The 17.7 miles of Interstate 10 across the Atchafalaya floodway will cost $114.2 million, or 75 per cent of the total funds for 68 miles of I-10 between Lafayette and Baton Rouge.

The five projects comprising the ultra-expensive section of roadway span the floodway from Lenora on the west Atchafalaya protection levee to Ramah on the east levee.

And this entails some of the costliest and most interesting construction in the history of the Louisiana Department of Highways, department representative Tommy Powers told the Chamber of Commerce Highway Committee this week.

**Record Cost**

The record cost of the mere 17.7 miles of South Louisiana Interstate 10 might better be understood in terms of 680,000 cubic yards of concrete, 49 million pounds of structural steel and 25 million pounds of strand.

To build a direct through route between Lafayette and Baton Rouge which will cut distance and travel time in half, will require 15 different highway construction projects totaling approximately 58 miles at a cost of $152.3 million. Completion date of the multimillion dollar section of I-10 is mid-1973.

**Embankment Work**

All of the Lafayette to Baton Rouge projects are under construction with embankment work between Lafayette and Lenora completed. The surfacing contracts for this 13.7 mile section will be let in June.

In the floodway, the first section from Lenora to the Atchafalaya River Bridge is 75 per cent finished. This covers 4.4 miles and is costing $30.5 million to build. The Atchafalaya River Bridge is 66 per cent completed and is costing $7.2 million.

The third section between the Atchafalaya River and Whiskey Bay is 48 per cent finished and covers 4.7 miles at a cost of $24.7 million. The Whiskey Bay pilot channel bridge is 88 per cent complete and is costing $14.6 million.

The final project, Whiskey Bay to Ramah, is 20 per cent complete. It covers 7.6 miles and is costing $37.2 million to build.

Additional projects on the Lafayette to Baton Rouge route are the Ramah interchange, Grosse Tete to Westover, all in early stages of construction. The Westover to Port Allen stretch has been completed.

**Lower Floodway**

The lower floodway has never been crossed by any type of roadway and the interstate project has resulted in unique construction problems for the state.

Initially, two main routes were decided upon and 26 different tests made to determine which of the two would be best economically and the most feasible to construct.

After the route was selected the decision had to be made as to whether the structure should be ground level or elevated. The staggering costs of building a bridge course for a ground level structure, including transporing the materials through the floodway, indicated the choice of an elevated structure. Also, with a ground level structure, bridge-type sections to allow for floodway waters would have to be incorporated in the design.

With no means to provide on-site construction, roadway sections and pilings had to be precast and floated to the site.

**Series Of Canals**

This, in turn, called for the construction of a series of canals. The precast sections are made in Mandeville on the north shore of Lake Pontchartrain, floated by barge across the lake to New Orleans and through the Industrial Canal to the Mississippi River. From the river the barges take one of two routes.

One route is across the Intracoastal Canal to Morgan City, up the Atchafalaya River and Little Atchafalaya to Bayou La Rose, down the bayou across a cut-off canal to the canal paralleling the I-10 route.

To service the projects in mid-floodway, the barges float up the Atchafalaya to the construction site and enter the construction canal through an opening in the levee. To get to the most distant projects, the barges leave the Atchafalaya and enter upper Grand River to use a nine-mile construction canal.

**Up Mississippi**

The alternate route carries the barges up the Mississippi from New Orleans to Port Allen and then across the floodway in a series of canals.

The two routes cover 215 and 185 miles respectively and take about four days to travel.

Once at the construction site, the roadway spans (cast in 70-foot sections) are lifted into place on the pilings. A 350-ton crane with a 145-foot boom uses 12/4-inch steel cables to lift the sections in place.

The only portion of the I-10 span to be poured on site will be the handrails.

The separated riding surfaces will have two 12-foot travel lanes with 51/2-foot clearance to the left and a 10-foot emergency lane to the right.

The finished grade across the floodway will have an elevation of 40.5 feet, except for five high spots.

Higgest point will be at Onelousas Bay at 85.5 feet. The Whiskey Bay Bridge will have an elevation of 77 feet; the Atchafalaya Bridge will be 69.8 feet high; and I-10 will be 68 feet high at the west levee crossing and 54.2 feet high at the east crossing.