AIR-RELEASE AND VACUUM VALVE ASSEMBLY

NO. 14 GAGE STEEL COVER WITH 12 5/16" x 4" SLOTS CUT AT BOTTOM FOR DRAINAGE

6" x 6" DOOR WITH WELDED HINGES & PADLOCK HASP. PADLOCK TO BE SUPPLIED BY DISTRICT.

6" x 6" BRASS INSECT SCREEN

SIDEWALK FINISH

EXISTING CURB AND GUTTER. IF NONE EXISTS, INSTALL BARRICADES PER STD PLAN W-14 AS REQ'D.

12" MIN

SLOPE 1/4" PER FT

SIDEWALK FINISH

WELDED HINGES & PADLOCK HASP. PADLOCK TO BE SUPPLIED BY DISTRICT.

1/2" BRASS BOLT & WASHER - 4" LG

WRAP PORTION OF COPPER EXPOSED TO CEMENT WITH 10 MIL PVC TAPE

IN THE ABSENCE OF A CURB AND SIDEWALK, INSTALL A 36" SQUARE CONCRETE PAD

FOR JOINING TUBING, USE SILVER BRAZING ALLOY, "SILFLOS" WITH COPPER COUPLING. SOFT SOLDER IS UNACCEPTABLE

FOR STEEL, DI, OR CI PIPE, WRAP WITH PVC TAPE FOR A MIN OF 24", COVERING PIPE, FITTINGS, CURB STOP, AND TUBING. SEE STD PLAN W-36. USE PRIMER AND 10 MIL TAPE. REPLACE PIPE COATING WITH CEMENT MORTAR, AFTER INSTALLATION OF COUPLING. (SEE STD PLAN W-36)

* FOR CONNECTION TO ACP, DI, CI, OR STEEL (LESS THAN 10 GA) PIPE, SEE STD PLAN W-5, NOTE 3 FOR DOUBLE-STRAP CLAMP TO BE USED FOR ITEM 12. CLAMP OUTLET SHALL BE SET VERTICALLY FACING UPWARD.

* STEEL WATER MAIN, 10 GA MIN

LOS ANGELES COUNTY WATERWORKS DISTRICTS

DEPARTMENT OF PUBLIC WORKS

STANDARD PLAN

W-16

APPROVED

ASSISTANT DEPUTY DIRECTOR

APRIL 2004

DATE

SHEET 1 OF 2
AIR-RELEASE AND VACUUM VALVE ASSEMBLY (CONTINUED)

GENERAL NOTES:
1. THE HEIGHT AND DIAMETER OF THE STEEL COVER SHALL PROVIDE A 2" MINIMUM CLEARANCE AROUND THE VALVE ASSEMBLY.
2. IN AREAS SUBJECT TO FREEZING, ALL VALVES AND PIPING ABOVE GROUND SHALL BE INSULATED.
3. PAINT VALVE ASSEMBLY ABOVE GROUND, AND STEEL COVER, WITH TWO COATS OF DISTRICT APPROVED RED PRIMER AND TWO COATS OF DISTRICT APPROVED FOREST GREEN OR DUNES TAN.
4. USE PROPER CLASS FITTINGS FOR WORKING WATER PRESSURE. (CLASS 150 MIN).
5. IF BRONZE NIPPLE (ITEM NO. 3) IS OVER 12" LONG, ADD CORPORATION STOP NEXT TO MAIN. (LEAVE OPEN).
6. SEE PLANS FOR VALVE SIZES AND USE SAME SIZE FITTINGS, AND NIPPLE LENGTHS TO SUIT. (NO CLOSE NIPPLES).

LIST OF MATERIALS

<table>
<thead>
<tr>
<th>NO.</th>
<th>DESCRIPTION (FOR 2&quot; VALVES)</th>
<th>ENGINEER'S EST. QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2&quot; AIR-RELEASE AND VACUUM VALVE</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2&quot; BALL VALVE, SCREWED, BRONZE</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>2&quot; BRONZE NIPPLE, SHORT</td>
<td>1' ±</td>
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<tr>
<td>4</td>
<td>2&quot; STD STEEL PIPE, NIPPLE, GALV</td>
<td>2' ±</td>
</tr>
<tr>
<td>5</td>
<td>2&quot; COPPER TUBING, TYPE &quot;K&quot; SOFT</td>
<td>24' ±</td>
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<tr>
<td>6</td>
<td>2&quot; 90° STREET ELBOW, SCREWED, BRONZE</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>2&quot; 90° ELBOW, SCREWED, GALV</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>2&quot; ADAPTER, BRONZE, COPPER FLARED x IP, MALE</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>2&quot; 90° ELBOW, COPPER</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>2&quot; CURB STOP, BRONZE, COPPER FLARED x IP, FEMALE, &quot;HAYS&quot; 5050 OR APPROVED EQUAL</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>2 1/2&quot; x 2&quot; INSULATING BUSHING</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>2 1/2&quot; WELDED COUPLING</td>
<td>1</td>
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</tbody>
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SHEET 2 OF 2