

DRAWING NO.	TITLE/DESCRIPTION
RW-10 (1 of 6)	INDEX AND GENERAL NOTES
RW-10 (2 of 6)	VAULT SECTIONAL PLAN VIEW
RW-10 (3 of 6)	VAULT SECTION "A"
RW-10 (4 of 6)	VAULT SECTIONS "B" AND "C"
RW-10 (5 of 6)	PIPING AND VAULT SCHEDULE
RW-10 (6 of 6)	SPECIFIC EQUIPMENT NOTES

ALL SIX (6) PRV DRAWINGS SHALL BE INCLUDED ON THE CONSTRUCTION PLANS.

- A. THE VALVE SIZE AND LAYOUT SCHEME SHALL BE DETERMINED BY THE OWNER; APPROVAL WILL BE BY THE UTILITIES DEPARTMENT. PLANS MUST BE PREPARED, SEALED AND SIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS.
- B. THE VAULT PIPING LAYOUT SHALL BE SHOWN IN DETAIL.
- C. THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR APPROVAL BY THE OWNER FOR ALL VAULT, PIPING, EQUIPMENT AND MATERIALS PRIOR TO ANY CONSTRUCTION.
- D. FIELD VERIFY THE DEPTH OF THE ADJACENT PIPING TO BE CONNECTED TO AND ADJUST THE VERTICAL DIMENSIONS OF THE VAULT AS REQUIRED.
- E. FIELD VERIFY THE MATERIAL AND PRESSURE CLASS OF THE ADJACENT PIPING TO BE CONNECTED TO AND PROVIDE APPROPRIATE PIPE CONNECTION FITTINGS AS REQUIRED.
- F. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF ANY EXISTING UTILITIES, STRUCTURES AND EQUIPMENT WHICH PERTAIN TO AND/OR AFFECT THE CONSTRUCTION OF THE VAULT.
- G. ANY EXISTING UTILITIES, PAVEMENT, FENCING, CURBS, SIDEWALKS, STRUCTURES, ETC., THAT ARE DAMAGED OR REMOVED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR.
- H. THE LOCATION AND ORIENTATION OF THE VAULT SHALL BE APPROVED BY THE OWNER PRIOR TO CONSTRUCTION.
- I. DIMENSIONS AND ELEVATIONS SHOWN WITH AN ASTERISK (\*) SHALL BE DETERMINED AND/OR VERIFIED AFTER FINAL EQUIPMENT SELECTION AND LOCATION HAVE BEEN MADE.
- J. VERIFY ALL PIPING DIMENSIONS AND ELEVATIONS FOR EQUIPMENT AND PIPING MATERIALS ACTUALLY FURNISHED FOR THIS PROJECT.
- K. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE REVEGETATED TO A MINIMUM OF PRE-CONSTRUCTION CONDITIONS.
- L. ALL VAULT PIPING SHALL BE DUCTILE IRON PIPE (D.I.P.), FACTORY COATED WITH PURPLE EPOXY PAINT.
- M. ALL BURIED PIPING SHALL BE PURPLE POLY WRAPPED AND SHALL ALSO HAVE RESTRAINED JOINTS INSTALLED TO A MINIMUM DISTANCE OUTSIDE OF THE VAULT WALL AS SHOWN ON DETAIL RW-10 (5 OF 6).
- N. ALL BURIED PIPING SHALL BE INSTALLED WITH 4- FEET MINIMUM COVER.
- O. THE CONTRACTOR SHALL PROVIDE COUPLINGS, EXPANSION JOINTS AND THRUST RESTRAINTS AS REQUIRED FOR ALL PIPING.
- P. ALL VALVES, FITTINGS AND PIPE NOT DESIGNATED OTHERWISE SHALL BE EPOXY LINED.
- Q. CONFINED SPACE ENTRY PLAQUE REQUIRED ON OUTSIDE OF ACCESS HATCH.

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**03-01-18**

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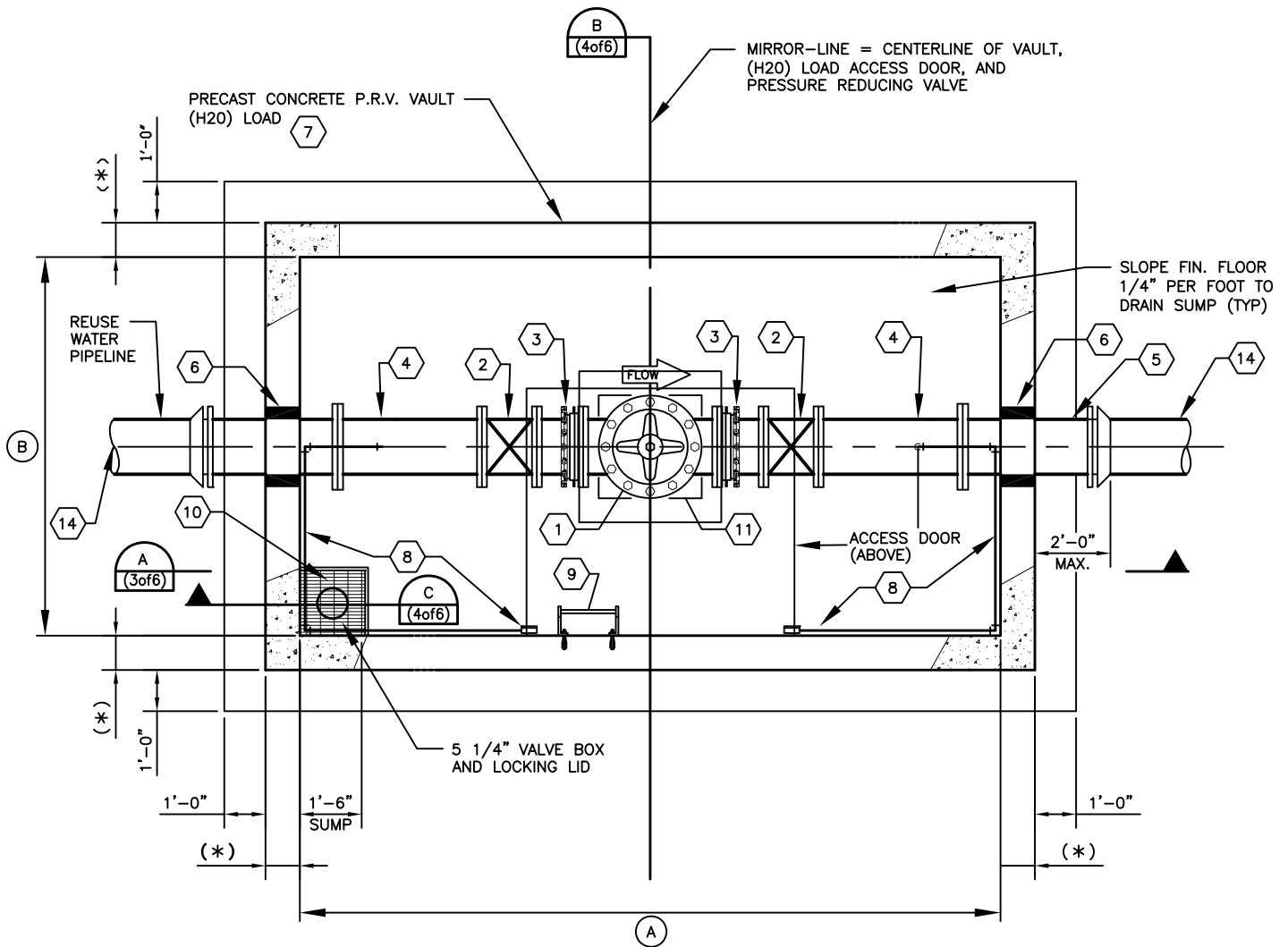
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# CITY OF ROUND ROCK

## REUSE WATER PRESSURE REDUCING VALVE VAULT INDEX AND GENERAL NOTES

DRAWING NO:  
RW-10 (1 of 6)





**SECTIONAL PLAN VIEW**

NOT TO SCALE



**NOTES:**

1. SEE DETAIL DRAWING NUMBER RW-10 (5 of 6) FOR PIPING SCHEDULE.
2. ACCESS HATCH TO BE CENTERED OVER PRESSURE REDUCING VALVE.
3. PIPING INSIDE OF VAULT TO BE PURPLE EPOXY PAINT (SEE NOTE L ON DETAIL RW-10 (1 of 6)).
4. ATTACH PLAQUE TO THE OUTSIDE OF THE ACCESS HATCH (SEE NOTE Q ON DETAIL RW-10 (1 of 6)).

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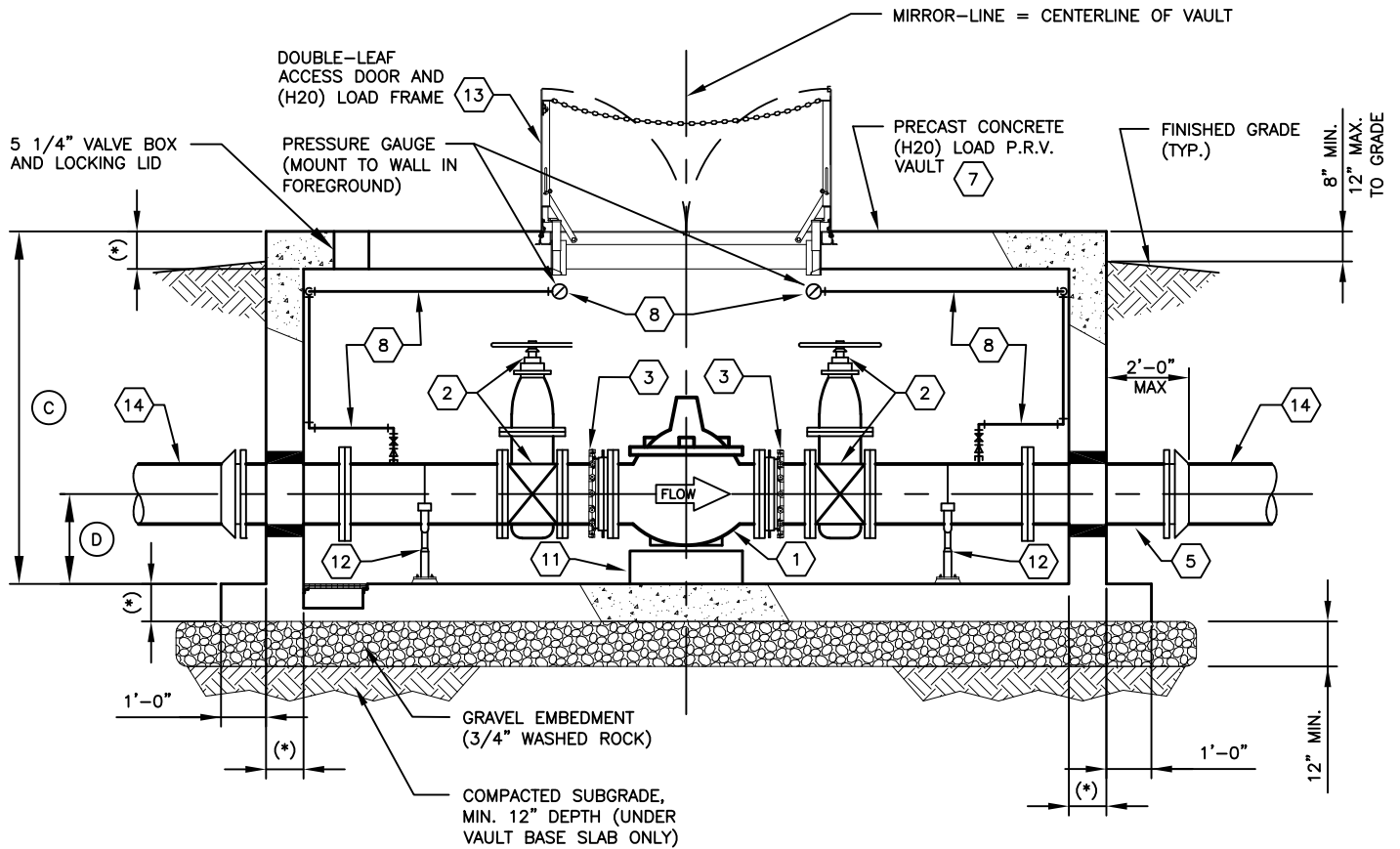
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**CITY OF ROUND ROCK**

**REUSE WATER  
PRESSURE REDUCING VALVE VAULT  
VAULT SECTIONAL PLAN VIEW**

DRAWING NO:  
RW-10 (2 of 6)





**VAULT SECTION "A"**

NOT TO SCALE



**NOTE:**

(\* ) SEE NOTE "i" ON DETAIL RW-10 (1 of 6).

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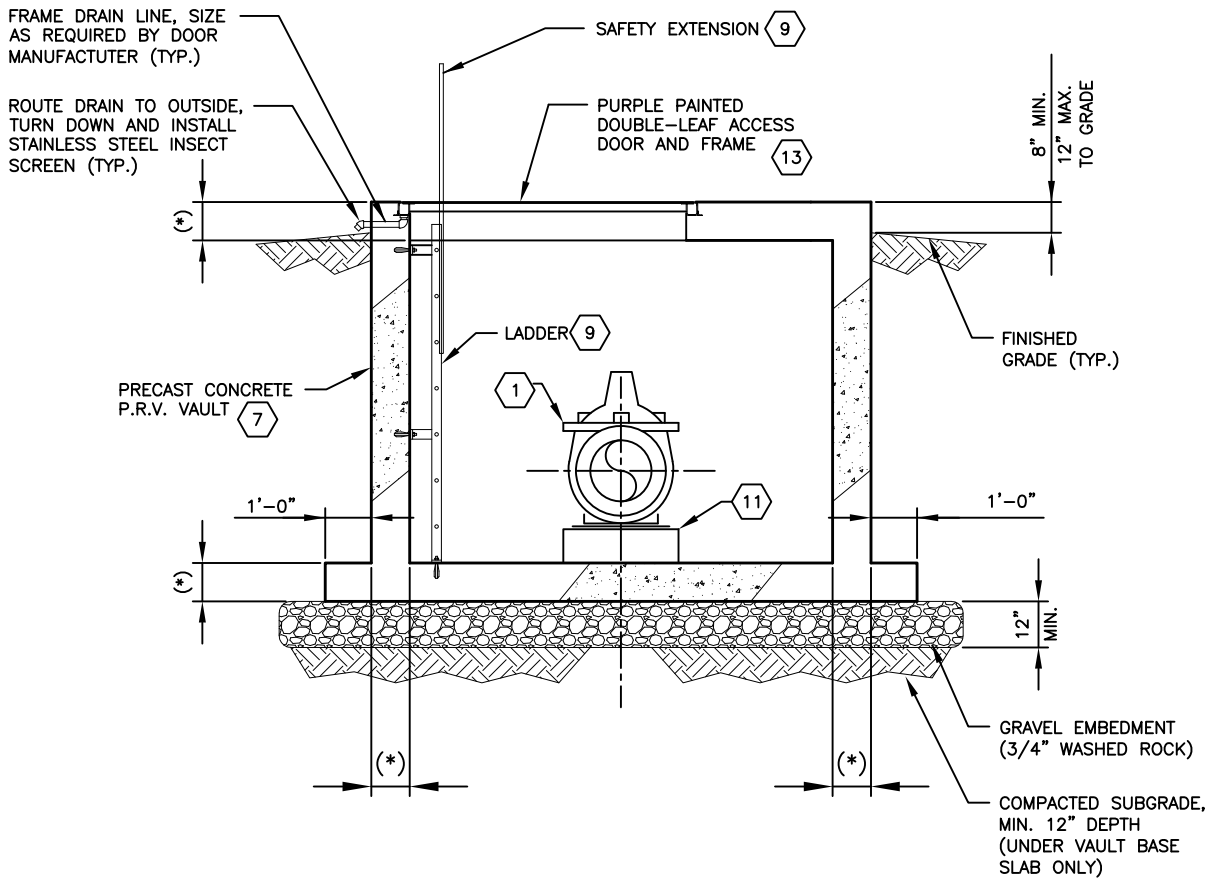
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**CITY OF ROUND ROCK**

**REUSE WATER  
PRESSURE REDUCING VALVE VAULT  
VAULT SECTION "A"**

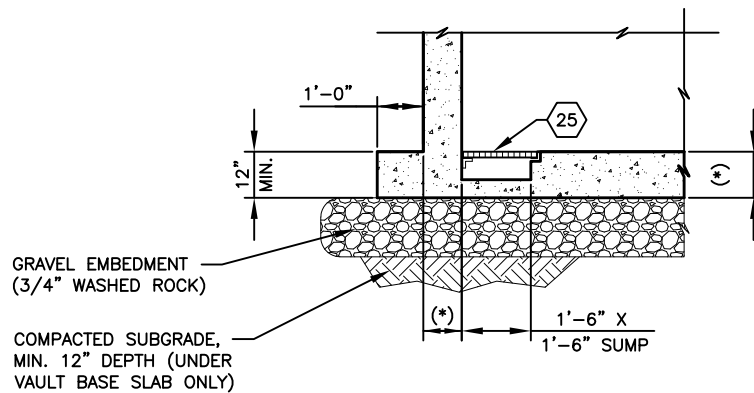
DRAWING NO:  
RW-10(3 of 6)





**VAULT SECTION**

NOT TO SCALE



**SUMP SECTION**

NOT TO SCALE



**NOTE:**

(\* ) SEE NOTE "1" ON DETAIL RW-10 (1 of 6).

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**CITY OF ROUND ROCK**

**REUSE WATER  
PRESSURE REDUCING VALVE VAULT  
VAULT SECTIONS "B" AND "C"**

DRAWING NO:  
RW-10 (4 of 6)



VAULT SCHEDULE				
TAG NO.	DESCRIPTION	VAULT NO. 1 (4" PRV)	VAULT NO. 2 (6" PRV)	VAULT NO. 3 (8" PRV)
A	MINIMUM VAULT LENGTH	5'-0"	7'-0"	8'-0"
B	MINIMUM VAULT WIDTH	5'-0"	5'-0"	6'-0"
C	MINIMUM VAULT HEIGHT	4'-0"	6'-6"	6'-6"
D	MINIMUM PIPE HEIGHT	18"	24"	24"

PIPING SCHEDULE						
TAG NO.	DESCRIPTION	VAULT NO. 1	VAULT NO. 2	VAULT NO. 3	FITTING TYPE	SPECIFIC NOTES – SEE RW 10 (6of6)
1	PRESSURE REDUCING VALVE	4"	6"	8"	FL X FL	3,7
2	RESILIENT WEDGE GATE VALVE	4"	6"	8"	FL X FL	3,4
3	DISMANTILING ADAPTOR	4"	6"	8"	-	5,6
4	DUCTILE IRON PIPE (OPTIONAL)	4"	6"	8"	FL X FL	2,3
5	SPOOL PIPE	4"	6"	8"	FL X PE	2,3
6	WALL PENETRATION SEAL	4"	6"	8"	-	18
7	PRE-CAST CONCRETE VALVE VAULT	-				14
8	PRESSURE GAUGE ASSEMBLY	-				8,9
9	ALUMINUM LADDER W/ SAFETY EXTENSION	-				15
10	GRATING AND FRAME	-				16
11	CONCRETE PEDESTAL VALVE SUPPORT	-				11
12	PIPE STANCHION SADDLE SUPPORT WITH YOKE	-				13
13	PURPLE DOUBLE-LEAF ACCESS DOOR	42" x 42"	42" x 42"	60" x 60"	-	17
14	BUIRED PIPE WITH RESTRAINED FITTINGS	61 L.F. MIN	88 L.F. MIN	114 L.F. MIN.	-	-

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CITY OF ROUND ROCK

REUSE WATER  
PRESSURE REDUCING VALVE VAULT  
PIPING AND VAULT SCHEDULE

DRAWING NO:  
RW-10 (5 of 6)



**NOTES:**

1. FULLY RESTRAINED JOINT FITTING.
2. DUCTILE IRON PIPE.
3. 200 P.S.I. WORKING PRESSURE.
4. NON-RISING STEM WITH HANDWHEEL OPERATOR, A.W.W.A. C509 (CLOW, MUELLER, OR APPROVED EQUAL).
5. 200 P.S.I. WORKING PRESSURE.
6. FULLY RESTRAINED (EBAA IRON SALES INCORPORATED SERIES 2100 MEGAFLANGE, OR APPROVED EQUAL).
7. GLOBE-STYLE, FULL-PORT WITH STEM INDICATOR AND 4 1/2", OIL FILLED, GUAGES ON THE INLET AND OUTLET PORTS. (WATTS ACV 115, CLA-VAL, OR APPROVED EQUAL). SEE NOTE #20 FOR REQUIRED LAYING LENGTHS.
8. PRESSURE GAUGE ASSEMBLY TO INCLUDE 1" DIAMETER THREADED TAP; 1/2" X 1" BUSHING; 1/2" QUARTER-TURN BALL VALVE; AND STAINLESS STEEL 316 GAUGE WITH 4 1/2" DIAL, OIL FILLED, 0-160 P.S.I. RANGE, AND 1/2" GAUGE CONNECTION; INSTALLED WITH 1/2" COPPER PIPING ROUTED ALONG WALL TO WITHIN 6" OF TOP OF VAULT, WITH GAUGE MOUNTED IN A LOCATION THAT IS READABLE BY OPENING THE ACCESS DOOR. COORDINATE INSTALLATION WITH THE OWNER'S REPRESENTATIVE.
9. SUPPORT COPPER TUBING WITH PIPE STRAP AND 3/8" EXPANSION ANCHORS, INSTALLED AT MAXIMUM 3- FEET O.C. EQUAL SPACING (ANVIL INTERNATIONAL INCORPORATED FIG. 262, OR APPROVED EQUAL).
10. CONCRETE PEDESTAL PIPE SUPPORT WITH STEEL STRAP; MINIMUM 10" THICK CONCRETE PEDESTAL (WIDTH TO BE PIPE O.D. PLUS 10" EACH SIDE), WITH 3/4" THICK X 6" WIDE STAINLESS STEEL STRAP AND TWO 1 1/4" DIAMETER ANCHOR BOLTS. CONCRETE REINFORCING SHALL BE NO. 5 VERTICAL REBARS AND NO. 4 HORIZONTAL HOOPS PLACED AT 8" ON-CENTERS (ALL VERTICAL BARS TO BE EMBEDDED INTO SLAB TO A DEPTH RECOMMENDED BY EPOXY SYSTEM MANUFACTURER).
11. CONCRETE PEDESTAL VALVE SUPPORT; HORIZONTAL CONCRETE DIMENSIONS AND ANCHOR BOLT SIZE, LENGTH AND LOCATIONS TO BE DETERMINED BY THE VALVE MANUFACTURER TO FIT THE VALVE MOUNTING BASE SUPPLIED WITH THE VALVE. VERIFY ALL DIMENSIONS WITH THE VALVE MANUFACTURER. CONCRETE REINFORCING SHALL BE NO. 5 VERTICAL REBARS AND NO. 4 HORIZONTAL HOOPS PLACED AT 8" ON-CENTERS (ALL VERTICAL BARS TO BE EMBEDDED INTO SLAB TO A DEPTH AS RECOMMENDED BY EPOXY SYSTEM MANUFACTURER).
12. PIPE STANCHION SADDLE SUPPORT (ANVIL INTERNATIONAL, INC., FIG. 258 AND FIG. 62, OR APPROVED EQUAL) WITH EXPANSION ANCHORS AS RECOMMENDED BY SUPPORT MANUFACTURER.
13. PIPE STANCHION SADDLE SUPPORT WITH YOKE (ANVIL INTERNATIONAL, INC., FIG. 259 AND FIG. 62, OR APPROVED EQUAL) WITH EXPANSION ANCHORS AS RECOMMENDED BY SUPPORT MANUFACTURER.
14. PRECAST CONCRETE VAULT INSTALLED ON TOP OF CRUSHED ROCK BED. DUE TO THE CONSTRAINTS OF THE CONSTRUCTION, THE CONTRACTOR MAY ELECT TO PROVIDE A CAST-IN-PLACE CONCRETE VAULT. IN EITHER CASE, SEALED AND SIGNED DRAWINGS BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS MUST BE SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION. THE VAULT SHALL BE MINIMUM 4000 P.S.I. 28-DAY COMPRESSION STRENGTH CONCRETE WITH GRADE 60 REINFORCING STEEL DESIGNED FOR AASHTO H-20 WHEEL LOAD AND GROUNDWATER AT 0- FEET BELOW FINISHED GRADE. (CONCRETE PRODUCTS INCORPORATED, OR APPROVED EQUAL).
15. LADDER PER DETAIL WT-18, ALL ALUMINUM CONSTRUCTION, WITH 7" STAND-OFF (FOR FLAT WALL) AND FLOOR MOUNTING BRACKETS AND SAFETY EXTENSION (HALLIDAY PRODUCTS SERIES L1D LADDER AND SERIES L1E EXTENSION). LADDER TO EXTEND TO THE VALVE VAULT FLOOR.
16. REMOVABLE FRP GRATING WITH FRP FRAME AND STAINLESS STEEL ANCHORS.
17. ALUMINUM DOUBLE-LEAF ACCESS DOOR, RATED FOR AASHTO H-20 WHEEL LOAD (HALLIDAY PRODUCTS SERIES H2W ACCESS DOOR, OR APPROVED EQUAL).
18. WALL PENETRATION SHALL BE INSTALLED WITH MECHANICAL COMPRESSION-TYPE ANNULAR SEAL (THUNDERLINE-LINK-SEAL, BY PIPELINE SEAL AND INSULATOR INCORPORATED, OR APPROVED EQUAL).
19. VALVE BOX AND LOCKING LID, 5 1/4" DIAMETER CAST IRON RISER SECTION OF VALVE BOX, LENGTH AS REQUIRED FOR COVER SLAB THICKNESS AND LOCKING LID WITH "PLAIN" MARKING (TYLER/UNION MODEL 148241 AND MODEL 145462, OR APPROVED EQUAL).
20. GLOBE VALVE SHALL HAVE THE FOLLOWING LAY LENGTHS: 2"-9.38", 3"-12.00", 4"-15.00", 6"-20.00", 8"-25.38", 10"-29.75", 12"-34.00", 14"-39.00", 16"-41.38", 18"-48.00", 20"-48.00" AND 24"-48.00".

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**CITY OF ROUND ROCK**

**REUSE WATER  
PRESSURE REDUCING VALVE VAULT  
SPECIFIC EQUIPMENT NOTES**

DRAWING NO:  
RW-10 (6 of 6)

