Reclaimed Water Design Standards and Details
Summary of Revisions

September 2015 Updates
Based on the Product Evaluation Committee findings, the following products/manufacturers are added to the Water Utilities Department Reclaimed Water Design Standards and Details.

Section 1. Design plan sheet information item #10: Revise “Irrigation water demand through reuse water meter (peak flow water demand for “direct” reuse water service; calculated rate through meter based on a 12 hour per day flow supply for “lake discharge” reuse water service).”; Item 10 (a): Add “A Remote Telemetry Unit (RTU) is required for all “Lake Discharge” reuse water services, and may be required for “direct” reuse water service connections to monitor and control (flow rate, availability) reuse water flow through the meter.

Section 4 Exhibit Listing:
- Add “Detail 31R: Rubble Riprap Detail"
- Add “Detail 32R: Reclaimed Water System RTU Control Panel – Bill of Materials"
- Add “Detail 33R: Reclaimed Water System RTU Control Panel"
- Add "Detail 34R: Reclaimed Water System RTU Panel Specifications (Sheet 1 of 2)"
- Add "Detail 35R: Reclaimed Water System RTU Panel Specifications (Sheet 2 of 2)"
- Add “Detail 36R: Reclaimed Water System RTU Specifications (Sheet 1 of 4)”
- Add “Detail 37R: Reclaimed Water System RTU Specifications (Sheet 2 of 4)”
- Add “Detail 38R: Reclaimed Water System RTU Specifications (Sheet 3 of 4)”
- Add “Detail 39R: Reclaimed Water System RTU Specifications (Sheet 4 of 4)”
- Add “Detail 40R: Reclaimed Water System RTU Control Panel Power Wiring Diagram”
- Add “Detail 41R: Reclaimed Water System RTU Antenna and Panel Mounting Detail”
- Add “Detail 42R: Reclaimed Water System Electrical Layout”
- Add “Detail 43R: Reclaimed Water System PLC Input/Output Wiring (Sheet 1 of 2)”
- Add “Detail 44R: Reclaimed Water System PLC Input/Output Wiring (Sheet 2 of 2)”
- Add “Detail 45R: RTU Sharing between Lift Station and Reclaimed Water System”

Standard Details:
- Detail 25R: Delete the “Calibrated Flow Rate Orifice Plate”; Add “Electronic” to Pressure Control Valve; Revise Note 17 “A RTU is required to allow PBCWUD
to monitor and control the reuse water discharge”; Add pressure transmitter with conduit to stilling well; Add pressure transmitter with conduit for line pressure; Revise material and size for hydraulic line from float to control valve (1/2” PVC instead of 3/8” copper)

- Detail 26R: Delete the “Calibrated Flow Rate Orifice Plate”; Add “Electronic” to Pressure Control Valve; Revise Note 15 “A RTU is required to allow PBCWUD to monitor and control the reuse water discharge”; Add pressure transmitter with conduit to stilling well; Add pressure transmitter with conduit for line pressure; Revise material and size for hydraulic line from float to control valve (1/2” PVC instead of 3/8” copper)

- Detail 27R: Add pressure transducer to stilling well; Revise material and size for hydraulic line from float to control valve (1/2” PVC instead of 3/8” copper); Add note: “11. Staff gauge to be unobstructed, easy to read, outside of littoral zone; must be calibrated by a surveyor”

- Detail 29R: Add Note: “5. Top rim elevation of the stilling well pipe shall be noted (with elevation datum) on the Record Drawings.”; Add: Pressure transducer to Stilling Well with 1” PVC Conduit to RTU; Revise material and size for hydraulic line from float to control valve (1/2” PVC instead of 3/8” copper)

- Add new Standard Details 31R through 45R as proposed by WUD Consultants

**November 2015**

Based on the Product Evaluation Committee findings, the following products/manufacturers are added to the Water Utilities Department Reclaimed Water Design Standards and Details.

1. Standard Details:
   - Detail 4R: Replace “Tilted/Slanted Disk Check Valve” with “Swing Flex Check Valve”; Update Revision Block
   - Detail 5R: Replace “Tilted/Slanted Disk Check Valve” with “Swing Flex Check Valve”; Update Revision Block
   - Detail 6R: Replace “Tilted/Slanted Disk Check Valve” with “Swing Flex Check Valve”; Update Revision Block
   - Detail 26R: Replace “Tilted/Slanted Disk Check Valve” with “Swing Flex Check Valve”; Update Revision Block
October 2016 Updates
Based on the Product Evaluation Committee findings, the following specifications are added and/or revised:
1. Standard Details
   - Details 1R, 2R, 3R: Revise Note #3 and replace “cement” with “foam sealant”; update Revision Block
   - Detail 13R: “Approved Neoprene End Seal with Stainless Steel Bands”; update Revision Date