

# ***APPLICATION FOR OUTSTANDING TRANSPORTATION PROJECT***

## **CONTENTS OF THE APPLICATION**

### **1. Name of the Project**

***The Bai Chay Bridge Project  
Ha Long City – Vietnam***

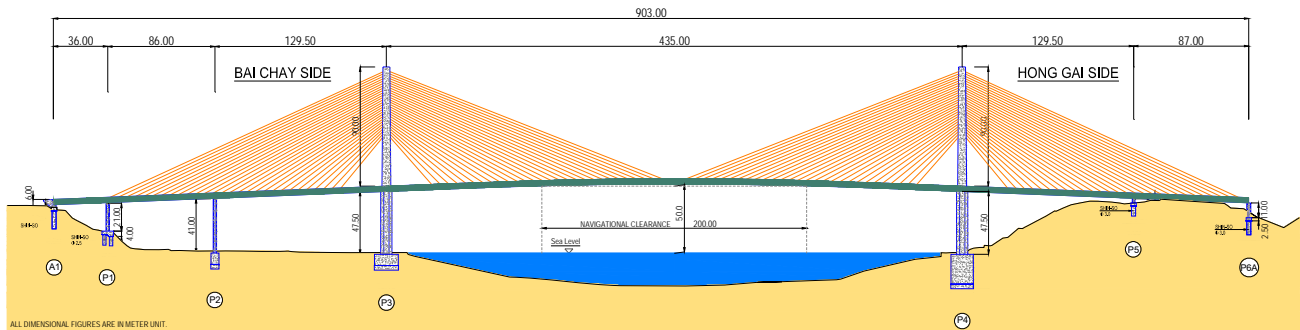


### **2. Outline of the Project**

*Bai Chay Bridge stays on the National Road 18, Quang Ninh province – Vietnam. This construction plays a specially important Role in development Economy, Society and Tourism in North Vietnam. By the way the Bridge adds dynamic images to the new silhouette of Ha Long Bay – the World’s Heritage.*

*This is the PC **Cable Stayed Bridge in Single Plane with the longest Span** – 435 meter – of the World (It’s the very Uniqueness of the Project). The Bai Chay Bridge is designed for service life of 100years, used construction material from prestressed concrete, and is calculated under heavy loading capacity (HL93, strong Earthquake and Wind Loading).*

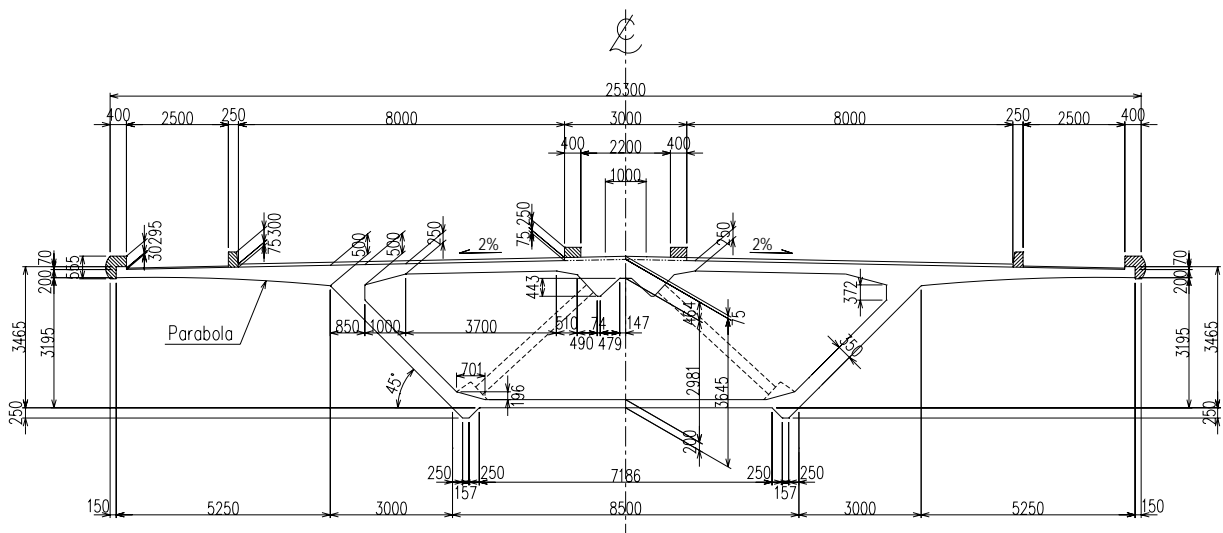
Following Pictures show the great size of the Bai Chay Cable-Stayed Bridge:



[ Number in meter ]

**Ranking 5 of PC Cable Stayed Bridge in Single Plane**

No.	Name	Span	Length	Year
1	Bai Chay Bridge (Vietnam)	435m	903m	2006
2	Elorn Bridge (France)	400m	800m	1994
3	Sunshine Skyway Bridge (U.S.A.)	366m	1,219m	1987
4	Brotonne Bridge (France)	320m	607m	1977
5	Puenete Coatzacoaltos (Mexico)	288m	698m	1984



[ Number in millimeter ]

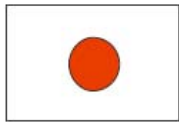
## ***Brief History:***

<b>Name of route:</b>	<b>National Highway No.18</b>
<b>Grade of road:</b>	<b>Urban road of class 2 (V=80km/h)</b>
<b>Type of Bridge:</b>	<b>Prestressed Concrete Highway Bridge</b>
<b>Structure type:</b>	<b>PPC 6 spans continuous cable stayed bridge</b>
<b>Bridge length:</b>	<b>903.00m</b>
<b>Girder length:</b>	<b>902.50m</b>
<b>Span length:</b>	<b>35.0+86.0+129.5+435.0+129.5+86.0m</b>
<b>Width of bridge:</b>	<b>25.300~25.700m</b>
<b>Transverse slope:</b>	<b>2.00%</b>
<b>Vertical slope:</b>	<b>4.00%</b>

**Construction period: August 2003 - November 2006**

## **Project Members**

### The Financier:



Japan Bank For International Cooperation

### The Employer:



The Socialist Republic of Vietnam  
Ministry of Transport  
Project Management Unit Number 18

### The Engineer:



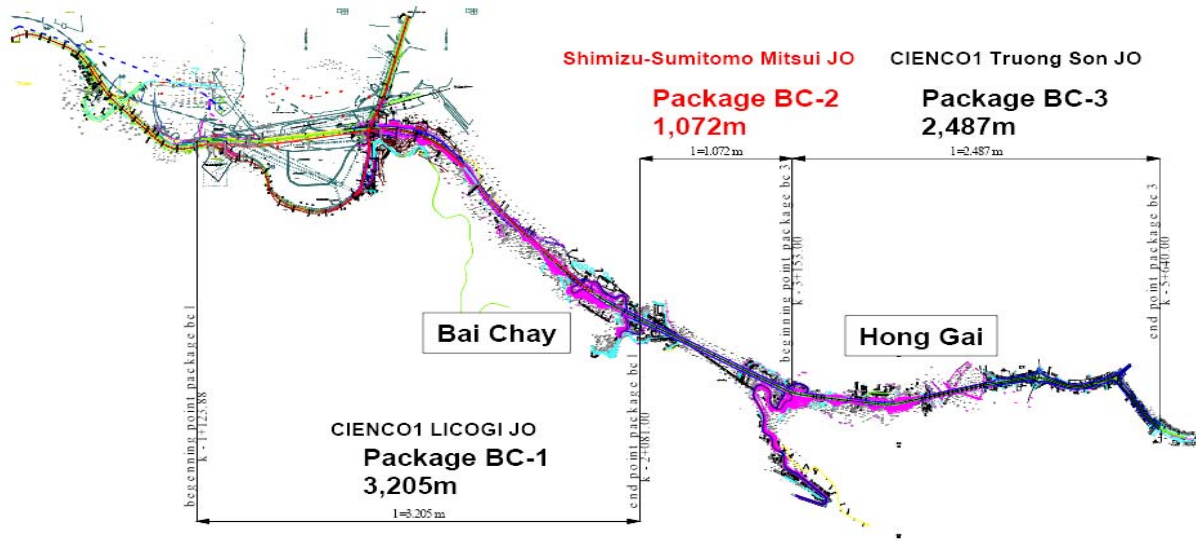
Japan Bridge & Structure Institute, Inc.  
Pacific Consultants International  
Transport Engineering Design Incorporation  
Hyder Consulting-CDC Ltd.

### The Contractor: (Main Bridge)

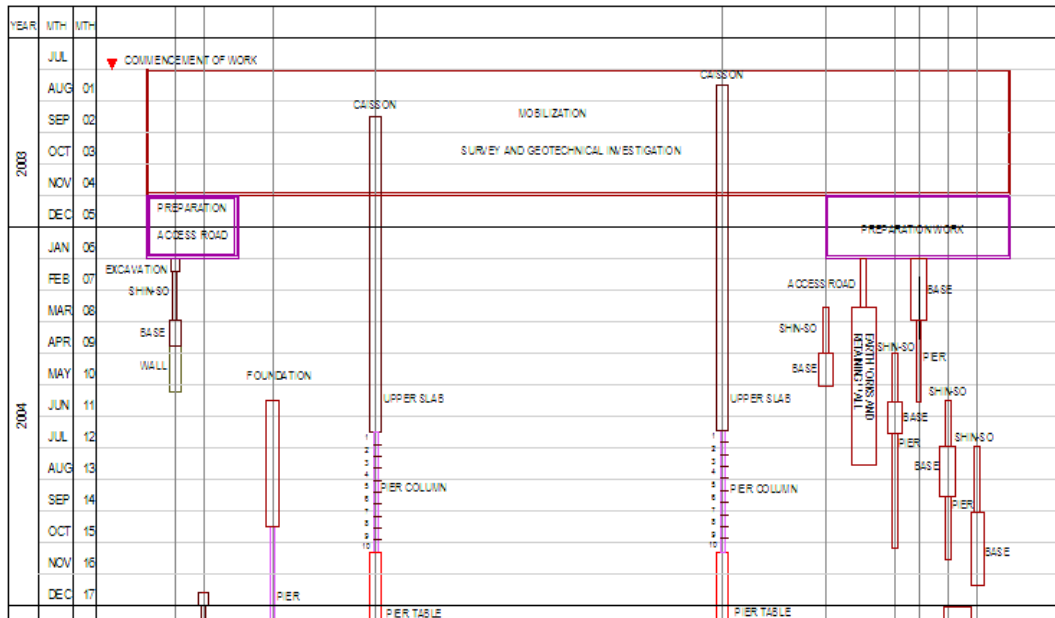
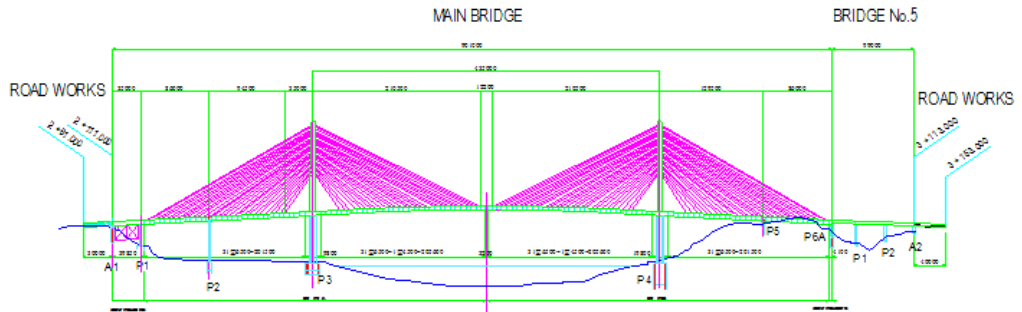


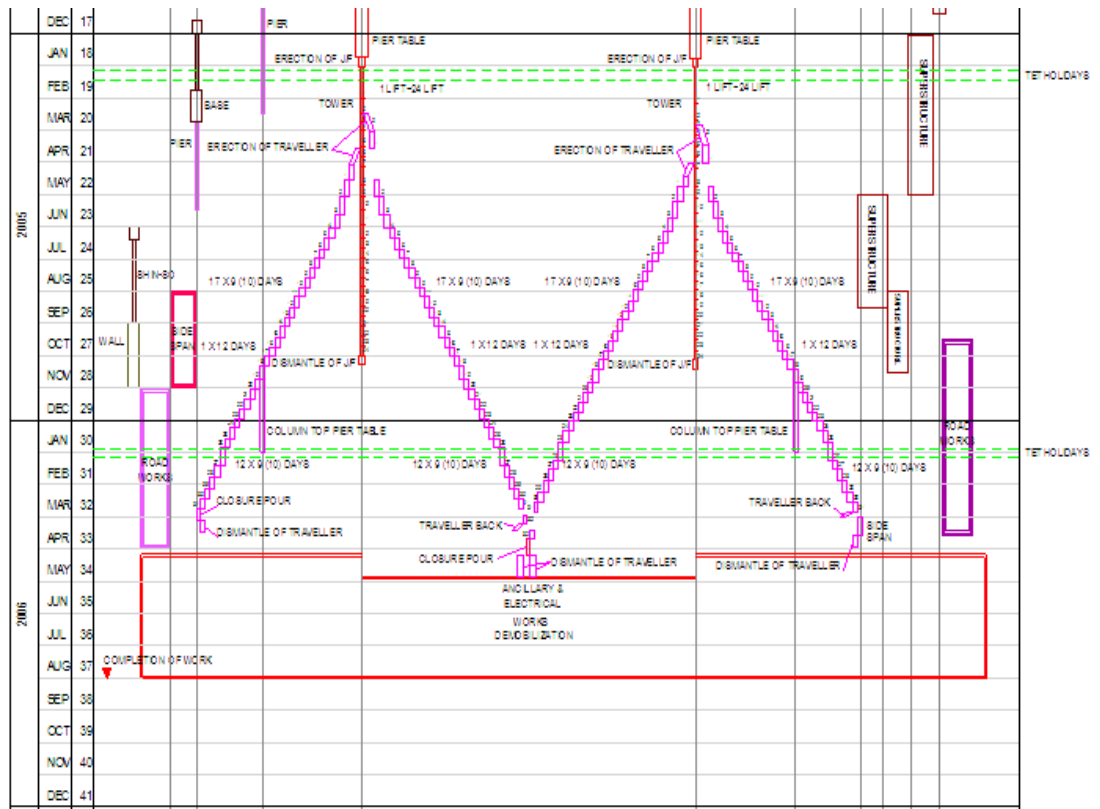
Shimizu-Sumitomo Mitsui  
Joint Operation

# Bai Chay Bridge Construction Project



**Construction Schedule: August 2003 - November 2006**





## Construction Cost

*The Bai Chay Bridge with total Length of 903m including main span (single Plane of stayed cable) of 435m makes the longest Span of that kind on the world Bridge. With 25,3m in Width composed 4 lanes for vehicles, 2 lanes for non-motorized and pedestrians. Ships of 40,000 TDW can pass under the longest span. There are 5 km urban road classification II connect the Bridge to Bai Chay-Hong Gai (including 1,172m of 8 viaducts) The Bai Chay Bridge has to be stable under Earthquake of Classification 7.*

*Total investment for construction: 2,140. Billion VND (about 140 Million USD, only Bai Chay Bridge 80 Million USD)*



[ Photo by Nguyen Xuan Huy ]

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