
CCL Assisted in CPM Schedule Analysis

Cochran Bridge

Mobile, Alabama

CCL was retained by legal counsel for S.J. Groves Construction Co. to provide consulting and general guidance in preparing CPM schedule analysis to determine the impact of delays on the Cochran Bridge project. Delays occurred in the processing and review of job drawings and submittals during construction.



The project consisting of two contracts to build a cable-stay bridge near Mobile. S.J. Groves' contract was with the State of Alabama for construction of the main span and approaches of the Cochran Bridge project. Total contract value of the two contracts was approximately \$60 million. The main span contract was for the construction of cable stay balanced cantilever deck construction which uses a cable supported from individual towers. The driving deck is constructed in approximately 30 foot sections, first on one side of the tower

and then on the alternating side. Two traveling form systems would have been employed. Because of stresses on the tower, the construction must proceed in a "balanced" technique out from the tower. The second contract for the approaches had three construction options in the bidding documents. The bidding options were for steel construction, precast segmental construction and cast in place concrete. S.J. Groves submitted an alternate that is known as the heavy lift technique. This technique allows for casting a small section of approaches deck on the top of each support pier. The deck section which spans between the two columns is cast on the ground on a casting bed. Curvature is set and surveyed in place on the ground. Once casting and stripping is completed, the section of deck is lifted via large hoists placed atop the columns. Once lifted into place, a connector section of concrete is cast. Once this connector section was cured, the heavy lift unit hoists could be moved to the next span. S.J. Groves was familiar with this technique and has successfully used it on a bridge project in Virginia.

Delays in removing the existing bridge and in the review of shop drawings prepared by S.J. Groves and a bridge engineering consulting firm eventually resulted in termination of S.J. Groves' contract without authority to proceed with the casting of the mainspan deck. Traveling forms were in place ready to proceed. S.J. Groves' claim indicated the State was inexperienced with cable stay bridge construction and the termination was without cause. Delays also occurred in the construction of the approach spans. S.J. Groves' claim indicated delays were due to low tolerance on the placement of post tensioning and design changes that effected rebar, depth of the deck slab, and additional steel lengthened the cast time for each of the 64 spans from 17 days to 64 days.

CCL provided CPM schedule analysis to determine the impact of delays on the project and reviewed schedule analysis prepared by S.J. Groves.



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