## **JPCI Award 2012**

# [JPCI Award for Outstanding Structures]



#### Sanagawa Bridge

Location : Aichi

Structural Type: 6-span continuous prestressed concrete box girder bridge

Bridge Length : (Up line) 636m, (Down line) 699m

(Up line) 81.25+112.50+105.00+126.00+123.00+85.75m Span:

(Down line) 76.75+2@128.00+2@142.00+79.75m

Width: 10.75m (effective width)

Design: Nagoya Branch, Central Nippon Expressway Company

Limited

Kajima Corporation

Construction: Kajima Corporation

#### Main building of AIMR, Tohoku University

Location: Miyagi Structural Type : PCaPc+RC+S Number of Stories: 5 stories Building use: University Floor Space : 2599.84m<sup>2</sup> Total floor space : 9269.70m<sup>2</sup> Design:

Tohoku University

Mitsubishi Jisho Sekkei Inc.

Construction: **Toda Corporation** 





### **Japanese Consumers' Co-operative Union Onomichi Refrigerated Warehouse**

Location: Hiroshima

Structural Type : RC (Pre-stressed Flat beam & Flat plate)

Pedestrian bridge separately

Number of Stories: 2 stories

Building use : Refrigerated Warehouse

Floor Space : 9,211.54m<sup>2</sup> Total floor space : 18,062.88m<sup>2</sup> Design: Nikken sekkei LTD. Construction: Kumagai Gumi Co., Ltd.

#### Tagajyo daiichi Bridge

Location: Miyagi

Structural Type: 2 span box and t-shape girder bridge

Bridge Length: 81.0m Span: 2@39.8m Width: 10.3m

Design: Yachiyo Engineering Co., Ltd.

Construction: Obayashi Corporation Toda Corporation JV



## **JPCI Award 2012**

# [JPCI Award for Outstanding Engineering Innovations]



### Seismic strengthening of historical brick masonry building by post-tension

Location: Tokyo

Structural Type:

Brick masonry bearing wall (Constructed in 1915)

Number of Stories:

2 stories+1 basement

Building use:

Academic (School)

Floor Space : 893.13m<sup>2</sup>
Total floor space : 1794m<sup>2</sup>

Strengthening system: Unbonded post-tensioning
Design (strengthening): Mitsubishi Jisho Sekkei Inc.
Construction (strengthening): Takenaka Corporation

### New PC floating body structure using the cylinder floating body and truss material

Location: Fukuoka

Structural Type: The hexagon float of concrete

Diagonal-line Length: 18.0m Height: 4.0m

Design : Japan Port Consultants, Ltd.
Construction : Fuji P.S Corporation



#### Development of the response control system with The Core Column

Outline of the development: The response control system using The Core

Column, prestressed concrete structure, as the

added mass has been developed.

Related structure: TOKYO SKYTREE

Location : Tokyo
Classification of structure : Steel structure

Structural Type: Steel pipe truss structure with The Core Column

Height: 634.0m above the ground

Building use : communications tower, store, office

The Core Column : Prestressed concrete structure 376.9m above

the ground (383.2m above the base) 8m in diameter, 400~600mm in thickness, Fc54

Design : Nikken Sekkei Ltd.
Construction : Obayashi Corporation

#### Hamana Bridge Repair Construction

Location: Shizuoka

Structural Type: 5-span continuous box girder bridge

Bridge Length: 630m

**Span**: 55.0m+140.0m+240.0m+140.0m+55.0m

Width: 9.0m

Design: IDEA Consultants,Inc., Oriental Shiraishi Corporation

Construction : Oriental Shiraishi Corporation



## **JPCI Award 2012**

# [JPCI Award for Outstanding Accomplishments of Constructions]



#### Hanoi City Ring Road No.3 Construction Project Package2

Location : Hanoi, Vietnam

Structural Type: 3-5 span Super-T Girder Bridge Bridge Length: Throughway 2070m, Ramp 447.6m

**Span**: 30.0m-44.8m

Width: Throughway (1 Side) 10.75m, Ramp 7.0m

Design: Oriental Consultants, Katahira & Engineers International,

other 3 companies

Construction: Sumitomo Mitsui Construction Co.,Ltd.

#### Imamura-shinden Bridge

Location: Niigata

Structural Type: 4-span continuous box girder bridge × 5

5-span continuous box girder bridge × 5

Bridge Length: 1588.0m

**Span**: 2@35m+3@32m, 2@32m+3@37m, 2@32m+2@37m,

35m+3@37m, 4@37m, 3@37m+2@35m, 3@35m+37m,

3@37m+35m, 5@35m, 5@35m

Width: 11.7m∼11.8m

Design: Yachiyo Engineering

Construction: P.S.Mitsubishi, Wakachiku Construction JV





#### Sagami traversing SagamiharaAikawa interchange F lamp

Location : Kanagawa

Structural Type: Retaining wall (Prestressed Concrete Walls)

 $\Box$ 700×700×Pile length (13~15m)

Construction length: 81.7m

Design : Katahira & Engineers Inc.
Construction : Oriental Shiraishi Corporation