



State Water Resources Control Board

Division of Drinking Water

November 18, 2022

Water System No. 4910020

Grant Davis
Sonoma County Water Agency
404 Aviation Boulevard
Santa Rosa, CA 95403

SONOMA COUNTY WATER AGENCY – APPROVAL OF ALTERNATE CONSTRUCTION BLANKET WAIVER 1 THROUGH BLANKET WAIVER 5

Thank you for submitting the Sonoma County Water Agency's (Agency) proposal for Alternate Construction Blanket Waivers (Blanket Waivers) to California Code of Regulations, Title 22, Chapter 16, Section 64572, *Water Main Separation*. The Blanket Waivers have been submitted in accordance with Section 64551.100, *Waivers and Alternatives*, and have been reviewed by the State Water Resources Control Board Division of Drinking Water (Division).

The Division approves the Blanket Waivers (enclosed). As stated in the Agency's submittal, the alternatives will be used upon the approval of the Agency's General Manager or their designee and only when the water main separation distances specified in the regulations cannot be met due to existing conditions.

If you have any questions regarding this letter, please contact Waldon Wong of my staff at waldon.wong@waterboards.ca.gov.

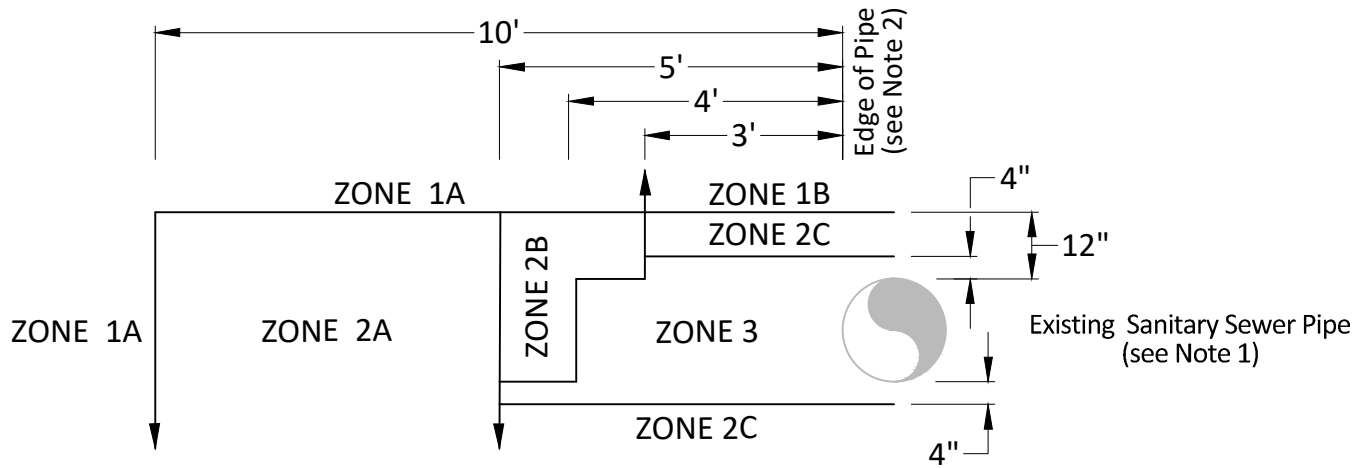
General inquiries to our office can be made by emailing dwpdist18@waterboards.ca.gov or calling (707) 576-2145.

Sincerely,

Stefan Cajina, P.E., Chief
North Coastal Section
Division of Drinking Water
STATE WATER RESOURCES CONTROL BOARD

Enclosure: September 22, 2022 Blanket Waivers 1 through 5





ZONE 1A: No special requirements for installation.

ZONE 1B: No parallel pipe allowed. Crossings shall be constructed at no less than 45-degrees to the sewer pipe.

ZONE 2A: New water pipe, joints, and fittings* shall satisfy the following minimum requirements:

- A. Polyvinyl Chloride (PVC):
 - Pipe: DR18 (AWWA C900)
 - Joints: ASTM D3139
 - Fittings: AWWA C907
- B. Polyethylene (PE):
 - Pipe: DR13.5 (AWWA C906)
 - Joints (fused): ASTM F2620
 - Fittings: AWWA C906
- C. Ductile Iron Pipe (DIP), wrapped per AWWA C217:
 - Pipe: Class 350 (AWWA C151)
 - Joints: AWWA C111
 - Fittings: AWWA C110 or AWWA C153
- D. Steel Pipe, wrapped per AWWA C217:
 - Pipe: AWWA C200 and AWWA Manual M11
 - Joints (welded): AWWA C206 and AWWA Manual M11
 - Fittings: AWWA C208 and AWWA Manual M11
- E. Concrete Pressure Pipe:
 - Pipe: AWWA C303 and AWWA Manual M9
 - Joints (welded): AWWA Manual M9
 - Fittings: AWWA C303 and AWWA Manual M9

* Bolted Couplings: AWWA C219

ZONE 2B: Only permitted where the nominal diameter of the new potable water main is 18" or less. New water pipe, joints, and fittings* shall satisfy the following minimum requirements:

- A. Polyvinyl Chloride (PVC):
 - Pipe: DR14 (AWWA C900)
 - Joints: ASTM D3139
 - Fittings: AWWA C907
- B. Polyethylene (PE):
 - Pipe: DR9 (AWWA C906)
 - Joints (fused): ASTM F2620
 - Fittings: AWWA C906
- C. Ductile Iron Pipe (DIP) shall be the same as Zone 2A
- D. Steel Pipe shall be the same as Zone 2A
- E. Concrete Pressure Pipe shall be the same as Zone 2A

ZONE 2C: No parallel pipe, joints or fittings allowed. Crossings only permitted where the nominal diameter of the new potable water main is 18" or less and shall be constructed at no less than 45-degrees to the new or existing sewer pipe. New water pipe shall be the same as Zone 2B. Where pipe separation is less than 12" controlled density fill (CDF) shall be placed between crossing pipes per Zone 2C Crossing Detail provided in Drawing No. BW5.

ZONE 3: Prohibited zone, no installation allowed.

NOTES:

1. Applies to pipelines conveying untreated sewage, primary or secondary treated sewage, or disinfected secondary recycled water.
2. Dimensions shown herein are minimums measured from outside edge of pipe to outside edge of pipe. Pipes, joints, and fittings shall be installed with as much separation as field conditions allow.
3. Only to be used with written approval of the Sonoma Water General Manager (or designee) prior to commencing work, AND where field conditions make it infeasible to achieve standard separation per California Waterworks Standards §64572 "Water Main Separation".
4. Sonoma Water may impose additional site-specific requirements or restrictions to protect its facilities and provide access for future maintenance.



**Sonoma
Water**

NEW WATER MAIN PARALLEL TO OR CROSSING EXISTING SANITARY SEWER PIPE

SCALE: NONE

REVISED:

DATE:

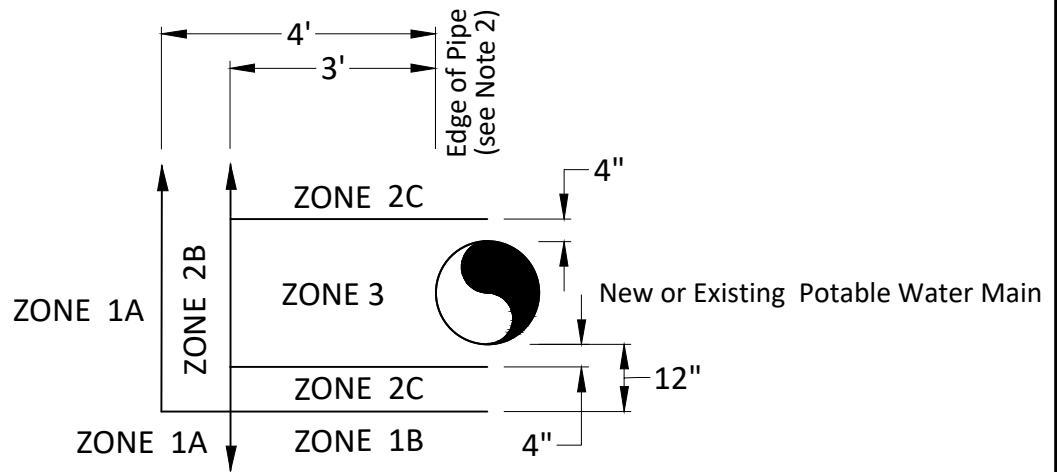
6/22/2022

REVIEWED BY:

APPROVED:

DRAWING
NUMBER:

BW2



ZONE 1A: No special requirements for installation.

ZONE 1B: No parallel pipe allowed. Crossings shall be constructed at no less than 45-degrees to the water main.

ZONE 2A: Zone not used.

ZONE 2B: Only permitted where the nominal diameter of the new storm drain pipe is 36" or less and the existing potable water main is 18" or less. New storm drain pipe, joints, and fittings* shall satisfy the following minimum requirements (see Note 1):

A. Polyvinyl Chloride (PVC):

- Pipe: SDR26 (ASTM D3034), PS115 (ASTM F679), or DR25 (AWWA C900)
- Joints: ASTM D3212 or ASTM D3139
- Fittings: ASTM F1336 or AWWA C907

B. Reinforced Concrete Pipe (RCP):

- Pipe: Class III (ASTM C76)
- Joints: ASTM C443
- Fittings: N/A

C. Polyethylene (PE):

- Pipe: Smooth interior walls (ASTM F2306)
- Joints: ASTM D3212
- Fittings: ASTM F2306

* Bolted Couplings: AWWA C219

ZONE 2C: No parallel pipe, joints or fittings allowed. Crossings only permitted where the nominal diameter of the new storm drain pipe is 36" or less and the existing potable water main is 18" or less, and shall be constructed at no less than 45-degrees to the potable water main. New storm drain pipe shall be the same as Zone 2B. Where pipe separation is less than 12" controlled density fill (CDF) shall be placed between crossing pipes per the Zone 2C Crossing Detail provided in Drawing No. BW5.

ZONE 3: Prohibited zone, no installation allowed.

NOTES:

1. Applies to pipelines conveying storm drainage, disinfected tertiary recycled water, irrigation water, raw water to be treated for drinking water purposes.
2. Dimensions shown herein are minimums measured from outside edge of pipe to outside edge of pipe. Pipes, joints, and fittings shall be installed with as much separation as field conditions allow.
3. Only to be used with written approval of the Sonoma Water General Manager (or designee) prior to commencing work, AND where field conditions make it infeasible to achieve standard separation per California Waterworks Standards §64572 "Water Main Separation".
4. Sonoma Water may impose additional site-specific requirements or restrictions to protect its facilities and provide access for future maintenance.



**Sonoma
Water**

NEW STORM DRAIN PIPE PARALLEL TO OR CROSSING WATER MAIN

SCALE: NONE

REVISED:

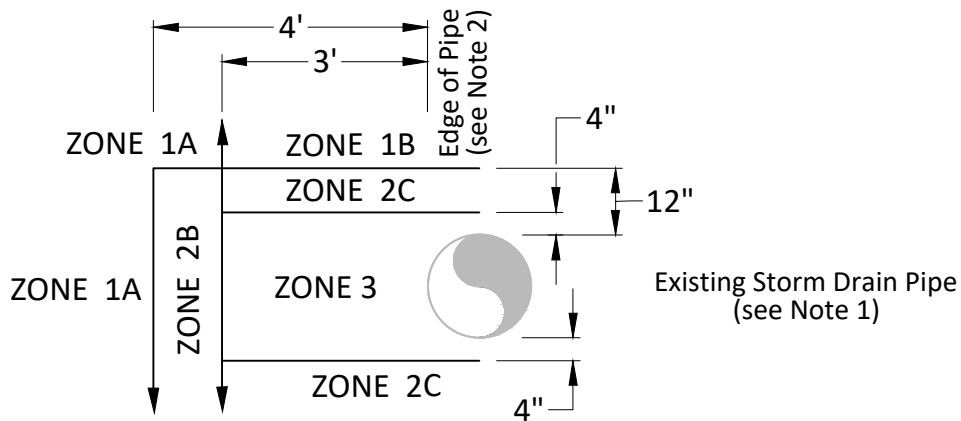
DATE:
6/22/2022

REVIEWED BY:

APPROVED:

DRAWING
NUMBER:

BW3



ZONE 1A: No special requirements for installation.

ZONE 1B: No parallel pipe allowed. Crossings shall be constructed at no less than 45-degrees to the storm drain pipe.

ZONE 2A: Zone not used.

ZONE 2B: Only permitted where the nominal diameter of the new potable water main is 18" or less and the new or existing storm drain pipe is 36" or less. New water pipe, joints, and fittings* shall satisfy the following minimum requirements:

- A. Polyvinyl Chloride (PVC):
 - Pipe: DR14 (AWWA C900)
 - Joints: ASTM D3139
 - Fittings: AWWA C907
- B. Polyethylene (PE):
 - Pipe: DR9 (AWWA C906)
 - Joints (fused): ASTM F2620
 - Fittings: AWWA C906
- C. Ductile Iron Pipe (DIP), wrapped per AWWA C217:
 - Pipe: Class 350 (AWWA C151)
 - Joints: AWWA C111
 - Fittings: AWWA C110 or AWWA C153
- D. Steel Pipe, wrapped per AWWA C217:
 - Pipe: AWWA C200 and AWWA Manual M11
 - Joints: AWWA C206 and AWWA Manual M11
 - Fittings: AWWA C208 and AWWA Manual M11
- E. Concrete Pressure Pipe:
 - Pipe: AWWA C303 and AWWA Manual M9
 - Joints (welded): AWWA Manual M9
 - Fittings: AWWA C303 and AWWA Manual M9

* Bolted Couplings: AWWA C219

ZONE 2C: No parallel pipe, joints, or fittings allowed. Crossings only permitted where the nominal diameter of the new potable water main is 18" or less and the new or existing storm drain pipe is 36" or less, and shall be constructed at no less than 45-degrees to the new or existing storm drain pipe. New water pipe shall be the same as Zone 2B. Where pipe separation is less than 12" controlled density fill (CDF) shall be placed between crossing pipes per the Zone 2C Crossing Detail provided in Drawing No. BW5.

ZONE 3: Prohibited zone, no installation allowed.

NOTES:

1. Applies to pipelines conveying storm drainage, disinfected tertiary recycled water, irrigation water, raw water to be treated for drinking water purposes.
2. Dimensions shown herein are minimums measured from outside edge of pipe to outside edge of pipe. Pipes, joints, and fittings shall be installed with as much separation as field conditions allow.
3. Only to be used with written approval of the Sonoma Water General Manager (or designee) prior to commencing work, AND where field conditions make it infeasible to achieve standard separation per California Waterworks Standards §64572 "Water main separation".
4. Sonoma Water may impose additional site-specific requirements or restrictions to protect its facilities and provide access for future maintenance.



**Sonoma
Water**

NEW WATER MAIN PARALLEL TO OR CROSSING EXISTING STORM DRAIN PIPE

SCALE: NONE

REVISED:

DATE:

6/22/2022

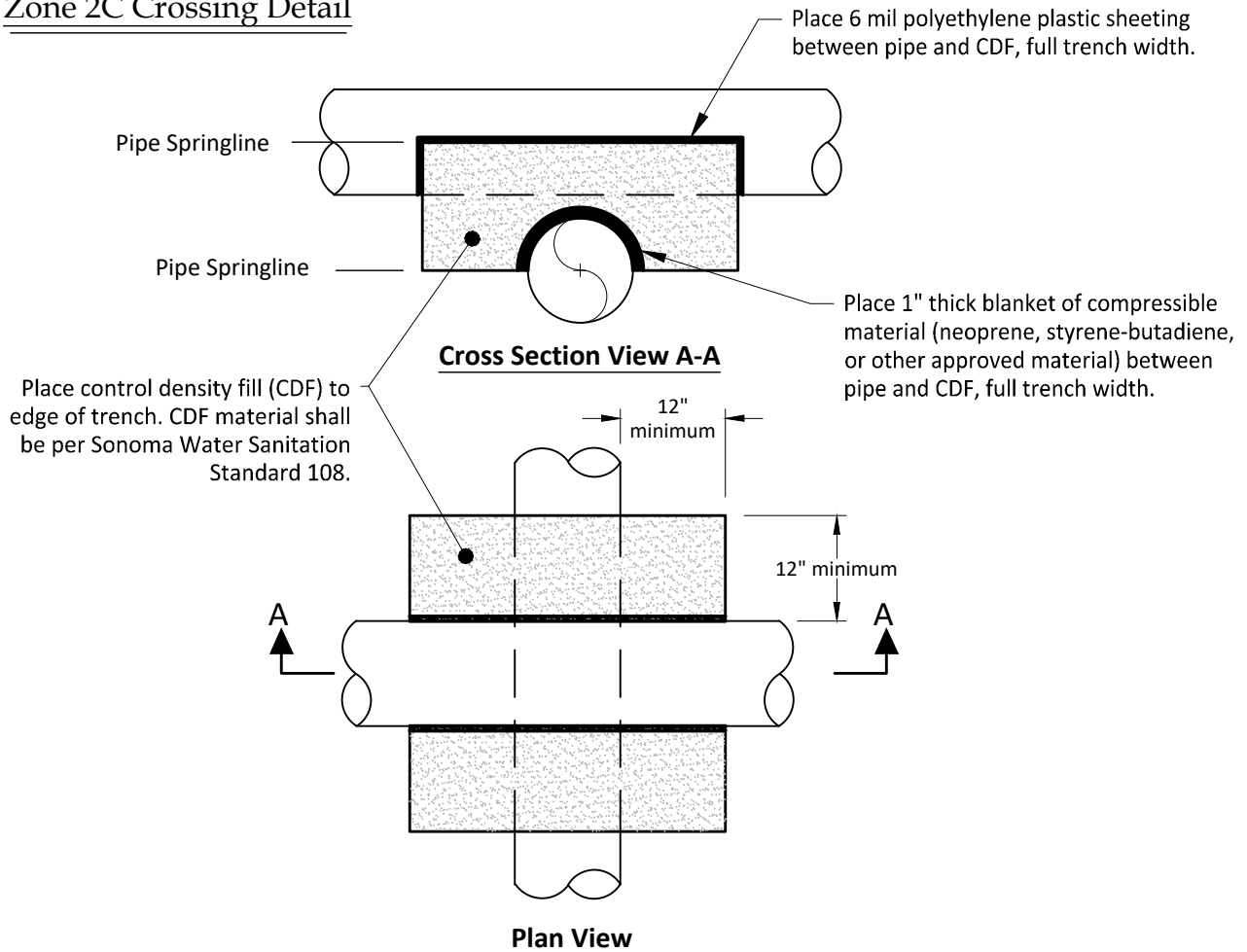
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BW4

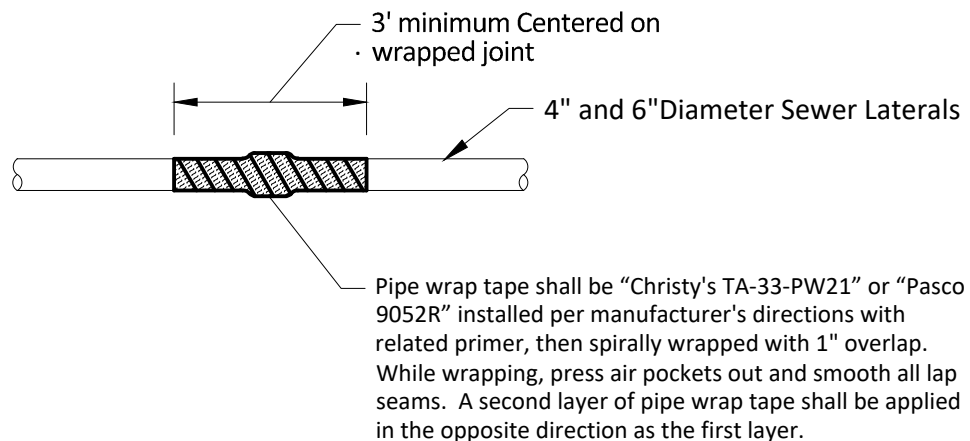
Zone 2C Crossing Detail



Sewer Lateral Pipe Wrap Detail

NOTE:

This detail may be utilized only for 4" or 6" diameter sewer laterals crossing a water main where a joint cannot be located outside of Zone 3, due to site constraints such as a property line cleanout, as indicated in Blanket Waiver #1.



**Sonoma
Water**

MISCELLANEOUS DETAILS

SCALE: NONE

REVISED:

DATE:
6/22/2022

REVIEWED BY:

APPROVED:

DRAWING
NUMBER:

BW5