NOTES:

1) IN NO CASE SHALL THE METER AND BOX BE PLACED IN THE SIDEWALK WITHOUT DISTRICT APPROVAL.

2) FOR SERVICE INSTALLATIONS WITH GREATER THAN 150 PSI, SEE W-8.

3) PIPING COVERED WITH BLUE POLY SLEEVE.

4) BACKFLOW REQUIRED, PER W-6.

5) METER BOX TO BE WITHIN ROW OR EASEMENT.
1) In no case shall the meter and box be placed in the sidewalk without district approval.

2) For service installations with greater than 150 psi, see W-8.

3) Piping covered with blue or purple poly sleeve.

4) Backflow required, per W-6.

5) Meter box to be within row or easement.

---

**REVISIONS**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>MATERIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SADDLE</td>
</tr>
<tr>
<td>2</td>
<td>2&quot; BALL CORP. STOP (MIPT X QUICK)</td>
</tr>
<tr>
<td>3</td>
<td>2&quot; TYPE &quot;K&quot; SOFT COPPER TUBING (NO JOINTS ALLOWED)</td>
</tr>
<tr>
<td>4</td>
<td>BALL ANGLE METER STOP (QUICK X FLG)</td>
</tr>
<tr>
<td>5</td>
<td>WATER METER</td>
</tr>
<tr>
<td>6</td>
<td>BALL VALVE W/ HANDLE</td>
</tr>
<tr>
<td>7</td>
<td>POLYMER CONCRETE METER BOX W/ 2-PIECE LID</td>
</tr>
<tr>
<td>8</td>
<td>3000# FORGED STEEL HALF COUPLING (ON STEEL PIPE ONLY)</td>
</tr>
<tr>
<td>9</td>
<td>DIELECTRIC INSULATING BUSHING (ON STEEL ONLY)</td>
</tr>
<tr>
<td>10</td>
<td>2&quot; COPPER 90° ELBOW (QUICK X QUICK)</td>
</tr>
</tbody>
</table>

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**RINCON DEL DIABLO MUNICIPAL WATER DISTRICT**

**STANDARD DRAWING**

**2" WATER SERVICE CONNECTION**

**(1-1/2" AND 2" METER)**
1) Substitutions in material shall not be made without district approval.
2) Pipe length shall be verified in the field.
3) All exposed piping and bolts shall be painted green per current RDDMWD material list (excluding meter and strainer).
4) Use 4" piping and valves for 3" & 4" meters. Use 6" piping and valves for 6" meter.

Legend symbol

<table>
<thead>
<tr>
<th>Item</th>
<th>Material</th>
<th>Item</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6&quot; TAP, GATE VALVE, AND REDUCER</td>
<td>6</td>
<td>2&quot; LOCK WING BALL VALVE, BRASS</td>
</tr>
<tr>
<td>2</td>
<td>SPOOL</td>
<td>9</td>
<td>VALVE SUPPORT STAND W/ SADDLE TOP</td>
</tr>
<tr>
<td>3</td>
<td>90° FLG ELBOW</td>
<td>10</td>
<td>GROOVED CONNECTION</td>
</tr>
<tr>
<td>4</td>
<td>D.I.P. SPOOL W/ 2&quot; SADDLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>GATE VALVE W/ HANDWHEEL</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>BACKFLOW</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>METER INSTALLED BY DISTRICT</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

Notes:

- Max height of valve 5' from finished surface.
- Valve support stand w/ saddle top.
- Grooved connection.
- Valve installed by district.
- Backflow.
- Meter installed by district.

RINCON DEL DIABLO MUNICIPAL WATER DISTRICT
STANDARD DRAWING

DATE: JULY 2017

BY: NL

MISC

NAMES

DATE: 12/18/17

Drawing No: W-3

3" - 4" - 6" METER
(ABOVE GROUND)
**NOTES:**

1) **SUBSTITUTIONS IN MATERIAL SHALL NOT BE MADE WITHOUT DISTRICT APPROVAL.**

2) **A MINIMUM OF 24" CLEARANCE SHALL BE MAINTAINED BETWEEN THE VAULT AND ALL FACILITIES.**

3) **PIPE LENGTH SHALL BE VERIFIED IN THE FIELD.**

4) **ALL EXPOSED PIPING AND BOLTS SHALL BE PAINTED GREEN PER CURRENT RDDMWD MATERIAL LIST.**

5) **ACCESS LADDER REQUIRED IF VAULT IS OVER 3' DEEP PER RDDMWD INSPECTOR'S DIRECTION.**

---

**ITEM** | **MATERIAL** | **ITEM** | **MATERIAL**
---|---|---|---
1 | 6" TAP, GATE VALVE, REDUCER | 9 | VALVE SUPPORT STAND W/ SADDLE TOP
2 | DIP SPOOL | 10 | ALUMINUM, SPRING ASSIST LID 20K OR H2O IF IN ROADWAY
3 | PRE-CAST VAULT | 11 | 
4 | D.I.P. SPOOL W/ 2" SADDLE & 2" LOCKING BALL VALVE | 12 | 
5 | GATE VALVE W/ HANDWHEEL | 13 | 
6 | BACKFLOW DEVICE | 14 | 
7 | METER INSTALLED BY DISTRICT | 15 | 
8 | GROOVED COUPLING | 16 | 

---

**RINCON DEL DIABLO MUNICIPAL WATER DISTRICT STANDARD DRAWING**

**DATE:** JULY 2017

**BY:** NL

**W - 4**

**3" - 4" - 6" METER (BELOW GROUND)**
3/4" THROUGH 1" METER W/ REGULATOR, GREATER THAN 150 PSI
#6B BOX/ LID SEE W-2

11/2" & 2" METER W/ REGULATOR, GREATER THAN 200 PSI
ARMORCAST A6001430PCX18 TWO - PIECE LID OR APPROVED EQUAL

NOTES:
1) IN NO CASE SHALL THE METER AND BOX BE PLACED IN THE SIDEWALK WITHOUT DISTRICT APPROVAL.
2) TO PROTECT THE DISTRICT METER, A PRESSURE REGULATOR IS REQUIRED FOR PRESSURES GREATER THAN 150 PSI (3/4" & 1" METERS) AND 200 PSI (1 1/2" & 2" METERS)
3) INSTALL BACKFLOW PER W-6
4) METER BOX TO BE WITHIN ROW OR EASEMENT
MATERIAL

ITEM

1) ALL INSTALLATIONS SHALL BE ABOVE GROUND.

2) ALL BACKFLOW PREVENTION DEVICES SHALL BE AS CLOSE TO THE WATER METER AS POSSIBLE.

3) THE BACKFLOW PREVENTION DEVICE SHALL BE SELECTED FROM APPROVED STATE OF CALIFORNIA-DEPARTMENT OF HEALTH SERVICES LIST ON FILE WITH THE DISTRICT.

4) NO CONNECTIONS SHALL BE MADE BETWEEN THE WATER METER AND THE BACKFLOW PREVENTION DEVICE.

5) TYPE OF BACKFLOW PREVENTION DEVICE SHALL BE BASED ON THE DEGREE OF HAZARD.

6) APPROPRIATE TEST COCKS SHALL BE IN PLACE AT ALL TIMES.

7) DISTRICT SHALL HAVE ACCESS TO BACKFLOW PREVENTION DEVICE AT ALL TIMES.

8) CONCRETE PAD SHALL BE A MINIMUM OF 18" WIDE.

9) REFER TO STANDARD DRAWINGS FOR INSTALLATION OF WATER METER AND SERVICE.

10) PIPING MATERIAL SHALL BE RED BRASS, OR "K" OR "L" RIGID COPPER PIPING.

11) AGRICULTURAL SERVICES, IN NON-TRAFFIC AREAS, MAY USE SCHEDULE 80 UV RESISTANT PVC PIPING MATERIALS WITH PRIOR APPROVAL OF THE DISTRICT.
1) Substitutions in material shall not be made without approval of the district.

2) Pipe length shall be verified in the field.

3) All exposed piping and bolts shall be painted, color per district discretion (excluding by-pass plumbing).

4) All by-pass plumbing shall be hard copper or red brass as supplied by manufacturer.

5) Contact the appropriate fire protection district for specifications on fire department connection.

6) RPDA per state health department approved list.

7) By-pass meter backflow device shall be an included component of detector check assembly.

8) Protection may be required as per W - 14.

---

**Legend Symbols**

- STA.
- FINISH GRADE
- CURB
- DISTRICT MAINTAINED
- PRIVATELY MAINTAINED

**REVISIONS**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>MATERIAL</th>
<th>ITEM</th>
<th>MATERIAL</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>CONCRETE THRUST BLOCK PER W - 20</td>
<td>11</td>
<td>FLANGED ELBOW</td>
</tr>
<tr>
<td>2</td>
<td>WATER MAIN</td>
<td>12</td>
<td>FLANGED OS&amp;Y RWGV W/ HAND WHEEL</td>
</tr>
<tr>
<td>3</td>
<td>GATE VALVE CAN PER W - 19</td>
<td>13</td>
<td>STATE APPROVED RPDA</td>
</tr>
<tr>
<td>4</td>
<td>TAPPING SLEEVE W/ GATE VALVE &amp; TEE</td>
<td>14</td>
<td>CHAIN W/ KNOX LOCK</td>
</tr>
<tr>
<td>5</td>
<td>GATE VALVE, SIZE DETERMINED BY DISTRICT, 8&quot; MIN</td>
<td>15</td>
<td>FLANGED TEE W/ &quot;FDC&quot; OR AS REQ. BY FIRE DEPT.</td>
</tr>
<tr>
<td>6</td>
<td>MJ/PO ADAPTER W/ RESTRAINTS PER APPROVED MTRL LIST</td>
<td>16</td>
<td>4&quot; THICK CONCRETE SLAB W/ 8&quot; CLEARANCE AROUND ASSY.</td>
</tr>
<tr>
<td>7</td>
<td>SPOOL, SIZE DETERMINED BY DISTRICT, 8&quot; MIN</td>
<td>17</td>
<td>BYPASS METER (READ IN GAL.) W/ RP DEVICE</td>
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<tr>
<td>8</td>
<td>MJ/PO X FLG ELBOW W/ RESTRAINTS PER APPROVED MTRL LIST</td>
<td>18</td>
<td>ADJUSTABLE VALVE SUPPORT W/ 3/8&quot; S.S ANCHOR BOLTS</td>
</tr>
<tr>
<td>9</td>
<td>FLANGED DUCTILE IRON PIPE</td>
<td>19</td>
<td>BALL VALVES LOCKABLE IN OPEN POSITION</td>
</tr>
<tr>
<td>10</td>
<td>EXPANSION JOINT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

- Substitutions in material shall not be made without approval of the district.
- Pipe length shall be verified in the field.
- All exposed piping and bolts shall be painted, color per district discretion (excluding by-pass plumbing).
- All by-pass plumbing shall be hard copper or red brass as supplied by manufacturer.
- Contact the appropriate fire protection district for specifications on fire department connection.
- RPDA per state health department approved list.
- By-pass meter backflow device shall be an included component of detector check assembly.
- Protection may be required as per W - 14.
SPECIFICATIONS:

1) NUTS & BOLTS TO BE COATED WITH NO-OXIDE GREASE AND VISQUEEN.

2) GATE VALVES TO COMPLY WITH RDDMWD AND VISQUEEN.

3) VALVES DEEPER THAN 5FT REQUIRE VALVE STEM EXTENSIONS. EXTENSION SHALL BE SUCH THAT NUT IS ~3FT BELOW FINISH SURFACE. EXTENSION SHALL NOT BE ATTACHED/BOLTED TO OPERATING NUT. EXTENSION SHALL BE STEEL GALVANIZED W/CENTER RING.

NOTES:

RESTRAINED END CAP

BEARING AREA PER FIG. 1 OF THRUST BLOCK DETAILS

END CAP ASSEMBLY

EXIST. PIPE

CONC. ANCHOR BLK.

EXIST. PIPE

TRACER WIRE

PER W-19

TRENCH BOTTOM

ALLOW 3" MIN CLEAR FROM BOT. OF BLOCK

PLAN

ELEVATION

RINCON DEL DIABLO MUNICIPAL WATER DISTRICT
STANDARD DRAWING

GATE VALVE INSTALLATION AND CAP ASSEMBLY

DATE: JULY 2017

BY: NL

Drawing No.

REDWOOD BLOCKS & EXTENSIONS

NL 10/17/17
1. IF CONCRETE CURBS OR BERM ARE NOT INSTALLED, LOCATE AV 24" FROM PROPERTY OR EASEMENT LINE.

2. WHERE STREETS ARE IMPROVED WITH EITHER CONCRETE CURB OR BERM, LOCATE AV 36" FROM CURB, BERM, OR SIDEWALK.

NOTES:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>MATERIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 1/4&quot; HIGH PRESSURE STEEL WELD COUPLING PER W-18</td>
</tr>
<tr>
<td>2</td>
<td>1&quot; MIPT BRONZE BALL CORP STOP</td>
</tr>
<tr>
<td>3</td>
<td>1&quot; FIPT BRONZE 90 DEGREE ELBOW</td>
</tr>
<tr>
<td>4</td>
<td>1&quot; COPPER TUBING</td>
</tr>
<tr>
<td>5</td>
<td>1&quot; MIPT X GRIP RING ADAPTER</td>
</tr>
<tr>
<td>6</td>
<td>1&quot; BALL VALVE 360 DEG TURN WITH OPERATING NUT</td>
</tr>
<tr>
<td>7</td>
<td>1&quot; BALL VALVE WITH T-HANDLE</td>
</tr>
<tr>
<td>8</td>
<td>GATE WELL PER W-19</td>
</tr>
<tr>
<td>9</td>
<td>1&quot; x 3&quot; RED BRASS NIPPLE</td>
</tr>
<tr>
<td>10</td>
<td>2&quot; COMBINATION AIR &amp; VACUUM RELEASE VALVE W/ SCREEN (ARI D-040)</td>
</tr>
<tr>
<td>11</td>
<td>SADDLE</td>
</tr>
<tr>
<td>12</td>
<td>1&quot; X 2&quot; REDUCER</td>
</tr>
<tr>
<td>13</td>
<td>1&quot; FIPT X GRIP RING ADAPTER</td>
</tr>
<tr>
<td>14</td>
<td>PIPELINE PRODUCTS #VCAS-1424GR W/BLUE OR PURP BAND</td>
</tr>
<tr>
<td>15</td>
<td>1&quot; BRASS COUPLING</td>
</tr>
<tr>
<td>16</td>
<td>1&quot; X 12&quot; RED BRASS NIPPLE</td>
</tr>
<tr>
<td>17</td>
<td>DIELECTRIC INSULATING BUSHING (STEEL PIPE ONLY)</td>
</tr>
</tbody>
</table>
NOTES:
1. IF CONCRETE CURBS OR BERRMS ARE NOT INSTALLED, LOCATE AV 24" FROM PROPERTY OR EASEMENT LINE.

2. WHERE STREETS ARE IMPROVED WITH EITHER CONCRETE CURB OR BERM, LOCATE AV 36" FROM CURB, BERM, OR SIDEWALK.
NOTES:
1) BLOW-OFF SHALL BE LOCATED
   BEHIND CURB OR SIDEWALK ON SIDE
   OF STREET NEAREST STORM DRAIN INLET
2) NO SOLDERED JOINTS, USE GRIP AND THREADED CONN.
3) EDGE OF METER BOX MUST BE 24" WITHIN ROW OR EASEMENT

<table>
<thead>
<tr>
<th>ITEM</th>
<th>MATERIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SADDLE</td>
</tr>
<tr>
<td>2</td>
<td>2&quot; BALL CORP STOP (MIPT X MIPT)</td>
</tr>
<tr>
<td>3</td>
<td>2&quot; 45° BEND COUPLING (FIPT X QUICK)</td>
</tr>
<tr>
<td>4</td>
<td>2&quot; TYPE K SOFT COPPER TUBING</td>
</tr>
<tr>
<td>5</td>
<td>2&quot; 90° ELBOW (QUICK X QUICK)</td>
</tr>
<tr>
<td>6</td>
<td>ANGLE BALL METER VALVE (QUICK X FIPT)</td>
</tr>
<tr>
<td>7</td>
<td>BRONZE 90° ELBOW</td>
</tr>
<tr>
<td>8</td>
<td>2&quot; MIPT X 2 1/2&quot; NST ADAPTER</td>
</tr>
<tr>
<td>9</td>
<td>STEEL PIPE CONNECTION</td>
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<tr>
<td>10</td>
<td>2 1/2&quot; NST CAP W/ CHAIN</td>
</tr>
<tr>
<td>11</td>
<td>POLYMER CONCRETE METER BOX #4 1/2</td>
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<tr>
<td>12</td>
<td>FRAME AND COVER</td>
</tr>
<tr>
<td>13</td>
<td>STEEL HALF COUPLING (ON STEEL PIPE ONLY)</td>
</tr>
<tr>
<td>14</td>
<td>DIELECTRIC INSULATING BUSHING (ON STEEL PIPE ONLY)</td>
</tr>
</tbody>
</table>

2" BLOW-OFF ASSEMBLY
NOTES:
1) BLOW-OFF SHALL BE LOCATED CURB OR SIDEWALK ON SIDE OF STREET NEAREST STORM DRAIN INLET
2) BOX MUST BE 24" WITHIN ROW OR EASEMENT

NOTE:
1) PIPE MATERIAL SHALL BE SAME AS MAIN.
1) ALL NUTS & BOLTS BELOW GROUND SHALL BE PLATED AND COATED WITH NO-OXIDE GREASE, WAX TAPE, AND VISQUEEN.
2) FL x FL VALVES REQUIRE ADAPTER PER MATERIALS LIST.
3) BREAK AWAY SPOOL WITH CHECK VALVE IN COMMERCIAL DEVELOPMENT AREAS.

**REVISIONS**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>MATERIAL</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>MAIN SIZE x 6&quot; FLG TEE</td>
<td>PLATED NUTS AND BOLTS W/ RING GASKET</td>
</tr>
<tr>
<td>2</td>
<td>6&quot; FLG x FLG GATE VALVE</td>
<td>FIRE HYDRANT</td>
</tr>
<tr>
<td>3</td>
<td>6&quot; MJ x FLG W/ MJ RESTRAINT BURY SHORT RADIUS</td>
<td>6&quot; PE X FLG SPOOL</td>
</tr>
<tr>
<td>4</td>
<td>6&quot; FLG x FLG DI SPOOL, LENGTH AS REQUIRED</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>12&quot; MIN. BREAK-OFF SPOOL, DOUBLE SCORE, W/ 2&quot; x 10 MIL TAPE</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**
- 7/8" Ø HOLES
- HYDRANT BASE FLANGE HOLES AND HYDRANT ELL FLANGE HOLES
- BEARING AREA = 5 sq. ft. (typ)
- 9 1/2" Ø BOLT CIRCLE
- 30° x 30° x 3 1/2" SLOPE 2% TO DRAIN
- 4" MIN. 6" MAX.
- POSITION PORTS 45° TO CURB
- 30° 90° 7/8"Ø HOLES
- 30° Bearing Area= 5 sq. ft. (typ)

**LEGEND**

- F.H.
- STA.
NOTES:

1. WALL REINFORCEMENT NOT SHOWN FOR CLARITY.

2. FINAL DETERMINATION FOR THE NEED OF RETAINING WALL AND PROTECTION POSTS SHALL BE MADE IN THE FIELD BY THE DISTRICT INSPECTOR.

3. POST TO BE PAINTED YELLOW AND FILLED W/CONCRETE
FIRE HYDRANT LOCATION WHERE SIDEWALK IS CONTIGUOUS WITH CURB

FIRE HYDRANT LOCATION WHERE SIDEWALK IS CONTIGUOUS WITH PROPERTY LINE

FIRE HYDRANT LOCATION WHERE SIDEWALK OCCUPIES FULL WIDTH OF PARKWAY STRIP

NOTE: A 10' MIN. HORIZONTAL OFFSET FROM EDGE OF DRIVEWAY ENTRANCES AND CURB RETURNS IS REQUIRED
TRENCH WIDTH

TRENCH DEPTH

GROUND LINE

ASPHALT PAVING

MAX. LIMIT SLOPE EXCAVATION ALLOWED

PIPE ZONE

12" MIN.

PIPE O.D.

SAND/D.G. TO BE PLACED IN 6" LAYERS THROUGHOUT PIPE ZONE & THROUGHLY COMPACTED BEFORE ANY ADDITIONAL BACKFILL SHALL BE PLACED.

(6" MINIMUM)

PIPE SUBGRADE SAND

SAND/D.G. TO BE PLACED IN 6" LAYERS THROUGHOUT PIPE ZONE & THROUGHLY COMPACTED BEFORE ANY ADDITIONAL BACKFILL SHALL BE PLACED.

NOTES:

1) LOCATION TAPE TO BE 12" ABOVE PIPE REFER TO MATERIAL LIST.
INSTALL SERVICE CONNECTION AND LINING AS NECESSARY TO REMOVE AND REPLACE COATING.

FIELD WELD

THREADED 316L STAINLESS STEEL HALF STEEL COUPLING WITH HEAVY DUTY 3000# THD'D STOP BALL CORPORATION LINE MAIN

3/16" x 6" DIA. STEEL BACKING PLATE

FULL CIRCLE

FILLET WELD

FULL CIRCLE

FILLET WELD

3/16" x 6" DIA. STEEL BACKING PLATE

FULL CIRCLE

FILLET WELD

3/16" x 6" DIA. STEEL BACKING PLATE

FULL CIRCLE

FILLET WELD

3/16" x 6" DIA. STEEL BACKING PLATE

FULL CIRCLE

FILLET WELD

3/16" x 6" DIA. STEEL BACKING PLATE

FULL CIRCLE

FILLET WELD

3/16" x 6" DIA. STEEL BACKING PLATE

FULL CIRCLE

FILLET WELD

3/16" x 6" DIA. STEEL BACKING PLATE

FULL CIRCLE

FILLET WELD

3/16" x 6" DIA. STEEL BACKING PLATE

FULL CIRCLE

THIN WALL REINFORCED CYLINDER PIPE

USE FOR THIN WALL REINFORCED CYLINDER PIPE

CONCRETE COATINGS

TACK WELD ROD REINFORCEMENT

COLLAR

OUTLET

CONCRETE LINING

CONCRETE THRUST BLOCK PER W-20. SIZE FOR OUTLET PIPE DIAMETER.

NOTES:

1. TACK WELD TO BE MADE PRIOR TO REINFORCING RODS BEING CUT.
2. NOZZLE SHALL BE WELDED TO PIPE BEFORE BACK-UP PLATE IS INSTALLED.
3. WELDERS USED ARE AT DISTRICT DISCRETION.

RINCON DEL DIABLO MUNICIPAL WATER DISTRICT

SERVICE CONNECTION FOR STEEL PIPE

W – 18
EXISTING PAVING THICKNESS PLUS 1", MINIMUM 6"

2) MTLS. - ASTM A48, CLASS 35B

BY: NL

DATE: JULY 2017

1) FRAME AND COVER SHALL BE B&T MARK V
2) MTLS. - ASTM A48, CLASS 35B
3) FRAME AND COVER BEARING SURFACES
   MACHINED TO ASSURE CLOSE/QUIET FIT
4) CASTINGS DIPPED IN BLACK BIT. PAINT
5) FRAME AND LID EXCEED H-20 LOADING
6) COAT LID YELLOW FOR POTABLE AND
   PURPLE FOR RECYCLED WATER

NOTES:

8" C900 PVC DR18 MIN
SEE W-8

VALVE BOX FRAME AND LID

RINCON DEL DIABLO MUNICIPAL WATER DISTRICT
STANDARD DRAWING

DATE: JULY 2017

BY: NL

Drawing No. W-19

REVISIONS

DESCRIPTION       APPROVED  DATE
ADD RECycled LID  NL        12/27/17
CHANGED TO B&T    NL        4/30/18
NOTES:
1) CONCRETE THRUST BLOCKS SHALL BE CONSTRUCTED IN ALL PIPELINES AT THE LOCATIONS SHOWN HEREON WHERE THE RESPECTIVE FITTINGS AND PLUGS ARE INSTALLED.

2) #4 REBAR LOOPS SHALL EXTEND TO THE DEPTH OR WIDTH OF BLOCK. WRAP EXPOSED METAL WITH 10 MIL TAPE PRIOR TO INSTALLATION.

3) ALL THRUST BLOCKS TO BE FORMED WITH SAND BAGS.

4) FOR CLASS 200 PIPE INCREASE AREAS AND VOLUMES BY 33%.

MINIMUMS-SPECIAL DESIGN MAY BE REQUIRED

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<tr>
<th>SIZE</th>
<th>BEARING AREA IN SQUARE FEET</th>
<th>CUBIC FEET</th>
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<tbody>
<tr>
<td></td>
<td>FIG 1</td>
<td>FIG 2</td>
</tr>
<tr>
<td></td>
<td>90°</td>
<td>45°</td>
</tr>
<tr>
<td>4&quot;</td>
<td>CL. 150</td>
<td>CL. 150</td>
</tr>
<tr>
<td>6&quot;</td>
<td>3</td>
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</tbody>
</table>

ANCHOR BLOCK

ELEVATION

TRENCH WIDTH

12" 12"

PLAN

#4 RE BAR

REDUCER

FIG 1

EXIST. PIPE

FIG 2

(HORIZONTAL OR VERTICAL BEND)

FIG 3

FIG 4

(VERTICAL BEND ONLY)

= 90°, 45°, 22 1/2°, 11 1/4°
FIELD WELDED CLOSURE

NOTES:

1. WELDED JOINTS SHALL DEVELOP FULL STRENGTH OF PIPE.
2. MINIMUM ALLOWABLE THICKNESS OF STEEL CYLINDER SHALL BE 10 GAUGE.
3. THICKNESS OF BUTT STRAP SHALL BE 1/3 GREATER IN THICKNESS THAN LARGEST ADJOINING PIPE CYLINDER.
4. WELDS MAY EITHER BE ON INSIDE OR OUTSIDE.
5. THE CEMENT GROUT AND MORTAR USED SHALL HAVE A PH OF 12 OR GREATER.
6. WHERE ACCESS TO THE PIPE INTERIOR FOR MORTAR LINING IS NOT POSSIBLE, INSTALL 5" DIAMETER HANDHOLES WITH THREADED PLUG WHICH IS TO BE SEAL WELDED UPON COMPLETION OF FIELD MORTAR LINING. AT LEAST TWO HANDHOLES WILL BE REQUIRED FOR 18" DIAMETER AND LARGER PIPE.
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NOTES:

1) ALL PIPE JOINTS IN BETWEEN UPPER 45-DEGREE BENDS MUST BE FUSED, NO MECHANICAL OR BOLTED JOINTS ALLOWED

2) THE THRUST AND ANCHOR BLOCKS SHALL BE PER RDDMWD STD. DWG. W-20.

3) 10 GAUGE TRACER WIRE AND METALLIC MARKING TAPE INSTALLED PER APPROVED MATERIALS LIST

4) AN AUTOMATIC AIR AND VACUUM VALVE SHALL BE INSTALLED PER W-10 ON THE HIGH POINT OF THE OFFSET AS SPECIFIED ON THE PLAN OR DIRECTED BY RDDMWD INSPECTOR.

5) A BLOW OFF MAY BE REQUIRED AT THE LOW POINT OF THE OFFSET AS SPECIFIED ON THE PLAN OR DIRECTED BY RDDMWD INSPECTOR.

6) ENTIRE ASSEMBLY MUST BE PRESSURE TESTED AND DISINFECTED AS DIRECTED BY RDDMWD INSPECTOR
NOTES:

1. WHERE THERE ARE NO CURBS, THE LOCATION OF THE METER BOX SHALL BE DETERMINED BY THE DISTRICT.

2. WATER SERVICE LATERALS SHALL NOT BE INSTALLED IN DRIVEWAY AREAS, CURBS, OR SIDEWALKS.
NOTES:
1. PRIOR APPROVAL OF THE DISTRICT ENGINEER REQUIRED FOR USE, SUBMITTALS WILL BE REQUIRED.
2. WALLS SHALL BE REINFORCED CONCRETE OR 6" x 6" x 16" CONCRETE BLOCK, REINFORCED AND ALL CORES FILLED WITH GROUT. SEE SPECIFICATIONS.
3. ALL SLOPES SHALL BE PROTECTED FROM EROSION WITH MULCH AND FIBER ROLLS OR EROSION CONTROL MATS AS APPROVED BY THE ENGINEER.