Water Notes

- 1. All materials shall conform to the latest revision of AWWA Standards. Construction shall be per the latest edition of the Standard Specifications for Public Works Construction, including any supplements or the City of Westminster Standard Plans.
- 2. All alternatives to any portion of these specifications must be approved in writing at least forty-eight (48) hours before bid date or any construction.
- 3. For Residential Tracts: Upon installing meters for new houses, developer shall obtain billing accounts for all meters. Developer shall be responsible for payments on new meter until new owner purchases the property. All newly installed meters shall be "new" or not previously used. All new meters shall have "0" reading upon installation. Any reading on newly installed meter shall be treated as used water upon establishment of new billing account, and shall be added to the initial billing fee. No water usage shall be allowed from an un-metered source for any purpose. Developer shall obtain a temporary construction water meter if needed to use water from a fire hydrant.
- 4. <u>For Commercial/Industrial Properties:</u> Upon installing meters, developer shall obtain billing accounts for all meters. Developer shall be responsible for payments until new owner purchases the property, or new tenant leases the property. All newly installed meters shall be "new" or not previously used. All new meters shall have "0" reading upon installation. Any reading on a newly installed meter shall be treated as used water upon establishment of new water billing account, and shall be added to the initial billing fee. No water usage shall be allowed from an un-metered source for any purpose. Developer shall obtain a temporary construction water meter if needed to use water from a fire hydrant.
- 5. <u>All New Construction/Industrial Developments:</u> Developer shall contact the Cross Connection Control Specialist in the Water Division to obtain approval of all proposed backflow prevention devices
- 6. All 1" water services shall be Drisco pipe 1", IPS 200 psi PE 3408, or approved equal. A plastic coated 14 gauge copper tracer wire shall be installed as shown on City Standard #401.
- 7. All 2", water services shall be Drisco pipe 2", I.P.S. 200 psi P.E., or approved equal. Riser shall be rigid copper tubing type "K". A 14 gauge plastic-coated copper tracer wire shall be installed as shown on City Standard #413.
- 8. All water meters shall be bronze, magnetic drive, touch read meters. Meters 5/8" to 2" to read in 100 cubic feet and meters 4" to 6" to read in 500 cubic feet. Meter type to be approved prior to installation by Water Division.
- 9. Water meter boxes shall be J & R polymer with J & R polymer covers fitted for touch read or approved equal as per City Standard #401.
- 10. Gate valves shall be Mueller Series A 2360 resilient wedge 250 psig working pressure, 500 psig test pressure, with shear stem or approved equal. Valves to be installed per City Standard #403.
- 11. Butterfly valves shall be Pratt or approved equal. Butterfly valves shall conform to ANSE/AWWA C504 and shall be flanged, of the size and class indicated. Flanged valves shall have 125-lb or 250-lb flanges complying with ANSI B.16.5. Valves may be either short-bodied or long-bodied except as otherwise indicated. Shaft seals shall be designed for use with standard split-V type packing or other approved seals, and the interior passage shall not have any excessive obstructions or stops. Cartridge-type valve seats, or valves employing snap rings to retain the rubber seats, will not be acceptable. The rubber seat shall be mounted in the valve body.

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- 12. Butterfly valves shall be installed with operating stem on the street centerline side.
- 13. Gate and butterfly valves shall be located at BCR's of streets unless otherwise specified.
- 14. Iron fittings shall be cement mortar lined and coated C110 or C153 or otherwise specified and be installed per City Standard #402.
- 15. Fire hydrants shall be wet barrel all bronze with 1 ½" operation nuts and caps. Hydrants to have a 6" hole with standard flange drilling per City standard #404
- 16. All valve boxes shall be adjustable, slip cast iron boxes. Tyler 6855 series lids to be marked "Water". It shall be the responsibility of the contractor to raise all valve boxes to grade after paving per City Standard #403.
- 17. Pre-cast concrete vaults shall be J&R Concrete or Armour Cast series with polymer covers fitted for touch read meters or equal.
- 18. Approved water main pipe shall be poly-vinyl chloride PVC-C900 DR-18 vinyl iron, John Mansville Blue Brute, Vinyl Tech White Knight, Diamond Plastic, or approved equal. All ductile iron to be cement mortar lined and coated. A 14 gauge copper trace wire shall be on top of all PVC pipes and wrapped with 10 mil, 2" pipe wrap two times around pipe every five (5) feet.
- 19. Plastic coated 14 gauge copper tracer wire from hydrant lateral and lateral service connection to tracer wires on water mains shall be stripped and tied with a brass split bolt connector. The connection to tracer wires shall be taped and completely covered with an electrical insulating coating per Section 300-5 of the National Electrical Code, latest edition.
- 20. Separation of services all non-water utilities must have a minimum separation of 3 feet from any Water Utility.
- 21. All work requiring excavations shall maintain a valid Dig Alert permit in the area.
- 22. In the event work requiring excavations near City of Westminster water utility lines, excavators shall determine exact subsurface locations (depth) by hand excavation, before the use of power equipment. Pipelines exposed during excavation require inspection by City of Westminster staff.
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- 24. Only lateral crossings are permitted within City of Westminster right of ways.
- 25. All other utilities shall provide a minimum of 12" clearance to be maintained between City of Westminster pipelines and any proposed improvements.
- 26. Native soil or sand shall be used to surround City of Westminster water pipelines with a minimum 12" cover. (No cement slurry is allowed within 12" of pipelines.)
- 27. Contractors shall use caution to protect City of Westminster pipelines in place and to avoid encroachments or damage to City of Westminster property. If pipelines are damaged, City of Westminster must be notified immediately so that proper repairs can be made.
- 28. Any high water use facility (60 gallons per minute or greater of continuous flow) must install an approved 3" cold water positive displacement touch read meter. The size and manufacturer of the meter to be determined by Water Division Representative prior to installation.

Water Notes (Continue)

- 29. All water meters shall be located in sidewalk or parkways behind curb in the City of Westminster right of way.
- 30. A three foot clearance shall be maintained around all water mains to include: water valves, fire hydrant valves, fire service valves, and water meter valves.
- 31. A visual inspection shall be made by Water Division Representative on all water main valves, tees, 90's,45's or other pipeline fittings.