

Eastview Water Distribution Chamber

WWWC Water System Advancement Award

**Presented by Paul Daniele, Mary
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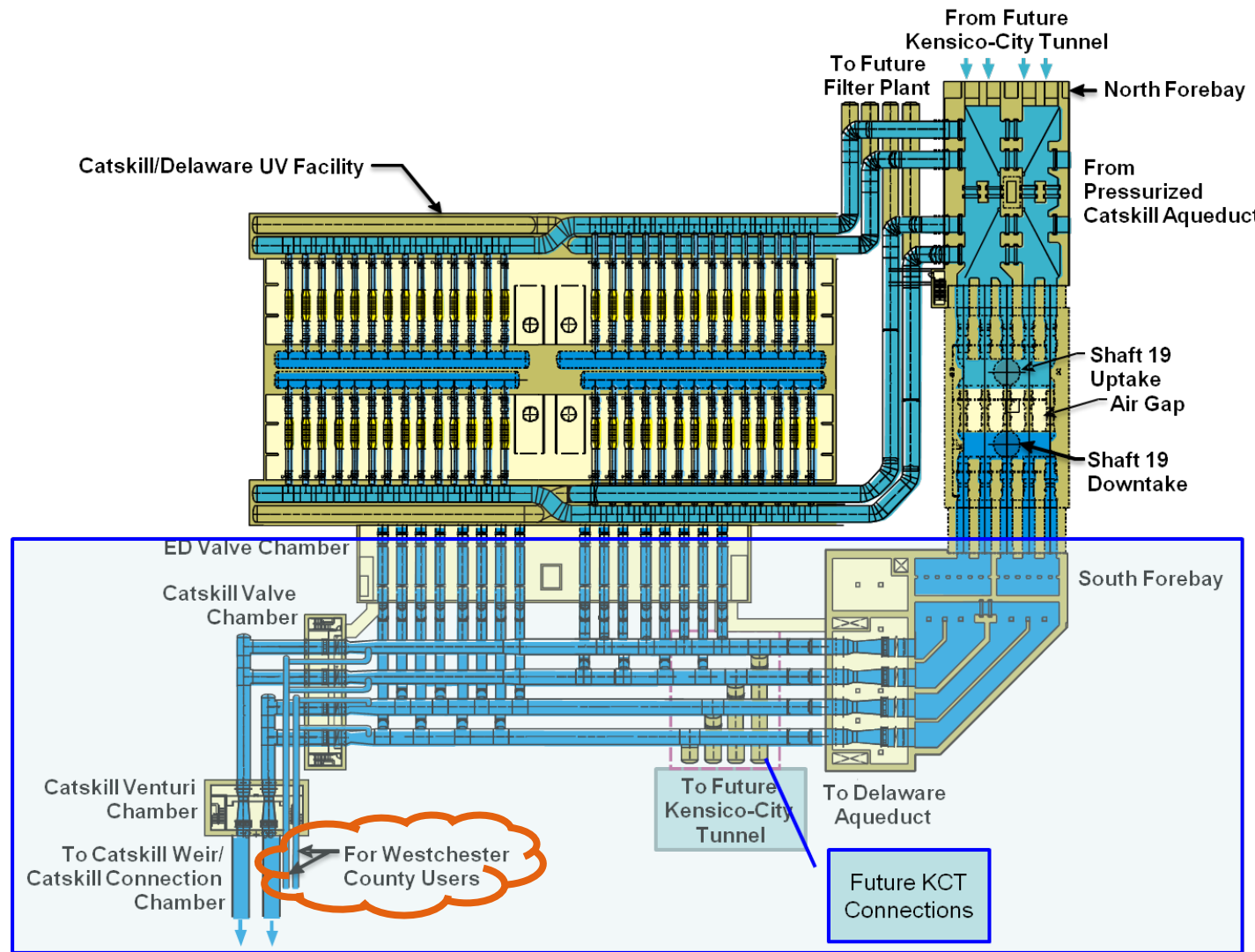
October 12, 2022



Project Introduction

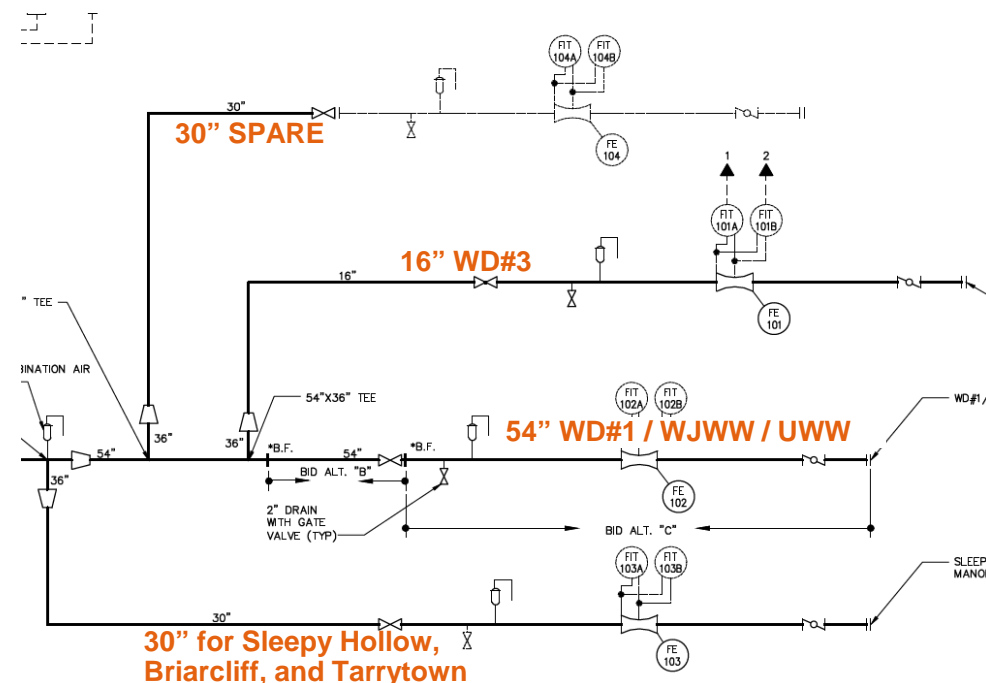
In order to comply with the requirements of the Long-Term 2 Surface Water Treatment Rule (reduction of *Cryptosporidium* in drinking water), Westchester County constructed the **Eastview Water Distribution Chamber** to obtain ultraviolet treated water from the NYC DEP's Catskill/Delaware UV Disinfection Facility, for distribution to various County users.

(2) 48" stubs were provided for County users at the Cat/Del UV Facility as shown which exemplifies the advance planning required to make this project a success.



Project Highlights

- The Chamber is a below-grade, cast-in-place concrete structure which houses piping, valves, meters and ancillary support equipment.
- Connection points provided for:
 - The tri-villages of Sleepy Hollow, Briarcliff Manor, and Tarrytown (30" *in service*)
 - Westchester County Water District #3 (16" *under construction*)
 - Westchester County Water District #1, Westchester Joint Water Works, and United Water of Westchester (54" *future use*)
- Approximately 200 feet of a 66" casing pipe was installed via pipe jacking under NYS roadway Route 100C
- Active coordination with NYC DEP to connect into critical UV Facility infrastructure



The Chamber is an example of a sustainable, cost-effective long-term planning project. It will ultimately benefit as many as 1 million residents in Westchester County.

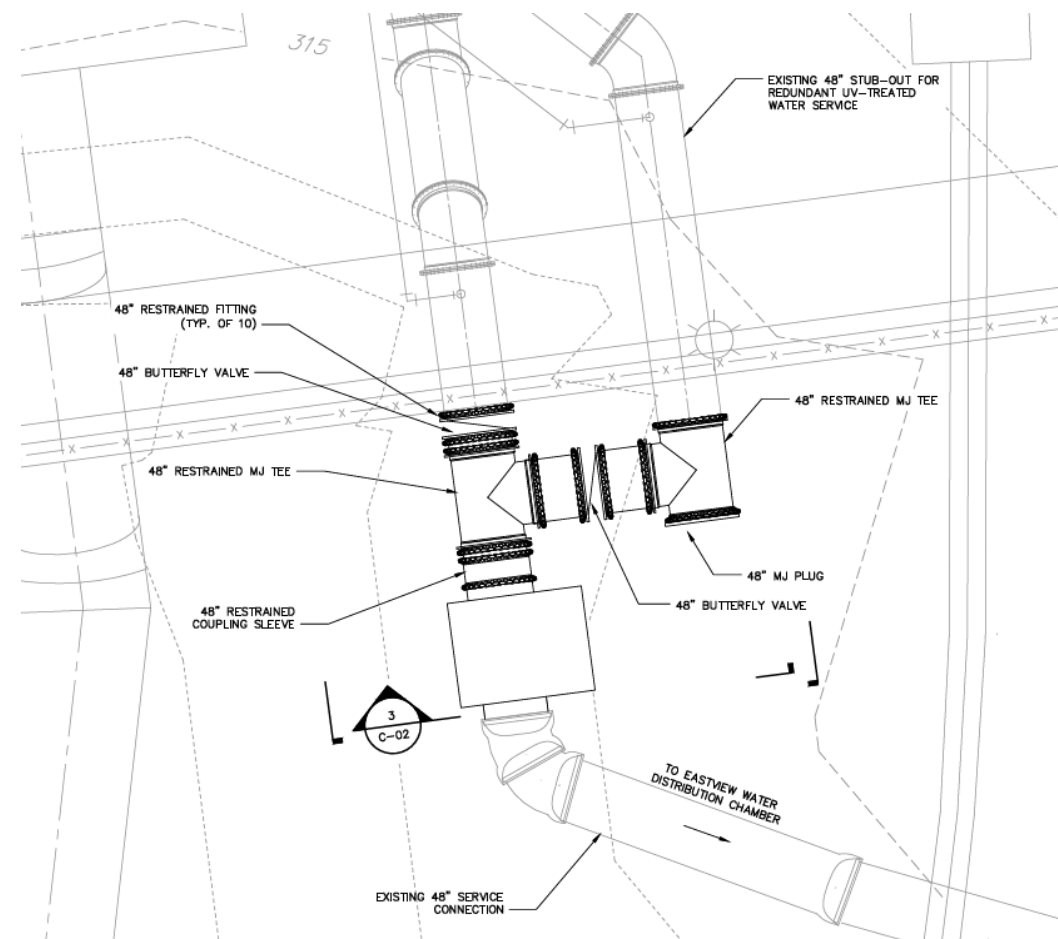
Project Challenges

- Crossing a major NYS roadway (Route 100C) – Pipe jacking use to eliminate disruption to community
- Protection of UV facility infrastructure during pressure testing and disinfection – Active coordination with NYC DEP throughout all stages of the project
- Unmanned, remote facility – Incorporated security protection measures and “low profile” aesthetic design
- Large concrete pours - utilized temperature monitoring to oversee health of concrete curing
- High groundwater table – Conducted diligent dewatering operations and worked with County to eliminate water intrusion
- Ensuring reliable flow to the chamber even with variable operation at NYC DEP – installed interconnection between the (2) 48” stubs (see next slide)



Eastview Interconnection

- NYC DEP planned a shutdown of the Catskill Aqueduct in late 2020 / early 2021
- Due to the configuration of the Cat/Del UV Facility, this would have left the chamber and its downstream users without water
- This shutdown would impact the ability to serve the tri-village connection, who would be an active user during the shutdown timeframe
- All parties (Westchester County, The Tri-Villages, NYCDEP, Dolph Rotfeld Engineering/AI Engineers, and Arcadis) coordinated to get an interconnection installed to provide reliable drinking water to the chamber under all operational scenarios



*The project is a **celebration** of successful collaboration and communication across all the involved parties.*

Next Steps – Eastview WD#3 Pumping Station

- Will serve Water District #3 (Valhalla Campus including Westchester Medical Center and Department of Corrections)
- Creates complete redundancy for the Gate of Heaven Pump Station
- 16" transmission main from new pump station to an elevated water storage tank
- 3 booster pumps capable of providing up to 3 MGD, expandable to 4 MGD with a 4th pump
- Addition of chemical (chlorine, caustic, and phosphate)
- Installed directly adjacent to Eastview Chamber with new subgrade access point
- 90% submittal to be completed by late Fall 2022





A big thank you to all parties who helped make this project a success!

The success of this project is due to many individuals! We are grateful for the opportunity to have worked with all these agencies to get the Eastview Chamber built and online. It will continue to serve users across Westchester County – thanks to YOU!



And lastly,

THANK YOU to the **Westchester Water Works Conference** for this award!

A photograph of an industrial facility, likely a water treatment plant. The scene is dominated by large, horizontal blue pipes supported by concrete pillars. On the left, a metal staircase with railings leads up to a higher level. The walls are made of concrete and feature several safety signs, including 'WARNING' and 'CAUTION'. The floor is a smooth, light-colored concrete. The lighting is bright, coming from overhead fixtures. The overall atmosphere is industrial and functional.

Questions?