

ABC Project Highlights

Project Name: US-6; Tucker MP 203 to 204.2

Project #/PIN #: NH-0006(29)204 / 4161

Year Constructed: 2010

ABC Element(s): Precast Box Culvert

Placement Method:

Contracting Method: Design-Bid-Build

Project Description: The US-6 Tucker bridge is UDOT's first completely precast bridge supported on drilled shafts. It crosses Soldier Creek and a wildlife path with a 120 ft single span. Precast elements were used throughout the bridge to accelerate construction and minimize impacts to the travelling public.

Each abutment consisted of four segments. The largest piece was 30 ft long and weighed 112,000 lbs. The Contractor was able to set the first abutment in less than 8 hours and the second abutment in less than 4 hours. Grouted splice couplers were used to attach the backwalls to the abutments.

Though the roadway is on a curved alignment, the deck was designed as straight to simplify the fabrication and construction, and to minimize the number of unique precast panels. The deck was longitudinally post-tensioned after all panels were in place.

High early strength concrete was used for all cast-in-place closures. Cast-in-place closures were used to connect the drilled shafts to the abutments and wingwalls, and between deck and approach slab panels.



