



## San Francisco Public Utilities Commission Recycled Water Installation Procedures for Developers

The City and County of San Francisco's (CCSF) Recycled Water Ordinance requires property owners to install dual plumbing for recycled water use within the designated recycled water use areas in these situations:

- New or remodeled buildings and all subdivisions with a total cumulative area of 40,000 square feet or more
- New and existing irrigated areas of 10,000 square feet or more

For more information on the Recycled Water Ordinance and the designated recycled water use areas, please visit <http://www.sfpuc.gov/recycledwateruse>

The following are procedures to guide developers and property owners with the installation of recycled water service lines. Drawings A and B show how and where the lines are to be installed, and the required backflow prevention assembly for development when recycled water mains have been installed in the streets (Drawing A), and when the mains have not been installed in the streets (Drawing B).

### Number of Water Lines Coming onto a Property

Three to four lines:

- 1) Fire
- 2) Potable water domestic
- 3) Recycled water domestic
- 4) Recycled water irrigation (if property has landscaping)

### Number of Water Meters

One water meter is required for each water line.

### Required Backflow Prevention Assembly

Fire line – reduced pressure principle backflow preventer

Potable water domestic – reduced pressure principle backflow preventer

Recycled water domestic – reduced pressure principle backflow preventer

Recycled water irrigation line – reduced pressure principle backflow preventer

All backflow prevention assemblies must be approved by the SFPUC's Water Quality Division.

The backflow prevention assembly for domestic water plumbing inside the building and for the recycled water system must meet the CCSF's Plumbing Code and Health Code.

### Pipe Separation

California Department of Public Health regulations require new water mains and new supply lines to be installed at least 4-foot horizontally from, and one-foot vertically above a parallel pipeline conveying recycled water.

### Pipe Type

- Transmission lines and mains – ductile iron
- Distribution and service lines – purple PVC or equivalent
- Irrigation lines – purple PVC or equivalent
- Dual-plumbing – described in the CCSF's Plumbing Codes

**\*\*SFPUC's City Distribution Division must sign off on pipe type prior to installation.** Contact the City Distribution Division at [cddengineering@sfwater.org](mailto:cddengineering@sfwater.org).

### Temporary Potable Water Use Until Recycled Water Becomes Available

The potable water line will be used to feed the recycled water lines(s) until such time that recycled water becomes available. When recycled water becomes available, the cross-connection will be broken by the SFPUC, and the potable and recycled water lines will be totally separated. Before recycled water is delivered to the property, cross-connection and backflow testing will take place to assure separation.

Under no circumstances are developers or property owners to "t-off" of the potable water line to the recycled water lines(s).

**If you have questions, or would like additional information:**

#### Recycled Water Ordinances and Technical Assistance

San Francisco Public Utilities Commission  
Water Resources Division  
(415) 551-4514

#### Backflow Prevention

San Francisco Public Utilities Commission  
Water Quality Division  
(650) 652-3100

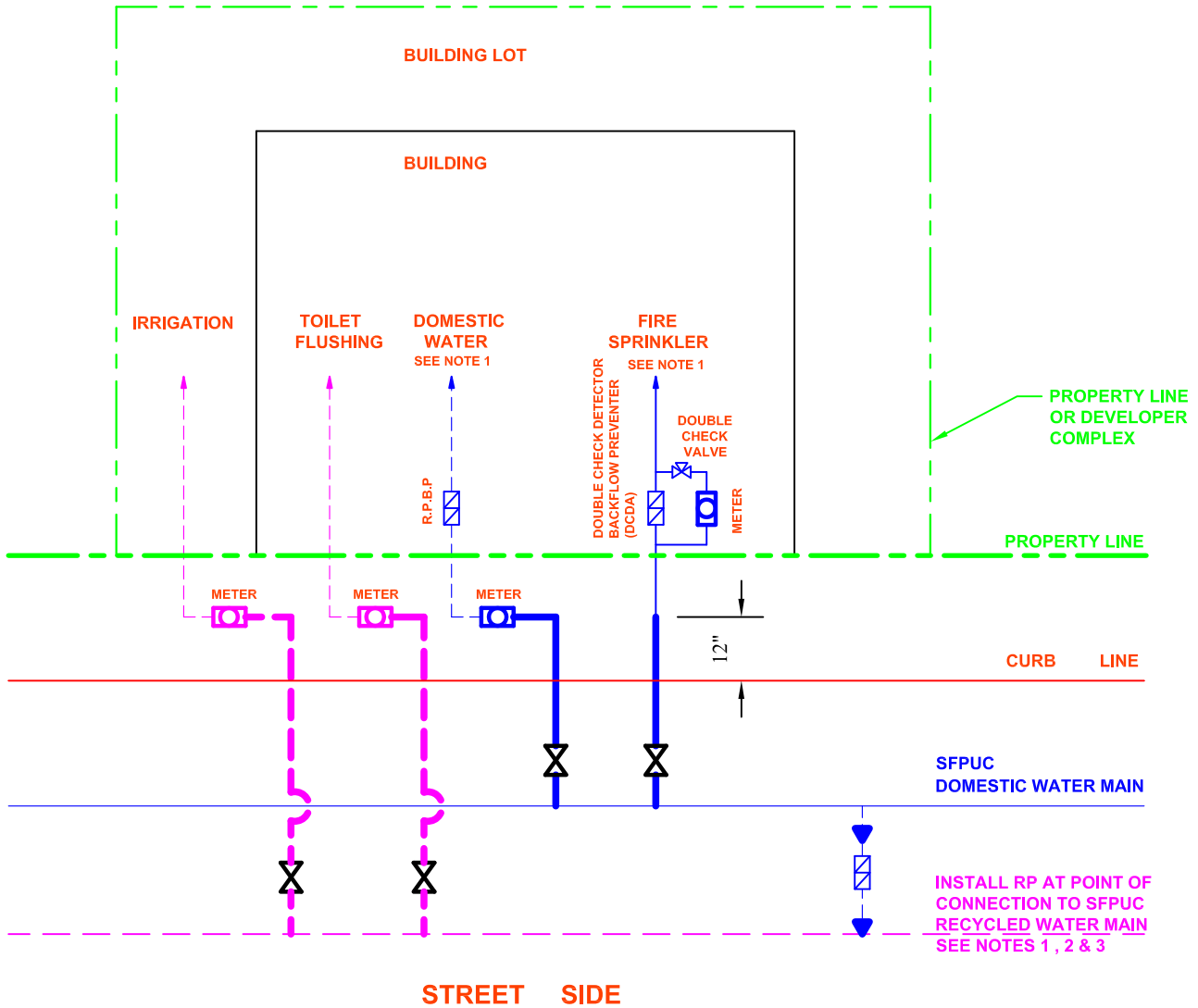
#### Recycled Water Plumbing Codes

Department of Building Inspection  
Plumbing Inspection Services  
(415) 558-6570

#### New Service Line Permits

San Francisco Public Utilities Commission  
Customer Service  
(415) 551-3000

# DRAWING A



**NOTES:**

1. BACKFLOW PREVENTER TO BE APPROVED BY SFPUC W( ).
2. BACKFLOW PREVENTER FOR RECYCLED WATER SYSTEM MUST MEET TITLE 17, CCR, REQUIREMENTS AND PUBLIC HEALTH SAFETY CODE.
3. BFA INSTALLED, OWNED AND MAINTAINED BY SFPUC

**RESPONSIBILITY OF INSTALLATION OF HEAVY LINES:**

OWNER PAYS FOR NEW SERVICE INSTALLATION. SFPUC RETAINS OWNERSHIP OF NEW SERVICE UP TO THE END OF METER ASSEMBLY.

**LIGHT LINES:**

HOUSE PIPE  
OWNER PAYS FOR NEW SERVICE INSTALLATION. OWNERSHIP REMAINS WITH THE PROPERTY OWNER.

CITY AND COUNTY OF SAN FRANCISCO  
PUBLIC UTILITIES COMMISSION  
SAN FRANCISCO WATER DEPARTMENT

## RESPONSIBILITY FOR SERVICE LINES FOR DEVELOPMENT WITH RECYCLED WATER MAIN LINES

APPROVED BY:

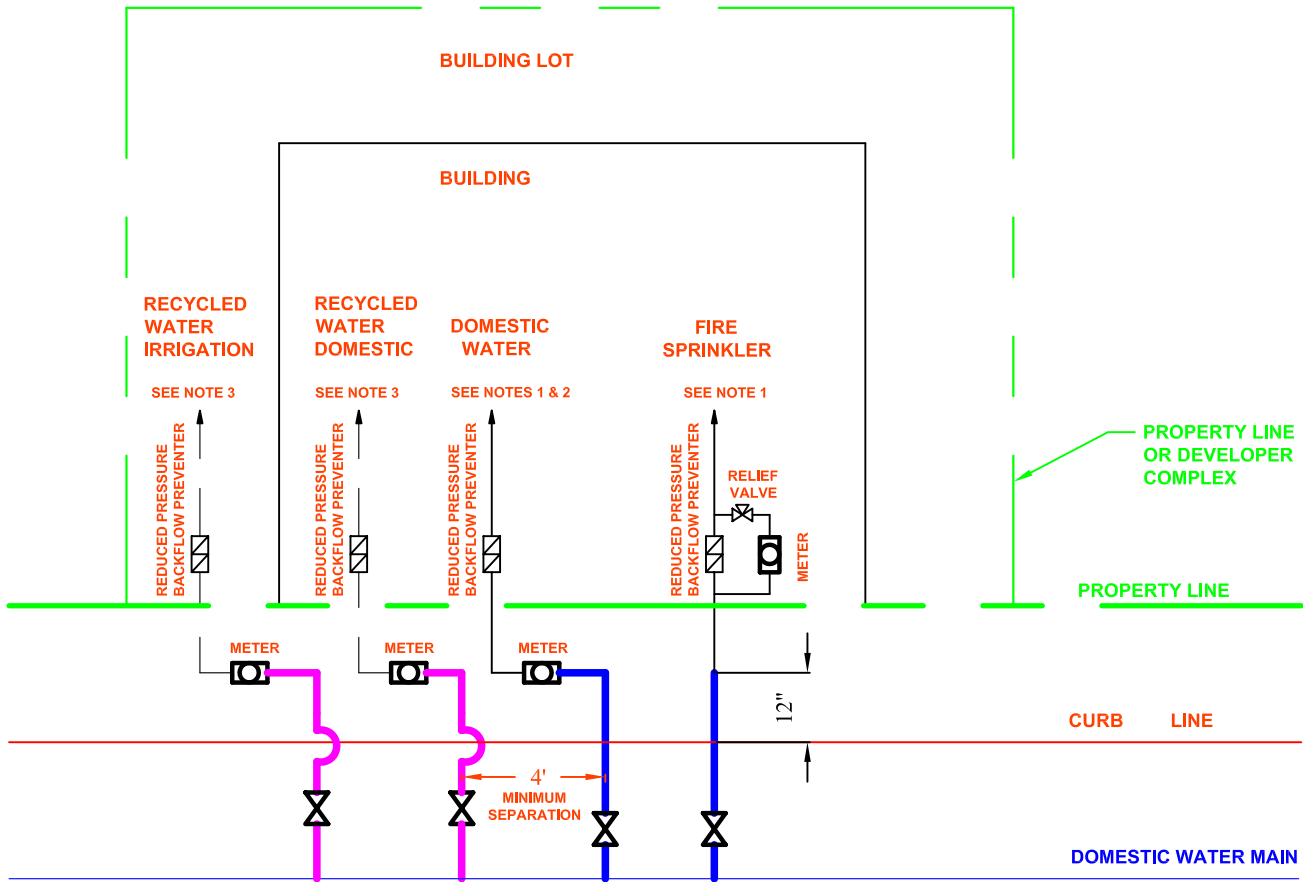
SCALE:  
NTS

DESIGNED BY:  
K. PAYNE  
DATE: 10/23/15

DRAWN:  
CHECKED:

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# DRAWING B



## STREET - SIDE

**NOTE:**

1. ALL BACKFLOW PREVENTERS MUST APPROVED BY SFPUC WATER QUALITY BUREAU.
2. BACKFLOW PREVENTION FOR DOMESTIC WATER PLUMBING INSIDE THE BUILDING MUST MEET CCSF PLUMBING CODE AND PUBLIC HEALTH CODE REQUIREMENTS.
3. BACKFLOW PREVENTER FOR RECYCLED WATER SYSTEM MUST MEET CCSF PLUMBING CODE AND PUBLIC HEALTH CODE REQUIREMENTS.

**RESPONSIBILITY OF INSTALLATION OF**

**HEAVY LINES:**

PROPERTY OWNER PAYS FOR NEW SERVICE INSTALLATION. SFPUC RETAINS OWNERSHIP OF NEW SERVICE UP TO THE END OF METER ASSEMBLY.

**LIGHT LINES:** & \_\_\_\_\_

PROPERTY OWNER PAYS FOR NEW SERVICE INSTALLATION. OWNERSHIP REMAINS WITH THE PROPERTY OWNER.

CITY AND COUNTY OF SAN FRANCISCO  
PUBLIC UTILITIES COMMISSION  
SAN FRANCISCO WATER DEPARTMENT

## INSTALLATION OF RECYCLED WATER SERVICE LINES

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Cheryl Munoz

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