# BRIDGE FROM MAINLAND TO PELJEŠAC PENINSULA, SOUTH CROATIA **OPTIMIZATION OF BRIDGE VARIANTS WITH RISK AND COST ESTIMATION**

### **OWNER: CROATIAN ROADS**



## LOCATION

#### PROJECT DESCRIPTION

THE BRIDGE FROM MAINLAND TO PENINSULA PELJEŠAC WILL ENABLE ONE DIRECT AND FIX CONNECTION OF TWO CROATIAN TERRITORIES: MIDDLE AND SOUTH DALMATIA. THE BRIDGE SHOULD CROSS THE DISTANCE OF  $2150\ \text{M}$  AND BESIDE TRAFFIC CONNECTION ALSO SHOULD HELP IN DEVELOPMENT OF PELJEŠAC.

THE BRIDGE HAS SEVERAL INVESTIGATED OPTIONS THAT WERE COMPARED AND FINALLY ONE CABLE STAYED BRIDGE WITH THE MAIN SPAN OF ABOUT 537 M AND TWO PYLONS WITH SEMI-FAN DISTRIBUTION OF CABLE STAYS IN TWO PLANES SHOULD CROSS THE MAIN PART OF THE CHANNEL.

STIFFENING GIRDER IS DESIGNED WITH A STEEL BOX CROSS SECTION ALL ALONG THE BRIDGE LENGTH, WITH APPROACHING SPANS AS CONTINUOUS GIRDER OVER COLUMNS ON 70 M DEEP PILE FOUNDATIONS.

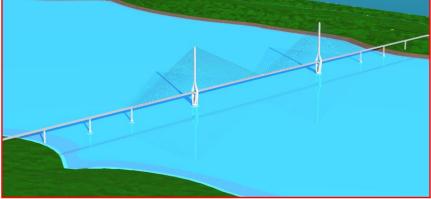
APPROACHING SPANS SHOULD BE OCONSTRUCTED IN A SEISMICALLY VERY SENSITIVE AREA WITH A STRONG WIND INFLUENCE. THE BRIDGE DECK IS DESIGNED FOR CARRYING 2\*2TRAFFIC LANES AND 2 PEDESTRIAN LANES.

## **SERVICES PROVIDED:**

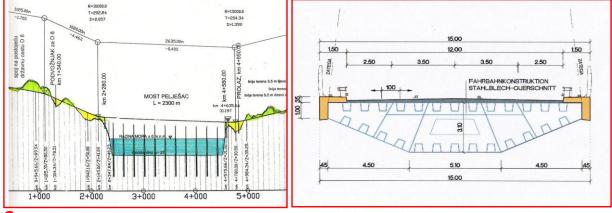
- OPTIMISATION OF BRIDGE VARIANTS
- **RISK AND COST ESTIMATION**
- DEFINING THE PRICE LEVEL ON THE LOCAL MARKET

## **CONSULTANCY FOR A CONSTRUCTION GROUP**

PERIOD OF WORK: 5/2003 - 2/2007



3D VIEW TO ONE OF BRIDGE OPTIONS SIMILAR TO FINAL SOLUTION.



 ${f G}$ EOLOGICAL PROFILE ON THE LOCATION AND THE CROSS SECTION OF A STIFFENING GIRDER.