



Waller Creek Tunnel Project

City celebrates completion of Waller Creek Boathouse.

On May 3, the City hosted a ribbon cutting ceremony marking the successful completion of the Waller Creek Boathouse. The new boathouse was constructed as mitigation for using parkland to build the Waller Creek tunnel outlet lagoon. The 10,800 ft., two-story building features a deck accessible to the public, public restrooms, office space, boat storage, a concession area, and locker rooms. The building is owned by the Parks and Recreation Department. The Austin Rowing Club (ARC) will operate the facility and will encourage multi-use public access. Certain sections of the building, including the locker rooms and boat storage areas are only accessible to ARC members, but the observation deck, concession area and restrooms are open to the public. In the future, the ARC plans to roll out community amenities such as kayak rentals, reduced cost rowing lessons, and a snack bar. "This project is a significant milestone in the overall Waller Creek Tunnel Program... in addition to clearing the way for construction of the tunnel outlet, the new boathouse provides a fantastic new way for the community to experience the beauty of Lady Bird Lake," says Mayor Lee Leffingwell.

Tunneling continues in two directions.

While everything appears quiet on the surface at 4th Street and IH35, work crews are hard at work 70 feet below ground creating the main tunnel segment. The main segment will span from Waterloo Park to the outlet lagoon on the shores of Lady Bird Lake. To date, the contractor has tunneled laterally more than a 1,000 ft. northward and 300 ft. southward. On average, the tunneling crew progresses 14 feet per day.

Tunnel Outlet construction to begin this summer.

The outlet lagoon is designed to safely discharge flood waters that are captured upstream into Lady Bird Lake. The outlet project will consist of an approximately 150- ft diameter, 50 ft. deep lagoon adjacent to the mouth of Waller Creek. In July, the contractor will begin preparing the site for construction. The lagoon will be built by installing a coffer dam in Lady Bird Lake that will allow water to be pumped out, creating a dry work location. The outlet lagoon will then be built and the coffer dam removed, allowing water to enter the lagoon. When finished, it will look like a natural wetland cove fringed by native vegetation. In addition to the lagoon, the project will build a maintenance access road. Outlet construction will take approximately two years to complete and will be followed by a site restoration project that includes new landscaping, paths and lighting.

Inlet construction well under way.

Waterloo Park is currently a hive of activity as work crews perform site utility and excavation work. The project includes a 20,000 sq. ft. maintenance and debris handling building, wet pond and creek channel improvements. The improved creek channel and new pond will capture and direct flood waters to the debris handling facility for trash screen-

ing and passage into the tunnel. The inlet project in Waterloo Park, and all other tunnel subprojects, are scheduled to be complete by the end of 2014.

Frequently Asked Questions

About the Project

The Waller Creek Tunnel Project is the very first step in transforming a part of Downtown Austin. The project is a storm water bypass tunnel that will capture and redirect flood waters south of 12th street and safely carry them to Lady Bird Lake. The project will begin in Waterloo Park where an inlet structure will take in flood waters and screen out trash and debris. Additional inlets between 4th and 5th Streets and between 8th and 9th Streets will capture additional flood waters. The tunnel will help prevent severe flooding and stream bank erosion by controlling the volume of water in the creek. It will empty the diverted waters into a lagoon on the shores on the Lady Bird Lake. A pump station at Waterloo Park will help improve water quality by maintaining a constant water flow in the creek at all times. When complete, the tunnel will take nearly 28 acres of downtown land out of the 100 year floodplain and create an environment suitable for redevelopment. Once the risk of flooding is reduced, future plans call for restoring the ecology of the creek, improving adjacent parks and open spaces, and enhancing pedestrian and bicycle connections between Lady Bird Lake, the University of Texas, and East Austin. A safer, healthier, and more attractive creek will be the springboard for the creation of a vibrant and vital space within the heart of the city.

Project Schedule

The Waller Creek Flood Control Tunnel Project will construct a stormwater bypass tunnel to address problems of flooding and erosion along lower Waller Creek. The mile-long tunnel will capture and redirect flood waters south of 12th Street and safely carry them to an outlet lagoon on the shores of Lady Bird Lake. In doing so, the tunnel will take nearly 28 acres of downtown land out of the 100-year floodplain and create an environment suitable for redevelopment. The project will also include amenities such as a new public boathouse and stream bank restoration. The project is scheduled for completion in 2014.

How much does the Waller Creek Tunnel project cost?

The cost for construction is \$106 million. The overall program cost is \$146.5 million and includes land acquisition, engineering and project management. The tunnel project is funded through the Waller Creek Tax Increment Financing Zone.

How will the Waller Creek Tunnel be constructed?

The tunnel will be constructed 60 to 70 feet underground using a roadheader, which cuts through rock. The access for the excavation necessary for the tunnel will be between

tunnel. As a result, the excavation will not require trenching. Further, individuals on the surface will likely not realize excavation is taking place far below them.

What's in store for the Waller Creek District?

The flooding problem must be addressed first before any surface amenities can be constructed. Once the risk of flooding is reduced, future plans call for restoring the ecology of the creek, improving adjacent parks and open spaces and enhancing pedestrian and bicycle connections between LBL, UT and East Austin.

How will the Waller Creek Tunnel enhance water quality?

The tunnel will operate as an "inverted siphon." During normal flows, water will move slowly through the tunnel and sediment will fall to the bottom of the tunnel. The sediment will be removed from the tunnel during normal maintenance activities. Trash will be collected at the tunnel inlet and at screened storm drains. During dry conditions, water will be pumped from the tunnel at the inlet and discharged into Waller Creek to maintain a constant flow in the creek, improving water quality and the appearance of the creek.

Why is the Waller Creek Tunnel needed?

Waller Creek can quickly go from calm conditions to a raging torrent during a storm event. Over the years, the creek has experienced several devastating floods, and there have been fatalities, most recently in 2007. The lower portion of the creek ranks among the City's worst in terms of flooding, water quality and erosion. Homes, businesses and parts of some downtown parks adjacent to Waller Creek are currently at risk for severe flooding. Along with the flood problem, the area also suffers from severe stream bank erosion and from large amounts of visible trash.

What are the benefits of the Waller Creek Tunnel project?

The tunnel will capture, carry and discharge Waller Creek flood waters into Lady Bird Lake. This will significantly reduce the 100-year floodplain and provide flood relief for nearly 28 acres of land. The tunnel will also alleviate the problem of stream bank erosion. The project will result in construction of a new Parks and Recreation Department boat facility, improvements to Waterloo Park and surface improvements adjacent to the creek side inlets.

Will the Waller Creek Tunnel project help the economic development of the City of Austin and Travis County?

The Waller Creek Tunnel Project will put hundreds of people to work, including engineers, construction managers, electricians, truck drivers, plumbers, computer specialists, safety inspectors, general laborers, traffic control specialists and landscapers, to name a few.

What permits and National Environmental Policy Act (NEPA) compliance are required for this project?

All permitting will be attained prior to issuing construction contracts. The project team will be attaining Federal Emergency Management Agency (FEMA), Army Corp of Engineers, Fish and Wildlife and Texas Commission on Environmental Quality (TCEQ) - which administers NEPA requirements in Texas via the Texas Pollutant Discharge Elimination System (TPDES) - permits and any others required during the commission phase of the project.

The State of Texas assumed the authority to administer the National Pollutant Discharge Elimination System (NPDES) program in Texas on September 14, 1998. NPDES is a federal regulatory program to control discharges of pollutants to surface waters of the United States. The TCEQ Texas Pollutant Discharge Elimination System (TPDES) program now has federal regulatory authority over discharges of pollutants to Texas surface water, with the exception of discharges associated with oil, gas and geothermal exploration and development activities, which are regulated by the Railroad Commission of Texas.

To review the agency's TPDES application components for authority to administer the NPDES program, the approval letter from the Environmental Protection Agency authorizing Texas to administer the program and other documents related to the application, go to TPDES Application for NPDES Authorization webpage on the TCEQ website.