

DECEMBER PROJECT PROFILE

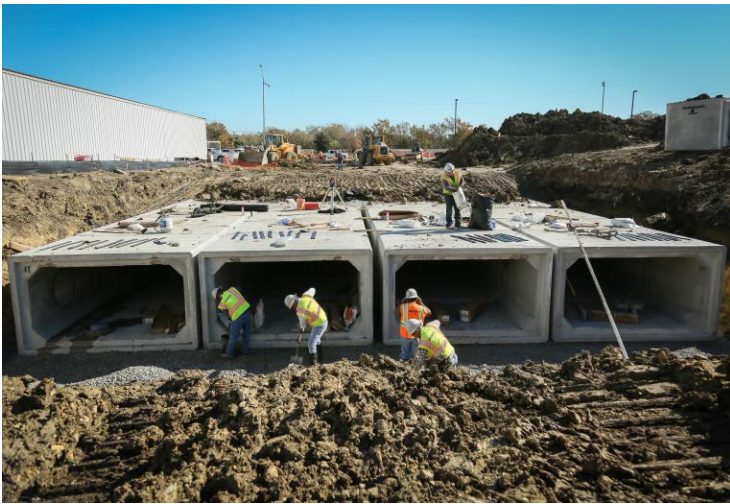
TxDOT Fort Worth District Headquarters - Parking Lot Modifications
Project for TxDOT – Fort Worth District

1.54 acres were excavated in order to install two 50' x 10' cast-in-place junction boxes and 1996' of 10x5 box culverts by December 1, 2019

Produced with Forterra in Cedar Hill, Texas in collaboration with Reyes Group Ltd. and Zachry Construction

Box Designer working for Forterra is Jacobs Engineering Firm

This project was initiated to create a new parking lot at the TxDOT – Fort Worth headquarters that would allow pass through parking over an existing drainage area. 1.54 acres was excavated for paving, grading and drainage. An existing 72" fiber glass pipe was draining into a 520' open channel ditch. The water then discharged through a three-barrel run of 42" fiber glass pipe. The open channel was replaced with a four-barrel run of 10x5 box culverts in order to create an area that could be paved and used for parking, as well as creating an underground retention system. Two 50' x 10' junction boxes were cast-in-place at each end of the box culverts in order to create the transitions to and from the existing lines.



A 50' x 10' junction box was cast in place on the downstream end to create the transition from a three-barrel run of 42" fiber glass pipes to the four-barrel run of 10x5 box culverts that were provided by Forterra. The boxes were laid one joint per barrel at a time starting at the downstream end. They were placed with 6" of space between them that was filled with gravel. Once all of the boxes were laid, the contractor poured another 50'x10' junction box in order to transition to the existing 72" fiber glass pipe.



Using box culvert allowed them to maximize the volume for water retention while maintaining a limited footprint, and it provided them with a structurally sound product to add parking on top of.



This project has allowed them to utilize a previously unused area of their property in two ways: water retention to manage stormwater runoff and added parking.