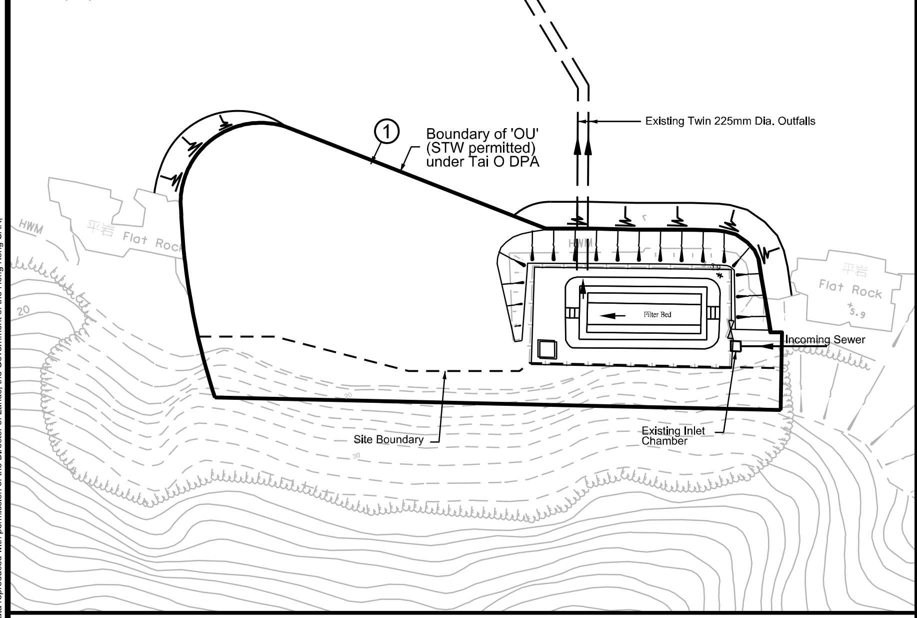
Stage 1

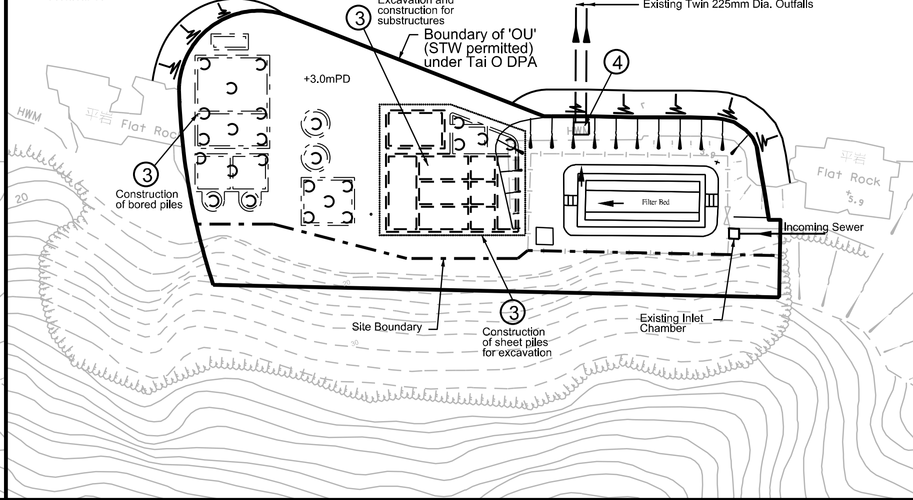
1. Construct the core of seawall and foundation stone first to form a temporary seawall which acts as a barrier between the proposed Tai O STW site and the sea.



Stage 1

Stage 2, 3 & 4

1. Fill the reclamation to 3mPD.
2. Carry out the GI works to determine the rock head level.
3. Excavation and Construction of substructures in new reclamation areas.
4. Construct Temporary Outfall Chamber through existing seawall and on existing outfall pipes, and remove existing section outfall pipes within Temporary Outfall Chamber

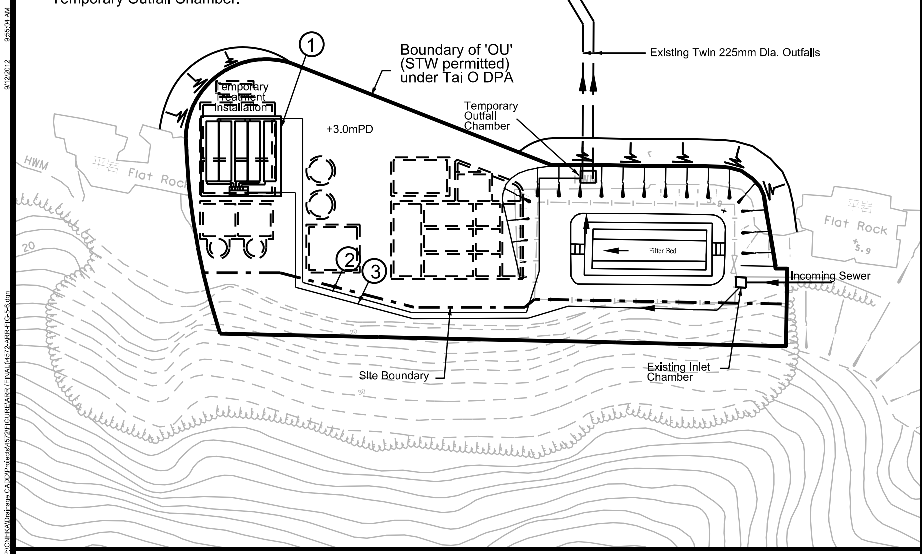


Excavation and construction for substructures
3
Existing Twin 225mm Dia. Outfalls
Boundary of 'OU' (STW permitted) under Tai O DPA
4
+3.0mPD
3
Construction of bored piles
Filter Bed
Incoming Sewer
Site Boundary
3
Construction of sheet piles for excavation
Existing Inlet Chamber
HWM
Flat Rock

Stage 2, 3 & 4

Stage 5

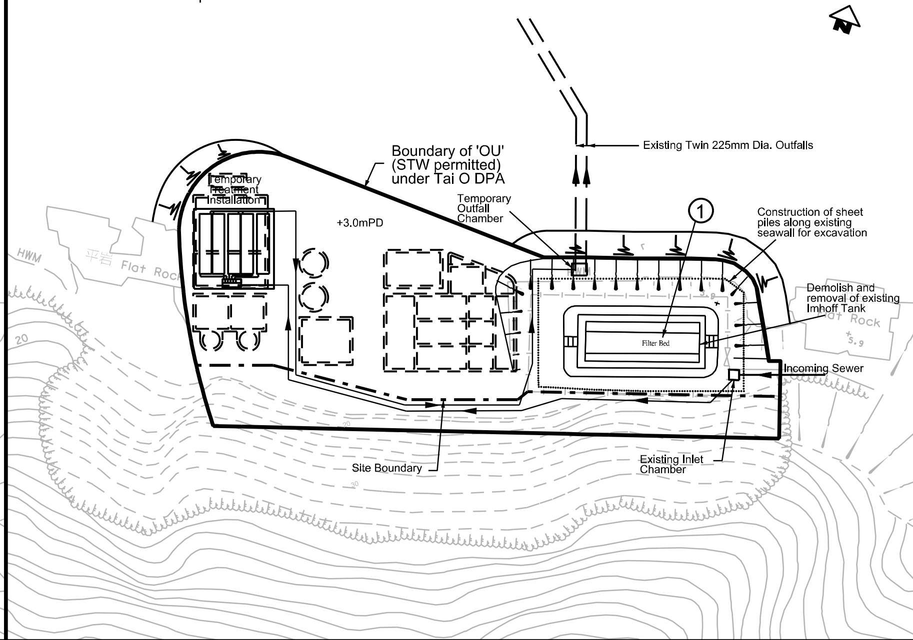
1. Install Temporary Treatment Installation.
2. Construct Temporary Sewage Inlet Pipe from existing Inlet Chamber to Temporary Treatment Installation.
3. Construct Temporary Treated Effluent Outlet Pipe from Temporary Treatment Installation to the Temporary Outfall Chamber.



Stage 5

Stage 6

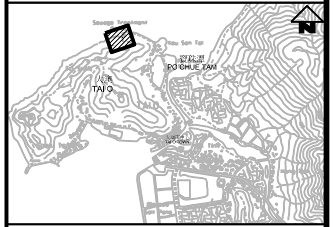
1. Demolish and remove the Imhoff Tank, pipework, chambers and workshop.



Boundary of 'OU' (STW permitted) under Tai O DPA
Existing Twin 225mm Dia. Outfalls
Temporary Treatment Installation
+3.0mPD
Temporary Outfall Chamber
1
Construction of sheet piles along existing seawall for excavation
Demolish and removal of existing Imhoff Tank
Filter Bed
Incoming Sewer
Site Boundary
Existing Inlet Chamber
HWM
Flat Rock

Stage 6

DO NOT SCALE DRAWINGS, VERIFY ALL DIMENSIONS ON SITE



KEY PLAN SCALE : N.T.S.

LEGEND:

- Structure or Features to be Demolished
- Sewage Flow Path
- Sludge Flow Path

REV	DESCRIPTION	BY	DATE	CHK'D	AUTH

渠務署
Drainage Services Department

顧問工程管理部
Consultants Management Division

ATKINS 阿特金斯顧問有限公司 Atkins China Ltd

SUPPORTED BY
PARSONS BRINCKERHOFF
A·LEAD ARCHITECTS LTD.

PROJECT
UPGRADING OF CHEUNG CHAU AND TAI O SEWAGE COLLECTION, TREATMENT AND DISPOSAL FACILITIES - DESIGN AND CONSTRUCTION

AGREEMENT NO.
CE 15/2010 (DS)

TITLE
TAI O SEWAGE TREATMENT WORKS CONSTRUCTION SEQUENCE (STAGE 1 TO 6)

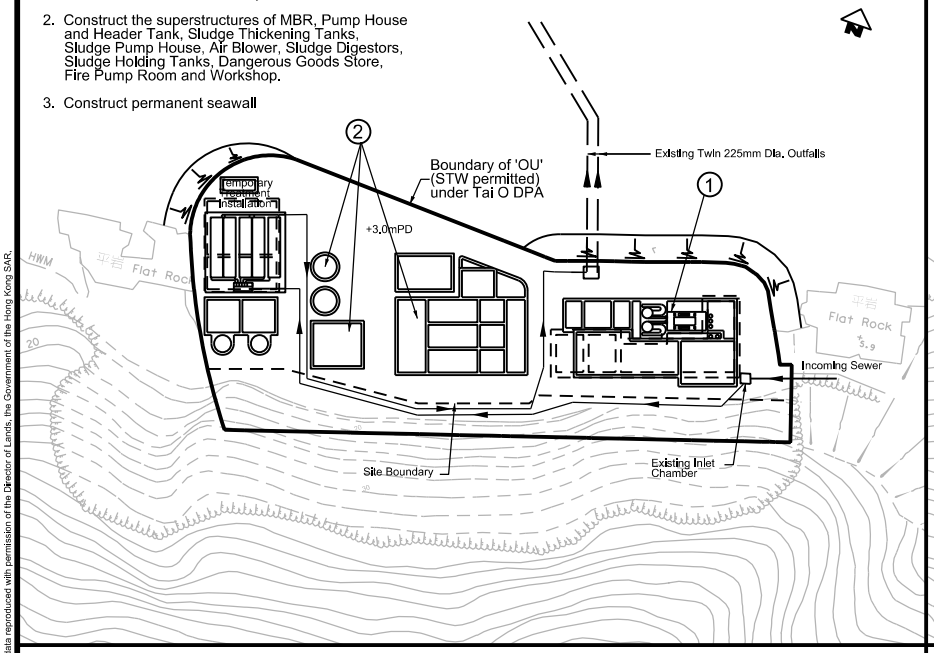
STATUS
REVIEW

SCALE AT A1	DESIGN	DRAWN	CHECKED	AUTHORISED
N.T.S.	WYGC	AC	HKML	XY
	DATE SEP 2012	DATE SEP 2012	DATE SEP 2012	DATE SEP 2012

DRAWING No. Appendix 2.2 REVISION -

Stage 7

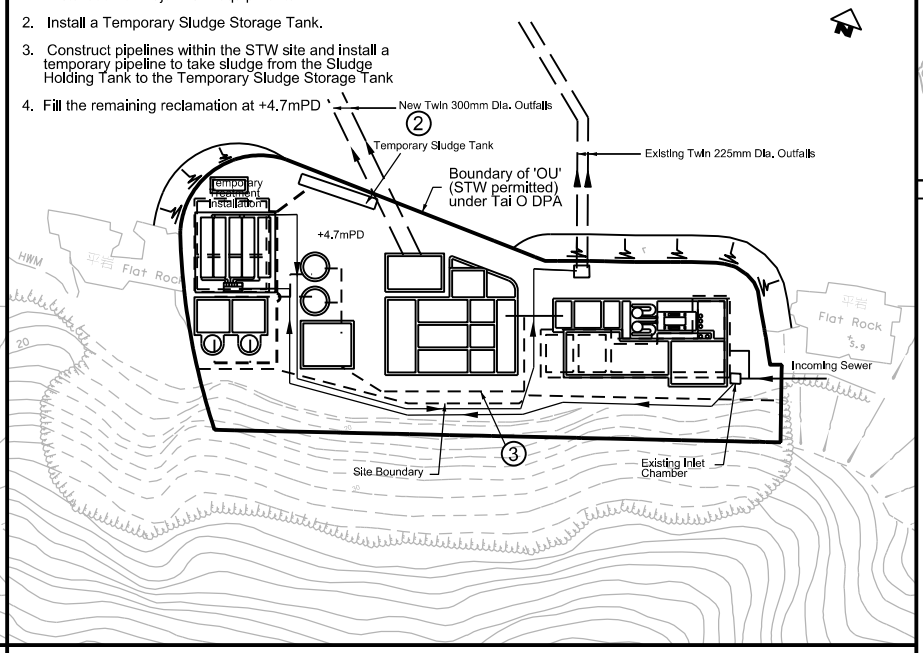
1. Construct the new Preliminary Treatment.
2. Construct the superstructures of MBR, Pump House and Header Tank, Sludge Thickening Tanks, Sludge Pump House, Air Blower, Sludge Digestors, Sludge Holding Tanks, Dangerous Goods Store, Fire Pump Room and Workshop.
3. Construct permanent seawall



Stage 7

Stage 8

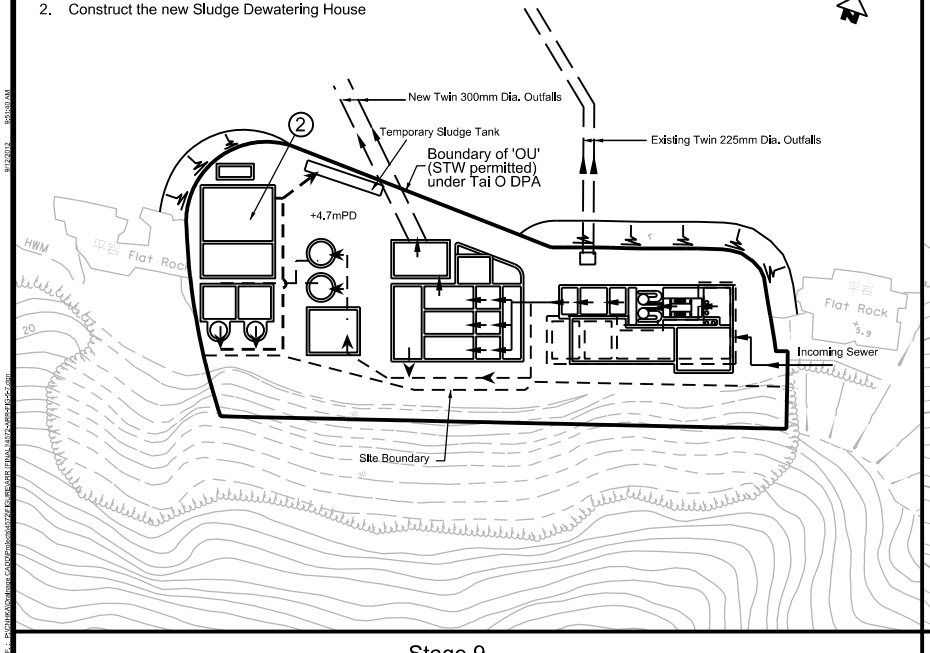
1. Installation of major E&M equipments.
2. Install a Temporary Sludge Storage Tank.
3. Construct pipelines within the STW site and install a temporary pipeline to take sludge from the Sludge Holding Tank to the Temporary Sludge Storage Tank
4. Fill the remaining reclamation at +4.7mPD



Stage 8

Stage 9

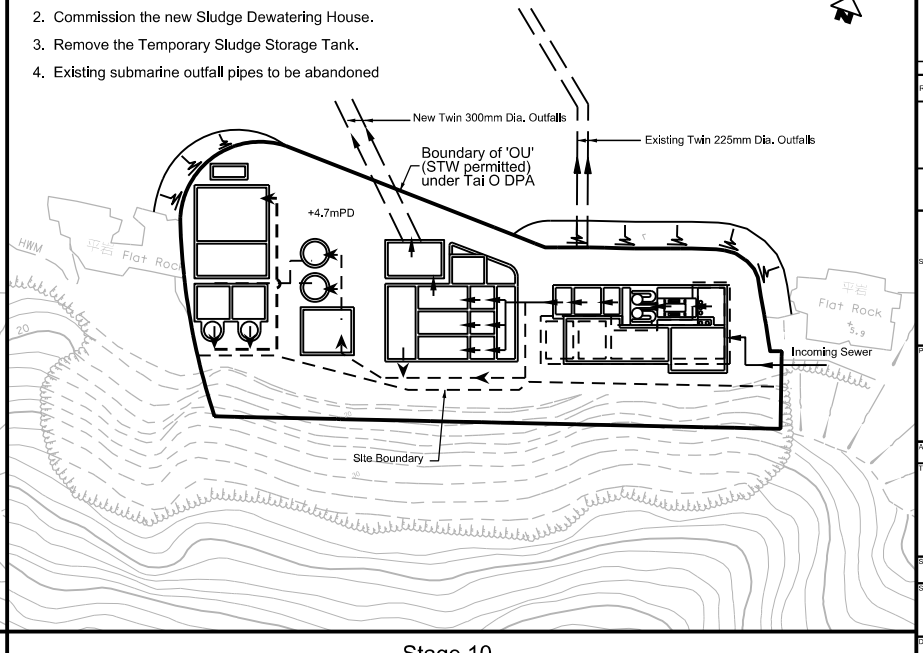
1. Commission the new treatment works.
2. Construct the new Sludge Dewatering House



Stage 9

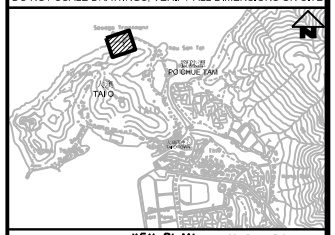
Stage 10

1. Installation of ancillary equipments and remove temporary platform.
2. Commission the new Sludge Dewatering House.
3. Remove the Temporary Sludge Storage Tank.
4. Existing submarine outfall pipes to be abandoned



Stage 10

DO NOT SCALE DRAWINGS, VERIFY ALL DIMENSIONS ON SITE



KEY PLAN SCALE : N.T.S.

LEGEND:

- Structure or Features to be Demolished
- Sewage Flow Path
- Sludge Flow Path

REV	DESCRIPTION	BY	DATE	CHK'D	AUTH

渠務署
Drainage Services Department

顧問工程管理部
Consultants Management Division

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PROJECT

UPGRADING OF CHEUNG CHAU AND TAI O SEWAGE COLLECTION, TREATMENT AND DISPOSAL FACILITIES - DESIGN AND CONSTRUCTION

AGREEMENT NO. CE 15/2010 (DS)

TITLE

TAI O SEWAGE TREATMENT WORKS CONSTRUCTION SEQUENCE (STAGE 7 TO 10)

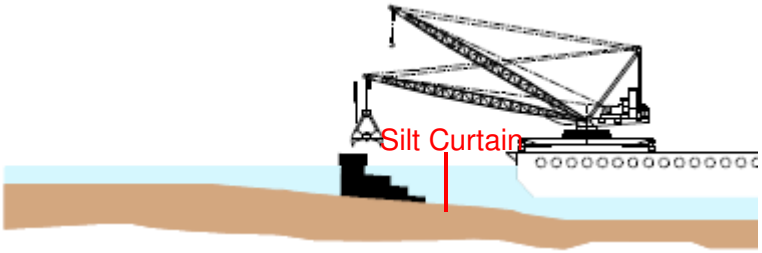
STATUS REVIEW

SCALE AT A1	DESIGN	DRAWN	CHECKED	AUTHORISED
N.T.S.	WYGC	AC	HKML	XY
	DATE SEP 2012	DATE SEP 2012	DATE SEP 2012	DATE SEP 2012

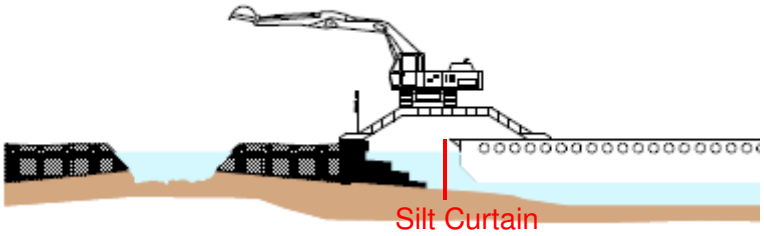
DRAWING No. Appendix 2.2

REVISION -

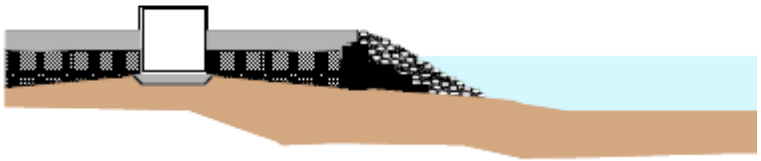
Reclamation of Tai O STW – Possible Construction Sequences by Non-Dredging Method



• Place Gabion Walls around reclamation to form a barrier to protect the area from waves.



• Transport construction machinery and equipment to the site.



• Fill around substructures.

• Place second layer of fill material across reclamation to enable superstructure construction.

• Construct superstructures.

- Construct the core of seawall and foundation stone first to form a temporary seawall
- Carry out the GI works to determine the thickness of marine deposit
- If necessary, surcharge or ground improvement works will be carried out based on the latest GI works
- Allow sufficient time for the possible settlement due to present of marine deposit
- Erection of the permanent seawall at the latest stage