

ORDINANCE NUMBER 1490

AN ORDINANCE OF THE CITY OF MILWAUKIE AMENDING ORDINANCE NO. 1267 PROVIDING FOR CROSS-CONNECTION CONTROL.

THE CITY OF MILWAUKIE DOES ORDAIN AS FOLLOWS:

Section 1. Ordinance No. 1267 is amended by the addition of a new Section 3:

Section 3. Reduced pressure and double check backflow devices shall be installed according to standards adopted by the Public Works Director. The current standards are attached as Exhibit A and may be amended from time to time.

Section 2. Ordinance No. 1267 is further amended by the addition of new Exhibit "A", consisting of the five pages attached to this ordinance.

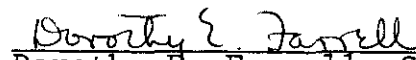
Read the first time on March 17, 1981, and moved to second reading by majority vote of the City Council.

Read the second time and adopted by the City Council on April 7, 1981.

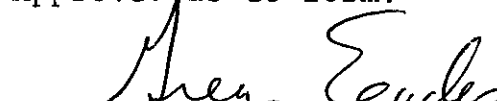
Signed by the Mayor on April 9, 1981.


Joy Burgess, Mayor

ATTEST:


Dorothy E. Farrell, City Recorder

Approved as to form:


Greg Eades, City Attorney

CITY OF MILWAUKIE

EXHIBIT "A"

REQUIREMENTS FOR DOUBLE CHECK ASSEMBLY INSTALLATION

1. These devices shall be installed on the service line of the customers' system at or near the property line, or immediately inside the building being served, but in all cases before the first branch of the service. The location of the device in all cases must be approved by the Water Department prior to installation.
2. These devices may be installed below ground level. The vault or chamber must be of sufficient size to ensure access for regular testing and maintenance and must drain to daylight, not to sewer and not over 100 feet in length. Chamber requirements are available from the Water Department on request. (see attached detail)
3. All chambers must be provided with a floor drain. However, no device shall be installed in any location subject to flooding. The customer shall take all necessary precautions to protect his device from severe weather conditions.
4. Every vault shall have access through an adequately sized frame and cover. If entry is through the vault roof and the depth of the vault exceeds 4' 0", an approved extension ladder will be required.
5. If adequate lighting is not available due to the positioning of the device, a moistureproof light fixture will be required.
6. No other usage of the vault will be allowed, except for fire alarm connections.
7. Approved O., S. and Y. gates, or other approved indicator gates are required on all devices installed on fire line services or combination services.
8. Access to the vault or chamber shall remain clear at all times.

A test of the backflow device will be required of the owner at the time of installation by a certified tester prior to acceptance of the installation and device. The Water Department will perform such test at the request of the owner. The cost of such test would be charged to the property being served.

Each backflow device shall be registered with the Water Department. Registration shall consist of date of installation and make, model and serial number of the backflow device. The Water Department shall be notified upon completion of the installation. Each device must be inspected by a Water Bureau Inspector for proper installation.

CITY OF MILWAUKIE

REQUIREMENTS FOR REDUCED PRESSURE AND DOUBLE CHECK BACKFLOW DEVICE INSTALLATIONS

1. Devices must be installed in an accessible location at a minimum elevation of 32' above mean sea level (City of Portland Datum). Minimum elevations may vary at other locations in the state. In addition, the relief valve discharge must be 1'0" above the surrounding grade. Variance may be allowed, at the discretion of the Water Department, in certain well-diked areas and basement installations. Locations of the devices shall be approved by the Water Department prior to installation.
2. All devices must be installed horizontally with at least 12" clearance from the lowest part of the device to the slab or floor of the chamber. All devices of 1-½" and larger size, should have a minimum of 12" clearance on the back side and at least 24" on the test cock side of the device. Adequate clearance of at least 36" must be maintained above all devices of 1-½" size and larger, or any top cover must be removable.
3. Protection from freezing must be provided for any device installed in an exposed location.
4. There must be an approved air gap of not less than 1" located directly at the relief valve orifice.
5. In no case may a reduced pressure and double check device be installed in any small, enclosed chamber or in any location subject to flooding.
6. All devices must have the approval of the City of Milwaukie Water Department and the Oregon State Health Division, Department of Human Resources.

We wish to advise that the installation of these devices will alter the delivery pressure and flow of the services. In addition, each device is required to be tested annually by a certified tester with the test results submitted to the Water Department. We wish to suggest the following procedures in the sizing and installation:

- a. Check the (1) water main pressure, (2) meter pressure loss, (3) proposed backflow device pressure loss and flow capacity, and (4) residual pressure downstream of the proposed backflow device, with your requirements. This information is available upon request at the Water Department.
- b. A test of the backflow device is required of the owner at the time of installation by a certified tester prior to acceptance of the installation and device and every year thereafter.

You are required to register each backflow device with the Water Department. Registration shall consist of date of installation and make, model and serial number of the backflow device. The Water Department shall be contacted upon installation. Each device must be inspected by a Water Department Inspector for proper installation.

GUIDELINES FOR THE INSTALLATION
OF CROSS-CONNECTION CONTROL DEVICES

Oregon State Health Division

April 1972
December 31, 1973
March 16, 1978

The following is intended to serve as a general outline of the requirements for installation of either a double-check valve assembly or a reduced pressure backflow prevention device. There is no intention to circumvent either the need for engineering, the need for approval of the water purveyor or review of these installations by this office, where in the judgment of the purveyor, such review is desirable.

Each double-check valve assembly or reduced pressure backflow prevention device must be installed in such a manner that:

1. The device is above the surrounding ground level and also not subject to flooding;
2. The device is not subject to freezing or vandalism. A locked shelter and a thermostatically controlled heater is usually required;
3. The device must be installed in such a manner that it can be easily tested and maintained. The Oregon Administrative Rules require annual testing. Two shut-off valves and unions must be provided to allow annual testing and removal.
4. The device must not be by-passed. When a device is removed for repair, a replacement device must be reinstalled for protection. Where service is for fire protection, or is classed as uninter-ruptible, then dual or multiple installations should be provided so the device can be tested and removed without inconvenience.
5. The device must be installed by a licensed plumber or by a certified backflow prevention device tester.

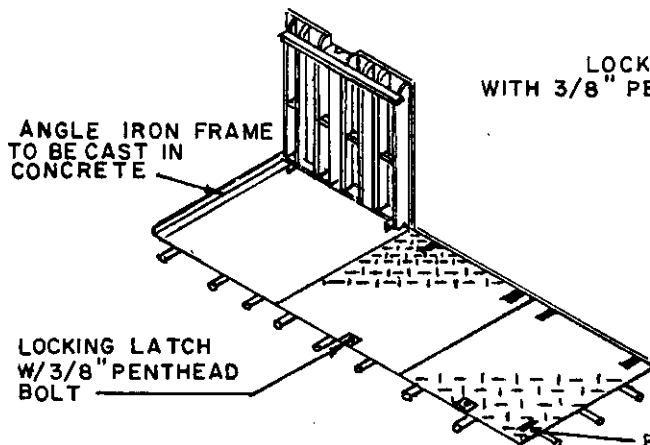
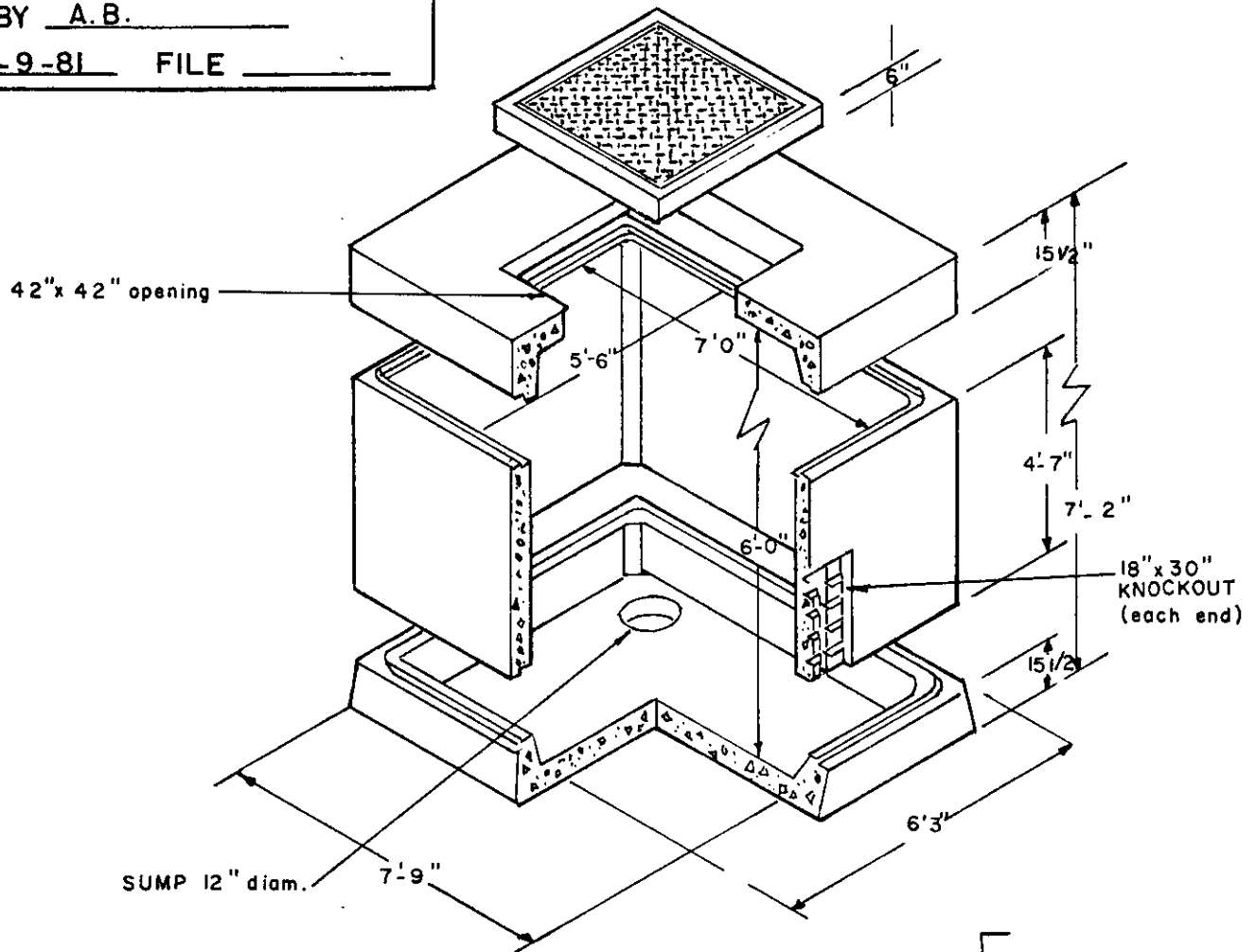


CITY OF MILWAUKIE
DEPT. OF PUBLIC WORKS

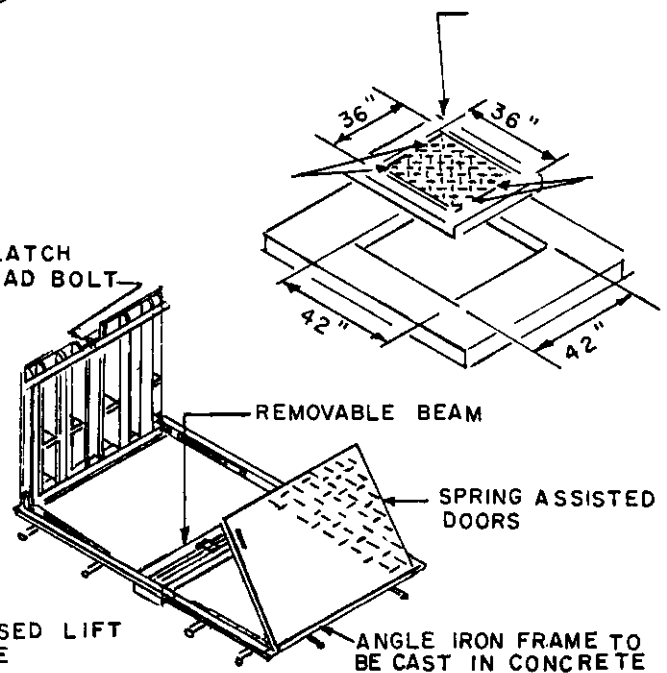
TYPICAL DETAILS: REDUCED
PRESSURE PRINCIPLE BACK-
FLOW PREVENTION DEVICES

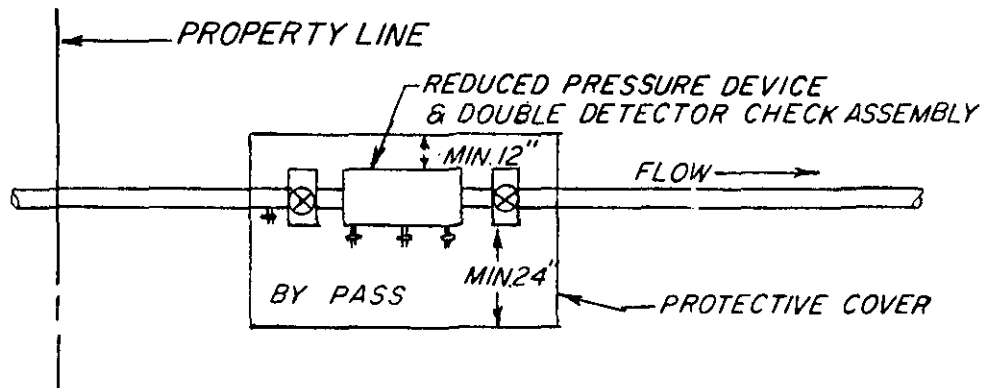
DRAWN BY A.B.

DATE 1-9-81 FILE

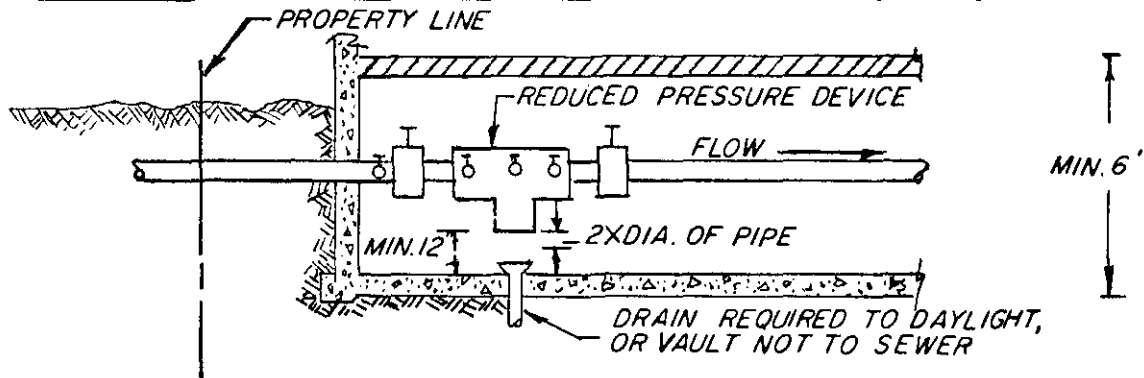


LOCKING LATCH
WITH 3/8" PENTHEAD BOLT

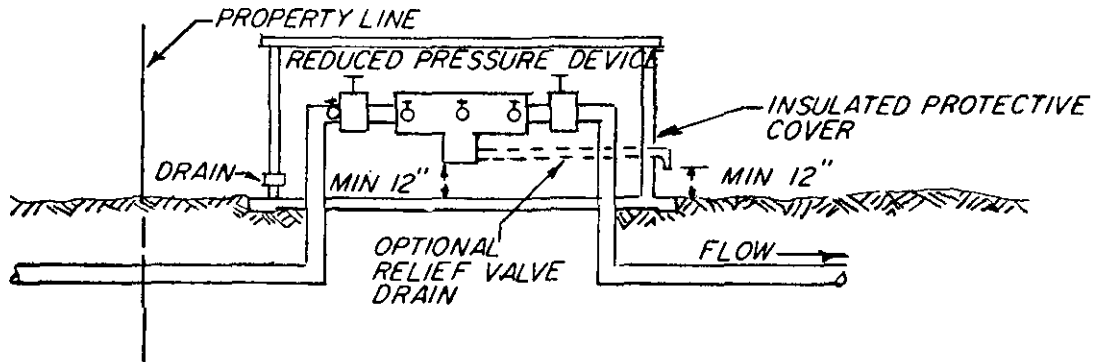




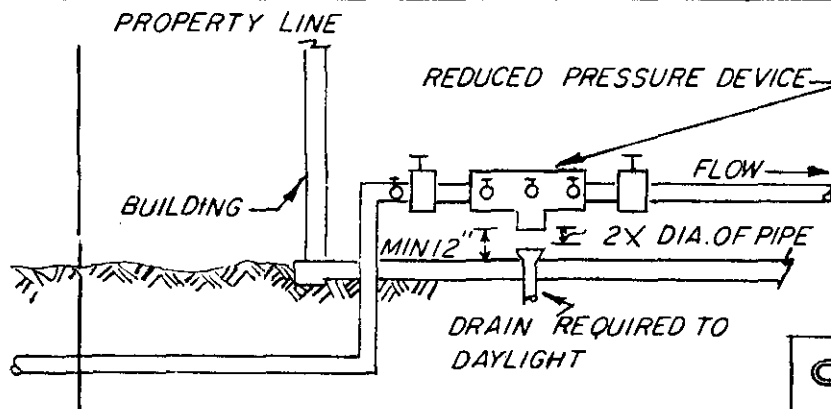
PLAN VIEW



IN BASEMENT



ABOVE GROUND



IN BUILDING

NOTE:

REDUCED PRESSURE DEVICES SHALL BE OF AN APPROVED TYPE AND SHALL BE INSTALLED IN SUCH A MANNER THAT THEY SHALL BE READILY ACCESSIBLE FOR REPAIR AND INSPECTION. WHEN INSTALLED INSIDE A BUILDING IT SHALL BE NECESSARY TO MAKE PROVISIONS FOR DRAINING DISCHARGE FROM THE RELIEF VALVE.

CITY OF MILWAUKIE

DEPARTMENT OF PUBLIC WORKS

**TYPICAL INSTALLATION
REDUCED PRESSURE PRINCIPLE
BACKFLOW PREVENTION DEVICES
& DOUBLE DETECTOR DEVICES**

DRAWN BY A.B...

DATE 1-9-81 FILE..