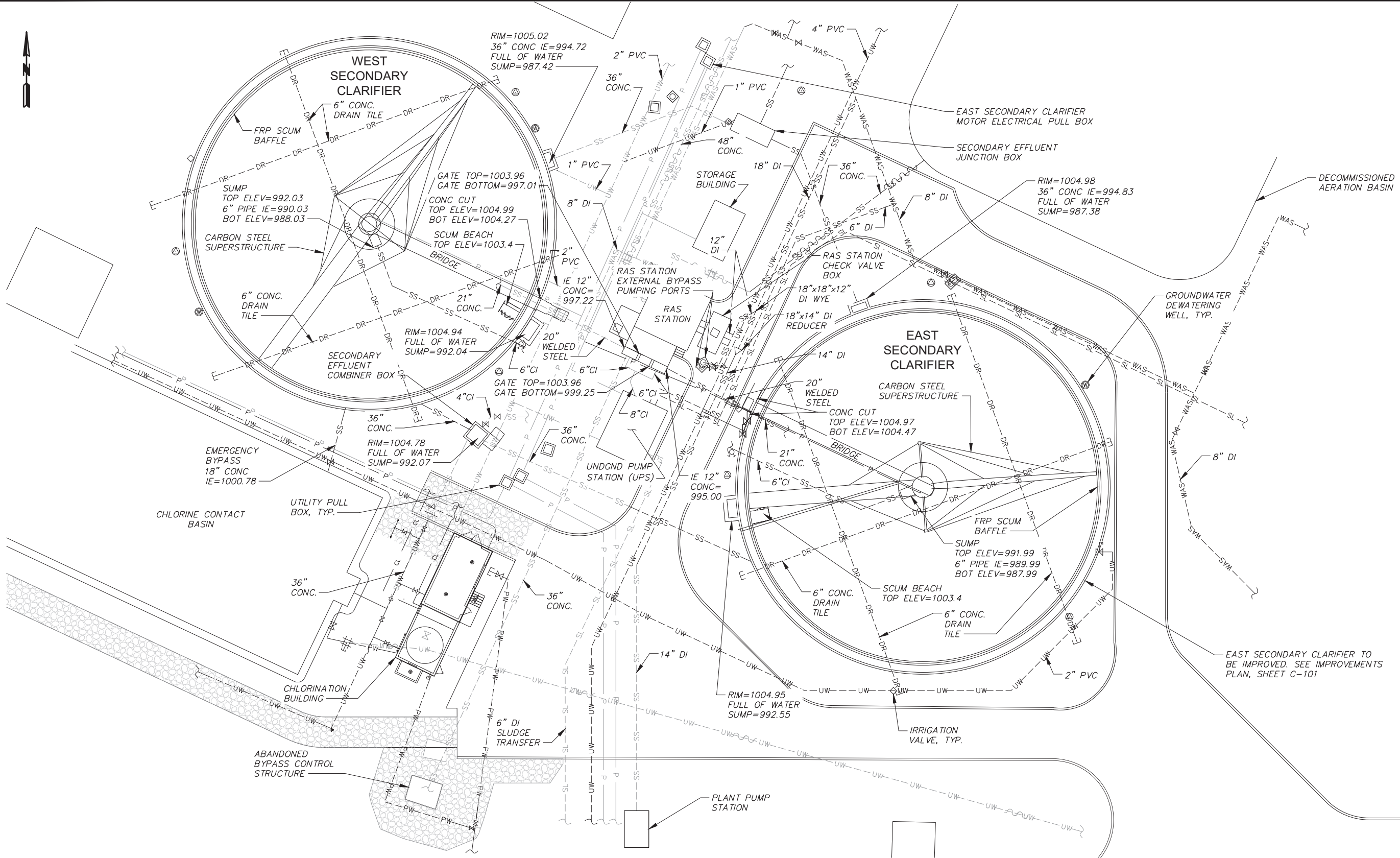
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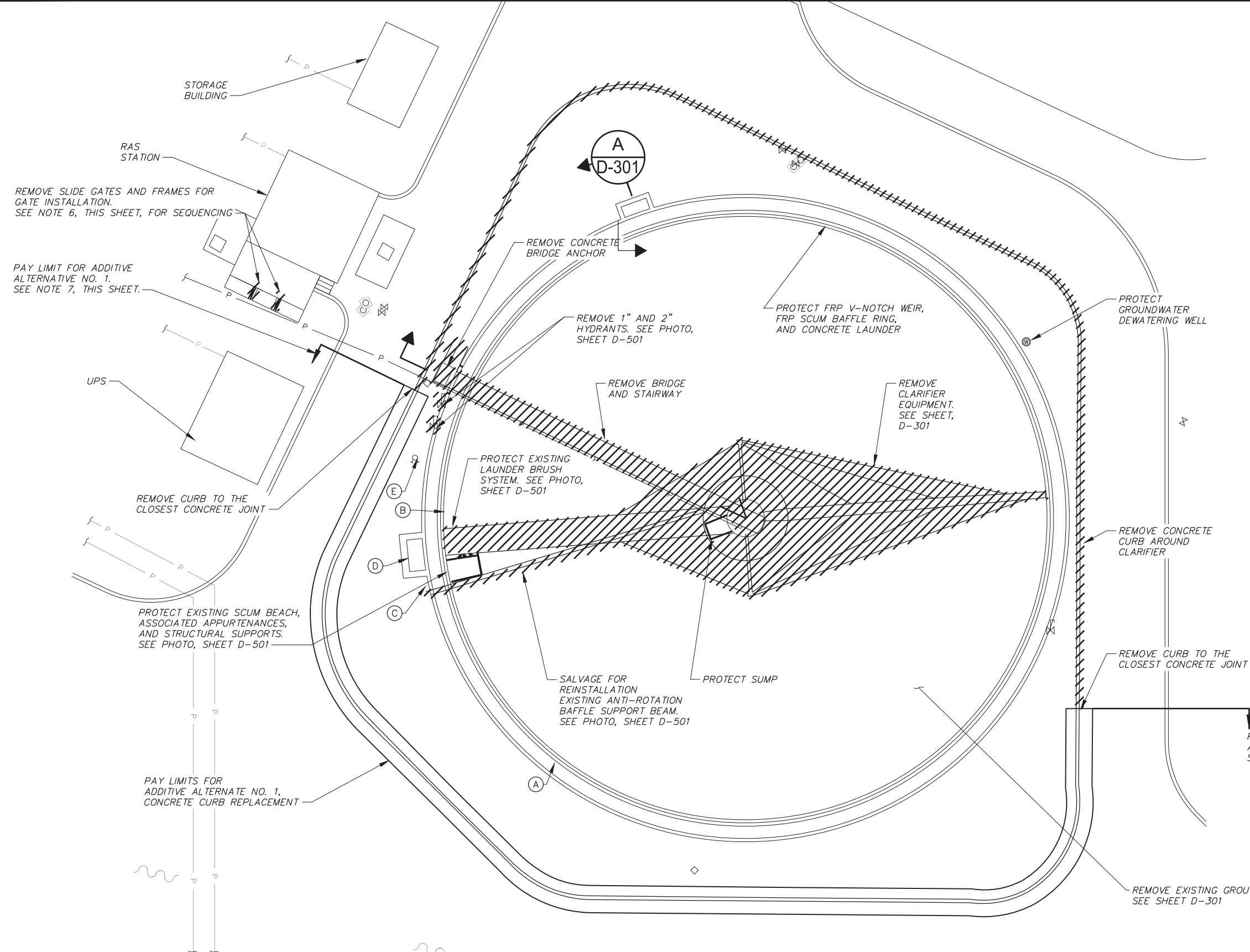


CITY OF PENDLETON
WASTEWATER TREATMENT PLANT
CLARIFIER REHABILITATION

EXISTING SITE PLAN

SHEET
G-101
 2 OF 12





LEGEND

- STRUCTURE AND/OR EQUIPMENT TO BE REMOVED
- LOCATION FROM WHICH PHOTOGRAPH ON SHEET D-501 WAS TAKEN

NOTES

1. SEE "GENERAL REQUIREMENTS" FOR SEQUENCE OF CONSTRUCTION.
2. SEE THE TECHNICAL SPECIFICATIONS "DEMOLITION AND SALVAGE WORK" FOR MORE DETAILS AND EXPLANATIONS OF THE DEMOLITION PROCEDURES, TIMING, AND SEQUENCE OF WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL REMOVED MATERIALS, COORDINATING WITH THE OWNER AS NECESSARY TO DETERMINE MATERIALS TO BE SALVAGED AND RETURNED TO THE OWNER.
4. PROTECT ALL VALVES, PIPING AND UNDERGROUND STRUCTURES.
5. SEE SHEET D-301 FOR SECTION VIEW OF RELEVANT STRUCTURES.
6. GATE REMOVAL SEQUENCING SHALL BE COORDINATED WITH OWNER.
7. WORK FOR ADDITIVE ALTERNATIVE NO. 1 SHALL INCLUDE THE DEMOLITION AND RECONSTRUCTION OF THE SOUTHERN PORTION OF THE CONCRETE CURB AROUND THE CLARIFIER. WORK SHALL PROCEED IN THE SAME MANNER AS THE DEMOLITION AND RECONSTRUCTION OF THE NORTHERN CONCRETE CURB.

EAST SECONDARY CLARIFIER DEMOLITION PLAN



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**CITY OF PENDLETON
WASTEWATER TREATMENT PLANT
CLARIFIER REHABILITATION**

DEMOLITION PLAN

SHEET
D-101
3 OF 12

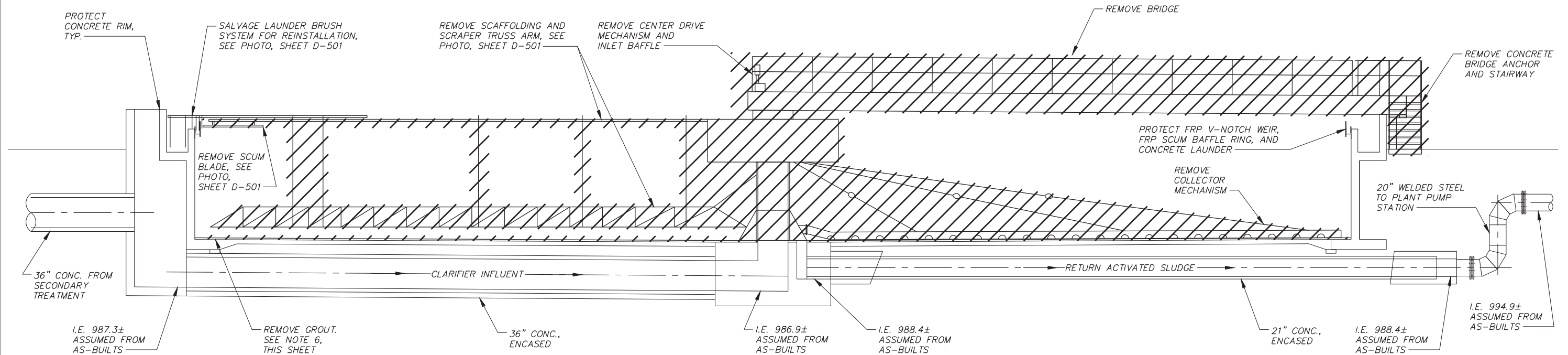
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LEGEND

////// STRUCTURE AND/OR EQUIPMENT TO BE REMOVED

NOTES

1. SEE "GENERAL REQUIREMENTS" FOR SEQUENCE OF CONSTRUCTION.
2. SEE THE TECHNICAL SPECIFICATIONS "DEMOLITION AND SALVAGE WORK" FOR MORE DETAILS AND EXPLANATIONS OF THE DEMOLITION PROCEDURES, TIMING, AND SEQUENCE OF WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL REMOVED MATERIALS, COORDINATING WITH THE OWNER AS NECESSARY TO DETERMINE MATERIALS TO BE SALVAGED AND RETURNED TO THE OWNER.
4. PROTECT EXISTING SCUM BEACH, WITH ASSOCIATED APPURTENANCES AND STRUCTURAL SUPPORTS, NOT SHOWN IN PROFILE.
5. PROTECT EXISTING SUMP, NOT SHOWN IN PROFILE.
6. REMOVE THE EXISTING APPROX. 2" OF GROUT FROM CLARIFIER FLOOR. PROTECT EXISTING CONCRETE FLOOR.



EAST SECONDARY CLARIFIER DEMOLITION (A) D-101

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CITY OF PENDLETON
WASTEWATER TREATMENT PLANT
CLARIFIER REHABILITATION

DEMOLITION SECTION

SHEET
D-301
 4 OF 12

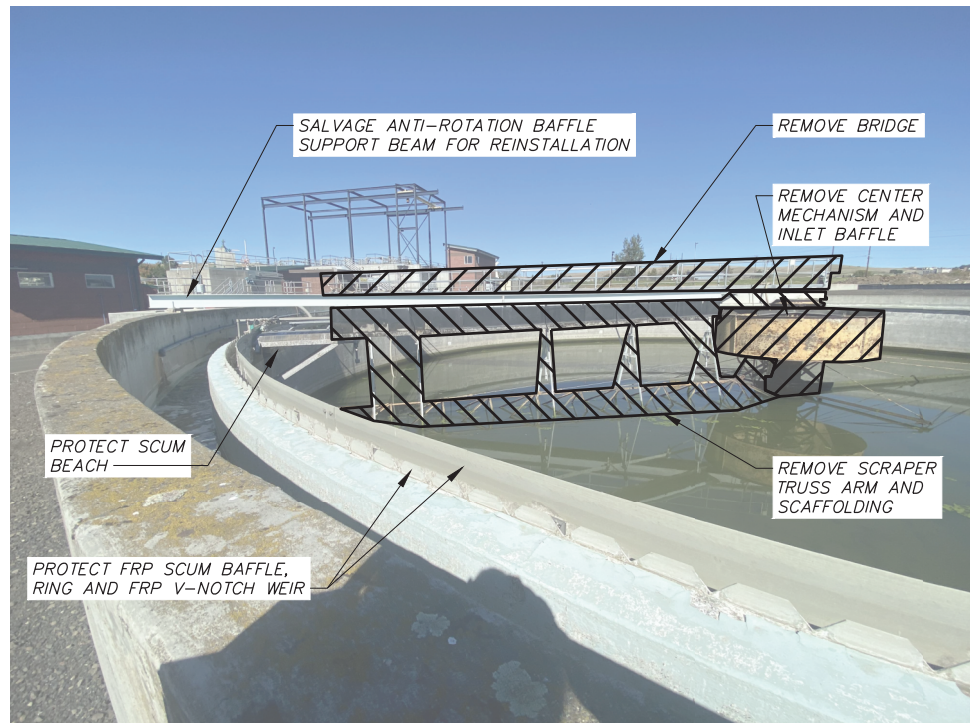


PHOTO A

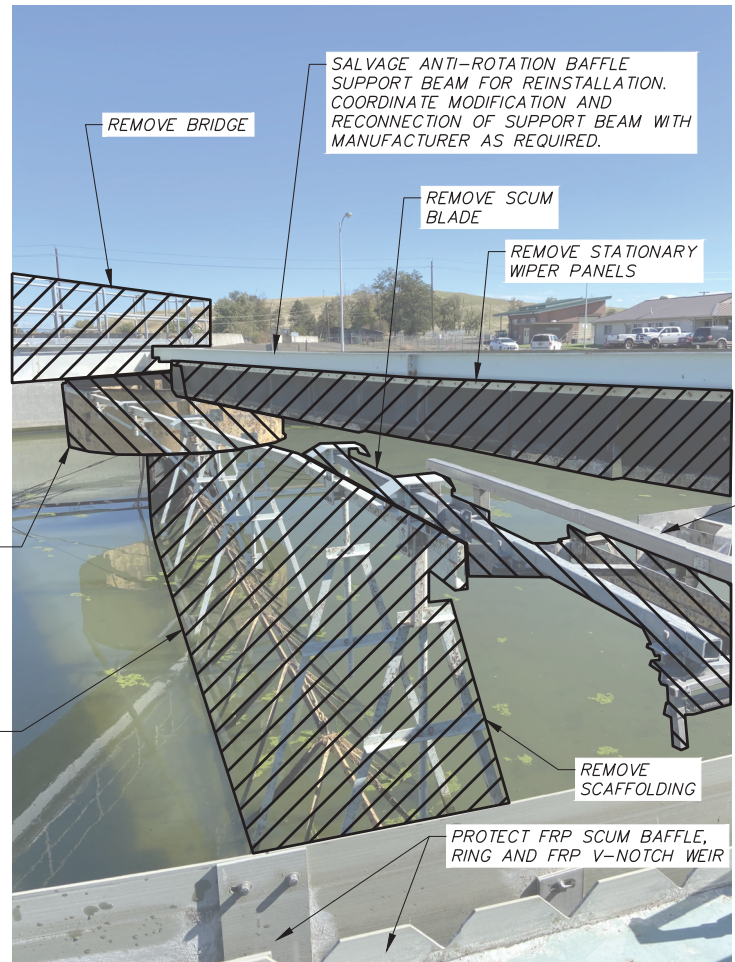


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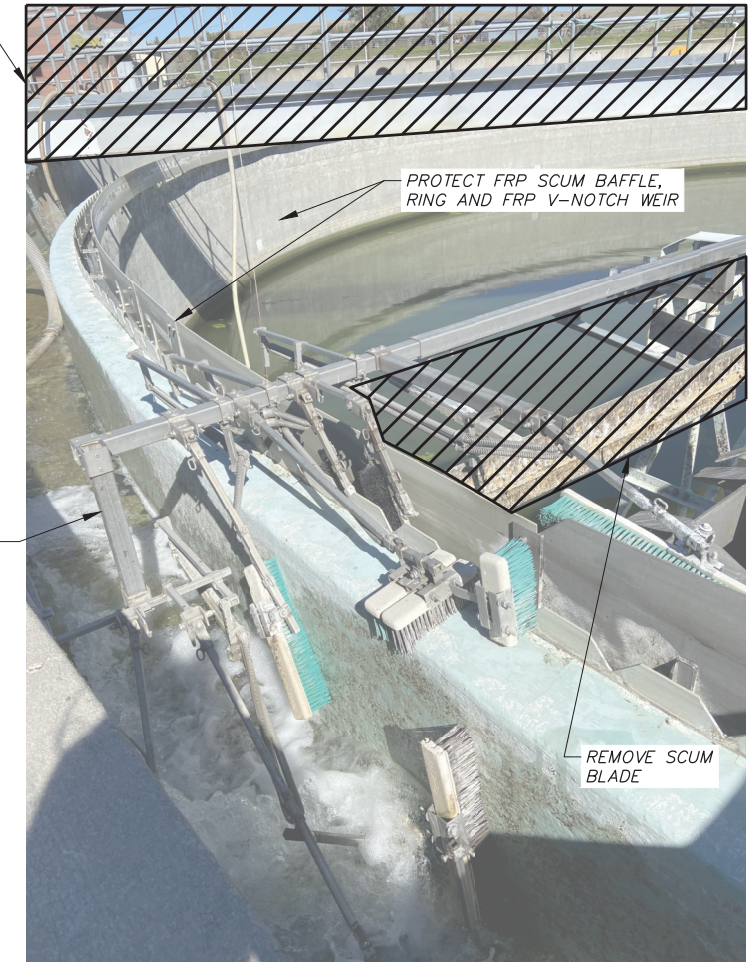


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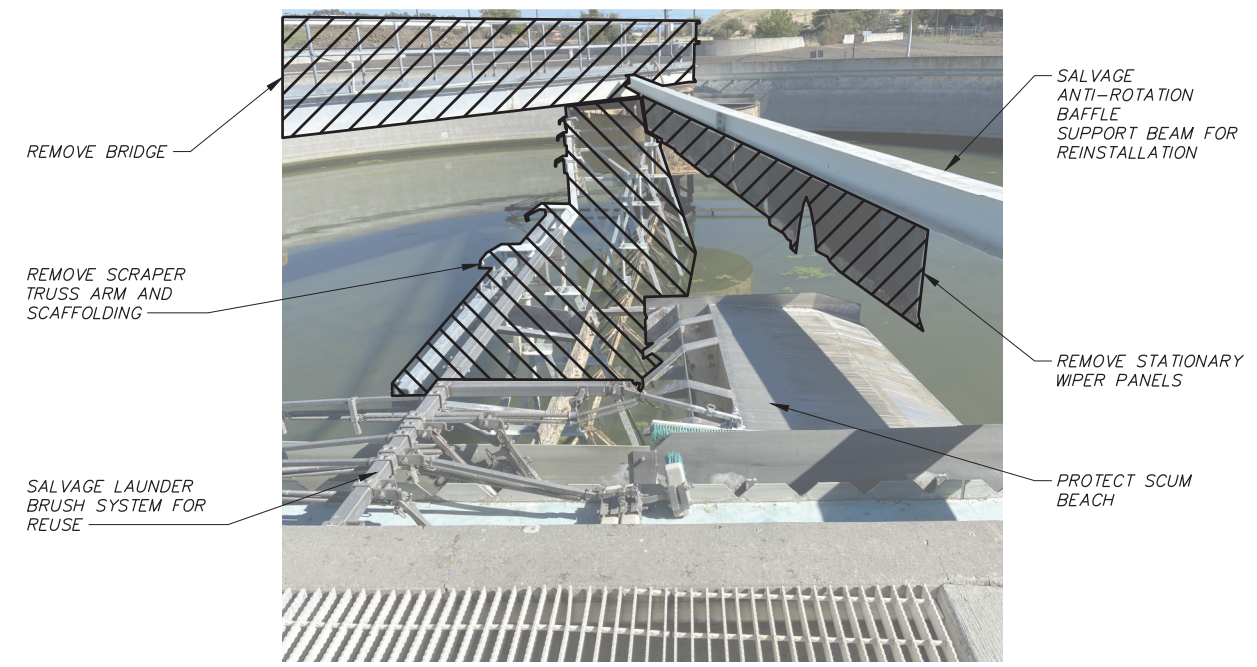


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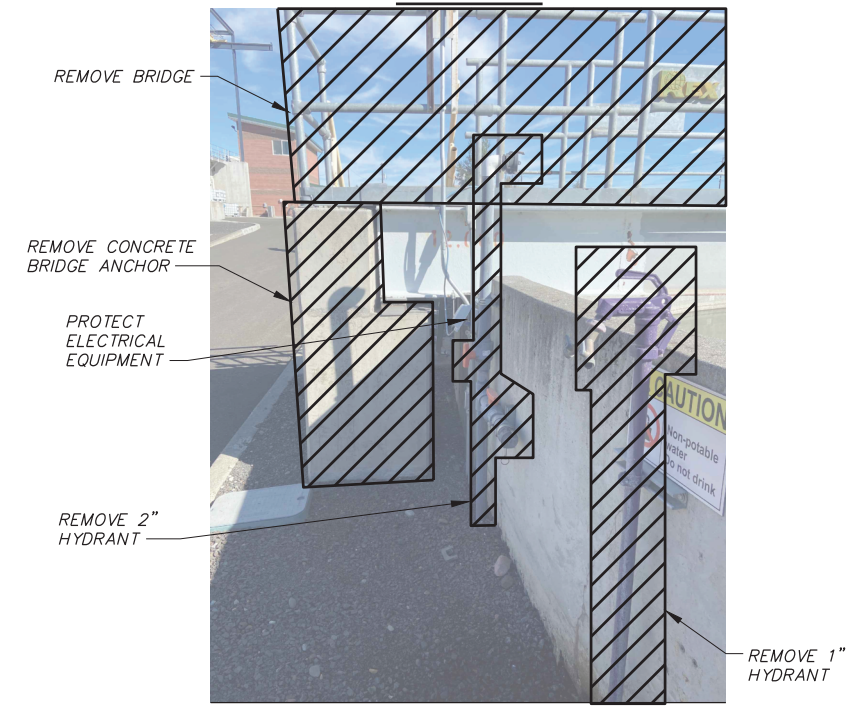


PHOTO E

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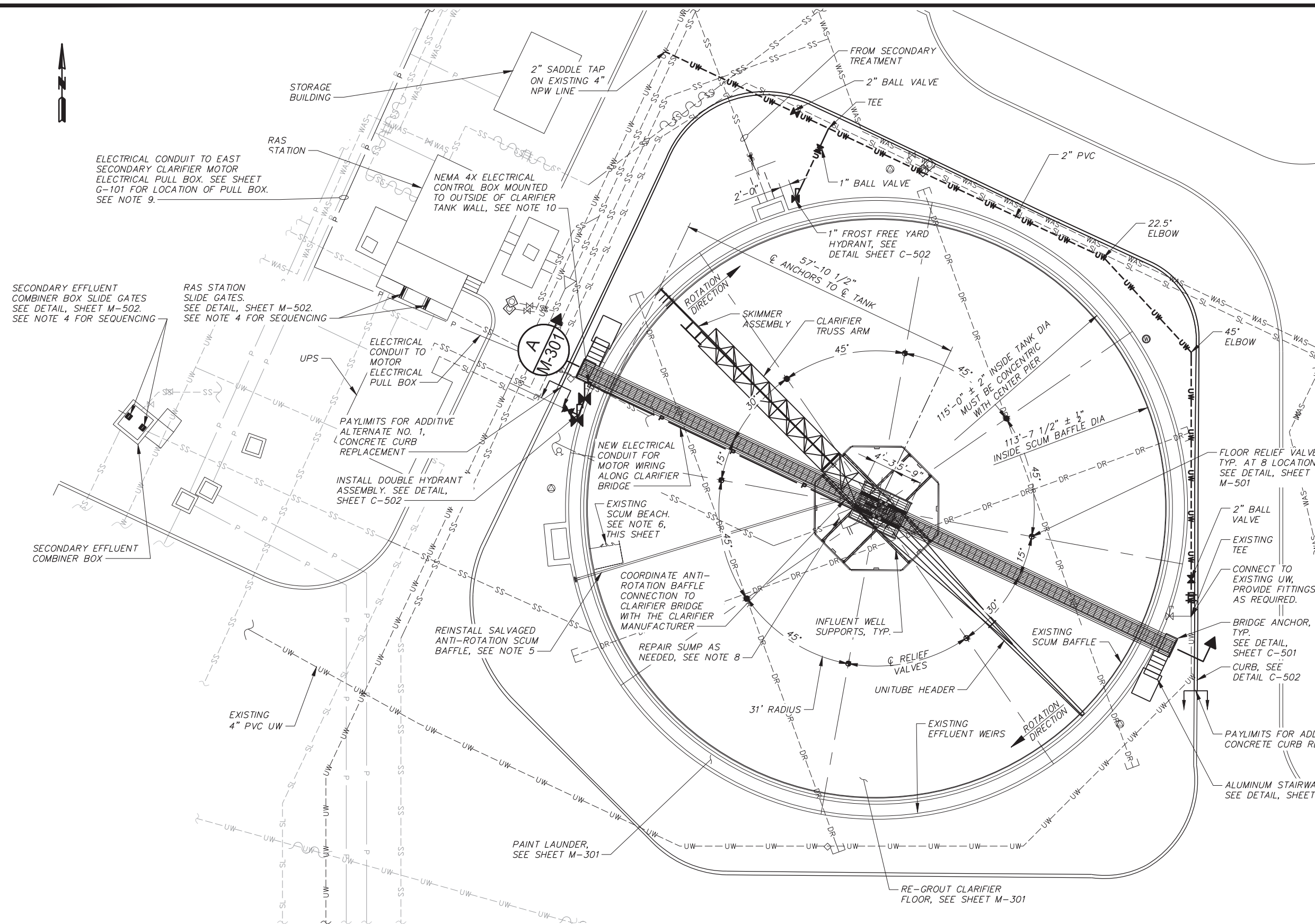
CITY OF PENDLETON
WASTEWATER TREATMENT PLANT
CLARIFIER REHABILITATION

DEMOLITION DETAILS

SHEET
D-501
5 OF 12

NOTES

1. ALL CLARIFIER MECHANISM COMPONENTS SHALL BE INSTALLED PER THE MANUFACTURER'S REQUIREMENTS.
2. NON-POTABLE WATER LINES SHALL HAVE A MINIMUM COVER OF 3 FEET. SEE DETAIL SHEET C-503 AND TECHNICAL SPECIFICATIONS.
3. EXISTING UNDERGROUND PIPING IS SHOWN ACCORDING TO RECORD DRAWINGS AND BEST KNOWLEDGE OF SITE. CONTRACTOR TO POTHOLE AND CONFIRM EXISTING PIPE DETAILS NECESSARY FOR EAST SECONDARY CLARIFIER IMPROVEMENTS.
4. SLIDE GATE REMOVAL AND INSTALLATION SEQUENCING SHALL BE COORDINATED WITH OWNER.
5. ATTACH NEW STATIONARY WIPER PANELS TO SALVAGED ANTI-ROTATION BAFFLE BEAM IN ORIGINAL PANEL LOCATIONS. COORDINATE MODIFICATION AND RECONNECTION OF SUPPORT BEAM WITH MANUFACTURER AS REQUIRED.
6. CONTRACTOR TO CONFIRM ALL ELEVATIONS AND DIMENSIONS PRIOR TO SHOP DRAWING PREPARATION AND MANUFACTURING OF EQUIPMENT.
7. THE DESIGN ELEMENTS SHOWN IN THESE DRAWINGS ARE BASED OFF OF AN H40A-HT TOW-BRO CLARIFIER AS MANUFACTURED BY EVOQUA WATER TECHNOLOGIES. IF CONTRACTOR ELECTS TO USE EQUIPMENT BY ANOTHER CLARIFIER MANUFACTURER IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS, THEN CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING DESIGN ELEMENTS AND DETAILS AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM. ALL SUCH DEVIATIONS SHALL BE AS APPROVED BY THE CLARIFIER MANUFACTURER AND SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
8. SPOT REPAIR CRACKS IN CONCRETE SUMP AS REQUIRED. RE-GROUT SEAM BETWEEN SUMP WALLS AND CONCRETE CLARIFIER FLOOR WITH NON-SHRINK GROUT. SEE TECHNICAL SPECIFICATIONS.
9. CONTRACTOR TO REPLACE MOTOR WIRING AS REQUIRED TO EXISTING PULL BOX, SEE TECHNICAL SPECIFICATIONS, "ELECTRICAL AND CONTROL WORK".
10. MOTOR WIRING ALONG CLARIFIER BRIDGE SHALL CONNECT TO THE WIRING IN THE UNDERGROUND ELECTRICAL CONTROL BOX, AND SHALL BE ABLE TO DISCONNECT FROM THE BOX WITHOUT AFFECTING THE WIRING IN THE UNDERGROUND CONDUIT.



EAST SECONDARY CLARIFIER IMPROVEMENTS PLAN



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<p>CITY OF PENDLETON WASTEWATER TREATMENT PLANT CLARIFIER REHABILITATION</p> <p>IMPROVEMENTS PLAN</p>	SHEET
	C-101
	6 OF 12

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FINAL ELECTRONIC DOCUMENTS AVAILABLE UPON REQUEST

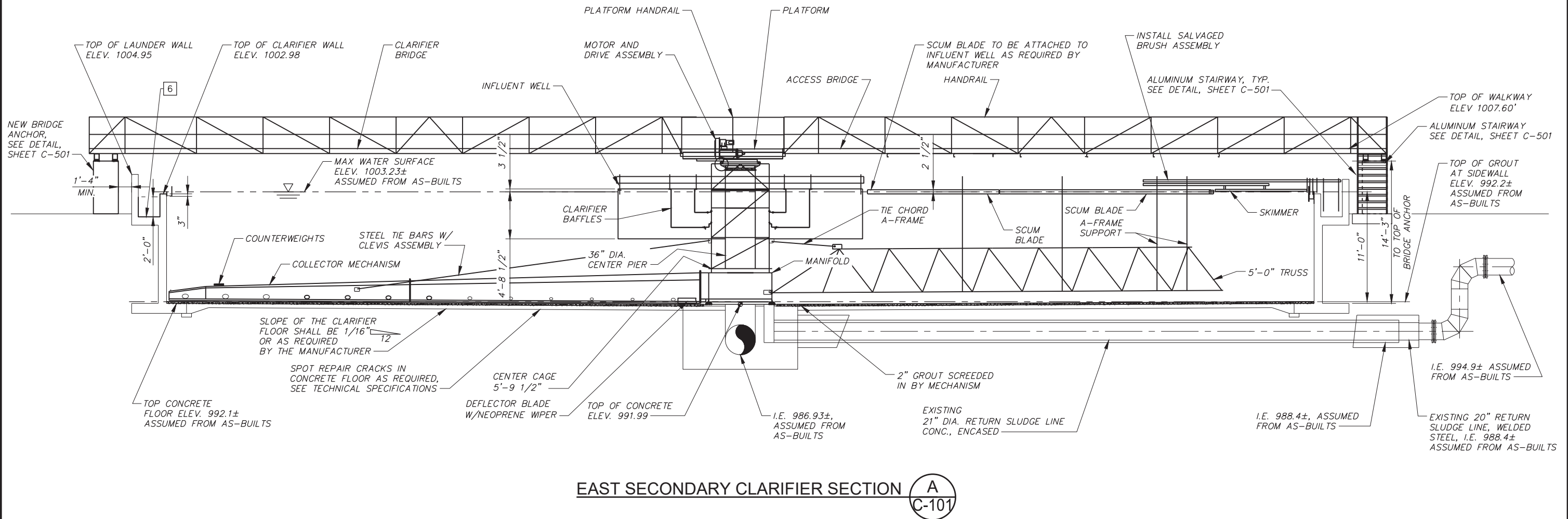
PAINTING SCHEDULE

(SEE TECHNICAL SPECIFICATIONS "PAINTING")

- 6 COAT SECONDARY CLARIFIER LAUNDER WITH PAINT SYSTEM NO. 6 TO THE DIMENSIONS SHOWN IN THE SECTION VIEW

NOTES

- SEE TECHNICAL SPECIFICATIONS - "SECONDARY CLARIFIER IMPROVEMENTS" AND "ELECTRICAL AND CONTROL WORK," FOR ADDITIONAL REQUIREMENTS.
- SEE SHEET C-101 FOR PLAN VIEW OF EAST SECONDARY CLARIFIER MECHANICAL DETAILS.
- PIPING BENEATH CLARIFIER SHOWN OUT OF ROTATION FOR CLARITY.
- COORDINATE ANTI-ROTATION BAFFLE CONNECTION TO BRIDGE WITH MANUFACTURER.
- ALL CLARIFIER MECHANISM COMPONENTS SHALL BE INSTALLED PER THE MANUFACTURER'S REQUIREMENTS.
- THE CARBON STEEL COMPONENTS OF THE SECONDARY CLARIFIER EQUIPMENT SHALL BE HOT DIPPED GALVANIZED.
- CONTRACTOR TO CONFIRM ALL ELEVATIONS AND DIMENSIONS PRIOR TO SHOP DRAWING PREPARATION AND MANUFACTURING OF EQUIPMENT.
- THE DESIGN ELEMENTS SHOWN IN THESE DRAWINGS ARE BASED OFF OF AN H40A-HT TOW-BRO CLARIFIER AS MANUFACTURED BY EVOQUA WATER TECHNOLOGIES. IF CONTRACTOR ELECTS TO USE EQUIPMENT BY ANOTHER CLARIFIER MANUFACTURER IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS, THEN CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING DESIGN ELEMENTS AND DETAILS AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM. ALL SUCH DEVIATIONS SHALL BE AS APPROVED BY THE CLARIFIER MANUFACTURER AND SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
- ALL DISSIMILAR METALS SHALL BE GALVANICALLY INSULATED AS REQUIRED.



EAST SECONDARY CLARIFIER SECTION A
C-101



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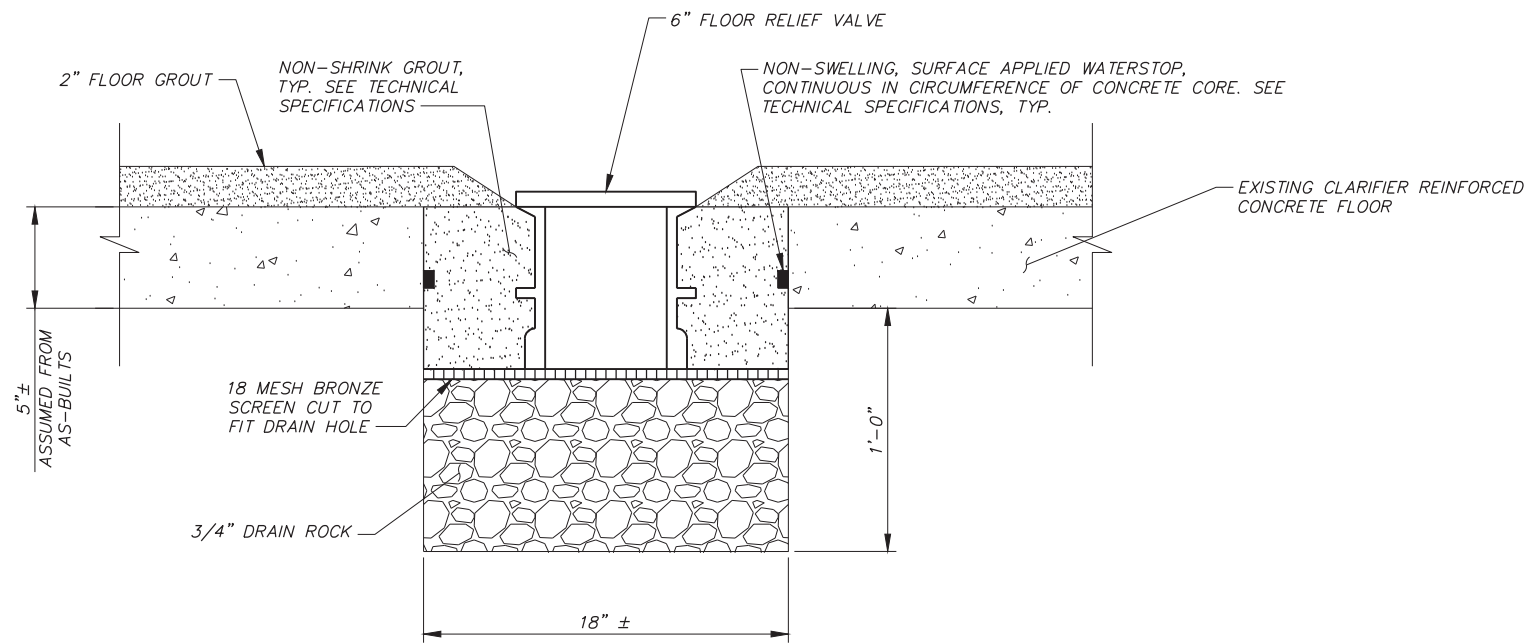


CITY OF PENDLETON
WASTEWATER TREATMENT PLANT
CLARIFIER REHABILITATION

MECHANICAL SECTION

SHEET
M-301
7 OF 12

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FLOOR RELIEF VALVE
SECTION
N.T.S.

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CITY OF PENDLETON
WASTEWATER TREATMENT PLANT
CLARIFIER REHABILITATION

FLOOR RELIEF VALVE DETAIL

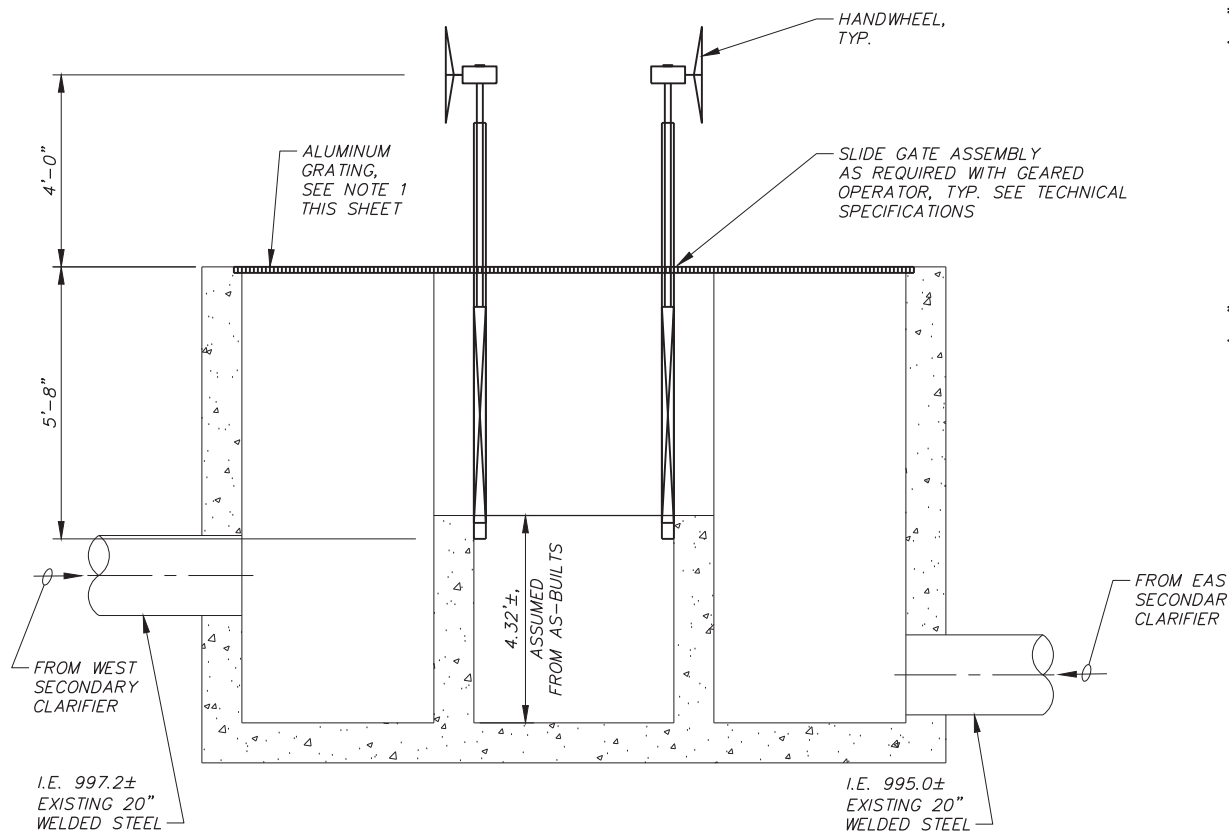
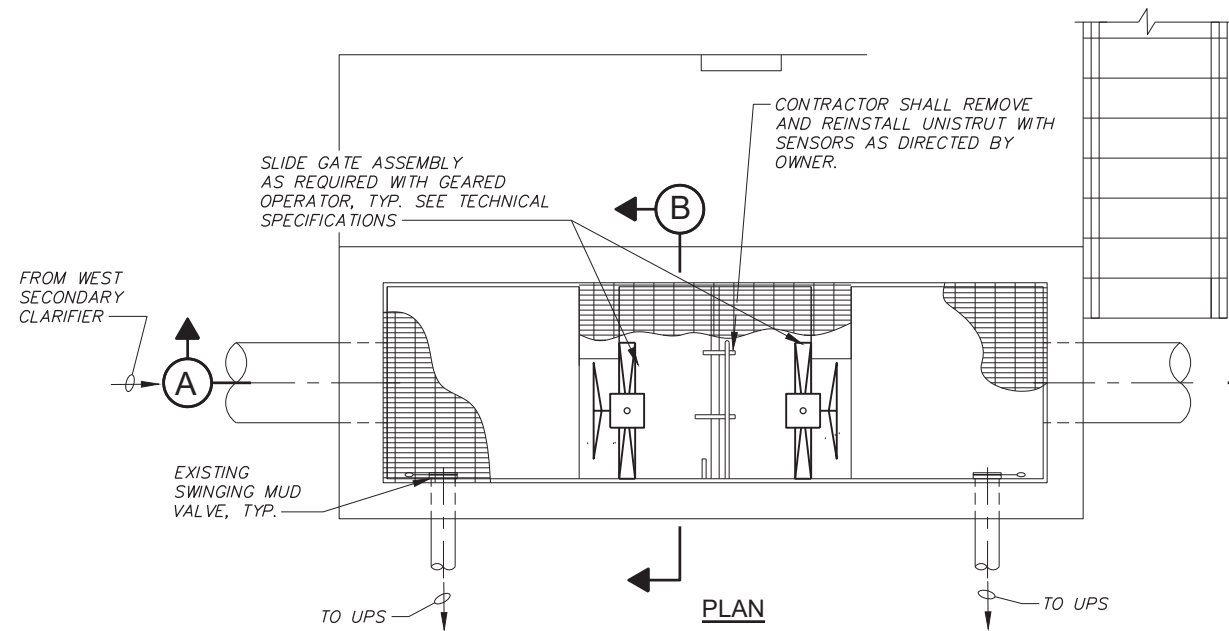
SHEET

M-501

8 OF 12

NOTES

1. CONTRACTOR TO CUT EXISTING GRATING TO ACCOMMODATE SLIDE GATE TRACKS WHILE MAINTAINING A SAFE WALKING PLATFORM.
2. CONTRACTOR TO CONFIRM ALL ELEVATIONS AND DIMENSIONS PRIOR TO SHOP DRAWING PREPARATION AND MANUFACTURING OF EQUIPMENT.

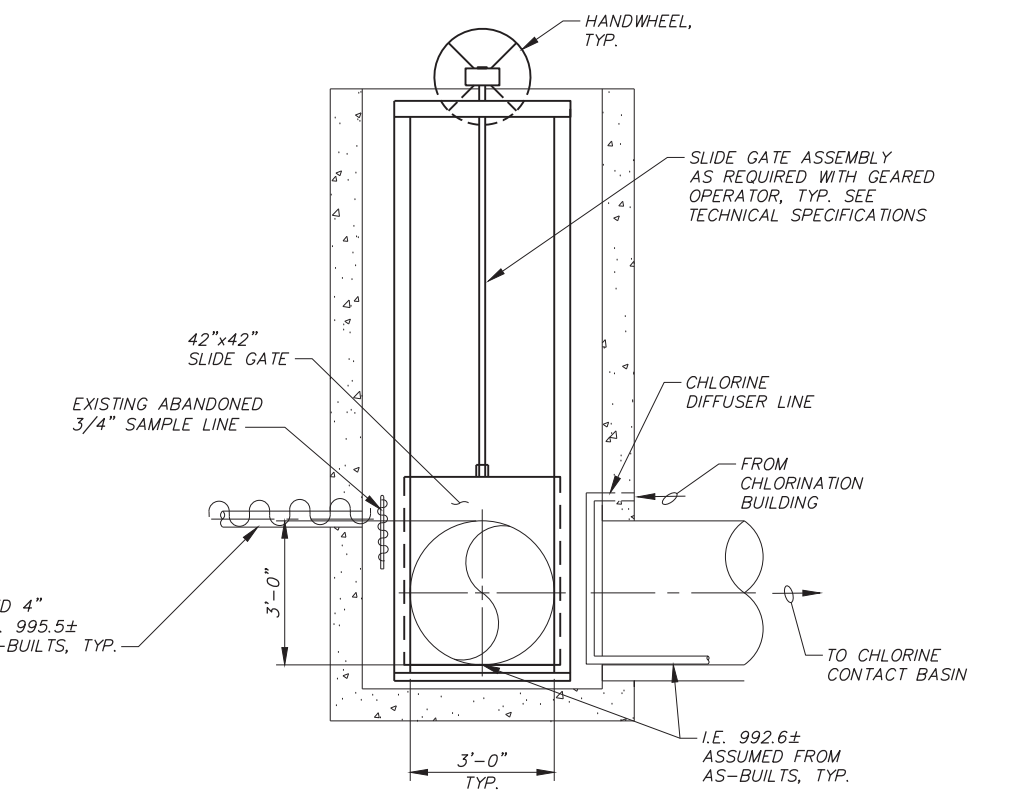
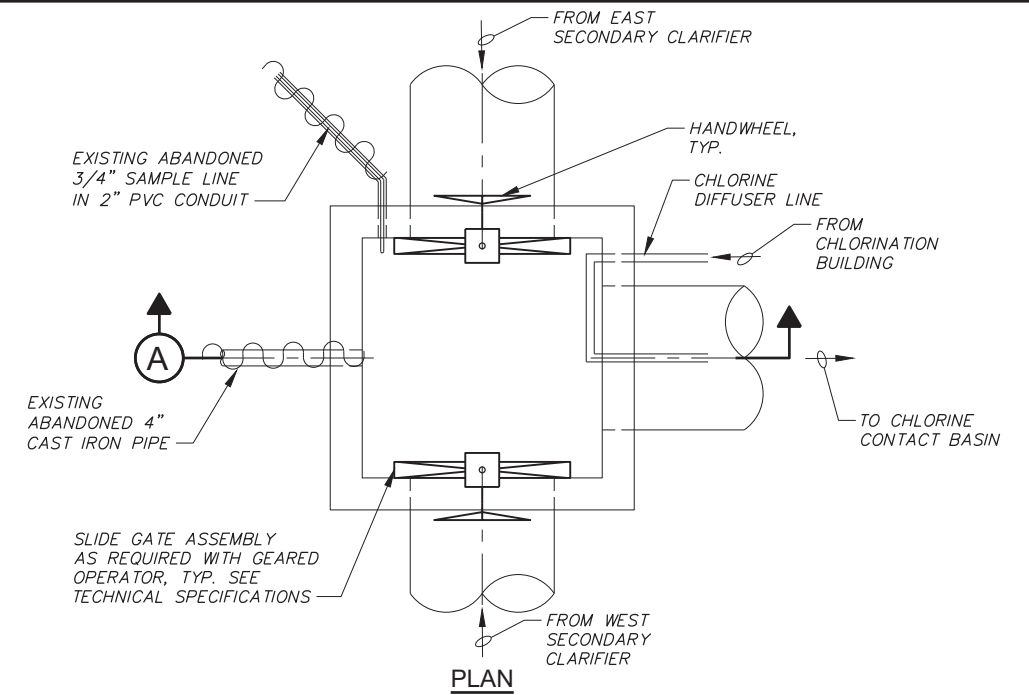


SECTION A

SECTION B

RAS STATION SLIDE GATE DETAIL

N.T.S.



SECTION A

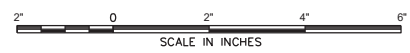
SECONDARY EFFLUENT COMBINER BOX SLIDE GATE DETAIL

N.T.S.

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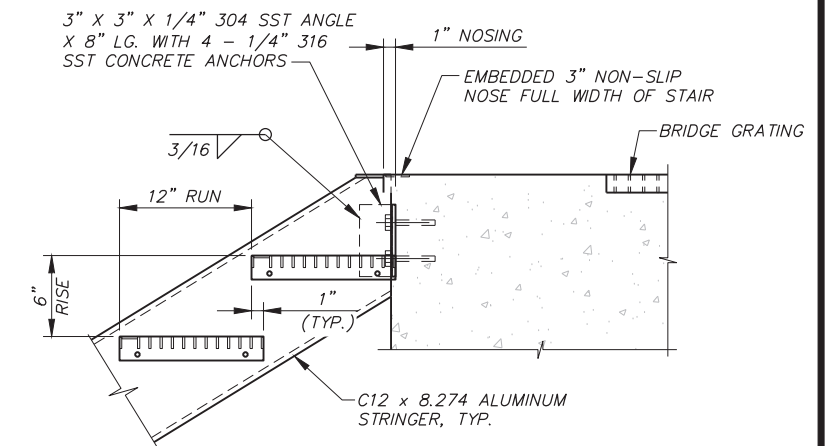
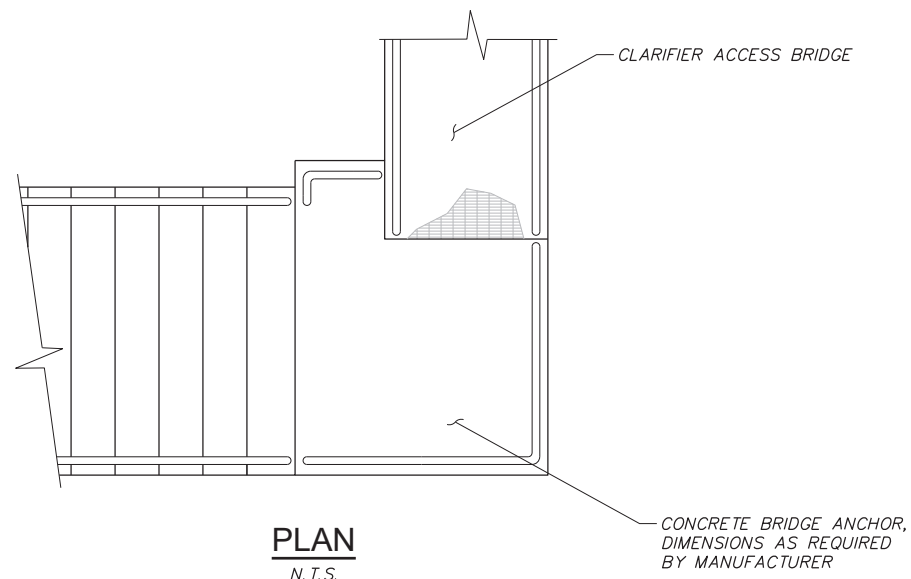
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CITY OF PENDLETON
WASTEWATER TREATMENT PLANT
CLARIFIER REHABILITATION

SLIDE GATE DETAILS

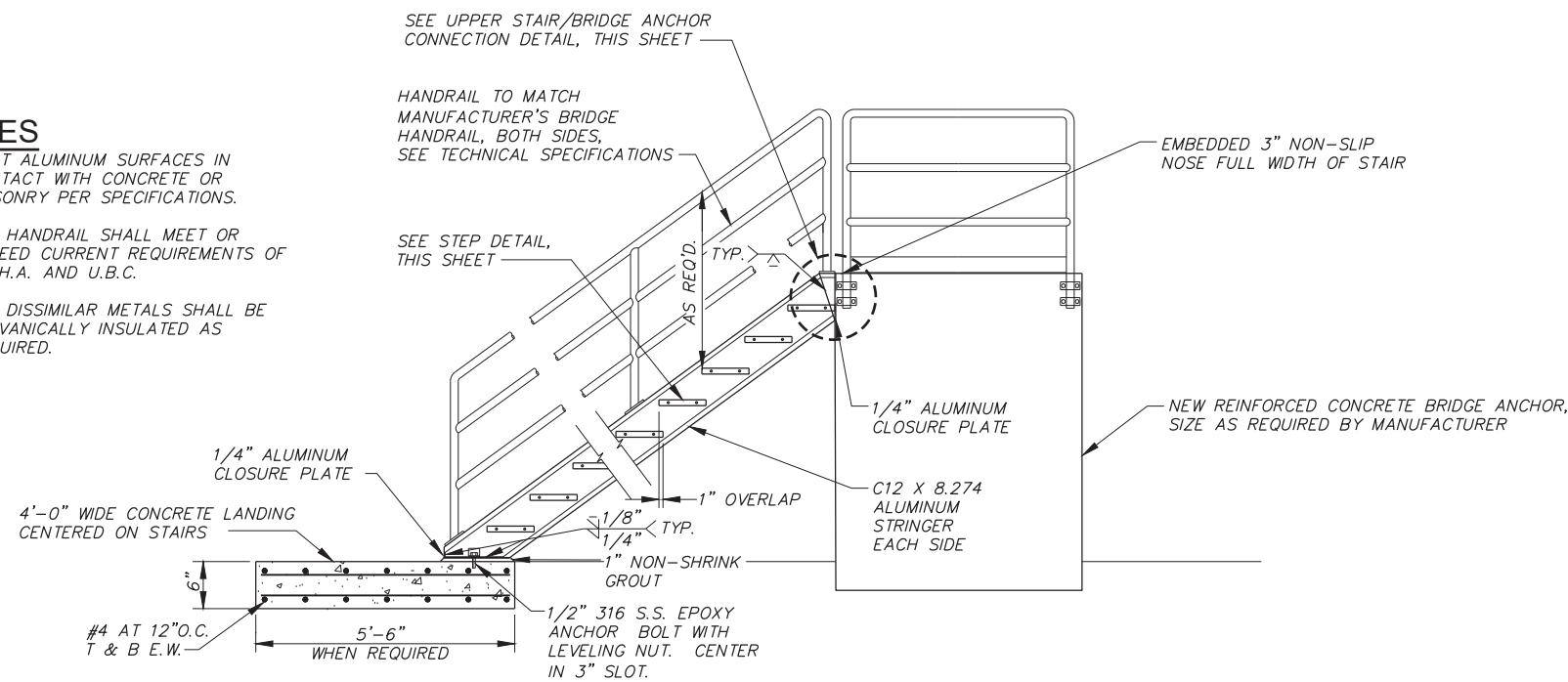
SHEET
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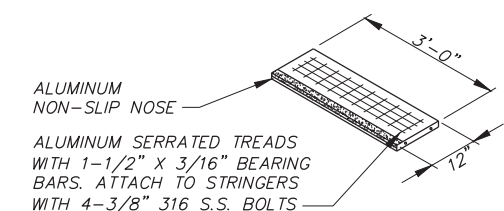
UPPER STAIR/BRIDGE ANCHOR CONNECTION DETAIL
N.T.S.

NOTES

1. COAT ALUMINUM SURFACES IN CONTACT WITH CONCRETE OR MASONRY PER SPECIFICATIONS.
2. ALL HANDRAIL SHALL MEET OR EXCEED CURRENT REQUIREMENTS OF O.S.H.A. AND U.B.C.
3. ALL DISSIMILAR METALS SHALL BE GALVANICALLY INSULATED AS REQUIRED.



ALUMINUM STAIRWAY AND BRIDGE ANCHOR DETAIL
N.T.S.



ALUMINUM STEP DETAIL
N.T.S.



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CLARIFIER REHABILITATION

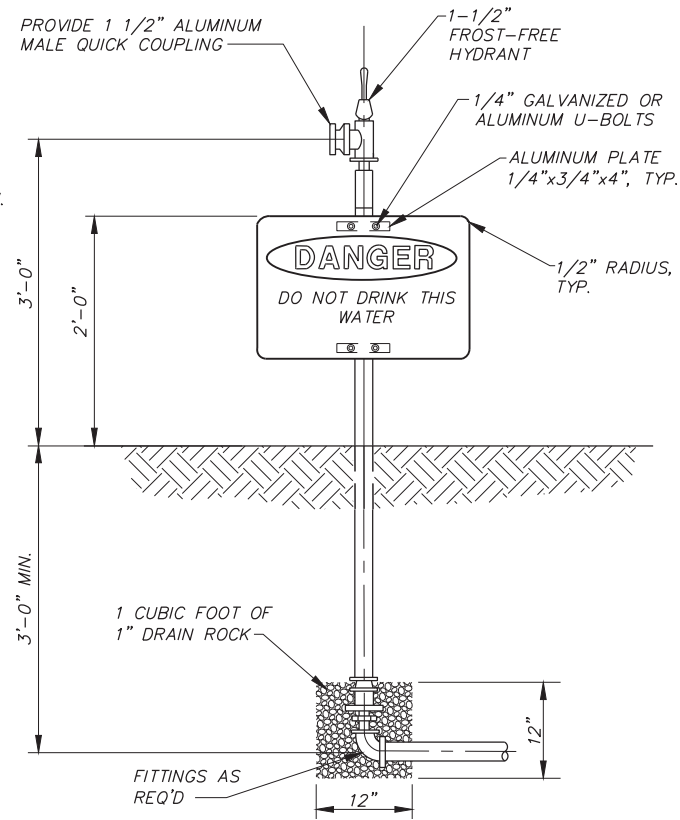
TYPICAL DETAILS I

SHEET

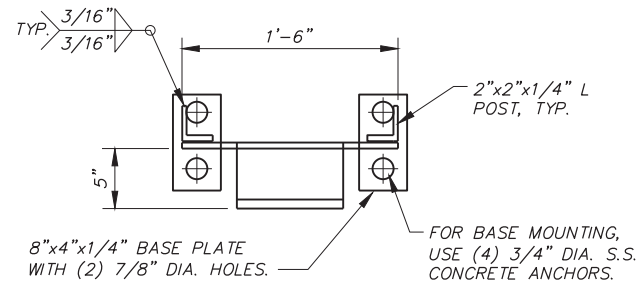
C-501

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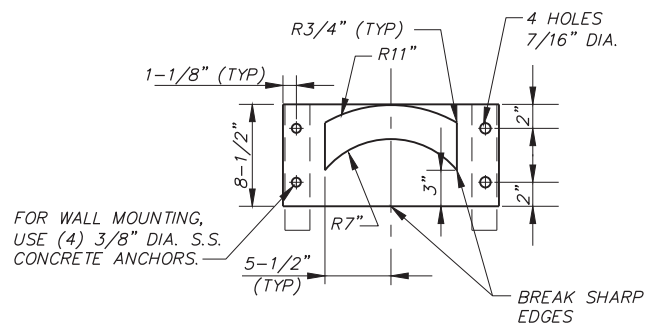
- NOTES**
1. SIGN SHALL BE 1/8" THICK ALUMINUM.
 2. SIGN SHALL BE 7"x10" AND SHALL CONFORM TO THE SPECIFICATIONS.
 3. SIGN AS SHOWN IS ROTATED 90° OFF TRUE POSITION. SIGN SHALL BE MOUNTED TO PERMIT EASY READING.



2" FROST-FREE HYDRANT
N.T.S.



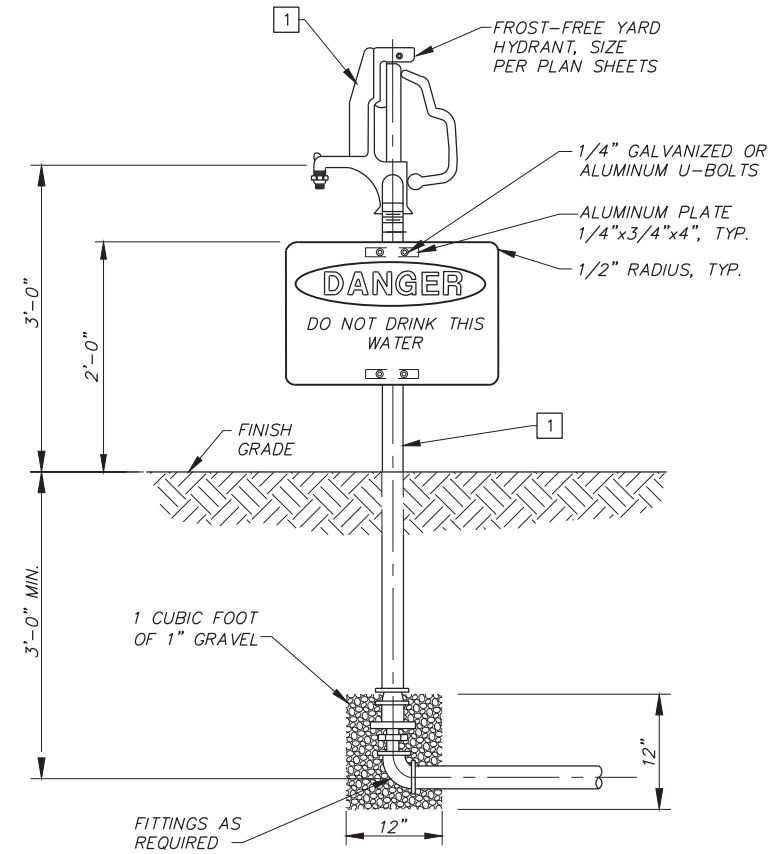
FOR BASE MOUNTING, USE (4) 3/4" DIA. S.S. CONCRETE ANCHORS.



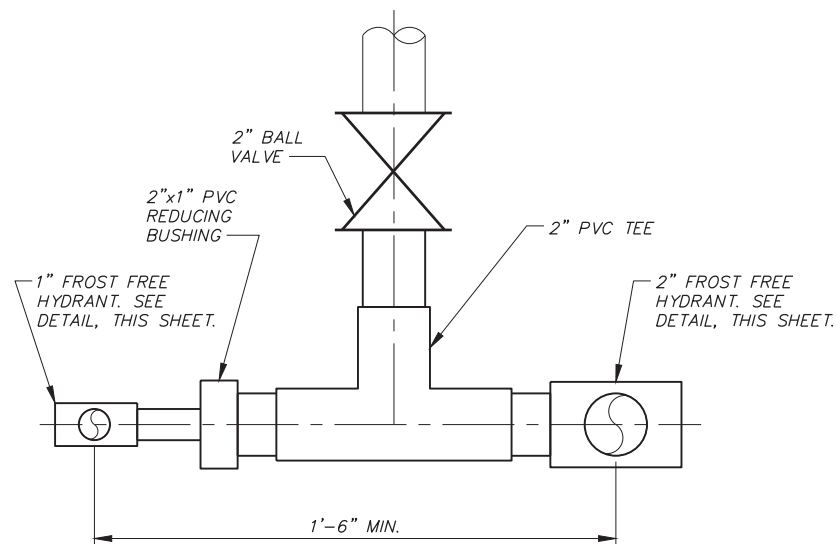
FOR WALL MOUNTING, USE (4) 3/8" DIA. S.S. CONCRETE ANCHORS.

- NOTES**
1. WHERE HOSE RACK IS FREE STANDING, PROVIDE (2) STEEL 2x2x1/4 ANGLES WITH BASE PLATES.
 2. HOT DIP GALVANIZE AFTER FABRICATION.
 3. INSTALL HOSE RACK AT EACH HYDRANT.

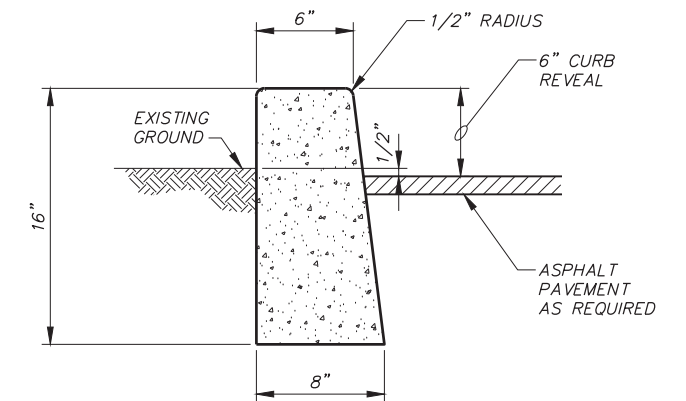
HOSE RACK
N.T.S.



1" FROST-FREE YARD HYDRANT
N.T.S.



DOUBLE HYDRANT ASSEMBLY DETAIL
N.T.S.



- NOTES**
1. PROVIDE FULL SECTION EXPANSION JOINT AT 50' MIN SPACING FOR CONTINUOUS SECTIONS AND AT BEGINNING AND END OF CURVED SECTIONS.
 2. PROVIDE 1/2 INCH DEPTH CONTRACTION JOINTS AT 10' SPACING.

CURB DETAIL
N.T.S.

- NOTES**
1. SIGN SHALL BE 1/8" THICK ALUMINUM.
 2. SIGN SHALL BE 7"x10" AND SHALL CONFORM TO THE SPECIFICATIONS.
 3. SIGN AS SHOWN IS ROTATED 90° OFF TRUE POSITION. SIGN SHALL BE MOUNTED TO PERMIT EASY READING.

PAINTING SCHEDULE
(SEE TECHNICAL SPECIFICATIONS "PAINTING")

- 1 COAT FERROUS SURFACES (PIPES, HYDRANTS ETC.) WITH PAINT SYSTEM NO. 1 IN PURPLE

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DESIGNED BY	A. HOUSER/M. GROOM	JOB NUMBER	77-67	DATE	2024
DRAWN BY	L. MURPHY	ACAD FILE:	77-67-C-502.dwg		
REVIEWED BY	T. MOORE/T. BAKER	COPYRIGHT 2024 BY ANDERSON PERRY & ASSOC., INC.			



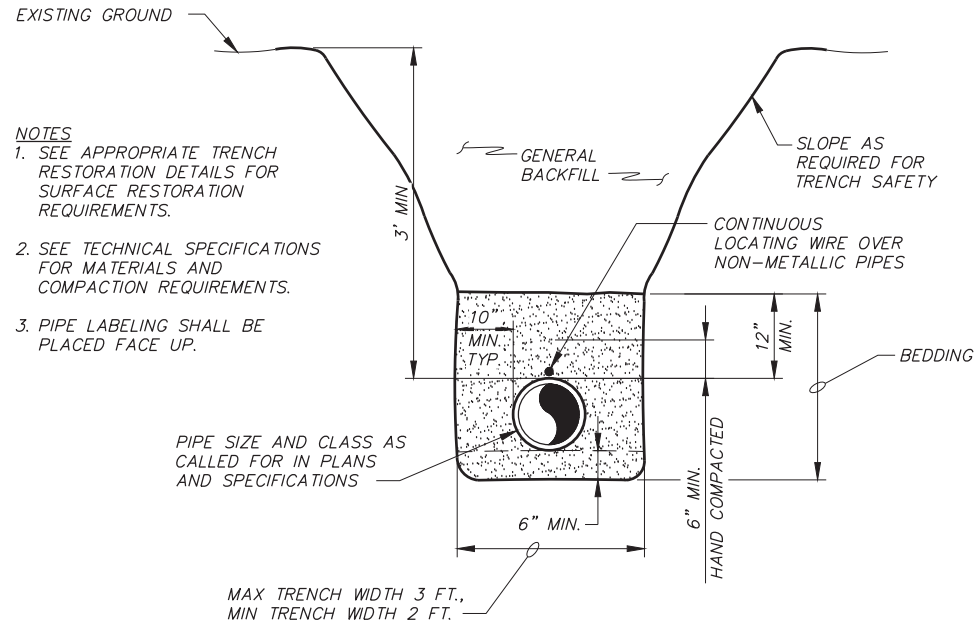
CITY OF PENDLETON
WASTEWATER TREATMENT PLANT
CLARIFIER REHABILITATION

TYPICAL DETAILS II

SHEET

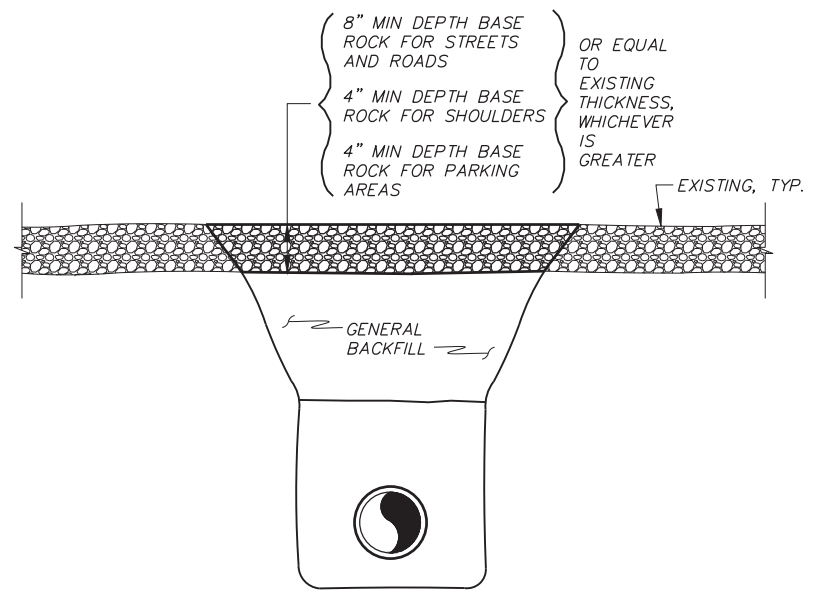
C-502

11 OF 12

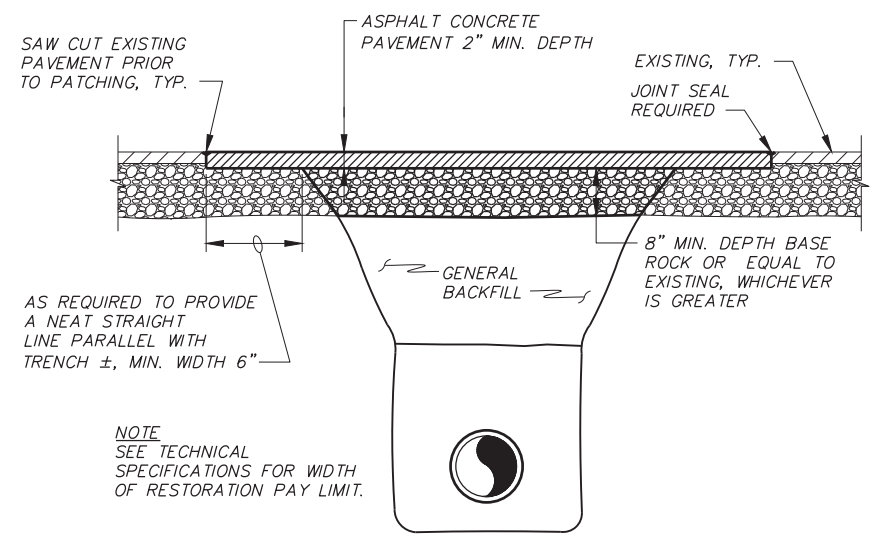


- NOTES**
1. SEE APPROPRIATE TRENCH RESTORATION DETAILS FOR SURFACE RESTORATION REQUIREMENTS.
 2. SEE TECHNICAL SPECIFICATIONS FOR MATERIALS AND COMPACTION REQUIREMENTS.
 3. PIPE LABELING SHALL BE PLACED FACE UP.

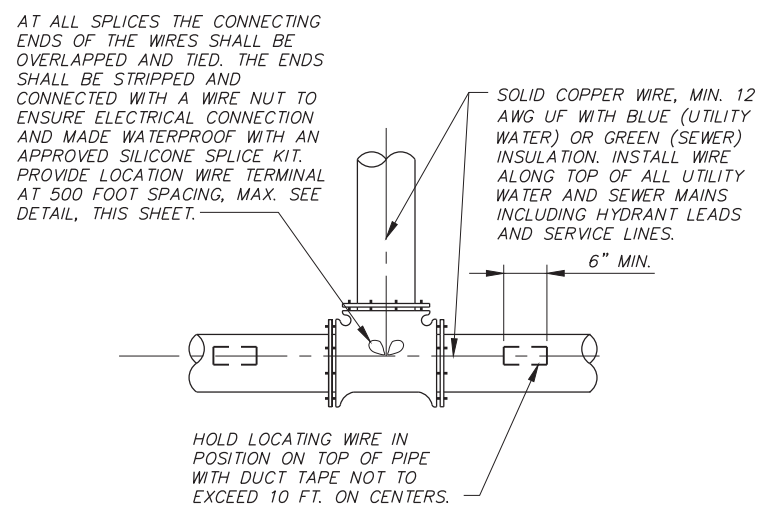
**TYPICAL TRENCH BACKFILL
(WITH LOCATING WIRE)**
N.T.S.



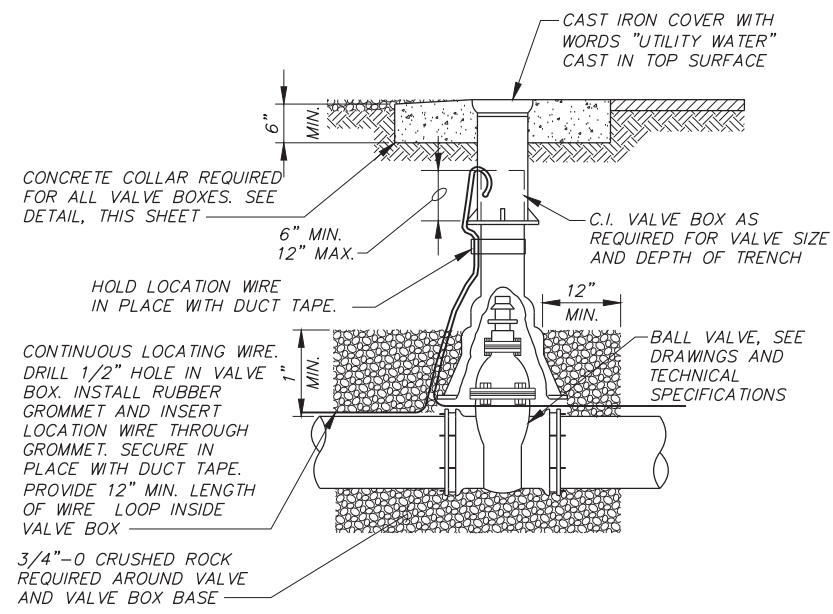
**TRENCH RESTORATION
GRAVEL SURFACES**
N.T.S.
("GRAVEL SURFACE RESTORATION" PAY ITEM)



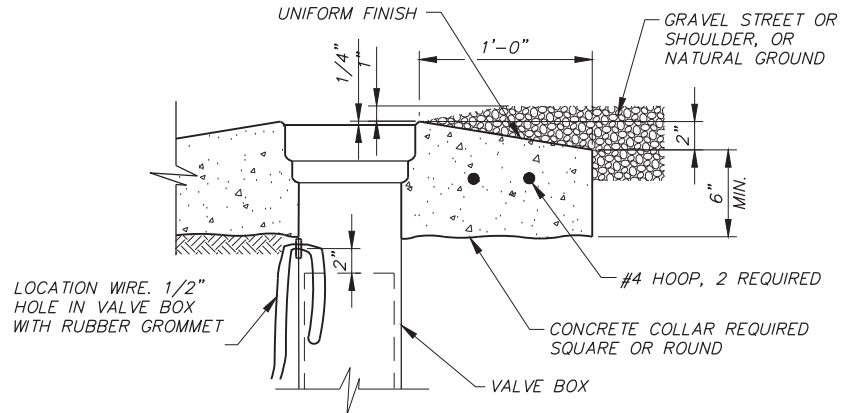
**TRENCH RESTORATION
ASPHALT SURFACES**
N.T.S.
("ASPHALT SURFACE RESTORATION" PAY ITEM)



CONTINUOUS LOCATING WIRE DETAIL
N.T.S.



VALVE BOX DETAIL
N.T.S.



**CONCRETE COLLAR DETAIL
IN GRAVEL STREETS OR NATURAL GROUND**
N.T.S.

REQUIREMENTS FOR CONCRETE COLLARS

1. CONCRETE : 3/4", 7 SACK, 4000 PSI AT 28 DAYS, 2" TO 4" SLUMP, 4-7% AIR.
2. COLLAR TO BE FORMED AND UNIFORMLY SHAPED.
3. SMOOTH BROOMED FINISH REQUIRED.
4. APPLY CONCRETE CURING COMPOUND.
5. PROTECT FROM TRAFFIC FOR 4 DAYS MIN.

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DESIGNED BY	A. HOUSER/M. GROOM	JOB NUMBER	77-67	DATE	2024
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CITY OF PENDLETON
WASTEWATER TREATMENT PLANT
CLARIFIER REHABILITATION

TYPICAL DETAILS III

SHEET
C-503
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