

IMAI LAB.

Multi-Mode Architectural Design



Department of Human and Social Systems
Design-Led X Platform

Architectural Space System

Department of Architecture, Graduate School of Engineering

<http://www.imai-lab.iis.u-tokyo.ac.jp/>



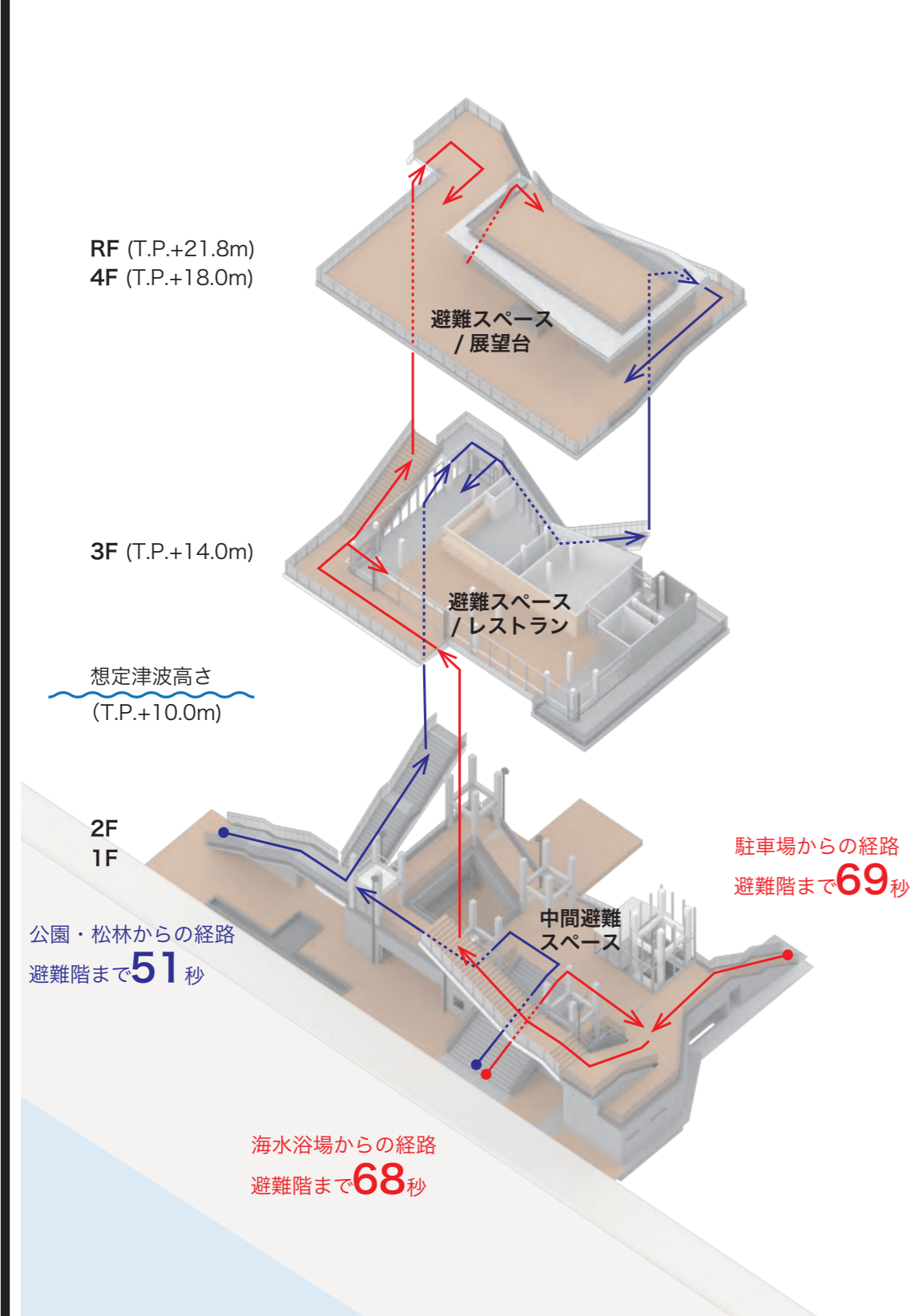
This project is a prototype of “multi-mode architecture,” integrating tsunami evacuation and tourism by superimposing everyday and emergency use within a single space. Rather than functioning solely as disaster-prevention infrastructure, it operates daily as a tourist facility with observation and commercial functions, contributing to the local economy while enhancing safety by familiarizing users with evacuation routes. The evacuation floors on the second and third levels

accommodate approximately 1,200 people and are positioned to serve also as observation and commercial spaces. At an intermediate height along columns exceeding 10 meters, a mid-level evacuation floor is provided to address moderate tsunamis and reduce congestion during large-scale evacuations. This semi-outdoor space, shaded by the upper slab and ventilated by sea breezes, is actively used by beach visitors. Wide staircases and visible terraces along the perimeter guide people

upward through the pine grove to the top observation deck. By overlapping evacuation and everyday circulation, the project creates a new landscape where disaster preparedness and tourism coexist. It proposes architecture as a system capable of assuming different roles under changing conditions, redefining both regional disaster infrastructure and public space.

This project was developed in collaboration with the Takaaki Kato Laboratory (Regional Safety Systems).

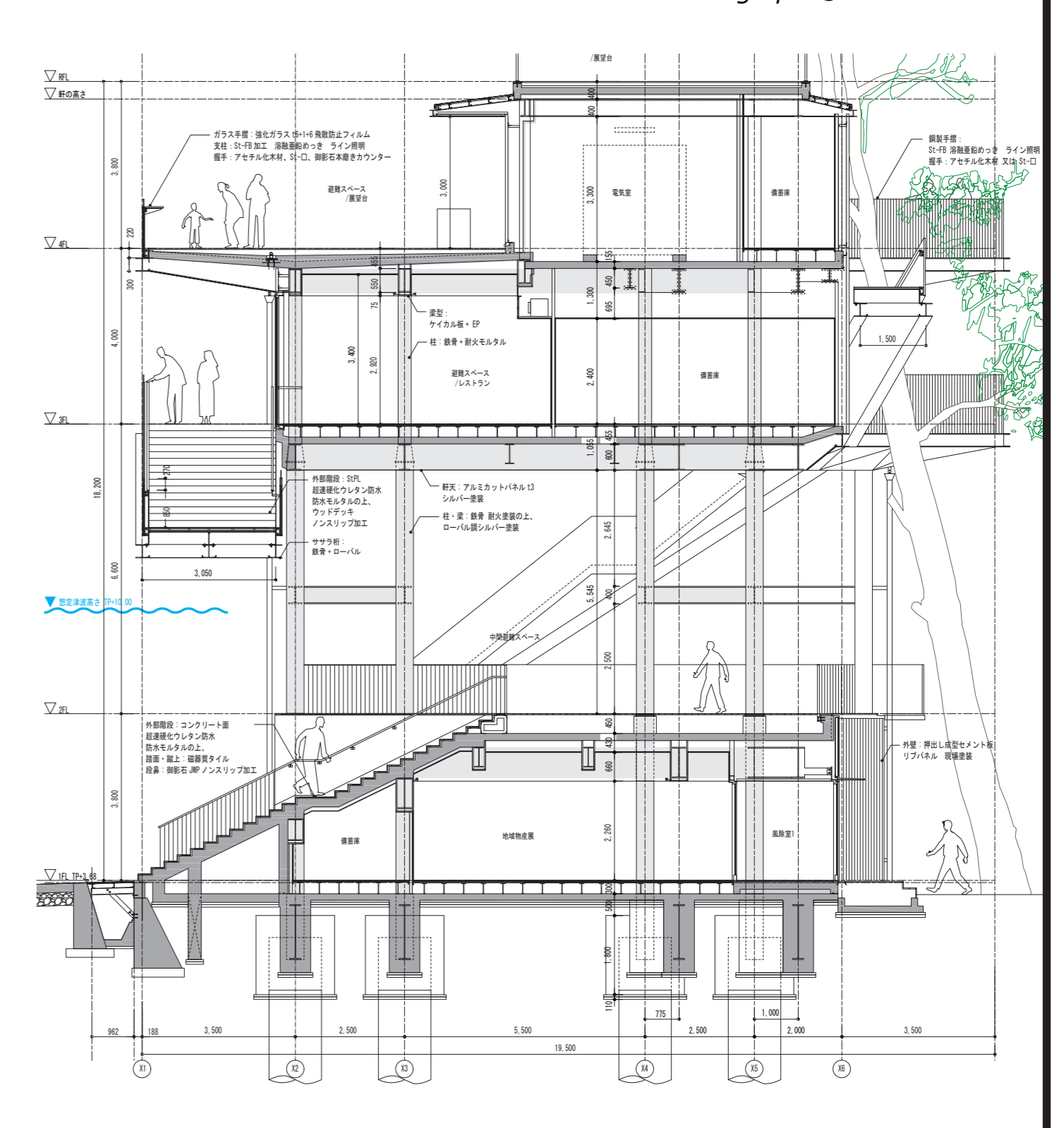
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Evacuation Circulation Diagram: A double-helical wide staircase along the building perimeter, leading upward with views through the pine grove.



A gate-like structure merges with the traditional pine grove, creating a new landscape. At sunset over Suruga Bay, the aluminum soffit is gently bathed in warm light.



Section: A layered configuration comprising a grand stair descending to the sea, a semi-outdoor piloti space, an intermediate evacuation level, and the upper evacuation floor.