2" MIP X 2 1/2" MHT

2" FIP X FIP BALL VALVE

SSENSUS MODEL 125-W CONSTRUCTION METER

ANCHOR POST, PLACE AT CONVENIENT LOCATION

2" 90° ELBOW FIP X FIP

2" X 6" BRASS NIPPLE

2" X 24" BRASS NIPPLE

18"

1 + 2" SWIVEL X 2" FIP ADAPTOR

STANDARD 2" BLOW-OFF ASSEMBLY

BACKFLOW PREVENTION DEVICE MAY BE REQUIRED. CHECK WITH DISTRICT BACKFLOW DEPARTMENT PRIOR TO INSTALLATION OF CONSTRUCTION METER.

NOTE:
POST WITH EYE HOOKS REQUIRED FOR CHAINING AND LOCKING THE CONSTRUCTION METER.
NOTES:
1) BLOW-OFF SHALL BE LOCATED TO THE SIDE OF THE STREET NEAREST GUTTER/EDGE.
2) ALL JOINTS TO BE 15% SILVER SOLDERED.
1) ALL PIPE FITTINGS, VALVES, AND COCKS SHALL BE THE SAME SIZE AS AIR VALVE INLET.

2) FOR SERVICE INSTALLATIONS GREATER THAN 150 psig, ALL COMPRESSION FITTINGS LISTED SHALL BE THREADED

3) ALL JOINTS TO BE 15% SILVER SOLDERED.

4) FOR STEEL PIPE CONNECTION SEE DRAWING W-26.

5) ENCLOSURE MAY BE A COLOR OTHER THAN BLUE IN DESIGN DISTRICTS, WITH VWD APPROVAL, ATTACH "VALLECITOS WATER DISTRICT" TAG TO ENCLOSURE.

---

**LEGEND SYMBOL**

**ITEM** | **MATERIAL** | **ITEM** | **MATERIAL**
---|---|---|---
1 | SADDLE | 9 | COMBINATION AIR AND VACUUM VALVE
2 | BALL CORP STOP | 10 | PVC THREADED STREET ELLS W/BUG SCREEN
3 | 1" TYPE K SOFT COPPER TUBING | 11 | ENCLOSURE PIPELINE PRODUCTS #VCAS-1424BL
4 | COPPER x MIPT ADAPTER | 12 | 3000# FORGED STEEL HALF COUPLING (ON STEEL PIPE ONLY)
5 | 1" BRASS 90° STREET ELL, MF/FIP | 13 | DIELECTRIC INSULATING BUSHING (ON STEEL PIPE ONLY)
6 | BALL VALVE W/ HANDLE, FI/FIP | 14 | MECHANICAL GROUNDING CLAMP PER CURRENT VWD MAT. LIST
7 | 1" X 18" BRASS NIPPLE, WRAPPED W/ 2" X 10 MIL TAPE | 15 | ZINC ANODE PER CURRENT VWD MATERIAL LIST
8 | 1" X CLOSE BRASS NIPPLE |  |  |

**REVISIONS**

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<thead>
<tr>
<th>DESCRIPTION</th>
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<th>DATE</th>
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<tr>
<td>SUPPORTS INSIDE CAN</td>
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<td>COPR STOP LOCATION</td>
<td>7-17-07</td>
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<tr>
<td>ENCLOSURE</td>
<td>6-9-11</td>
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<td>SADDLE</td>
<td>3-5-12</td>
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<tr>
<td>ADDED ZINC ANODE &amp; CLAMP</td>
<td>3-27-17</td>
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**VALLECITOS WATER DISTRICT STANDARD DRAWING**

**DATE:** JULY 2015

**BY:**

**1" AUTOMATIC AIR & VACUUM VALVE**

**DRAWING NO.** W-2
NOTES:
1) ALL PIPE FITTINGS, VALVES, AND COCKS SHALL BE THE SAME SIZE AS AIR VALVE INLET.
2) FOR SERVICE INSTALLATIONS GREATER THAN 150psi, ALL COMPRESSION FITTINGS LISTED SHALL BE THREADED WITH MIP ADAPTERS PER APPROVED MATERIAL LIST.
3) ALL JOINTS TO BE 15% SILVER SOLDERED.
4) FOR STEEL PIPE CONNECTION SEE DRAWING W-26.
5) ENCLOSURE MAY BE A COLOR OTHER THAN BLUE IN DESIGN DISTRICTS, WITH VWD APPROVAL, ATTACH "VALLECITOS WATER DISTRICT" TAG TO ENCLOSURE.

ITEM | MATERIAL | ITEM | MATERIAL
--- | --- | --- | ---
1 | DOUBLE STRAP BRONZE SADDLE W/ BRONZE STRAPS | 6 | PVC THREADED STREET ELLS W/ BUG SCREEN
2 | BALL CORP STOP | 7 | ENCLOSE PIPELINE PRODUCTS #VCAS-18308L
3 | 2" TYPE K SOFT COPPER TUBING | 8 | 3000# FORGED STEEL HALF COUPLING (ON STEEL PIPE ONLY)
4 | COPPER x MIP ADAPTER | 9 | DIELECTRIC INSULATING BUSHING (ON STEEL PIPE ONLY)
5 | 2" BRASS 90° STREET ELL, MIP x FIP | 10 | MECHANICAL GROUNDING CLAMP PER CURRENT VWD MAT. LIST
6 | BALL VALVE W/ HANDLE, FIP x FIP | 11 | ZINC ANODE PER CURRENT VWD MATERIAL LIST
7 | 2" x 10" BRASS NIPPLE / WRAPPED W/ 2" x 10 MIL TAPE | 12 | 2" AUTOMATIC AIR & VACUUM VALVE
8 | 2" CLOSE BRASS NIPPLE | 13 | VALLECITOS WATER DISTRICT STANDARD DRAWING

REVISIONS
- DESCRIPTION: SUPPORTS INSIDE CAN
  - APPROVED: 5-16-06
- DESCRIPTION: COR STOP LOCATION
  - APPROVED: 7-17-07
- DESCRIPTION: ENCLOSURE
  - APPROVED: 6-9-11
- DESCRIPTION: 2" COPPER 90° ELBOW
  - APPROVED: 3-5-12
- DESCRIPTION: ADDED ZINC ANODE & CLAMP
  - APPROVED: 3-27-17

DATE: JULY 2015

BY:
Drawing No. W-3
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 IS REQUIRED
NOTES:

1) METER SET AND BOX TO BE PLACED BEHIND CURB AND/OR SIDEWALK. IN NO CASE SHALL THE BOX BE PLACED IN THE SIDEWALK WITHOUT DISTRICT PERMISSION. 6" BOX WILL BE REQUIRED IF APPROVED LOCATION IS IN A SIDEWALK OR DRIVEWAY.

2) FOR SERVICE INSTALLATIONS WITH GREATER THAN 175 psi, SEE W-8. ALL COMPRESSION FITTINGS LISTED SHALL BE THREADED WITH MIP ADAPTERS PER APPROVED MATERIAL LIST.

3) NO JOINTS ALLOWED

ITEM | MATERIAL | ITEM | MATERIAL
--- | --- | --- | ---
1 | SADDLE | 6 | BALL VALVE W/ HANDLE
2 | BALL CORP STOP | 7 | POLYMER CONCRETE METER BOX W/LID
3 | 1" TYPE "K" SOFT COPPER TUBING | 8 | 3000# FORGED STEEL HALF COUPLING (STEEL PIPE ONLY)
4 | BALL ANGLE METER STOP WITH 1 x 3/4 BRASS METER BUSHING FOR 3/4" METER SET | 9 | DIELECTRIC INSULATING BUSHING (STEEL PIPE ONLY)
5 | WATER METER | 10 | ZINC ANODE PER CURRENT VWD MATERIALS LIST
6 | WATER METER | 11 | MECHANICAL GROUNDING CLAMP PER CURRENT VWD MAT. LIST

REVISIONS

DATE: JULY 2015

WATER SERVICE CONNECTION
(3/4" AND 1" METER)
1) FOR SERVICE INSTALLATION WITH GREATER THAN 175 PSI, SEE W-8. ALL COMPRESSION FITTINGS LISTED SHALL BE THREADED WITH MIP ADAPTERS PER APPROVED MATERIAL LIST.

2) ALL JOINTS TO BE 15% SILVER SOLDERED.

3) ALL NUTS AND BOLTS SHALL BE BRONZE.

4) METER SET AND BOX TO BE PLACED BEHIND CURB AND/OR SIDEWALK. IN NO CASE SHALL THE BOX BE PLACED IN THE SIDEWALK WITHOUT DISTRICT PERMISSION. BOX WILL BE REQUIRED IF APPROVED LOCATION IS IN A SIDEWALK OR DRIVEWAY.

2" WATER SERVICE CONNECTION
(1-1/2" & 2" METER)

VALLECITOS WATER DISTRICT STANDARD DRAWING
DATE: JULY 2015
BY: W - 7
3/4" THROUGH 1" METER W/ REGULATOR, #6B BOX/ LID SEE W-7

11/2" & 2" METER W/ REGULATOR, ARMORCAST A6001430PCX18
TWO - PIECE LID OR APPROVED EQUAL.

NOTES:
1) METER SET AND BOX TO BE PLACED BEHIND CURB AND/OR SIDEWALK. IN NO CASE SHALL THE BOX BE PLACED IN THE SIDEWALK WITHOUT DISTRICT PERMISSION.

2) TO PROTECT THE DISTRICT METER, A PRESSURE REGULATOR IS REQUIRED FOR PRESSURES GREATER THAN 175 PSI.

3) NO JOINTS ALLOWED

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<tr>
<th>ITEM</th>
<th>MATERIAL</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>SEE W-6, W-7</td>
</tr>
<tr>
<td>2</td>
<td>SEE W-6, W-7</td>
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<tr>
<td>3</td>
<td>TYPE &quot;K&quot; SOFT COPPER TUBING, PER APP'D SIZE</td>
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<tr>
<td>4</td>
<td>BALL ANGLE METER STOP FIP X FIP</td>
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<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/ LID</td>
</tr>
<tr>
<td>8</td>
<td>STEEL SUPPORT BEAM</td>
</tr>
<tr>
<td>9</td>
<td>PIPE CLAMP W/ LUG, COVERED W/ DIELECTRIC COATING</td>
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<tr>
<td>10</td>
<td>PRESSURE REGULATOR, SAME SIZE AS METER</td>
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REVISIONS

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<th>DESCRIPTION</th>
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<th>DATE</th>
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<tr>
<td>POLYMER CONCRETE BOX/ LID</td>
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<tr>
<td>ADDED 150 PSI TO TITLE</td>
<td>3-27-17</td>
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</tr>
<tr>
<td>CHANGED 150 PSI TO 175 PSI</td>
<td>2-27-18</td>
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<tr>
<td>CHANGED ANGLE METER STOP</td>
<td>4-3-18</td>
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VALLECITOS WATER DISTRICT STANDARD DRAWING
HIGH PRESSURE (175 PSI+)
WATER METER CONNECTION
(3/4" THROUGH 2" METERS)

DATE: JULY 2015
BY: W-8
NOTES:

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

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 BLUE PER CURRENT VWD MATERIAL LIST (EXCLUDING METER AND STRAINER).

5) REFER TO STANDARD DRAWINGS FOR INSTALLATION OF BACKFLOW PREVENTION DEVICE.

6) 2" OUTLET SHALL BE (3) PIPE DIAMETERS MINIMUM DOWNSTREAM OF THE WATER METER.

7) BRASS BOLTS AND NUTS SHALL BE USED FOR ALL CONNECTIONS TO THE WATER METER AND STRAINER.

8) ACCESS LADDER REQUIRED IF VAULT IS OVER 3' DEEP PER VWD INSPECTOR'S DIRECTION.

2 1/2" OUTLET W/ 2 1/2" X 2" INS. BUSHING (TYP.)

---

**VALLECITOS WATER DISTRICT STANDARD DRAWING**

**DATE:** JULY 2015

**BY:**

**W-9**

**3" - 4" - 6" METER**

(BELOW GROUND)

WITH BY-PASS

---

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<th>MATERIAL</th>
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<tbody>
<tr>
<td>1</td>
<td>TAPPING GATE VALVE &amp; TEE</td>
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<tr>
<td>2</td>
<td>SPOOL, SAME MATERIAL AS MAIN LINE</td>
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<tr>
<td>3</td>
<td>PRE-CAST VAULT</td>
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<tr>
<td>4</td>
<td>D.I.P. SPOOL W/ SADDLE</td>
</tr>
<tr>
<td>5</td>
<td>GATE VALVE W / HANDWHEEL</td>
</tr>
<tr>
<td>6</td>
<td>STRAINER</td>
</tr>
<tr>
<td>7</td>
<td>TURBINE METER</td>
</tr>
<tr>
<td>8</td>
<td>FL x VICTAULIC SPOOL</td>
</tr>
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<table>
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<tr>
<th>ITEM</th>
<th>MATERIAL</th>
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<tbody>
<tr>
<td>9</td>
<td>VICTAULIC COUPLING</td>
</tr>
<tr>
<td>10</td>
<td>D.I.P. SADDLE</td>
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<tr>
<td>11</td>
<td>VALVE SUPPORT STAND W/ SADDLE TOP</td>
</tr>
<tr>
<td>12</td>
<td>2&quot; HARD COPPER OR RED BRASS BY-PASS</td>
</tr>
<tr>
<td>13</td>
<td>2&quot; LOCK WING BALL VALVE, BRASS</td>
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<tr>
<td>14</td>
<td>UNION (HARD COPPER OR RED BRASS)</td>
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<tr>
<td>15</td>
<td>FLANGED SPOOL</td>
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<td>16</td>
<td>ALUMINUM, SPRING ASSIST LID</td>
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**REVISIONS**

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<td>REMOVED VALVE STEM EXTENSION</td>
<td>9-9-16</td>
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</table>
4" THICK CONCRETE SLAB W/ 4" CLEARANCE AROUND DEVICE.

90° ELBOW

12
14

4" TYP.

24"

12"

4" TYP.

4" CONCRETE SLAB

W-14

STA. ___

NOTES:
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 BLUE PER CURRENT VWD MATERIAL LIST (EXCLUDING METER AND STRAINER).

4) REFER TO STANDARD DRAWINGS FOR INSTALLATION OF BACKFLOW PREVENTION DEVICE.

5) 2" OUTLET FOR 6" METER INSTALLATION SHALL BE (3) PIPE DIAMETERS MINIMUM DOWNSTREAM OF THE WATER METER.

6) BRASS BOLTS AND NUTS SHALL BE USED FOR ALL CONNECTIONS TO THE WATER METER AND STRAINER.

7) USE 4" PIPING AND VALVES FOR 3" & 4" METERS. USE 6" PIPING AND VALVES FOR 6" METER.

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<th>ITEM</th>
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<tr>
<td>1</td>
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<td>FL x VICTAULIC SPOOL</td>
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<td>VICTAULIC COUPLING</td>
</tr>
<tr>
<td>3</td>
<td>FL, 90&quot; ELBOW</td>
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<td>D.I.P. SADDLE</td>
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<tr>
<td>4</td>
<td>D.I.P. SPOOL W/ SADDLE</td>
<td>9</td>
<td>VALVE SUPPORT STAND W/ SADDLE TOP</td>
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<tr>
<td>5</td>
<td>GATE VALVE W/ HANDWHEEL</td>
<td>10</td>
<td>2&quot; HARD COPPER OR RED BRASS BY-PASS</td>
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<tr>
<td>6</td>
<td>STRAINER</td>
<td>11</td>
<td>2&quot; LOCK WING BALL VALVE, BRASS</td>
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<tr>
<td>7</td>
<td>TURBINE METER</td>
<td>12</td>
<td>UNION (HARD COPPER OR RED BRASS)</td>
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REVISIONS

DESCRIPTION | APPROVED | DATE
---|---|---
REMOVED VALVE RISER STEM & | 9-9-16
REMOVED 45° ELBOW

VALLECITOS WATER DISTRICT STANDARD DRAWING  
3" – 4" – 6" METER  
(ABOVE GROUND)  
WITH BY-PASS  
DATE: JULY 2015  
BY:  
Drawing No. W–11
NOTES:

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

2) A MINIMUM OF 36" 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 BLUE PER CURRENT VWD MATERIAL LIST (EXCLUDING BY-PASS PLUMBING & METER).

5) BY-PASS METER SHALL BE RAISED TO WITHIN ONE FOOT OF THE VAULT LID.

6) ALL BY-PASS PLUMBING SHALL BE HARD COPPER OR RED BRASS AS SUPPLIED BY MANUFACTURER.

7) CONTACT THE FIRE PROTECTION DISTRICT FOR SPECIFICATIONS ON FIRE DEPARTMENT CONNECTION.

8) ACCESS LADDER REQUIRED FOR VAULTS OVER THREE FEET DEEP.

9) DCDA OR RPDA, PER STATE HEALTH DEPARTMENT APPROVED LIST, DEVICE TO DETERMINED BY TYPE OF HAZARD.

10) BYPASS METER BACKFLOW DEVICE SHALL BE AN INCLUDED COMPONENT OF DETECTOR CHECK ASSEMBLY.

---

**VALLECTOS WATER DISTRICT STANDARD DRAWING**

**DETECTOR CHECK ASSEMBLY**

**BELOW GROUND**

**DATE:** JULY 2015

**DRAWING NO.:** W-12

**REVISIONS**

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<tr>
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<td>BY-PASS METER W/ BACKFLOW</td>
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<td>2</td>
<td>PIPE, SAME MATERIAL AS MAIN LINE</td>
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<td>FLANGED SPOOL, SAME MATERIAL AS MAIN LINE</td>
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<tr>
<td>3</td>
<td>PRECAST VAULT</td>
<td>8</td>
<td>VALVE &amp; INDICATOR POST PER APPROPRIATE FIRE DIST.</td>
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<tr>
<td>4</td>
<td>ALUMINUM, TWO PIECE SPRING ASSIST LID</td>
<td>9</td>
<td>VALVE SUPPORT STAND W/ SADDLE TOP AND 3/8&quot; S.S. &quot;L&quot;</td>
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<tr>
<td>5</td>
<td>STATE APPROVED DETECTOR CHECK ASSEMBLY</td>
<td></td>
<td>ANCHOR BOLTS W/ WASHERS</td>
</tr>
</tbody>
</table>

**DESCRIPTION** | **APPROVED** | **DATE**
--- | --- | ---
REMOVED VALVE RISER STEM | 9-9-16 |
**NOTES:**

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 BLUE PER CURRENT VWD MATERIAL LIST (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) DCDA OR RPDA, PER STATE HEALTH DEPARTMENT APPROVED LIST, DEVICE TO DETERMINED BY TYPE OF HAZARD.

7) BYPASS METER BACKFLOW DEVICE SHALL BE AN INCLUDED COMPONENT OF DETECTOR CHECK ASSEMBLY.

**UPGRADES:**

1) RE-CONNECTION TO BE MADE ON STRUCTUALLY SOLID EXISTING PIPE MATERIAL (PER VWD INSPECTOR)

2) ANY VALVES LOCATED BETWEEN THE DISTRICT VALVE AND PUBLIC RIGHT OF WAY TO BE REMOVED.

3) EXISTING FIRE SERVICES LOCATED IN VAULTS MUST BE RELOCATED ABOVE GROUND, VAULT LID AND SIDE WALLS TO BE REMOVED.

---

**ITEM**

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<tr>
<th>1</th>
<th>TAPPING SLEEVE W/ GATE VALVE &amp; TEE</th>
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<tbody>
<tr>
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<td>SPOOL, SAME MATERIAL AS MAIN LINE</td>
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<td>3</td>
<td>FL. 90° ELBOW</td>
</tr>
<tr>
<td>4</td>
<td>VALVE SUPPORT STAND W/ SADDLE TOP</td>
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<tr>
<td>5</td>
<td>STATE APPROVED DETECTOR CHECK ASSEMBLY</td>
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</tbody>
</table>

**ITEM**

| 6   | BY-PASS METER W/ BACKFLOW         |
| 7   | 3/8" S.S. "L" ANCHOR BOLTS W/ WASHERS |

---

**REVISIONS**

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<tr>
<td>REMOVED 45° ELBOW</td>
<td>9-9-16</td>
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<tr>
<td>ADDED UPGRADE NOTES</td>
<td>10-21-19</td>
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</tbody>
</table>

**DATE:** JULY 2015

**BY:**

**DRAWING NO.** W-13
1/2" x 1" THROUGH SLOT

EXISTING PAVING THICKNESS PLUS 1"

6"

(TYP)

13" DIA.

6"

6 1/8"

6 3/4"

8 1/2" DIA.

5" CL. 100 SDR41 WHITE (PIP)
SEE W-16

NOTES:
1) FRAME AND COVER SHALL BE SBF 1208-N MANUFACTURED IN MEXICO
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

REVISIONS

DESCRIPTION
ADDED 8" CL. 100 SDR41 WHITE PIP
CHANGED MANHOLE NOTE

APPROVED
9-9-16
4-3-16

DATE

VALLECTITOS WATER DISTRICT STANDARD DRAWING

DATE: JULY 2015

VALVE BOX FRAME AND LID

DRAWING NO.
W - 14
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) IN 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%.
END CAP ASSEMBLY

NOTES:
1) NUTS & BOLTS TO BE COATED WITH NO-OXIDE GREASE AND VISQUEEN.
2) GATE VALVES TO COMPLY WITH VALLECITOS WATER DISTRICT SPECIFICATIONS.

ITEM | MATERIAL
--- | ---
1 | VALVE BOX AND COVER
2 | 8" CL. 100 SDR41-WHITE (PIP)

GATE VALVE INSTALLATION AND CAP ASSEMBLY

DATE: JULY 2015
BY: [Signature]

REVISIONS
DESCRIPTION | APPROVED | DATE
--- | --- | ---
REMOVED VALVE RISER STEM | 9-9-16 |
TRENCH WIDTH

GROUND LINE

ASPHALT PAVING

TRENCH BACKFILL & COMPACTATION PER PERMITTING AGENCY (95% IN VIVACEMENT)

MAX. LIMIT SLOPE EXCAVATION ALLOWED

9" MAX.

9" MIN.

12" MIN.

PIPE ZONE

90% COMPACTION

(4" MINIMUM) PIPE SUBGRADE SAND OR DECOMPOSED GRANITE

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.

VALLECITOS WATER DISTRICT STANDARD DRAWING

DATE: JAN. 04

BY:

Drawing No.

W - 17

REVISIONS

DESCRIPTION

APPROVED

DATE

TRENCH COMPACTION AND BACKFILL
NOTES:

1) ALL INSTALLATIONS SHALL BE ABOVE GROUND. THE BACK FLOW DEVICE SHALL BE NO MORE THAN 1/2" GREATER THAN THE METER SIZE.

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", COPPER PIPING.

11) ALTHOUGH THE DISTRICT REQUIRES THE USE OF RED BRASS OR RIGID COPPER PIPING, AGRICULTURAL SERVICES, IN NON-TRAFFIC AREAS, MAY USE SCHEDULE 80 UV RESISTANT PVC PIPING MATERIALS WITH PRIOR APPROVAL OF THE DISTRICT.
NOTE:

1) FOR SERVICE INSTALLATIONS WITH GREATER THAN 150 psI, ALL COMPRESSION FITTINGS LISTED SHALL BE THREADED WITH MIP ADAPTORS PER APPROVED MATERIAL LIST.

---

**Legend Symbol**

1. **Double Strap Bronze Service Clamp**
2. **1" Ball Corp Stop**
3. **1" K - Soft Copper Tubing**
4. **Mechanical Grounding Clamp Per Current VWD Materials List**
5. **Mip Adaptor**
6. **Ball Valve W/ Handle, FIP x FIP**
7. **1" X 18" Red Brass Riser**
8. **3/8" S.S. "L" Anchor Bolts W/ Nuts & Washers**
9. **15% Silver Soldered Joint**
10. **Red Brass Wrapped With 2" X 10 Mill Tape**
11. **10 Gauge Steel Cover Continuous Weld To Cylinder**
12. **Do Not Flatten Or Crimp At Bend**
13. **#12 AWG Solid Wire Thhn Insulation**
14. **2 1/2" x 2 1/2" Angle (3 Places)**

---

**Revisions**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Double Strap Bronze Service Clamp</td>
<td>24&quot; x 24&quot; x 4&quot; Concrete Pad</td>
</tr>
<tr>
<td>2</td>
<td>1&quot; Ball Corp Stop</td>
<td>1&quot; x 1/2&quot; Brass Bushing</td>
</tr>
<tr>
<td>3</td>
<td>1&quot; K - Soft Copper Tubing</td>
<td>1/2&quot; x 1/8&quot; Brass Nipple</td>
</tr>
<tr>
<td>4</td>
<td>Mechanical Grounding Clamp Per Current VWD Materials List</td>
<td>Pipeline Products WTS-889E</td>
</tr>
<tr>
<td>5</td>
<td>Mip Adaptor</td>
<td>3000# Forged Steel Half Coupling W/Dielectric Bushing (Steel Only)</td>
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<tr>
<td>6</td>
<td>Ball Valve W/ Handle, FIP x FIP</td>
<td>1/2&quot; S.S. Koral FEN Part #0004 Complete</td>
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<tr>
<td>7</td>
<td>1&quot; X 18&quot; Red Brass Riser</td>
<td>Zink Anode Per Current VWD Material List</td>
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</table>

---

**Valleitos Water District Standard Drawing**

1" WATER TEST STATION

**Date:** July 2015

**By:**

Drawing No. W-21
NOTE:
1) PIPE MATERIAL SHALL BE SAME AS MAIN.

<table>
<thead>
<tr>
<th>ITEM</th>
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<th>ITEM</th>
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<tbody>
<tr>
<td>1</td>
<td>WATER MAIN W/ FLG'D OUTLET.</td>
<td>5</td>
<td>RISER, FL x FL.</td>
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<tr>
<td>2</td>
<td>GATE VALVE, FLG'D.</td>
<td>6</td>
<td>90° ELBOW W/ MIP THREADS &amp; CAP</td>
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<tr>
<td>3</td>
<td>PIPE SPOOL PIECE, FL x FL.</td>
<td>7</td>
<td>THRUST BLOCK, PER VWD DWG W-15.</td>
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<tr>
<td>4</td>
<td>90 DEGREE FL, ELBOW</td>
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REVISIONS

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<tr>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>REMOVED VALVE RISER STEM</td>
<td>9-9-16</td>
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</table>

VALLECITOS WATER DISTRICT STANDARD DRAWING

DATE: JULY 2015

BY:

4" AND LARGER BLOW-OFF

Drawing No. W-23
NOTE:
1) PIPE MATERIAL SHALL BE SAME AS MAIN.

ITEM | MATERIAL
--- | ---
1 | WATER MAIN W/ FLG'D Outlet.
2 | 80° BEND, FLG'D
3 | THRUST BLOCK, PER VWD DWG W-15.
4 | GATE VALVE, FLG'D
5 | 8" CL 100, SDR41 WHITE
6 | PIPE SPOOL PIECE, FL x FL.
7 | PIPE RISER, FL x FL.

VALLECITOS WATER DISTRICT STANDARD DRAWING

DATE: JULY 2015

3" AND LARGER AIR RELEASE ASSEMBLY
W-24
TABLE

<table>
<thead>
<tr>
<th>SIZE</th>
<th>HEIGHT</th>
<th>DIAMETER</th>
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<tr>
<td>3&quot;</td>
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</tr>
<tr>
<td>8&quot;</td>
<td>36&quot;</td>
<td>30&quot;</td>
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</tbody>
</table>

- SQUARE CONCRETE PAD
- EYE HOOK WELDED
- 10 GA STEEL HOT DIPPED GALVANIZED WIRE BRUSH & PAINT BLUE PER CURRENT VWD MATERIAL LIST
- HOOD
- (18) 3/4" HOLES (TYP)
- 3" MIN.
- COMBINATION AIR VALVE
- 4" MIN.
- 1/2"
- 12"
- SIDEWALK
- 6" THK. CONC.
- (4) DRILLED 1/2" Ø HOLES FOR 3/8" S.S. "L" ANCHOR BOLTS W/ NUTS & WASHERS

REVISIONS

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<tr>
<th>DESCRIPTION</th>
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<th>DATE</th>
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<tr>
<td>SUPPORTS INSIDE CAN &amp; EYE HOOK</td>
<td>5-16-08</td>
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VALLECITOS WATER DISTRICT STANDARD DRAWING

3" & LARGER AIR RELEASE/ ENCLOSURE

DATE: JAN. 04
BY: 

Drawing No. W-25
REMOVE AND REPLACE COATING AND LINING AS NECESSARY TO INSTALL SERVICE CONNECTION

MAIN LINE

HEAVY DUTY 3000# THD
HALF STEEL COUPLING WITH THREADED 3/16" STAINLESS STEEL

3/16" x 3/4" DIA. STEEL BACKING PLATE

BALL CORPORATION STOP

FULL CIRCLE

FIELD WELD SERVICE CONN.

FILLET WELD

VALLECITOS WATER DISTRICT STANDARD DRAWING

DATE: JAN. 04

SERVICE CONNECTION FOR STEEL PIPE

W-26
NOTES:
1) ALL FLANGES TO BE WELDED IN FIELD, PER A.W.W.A. C-207.
2) ALL STEEL PIPE, FIELD WELDING' AND REPAIRS, SHALL BE PER A.W.W.A. C-255 & C-256.
3) INSTALL HANDHOLE W/ PLUG MIN. OF 6" FROM EACH WELDED JOINT, DETAIL "A"

DETAIL "A"
(HANDHOLE)

DETAIL "B"
(P.O. x FLG. ADAPTER)
NOTES:

1) ALL PIPE JOINTS AT 45-DEGREE BENDS SHALL BE RESTRAINED

2) THE THRUST AND ANCHOR BLOCKS SHALL BE PER VWD STD. DWG. W-15.

3) DIP INSTALLATION SHALL BE DOUBLE ENCASED POLYETHYLENE WRAPPING PER VWD STANDARDS SECTION 15058 PART 3 C4

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

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

6) IF BOTTOM LENGTH EXCEEDS 18 FEET, CONNECT PIPE SECTIONS WITH MECHANICAL JOINT RETAINING GLAND.