CONSTRUCTION NOTES

1. SIZE OF PIPING SHALL MATCH SIZE OF AIR VALVE.

2. ENGINEER TO SPECIFY TYPE & SIZE OF VALVE.

3. AIR VALVES LARGER THAN 2" SHALL BE BY SPECIAL DESIGN.

4. AIR VALVE SHALL BE PLACED OUTSIDE OF TRAFFIC AREAS.

5. ALL PIPING ABOVE GROUND TO BE PAINTED OSHA SAFETY BLUE.

6. CENTER VALVE IN LONGITUDINAL DIRECTION IN BOX.

7. PAINT AND MARK VENT SIMILAR TO MARKER POST DETAIL.

8. CHRISTY B36 FOR 1" ARV, B40 FOR 2" ARV.
**End-line connection for PVC, Cast and Ductile Iron water main**

- **Concrete anchor block with capped end per Standard Drawing No. 706**
- **In-line connection to main**

<table>
<thead>
<tr>
<th>FITTINGS AND PARTS: *</th>
<th>6&quot; Ø AND SMALLER</th>
<th>8&quot; Ø AND LARGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM NO.</td>
<td>AIR &amp; VACUUM RELEASE VALVE</td>
<td>Airways of larger than 10&quot;</td>
</tr>
<tr>
<td>A. Corporation Stop</td>
<td>Mueller N-35008</td>
<td>Mueller H-15025</td>
</tr>
<tr>
<td>B. Tubing</td>
<td>Copper Tubing Type &quot;K&quot; Soft</td>
<td></td>
</tr>
<tr>
<td>C. Dielectric Union</td>
<td>Calpico Insulating union</td>
<td></td>
</tr>
<tr>
<td>D. Tubing</td>
<td>Brass Nipple</td>
<td></td>
</tr>
<tr>
<td>E. PVC Sleeves</td>
<td>2&quot; PVC, Class 200</td>
<td>3&quot; PVC, Class 200</td>
</tr>
<tr>
<td>F. Brass Gate Valve with 2-1/2&quot; male threaded end</td>
<td>Stockholm B-103 or Wats WGV-1</td>
<td></td>
</tr>
<tr>
<td>G. Brass Gate Valve</td>
<td>Mueller H-15204</td>
<td></td>
</tr>
<tr>
<td>H. Comb. Air &amp; Vacuum and Air Release Valves</td>
<td>APCO No. 143C</td>
<td>APCO No. 145C</td>
</tr>
<tr>
<td>I. 2&quot; by 1&quot; adaptor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. Bushing Insulating 2-1/2&quot; x 2&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K. Plug - C.I.R.T. 6&quot; x 2-1/2&quot; for rubber ring push-on joint</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Or approved equal

**NOTES:**
1. Valve assembly enclosure shall be per Sheet 4, Type I.
2. Use same diameter tubing as that required by the size of the air & vacuum and air release valves.
3. Tubing shall be installed a minimum of 3 ft deep at the lip of the gutter.
4. Refer to Standard Drawing No. 706 for detail of each type of material.
5. Install valve assembly behind sidewalk, in easement.

**CITY OF MILPITAS, ENGINEERING DIVISION**

**STANDARD DRAWING NO. 738**

**COMBINATION 1" OR 2" BLOW OFF AND AIR & VACUUM RELEASE VALVE (At high point)**

**DATE** : 6/15/10

**SHEET 2 OF 6**

**REVISION**
- ▲ 1997
- ▲ 2001
- ▲ 2010

**APPROVED BY:**
- PUBLIC WORKS DIRECTOR / CITY ENGINEER RCE No. 40283
End-line connection for PVC, Cast and Ductile Iron water main

In-line connection to main

End-line connection for welded steel water main

Fittings and parts:

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>Blow Off Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Service Saddle</td>
<td>Mueller BR2B</td>
</tr>
<tr>
<td>B. Corporation Stop</td>
<td>Mueller H-15025</td>
</tr>
<tr>
<td>C. Tubing</td>
<td>Copper Tubing Type &quot;K&quot; Soft</td>
</tr>
<tr>
<td>D. PVC Sleeves</td>
<td>3&quot; PVC, Class 200</td>
</tr>
<tr>
<td>E. Copper Coupling</td>
<td>Mueller H-15425</td>
</tr>
<tr>
<td>F. Brass Gate Valve</td>
<td>Stockham B-103 or Wats WGV-1</td>
</tr>
<tr>
<td>K. Bushing Insulating 2-1/2&quot; x 2&quot;</td>
<td></td>
</tr>
<tr>
<td>L. Plug - C.I.R.T. 6&quot; x 2-1/2&quot; for rubber ring push-on joint</td>
<td></td>
</tr>
</tbody>
</table>

* Or approved equal

Notes:
1. Valve assembly enclosure shall be per City Standard Drawing No. 741, Type I.
2. Use same diameter tubing as that required by the size of the air & vacuum release valve.
3. Tubing shall be installed a minimum of 3 ft deep at the lip of the gutter.
4. Refer to Standard Drawing No. 706 for detail of each type of material.
5. Install valve assembly behind sidewalk, in easement.
ENCLOSURE IN OPEN POSITION

TYPE I & II VALVE ASSEMBLY MESH BOX ENCLOSURE
(FOR INDUSTRIAL/COMMERCIAL)

LIST OF PARTS
1. Frame constructed of 1 1/2" x 1 1/2" x 3/16" steel angle.
2. No. 9 flattened expanded mesh, (weld to internal steel angle).
3. 3/8" diameter U-BOLT for padlocking.
4. Lifting handles.
5. ¼" X 1-½" metal tab welded to enclosure frame with hole to accommodate U-bolt loop.
6. Nozzle shall be set at a minimum of 1'-0" above 100 year Base Flood Level Elevation (BFE), or 1 foot above adjacent grade or highest recorded water level, which ever is greater. Base pad foundation may be filled to raise the air relief valve to required elevation.
7. ½" diameter stainless steel bolt with nut and washer. (Nut welded to internal steel angle).
8. ¼" X 1-½" metal tab with ½" diameter holes embedded in slab.

NOTES:
1. Confirm clearance prior to installation to verify box can be opened without restriction.
2. Valve enclosure shall be as manufactured by Le Meur or approved by Engineer.
3. All valve enclosures shall be installed per manufacturer's instruction, or as directed by the Engineer.
4. Wash enclosure assembly with degreasing cleaner, apply two coats of water based corrosion resistant, acrylic primer, one coat of acrylic enamel (forest green), anti-graffiti coating.

CITY OF MILPITAS, ENGINEERING DIVISION

COMMERCIAL VALVE ASSEMBLY ENCLOSURE

REVISION  DATE
1  1997
2  2001
3  2010

APPROVED BY: PUBLIC WORKS DIRECTOR / CITY ENGINEER RCE No. 40283

STANDARD DRAWING NO. 738
DATE: 6/15/10
SHEET 4 OF 6
TYPE II VALVE ASSEMBLY SOLID METAL BOX ENCLOSURE
(FOR ALL RESIDENTIAL)

LIST OF PARTS

1. Frame constructed of 1 1/2" x 1 1/2" x 3/16" steel angle.
2. 3/8" steel plate, (weld to internal steel angle).
3. 3/8" diameter U-BOLT for padlocking.
4. Lifting handles.
5. 1/4" X 1-1/2" metal tab welded to enclosure frame with hole to accommodate U-bolt loop.
6. Nozzle shall be set at a minimum of 1'-0" above 100 year Base Flood Level Elevation (BFE), or 1 foot above adjacent grade or highest recorded water level, which ever is greater. Base pad foundation may be filled to raise the air relief valve to required elevation.
7. 3/8" diameter stainless steel bolt with nut and washer. (Nut welded to internal steel angle).
8. 1/4" X 1-1/2" metal tab with 3/8" diameter holes embedded in slab.
9. Louvers 3 on center 1/2" X 6".

NOTES:
1. Confirm clearance prior to installation to verify box can be opened without restriction.
2. Valve enclosure shall be as manufactured by Le Meur or approved by Engineer.
3. All valve enclosures shall be installed per manufacturer's instruction, or as directed by the Engineer.
4. Wash enclosure assembly with degreasing cleaner, apply two coats of water based corrosion resistant, acrylic primer, one coat of acrylic enamel (forest green), anti-graffiti coating.

NOT TO SCALE
ENCLOSURE IN OPEN POSITION

TYPE III VALVE ASSEMBLY SOLID METAL BOX ENCLOSURE
(RESIDENTIAL BOX FLUSH WITH PAD,
LIFT-UP, DOES NOT PIVOT ON HINGE)

LIST OF PARTS

1. Frame constructed of 1 1/2” x 1 1/2” x 3/16” steel angle.
2. 3/8” steel plate (weld to internal steel angle).
3. 3/4” X 1-1/2” metal tab welded to enclosure frame with 3/8” diameter holes.
4. Lifting handles. (Two handles each side for Type III enclosure)
5. Louvers 3 on center 3/8” X 6”.
6. Nozzle shall be set at a minimum of 1’-0” above 100 year Base Flood Level Elevation (BFE), or 1 foot above adjacent grade or highest recorded water level, which ever is greater. Base pad foundation may be filled to raise the air relief valve to required elevation.
7. 3/4” diameter stainless steel bolt with nut and washer. (Nut welded to internal steel angle).
8. 3/4” X 1-1/2” metal tab with 3/8” diameter holes embedded in slab.

NOTES:

1. Confirm clearance prior to installation to verify box can be opened without restriction.
2. Valve enclosure shall be as manufactured by Le Meur or approved by Engineer.
3. All valve enclosures shall be installed per manufacturer’s instruction, or as directed by the Engineer.
4. Wash enclosure assembly with degreasing cleaner, apply two coats of water based corrosion resistant, acrylic primer, one coat of acrylic enamel (forest green), anti-graffiti coating.

NOT TO SCALE

CITY OF MILPITAS, ENGINEERING DIVISION

RESIDENTIAL VALVE ASSEMBLY
ENCLOSURE (LIFT-UP)

STANDARD DRAWING
NO. 738

DATE : 6/15/10

SHEET 6 OF 6

APPROVED BY:
PUBLIC WORKS DIRECTOR / CITY ENGINEER RCE No. 40283