

TRAVIS COUNTY CIVIL AND FAMILY COURTS FACILITY

In the summer of 2019, Travis County broke ground on the new Civil and Family Court Building. Travis County leadership realized early that construction of this new facility was a unique opportunity to reduce demand on Austin's potable water supply. It was important to the Travis County Commissioners Court that the courthouse serve as an example of facilities that help reduce the burden on community water supply needs.

The design team worked with the owner and prepared life cycle cost analyses for multiple onsite and city reclaimed water usage scenarios. Demands were calculated based on expected consumption needs derived from equipment data, anticipated equipment usage and historic weather information for the building location. Ultimately the County's appetite for sustainability and reduction of water consumption practices was very high and the team chose an aggressive strategy to increase the flexibility of the system in order to allow the facility to be connected to the COA Reclaimed water supply when it becomes available in the future.

Until this reclaimed water is available, the courthouse is designed to capture and store rainfall and air conditioning condensate. Captured water will be stored in tanks and then, with proper filtering and cleaning, will be used for irrigation and make-up water for the air conditioning system. The facility will also capture stormwater and use rain gardens and other landscaping to hold and beneficially use water onsite.

Once the City's reclaimed water system line is extended to their location, the building is designed to be able to incorporate this additional source and further offset potable water demand. It is expected that approximately 90 percent of the building water needs will be addressed by non-potable water (rainwater, condensate, stormwater and reclaimed water) when the reclaimed line is connected.

Drivers

The County chose to implement aggressive reuse strategies because of strong interest in by County stakeholders (eventual facility owners) to reduce potable water consumption. Additionally, these features helped them achieve LEED Gold certification and AEGB four-star rating.



Photo Credit: Gensler

System Cost

The system cost is approximately \$400,000. This figure includes costs for piping, supports, valves, backflow preventers, storage tanks, pumps and controls.

Operation and Maintenance

Operation and maintenance costs are estimated to be approximately \$6,000 per year, though it is anticipated that these costs will increase once the project connects to the reclaimed water line due to additional pumping requirements. These additional costs are estimated at \$2,000 annually.

Ownership

Travis County Courthouse
Development Partners

Reference Contact

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Project Status:	In construction
Development Size:	448,000 sq.ft.
Onsite water sources:	Rainwater, A/C condensate
End uses:	Irrigation, cooling tower make-up
Treatment train components	Filtration
Potable water savings:	1.4 million gallons in potable offset for irrigation and cooling tower
Estimated utility savings:	TBD
Drivers:	LEED Gold and AEGB four star ratings and strong interest by County stakeholders to reduce potable water consumption.
System Cost:	\$400,000
Annual O&M Cost:	\$6,000 initially and an additional estimated \$2,000/year will be needed for reclaimed water pump once it is installed.
Owners	Travis County Courthouse Development Partners