

Location & Transportation

One hour to Narita Airport by expressway

Almost the center of the Kanto Plain

Southwest part of Ibaraki Prefecture

About 100 km to Mito

About 50 km to central Tokyo

139° 47' East

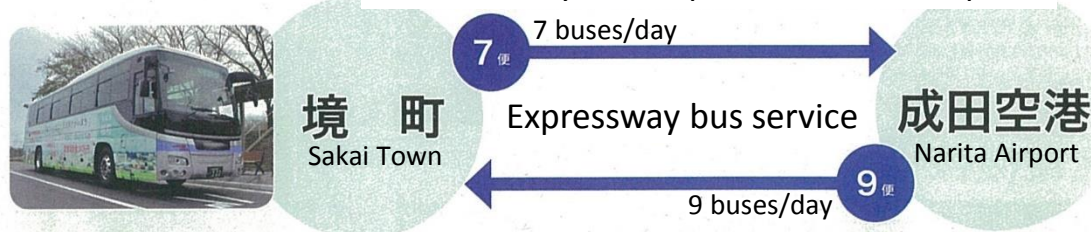
36° 06' North

Area: 46.59 km²

40 min. bus ride from JR Koga Station

40 min. bus ride from Tobu Zoo Station

One hour by nonstop bus to Narita Airport



Ibaraki prefecture

境町
SAKAI



〒306-0495

茨城県猿島郡境町 391-1 境町役場

電話 0280-81-1300



www.town.sakai.ibaraki.jp

Translated by International Centre for Water Hazard and Risk Management under the auspices of UNESCO (ICHARM), PWRI, May 2019

Protecting residents' lives from floods

Designated emergency evacuation site

First
in Japan

Sakai Town Flood Disaster Evacuation Tower



Always remembering the flood disaster that hit Sakai Town in September 2015...

From Mayor



For the residents’ security and safety and more awareness towards disaster management

I would like to express my heartfelt gratitude to the national and prefectural governments and other concerned parties for the completion of Japan's first "Sakai Town Flood Disaster Evacuation Tower."

Learning lessons from the experience of the devastating flood due to heavy rainfall over the Kanto and Tohoku regions in September 2015, we constructed this tower as a new designated emergency evacuation site of the Sakai district, where it is considered difficult to walk to their existing designated evacuation site in the event of a large-scale flood expected to occur, for example, when the Tonegawa River floods. With the completion of this tower, residents, even if failing to start timely evacuation, will be able to run to the town office, a most familiar building around, to take temporary shelter at the tower and then move to an evacuation center safely.

I hope that, by learning a lot about the tower through disaster prevention drills and other occasions, the residents of the town will realize that disaster prevention awareness has been increasing and the safety and security of the community has been improving.

I will continue to do my best to ensure the safety and security of the residents. I look forward to your continued support and cooperation.

Masahiro Hashimoto
Mayor of Sakai Town



Outline of Sakai Town Flood Disaster Evacuation Tower Project

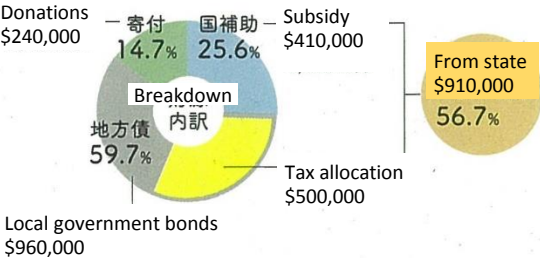
The Sakai Town Flood Disaster Evacuation Tower, the first of its kind in Japan, was constructed as a temporary evacuation site at the town office, which will function as the disaster management base in case of a flood. Since the 2nd level of this tower is connected through a bridge to the 3rd floor of the town hall’s main building, they can together provide an evacuation space for about 1,000 people.

According to simulations released by the Cabinet Office in September 2008, there is a possibility that, in case of a large-scale flood involving the Tone and other nearby rivers, 80% of the residents in the town may be able to evacuate but 20% may not. In such a case, about 800 people will be in danger of death. The tower is for those left stranded to take temporary shelter there since designed to withstand the maximum flood depth expected in the event of a Tone River flood. In addition, the tower has an emergency supplies storage on the second floor to ensure the safety and security of the evacuees.

The emergency power generators, which used to be kept in the basement of the town hall, have also been moved to a far higher place where they will not be flooded easily, which makes it possible for the town office to maintain its functions as headquarters in case of a flood disaster.



Project: Construction of Sakai Town Designated Emergency Evacuation Area
Cost: \$1.6 million
Funding: state subsidy for infrastructure, local government bonds, donations
Period: May 2018 to June 2017
Design & Supervision: Kusuyama Design Co., Ltd.
Construction: Arai Kensetsu Kogyo Co., Ltd.

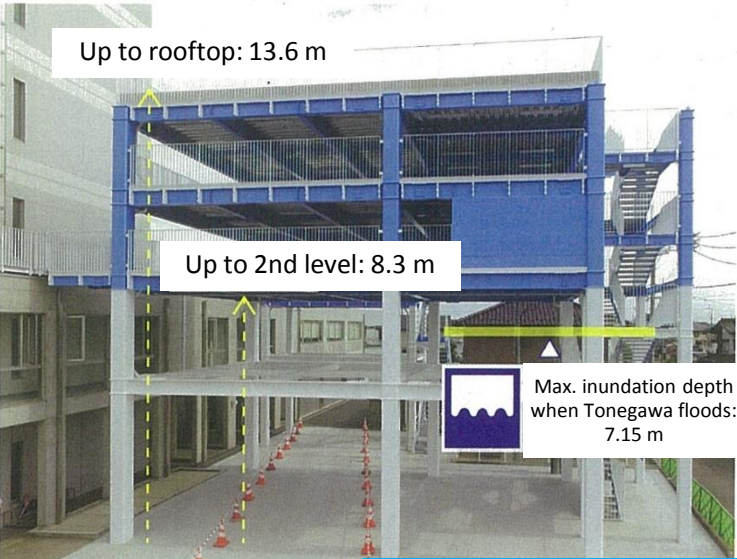


Construction (May 2018)

The tower functions as the disaster management headquarters even when the city hall is flooded.

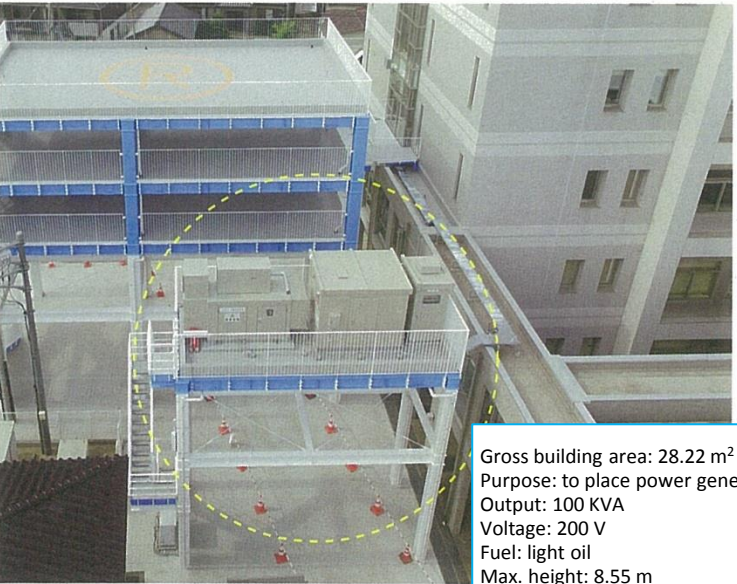
- Up to 1000 people for temporary evacuation
- Emergency power generators
- Emergency supplies storage
- Rooftop heliport for rescue

Evacuation Tower



The evacuation space and emergency power generators are placed over 8m high above the ground since the latest maximum inundation depth around Sakai Town Hall is estimated to be 7.15m by the MLIT Upper Tonegawa River Office.

Power Generator Tower



Gross building area: 28.22 m²
Purpose: to place power generators
Output: 100 KVA
Voltage: 200 V
Fuel: light oil
Max. height: 8.55 m
Structure: steel structure



Facilities

Rooftop heliport for rescue



An emergency heliport (marked as “R” in a circle) is on the roof of the tower. Helicopters will rescue people from the roof and carry them to evacuation centers.

Emergency supplies storage



An about 18m² storage is on the 2nd level with emergency supplies for about 200 people, including a 2-day supply of water and food, blankets, towels, etc.

Connecting bridge



A bridge connects the tower’s 2nd level and the town hall’s 3rd floor. The tower and the town hall together hold up to about 1,000 people for temporary evacuation.

Emergency power generator



The emergency power generators have been moved from the basement of the town hall to the generator tower next to the evacuation tower, which solved the problem of losing power during a flood.