Waste Disposal by Landfill Plan

- Currently, it is strongly demanded that landfill sites be used for as long as possible.
- The Tokyo Metropolitan Government has formulated the Plan for Waste Disposal by Landfill and is systematically advancing the construction of landfills.
- The Plan for Waste Disposal by Landfill will be reviewed every five years.

Waste Disposal by Landfill Plan (Revised February 2022) (Plan period : 15 years from FY 2022 to 2036) Unit: Ten thousand m³

Fiscal Year		2022 - 2026						2027-2031	2032-2036	2022-2036 Total
		2022	2023	2024	2025	2026	Subtotal			
Waste Type	General Waste(※)	22	20	20	19	18	99	84	77	260
	Industrial Waste	8	8	8	8	8	40	40	40	120
	Waste from Public Facilities	16	15	14	14	14	72	70	70	212
	Subtotal	46	43	42	41	40	211	194	187	592
Earth and Sand Type	Dredged Soil	89	89	89	89	89	445	435	435	1,315
	Soil Produced in Construction Work, etc.	30	30	30	30	30	150	150	150	450
	Subtotal	119	119	119	119	119	595	585	585	1,765
Total		165	162	161	160	159	806	779	772	2,357

※The volume of waste soil covering, etc., is included in general waste.
※Due to rounding, some totals may not correspond with the sum of the separate figures.

- The type of waste and policy for acceptance of waste at the Shinkaimen Landfill Site are determined in the Plan for Waste Disposal by Landfill.

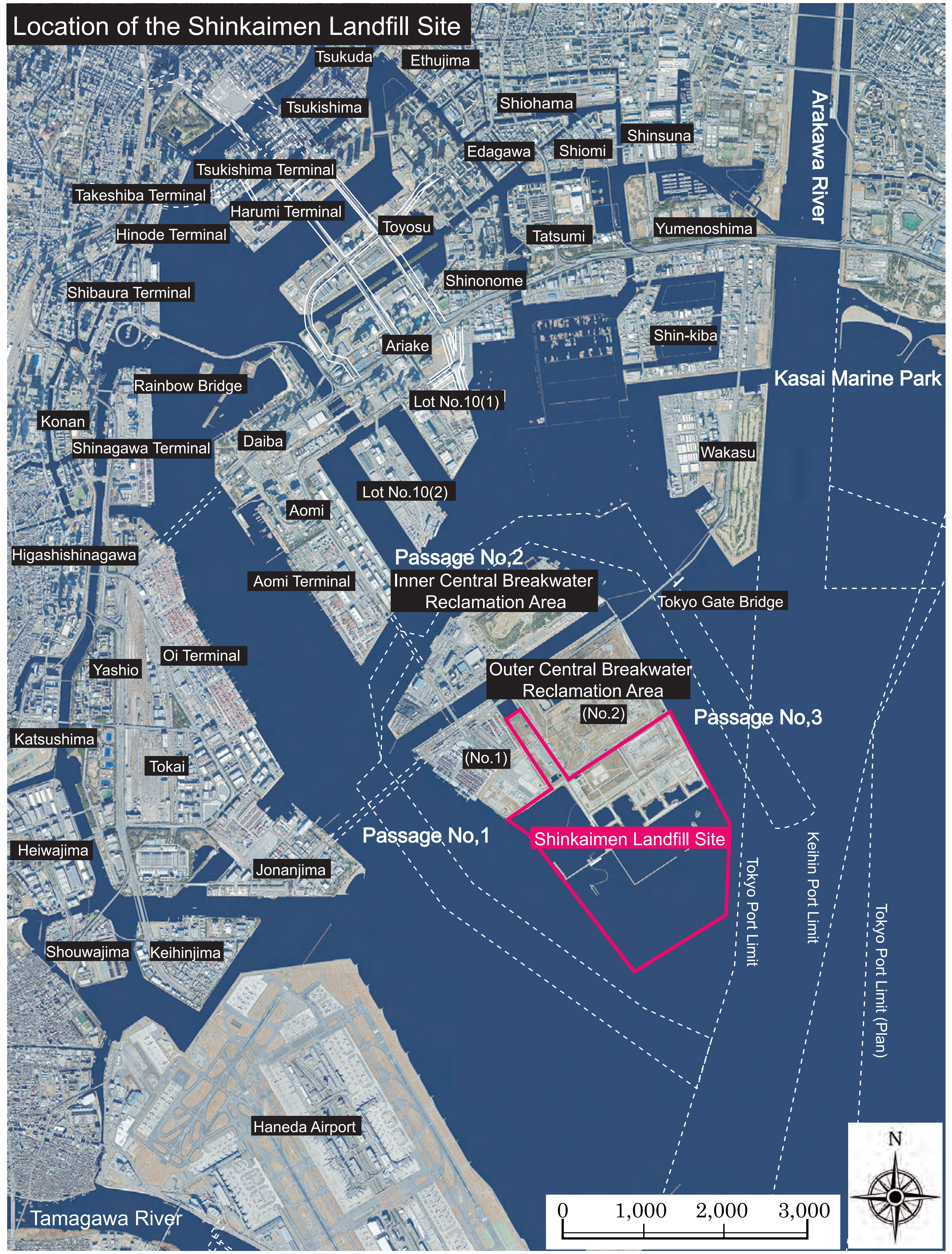
Waste Acceptance Policy by Type of Waste

Type of Waste		Acceptance Policy
Waste Type	General Waste	・General waste produced by households, etc. within the 23 wards of Tokyo. ・All waste is accepted provided that it undergoes intermediate treatment, while efforts are also undertaken to reduce waste volume and maximize the reuse and recycling of resources.
	Industrial Waste	・Industrial waste produced by small and medium-sized businesses within Metropolitan Tokyo. ・Waste that has already undergone intermediate treatment is accepted up to a fixed volume.
	Waste from Public Facilities	・Waste produced from waterworks and sewage facilities within Metropolitan Tokyo. ・Waste is accepted provided that it undergoes intermediate processing.
Earth and Sand Type	Dredged Soil	・Dredged soil is produced from streams and rivers within Metropolitan Tokyo and Tokyo ports. ・Dredged soil that cannot be used for the upkeep of rivers, canals or harbors is accepted.
	Soil Produced in Construction Work, etc.	・This soil is used for upkeep of the landfill site and as soil covering for waste.

Background

Month/Year	
November/1989	Request made to the Tokyo Port and Harbor Council to conduct a study on a basic policy for construction of a new landfill site on the water for waste disposal.
July/1991	Shinkaimen Landfill Site waste acceptance policy by type of waste and the plan for waste disposal by landfill formulated in the Long Term Vision for Waste Disposal by Landfill.
December/1991	Report by the Tokyo Port and Harbor Council on a basic policy for construction of a new landfill site on the water.
May/1992	Shinkaimen Landfill Site plan decided through partial amendment of the Port and Harbor Plan of the Port of Tokyo (Fifth Edition).
October/1993	Submission of the Environmental Impact Assessment (tentative) based on the Tokyo Metropolitan Government Environmental Impact Assessment Ordinance and Guidelines for Implementation of Environmental Impact Assessment (Cabinet decision).
October/1994	Completion of environmental impact assessment procedures.
August/1995	Application for License to Reclaim Publicly-owned Water Surfaces based on the Act on Reclamation of Publicly-owned Water Surface.
July/1996	Acquisition of License to Reclaim Publicly-owned Water Surface.
May/1998	Formulation of the Plan for Waste Disposal by Landfill.
January/2003	Revision of the Plan for Waste Disposal by Landfill.
January/2006	Partial revision of the Plan for Waste Disposal by Landfill.
January/2007	Revision of the Plan for Waste Disposal by Landfill.
February/2012	Revision of the Plan for Waste Disposal by Landfill.
December/2013	Partial revision of the Plan for Waste Disposal by Landfill.
February/2017	Revision of the Plan for Waste Disposal by Landfill.
February/2022	Revision of the Plan for Waste Disposal by Landfill.

Location Map

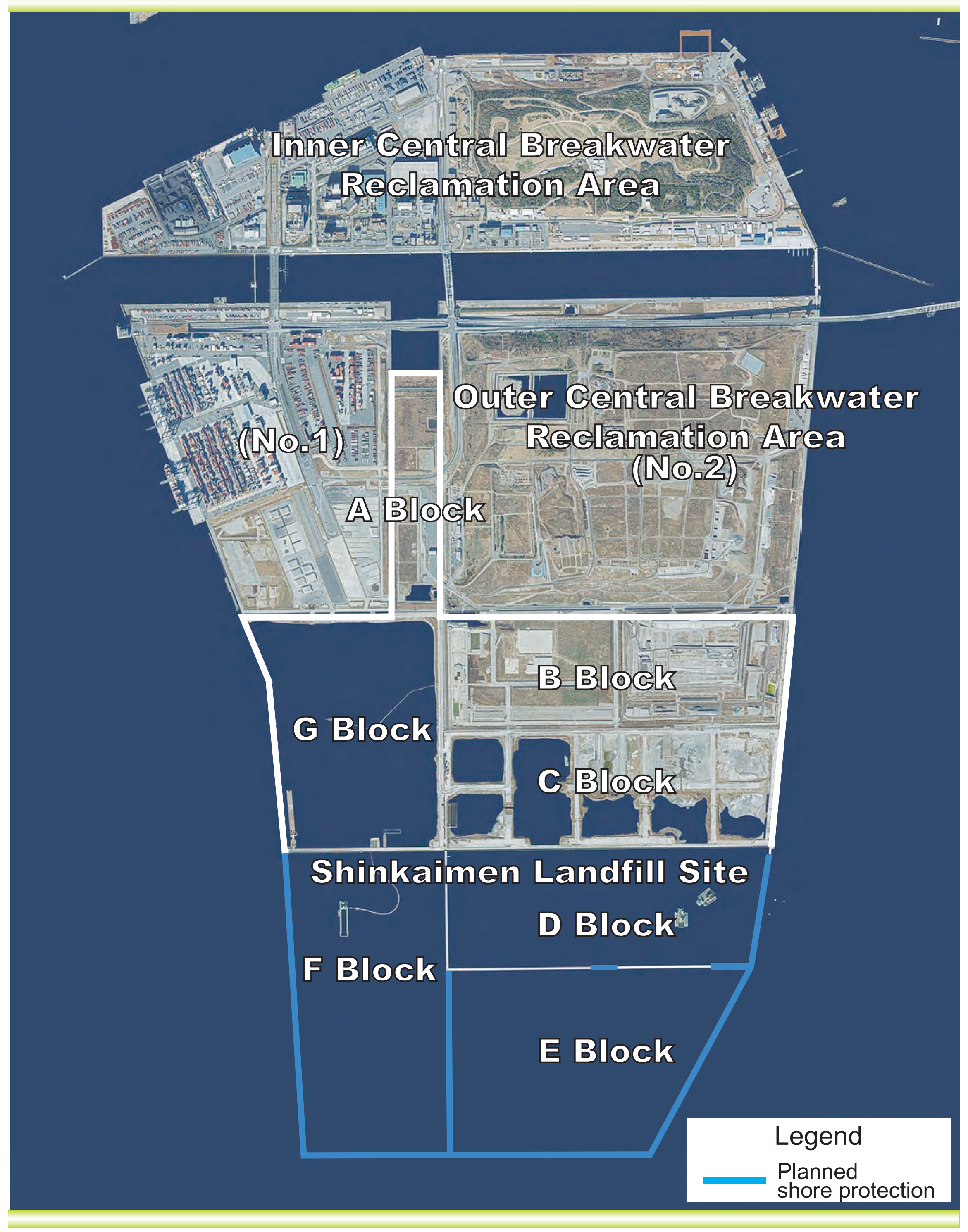


<Materials : Bureau of Port and Harbor, Tokyo Metropolitan Government> <© Tokyo Digital map>

Port Planning and Construction, Division Bureau of Port and Harbor, Tokyo Metropolitan Government
Bureau of Port and Harbor, Tokyo Metropolitan Government HP http://www.kouwan.metro.tokyo.lg.jp/
8-1 Nishi-Shinjuku 2-chome, Shinjuku-ku, Tokyo 163-8001
登録番号（4）5
R70 古紙パルプ配合率70%再生紙を使用 石油系溶剤を含まないインキを使用
リサイクル適性Ⓐ この印刷物は、印刷用の紙へリサイクルできます。

The last landfill site in Tokyo Bay, which supports the comfortable lives of Tokyo residents

Shinkaimen Landfill Site



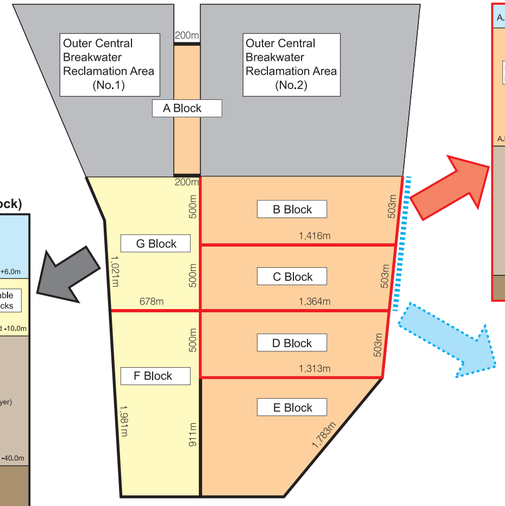
Photographed on January 2021

Bureau of Port and Harbor, Tokyo Metropolitan Government

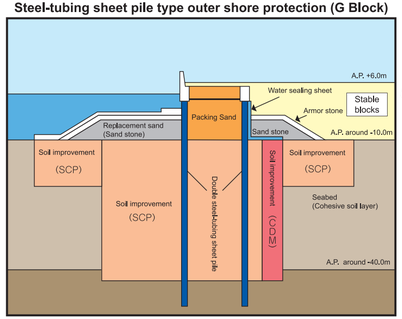
Overview of Shinkaimen Landfill Site

- In order to ensure the comfortable lives of the Tokyo residents and maintain urban dynamism, the Shinkaimen Landfill Site, which is the final waste disposal site in Tokyo Bay, will be built in stages.
- The landfill will be used for as long as possible through recycling and effective use of waste that will be disposed by landfill.

Area of reclamation area	approx. 480 ha (Reclamation through division of the site into seven blocks, A - G)
Landfill capacity	approx. 120 million ㎥
Ground surface height	A.P. +6.0 m - A.P. +30.0 m
Shore protection length	approx. 13.9 km (Outer shore protection : approx. 6.5 km Partitions : approx. 7.4 km)
Shore protection construction cost	approx. 450 billion yen

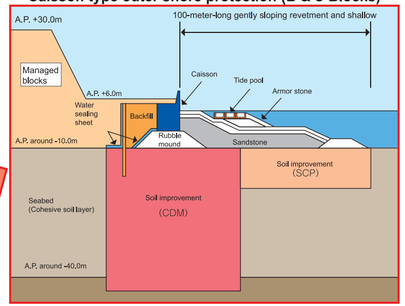


Steel-tubing sheet pile type outer shore protection (G Block)

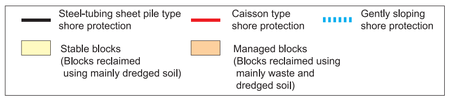


- Outer shore protection (west side) has a structure that will facilitate the building of quays in line with future land use plans (land for piers).

Caisson type outer shore protection (B & C Blocks)



- Outer shore protection (east side) has water sealing features so that polluted water from waste does not seep into groundwater or the ocean.



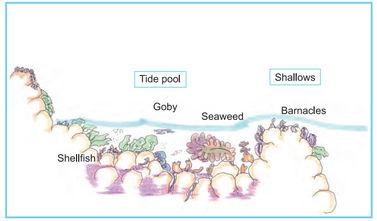
Gently sloping shore protection is friendly to wildlife

- By establishing shallows and Tide pools on the gently sloping shore protection, habitats for marine life will be expanded.

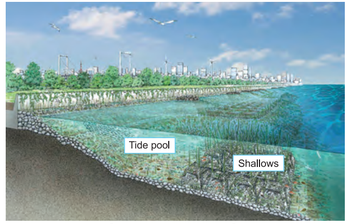
Gently sloping outer shore protection (east side)

Tide pool at low tide (※)

(※)Tide pool : A shallow pool formed in the tidal zone, which appears at low tide and is under water at high tide. It is the prefect habitat for young fish and periphytons.



【Illustration of kinds of marine life anticipated by development of shore protection】

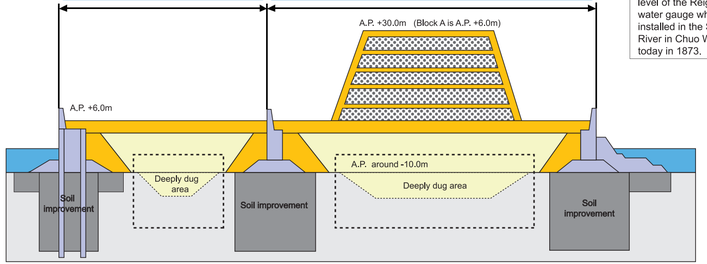


【Illustration of development】

【Landfill cross-section】

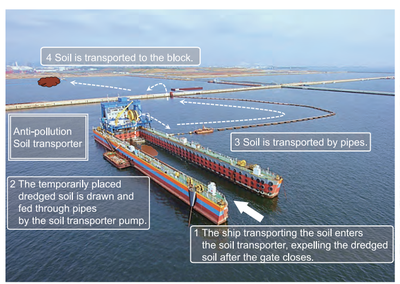
Stable blocks (F & G blocks)	Managed blocks (A - E blocks)
Blocks reclaimed with soil such as dredged soil that does not generate polluted water.	Blocks reclaimed with waste such as incinerated ash and sewage sludge that requires management such as preventing dispersion after filling and wastewater treatment.

A.P., Arakawa Peil
A method used in the Arakawa River system to measure the water level. It sets the datum at the lowest low tide level of the Reiganjima water gauge which was installed in the Sumida River in Chuo Ward of today in 1873.



Reclamation using dredged soil at the Shinkaimen Landfill Site

- For reclamation using dreaded soil, an anti-pollution soil transporter takes dredged soil to blocks C and G.

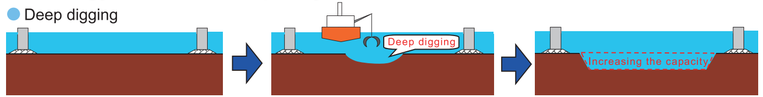


How dredged soil is sent

Entry of *KAIRYU*, the ship carrying the dredged soil

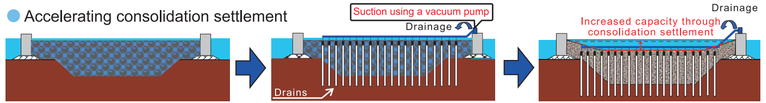
Strategy to increase capacity at the Shinkaimen Landfill Site

- Deep digging



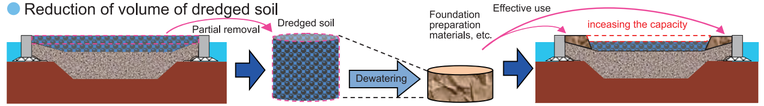
・After building the shore protection, digging of the ocean floor is conducted to incease capacity.
・Efforts are taken to effectively use the dredged soil in building fishing grounds in Tokyo Bay.

- Accelerating consolidation settlement



・After filling this area with dredged soil, drains are driven in and vacuum pumps are used to extract water from the filled foundation and seabed soil to accelerate consolidation settlement to increase capacity.

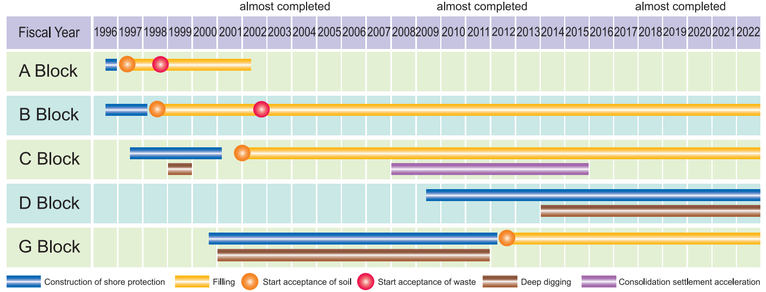
- Reduction of volume of dredged soil



・ Efforts are taken to expand capacity of the landfill site such as by effectively using the accepted dredged soil after its dewatering as civil engineering materials for foundation preparation, etc, .

Construction process

Before construction | Shore protection of blocks A & B almost completed | Shore protection of block C almost completed | Shore protection of blocks G almost completed



	Construction of shore protection		Filling	
	Start construction	Almost completed	Start acceptance of soil	Start acceptance of waste
A Block	August/1996	March/1997	June/1997	December/1998
B Block	August/1996	May/1998	August/1998	February/2003
C Block	October/1997	May/2001	March/2002	
D Block	September/2009			
G Block	December/2000	July/2012	August/2012	