

## **Campus RainWorks Challenge Video Transcript for University of Texas at Arlington Design Team**

Text: An EPA Campus RainWorks Challenge Feature. Stormwater Runoff: Retain, Refine, Restore. In Association with the University of Texas at Arlington.

Text: A sunny day at the UT Arlington campus. Studying? What does that mean?

Text: A startled shout! What has happened here?!

Text: Asphalt so close to the creek, causing high runoff levels and erosion. But why, oh why?

Text: Ah, but our friend has a plan. Let's see how we can remedy this conundrum...

Narrator: Right now, Trading House Creek, itself, runs along the University of Texas at Arlington southern border. This green strip is inaccessible and polluted due to large parking lots on either side. In fact, almost 70% of site is covered by impervious surfaces. Aside from fragmenting the landscape, these parking lots have an annual runoff of 31.88 inches per year, based on a 33-inch per year average for Arlington. The effects of this runoff are a high level of erosion and pollutants reaching Trading House Creek.

This new site design solves this runoff problem, while also defining an attractive campus edge and linking to the rest of UTA. Three new buildings will provide a museum and a sustainable technologies research facility, a residential and research building, and structural parking with student living units throughout the façade. In turn, three outdoor spaces would also be defined—a green ribbon along the campus edge, a corner park with existing mature trees, and a campus quad serving the new residential complex.

There are five major low impact development concepts implemented throughout the design, providing a treatment train to retain, refine, and restore the water as it moves toward the creek. The most visible feature is the aquaduct and cleansing biotope. It serves a dual purpose, as monument for the southern edge of UTA as well as a pond to retain stormwater and cleanse it with native bog plants. The rain gardens and bioswales across the site serve a similar purpose, refining the water and slowing it down. Permeable streets and paths allow water to trickle through and seep into the ground. The museum green roof combines both intensive and extensive green roof strategies. The intensive area along the edge allows for larger plantings, while the greater extensive area provides the energy and water benefits of a green roof while requiring less money and maintenance. Finally, cisterns store gray water for irrigation, eliminating dependence on potable water.

This design not only defines and connects UTA's southern border, it also restores clean water back into Trading House Creek. The benefits of this project to UTA as well as the City of Arlington are extensive. It'll provide the campus a clearly defined southern border and will not only conserve water use, it will retain and cleanse stormwater and reduce immediate runoff. This green edge has already begun with the Green at College Park. Once the site is established, a long-term plan can give the campus a continuous green and clean edge.