



Water supply and Sewage

We plan the earthquake resistant facilities that support the maintenance and renewal of water and sewage facilities, and are resistant to huge earthquakes. We also conduct flood control planning using high quality flooding analysis simulation. In addition to ensuring citizen safety through such hard infrastructure construction, we complement with soft infrastructure measures such as inland water hazard maps and BCP plan. Finally, we support the strengthening of disaster prevention in whole urban areas.

We also design stock management plans and sewage business plans which are new type of business under Sewage Law (revised in 2015), and contribute to the sustainable operation of sewage business through strategic maintenance and renewal plans.

Water supply and sewage planning, design and construction supervision



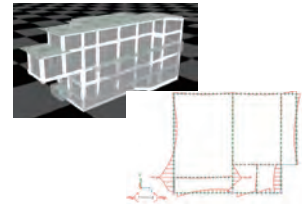
- Basic and detailed design
- Construction supervision

We support whole plans and business approved plans for water and sewage as well as agricultural settlement projects and basic and detail and construction.

We provide total support for development plans from the planning to the designing and construction stages.

Seismic diagnosis / earthquake resistance planning

We are providing total support for seismic performance surveys / diagnoses, earthquake resistance planning, and seismic reinforcement design to enable water supply and sewage facilities to meet optimal performance requirements even in the event of earthquakes.



Composite structure L2'Seismic diagnosis

- Earthquake resistance performance surveys / earthquake resistance diagnoses.
- Earthquake resistance reinforcement planning

Rainwater control plan

We evaluate the risk of flooding by flooding analysis simulation, and suggest flooding countermeasure plans utilizing existing stocks.

We totally support flooding countermeasure plans include soft infrastructure measure such as inland water hazard maps.

- Flooding analysis simulation
- Flooding countermeasure plans
- Countermeasure facility plan
- Inland hazard maps
- Soft infrastructure countermeasure support such as self-help and community cooperation



Inland hazard maps, Regulating reservoir design

Business Continuity Planning (BCP)

BCP refers to the drafting of action plans to enable swift recovery of facility functionality (at the service level) in situations that there are restrictions such as damage to the water supply and sewage facilities or power outages after the occurrence of an earthquake. We provide total support ranging from the drafting of BCP to the provision of emergency response drills in accordance with the manual after their drafting.



Setting an emergency inspection route (Sewage Business Continuity Planning)

Sewage facility stock management maintenance and management / update plan

It has become necessary to draft a stock management plan for all facilities owned by local governments from the perspective of life extension for each facility. We shall provide a survey / deterioration diagnosis for the purpose of maintaining the structural integrity of the sewage facilities, as well as drawing up facility life extension / stock management plans and proposing appropriate maintenance management / update plans.



Inspection by pipe opening camera

- Facility surveys / diagnosis
- Renovation / renewal execution design

Sewage Business Plans

It is imperative to create new "Sewage business plans" that add "Inspection methods / frequency" and "mid-term facility installation/improvement policy" to the sewage business plans that have been central to traditional construction planning.

We are using our knowledge of work planning to provide total support for sewage business operations.

- Drawing up business management plans
- Stock management plans