



## News Release

For Immediate Release: September 29, 2011

### **FIRST SEGMENT ERECTED FOR PALMETTO EXPRESSWAY SECTION 5, MIAMI-DADE COUNTY, FL**

TALLAHASSEE, Florida – Finley Engineering Group (FINLEY) announces the first of 783 concrete segments was erected on Wednesday, September 28, 2011 for the new SR826/836 Palmetto/Dolphin Expressway Interchange in Miami, Florida. A 460 foot long gantry, manufactured by DEAL, will erect the segments using a top-down construction approach.

“Most notable and significant among the design solutions is the “top-down” construction approach,” said Craig Finley, Managing Principal, FINLEY. “Rather than assembling the precast sections by raising them into place from below, the project team is using a self-launching overhead gantry to build the bridges in balanced cantilever outward from the piers. This temporarily eliminates the need for temporary falsework supports; the superstructure is stabilized off the pier caps while the segment is placed.”

Eliminating temporary falsework supports reduces the inconvenience to the traveling public during construction. Casting production and erection will continue over the next two years. Casting will continue at two segments per day using two short-line casting moulds. These moulds will accommodate segments from 9 to 12 feet in height and weighing 62 to 86 tons.

The \$558 million design-build-finance project reconfigures the roadway where SR 826 (Palmetto Expressway) and SR 836 (Dolphin Expressway) meet in Miami. Section 5 entails the construction of a four-level interchange at SR 826 and SR 836, as well as the reconstruction and modification of two existing interchanges. This section holds significant importance because the Dolphin Expressway is a major route to Miami International Airport. More than 430,000 motorists use the interchange daily. Four complex precast segmental bridge ramps – Bridges 9, 11, 15 and 19 – will traverse the core of the interchange. These four bridges are 46 feet wide and range in length from 1,100 feet to 2,450 feet. Total deck area is 360,718 square feet, with 7,764 linear feet of bridge. The longest span is 266 feet, the tallest pier is 81 feet and there are 783 total segments. The curved segmental bridge ramps are the third level of the interchange with radii down to 590 feet and a proposed maximum superstructure deck height of 95 feet above ground.

The Palmetto Expressway Improvement Program redesigns and reconstructs the interchanges along a 16-mile stretch of the expressway. The project adds one travel lane in each direction, widens and/or replaces bridges, increases shoulder widths, reconfigures entrance and exit ramps at all interchanges, and improves drainage, signalization, lighting and signage. Capacity improvements include road widening and the construction of 46 bridge structures, new direct connector ramps for major improvements and collector-distributor ramps to eliminate existing geometric and operational deficiencies. Construction began November 30, 2009 and is anticipated to be completed by 2015.

#### **About FINLEY**

Founded in 2004, FINLEY is recognized, nationally and internationally, as a leading design, engineering and construction consulting firm specializing in complex bridge projects of all kinds.

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