CONSTRUCTION NOTES

1. THE SIGNATURE OF THE PESCADERO RECLAMATION DISTRICT 2058 (THE DISTRICT)ON DRAWING CONSTITUTES THE DISTRICT'S APPROVAL OF THE SAME AS TO THE ENGINEERING ASPECTS THEREOF ONLY AND DOES NOT AUTHORIZE, EXPRESSLY, OR IMPLICITLY THE CONSTRUCTION OF ANY ASPECT HEREOF OR THE INTERFERENCE WITH ANY PROPERTY, EQUIPMENT, OR INTEREST OF THE DISTRICT. NO SUCH CONSTRUCTION OR INTERFERENCE SHALL OCCUR UNTIL THE DISTRICT HAS OBTAINED, BY SEPARATE AGREEMENT SUCH AGREEMENTS AS THE DISTRICT DEEMS NECESSARY FOR THE PROTECTION OF ITS FACILITIES.

2. ALL CONSTRUCTION WITHIN THE DISTRICT RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE APPROVED DRAWINGS AND THE CURRENT EDITION OF THE DISTRICT'S STANDARDS AND/OR STANDARD SPECIFICATIONS OF OTHER GOVERNING AGENCIES, AS APPLICABLE.

3. CONSTRUCTION WITHIN THE DISTRICT RIGHT OF WAY WILL NOT BE ALLOWED DURING THE IRRIGATION SEASON (TYPICALLY MARCH 1 TO OCTOBER 31).

4. CONTRACTOR SHALL PROVIDE AN ALTERNATE STORM WATER BYPASS DURING CONSTRUCTION UNLESS DIRECTED OTHERWISE BY THE DISTRICT ENGINEER.

5. WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL. IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THE ONLY MATERIAL AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.

6. THE DISTRICT STANDARD DETAILS MAY REQUIRE MODIFICATIONS BASED ON SITE SPECIFIC FIELD CONDITIONS. SUCH MODIFICATIONS SHALL BE REVIEWED AND APPROVED IN WRITING BY THE DISTRICT ENGINEER PRIOR TO CONSTRUCTION.

7. CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

8. CAL-OSHA SAFETY REQUIREMENTS SHALL BE IN EFFECT DURING ALL CONSTRUCTION. SPECIAL SAFETY PRECAUTIONS SHALL BE TAKEN WHEN WORKING IN THE VICINITY OF GAS, OIL, OR ELECTRICAL LINES.

9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH CALIFORNIA GOVERNMENT CODE 4216, AS APPLICABLE. TO OBTAIN A DIG ALERT IDENTIFICATION NUMBER, CALL 811 AT LEAST 2 WORKING DAYS BEFORE DIGGING UNDERGROUND.

10. THE DISTRICT WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USED OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE OBTAINED IN WRITING FROM THE DISTRICT ENGINEER, AND MUST BE APPROVED BY THE PREPARER OF THE PLANS.

11. CONTRACTOR SHALL BE REQUIRED TO HAVE A PRE-CONSTRCUTION CONFERENCE WITH THE DISTRICT ENGINEER AND DISTRICT GENERAL MANAGER, PRIOR TO STARTING ANY WORK WITHIN THE DISTRICT RIGHT OF WAY.

12. BACKFILL AND SUBGRADES SHALL BE COMPACTED TO A MINIMUM 90% RELATIVE COMPACTION PER ASTM D-1557 WITHIN THE DISTRICT RIGHT OF WAY, UNLESS DIRECTED OTHERWISE BY THE DISTRICT ENGINEER.

13. A SET OF APPROVED PLANS SHALL BE ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.

14. THE CONTRACTOR SHALL EXERCISE DUE CAUTION IN PROTECTING EXISTING FACILITIES. THE CONTRACTOR SHALL GIVE PARTICULAR CARE TO PROTECTING EXISTING PIPELINES DURING CONSTRUCTION. THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCH MARKS, REFERENCE POINTS AND STAKES, AND SHALL BEAR ALL EXPENSES FOR REPLACEMENT AND/OR ERRORS CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE. ANY DAMAGES TO DISTRICT FACILITIES DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED IN A MANNER APPROVED BY THE DISTRICT ENGINEER AT THE SOUL COST OF THE CONTRACTOR.

15. ANY WORK WITHIN THE DISTRICT RIGHT OF WAY SHALL NOT BE DEEMED COMPLETE UNTIL THE DISTRICT ENGINEER HAS BEEN PROVIDED WITH A SET OF RECORD DRAWINGS IN AUTOCAD 2007 AND HARDCOPY FORMATS.

16. CONTACT THE DISTRICT AT LEAST TWO (2) WORKING DAYS PRIOR TO ANY CONSTRUCTION AND/OR NECESSARY INSPECTIONS. WORK WITHIN THE DISTRICT RIGHT OF WAY SHALL PROCEED IN A CONTINUOUS MANNER ONCE STARTED. THE DISTRICT SHALL BE NOTIFIED OF ANY WORK STOPPAGES. WHENEVER WORK IS TO RESTART, THE DISTRICT SHALL REQUIRE AN ADDITIONAL TWO (2) WORKING DAYS PRIOR TO ALL CONSTRUCTION SCHEDULED ON A HOLIDAY OR WEEKEND. PESCADERO RECLAMATION DISTRICT 2058 PHONE NUMBER: (209) 835-8893

PESCADERO
RECLAMATION DISTRICT 2058

GENERAL NOTES (1)

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 0-02
REVISIONS: 0	SECTION: 0	DRAWING NAME: 0-02.DWG		

CONSTRUCTION NOTES

17. UNLESS OTHERWISE STATED, ALL STATIONS INDICATED ON THE PLANS ARE IN REFERENCE TO THE CENTERLINE OF THE PROPOSED STRUCTURE.

18. THE DISTRICT SHALL AT ALL TIMES HAVE ACCESS TO THE WORK WHEREVER IT IS IN PREPARATION AND PROGRESS.

19. IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE DISTRICT IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES, WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. THE DISTRICT'S INTERPRETATION OR CORRECTION THEREOF SHALL BE CONCLUSIVE. THE DISTRICT WILL HAVE AUTHORITY TO REJECT WORK WHICH DOES NOT CONFORM TO THE PLANS AND SPECIFICATIONS.

20. THE CONTRACTOR SHALL NOT LEAVE "IN USE" DISTRICT PROJECTS INCOMPLETE FOR MORE THAN TWO (2) WEEKS. WHEN CONDITIONS REQUIRE, AND DETERMINED SOLELY BY THE DISTRICT, THE CONTRACTOR SHALL PROVIDE A TEMPORARY DIVERSION DITCH TO PROVIDE FOR IRRIGATION WATER DELIVERY OR STORM WATER REMOVAL.

21. ASTM C-361 CLASS 3 RUBBER GASKETED REINFORCED CONCRETE PIPE (RGRCP) WITH APPROPRIATE WALL THICKNESS FOR THE PRESSURE AND TRAFFIC LOADS REQUIRED FOR DISTRICT PIPELINES. CONTRACTOR SHALL SUBMIT FACTORY TEST DATA TO THE DISTRICT ENGINEER, VERIFYING THAT PIPE JOINTS CONFORM TO NO LEAKAGE AT HYDROSTATIC PRESSURES UP TO TWENTY-FIVE (25) FEET. FIELD TESTS, IF REQUIRED, SHALL BE PREFORMED IN THE PRESENCE OF THE DISTRICT ENGINEER.

22. POLYVINYL CHLORIDE (PVC) PIPE SHALL BE 100 PSI PIP WITHIN LIMITS OF THE DISTRICT RIGHT OF WAY, OR AS DIRECTED BY THE DISTRICT ENGINEER.

23. 30 INCHES MINIMUM COVER SHALL BE PROVIDED OVER ALL PIPELINES.

PESCADERO RECLAMATION DISTRICT 2058			GENERAL NOTES (2)	
DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 0-02
REVISIONS: 0	SECTION: 0	DRAWING NAME: 0-02.DWG		

1. ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY EXISTING ENCROACHMENTS OR PROPOSED IMPROVEMENTS INVOLVING DISTRICT FACILITIES OR EASEMENTS.

2. THE DISTRICT MAY REQUIRE THAT ITS EASEMENTS, RIGHTS OF WAY, AND FEE TITLE PROPERTY BE FENCED TO THE DISTRICT STANDARDS. THE NEED FOR FENCING WILL BE EVALUATED ON A CASE BY CASE BASIS. THE COST OF FENCING SHALL BE BORNE BY THE DEVELOPER/LANDOWNER.

3. ACCESS GATES AND FENCING THAT CROSS THE DISTRICT EASEMENT MAY BE PERMITTED SO LONG AS THEY DO NOT IMPACT DISTRICT OPERATIONS AND MAINTENANCE AND ARE NOT BURDENSOME ON THE DISTRICT. AN ENCROACHMENT AGREEMENT IS REQUIRED.

4. EXISTING DISTRICT FACILITIES WITHIN A PUBLIC ROAD RIGHT OF WAY SHALL BE RELOCATED INTO A RIGHT OF WAY EASEMENT DEDICATED SOLELY TO THE DISTRICT AT THE COST OF THE DEVELOPER.

5. STANDARD EASEMENT WIDTHS FOR DISTRICT FACILITIES SHALL BE:

MAIN CANALS	100 FEET	CENTERED ON CANAL
CANALS/DRAINS	60 FEET	CENTERED ON CANAL/DRAIN
PIPELINES	30 FEET	CENTERED ON PIPELINE
PIPELINES ADJACENT TO ROADWAYS	20 FEET	
PIPELINES ADJACENT TO P.U.E.	15 FEET	
PUMP SITES	40 FEET	SQUARE CENTERED ON PUMP

6. STANDARD ROADWAY WIDTHS SHALL BE 16 FEET MINIMUM.

7. EASEMENT WIDTHS FOR JOINT PROJECTS SHALL MEET THE ABOVE MINIMUM EASEMENT WIDTHS PLUS ANY ADDITIONAL EASEMENT WIDTH THAT MAY BE REQUIRED BASED ON SPECIFIC PROJECT USES OR AS APPROVED BY THE DISTRICT.

8. IF AN EXISTING DISTRICT FACILITY IS NOT CENTERED ON THE PROPERTY BOUNDARY BETWEEN TWO (2) PROPERTIES, THE DISTRICT MAY REQUIRE AN EASEMENT WIDTH BASED ON THE DISTANCE TO THE CENTERLINE OF THE DISTRICT FACILITY.

9. NO PERMANENT STRUCTURES OR LANDSCAPING SHALL BE PLACED WITHIN THE DISTRICT'S RIGHT OF WAY.

PESCADERO
RECLAMATION DISTRICT 2058

EASEMENTS AND ENCROACHMENTS

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 0-03
REVISIONS: 0	SECTION: 0	DRAWING NAME: 0-03.DWG		

CAST-IN-PLACE NOTES

1. UNLESS DIRECTED OTHERWISE BY DISTRICT ENGINEER, MINIMUM CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE 3,000 PSI. CEMENT SHALL BE ASTM TYPE II PORTLAND CEMENT AND BE FREE OF LUMPS AND PARTIALLY SET MASSES, AND PROPORTIONED TO INCLUDE NOT LESS THAN 6 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE AND HAVE A MAXIMUM WATER - CEMENT RATIO OF 0.50. WATER SHALL BE FREE FROM ACID, ALKALI, OILS OR ORGANIC MATTER. AGGREGATE SHALL BE LEAN, HARD, STRONG AND DURABLE, AND FREE FROM DIRT AND OTHER SUBSTANCES DELETERIOUS TO CONCRETE. THE FINE AND COARSE AGGREGATES SHALL BE A WELL GRADED MIX APPROVED BY DISTRICT ENGINEER. THE MAXIMUM SIZE SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-33.

2. CONSISTENCY OF THE CONCRETE SHALL ALLOW IT TO BE WORKED INTO PLACE WITHOUT SEGREGATION. SLUMP SHALL BE 4 INCHES MAXIMUM. FORMS SHALL BE BRACED AND/OR TIED TOGETHER SO AS TO MAINTAIN POSITION AND SHAPE AND BE SUFFICIENTLY TIGHT TO PREVENT LEAKAGE OF MORTAR.

3. ALL VERTICAL CONCRETE SUBGRADES SHALL BE POURED AGAINST FORMS IN ALL CASES. CONCRETE SHALL NOT BE DROPPED MORE THAN 5 FEET VERTICALLY UNLESS SUITABLE EQUIPMENT IS USED TO PREVENT SEGREGATION AND SHALL BE VIBRATED IN 18 INCH, HORIZONTAL LIFTS. CONCRETE SHALL NOT BE MOVED DISTANCES OVER 5 FEET HORIZONTALLY USING A VIBRATOR. CONSOLIDATION OF CONCRETE SHALL BE ACCOMPLISHED BY MEANS OF INTERNAL TYPE MECHANICAL VIBRATORS, OR AS PRE-APPROVED BY DISTRICT ENGINEER EQUIVALENT METHOD.

4. CONSTRUCTION JOINTS SHALL BE PLACED AS SHOWN ON THE PLANS OR AS PRE-APPROVED BY DISTRICT ENGINEER ONLY. ENTIRE SURFACE UNDER WALL TO BE ROUGHENED WHILE WET, TO $\frac{1}{8}$ INCH MINIMUM AMPLITUDE/DEPTH. JOINTS SHALL BE THOROUGHLY CLEANED AND ALL LAITANCE REMOVED BEFORE THE PLACEMENT OF NEW CONCRETE
5. ALL CAST-IN-PLACE CONCRETE STRUCTURE SHALL BE FORMED INSIDE AND OUT AND CONCRETE VIBRATED SUFFICIENTLY TO PROVIDE FOR SMOOTH SURFACED WALLS/FLOORS WITHOUT VOIDS AND HONEYCOMBS.

6. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH STRUCTURAL DETAILS AND NOTES.

7. GUIDELINES FOR CONCRETING IN HOT AND COLD WEATHER AS SET FORTH IN NRCS CONSTRUCTION SPECIFICATION 901 SHALL BE FOLLOWED.

8. ALL SLABS SHALL BE SLOPED TO ALLOW DRAINAGE OF RUNOFF WATER TO PREVENT PONDING.

9. CONCRETE SHALL BE PREVENTED FROM PREMATURE DRYING FOR A CURING PERIOD OF AT LEAST SEVEN DAYS AFTER IT IS PLACED. EXPOSED SURFACES SHALL BE KEPT CONTINUOUSLY MOIST FOR THE ENTIRE PERIOD IN LIEU OF WATER CURING, THE CONCRETE SHALL BE PROTECTED BY SPRAYING WITH A CURING COMPOUND PRE-APPOVED BY DISTRICT ENGINEER. ALL SURFACES SHALL BE KEPT MOIST UNTIL THE COMPOUND IS APPLIED.

REINFORCING STEEL NOTES

1. ALL REBAR SHALL BE GRADE 60.

2. SPLICES AND HOOKS MADE IN REINFORCING STEEL SHALL BE STAGGERED AND LAPPED IN ACCORDANCE WITH DISTRICT DETAIL 1-02: STEEL REINFORCING.

3. SLAB REINFORCING IS TO BE LOCATED IN THE CENTER OF THE SLAB, UNLESS NOTED OTHERWISE.

4. ALL BARS SHALL BE FREE OF EXCESSIVE RUST, MUD, OIL , AND GREASE.

GENERAL NOTES

1. ALL DIMENSIONS ARE TO BE FIELD VERIFIED BY CONTRACTOR PRIOR TO COMMENCING WORK OR FABRICATION. IF ANY CONDITIONS EXIST NOT AS SHOWN ON THE DRAWINGS DISTRICT ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

2. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS SHALL HAVE PRECEDENCE OVER SCALED DRAWINGS. CONTRACTOR SHALL VERIFY DIMENSIONS AND MEASUREMENTS AT SITE.

3. ALL WORK SHALL BE PERFORMED USING MATERIALS AND METHODS IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE INTERNATIONAL BUILDING CODE (IBC) 2006 EDITION, 2007 CALIFORNIA BUILDING CODE (CBC), LOCAL CODES AND ORDINANCES. REPORT ALL DISCREPANCIES TO DISTRICT ENGINEER IMMEDIATELY.

4. ANY CHANGES TO THE APPROVED SET OF PLANS WITHOUT NOTIFYING DISTRICT ENGINEER PRIOR TO SUCH CHANGES ABSOLVES SAID ENGINEER FROM ANY AND ALL RESPONSIBILITY WITH RESPECT TO THE LIABILITY DAMAGES OR EXTRA WORK RESULTING FROM SAID CHANGES.

5. BUILDING PERMITS, IF REQUIRED, MUST BE OBTAINED BEFORE STARTING CONSTRUCTION.

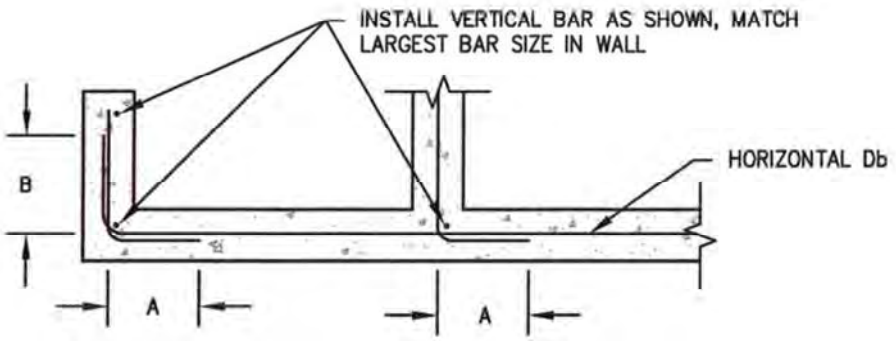
6. ALL STRUCTURE SUBGRADES AND STEEL REINFORCEMENT SHALL BE INSPECTED AND APPROVED BY DISTRICT ENGINEER PRIOR TO CONCRETE PLACEMENT OR BACKFILL. BACKFILL SHALL NOT OCCUR UNTIL 7 DAYS AFTER CONCRETE PLACEMENT.

PESCADERO

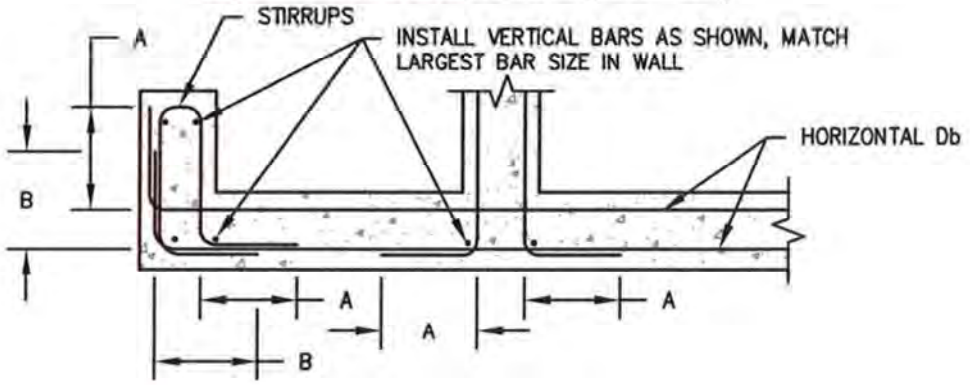
RECLAMATION DISTRICT 2058

CONCRETE NOTES

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-01
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-01.DWG		



SINGLE CURTAIN REINFORCEMENT (PLAN VIEW)



DOUBLE CURTAIN REINFORCEMENT (PLAN VIEW)

TYPICAL ANGLE/CORNER REINFORCEMENT							
BAR SIZE		#4	#5	#6	#7	#8	#9
GRADE 60	A	1'-6"	1'-6"	2'-0"	2'-9"	3'-7"	4'-6"
	B	1'-9"	2'-6"	3'-6"	4'-9"	6'-2"	7'-8"

MINIMUM CONCRETE COVER, 2006 IBC, SECTION 1907.7.1		
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH		3"
CONCRETE EXPOSED TO EARTH OR WEATHER		
	NO. 5 BAR OR SMALLER	1-1/2"
	NO. 6 BAR OR LARGER	2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND		
	SLABS, WALLS AND JOISTS	3/4"
	BEAMS AND COLUMNS	1-1/2"

Db = BAR DIAMETER
D = FINISHED INSIDE BEND DIA
D = 6Db FOR #3 THROUGH #8

CONSTRUCTION NOTE

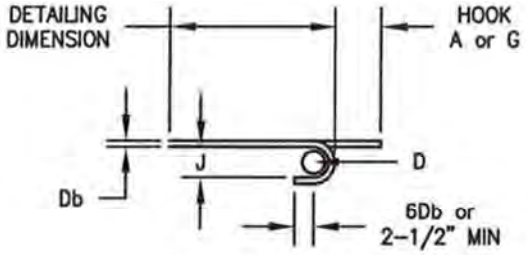
ALL STEEL REINFORCEMENT SHALL CONFORM TO APPLICABLE PROVISIONS OF ACI-318.

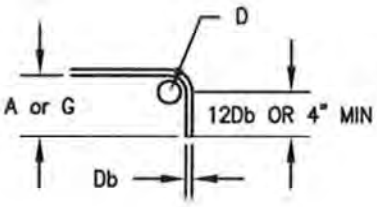
PESCADERO

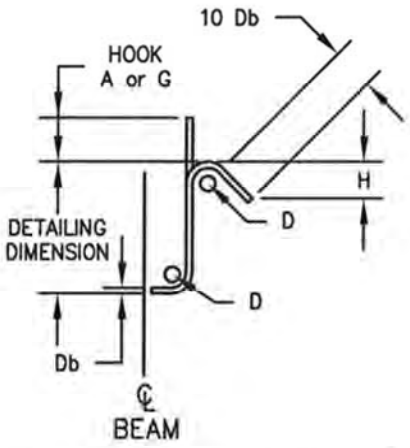
RECLAMATION DISTRICT 2058

STEEL REINFORCING (1)

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-02
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-02.DWG		





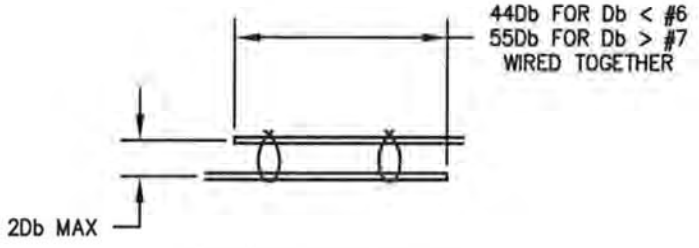


DIMENSIONS OF STANDARD 180° HOOKS			
BAR SIZE	A OR G	J	D
#3	5"	3"	2-1/4"
#4	6"	4"	3"
#5	7"	5"	3-3/34"
#6	8"	6"	4-1/2"
#7	10"	7"	5-1/4"
#8	11"	8"	6"

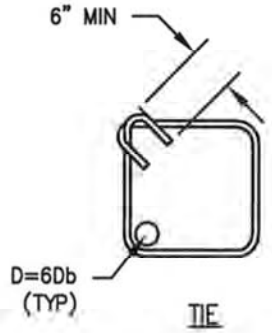
DIMENSIONS OF STANDARD 90° HOOKS	
A OR G	D
6"	2-1/4"
8"	3"
10"	3-3/34"
12"	4-1/2"
14"	5-1/4"
16"	6"

135° SEISMIC HOOK			
BAR SIZE	A OR G	D	APPROX. H
#3	5"	1-1/2"	3-1/2"
#4	6-1/2"	2"	4-1/2"
#5	8"	2-1/2"	5-1/2"
#6	11"	4-1/2"	6-1/2"
#7	12-1/2"	5-1/4"	7-3/4"
#8	14-1/2"	6"	9"

REINFORCEMENT BEND



STRAIGHT REBAR SPLICE



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REINFORCING STEEL NOTES

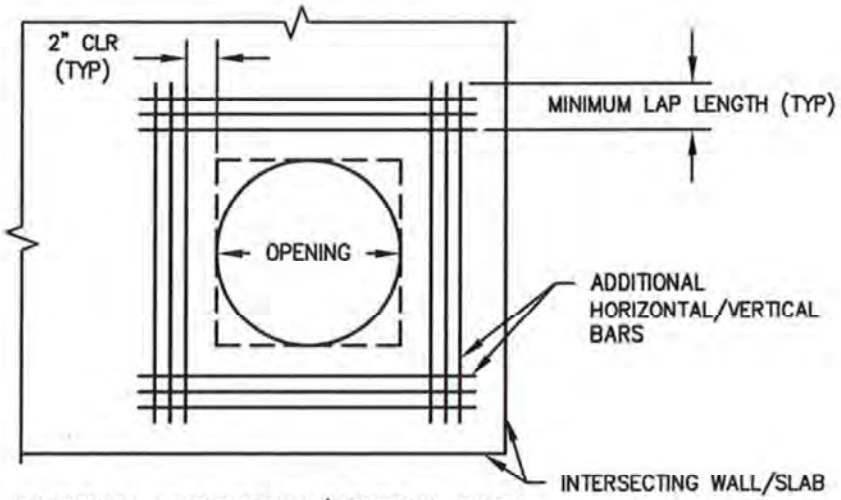
1. ALL REBAR SHALL BE GRADE 60.
2. SPLICES AND HOOKS MADE IN REINFORCING STEEL SHALL BE STAGGERED AND LAPPED IN ACCORDANCE WITH ACI-318.
3. SLAB REINFORCING SHALL BE LOCATED IN THE CENTER OF THE SLAB, UNLESS NOTED OTHERWISE.
4. ALL BARS SHALL BE FREE OF EXCESSIVE RUST, MUD, OIL, AND GREASE.

PESCADERO

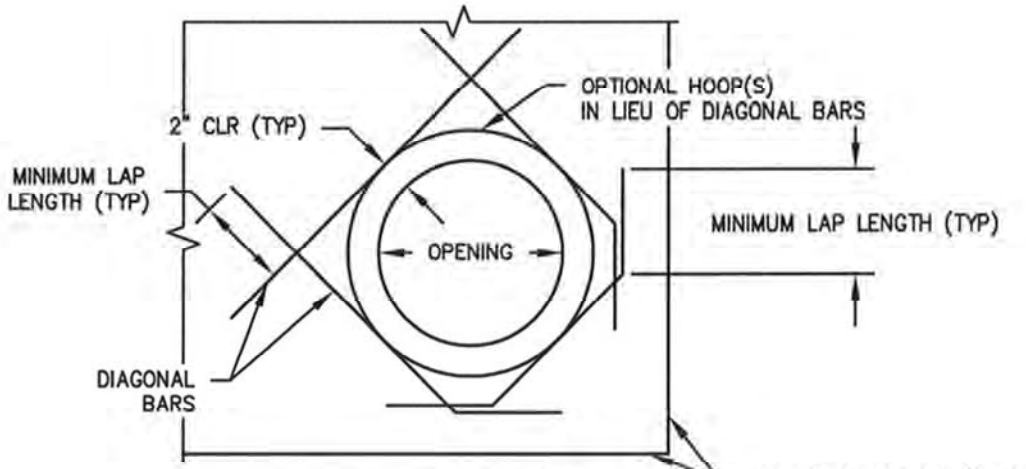
RECLAMATION DISTRICT 2058

STEEL REINFORCING (2)

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-02
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-02.DWG		



ADDITIONAL HORIZONTAL/VERTICAL BARS



DIAGONAL BARS/HOOPS

PESCADERO RECLAMATION DISTRICT 2058			OPENING REINFORCEMENT (1)	
DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-03
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-03.DWG		

CONSTRUCTION NOTES

1. ALL OPENINGS (SQUARE AND CIRCULAR)

   1.1. INSTALL ADDITIONAL HORIZONTAL AND VERTICAL REINFORCEMENT ABOVE, BELOW, AND TO EACH SIDE OF THE OPENING. ADDITIONAL STEEL AREA SHALL BE EQUAL TO THE STEEL AREA CUT BY THE OPENING, AND SHALL BE EVENLY DIVIDED EACH SIDE OF THE OPENING. ALL CUT BARS SHALL BE CUT 2 INCHES FROM THE OPENING.

   1.2. ADDITIONAL BARS SHALL BE INSTALLED WITHIN 2 WALL THICKNESSES OF THE OPENING (INCREASE BAR SIZE AS REQUIRED). MAINTAIN MINIMUM 2 INCHES CLEARANCE BETWEEN BARS. IF THE OPENING IS WITHIN 1 WALL THICKNESS OF AN INTERSECTING (PERPENDICULAR) SLAB OR WALL, THE ADDITIONAL REINFORCEMENT ADJACENT TO INTERSECTING SLAB OR WALL MAY BE OMITTED.

   1.3. OPENINGS LESS THAN 12 INCHES IN DIAMETER OR MAXIMUM WIDTH DO NOT REQUIRE ADDITIONAL HORIZONTAL AND VERTICAL REINFORCEMENT, BUT ADDITIONAL DIAGONAL BARS OR HOOPS SHALL BE INSTALLED AROUND CIRCULAR OPENINGS AS SPECIFIED IN NOTE 2, BELOW.

   1.4. FOR MINIMUM LAP LENGTHS, REFER TO DISTRICT DETAIL 1-02, STEEL REINFORCING. EXTEND REBAR INTO ADJACENT WALLS/SLABS AS REQUIRED TO MAINTAIN MINIMUM LAP LENGTHS. REFER TO DISTRICT DETAIL 1-02 FOR HOOK REQUIREMENTS.

2. CIRCULAR OPENINGS ONLY

   2.1. INSTALL ADDITIONAL HORIZONTAL AND VERTICAL REINFORCEMENT AS SPECIFIED IN NOTE 1, ABOVE.

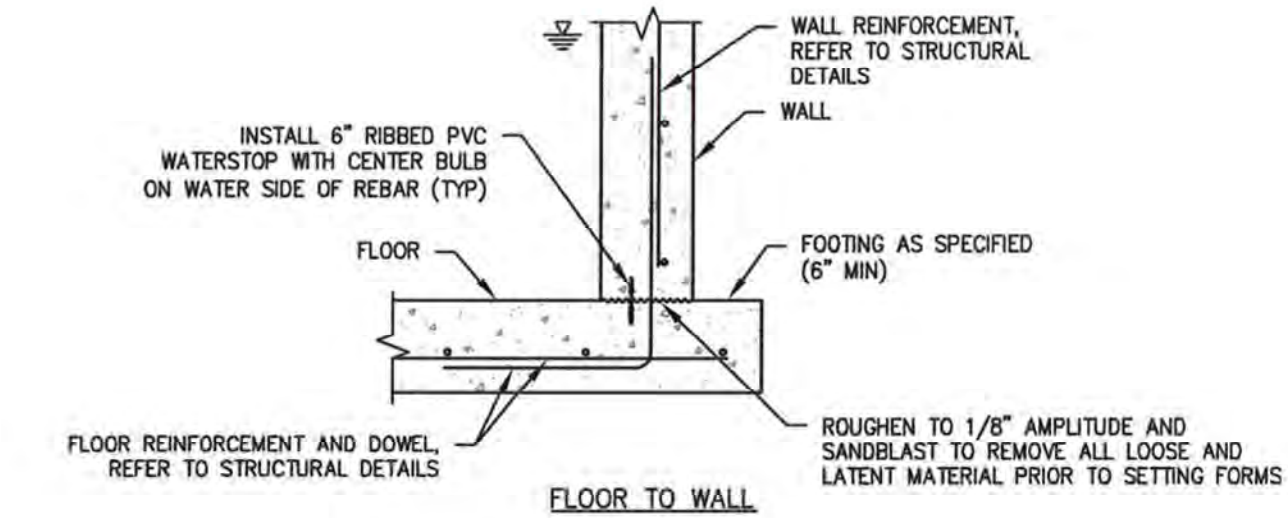
   2.2. INSTALL EITHER DIAGONAL BARS OR HOOPS AS FOLLOWS

      2.2.1. DIAGONAL BARS: INSTALL 4 DIAGONAL BARS PER MAT OF STEEL. DIAGONAL BAR SIZE SHALL MATCH THE LARGEST BAR SIZE IN THE WALL OR SLAB. DIAGONAL BARS MAY BE BENT AND LAPPED WITH ADJACENT BARS NEAR INTERSECTION SLABS, WALLS, OR OTHER OBSTRUCTIONS.

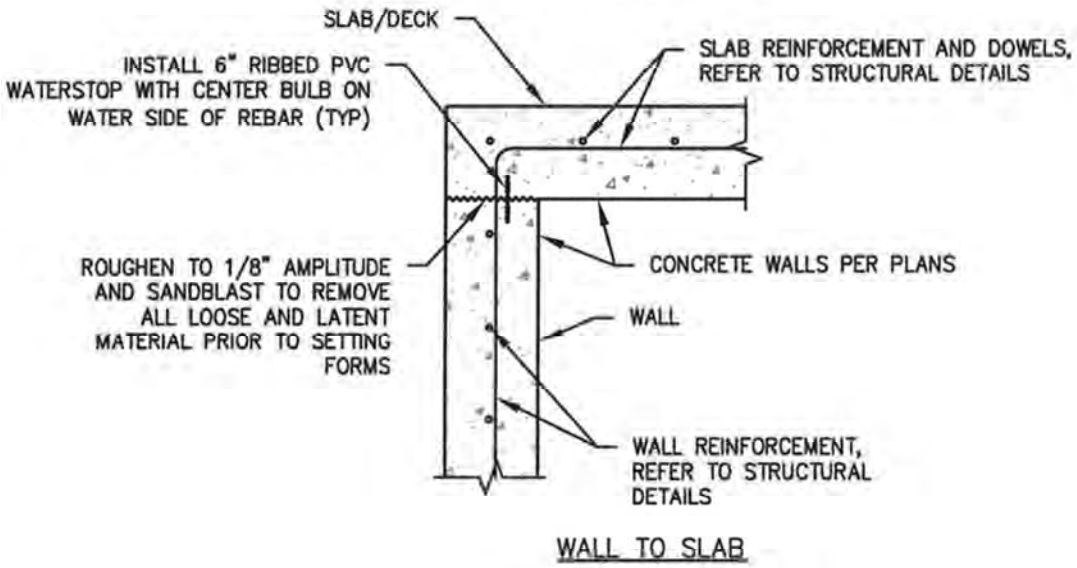
      2.2.2. HOOPS: INSTALL 1 HOOP PER MAT OF STEEL. HOOP SIZE SHALL BE ONE BAR SIZE GREATER THAN THE LARGEST BAR SIZE IN THE WALL OR SLAB.

3. ALL STEEL REINFORCEMENT SHALL CONFORM TO APPLICABLE PROVISIONS OF ACI-318.

PESCADERO RECLAMATION DISTRICT 2058			OPENING REINFORCEMENT (2)	
DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-03
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-03.DWG		



FLOOR TO WALL

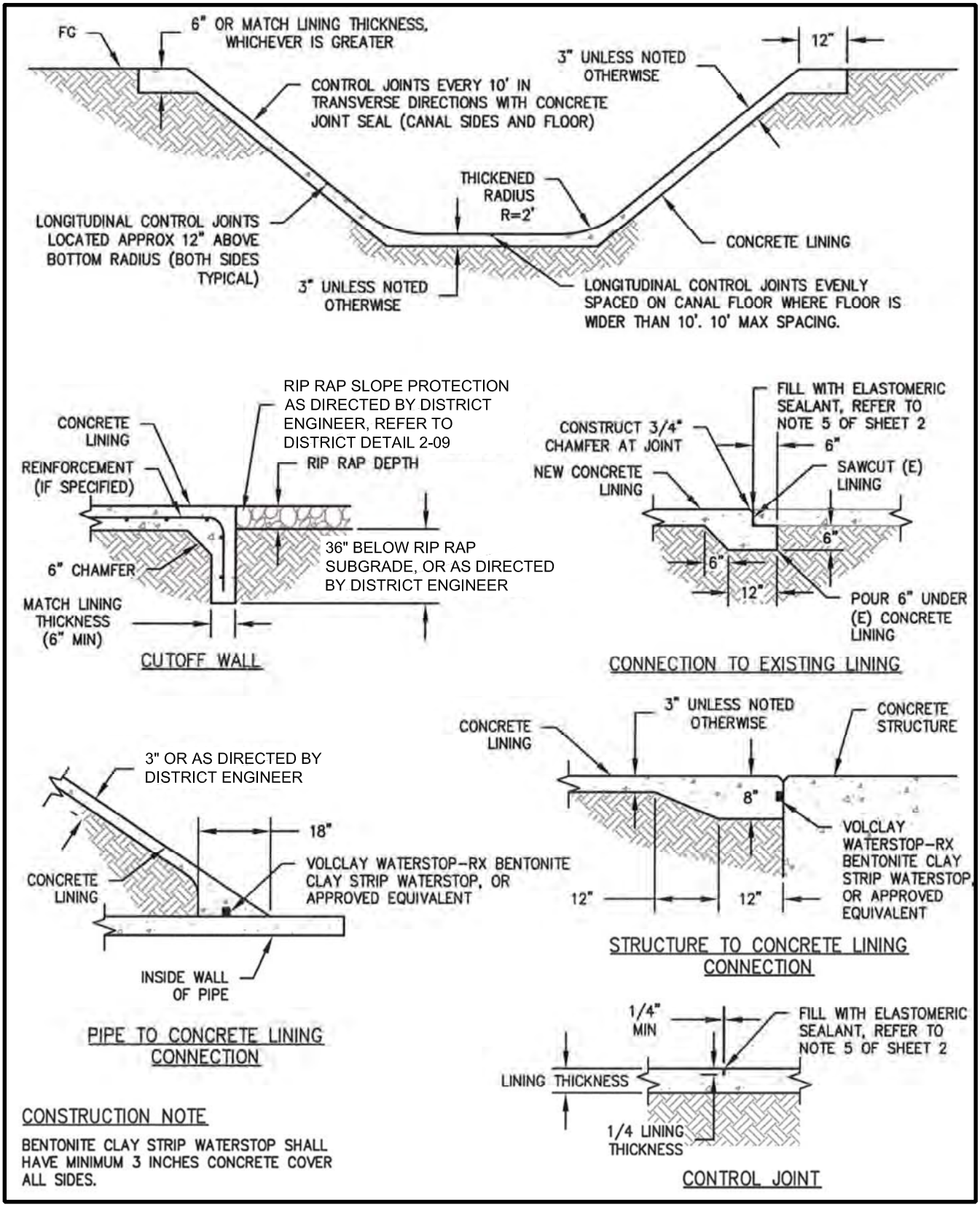


WALL TO SLAB

CONSTRUCTION NOTES

1. ALL JOINTS BETWEEN CONCRETE POURS SHALL BE APPROVED CONSTRUCTION JOINTS. ALL CONSTRUCTION JOINTS SHALL CONFORM TO THE STANDARD AND DISTRICT DETAIL 1-01, CONCRETE NOTES.
2. CONSTRUCTION JOINTS ARE REQUIRED FOR ALL FLOOR/SLAB TO WALL TRANSITIONS.
3. CONSTRUCTION JOINTS SHALL BE PLACED AS SHOWN ON THE PLANS OR AS PRE-APPOVED BY DISTRICT ENGINEER. JOINTS SHALL BE THOROUGHLY CLEANED AND LAITANCE REMOVED BEFORE A NEW POUR IS MADE. EACH JOINT SHALL BE WETTED IMMEDIATELY BEFORE THE PLACING OF NEW CONCRETE.
4. WATER STOP SHALL BE 6 INCH RIBBED PVC WATER STOP WITH CENTER BULB.
5. REINFORCING STEEL SHALL JOIN THE CONCRETE BETWEEN POURS WITH A MINIMUM OVERLAP CONFORMING TO DISTRICT DETAIL 1-02: STEEL REINFORCING.
6. THIS DETAIL INTENTIONALLY DOES NOT SPECIFY CONCRETE THICKNESS OR REINFORCEMENT SIZE WHICH SHOULD BE DESIGNED SEPARATELY.

PESCADERO RECLAMATION DISTRICT 2058			CONSTRUCTION JOINT	
DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-04
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-04.DWG		



CONSTRUCTION NOTE

BENTONITE CLAY STRIP WATERSTOP SHALL HAVE MINIMUM 3 INCHES CONCRETE COVER ALL SIDES.

PESCADERO

RECLAMATION DISTRICT 2058

CONCRETE LINED CANAL (1)

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-05
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-05.DWG		

CONSTRUCTION NOTES

1. BACKFILL AND SUBGRADES SHALL BE COMPACTED TO MINIMUM 90% RELATIVE COMPACTION PER ASTM D-1557 AND SHALL BE MANUALLY COMPACTED A MINIMUM OF 12 INCHES OVER TOP OF PIPE OR AS DIRECTED BY DISTRICT ENGINEER.

2. CONTROL JOINT DEPTH SHALL BE MINIMUM 1/4 OF LINING THICKNESS AND 1/4 INCH WIDE AS SHOWN IN THE CONTROL JOINT DETAIL AND SHALL BE LOCATED EVERY 10 FEET IN THE TRANSVERSE DIRECTION AND LONGITUDINALLY APPROXIMATELY 12 INCHES ABOVE THE BOTTOM RADIUS ON BOTH SIDES.

3. TRANSITIONS

3.1. CONCRETE LINED CANALS :
SAW CUT EXISTING LINING AT A LOCATION APPROVED BY AND AS DIRECTED BY DISTRICT ENGINEER. UNDER-LAP EXISTING LINING A MINIMUM OF 6 INCHES UNDER THE SAWCUT EDGE (BOTH SIDES AND BOTTOM) AS SHOWN IN THE CONNECTION TO EXISTING LINING DETAIL. DAMAGE TO THE EXISTING CONCRETE LINING WILL REQUIRE REPAIR OR REPLACEMENT AS DIRECTED BY DISTRICT ENGINEER.

3.2 EARTHEN CANALS:
NEW LINING SIDE SLOPES SHALL MATCH EXISTING CANAL SIDE SLOPES, OR AS DIRECTED BY DISTRICT ENGINEER. SIDE SLOPES SHALL BE NO STEEPER THAN 1-1/2 HORIZONTAL TO 1 VERTICAL UNLESS PRE-APPROVED BY BY DISTRICT ENGINEER. SIDE SLOPES SHALL BE FEATHERED BACK TO MATCH THE EXISTING CANAL BANKS FOR 10 LINEAR FEET UPSTREAM AND DOWNSTREAM OF THE CONCRETE LINING TRANSITION, OR AS DIRECTED BY DISTRICT ENGINEER. RIP RAP OR CONCRETE LINING SLOPE PROTECTION SHALL BE INSTALLED AS DIRECTED BY DISTRICT ENGINEER. REFER TO DISTRICT DETAIL 2-09, RIP RAP SLOPE PROTECTION.

4. CONCRETE LINING SHALL BE POURED IN PLACE, AT MINIMUM 3 INCHES THICK. CEMENT SHALL BE TYPE II PORTLAND CEMENT. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2,500 PSI. SLUMP SHALL BE A MAXIMUM OF 4 INCHES. CONCRETE SHALL BE PREVENTED FROM DRYING FOR A CURING PERIOD OF AT LEAST 7 DAYS AFTER IT IS PLACED. EXPOSED SURFACES SHALL BE KEPT CONTINUOUSLY MOIST FOR THE ENTIRE PERIOD, OR AN APPROVED CURING COMPOUND SHALL BE APPLIED AFTER FINISHING AT A RATE OF ONE GALLON PER 150 SQUARE FEET. REINFORCEMENT SHALL BE EITHER FIBER MESH "MD" AT 2.0 POUNDS PER CUBIC YARD OF CONCRETE OR 6"x6" -W2.1xW2.1 WELDED WIRE FABRIC AS DIRECTED BY DISTRICT ENGINEER.

5. ALL COLD JOINT INTERFACES BETWEEN CONCRETE SURFACES SHALL BE FILLED WITH SIKAFLEX 1A ELASTOMERIC SEALANT OR APPROVED EQUIVALENT. CONCRETE SHALL CURE FOR AT LEAST 72 HOURS PRIOR TO SEALANT PLACEMENT. CLEAN OUT GAP PRIOR TO SEALANT PLACEMENT AND APPLY ACCORDING TO PRODUCT MANUFACTURER REQUIREMENTS. SEALANT SHALL FILL JOINT COMPLETELY.

6. SHOTCRETE LINING MAY BE INSTALLED AS AN ALTERNATIVE TO CONCRETE LINING. DESIGN MIX SHALL BE PRE-APPROVED BY DISTRICT ENGINEER.

7. STRUCTURE TO LINING CONNECTIONS MAY REQUIRE REBAR DOWELS AS DIRECTED BY DISTRICT ENGINEER.

PESCADERO
RECLAMATION DISTRICT 2058

CONCRETE LINED CANAL (2)

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-05
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-05.DWG		

1. FOR CONCRETE SPECIFICATIONS REFER TO DISTRICT DETAIL 1-01, CONCRETE NOTES.

2. BACKFILL AND SUBGRADES SHALL BE COMPACTED TO MINIMUM 90% RELATIVE COMPACTION PER ASTM D-1557 AND SHALL MANUALLY COMPACTED A MINIMUM OF 12 INCHES OVER TOP OF PIPE OR AS DIRECTED BY DISTRICT ENGINEER.

3. WATERSTOP SHALL BE VOLCLAY WATERSTOP-RX BENTONITE CLAY STRIP WATERSTOP OR APPROVED EQUIVALENT, PLACED AROUND OUTSIDE OF PIPE IN CENTER OF WALL.

4. REFER TO DISTRICT DETAIL 1-02: STEEL REINFORCING FOR ALL REBAR SPLICES. REINFORCEMENT SHALL BE PLACED IN THE CENTER OF WALLS AND SLABS UNLESS SPECIFIED OTHERWISE.

5. DIMENSIONS, ELEVATIONS, PIPE SIZES, AND STRUCTURE LOCATION SHALL BE DETERMINED BY DISTRICT ENGINEER.

6. ADD STANDARD OPENING REINFORCEMENT AT GATE OPENINGS. REFER TO DISTRICT DETAIL 1-03: OPENING REINFORCEMENT.

7. GATE FRAME SHALL BE SECURELY BOLTED TO CONCRETE STRUCTURE WITH STAINLESS STEEL BOLTS. TOP ANCHORS SHALL BE INSTALLED WITHIN 6 INCHES OF TOP OF CONCRETE WALL.

8. ALL SLIDE GATES SHALL HAVE STOP NUT, GALVANIZED FRAME AND STAINLESS STEEL RISING STEM.

9. IF PVC PIPE IS INSTALLED IN PLACE OF RGRCP, A MORRIL 2005 M&M GALVANIZED STEEL STARTER COUPLER WITH WEEP RING, OR APPROVED EQUIVALENT, SHALL BE CAST INTO TURNOUT HEADWALL. PVC PIPE SHALL BE MINIMUM 100 PSI PIP WITHIN LIMITS OF RIGHT OF WAY.

10. SITE CONDITIONS MAY REQUIRE ADDITIONAL CUTOFF WALLS AND/OR COLLARS TO PREVENT SEEPAGE OR SLIDING, AS DIRECTED BY DISTRICT ENGINEER.

11. IF CONCRETE PIPE IS INSTALLED AT HEADWALL CONNECTION, USE SPIGOT END OF PIPE OR CUT OFF PIPE BELL.

12. UPSTREAM SUBMERGENCE ON TURNOUT(S) SHOULD BE AT LEAST ONE PIPE DIAMETER ABOVE TOP OF PIPE.

13. SUFFICIENT SUBMERGENCE MUST OCCUR DOWN STREAM OF TURNOUT(S) TO ENSURE FULL PIPE FLOW SUCH THAT A READABLE WATER SURFACE IS PRESENT IN THE DOWNSTREAM STILLING WELL (MINIMUM ONE FOOT ABOVE TOP OF PIPE DESIRED).

14. THE DIFFERENCE BETWEEN UPSTREAM AND DOWNSTREAM WATER SURFACE ELEVATIONS ACROSS TURNOUT(S) SHALL BE 12 INCHES TO 18 INCHES MAXIMUM.

15. THE GATE DISCHARGE TABLE BEING USED FOR THE TURNOUT SHOULD BE VERIFIED TO ENSURE THAT IT APPLIES TO THE CONDITIONS ENCOUNTERED IN THE FIELD AND TO THE BRAND AND TYPE OF GATE BEING USED.

16. DISCHARGE TABLES FOR ROUND BOTTOM GATES MUST NOT BE USED FOR SQUARE BOTTOM GATES AND VICE VERSA. GATE SETTINGS MUST BE MADE AND READ ACCURATELY, WHICH REQUIRES THAT THE GATE POSITION INDICATORS BE IN GOOD CONDITION AND INDICATE THE TRUE OPENING.

17. STILLING WELLS SHALL BE PERIODICALLY FLUSHED TO MAKE SURE THEY ARE OPERATING PROPERLY AND FREE OF OBSTRUCTIONS AND SILT. WEEDS, TRASH, AND SEDIMENT MUST BE REMOVED FROM THE APPROACH TO THE GATE BECAUSE THEY CAN CAUSE FLOW DISTURBANCES THAT MAY RESULT IN ERRONEOUS HEAD DIFFERENTIAL READINGS.

18. MEASUREMENT ACCURACY ASSUMED TO BE BETWEEN 3 AND 6 PERCENT IN ACCORDANCE WITH "DISCHARGE MEASUREMENT STRUCTURES, THIRD REVISED EDITION, EDITED BY M.G. BOS, PUBLICATION 20, INTERNATIONAL INSTITUTE FOR LAND RECLAMATION AND IMPROVEMENT, 1989.

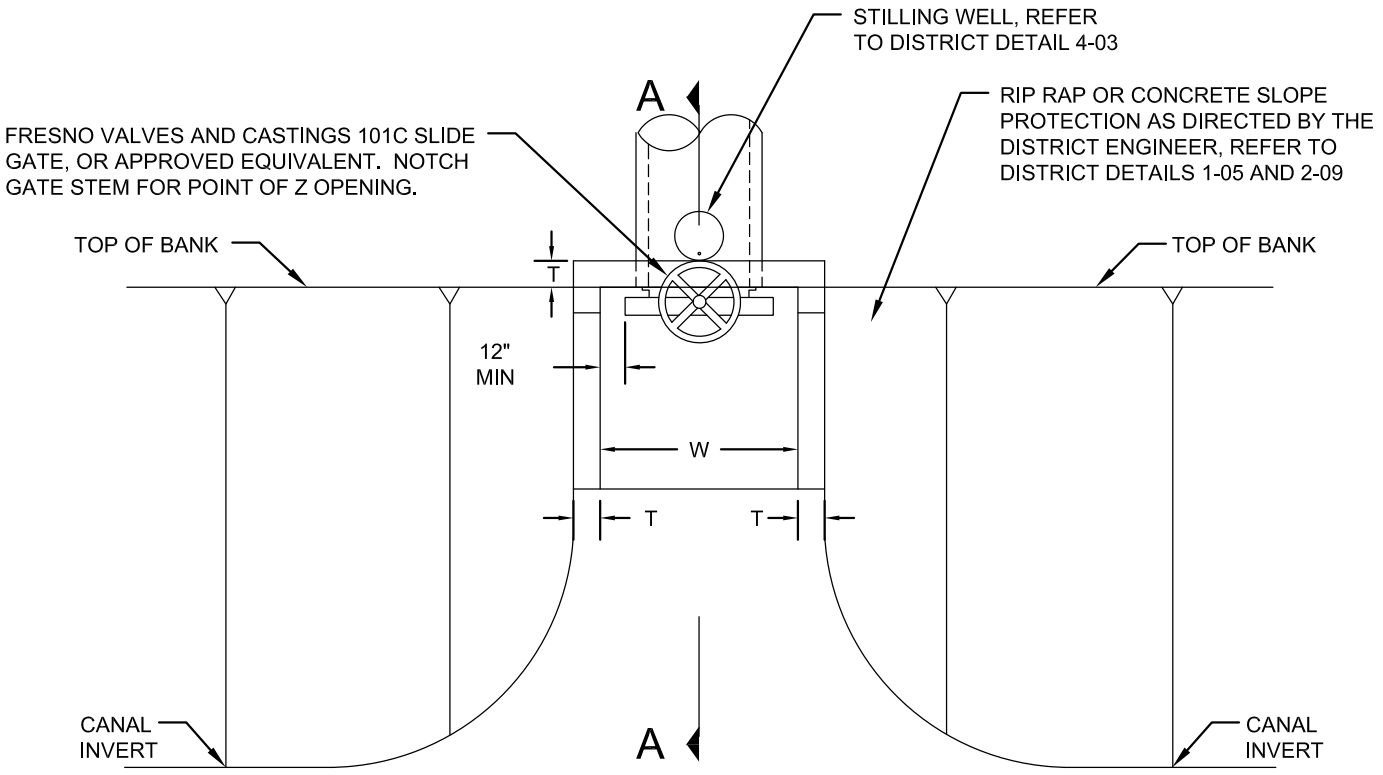
TABLE A

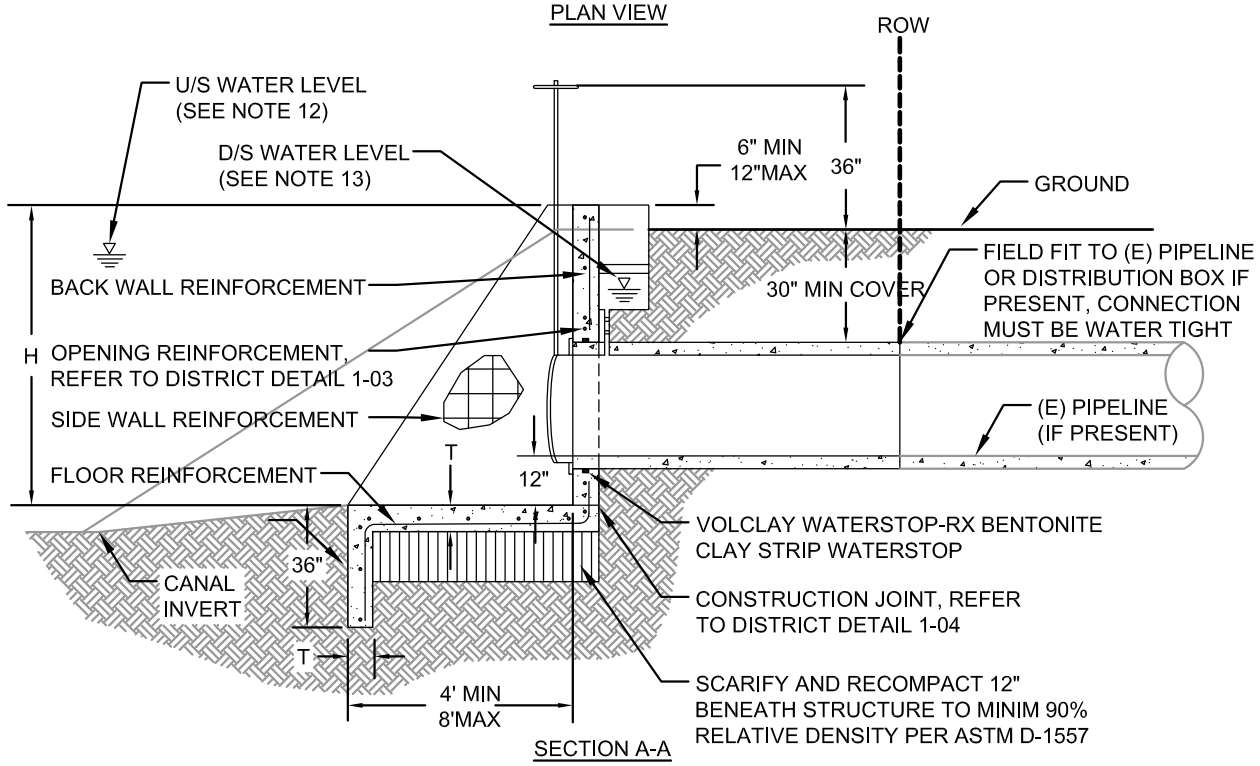
DIM "H" MAX HEIGHT	MAX PIPE SIZE	DIM "W" MAX WIDTH	FLOOR REINFORCEMENT	WALL REINFORCEMENT
6'	24"	4'	#4 @ 12" O.C. EACH WAY	#4 @ 12" O.C. EACH WAY
12'	48"	6'	#4 @ 12" O.C. EACH WAY	#4 @ 12" O.C. VERT #5 @ 12" O.C. HORZ
> 12'	BY DESIGN			

PESCADERO
RECLAMATION DISTRICT 2058

CAST-IN-PLACE METER GATE

DRAWN BY: NWP-DIST. ENGR.	DATE: 8-1-2018	SCALE: NTS	ADOPTED BY THE DISTRICT:	DRAWING NO.
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-06.DWG	RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	1-06

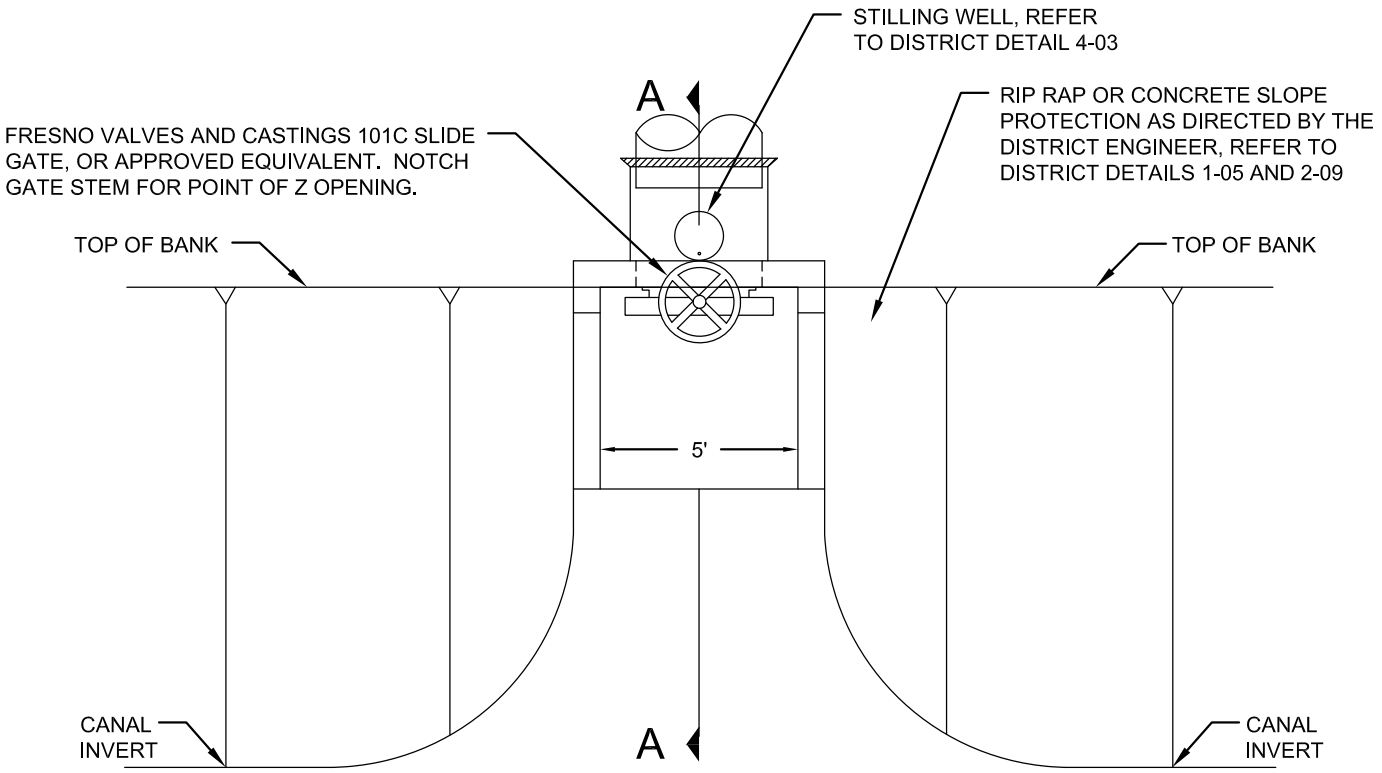




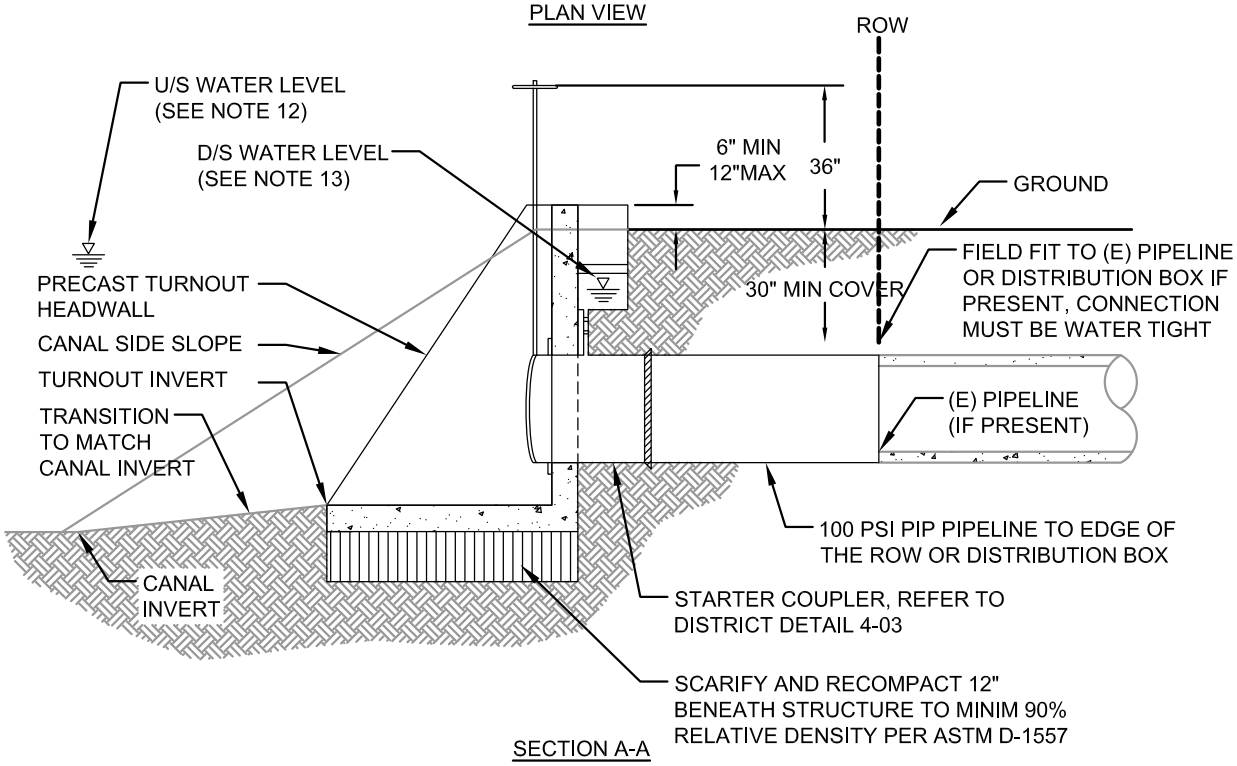
PESCADERO
RECLAMATION DISTRICT 2058

CAST-IN-PLACE METER GATE

DRAWN BY: NWP-DIST. ENGR.	DATE: 8-1-2018	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-06
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-06.DWG		



PLAN VIEW



SECTION A-A

PESCADERO
RECLAMATION DISTRICT 2058

PRECAST METER GATE

DRAWN BY: NWP-DIST. ENGR.	DATE: 8-1-2018	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-07
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-07.DWG		

1. BACKFILL AND SUBGRADES SHALL BE COMPACTED TO MINIMUM 90% RELATIVE COMPACTION PER ASTM D-1557 AND SHALL MANUALLY COMPACTED A MINIMUM OF 12 INCHES OVER TOP OF PIPE OR AS DIRECTED BY DISTRICT ENGINEER.

2. TURNOUT SHALL BE SUPPLIED WITH PVC PIPE STARTER COUPLER, REFER TO DISTRICT DETIAL 4-03, TURNOUT STILLING WELL.

3. DIMENSIONS, ELEVATIONS, PIPE SIZES, AND STRUCTURE LOCATION SHALL BE DETERMINED BY DISTRICT ENGINEER.

4. GATE FRAME SHALL BE SECURELY BOLTED TO CONCRETE STRUCTURE WITH STAINLESS STEEL BOLTS. TOP ANCHORS SHALL BE INSTALLED WITHIN 6 INCHES OF TOP OF CONCRETE WALL.

5. ALL SLIDE GATES SHALL HAVE STOP NUT, GALVANIZED FRAME AND STAINLESS STEEL RISING STEM.

6. SITE CONDITIONS MAY REQUIRE ADDITIONAL CUTOFF WALLS AND/OR COLLARS TO PREVENT SEEPAGE OR SLIDING, AS DIRECTED BY DISTRICT ENGINEER.

7. UPSTREAM SUBMERGENCE ON TURNOUT(S) SHOULD BE AT LEAST ONE PIPE DIAMETER ABOVE TOP OF PIPE.

8. SUFFICIENT SUBMERGENCE MUST OCCUR DOWN STREAM OF TURNOUT(S) TO ENSURE FULL PIPE FLOW SUCH THAT A READABLE WATER SURFACE IS PRESENT IN THE DOWNSTREAM STILLING WELL (MINIMUM ONE FOOT ABOVE TOP OF PIPE DESIRED).

9. THE DIFFERENCE BETWEEN UPSTREAM AND DOWNSTREAM WATER SURFACE ELEVATIONS ACROSS TURNOUT(S) SHALL BE 12 INCHES TO 18 INCHES MAXIMUM.

10. THE GATE DISCHARGE TABLE BEING USED FOR THE TURNOUT SHOULD BE VERIFIED TO ENSURE THAT IT APPLIES TO THE CONDITIONS ENCOUNTERED IN THE FIELD AND TO THE BRAND AND TYPE OF GATE BEING USED.

11. DISCHARGE TABLES FOR ROUND BOTTOM GATES MUST NOT BE USED FOR SQUARE BOTTOM GATES AND VICE VERSA. GATE SETTINGS MUST BE MADE AND READ ACCURATELY, WHICH REQUIRES THAT THE GATE POSITION INDICATORS BE IN GOOD CONDITION AND INDICATE THE TRUE OPENING.

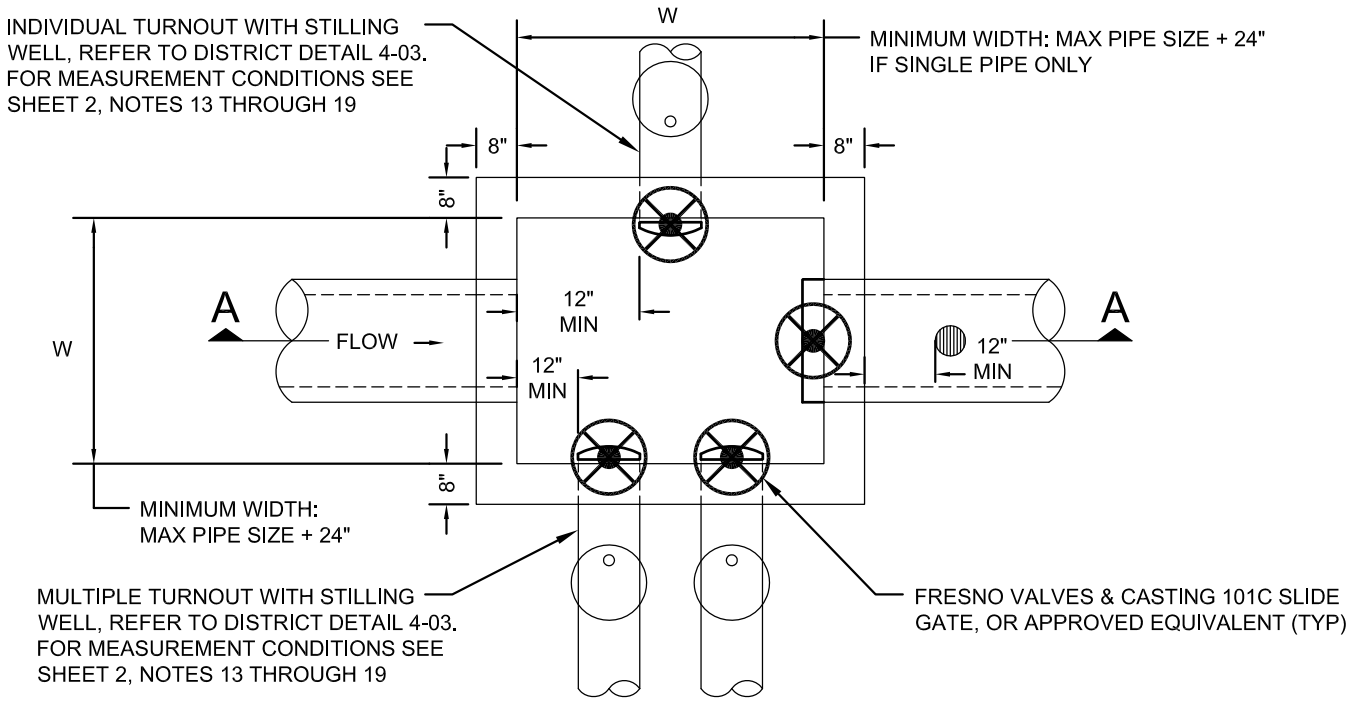
12. STILLING WELLS SHALL BE PERIODICALLY FLUSHED TO MAKE SURE THEY ARE OPERATING PROPERLY AND FREE OF OBSTRUCTIONS AND SILT. WEEDS, TRASH, AND SEDIMENT MUST BE REMOVED FROM THE APPROACH TO THE GATE BECAUSE THEY CAN CAUSE FLOW DISTURBANCES THAT MAY RESULT IN ERRONEOUS HEAD DIFFERENTIAL READINGS.

13. MEASUREMENT ACCURACY ASSUMED TO BE BETWEEN 3 AND 6 PERCENT IN ACCORDANCE WITH "DISCHARGE MEASUREMENT STRUCTURES, THIRD REVISED EDITION, EDITED BY M.G. BOS, PUBLICATION 20, INTERNATIONAL INSTITUTE FOR LAND RECLAMATION AND IMPROVEMENT, 1989.

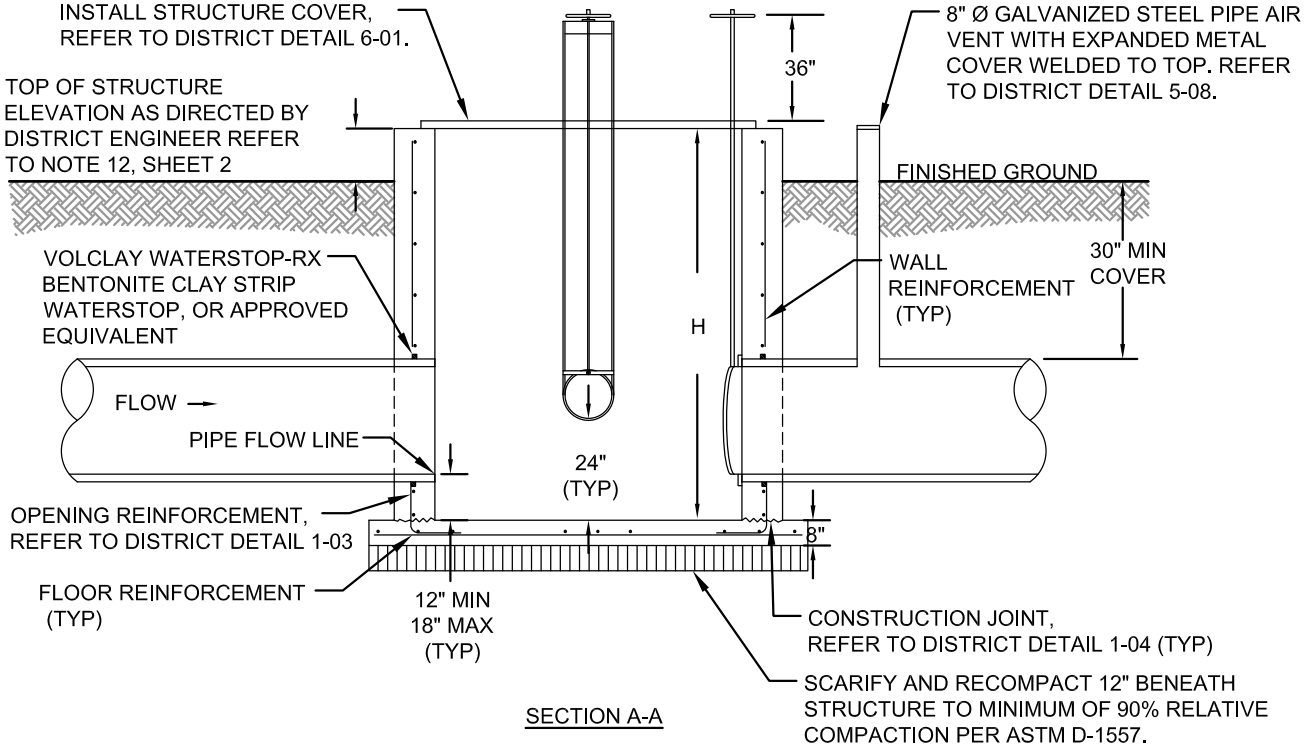
PESCADERO
RECLAMATION DISTRICT 2058

PRECAST
METER GATE

DRAWN BY: NWP-DIST. ENGR.	DATE: 8-1-2018	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-07
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-07.DWG		



PLAN VIEW



SECTION A-A

PESCADERO
RECLAMATION DISTRICT 2058

TYPE 1 TURNOUT (1)

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-09
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-09.DWG		

1. FOR CONCRETE SPECIFICATIONS REFER TO DISTRICT DETAIL 1-01, CONCRETE NOTES.

2. BACKFILL AND SUBGRADES SHALL BE COMPACTED TO MINIMUM 90% RELATIVE COMPACTION PER ASTM D-1557 AND SHALL MANUALLY COMPACTED A MINIMUM OF 12 INCHES OVER TOP OF PIPE OR AS DIRECTED BY DISTRICT ENGINEER.

3. WATERSTOP SHALL BE VOLCLAY WATERSTOP-RX BENTONITE CLAY STRIP WATERSTOP OR APPROVED EQUIVALENT, PLACED AROUND OUTSIDE OF PIPE IN CENTER OF WALL.

4. REFER TO DISTRICT DETAIL 1-02: STEEL REINFORCING FOR ALL REBAR SPLICES. REINFORCEMENT SHALL BE PLACED IN THE CENTER OF WALLS AND SLABS UNLESS SPECIFIED OTHERWISE.

5. DIMENSIONS, ELEVATIONS, PIPE SIZES, AND STRUCTURE LOCATION SHALL BE DETERMINED BY DISTRICT ENGINEER.

6. ADD STANDARD OPENING REINFORCEMENT AT GATE OPENINGS. REFER TO DISTRICT DETAIL 1-03: OPENING REINFORCEMENT.

7. GATE FRAME SHALL BE SECURELY BOLTED TO CONCRETE STRUCTURE WITH STAINLESS STEEL BOLTS. TOP ANCHORS SHALL BE INSTALLED WITHIN 6 INCHES OF TOP OF CONCRETE WALL.

8. ALL SLIDE GATES SHALL HAVE STOP NUT, GALVANIZED FRAME AND STAINLESS STEEL RISING STEM.

9. IF PVC PIPE IS INSTALLED IN PLACE OF RGRCP, A MORRIL INDUSTRIES GALVANIZED STEEL STARTER COUPLER WITH WEEP RING, OR APPROVED EQUIVALENT, SHALL BE CAST INTO TURNOUT HEADWALL. PVC PIPE SHALL BE MINIMUM 100 PSI PIP WITHIN LIMITS OF RIGHT OF WAY. SEE DISTRICT DETAIL 5-10 FOR AIR VENT.

10. SITE CONDITIONS MAY REQUIRE ADDITIONAL CUTOFF WALLS AND/OR COLLARS TO PREVENT SEEPAGE OR SLIDING, AS DIRECTED BY DISTRICT ENGINEER.

11. IF CONCRETE PIPE IS INSTALLED AT HEADWALL CONNECTION, USE SPIGOT END OF PIPE OR CUT OFF PIPE BELL.

12. IF TOP OF STRUCTURE IS 3 FEET OR MORE ABOVE SURROUNDING GRADE, LADDER AND HANDRAILING SHALL BE REQUIRED. REFER TO DISTRICT DETAILS 6-05 AND 6-06, BOX CONTROL STRUCTURE HANDRAILING AND STRUCTURE LADDER.

13. UPSTREAM SUBMERGENCE ON TURNOUT(S) SHOULD BE AT LEAST ONE PIPE DIAMETER ABOVE TOP OF PIPE.

14. SUFFICIENT SUBMERGENCE MUST OCCUR DOWN STREAM OF TURNOUT(S) TO ENSURE FULL PIPE FLOW SUCH THAT A READABLE WATER SURFACE IS PRESENT IN THE DOWNSTREAM STILLING WELL (MINIMUM ONE FOOT ABOVE TOP OF PIPE DESIRED).

15. THE DIFFERENCE BETWEEN UPSTREAM AND DOWNSTREAM WATER SURFACE ELEVATIONS ACROSS TURNOUT(S) SHALL BE 12 INCHES TO 18 INCHES MAXIMUM.

16. THE GATE DISCHARGE TABLE BEING USED FOR THE TURNOUT SHOULD BE VERIFIED TO ENSURE THAT IT APPLIES TO THE CONDITIONS ENCOUNTERED IN THE FIELD AND TO THE BRAND AND TYPE OF GATE BEING USED.

17. DISCHARGE TABLES FOR ROUND BOTTOM GATES MUST NOT BE USED FOR SQUARE BOTTOM GATES AND VICE VERSA. GATE SETTINGS MUST BE MADE AND READ ACCURATELY, WHICH REQUIRES THAT THE GATE POSITION INDICATORS BE IN GOOD CONDITION AND INDICATE THE TRUE OPENING.

18. STILLING WELLS SHALL BE PERIODICALLY FLUSHED TO MAKE SURE THEY ARE OPERATING PROPERLY AND FREE OF OBSTRUCTIONS AND SILT. WEEDS, TRASH, AND SEDIMENT MUST BE REMOVED FROM THE APPROACH TO THE GATE BECAUSE THEY CAN CAUSE FLOW DISTURBANCES THAT MAY RESULT IN ERRONEOUS HEAD DIFFERENTIAL READINGS.

19. MEASUREMENT ACCURACY ASSUMED TO BE BETWEEN 3 AND 6 PERCENT IN ACCORDANCE WITH "DISCHARGE MEASUREMENT STRUCTURES, THIRD REVISED EDITION, EDITED BY M.G. BOS, PUBLICATION 20, INTERNATIONAL INSTITUTE FOR LAND RECLAMATION AND IMPROVEMENT, 1989.

TABLE A

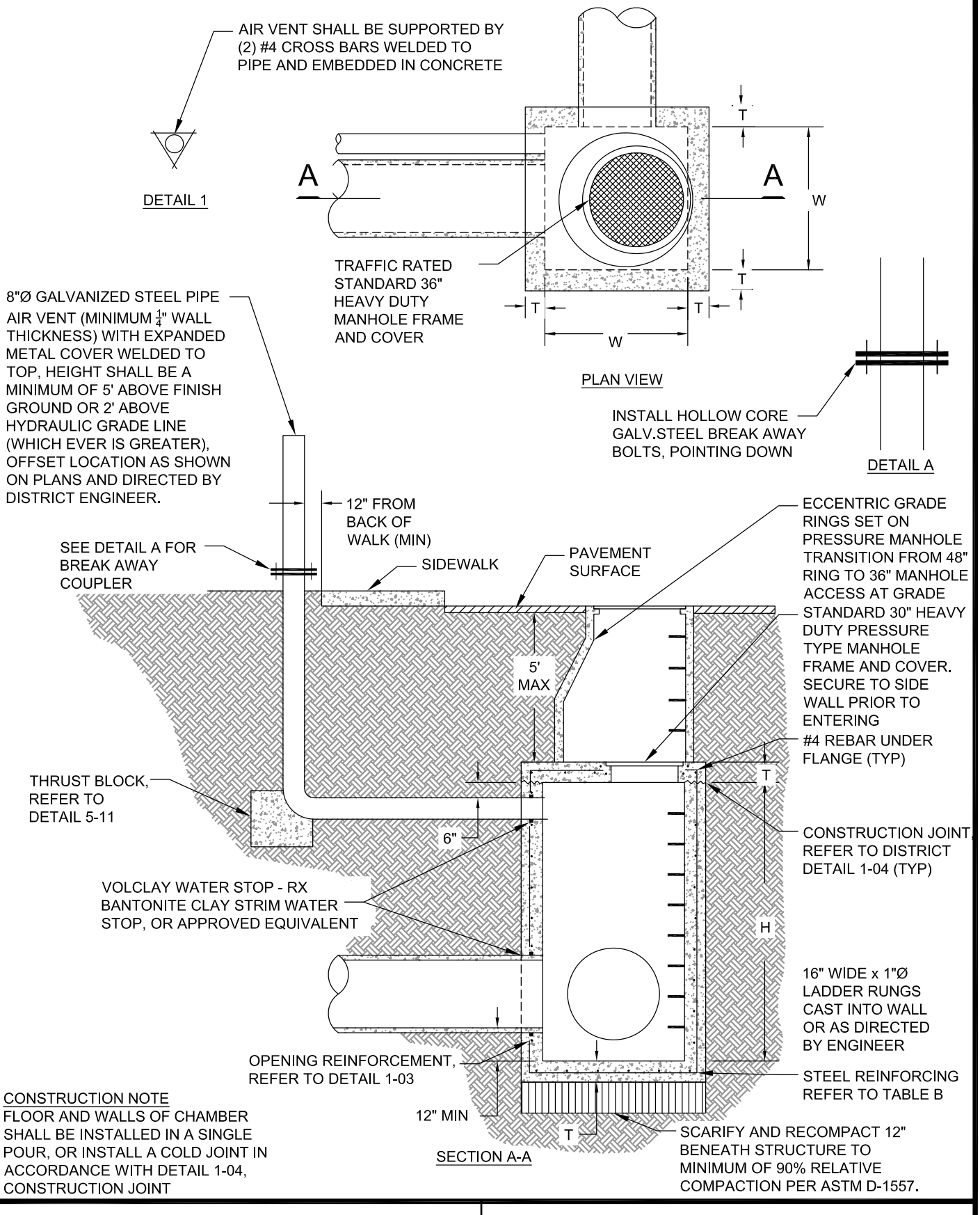
DIM "H" MAX HEIGHT	MAX PIPE SIZE	DIM "W" MAX WIDTH	FLOOR REINFORCEMENT	WALL REINFORCEMENT
6'	24"	4'	#4 @ 12" O.C. EACH WAY	#4 @ 12" O.C. EACH WAY
12'	48"	6'	#4 @ 12" O.C. EACH WAY	#4 @ 12" O.C. VERT #5 @ 12" O.C. HORZ
> 12'	BY DESIGN			

PESCADERO

RECLAMATION DISTRICT 2058

TYPE 1 TURNOUT (2)

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT:	DRAWING NO.
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-09.DWG	RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	1-09



PESCADERO
RECLAMATION DISTRICT 2058

PRESSURE MANHOLE (1)
(BELOW GRADE WITHIN ROAD)

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-14-2020	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-11
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-11.DWG		

1. FOR CONCRETE SPECIFICATIONS REFER TO DISTRICT DETAIL 1-01, CONCRETE NOTES.

2. BACKFILL AND SUBGRADES SHALL BE COMPACTED TO MINIMUM 90% RELATIVE COMPACTION PER ASTM D-1557 AND SHALL MANUALLY COMPACTED A MINIMUM OF 12 INCHES OVER TOP OF PIPE OR AS DIRECTED BY DISTRICT ENGINEER.

3. WATERSTOP SHALL BE VOLCLAY WATERSTOP-RX BENTONITE CLAY STRIP WATERSTOP OR APPROVED EQUIVALENT, PLACED AROUND OUTSIDE OF PIPE IN CENTER OF WALL.

4. REFER TO DISTRICT DETAIL 1-02: STEEL REINFORCING FOR ALL REBAR SPLICES. REINFORCEMENT SHALL BE PLACED IN THE CENTER OF WALLS AND SLABS UNLESS SPECIFIED OTHERWISE.

5. DIMENSIONS, ELEVATIONS, PIPE SIZES, AND STRUCTURE LOCATION SHALL BE DETERMINED BY DISTRICT ENGINEER.

6. ADD STANDARD OPENING REINFORCEMENT AT GATE OPENINGS. REFER TO DISTRICT DETAIL 1-03: OPENING REINFORCEMENT.

7. IF PVC PIPE IS INSTALLED IN PLACE OF RGRCP, A MORRIL INDUSTRIES GALVANIZED STEEL STARTER COUPLER WITH WEEP RING, OR APPROVED EQUIVALENT, SHALL BE CAST INTO TURNOUT HEADWALL. PVC PIPE SHALL BE MINIMUM 100 PSI PIP WITHIN LIMITS OF RIGHT OF WAY.

8. SITE CONDITIONS MAY REQUIRE ADDITIONAL CUTOFF WALLS AND/OR COLLARS TO PREVENT SEEPAGE OR SLIDING, AS DIRECTED BY DISTRICT ENGINEER.

9. IF CONCRETE PIPE IS INSTALLED AT HEADWALL CONNECTION, USE SPIGOT END OF PIPE OR CUT OFF PIPE BELL.

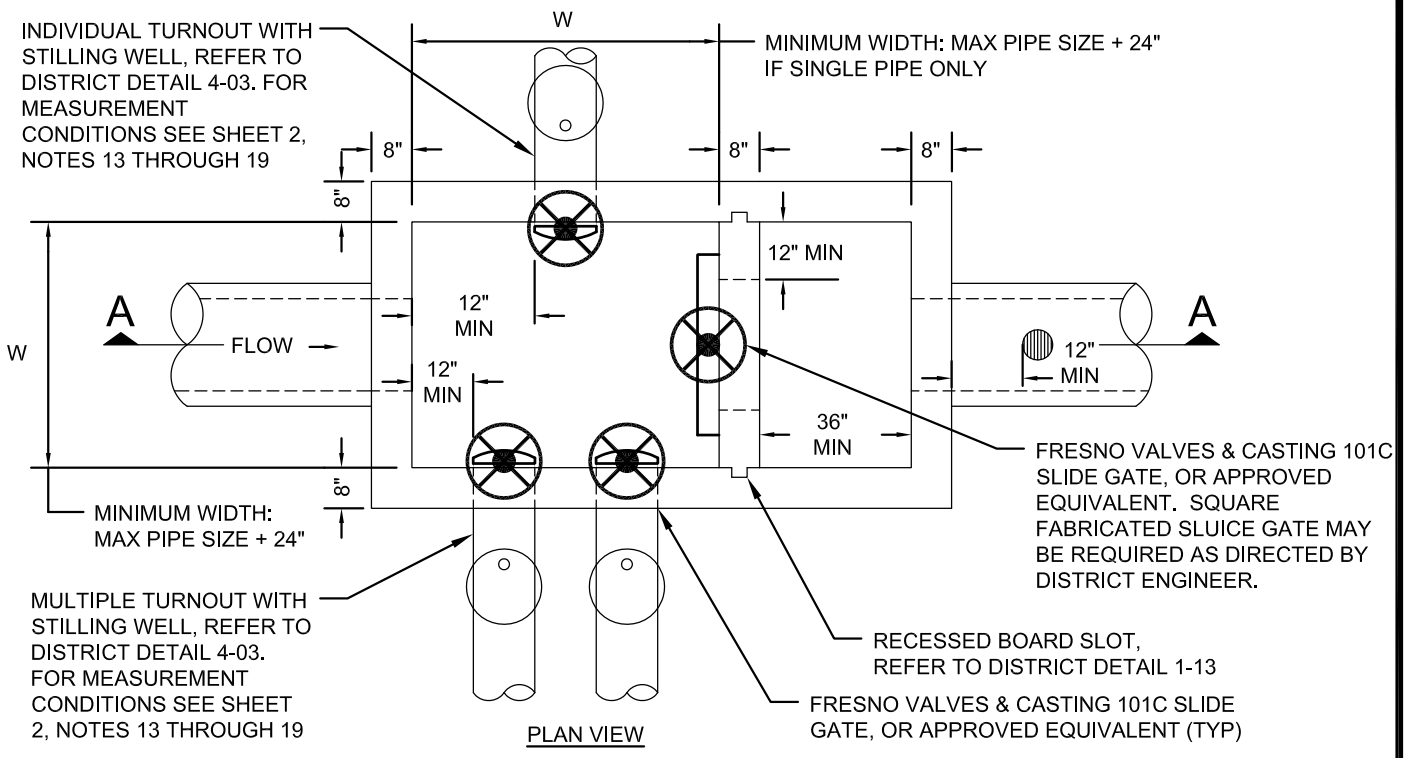
10. MANHOLE FRAME AND COVER SHALL BE STANDARD 36" OPENING, HEAVY DUTY PRESSURE TYPE MANHOLE FRAME AND COVER, WITH MINIMUM 8-1/2 INCH DIAMETER STAINLESS STEEL BOLTS, NEENAH FOUNDRY R-1919-H, ALHAMBRA FOUNDRY A-12521B-, OR DISTRICT APPROVED EQUIVALENT. MAXIMUM DESIGN WORKING PRESSURE IS 10 FEET OF HEAD ABOVE MANHOLE LID.

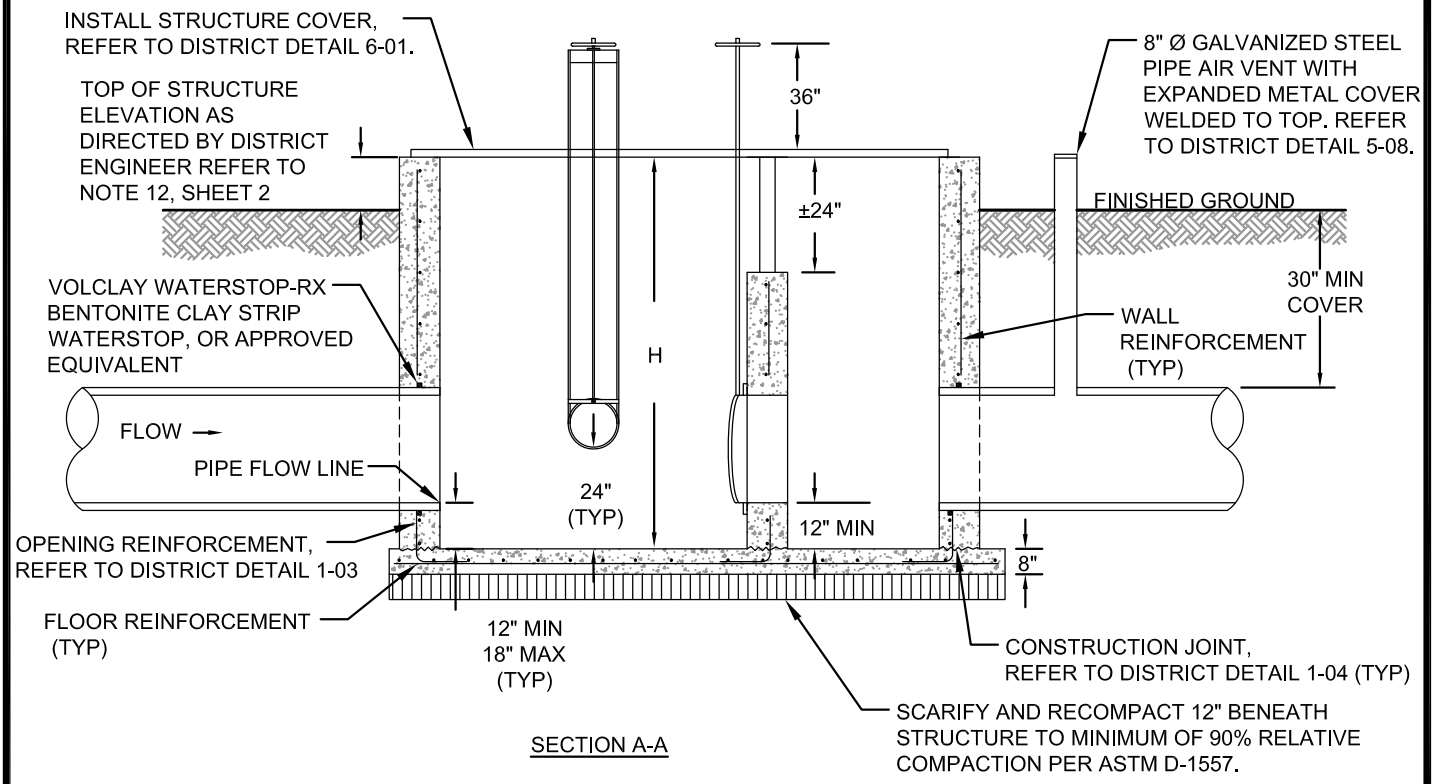
TABLE B BELOW GRADE PRESSURE MANHOLE				
DIM "H" MAX HEIGHT	MAX PIPE SIZE	DIM "W" MAX WIDTH	DIM "T" WALL/FLOOR THICKNESS	STEEL REINFORCEMENT
9'	36"	6'	8"	#4 @ 12" O.C. EACH WAY
12'	48"	8'	9"	#4 @ 6" O.C. EACH WAY
15'	60"	9'	10"	#5 @ 6" O.C. EACH WAY
> 15'	BY DESIGN			

PESCADERO
RECLAMATION DISTRICT 2058

PRESSURE MANHOLE (2)
(BELOW GRADE WITHIN ROAD)

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-14-2020	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-11
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-11.DWG		





PESCADERO
RECLAMATION DISTRICT 2058

CONCRETE BOX CONTROL STRUCTURE (1)

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-12
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-12.DWG		

1. FOR CONCRETE SPECIFICATIONS REFER TO DISTRICT DETAIL 1-01, CONCRETE NOTES.

2. BACKFILL AND SUBGRADES SHALL BE COMPACTED TO MINIMUM 90% RELATIVE COMPACTION PER ASTM D-1557 AND SHALL MANUALLY COMPACTED A MINIMUM OF 12 INCHES OVER TOP OF PIPE OR AS DIRECTED BY DISTRICT ENGINEER.

3. WATERSTOP SHALL BE VOLCLAY WATERSTOP-RX BENTONITE CLAY STRIP WATERSTOP OR APPROVED EQUIVALENT, PLACED AROUND OUTSIDE OF PIPE IN CENTER OF WALL.

4. REFER TO DISTRICT DETAIL 1-02: STEEL REINFORCING FOR ALL REBAR SPLICES. REINFORCEMENT SHALL BE PLACED IN THE CENTER OF WALLS AND SLABS UNLESS SPECIFIED OTHERWISE.

5. DIMENSIONS, ELEVATIONS, PIPE SIZES, AND STRUCTURE LOCATION SHALL BE DETERMINED BY DISTRICT ENGINEER.

6. ADD STANDARD OPENING REINFORCEMENT AT GATE OPENINGS. REFER TO DISTRICT DETAIL 1-03: OPENING REINFORCEMENT.

7. GATE FRAME SHALL BE SECURELY BOLTED TO CONCRETE STRUCTURE WITH STAINLESS STEEL BOLTS. TOP ANCHORS SHALL BE INSTALLED WITHIN 6 INCHES OF TOP OF CONCRETE WALL.

8. ALL SLIDE GATES SHALL HAVE STOP NUT, GALVANIZED FRAME AND STAINLESS STEEL RISING STEM.

9. IF PVC PIPE IS INSTALLED IN PLACE OF RGRCP, A MORRIL INDUSTRIES GALVANIZED STEEL STARTER COUPLER WITH WEEP RING, OR APPROVED EQUIVALENT, SHALL BE CAST INTO TURNOUT HEADWALL. PVC PIPE SHALL BE MINIMUM 100 PSI PIP WITHIN LIMITS OF RIGHT OF WAY. SEE DISTRICT DETAIL 5-10 FOR AIR VENT.

10. SITE CONDITIONS MAY REQUIRE ADDITIONAL CUTOFF WALLS AND/OR COLLARS TO PREVENT SEEPAGE OR SLIDING, AS DIRECTED BY DISTRICT ENGINEER.

11. IF CONCRETE PIPE IS INSTALLED AT HEADWALL CONNECTION, USE SPIGOT END OF PIPE OR CUT OFF PIPE BELL.

12. IF TOP OF STRUCTURE IS 3 FEET OR MORE ABOVE SURROUNDING GRADE, LADDER AND HANDRAILING SHALL BE REQUIRED. REFER TO DISTRICT DETAILS 6-05 AND 6-06, BOX CONTROL STRUCTURE HANDRAILING AND STRUCTURE LADDER.

13. UPSTREAM SUBMERGENCE ON TURNOUT(S) SHOULD BE AT LEAST ONE PIPE DIAMETER ABOVE TOP OF PIPE.

14. SUFFICIENT SUBMERGENCE MUST OCCUR DOWN STREAM OF TURNOUT(S) TO ENSURE FULL PIPE FLOW SUCH THAT A READABLE WATER SURFACE IS PRESENT IN THE DOWNSTREAM STILLING WELL (MINIMUM ONE FOOT ABOVE TOP OF PIPE DESIRED).

15. THE DIFFERENCE BETWEEN UPSTREAM AND DOWNSTREAM WATER SURFACE ELEVATIONS ACROSS TURNOUT(S) SHALL BE 12 INCHES TO 18 INCHES MAXIMUM.

16. THE GATE DISCHARGE TABLE BEING USED FOR THE TURNOUT SHOULD BE VERIFIED TO ENSURE THAT IT APPLIES TO THE CONDITIONS ENCOUNTERED IN THE FIELD AND TO THE BRAND AND TYPE OF GATE BEING USED.

17. DISCHARGE TABLES FOR ROUND BOTTOM GATES MUST NOT BE USED FOR SQUARE BOTTOM GATES AND VICE VERSA. GATE SETTINGS MUST BE MADE AND READ ACCURATELY, WHICH REQUIRES THAT THE GATE POSITION INDICATORS BE IN GOOD CONDITION AND INDICATE THE TRUE OPENING.

18. STILLING WELLS SHALL BE PERIODICALLY FLUSHED TO MAKE SURE THEY ARE OPERATING PROPERLY AND FREE OF OBSTRUCTIONS AND SILT. WEEDS, TRASH, AND SEDIMENT MUST BE REMOVED FROM THE APPROACH TO THE GATE BECAUSE THEY CAN CAUSE FLOW DISTURBANCES THAT MAY RESULT IN ERRONEOUS HEAD DIFFERENTIAL READINGS.

19. MEASUREMENT ACCURACY ASSUMED TO BE BETWEEN 3 AND 6 PERCENT IN ACCORDANCE WITH "DISCHARGE MEASUREMENT STRUCTURES, THIRD REVISED EDITION, EDITED BY M.G. BOS, PUBLICATION 20, INTERNATIONAL INSTITUTE FOR LAND RECLAMATION AND IMPROVEMENT, 1989.

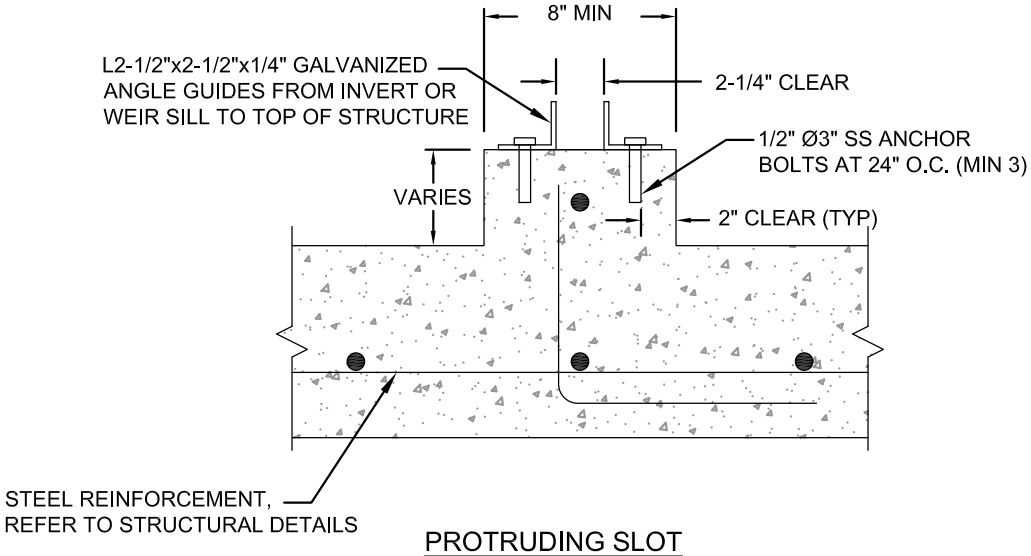
TABLE A

DIM "H" MAX HEIGHT	MAX PIPE SIZE	DIM "W" MAX WIDTH	FLOOR REINFORCEMENT	WALL REINFORCEMENT
6'	24"	4'	#4 @ 12" O.C. EACH WAY	#4 @ 12" O.C. EACH WAY
12'	48"	6'	#4 @ 12" O.C. EACH WAY	#4 @ 12" O.C. VERT #5 @ 12" O.C. HORZ
> 12'	BY DESIGN			

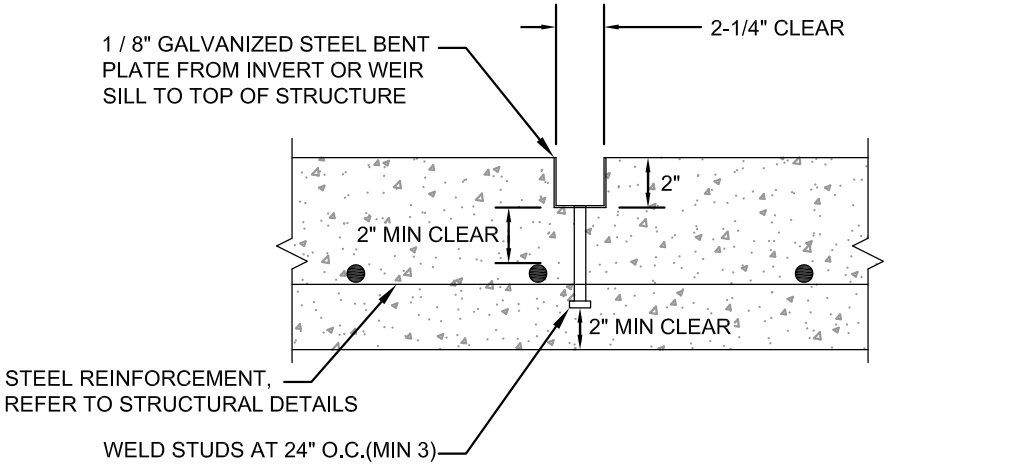
PESCADERO
RECLAMATION DISTRICT 2058

CONCRETE BOX CONTROL STRUCTURE (2)

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-12
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-12.DWG		



PROTRUDING SLOT



RECESSED SLOT

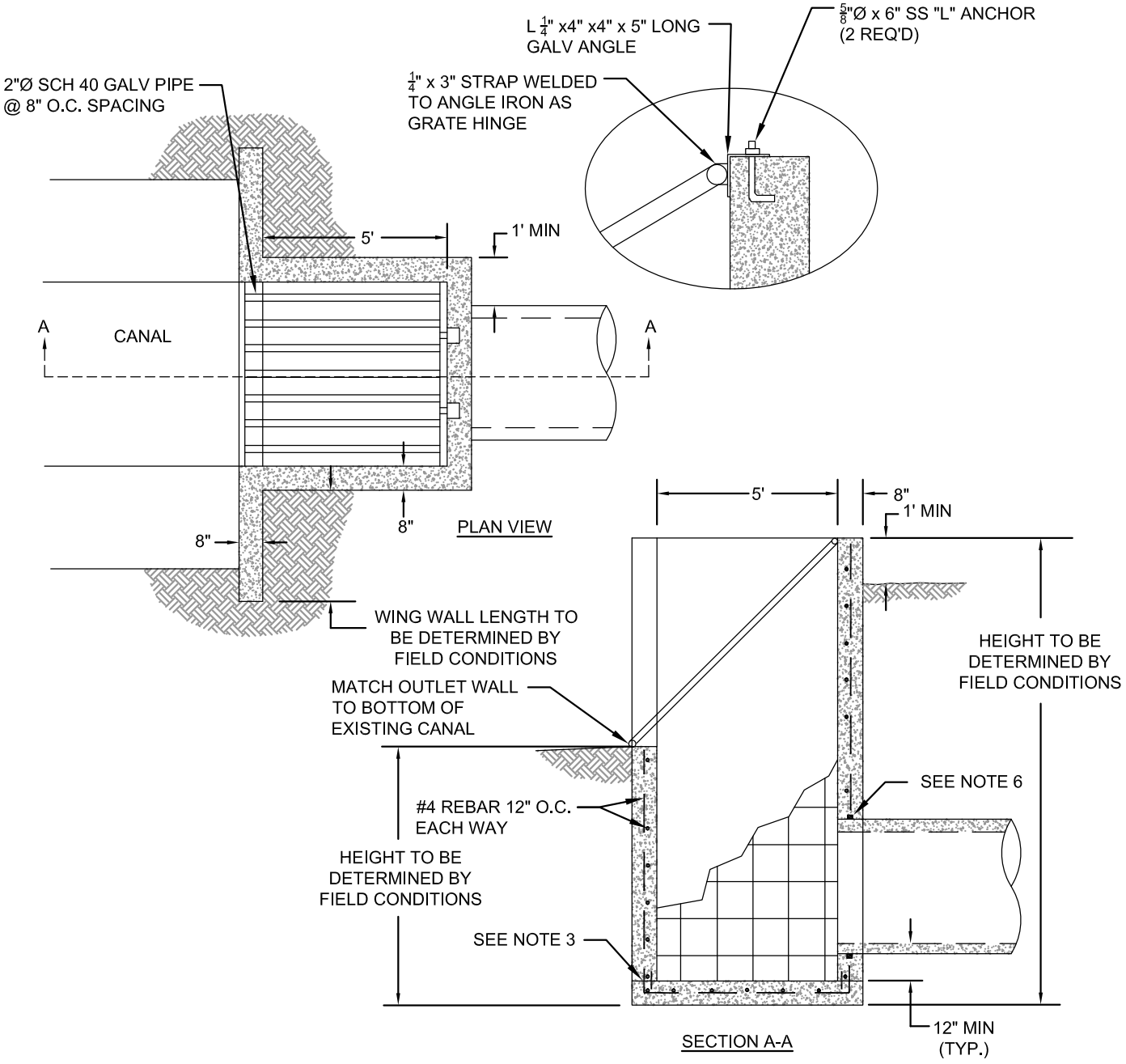
CONSTRUCTION NOTES

1. ALL BOARD SLOTS SHALL CONFORM TO THIS DETAIL AND DISTRICT DETAILS.
2. BOARD SLOTS SHALL BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY DISTRICT ENGINEER.
3. REINFORCING STEEL SHALL CONFORM TO DISTRICT DETAIL 1-02, STEEL REINFORCING, AND MAINTAIN MINIMUM CLEARANCES FROM SURFACES.
4. THIS DETAIL INTENTIONALLY DOES NOT SPECIFY CONCRETE THICKNESS OR REINFORCEMENT SIZE WHICH SHOULD BE DESIGNED SEPARATELY.

PESCADERO RECLAMATION DISTRICT 2058			BOARD SLOT	
DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-13
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-13.DWG		

NOTES:

1. CONCRETE STRENGTH AND MIX SHALL CONFORM TO DISTRICT STANDARD 1-01 CONCRETE NOTES
2. ALL PIPE SHALL ENTER THE BOX AT OR NEAR PERPENDICULAR ANGLES TO THE BOX.
3. ALL COLD JOINTS REQUIRE 6" CENTER BULB RUBBER WATER STOP EMBEDDED IN CENTER OF WALL AT COLD JOINT LOCATION PER MANUFACTURER'S RECOMMENDATIONS. SEE DISTRICT STANDARD 1-04 CONSTRUCTION JOINT.
4. GRATE REQUIRED ONLY FOR INLET STRUCTURE.
5. PROPERLY SEAL ALL BOX JOINTS AND PIPES BY MORTARING FROM INSIDE OF BOX. USE SOFT BRISTLE BRUSH TO BLEND MORTAR AND CONCRETE TOGETHER.
6. WATERSTOP SURROUNDING OPENINGS SHALL BE VOLCLAY WATERSTOP-RX 102 BENTONITE CLAY STRIP OF ADEKA ULTRASEAL KBA-1510FP WATERSTOP, PLACED AROUND OUTSIDE OF PIPE IN CENTER OF WALL.



PESCADERO

RECLAMATION DISTRICT 2058

DROP INLET STRUCTURE (CANAL TO RCP PIPE)

DRAWN BY: NWP-DIST. ENGR.	DATE: 5-29-2018	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-14
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-14.DWG		

DISTRICT STANDARD MORTAR MIX

QUANTITY	DISCRIPTION
1	94LB BAG OF PORTLAND CEMENT
7	FULL SHOVELS OF SAND
2	FULL SHOVELS OF FIRECLAY

1. THE DISTRICT STANDARD MORTAR MIX MUST BE THOROUGHLY DRY MIXED BEFORE ADDING WATER.
2. USE A SOFT BRISTLE BRUSH TO BOND MORTAR AND EXISTING CONCRETE TOGETHER
3. ALL MORTARED JOINTS AND REPAIRS EXPOSED TO SUNLIGHT MUST BE WRAPPED IN PLASTIC TO PREVENT CRACKING.
4. A MINIMUM OF 48 HOURS CURING TIME IS REQUIRED.

OTHER STANDARD DRYING MORTAR MIXES (ACCEPTABLE)

1. ALL MANUFACTURED MORTAR MIX PRODUCTS SHALL HAVE CONSISTENT MIX PROPERTIES AS THE DISTRICT STANDARD MORTAR MIX. ALL MANUFACTURED MORTAR MIX PRODUCTS DRYING TIME MUST BE CONSISTENT WITH MANUFACTURES RECOMMENDATIONS, BUT NOT LESS THAN 48 HOURS.
2. FOLLOW ALL MANUFACTURED GUIDELINES TO CREATE A SMOOTH SEALED BOND
3. FOLLOW ALL MANUFACTURER GUIDELINES FOR PROPER SURFACE PREPARATION BEFORE MORTARING.

QUICK DRYING MORTAR (EPOXY GROUT) PRODUCTS (ACCEPTABLE ONLY WHEN APPROVED)

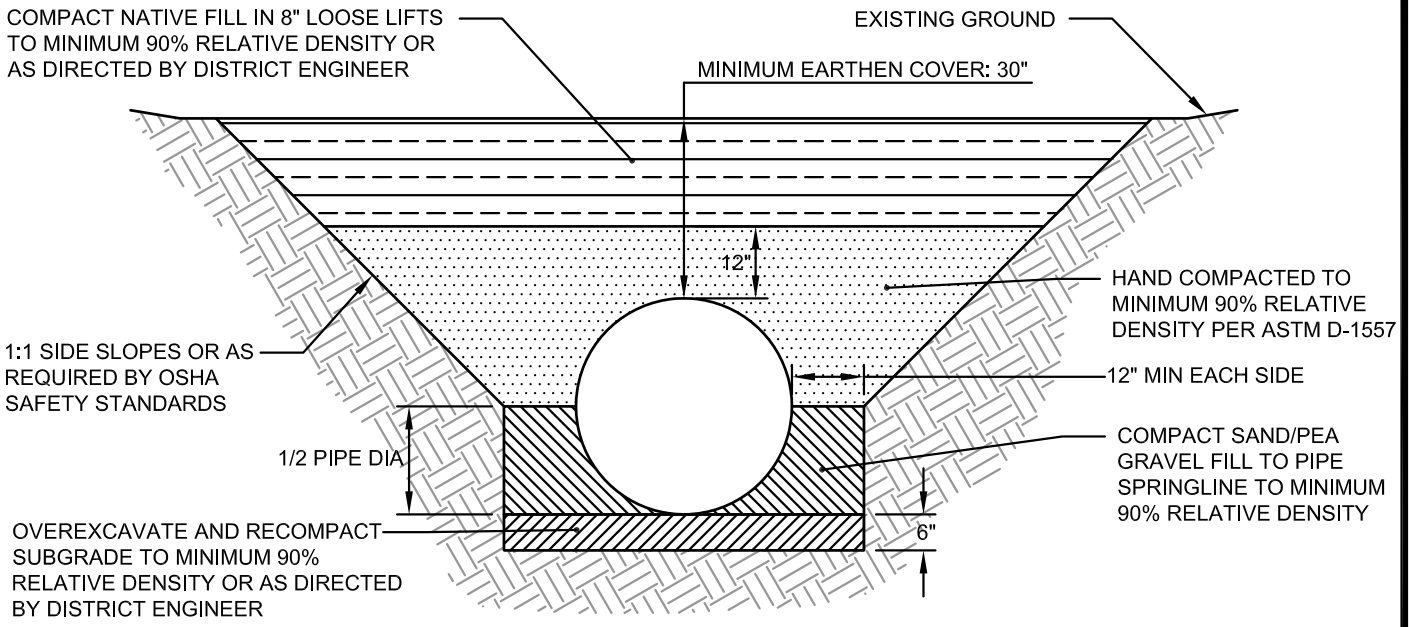
1. USE ONLY CUSTOM-PLUG HYDRAULIC PATCHING AND ANCHORING CEMENT OR A PRE-APPROVED EQUIVALENT PRODUCT ONLY IN SITUATION WHERE 48 HOURS OF CURING TIME IS NOT POSSIBLE.
2. ALL MANUFACTURED QUICK DRYING MORTAR MIX PRODUCTS MUST BE PRE-APPOVED BY THE DISTRICT ENGINEER.
3. FOLLOW ALL MANUFACTURED GUIDELINES TO CREATE A SMOOTH SEALED BOND.
4. FOLLOW ALL MANUFACTURED GUIDELINES FOR PROPER SURFACE PREPARATION BEFORE MORTARING.

PESCADERO

RECLAMATION DISTRICT 2058

MORTAR MIX NOTES

DRAWN BY: NWP-DIST. ENGR.	DATE: 5-29-2018	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-15
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-15.DWG		



CONSTRUCTION NOTES:

1. BACKFILL AND SUBGRADES SHALL BE COMPACTED TO MINIMUM 90% RELATIVE DENSITY PER ASTM D-1557 AND SHALL BE MANUALLY COMPACTED A MINIMUM DEPTH OF 12 INCHES OVER TOP OF PIPE OR AS DIRECTED BY DISTRICT ENGINEER. THE MAXIMUM LAYER THICKNESS SHALL BE 8 INCHES BEFORE COMPACTION.

2. BACKFILL SHALL BE SELECT NATIVE MATERIAL, CONTAIN NO MATERIAL OVER 3 INCHES IN DIAMETER OR LENGTH, AND SHALL BE COMPACTED AGAINST UNDISTURBED EARTH. FILL MATERIAL SHALL CONTAIN NO SOD, BRUSH, ROOTS, OR OTHER ORGANIC OR OTHERWISE UNSUITABLE MATERIAL.

3. PIPELINE SHALL BE INSTALLED ACCORDING TO MANUFACTURED INSTRUCTIONS AND SPECIFICATIONS. MINIMUM DEPTH OF COVER SHALL BE 30 INCHES OR AS DIRECTED BY THE DISTRICT ENGINEER.

4. COMPACTION TESTS SHALL BE AT THE LANDOWNER OR DEVELOPER EXPENSE. ANY RETESTS SHALL BE PAID BY THE CONTRACTOR. FREQUENCY AND LOCATION OF THE TESTS SHALL BE AS DIRECTED BY DISTRICT ENGINEER.
5. DEWATERING DUE TO HIGH GROUNDWATER OR CANAL SEEPAGE MAY BE REQUIRED. DEWATERING METHODS SHALL BE PRE-APPROVED BY DISTRICT ENGINEER PRIOR TO COMMENCEMENT OF DEWATERING.

6. TRENCH WIDTHS SHALL BE AS SHOWN UNLESS THE PIPELINE SIZE IS 4 INCHES OR SMALLER, WHERE THE TRENCH SHALL HAVE A 12 INCH MINIMUM WIDTH.

7. BEDDING, IF REQUIRED, SHALL BE MINIMUM 4 INCHES AS DIRECTED BY DISTRICT ENGINEER. BEDDING SHALL CONFORM TO THE SPECIFICATIONS BELOW. SOIL TYPES SHALL BE AS DETERMINED BY DISTRICT ENGINEER.

   A. ON SANDY SOIL (BEDDING AND HAUNCHING):
      NATIVE MATERIAL, IF SUITABLE OR SAND AS DIRECTED BY DISTRICT ENGINEER

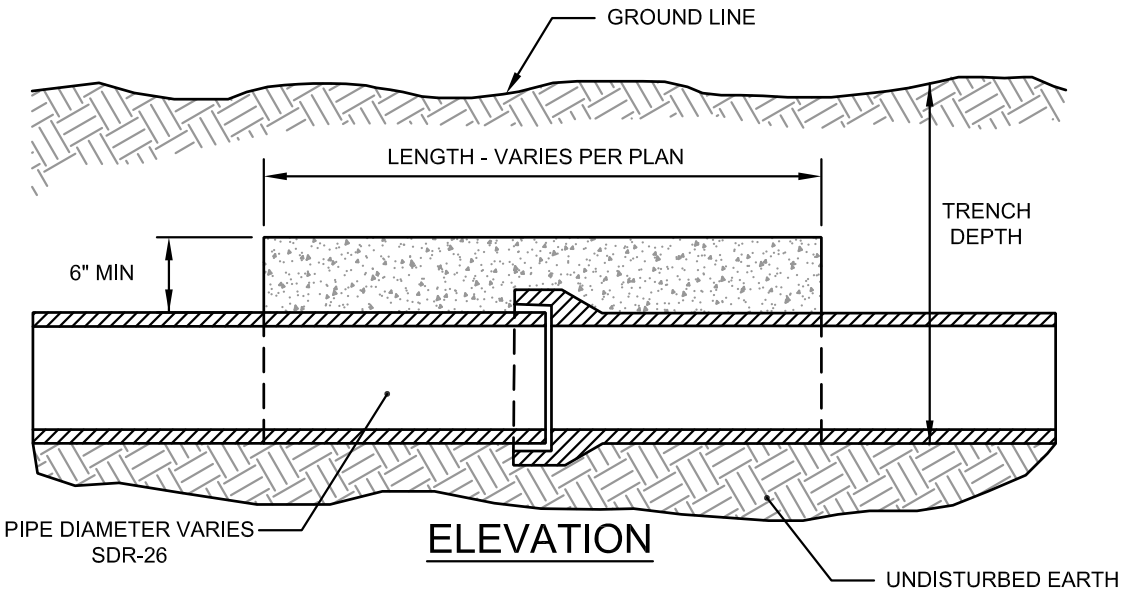
   B. ON CLAY SOIL (BEDDING & HAUNCHING):
      SAND OR APPROVED NATIVE MATERIAL AS PRE-APPROVED BY DISTRICT ENGINEER SHALL BE PLACED IN 8 INCH LIFTS

8. WATER PACKING OR JETTING SHALL ONLY BE USED ON SOILS PRE-APPROVED BY DISTRICT ENGINEER. WHEN WATER PACKING OR JETTING IS USED, THE AMOUNT OF WATER SHALL BE CONTROLLED TO INSURE THAT POOLING OF EXCESS WATER DOES NOT OCCUR. THE WETTED FILL MUST BE ALLOWED TO REACH OPTIMUM MOISTURE AND THEN MECHANICALLY COMPACTED TO MEET MINIMUM 90% RELATIVE DENSITY PER ASTM D-1557 BEFORE ADDITIONAL BACKFILLING IS DONE. CARE MUST BE EXERCISED TO PREVENT PIPE FLOTATION DURING WATER PACKING OR JETTING. MEASURE MUST BE PRE-APPROVED BY DISTRICT ENGINEER. THIS ITEM DOES NOT APPLY TO PVC OR HDPE PIPELINES.

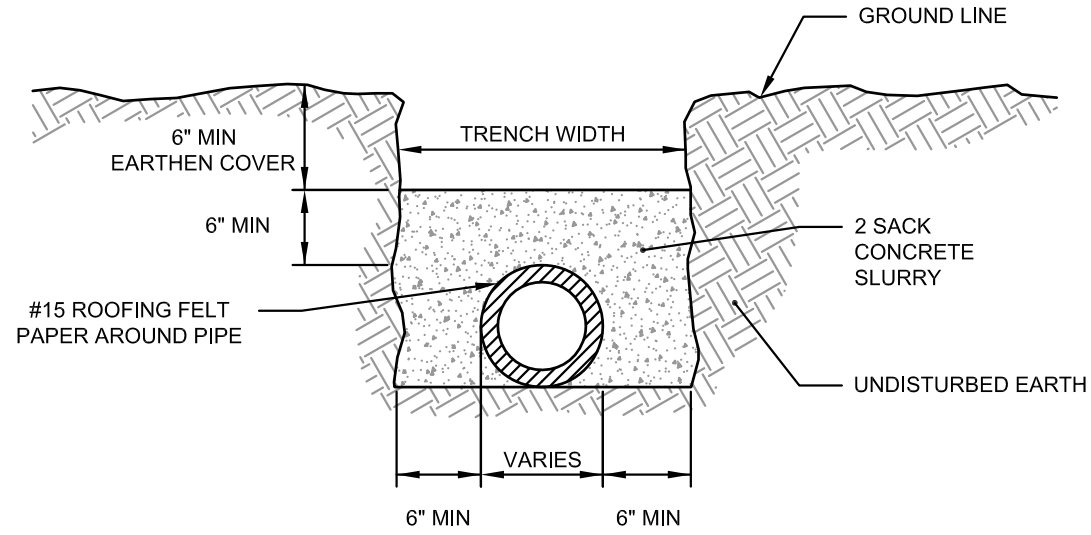
PESCADERO
RECLAMATION DISTRICT 2058

TYPICAL
PIPE TRENCH

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-20
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-20.DWG		



ELEVATION



SECTION

NOTES:

1. THIS METHOD SHALL ONLY BE USED IF APPROVED BY THE DISTRICT ENGINEER DUE TO LACK OF REQUIRED EARTHEN COVER.

2. ENCASEMENT TO BE PLACED AGAINST UNDISTURBED NATURAL GROUND OF FILL COMPACTED TO 90% RELATIVE COMPACTION, UNLESS OTHERWISE SPECIFIED.

PESCADERO RECLAMATION DISTRICT 2058			CONCRETE ENCASEMENT OF PIPE	
DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 1-21
REVISIONS: 0	SECTION: 0	DRAWING NAME: 1-21.DWG		

PESCADERO

RECLAMATION DISTRICT 2058

DRIVEWAY CROSSING

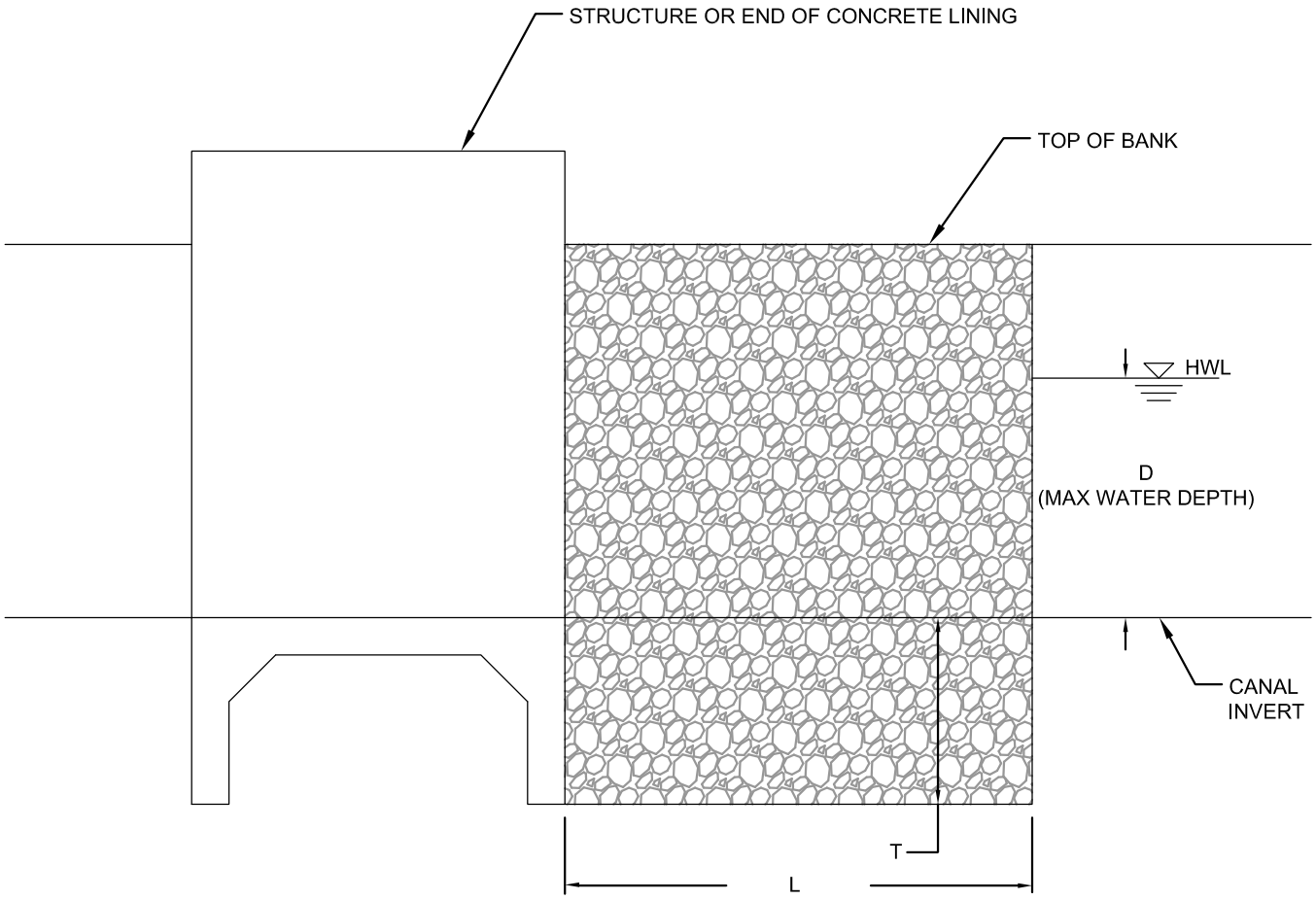
DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 2-08
REVISIONS: 0	SECTION: 0	DRAWING NAME: 2-08.DWG		

PESCADERO

RECLAMATION DISTRICT 2058

DRIVEWAY CROSSING

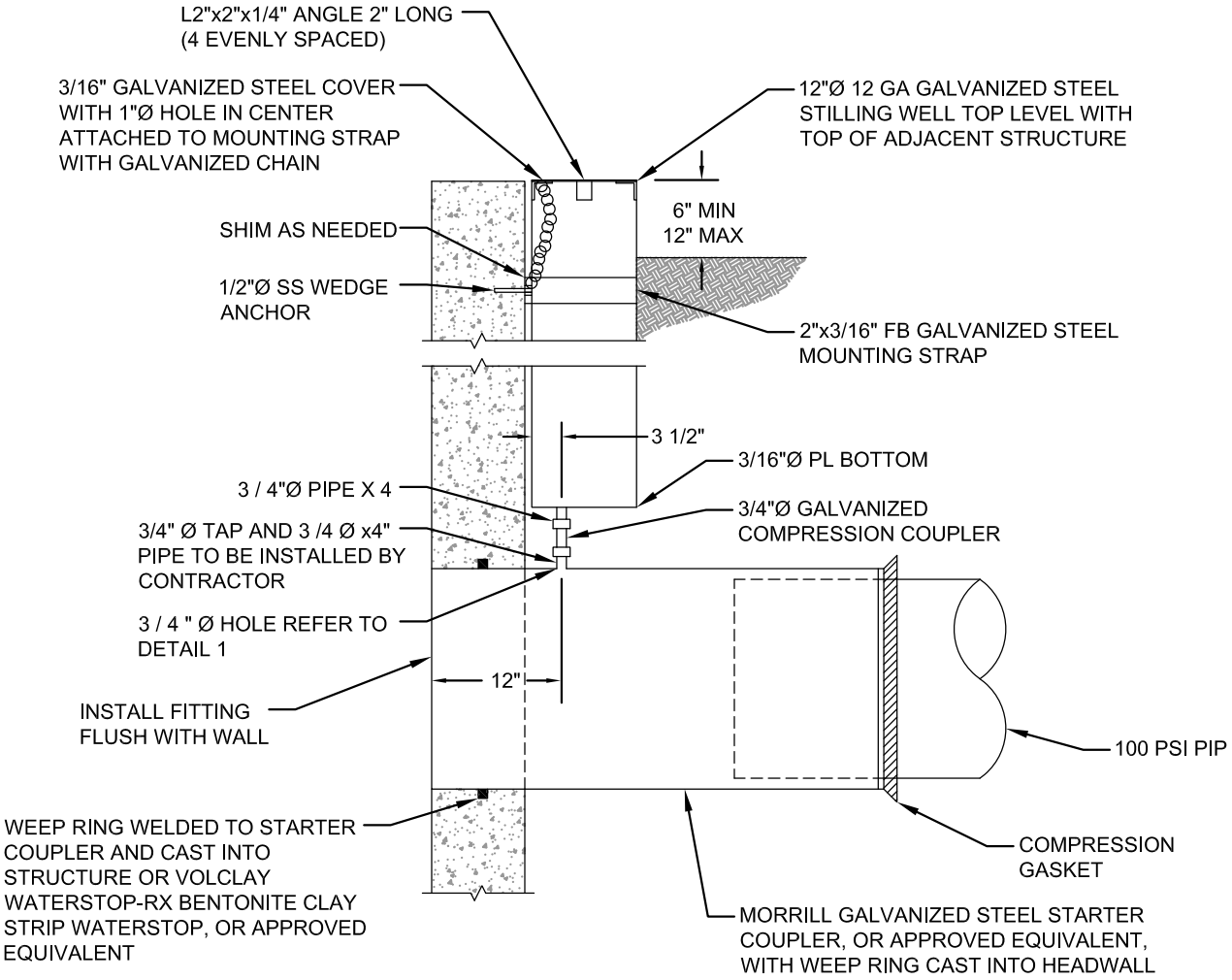
DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 2-08A
REVISIONS: 0	SECTION: 0	DRAWING NAME: 2-08.DWG		

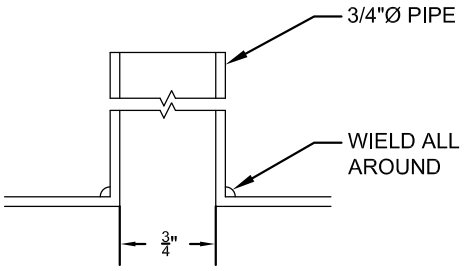


CONSTRUCTION NOTES

1. RIP RAP TRANSITION SHALL BE CONSTRUCTED UPSTREAM AND DOWN STREAM OF STRUCTURE AND CONCRETE LINING TRANSITIONS IN EARTHEN CANALS, AS WELL AS AREAS DISTURBED DURING CONSTRUCTION, OR AS DIRECTED BY DISTRICT ENGINEER.
2. RIP RAP GRADATION SHALL BE 12 INCH TO 18 INCH ANGULAR ROCK.
3. RIP RAP THICKNESS "T" SHALL BE 1.5 x MAX STONE SIZE.
4. RIP RAP TRANSITION LENGTH "L" SHALL BE 4 x MAX WATER DEPTH (10 FEET MINIMUM), OR AS DIRECTED BY DISTRICT ENGINEER.
5. TOP OF RIP RAP SLOPE PROTECTION SHALL BE PLACED AT LEAST 12 INCHES ABOVE HIGH WATER LEVEL.

PESCADERO RECLAMATION DISTRICT 2058			RIP RAP SLOP PROTECTION	
DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 2-09
REVISIONS: 0	SECTION: 0	DRAWING NAME: 2-09.DWG		





DETAIL 1

CONSTRUCTION NOTES

1. IF RGRCP PIPE IS INSTALLED IN PLACE OF PVC, $\frac{3}{4}$ INCH DIAMETER THREADED TAP SHALL BE CAST INTO RGRCP OR ADDED IN FIELD.

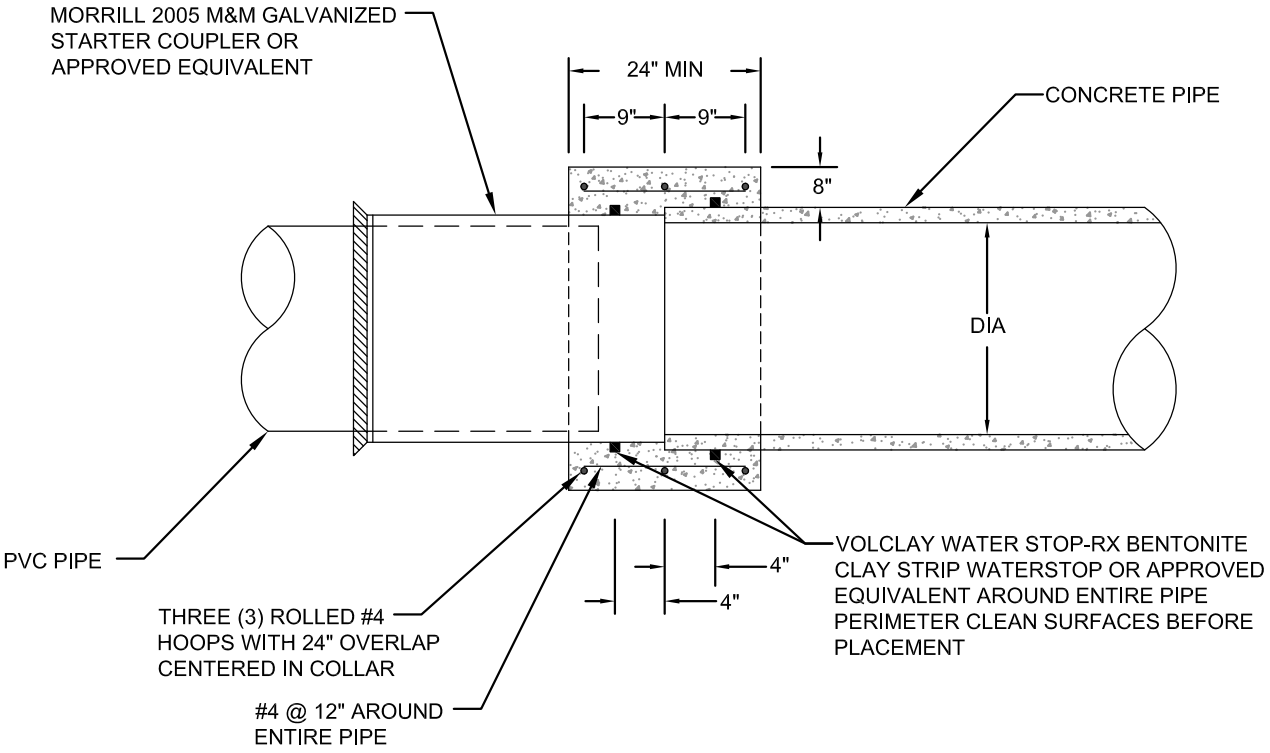
2. ALL HARDWARE SHALL BE STAINLESS STEEL, AND SHALL BE COATED WITH A RUST PREVENTATIVE, WRAPPED WITH 4 MIL POLYETHYLENE SHEETING, AND SECURED WITH PVC TAPE.

PESCADERO

RECLAMATION DISTRICT 2058

STILLING WELL

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 4-03
REVISIONS: 0	SECTION: 0	DRAWING NAME: 4-03.DWG		



CONSTRUCTION NOTES

1. THIS STYLE COLLAR TO BE USED ONLY WITH PIPES LESS THAN OR EQUAL TO 24 INCHES IN DIAMETER. FOR LARGER PIPES, COLLAR DESIGN SHALL BE PRE-APPOVED BY DISTRICT ENGINEER.
2. MINIMUM CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE 3,000 PSI, AND SHALL CONFORM TO DISTRICT DETAIL 1-01, CONCRETE NOTES.
3. FORMS USED TO POUR CONCRETE COLLAR SHALL BE REMOVED PRIOR TO BACKFILL.
4. DIAMETER OF ROLLED HOOPS SHALL BE: PIPE DIA + (2 x WALL THICKNESS) + 8 INCHES.
5. CONCRETE SHALL BE VIBRATED AROUND PIPE JOINT DURING PLACEMENT.
6. JOINT SHALL BE WATER TIGHT.
7. CONCRETE PIPE SHALL BE CLEANED AND TREATED WITH PRE-APPOVED BY DISTRICT ENGINEER CONCRETE BONDING AGENT PRIOR TO CONCRETE PLACEMENT.

PESCADERO
RECLAMATION DISTRICT 2058

REINFORCED CONCRETE COLLAR (RCP TO PVC)

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 5-03
REVISIONS: 0	SECTION: 0	DRAWING NAME: 5-03.DWG		

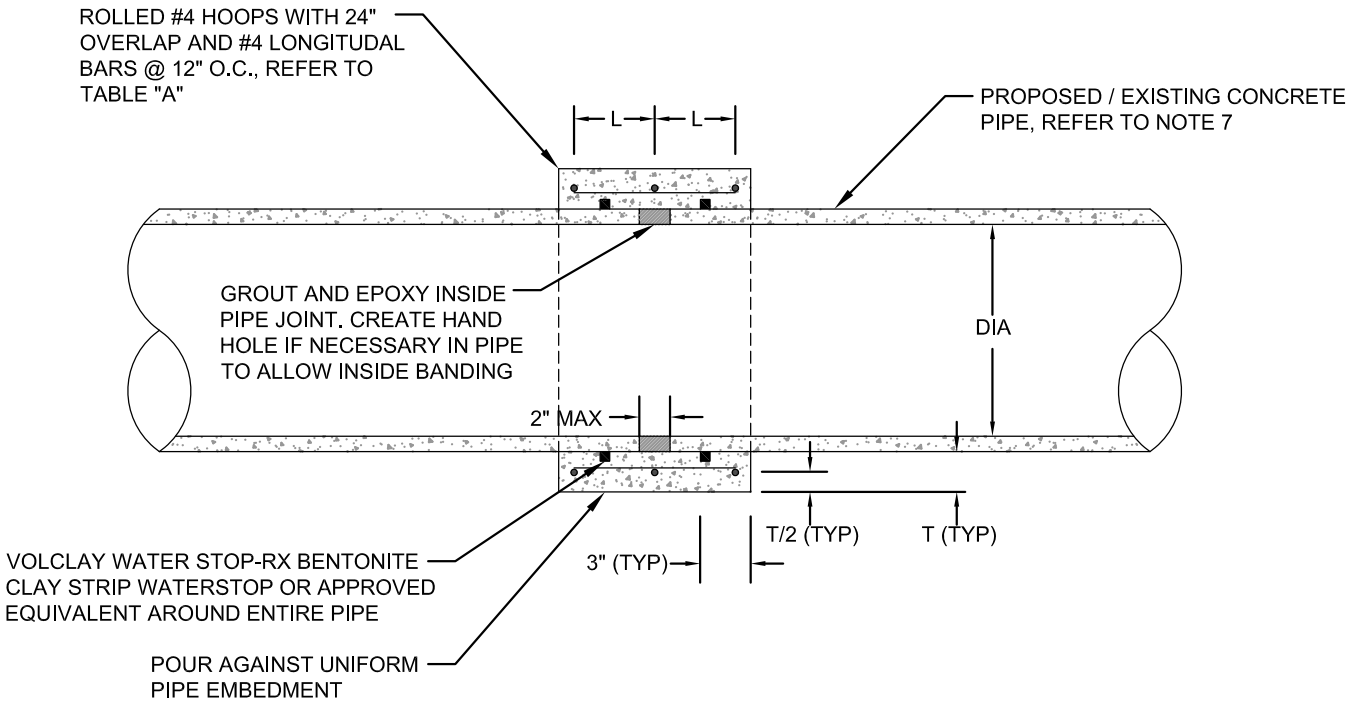


TABLE "A"			
MAX PIPE SIZE	L	T	MIN HOOP QTY
24"	18"	8"	2
48"	24"	10"	3
72"	30"	12"	4
> 72"	BY DESIGN		

CONSTRUCTION NOTES

1. FOR COLLARS WITH PIPELINE DIAMETERS THAT DIFFER IN EXCESS OF 3 INCHES, A MANHOLE OR OTHER TRANSITION STRUCTURE IS REQUIRED, AS DIRECTED BY DISTRICT ENGINEER.
2. MINIMUM CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE 3,000 PSI, AND SHALL CONFORM TO DISTRICT DETAIL 1-01 CONCRETE NOTES.
3. FORMS USED TO POUR CONCRETE COLLAR SHALL BE REMOVED PRIOR TO BACKFILL.
4. DIAMETER OF ROLLED HOOPS SHALL BE: PIPE DIA + (2 x WALL THICKNESS) + T.
5. CONCRETE SHALL BE VIBRATED AROUND PIPE JOINT DURING PLACEMENT.
6. JOINT SHALL BE WATER TIGHT.
7. CONCRETE PIPE SHALL BE CLEANED AND TREATED WITH PRE-APPROVED BY DISTRICT ENGINEER CONCRETE BONDING AGENT PRIOR TO CONCRETE PLACEMENT.
8. THIS STANDARD ONLY APPLIES TO CONCRETE PIPES BEING CONNECTED WITH A CONCRETE COLLAR THAT ARE LEVEL OR AT SAME SLOPE. IT SHALL NOT APPLY TO PIPES WITH DEFLECTIONS AT THE CONNECTION POINT.
9. IF REMOVAL OF AN EXISTING STRUCTURE OR PIPE IS SPECIFIED, REMOVAL SHALL BE ACCOMPLISHED BY SAWCUTTING, OR OTHER PRE-APPROVED METHOD, WITH DISTRICT ENGINEER ON SITE DURING SAWCUTTING.
10. PREPARE SURFACE OF EXISTING PIPES BY WIRE BRUSHING, WATER BLASTING OR SAND BLASTING.

PESCADERO
RECLAMATION DISTRICT 2058

REINFORCED CONCRETE COLLAR (RCP TO RCP)

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 5-04
REVISIONS: 0	SECTION: 0	DRAWING NAME: 5-04.DWG		

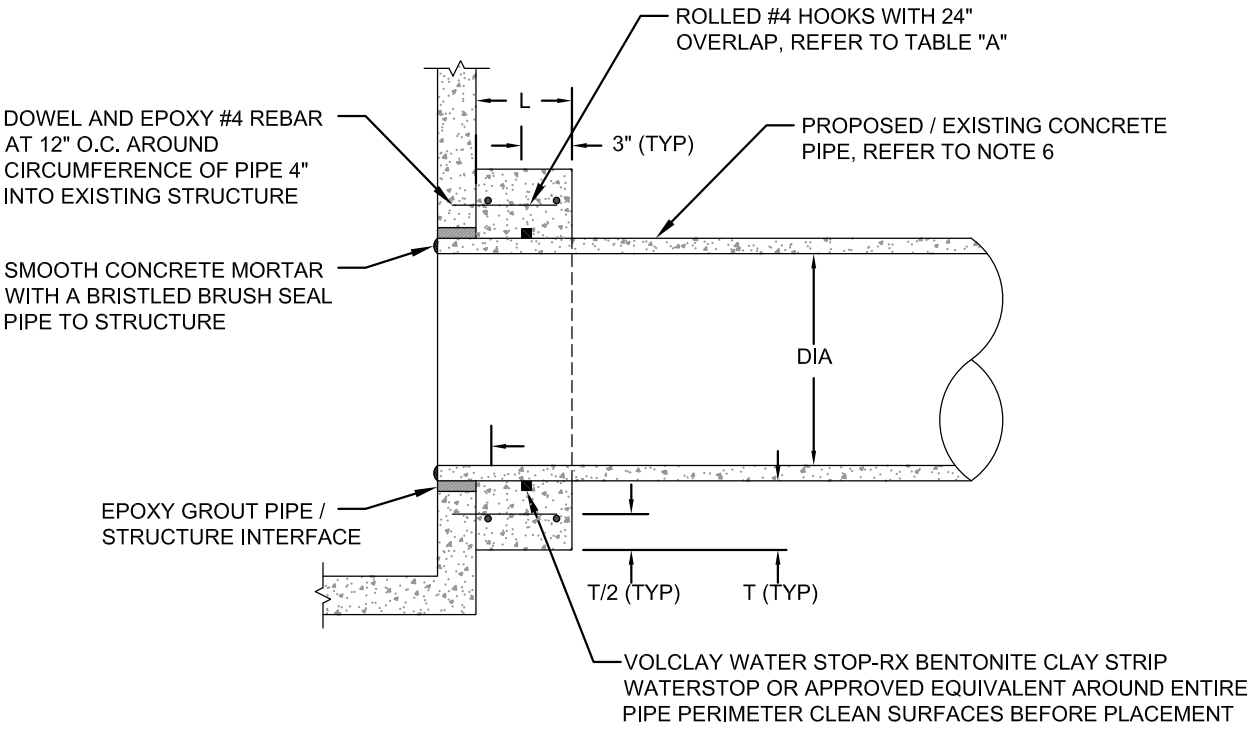


TABLE "A"			
MAX PIPE SIZE	L	T	MIN HOOP QTY
24"	18"	8"	2
48"	24"	10"	3
72"	30"	12"	4
> 72"	BY DESIGN		

CONSTRUCTION NOTES

1. MINIMUM CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE 3,000 PSI, AND SHALL CONFORM TO DISTRICT DETAIL 1-01 CONCRETE NOTES.
2. FORMS USED TO POUR CONCRETE COLLAR SHALL BE REMOVED PRIOR TO BACKFILL.
3. DIAMETER OF ROLLED HOOPS SHALL BE: PIPE DIA + (2 x WALL THICKNESS) + T.
4. CONCRETE SHALL BE VIBRATED AROUND PIPE JOINTS DURING PLACEMENT.
5. JOINT SHALL BE WATER TIGHT.
6. CONCRETE PIPE SHALL BE CLEANED AND TREATED WITH PRE-APPROVED BY DISTRICT ENGINEER CONCRETE BONDING AGENT PRIOR TO CONCRETE PLACEMENT.
7. THIS STANDARD ONLY APPLIES TO CONCRETE PIPS BEING CONNECTED WITH A CONCRETE COLLAR THAT ARE LEVEL OR AT THE SAME SLOPE. IT SHALL NOT APPLY TO PIPES WITH DEFLECTIONS AT THE CONNECTION POINT.
8. IF REMOVAL OF AN EXISTING STRUCTURE OR PIPE IS SPECIFIED, REMOVAL SHALL BE ACCOMPLISHED BY SAWCUTTING, OR OTHER PRE-APPOVED METHOD, WITH THE ENGINEER ON SITE DURING SAWCUTTING.
9. PREPARE SURFACE OF EXISTING PIPES BY WIRE BRUSHING, WATER BLASTING, OR SAND BLASTING.

PESCADERO
RECLAMATION DISTRICT 2058

REINFORCED CONCRETE COLLAR (RCP TO STRUCTURE)

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 5-05
REVISIONS: 0	SECTION: 0	DRAWING NAME: 5-05.DWG		

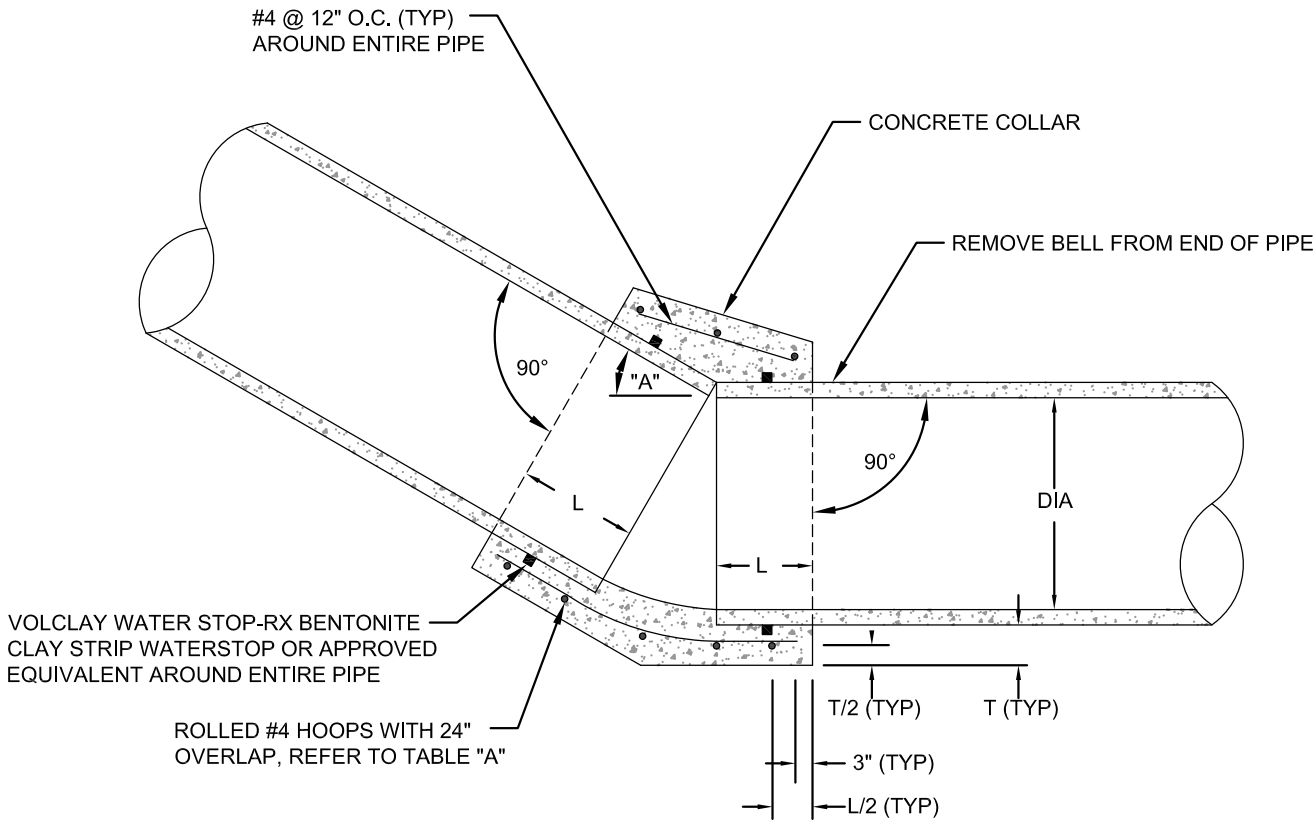


TABLE "A"			
MAX PIPE SIZE	L	T	MIN HOOP QTY
24"	18"	8"	3
48"	24"	10"	4
72"	30"	12"	5
> 72"	BY DESIGN		

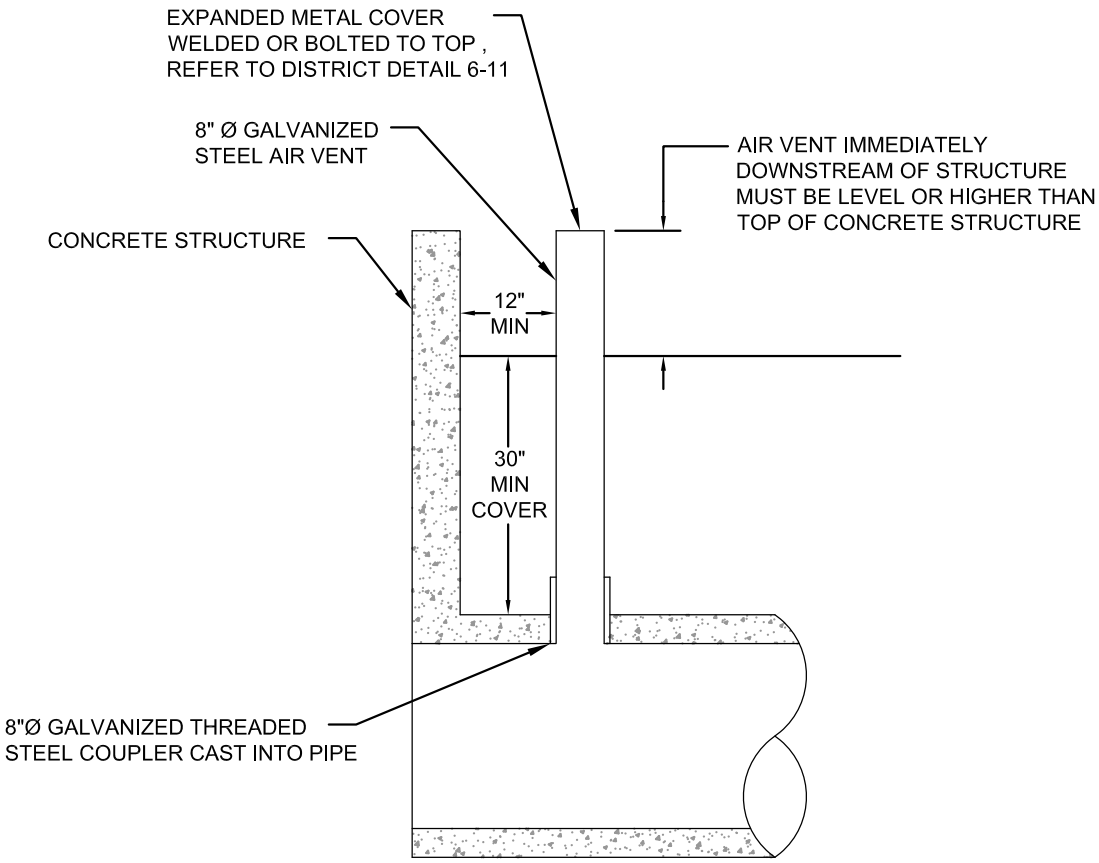
CONSTRUCTION NOTES

1. ANGLE "A" SHALL BE DETERMINED IN THE FIELD AND REBAR PLACEMENT APPROVED BY DISTRICT ENGINEER PRIOR TO CONCRETE PLACEMENT.
2. MINIMUM CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE 3,000 PSI, AND SHALL CONFORM TO DISTRICT DETAIL 1-01 CONCRETE NOTES.
3. FORMS USED TO POUR CONCRETE COLLAR SHALL BE REMOVED PRIOR TO BACKFILL.
4. DIAMETER OF ROLLED HOOPS SHALL BE: PIPE DIA + (2 x WALL THICKNESS) + T.
5. CONCRETE SHALL BE VIBRATED AROUND PIPE JOINTS DURING PLACEMENT.
6. JOINT SHALL BE WATER TIGHT.
7. CONCRETE PIPE SHALL BE CLEANED AND TREATED WITH PRE-APPROVED BY DISTRICT ENGINEER CONCRETE BONDING AGENT PRIOR TO CONCRETE PLACEMENT.
8. PREPARE SURFACE OF EXISTING PIPES BY WIRE BRUSHING, WATER BLASTING OR SAND BLASTING.
9. INSIDE JOINT TO BE SMOOTH FINISH (BRUSHED AND FLUSH.

PESCADERO
RECLAMATION DISTRICT 2058

ANGLED PIPE JOINT COLLAR

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 5-06
REVISIONS: 0	SECTION: 0	DRAWING NAME: 5-06.DWG		



CONSTRUCTION NOTES

1. AIR VENT SIZE SHALL BE 8 INCH DIAMETER OR AS DIRECTED BY DISTRICT ENGINEER.

PESCADERO RECLAMATION DISTRICT 2058			STEEL AIR VENT FOR CONCRETE PIPE	
DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 5-08
REVISIONS: 0	SECTION: 0	DRAWING NAME: 5-08.DWG		

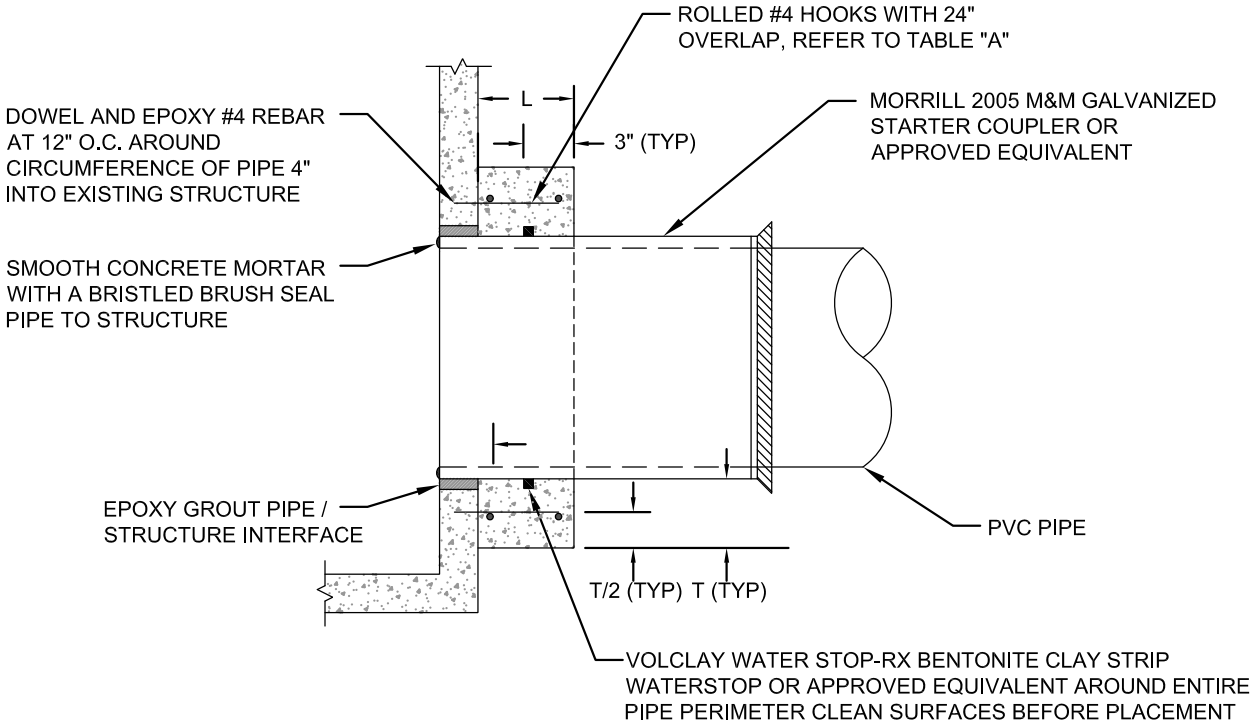


TABLE "A"			
MAX PIPE SIZE	L	T	MIN HOOP QTY
24"	18"	8"	2
48"	24"	10"	3
72"	30"	12"	4
> 72"	BY DESIGN		

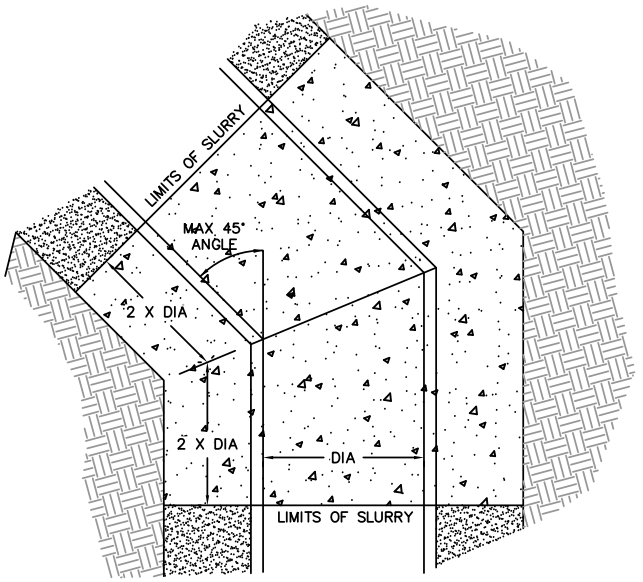
CONSTRUCTION NOTES

1. MINIMUM CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE 3,000 PSI, AND SHALL CONFORM TO DISTRICT DETAIL 1-01 CONCRETE NOTES.
2. FORMS USED TO POUR CONCRETE COLLAR SHALL BE REMOVED PRIOR TO BACKFILL.
3. DIAMETER OF ROLLED HOOPS SHALL BE: PIPE DIA + (2 x WALL THICKNESS) + T.
4. CONCRETE SHALL BE VIBRATED AROUND PIPE JOINTS DURING PLACEMENT.
5. JOINT SHALL BE WATER TIGHT.
6. IF REMOVAL OF AN EXISTING STRUCTURE OR PIPE IS SPECIFIED, REMOVAL SHALL BE ACCOMPLISHED BY SAW CUTTING, OR OTHER PRE-APPOVED METHOD, WITH THE ENGINEER ON SITE DURING SAW CUTTING.
7. PREPARE SURFACE OF EXISTING PIPES BY WIRE BRUSHING, WATER BLASTING, OR SAND BLASTING.

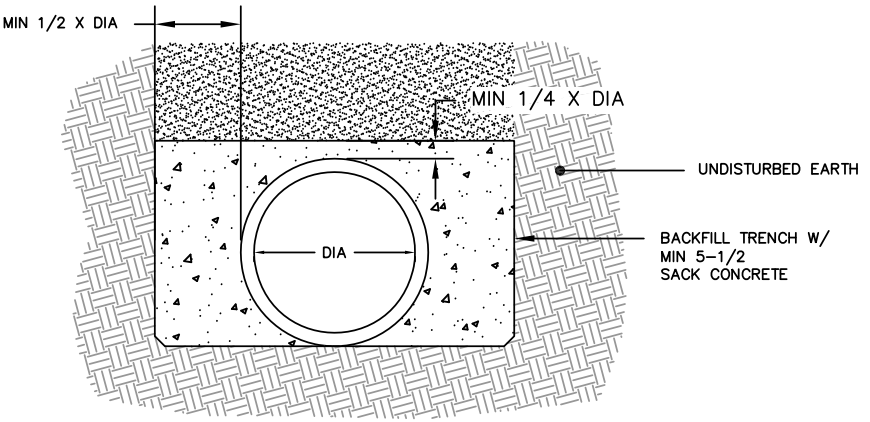
PESCADERO
RECLAMATION DISTRICT 2058

REINFORCED CONCRETE COLLAR (PVC TO STRUCTURE)

DRAWN BY: NWP-DIST. ENGR.	DATE: 6-14-2018	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 5-09
REVISIONS: 0	SECTION: 0	DRAWING NAME: 5-09.DWG		



PLAN



PROFILE

PESCADERO IRRIGATION DISTRICT

Title: THRUST BLOCK DETAIL – 48" PIPE

Drawn By:	NO.	REVISED	DATE
Checked By:			
Scale: None			

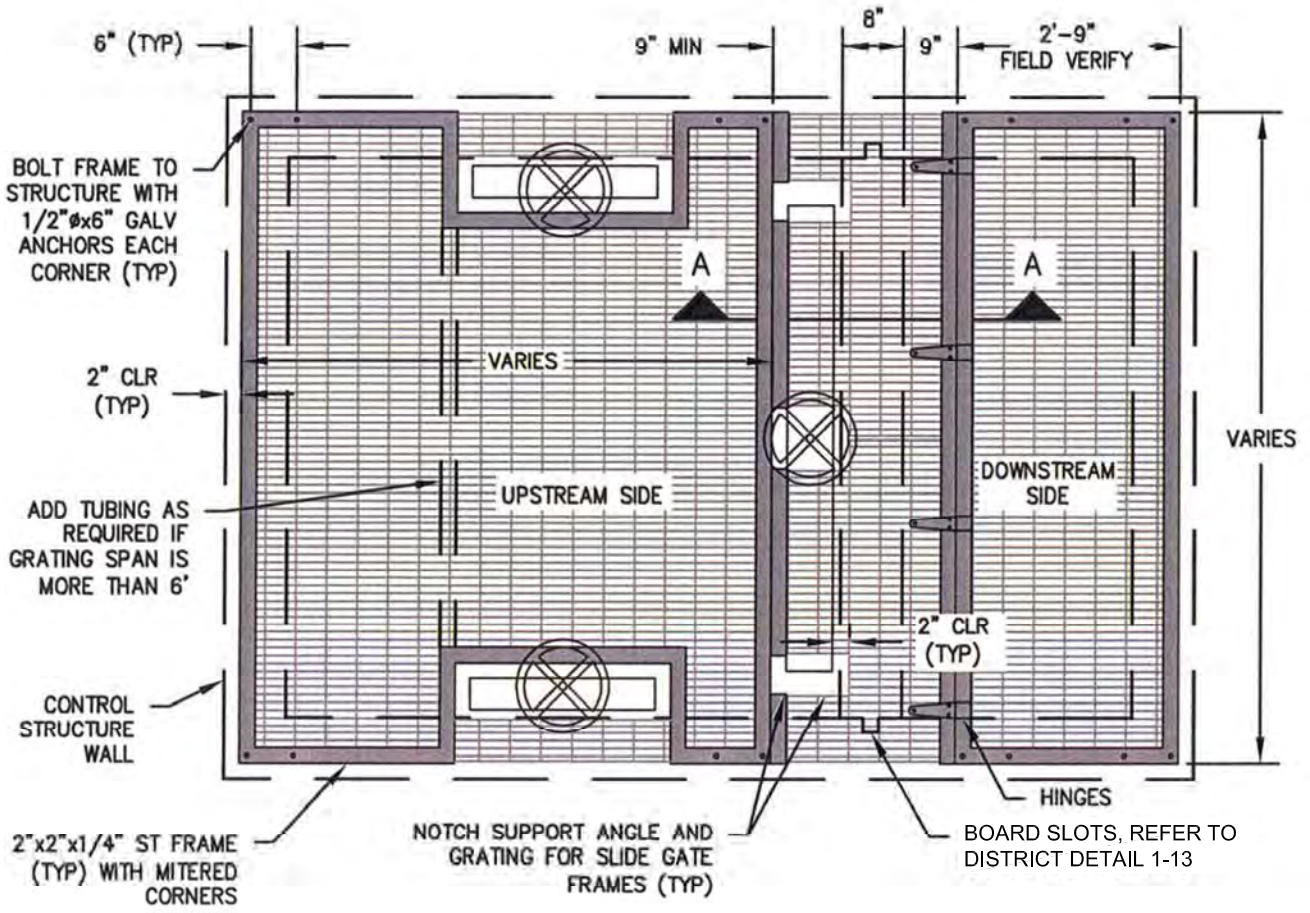
RECOMMENDED FOR APPROVAL BY:

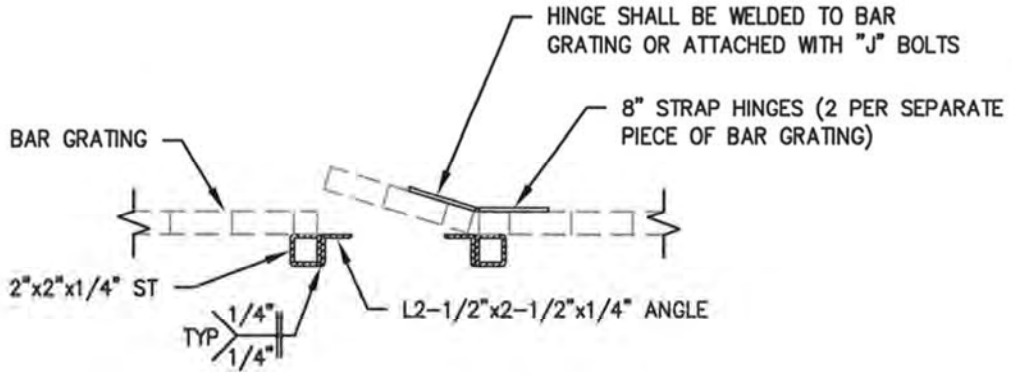
CHIEF OF OPERATIONS DATE

APPROVED BY:

PRESIDENT, BOARD OF DIRECTORS DATE

THRUST





SECTION A–A

CONSTRUCTION NOTES

1. BAR GRATING SHALL BE McNICHOLS GW-175 1-3/4" x 3/16" GALVANIZED STEEL BARS SPACED AT 1-3/16 INCH CENTERS WITH CROSS BARS AT 4 INCH CENTERS, OR APPROVED EQUIVALENT. MAXIMUM SPAN SHALL BE 6 FEET. GRATING SHALL BE BANDED ALL AROUND INCLUDING NOTCHED AREAS.

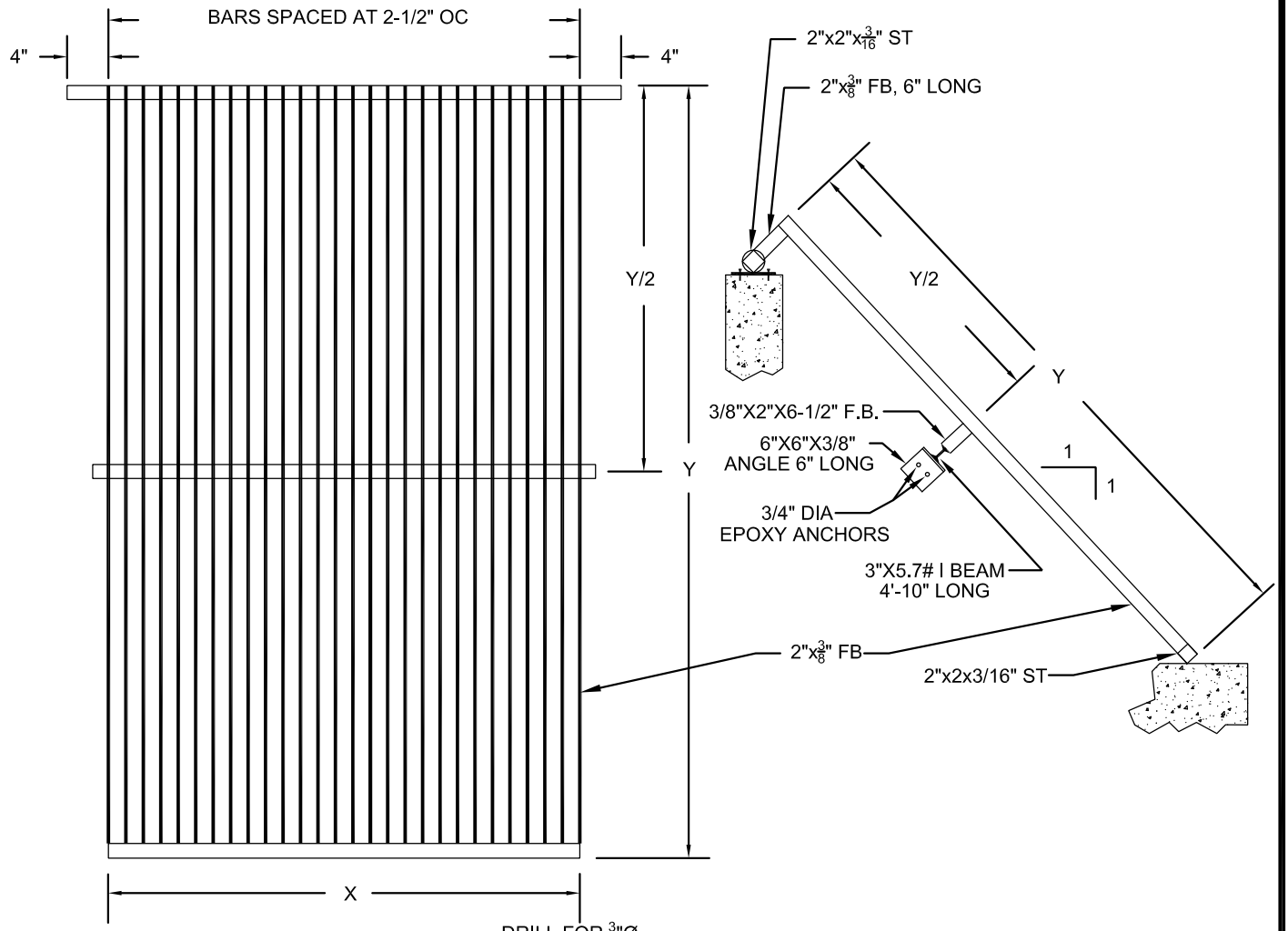
2. UNLESS OTHERWISE NOTED, ALL STEEL SURFACES SHALL BE HOT DIP GALVANIZED OR BRUSH PAINTED WITH ONE COAT RED RUSTOLEUM PRIMER, SECOND COAT GREEN RUSTOLEUM, FINAL COAT SAND OR TAN EXTERIOR GLOSS FINISH, OR PRE-APPOVED EQUIVALENT.

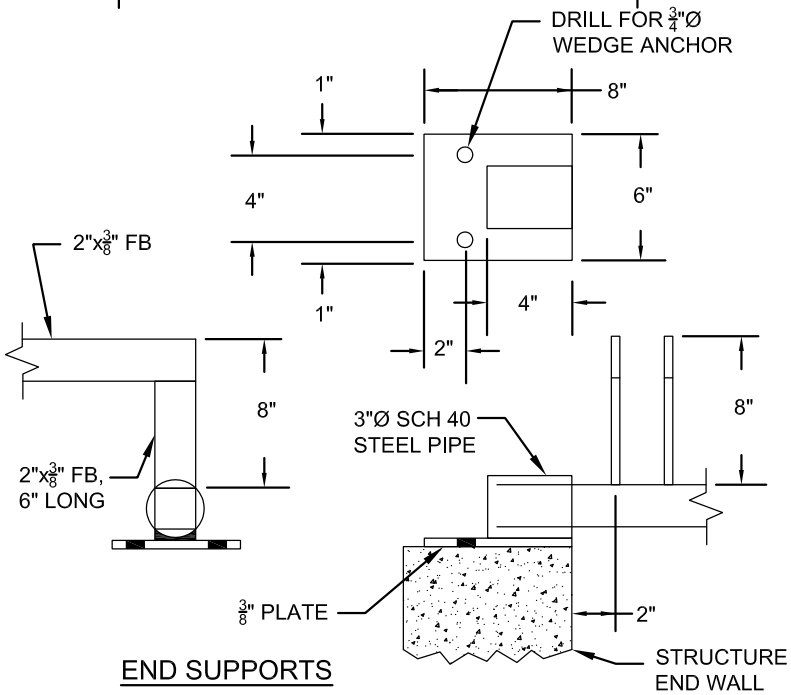
3. PROVIDE REMOVAL (BOLTED DOWN) GRATING SECTIONS ON UPSTREAM SIDE OF CONTROL STRUCTURE (MAX 2 FOOT WIDTH EACH.

PESCADERO
RECLAMATION DISTRICT 2058

EXPANDED METAL COVER

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 6-01
REVISIONS: 0	SECTION: 0	DRAWING NAME: 6-01.DWG		





END SUPPORTS

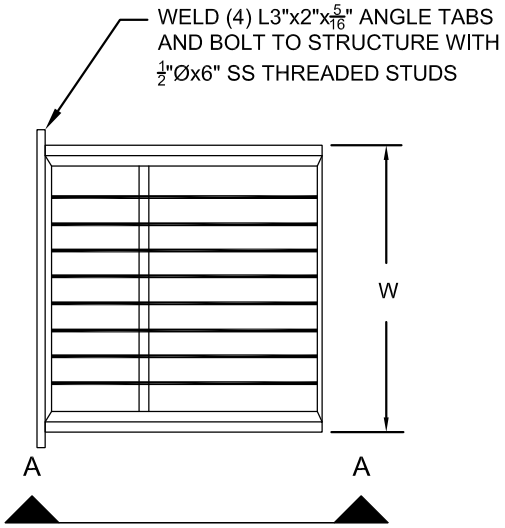
CONSTRUCTION NOTES

1. ALL METAL SHALL BE HOT-DIP GALVANIZED STEEL.
2. THE SHAPE OF THE TRASH RACK FACE MAY BE MODIFIED AS NEEDED TO FIT CANAL TO PIPELINE TRANSITIONS AS DIRECTED BY DISTRICT ENGINEER.
3. DIMENSION "X" AND "Y" TO BE FIELD FIT TO CONCRETE STRUCTURE.

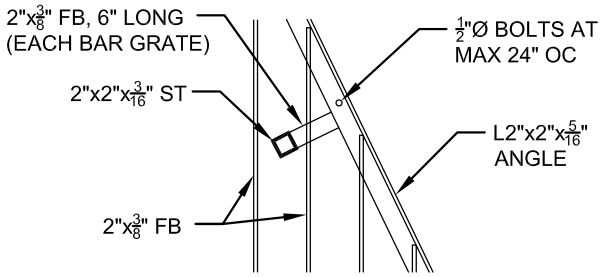
PESCADERO
RECLAMATION DISTRICT 2058

HINGED GALVANIZED TRASH RACK

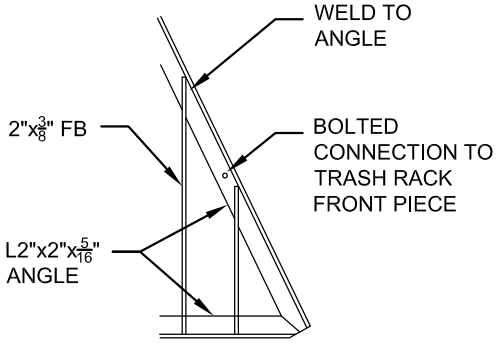
DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 6-02
REVISIONS: 0	SECTION: 0	DRAWING NAME: 6-02.DWG		



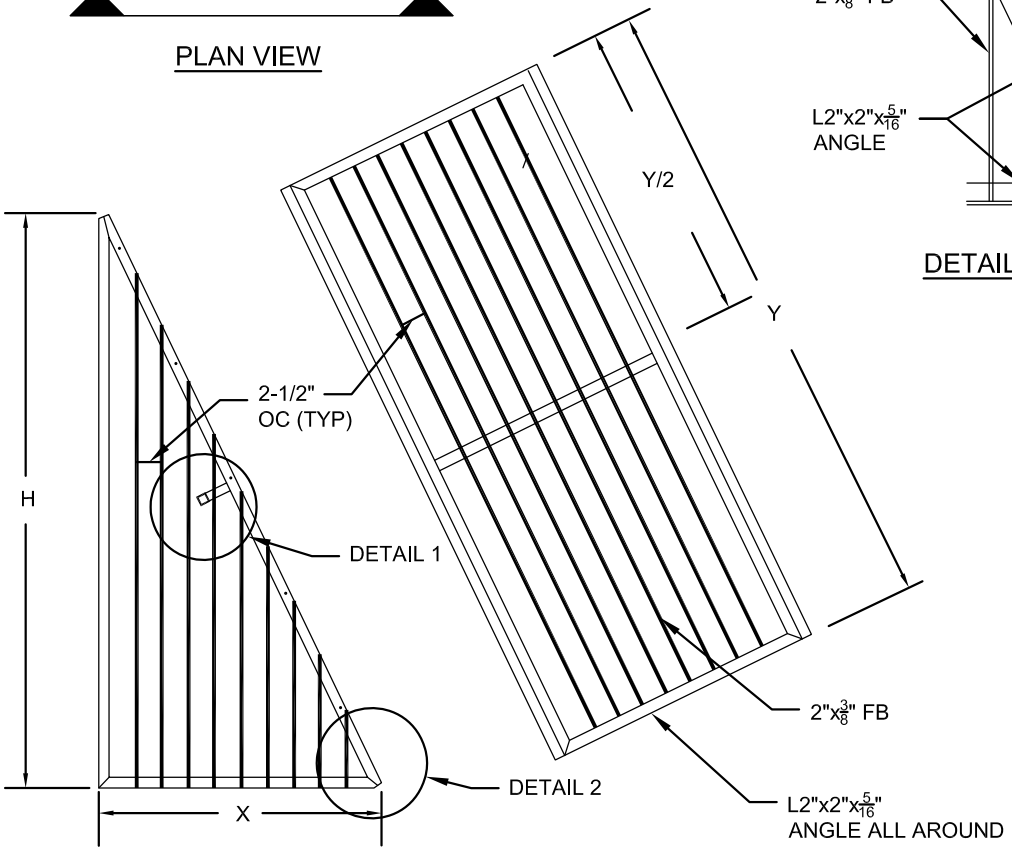
PLAN VIEW



DETAIL 1



DETAIL 2



SECTION A

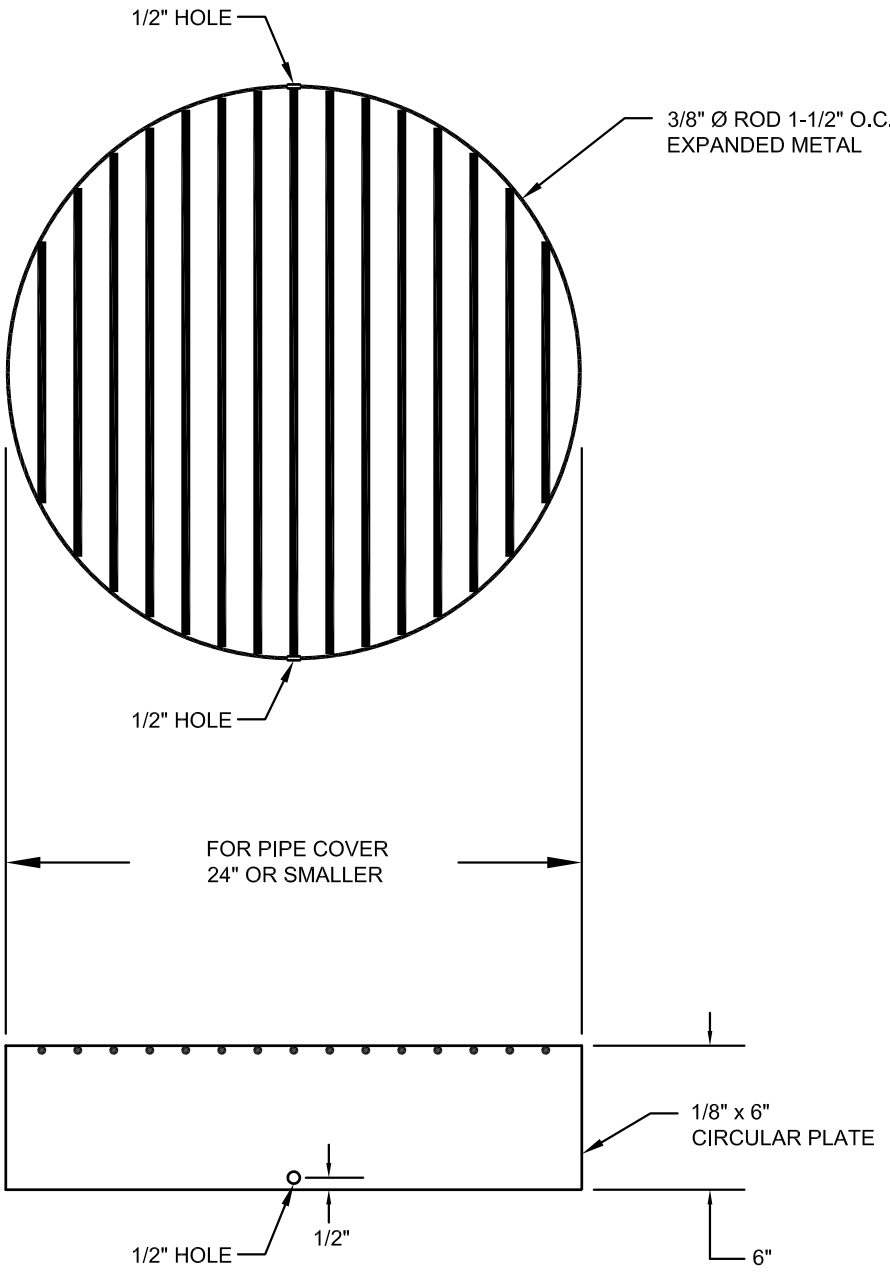
CONSTRUCTION NOTES

1. ALL METAL SHALL BE HOT-DIP GALVANIZED STEEL.
2. THE SHAPE OF THE TRASH RACK FACE MAY BE MODIFIED AS NEEDED TO FIT CANAL TO PIPELINE TRANSITIONS AS DIRECTED BY DISTRICT ENGINEER.
3. DIMENSION "H", "X", AND "Y" TO BE FIELD FIT TO CONCRETE STRUCTURE.
4. TRASH RACK SHALL BE FABRICATED IN THREE PIECES THAT ARE BOLTED TOGETHER. BOLTS USED SHALL BE STAINLESS STEEL

PESCADERO
RECLAMATION DISTRICT 2058

THREE SIDED TRASH RACK

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 6-04
REVISIONS: 0	SECTION: 0	DRAWING NAME: 6-04.DWG		



CONSTRUCTION NOTES

1. CLEARANCE BETWEEN EDGE OF STAND AND COVER SHALL BE MINIMUM 1/4 INCH AND MAXIMUM 1/2 INCH ALL SIDES.
2. ANY CHANGES OR DEVIATION REQUIRED BY FIELD CONATIONS SHALL BE PRE-APPOVED BY DISTRICT ENGINEER.
3. UNLESS OTHERWISE NOTED, ALL STEEL SURFACES SHALL BE HOT DIP GALVANIZED OR BRUSH PAINTED WITH ONE COAT RED RUSTOLEUM PRIMER, SECOND COAT GREEN RUSTOLEUM, FINAL COAT SAND OR TAN EXTERIOR GLOSS FINISH, OR PRE-APPROVED EQUIVALENT.

PESCADERO
RECLAMATION DISTRICT 2058

EXPANDED METAL COVER

DRAWN BY: NWP-DIST. ENGR.	DATE: 2-1-2017	SCALE: NTS	ADOPTED BY THE DISTRICT: RICHARD PELLEGRI RD 2058 DISTRICT GENERAL MANAGER	DRAWING NO. 6-11
REVISIONS: 0	SECTION: 0	DRAWING NAME: 6-11.DWG		