

Update on the Proposed Revisions to the Water, Recycled Water and Sewer Standards and Specifications

Board of Public Utilities
Study Session
May 4, 2017



OUR FUTURE IN EVERY DROP



OUTLINE



- Background
- Revision process
- Description of changes
- Importance of keeping up-to-date
- Delegation of approval authority
- Next steps

BACKGROUND

- **Design Standards**
 - Framework for designing infrastructure
- **Construction Standards**
 - Specific construction details
- **Construction Specifications**
 - Testing procedures and installation methods

BACKGROUND

Part of Citywide standards related to the development of public infrastructure

- Streets
- Traffic
- Storm Drain
- Parks and Landscaping
- Street Lights

BACKGROUND

Applicability

- Additions and modifications to water and sewer systems
- CIP and private development projects
- Local operations

BACKGROUND

Most recent standard update in 2009

- Council Resolution Number 27404
- Larger domestic services sizes
- High-Density Polyethylene pipe
- Two-way sewer cleanout

BACKGROUND

Citywide standard update attempted in 2014

- **Council - June 3, 2014 (Continued)**
 - Council requested clear description of changes
- **Council - June 10, 2014 (Continued)**
 - Staff requested additional time to prepare documents
- **Council - July 8, 2014 (Redirected)**
 - Council requested review by Planning Commission and the Design Review Board

REVISION PROCESS

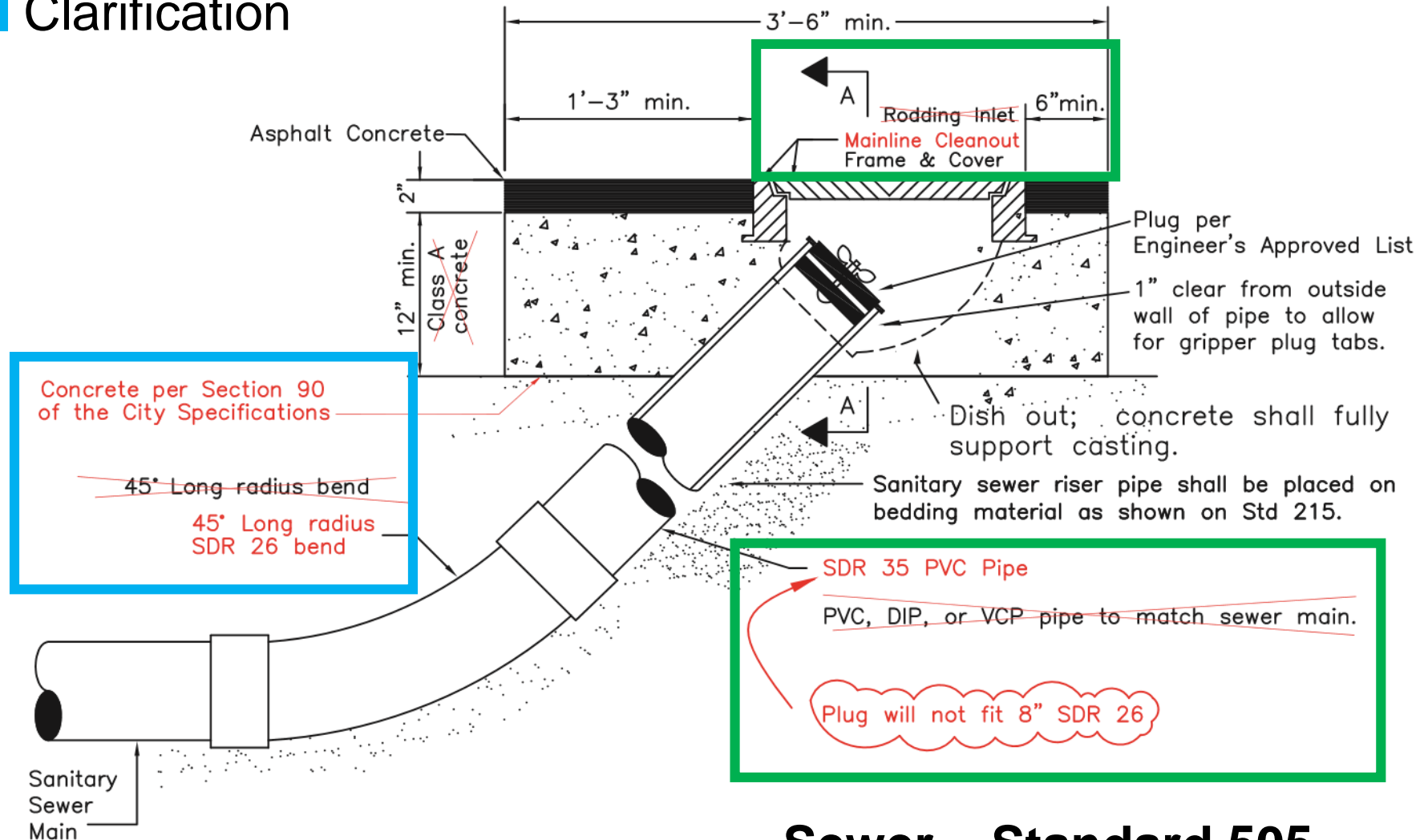
- **Input from multiple City departments**
 - Fire, Transportation and Public Works, Parks and Planning and Economic Development
 - Ensures consistency with other codes and policies
- **Public outreach**
 - American Council of Engineering Companies (ACEC)
 - Engineering Contractor's Association (ECA)
- **Coordinating with Street Standards update**

DESCRIPTION OF CHANGES

- **Clarification (70%)**
 - Verbiage or detail to better explain intent
- **Correction (20%)**
 - Identifies correct information or material
- **Improvement (10%)**
 - Improvement in methods or material

DESCRIPTION OF CHANGES - CONSTRUCTION

- Correction
- Clarification

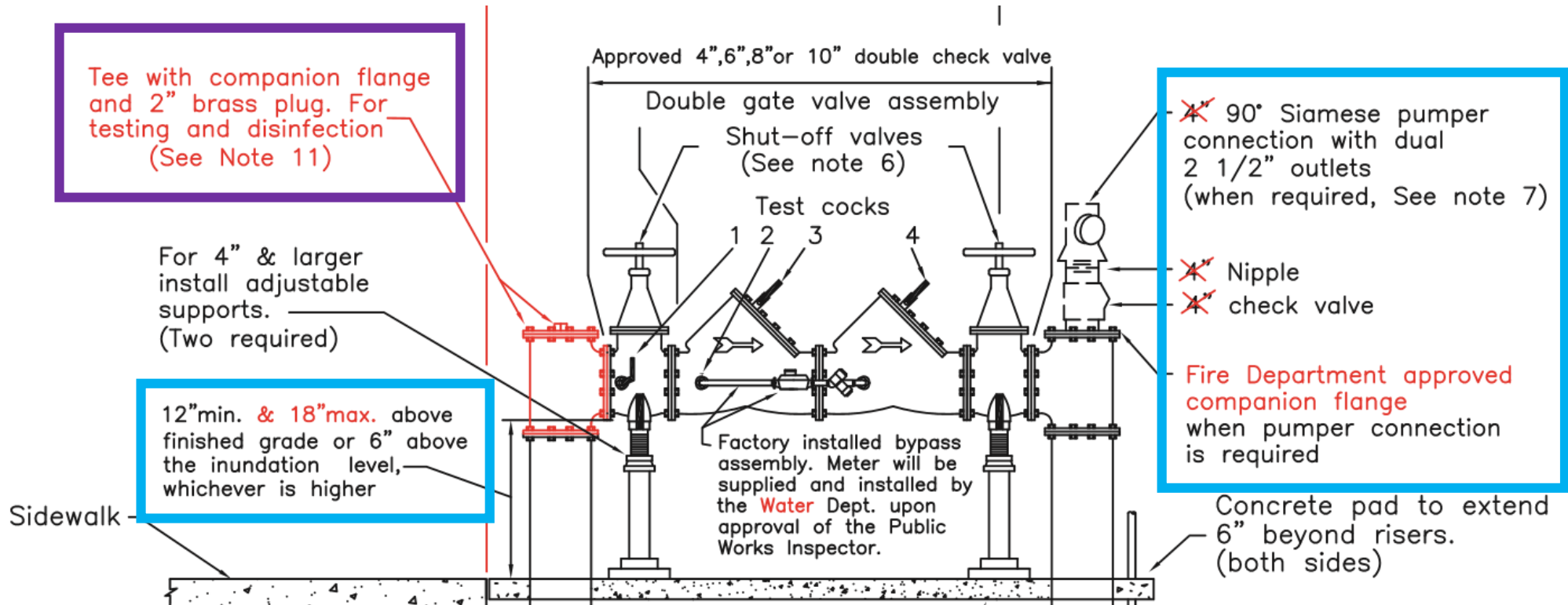


Sewer – Standard 505

DESCRIPTION OF CHANGES - CONSTRUCTION

Improvement

Clarification

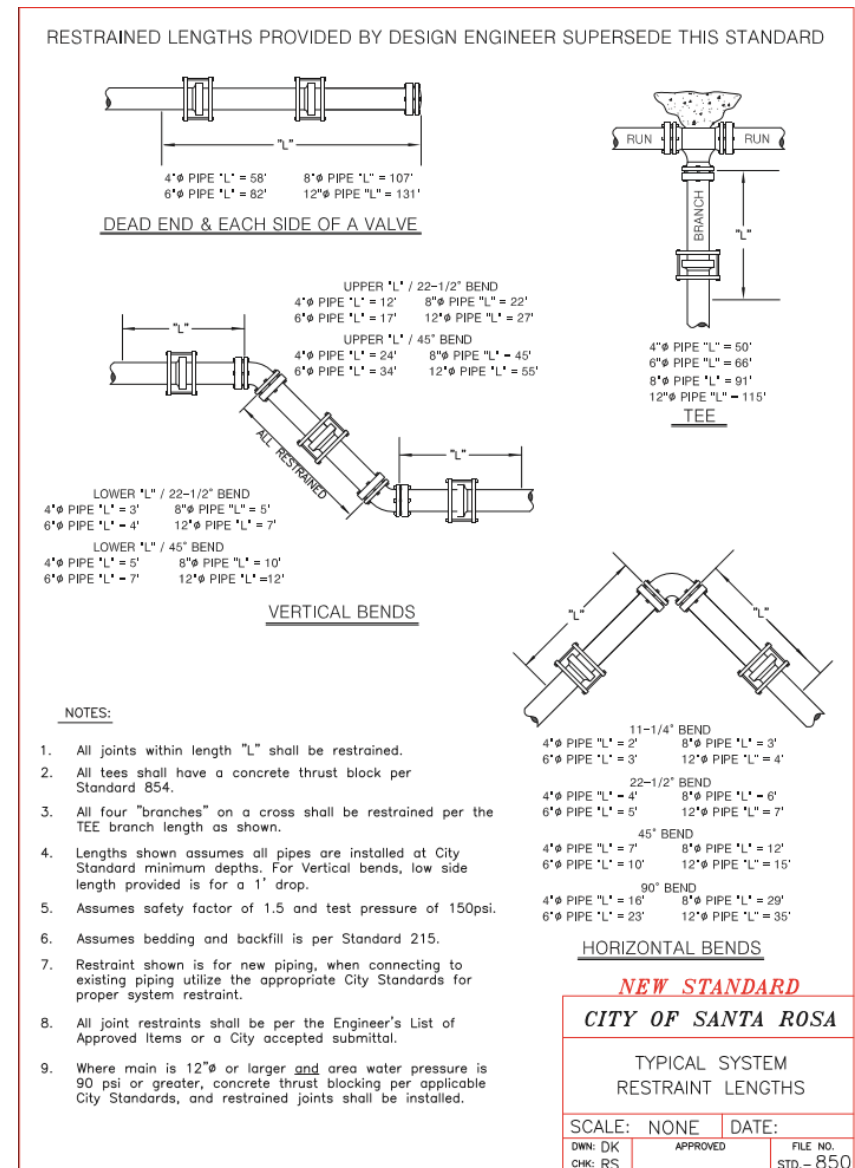


DESCRIPTION OF CHANGES - CONSTRUCTION

New Standard

Water – Standard 850

- Allows restrained joints
- Avoids concrete thrust blocks
- Simplifies installation and maintenance



DESCRIPTION OF CHANGES – WATER DESIGN

 Improvement

 Clarification

VI. ALIGNMENT

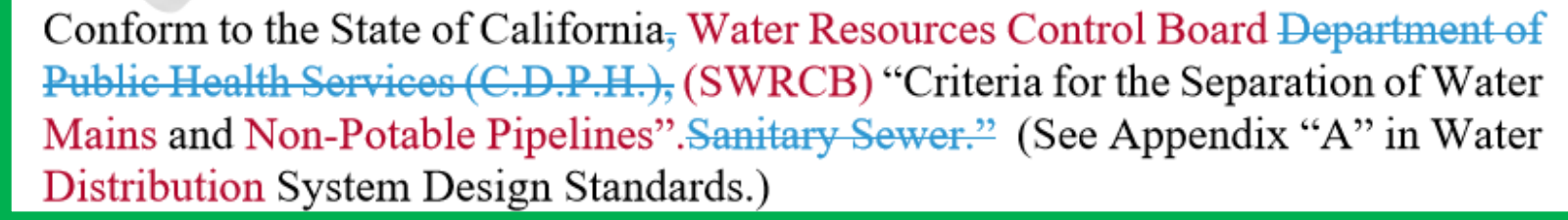
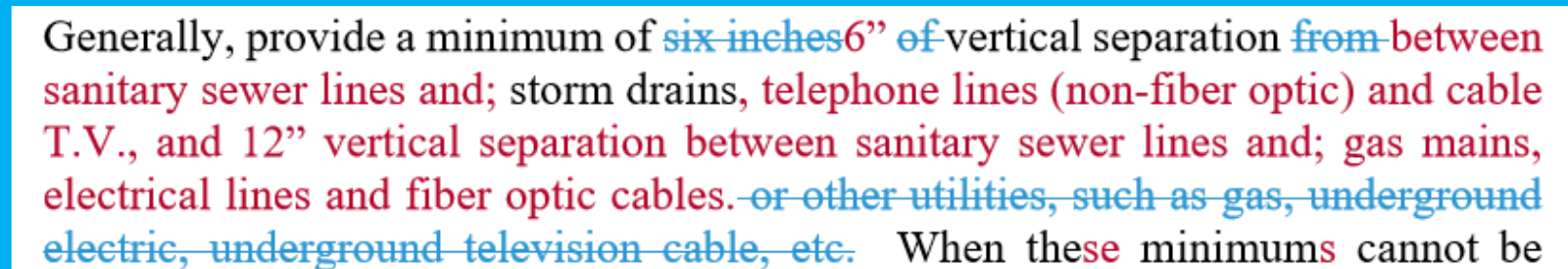


A. Horizontal

1. Alignment ~~will~~ **shall** be in accordance with the provisions of Standard 871 or as directed by the Engineer.
2. New water systems shall be designed as “Restrained Joint Systems” wherever possible, minimizing the use of concrete thrust blocks and/or harnesses except as otherwise specified herein, in the Water Distribution System Construction and Rehabilitation Specifications, or on the plans. The Design Engineer shall show system restraint lengths on the plans, and all restraint calculations shall be provided to the Engineer.
3. Installations of 90-degree bends shall only be installed where site constraints do not allow the installation of two 45-degree bends. Where two 45-degree bends are required per these specifications there shall be as much separation between the bends as practical for the design.

DESCRIPTION OF CHANGES – SEWER DESIGN

-  Correction
-  Clarification

B. Vertical

1. Conform to the State of California, ~~Water Resources Control Board~~  ~~Department of Public Health Services (C.D.P.H.)~~ (SWRCB) “Criteria for the Separation of Water Mains and Non-Potable Pipelines”. ~~Sanitary Sewer.”~~ (See Appendix “A” in Water Distribution System Design Standards.)
2.  Generally, provide a minimum of ~~six inches~~  6” ~~of~~ vertical separation ~~from~~  between sanitary sewer lines and; storm drains, telephone lines (non-fiber optic) and cable T.V., and 12” vertical separation between sanitary sewer lines and; gas mains, electrical lines and fiber optic cables. ~~or other utilities, such as gas, underground electric, underground television cable, etc.~~ When these minimums cannot be

DESCRIPTION OF CHANGES

Sewer and Water Standard Specifications

- Significant changes needed to align CIP and private development process
- Creates a higher level of predictability to the construction industry
- Avoids lengthy specifications for capital projects

DESCRIPTION OF CHANGES

Recycled Water Standards

- Minimal changes
- Majority of updates ensure consistency with potable water revisions

WHY KEEP THE STANDARDS UP-TO-DATE?

- Ensures consistency in all additions and modifications to the systems
- Provides predictability to the design and construction communities
- Avoids the need to address updates on a case-by-case basis through the plan revision process

WHY KEEP THE STANDARDS UP-TO-DATE?

Proposed update process

- Annual review cycle
- Coordinate with Citywide Standards Committee
- Align with industry specific code cycles

FUTURE APPROVAL AUTHORITY

- Recommend approval authority of water, recycled water and sewer standards and specifications be delegated to the Board of Public Utilities
- Timelier processing of future revisions
- Consistent with Section 25 of the Charter of the City of Santa Rosa

NEXT STEPS

- May 18th – Board of Public Utilities Meeting
 - Consideration of recommending Council adopt the standards
 - Consideration of recommending the Council delegate approval authority to the Board
- Approximately 45 days after Board meeting, consideration by City Council to adopt standards

QUESTIONS?



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