



# Arthur Ravenel Jr. Bridge

Cooper River, Charleston, South Carolina

## Engineering support for cable stayed bridge erection

owner ... *South Carolina Dept. of Transportation*  
client ... *Palmetto Bridge Constructors, JV*

*This \$531 million design/build cable stayed bridge was the largest highway project awarded in South Carolina, and the longest (471 m) cable stayed bridge in North America*

*Both the main span and the approaches consist of steel plate girders, weighing in at over 41,000 tons*

*SOMERSET provided all structural steel erection methods and shoring and equipment design for the main span erection and erection analysis and shoring design for the approaches, of which 30% were curved*



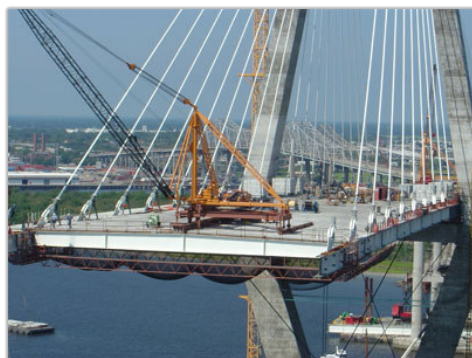
Somerset's pier bracket system used for approach girders



Temporary shoring truss



Under-slung travelling work platforms



Traveling sleds for the derricks

