



Washington Bypass

When receiving data from wireless sensors the Pile Driving Analyzer may be placed as far as 100 m (approximately 330 feet) away from the foundation being tested.

After several successful experimental tests in Florida and Ohio on steel and concrete driven piles, GRL used the PDA model PAX with wireless gages when providing dynamic testing services for MACTEC Engineering and Consulting at the US 17 Washington Bypass.

The bypass bridge, in Washington, NC, is in a wetland area. In order to avoid having any construction equipment in the wetland, the bridge is being built using a gantry system that allows the contractor to build two or three pile caps in front

of the bridge, set the beams and then pour bridge decks to move along the bridge alignment. The gantry is basically a pair of long trusses which are supported at two locations. The working end is cantilevered out over the end of the recently constructed bridge. The gantry has a pair of lifting points which run the length of the gantry and are used to transport the various items needed for construction to proceed. The piles are lifted at the back end of the gantry and then rolled to the working end for driving. The photo shows the gantry with the pile at its back end.

GRL tested two piles using the wireless system, including one tested both during initial driving and after a 2 hour wait.