Safe, Secure and Enjoyable
KOSHIGAYA LAKE-TOWN

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Urban Renaissance Agency (UR)
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Location of the Project
Former Situation...Flood Risk Posed in the Area

Legend
- River Basin
- River
- Flooded Area

Nakagawa River
Motoarakawa River
Lake-Town Project Site

Sep. 1982
Before Project
Sep. 1991

Purposes of the Project
- To develop a new regional city core with a new railway station
- To develop suitable infrastructure to control flood risk
- To realize symbiotic relationship between waterfront space and urban living space by utilizing the retention pond
### Land Use Plan

<table>
<thead>
<tr>
<th>Infrastructures</th>
<th>Area (ha)</th>
<th>Rate(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>road</td>
<td>32.8</td>
<td>15</td>
</tr>
<tr>
<td>park</td>
<td>6.9</td>
<td>3</td>
</tr>
<tr>
<td>Retention Pond</td>
<td>38.9</td>
<td>17</td>
</tr>
<tr>
<td>total</td>
<td>78.6</td>
<td>35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Building Lots</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>98.9</td>
<td>44</td>
</tr>
<tr>
<td>Public facilities</td>
<td>21.1</td>
<td>9</td>
</tr>
<tr>
<td>others</td>
<td>27.0</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>147.0</td>
<td>65</td>
</tr>
</tbody>
</table>

| Total           | 225.6     |         |

### Flood Control

- **Water Conveyance Ditch**
- **Drainage Ditch**
- **Capacity of Retention Pond**: 1,200,000m³

- **Motoarakawa River**
- **Nakagawa River**
**Flood Control**

**Ordinary Conditions**

- Water conveyance gate is open
- Drainage gate is open

Overflow Type Bank

Water Depth 1.0m to 1.5m

Motoarakawa River Retention Pond Nakagawa River

**Flood Control**

**When the Water Level of Motoarakawa River has Risen due to heavy Rain**

- Water conveyance gate is open
- Drainage gate is closed

Water Depth 1.5m to 5m

Motoarakawa River Retention Pond Nakagawa River
**Flood Control**

When the Water Level of Motoarakawa River has Fallen after Rain has Stopped

- Water conveyance gate is closed
- Drainage gate is open

[Motoarakawa River] [Retention Pond] [Nakagawa River]

**New Rule to Share the Cost for the Flood Control**

<table>
<thead>
<tr>
<th></th>
<th>General Rule</th>
<th>Lake-Town Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outflow Increase</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Flooding Volume in the Site</td>
<td>B</td>
<td>Developer</td>
</tr>
<tr>
<td>Flooding Volume outside of the Site</td>
<td>C</td>
<td>National Government</td>
</tr>
<tr>
<td>Developer’s Share</td>
<td>(A + B) / (A + B)</td>
<td>A + B / (2A + 2B + C)</td>
</tr>
<tr>
<td>River Administrators’ Share</td>
<td>-</td>
<td>A + B + C / (2A + 2B + C)</td>
</tr>
<tr>
<td>Basis of the Concept</td>
<td>*Developments Increase Outflow and Decrease Water Retention Volume</td>
<td>*River Administrators Responsible to (A+B+C) *Developer Responsible to (A+B)</td>
</tr>
</tbody>
</table>
Presentation of Water and Green Board

Workshops and Exhibitions of Plans for the Pond

Activities (Rafting)
Recreation (Sailing, Kayaking, and Canoeing)

To Regenerate the Natural Environment

Biotope
Thank you!

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Project Plan

Activities of Water and Green Board

Workshop on Uses for the Pond
(Dec 2004 to Mar 2007)
Cross Section of Retention Pond

In 2008

Launched

- Railway station
- New Inhabitants' Moving in
- Huge Shopping Mall
- Public facilities
Aeon Lake Town

- Site Area: approx. 337,000 m²
- Shop Area: approx. 245,000 m²
- Parking: 10,400 Cars
- Tenants: 710 (Supermarket, Retail Shops, Restaurants, Cinema complex)
- Open: Autumn 2008
**Theme of the Development Project**

1) To Realize Symbiotic Relationship between Waterfront Space and Urban Living Space by Utilizing Flood Control Retention Pond.

2) To Become a Pioneer of Smart City that Tackles Sustainable Development.

**Efforts under the Theme**

1) To Realize Symbiotic Relationship between Waterfront Space and Urban Living Space by Utilizing Flood Control Retention Pond.

① Waterfront Development

② Activities of Water and Green Board
Concept of Waterfront Development

Urban / Active Landscape

Rural / Nature Landscape

Facilities of Waterfront Development

(Biotope)

Stage

Pedestrian Way

Grass Area

Pier
Lake-side View

Grass Area
Stage

Pedestrian Way
2) To Become a Pioneer of Smart City that Tackles Sustainable Development.

① To Establish Eco-Conscious Model Block

② To Use Eco-Conscious Materials

③ To Regenerate the Natural Environment
Eco-Conscious Model Block

Condominiums 500  Detached Houses 132

⇒ CO₂ Emission : 20% Off

① Eco-Conscious Model Block

Condominiums

- CO₂ Emission : 20% Off
- To Aim the Next Generation's Energy Standard
To Use Eco-Conscious Materials

- Recycling Materials
  Pedestrian Way Paved by Bricks
  Made from Incineration Ash with Water Retaining Capacity

Outline of the Implementation Plan

Location; Koshigaya City, Saitama Pref.
Acreage; 225.6ha
Implementation Body; UR
Project Period; 1999~2014
Project Cost; JPY88.5billion (US$0.74billion)
Planed Population; 22,400(7,000households)
Total Contribution rate; 40.6%
  (for Public Facilities; 24.3%)
Land Owners; 813
History of the Project

1994 UR Decided to Implement the Project and Started Land Pre-Purchase

1996 Determination of L/R Project in City Planning

1999 Government Approval of Implementation

2008 Launching Operation of Town and New Railway Station

The land-use plan of Koshigaya Lake Town and the surrounding areas
## Financial Structure of the Project

**Expenditure:** ¥88.5 billion
- Construction Cost: 76.8 billion
- Administration: 7.7 billion
- Interest: 4.0 billion

**Revenue:** ¥88.5 billion
- Financial land selling: 44.1 billion
- Subsidy: 44.4 billion

## Construction Cost

¥76.8 billion
- Infrastructures: 26.5 billion
- Compensation: 10.7 billion
- Earth work: 17.8 billion
- Survey & design: 8.7 billion
- Others: 13.1 billion
Town Opening Area  (Spring 2008)
Town Opening Area (Spring 2008)

- Koshigaya Lake Town Station
- Condominiums
- Shopping Mall
- Park

Shopping Mall (Aeon Lake Town)
Methods of Urban Development

Comparison in terms of Acquiring Land

1. Land Purchase
   - Higher initial cost
   - Basically, former land owner and borrower cannot stay the district
   - Tough negotiation with former land owner and borrower

2. PPP (Land Readjustment)
   - Lower initial cost
   - Basically, former land owner and borrower can stay the district
   - Long time explanation to land owner and borrower

Popular Method in Japan

Framework of Land Readjustment

Before
- Mr. A's lot before land readjustment
- Contribution for financial land
- Contribution for public facilities
- Disposition
  - used to defray part of the project cost

After
- Mr. A's lot after readjustment
- Contribution for financial land
- Contribution for public facilities
- Disposition
  - used to defray part of the project cost

Project cost
- Cost for relocation of building and compensation
- Cost for construction of roads, parks, etc.
- Survey and design costs
- Miscellaneous

Resources
- Capital from disposition of financial land
- Management authority
- Shared defense
- National subsidy
- Expenses for prefecture
- Expenses for city, town, and village
- Levy
- Miscellaneous (loans, etc.)
Framework of Land Readjustment (Reference)

Land Value Increase

Before

After

Value

Value

A B C

G F E D

A B C

D E F G

Park