

Tung Chung New Town Extension



6th PLG Meeting

Date : 17 January 2022



土木工程拓展署
CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT

可持續大嶼辦事處
SUSTAINABLE LANTAU OFFICE

Agenda

1. Confirmation of Last Meeting Minutes
2. Tung Chung East
 - a) Matters Arising from Last Meeting
 - b) Overview and Progress
 - c) Environmental Monitoring and Audit (EM&A)
3. Tung Chung West
 - a) Matters Arising from Last Meeting
 - b) Overview and Progress
 - c) Environmental Monitoring and Audit (EM&A)
4. AOB

1. Confirmation of Last Meeting Minutes

2. Tung Chung East

a) Matters Arising from Last Meeting

2(a) Matters Arising from Last Meeting



Eco-shoreline

Paras. 3.3.3: *To provide both horizontal & vertical drill holes on bio-blocks to enhance the species diversity.*

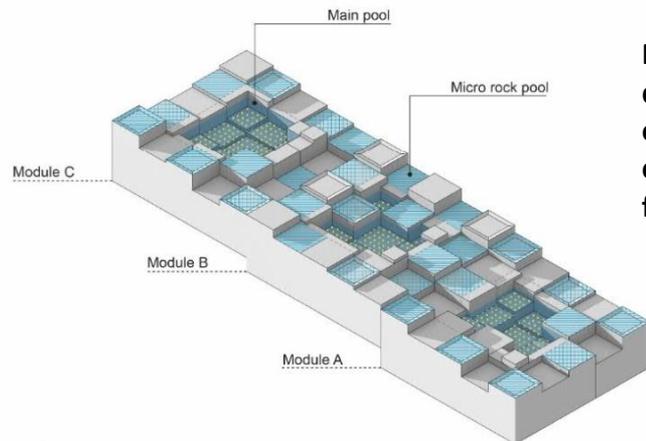
Para. 3.3.5: *Rockpool should be located below mid-tide level to avoid mosquito breeding, & stones should be placed in the rockpool to provide habitat for organisms.*

Details of Complaint

Para. 4.3.2: *To follow up noise monitoring for construction works undertaken during restricted hours.*

Eco Shoreline -

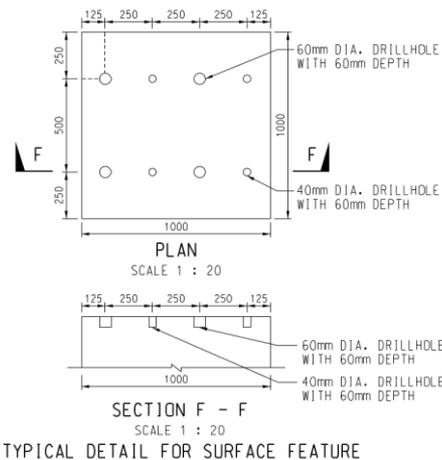
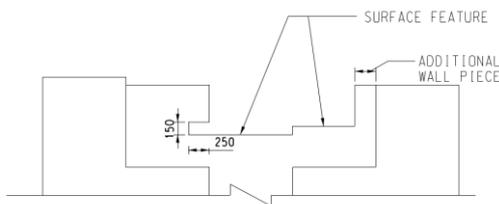
Enhancement of Rocky Eco Shoreline



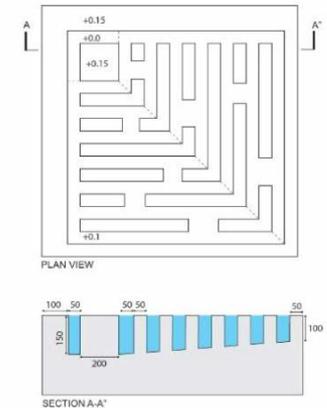
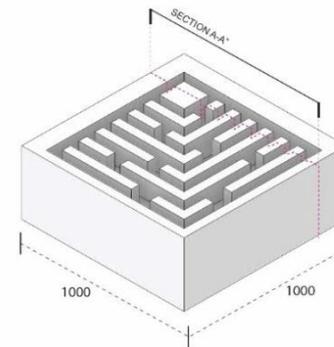
Note: The following details are indicative only to illustrate the concept. Subject to further design revision.

Legend

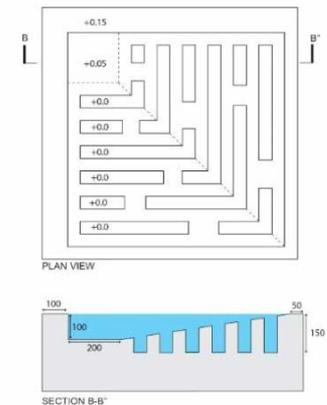
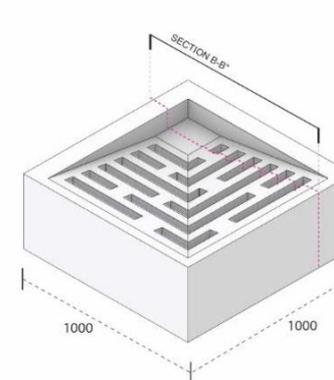
-  Micro Rock Pool Surface Type 1
-  Micro Rock Pool Surface Type 2



Micro Rock Pool Type 1
30% of total micro rock pool



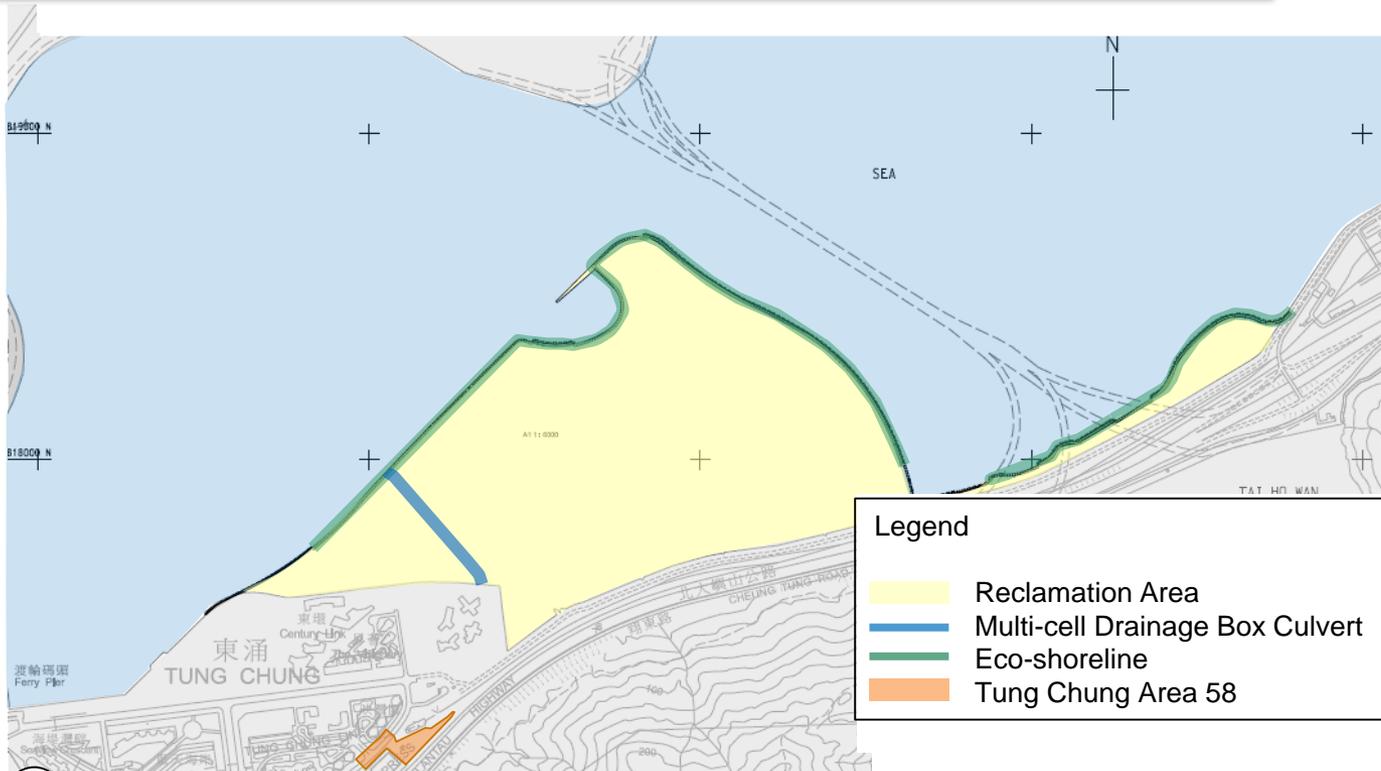
Micro Rock Pool Type 2
70% of total micro rock pool



2. Tung Chung East

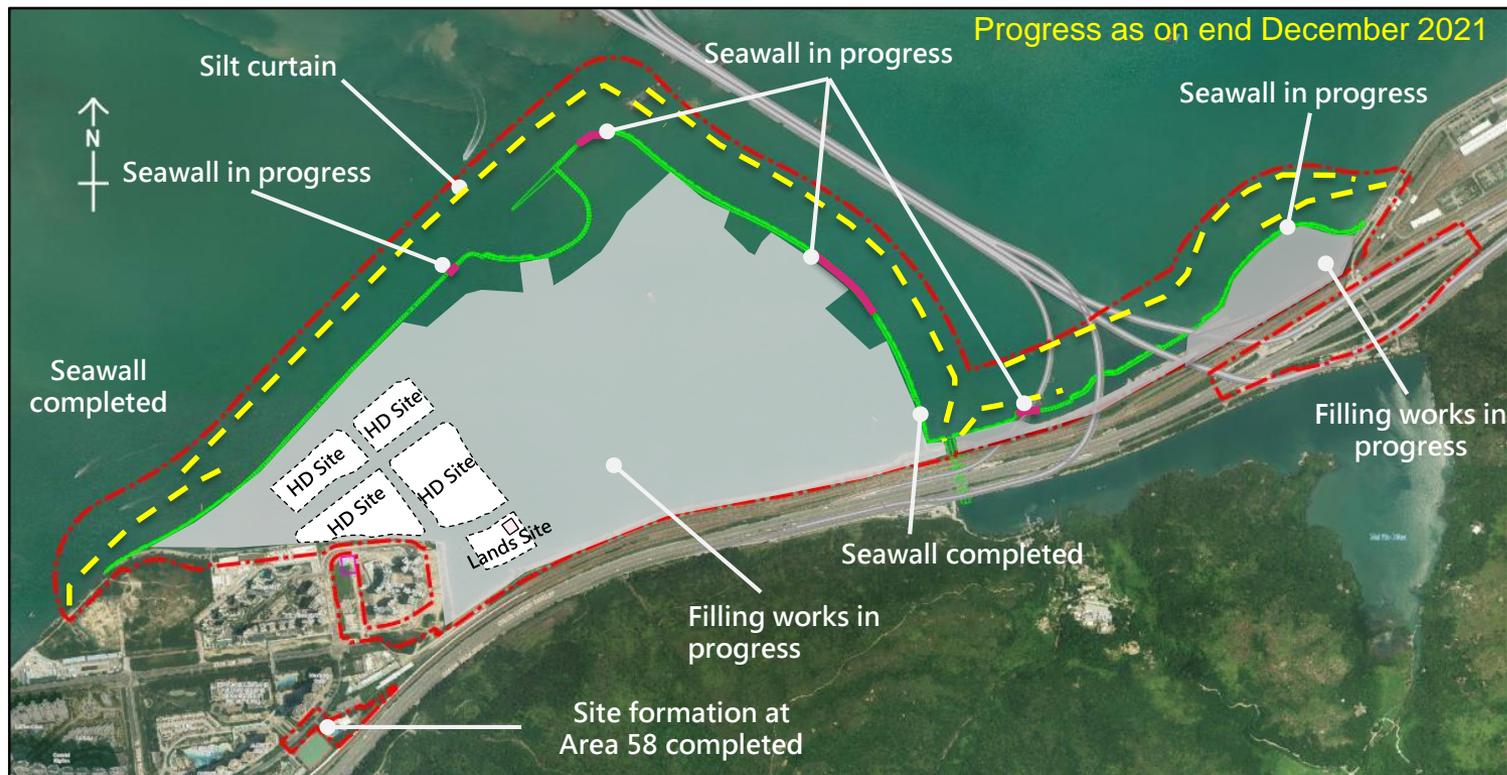
b) Overview and Progress

Tung Chung East Reclamation



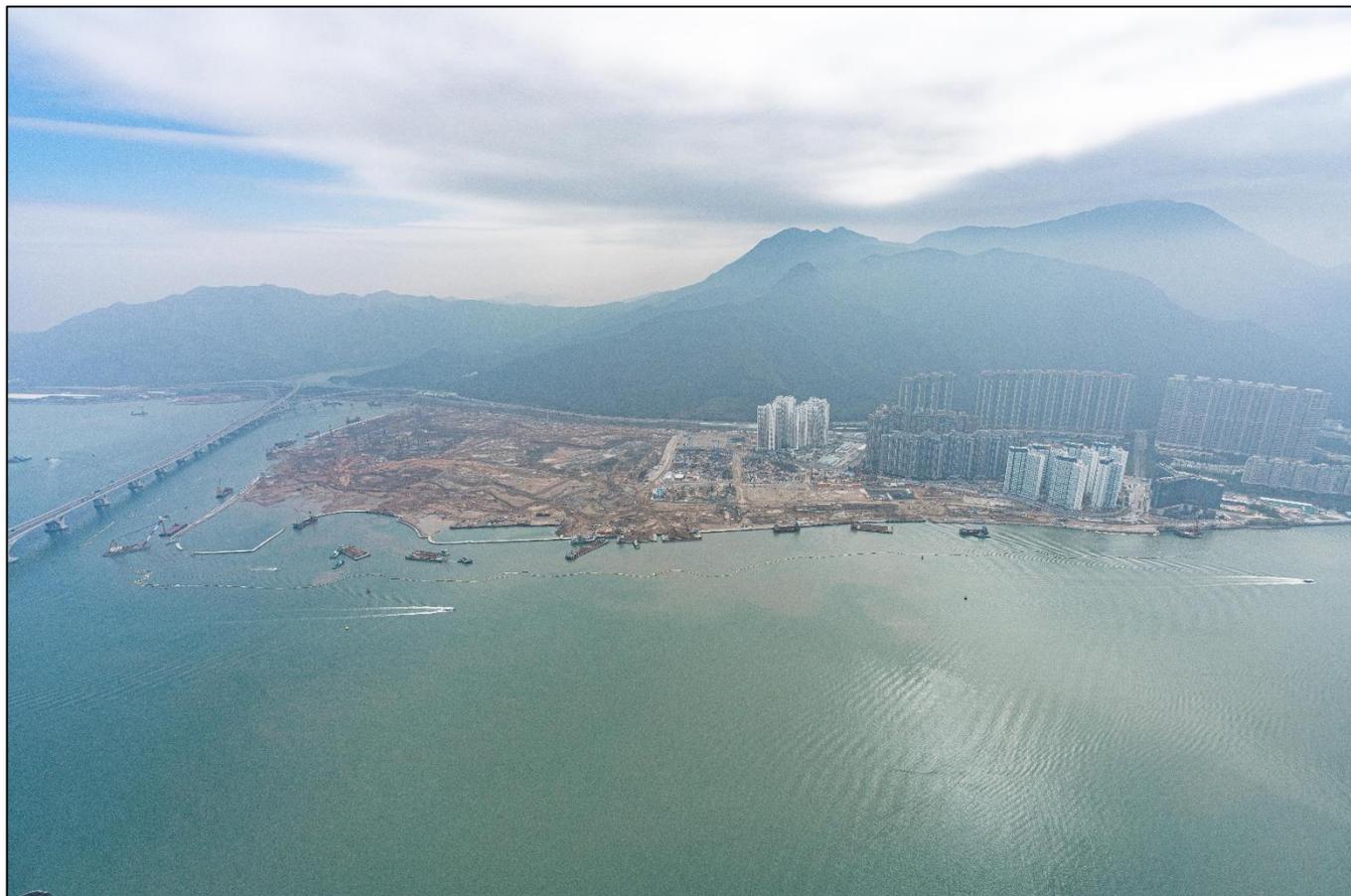
- ① 130 hectares land reclamation by non-dredged method
- ② Construction of 4.9 km seawalls partly with eco-shorelines
- ③ Construction of 470m extension of multi-cell drainage box culvert
- ④ Site formation for future development in Tung Chung Area 58

Current Progress



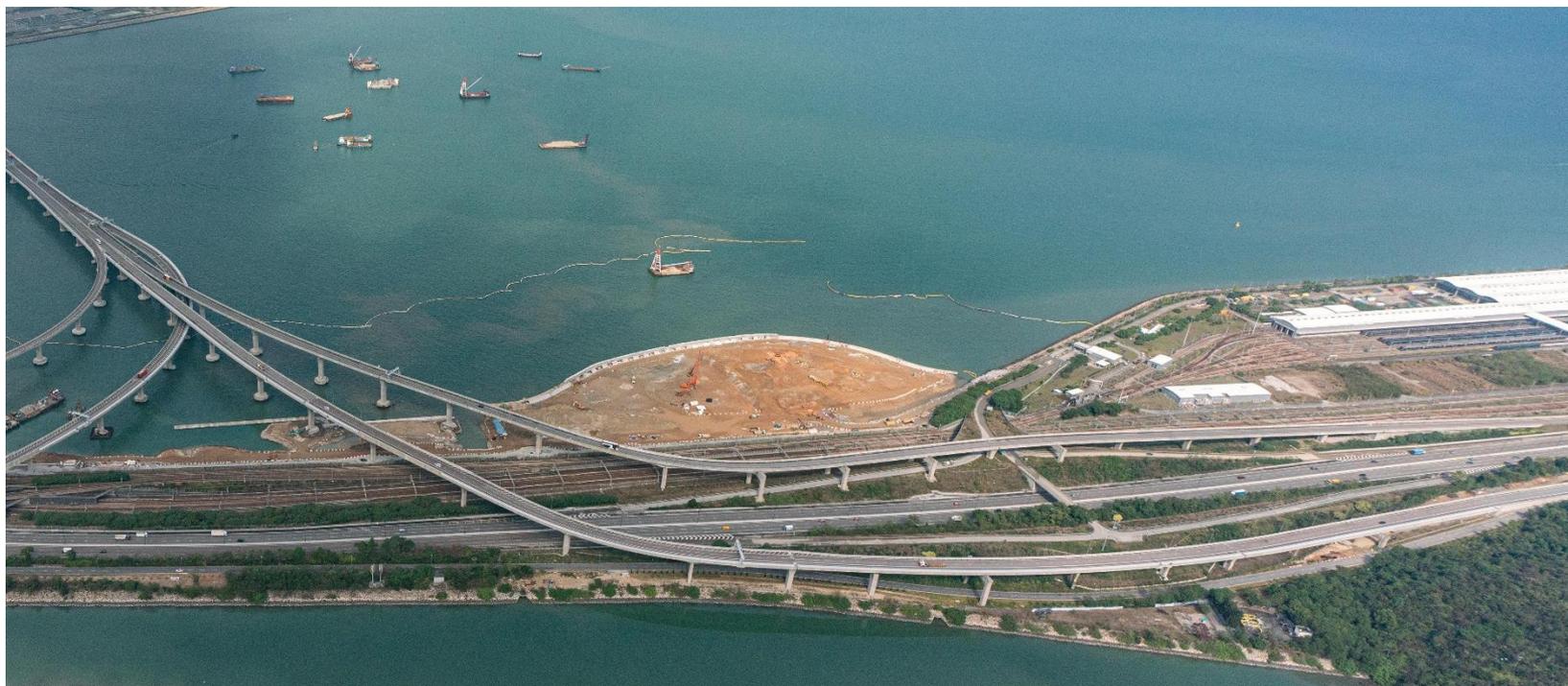
Aerial Photo

Photo taken in December 2021

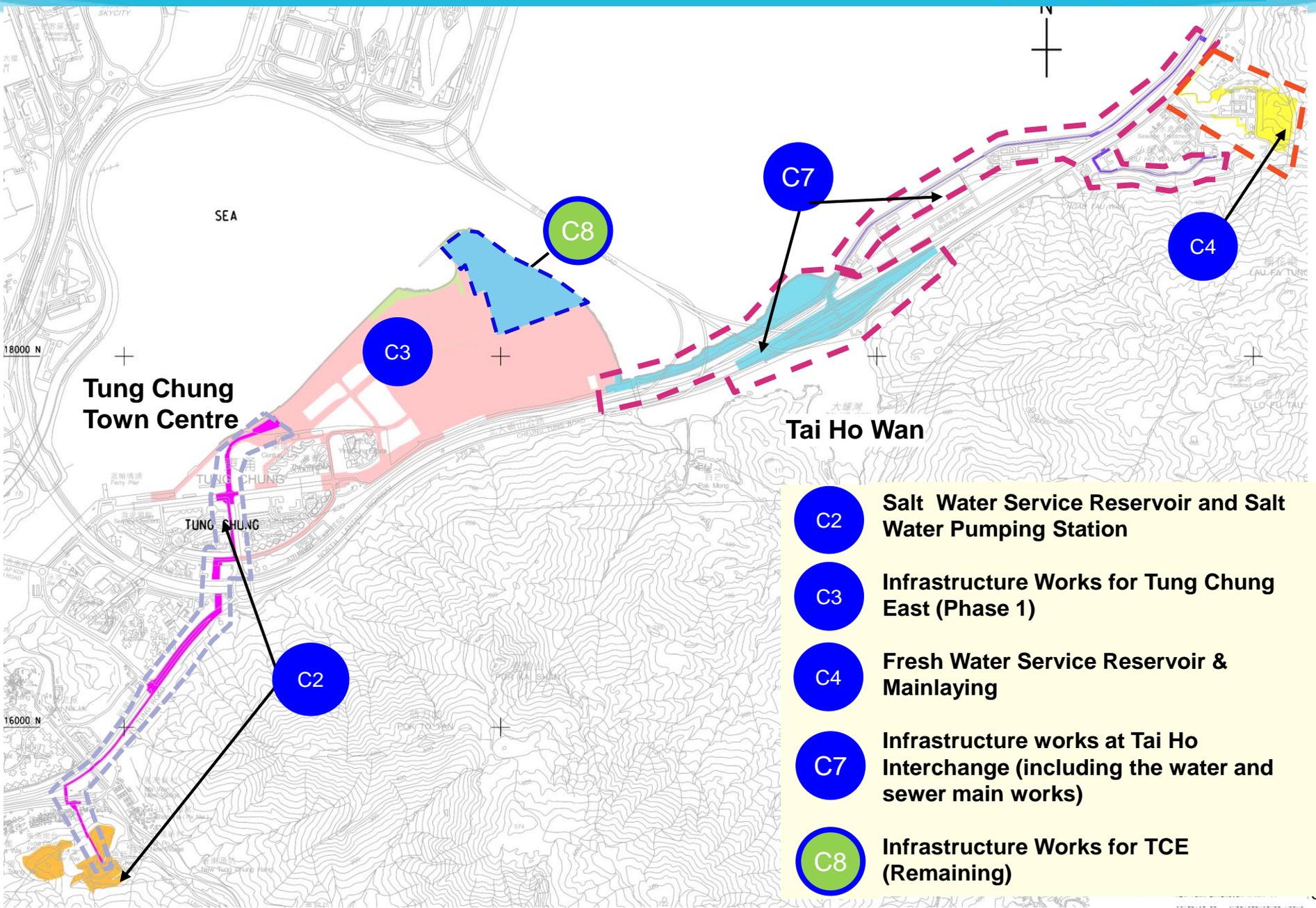


Aerial Photo

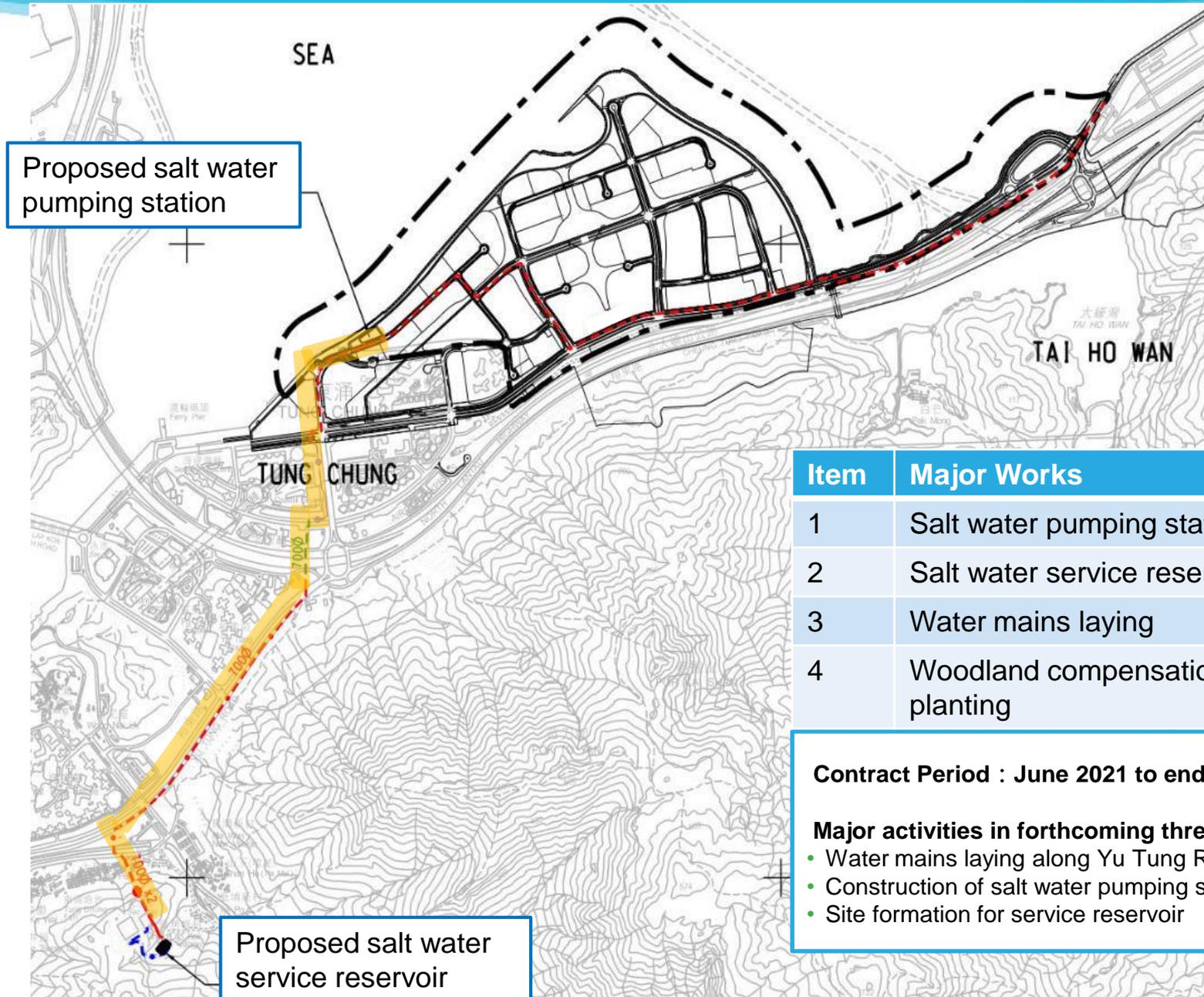
Photo taken in December 2021



Tung Chung East Infrastructure



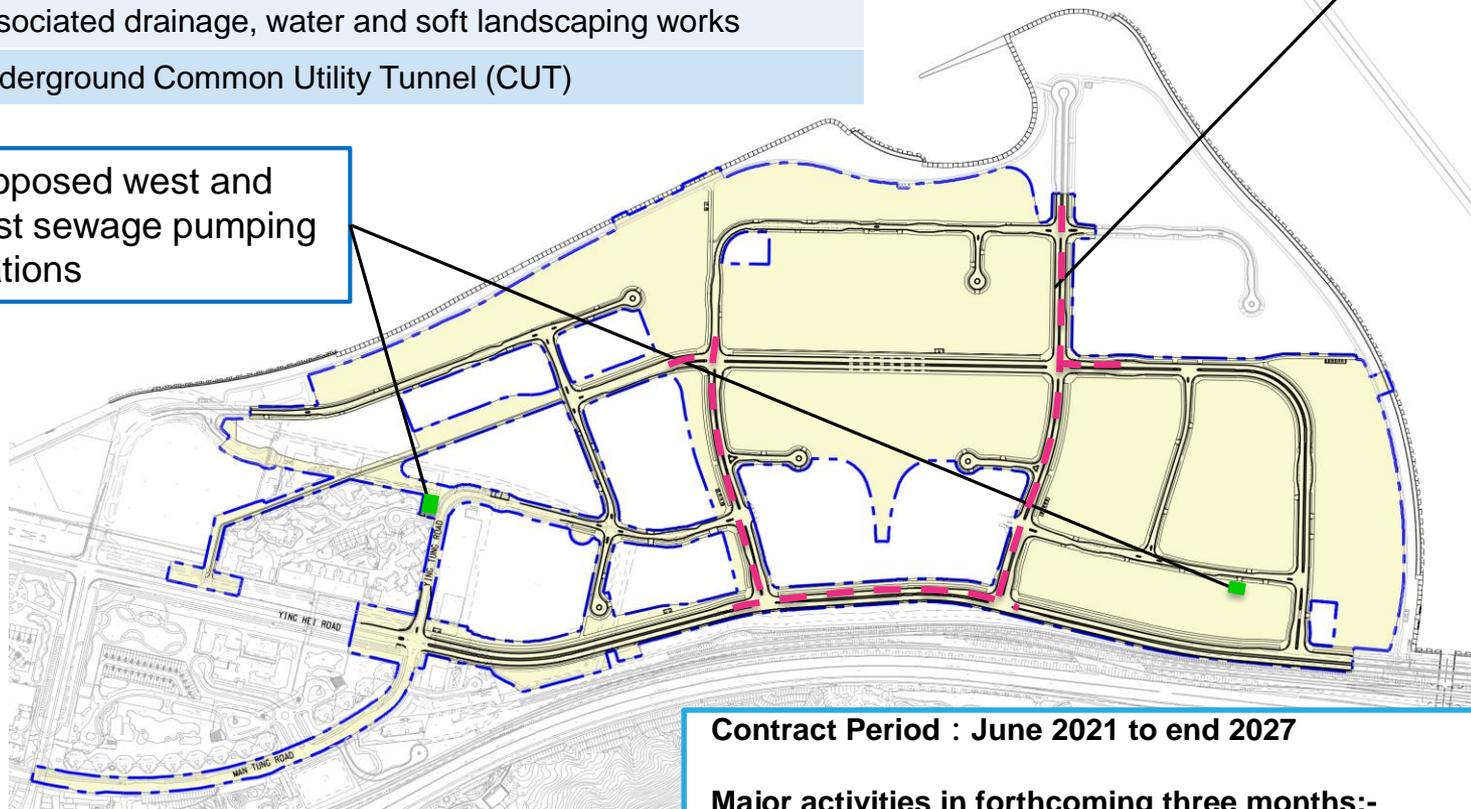
- C2** Salt Water Service Reservoir and Salt Water Pumping Station
- C3** Infrastructure Works for Tung Chung East (Phase 1)
- C4** Fresh Water Service Reservoir & Mainlaying
- C7** Infrastructure works at Tai Ho Interchange (including the water and sewer main works)
- C8** Infrastructure Works for TCE (Remaining)



Item	Major Works
1	Local road network, footpath and cycle track network
2	Road P1 connecting Tung Chung East to Pak Mong section
3	East and west sewage pumping stations
4	Associated drainage, water and soft landscaping works
5	Underground Common Utility Tunnel (CUT)

Proposed west and east sewage pumping stations

Underground Common Utility Tunnel (CUT)



Contract Period : June 2021 to end 2027

Major activities in forthcoming three months:-

- Construction of west sewage pumping station
- Construction of Common Utility Tunnel (Stage 1)
- Commence pipe laying along Man Tung Road/ Ying Tung Road

West Sewage Pumping Station (WSPS)

Construction Period
2021 Q3 to 2023 Q3

Related Works

- Construction of temp. noise barriers
- ELS installation
- R.C. structures



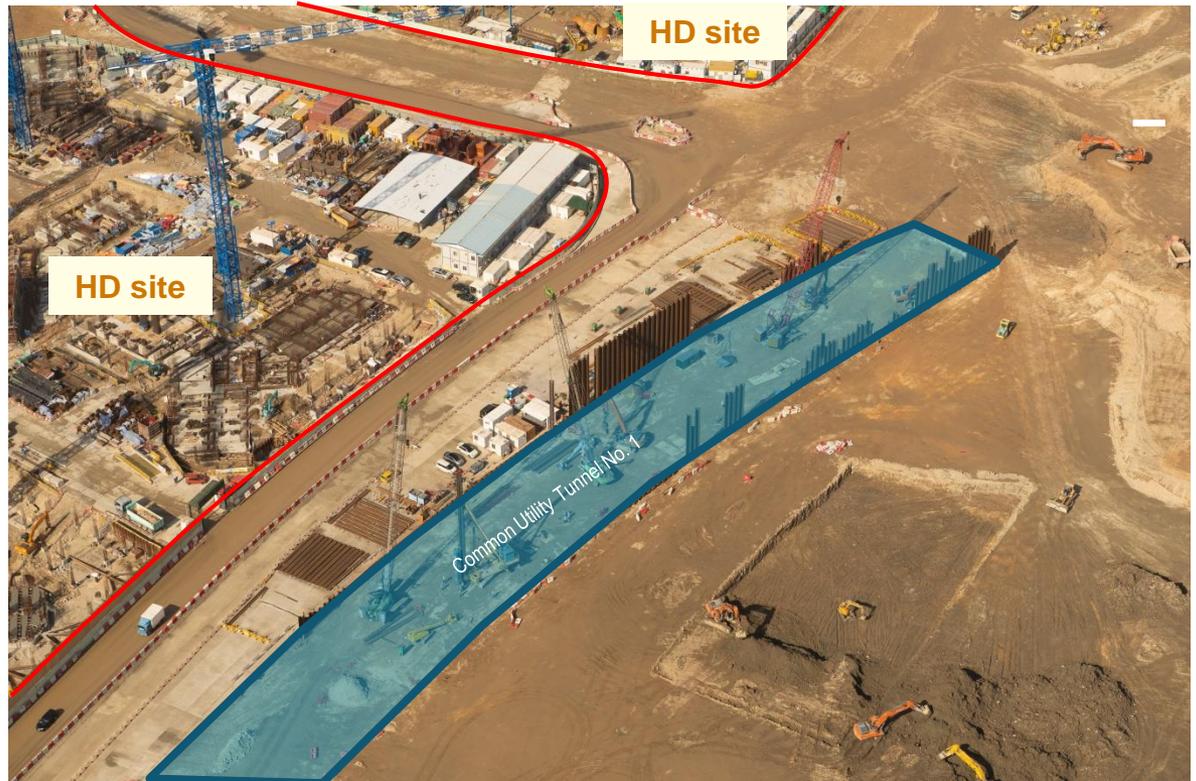
Legend	
	NL/2020/03 Site Area
	TTA on Pedestrian Road (2021 Q3 – 2023 Q1)
	Phased TTA Area (2022 Q1 – 2023 Q3)
	Drainage/Sewage Pipe Installation

Common Utility Tunnel (CUT)

Construction Period
2021 Q4 to 2023 Q3

Related Works

- ELS installation
- Underground R.C. structures

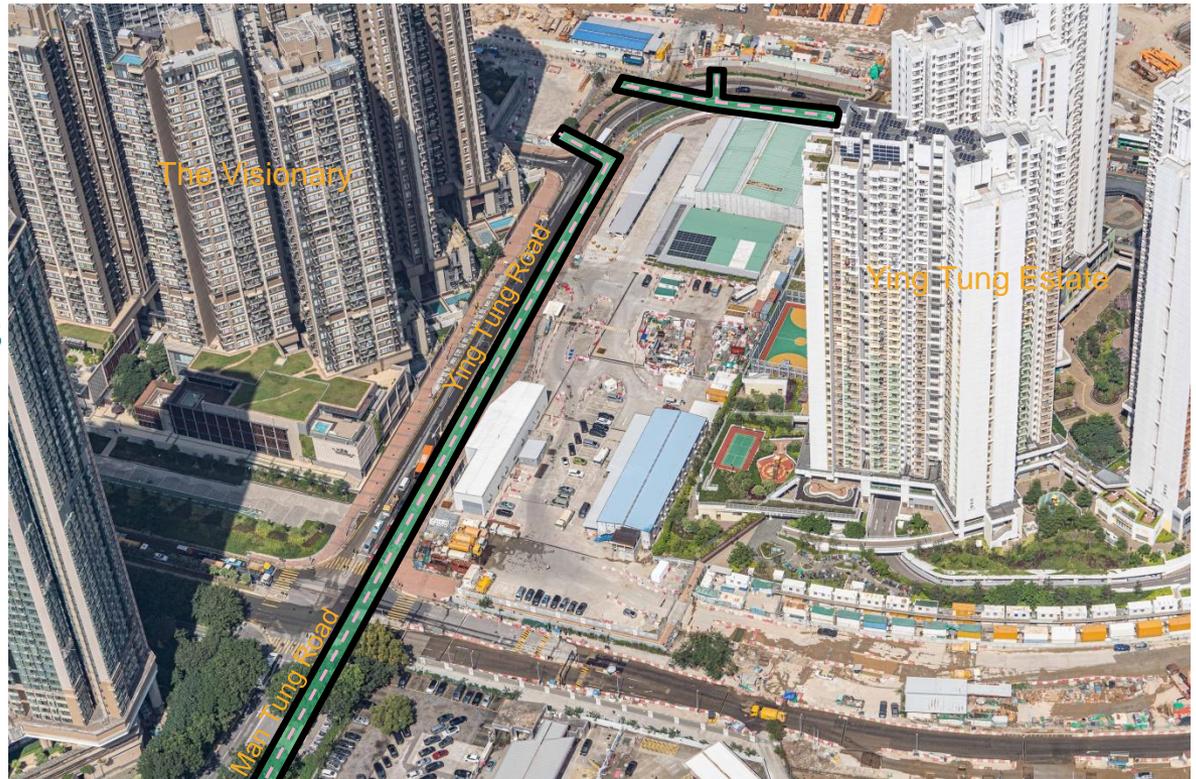


Pipe Laying Works at Ying Tung Rd and Man Tung Rd

Construction Period
2022 Q1 to 2023 Q2

Related Works

- TTA
- Construction of manholes
- Pipe laying works



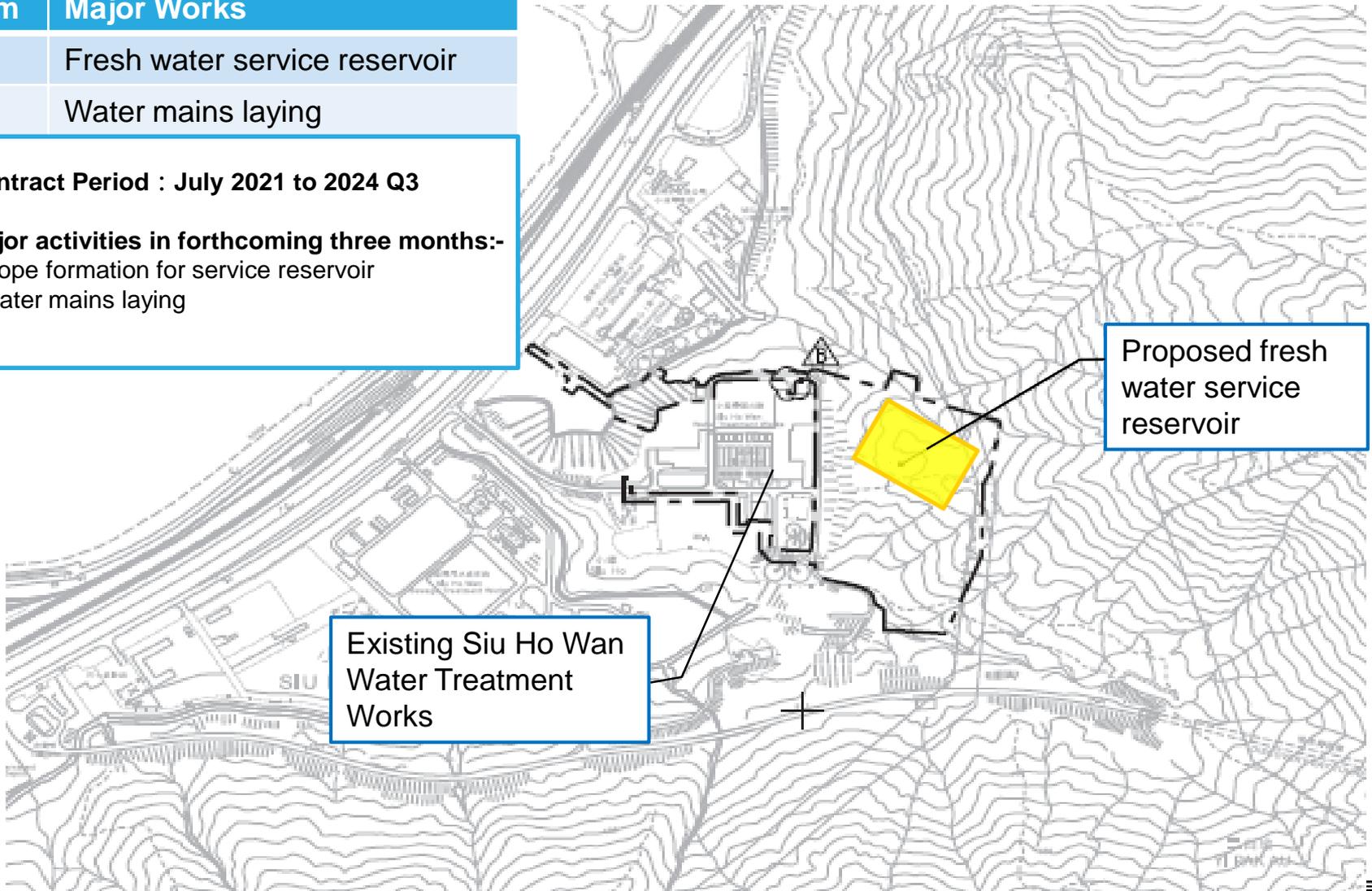
Legend	
	NL/2020/03 Site Area
	Phased TTA Area
	Drainage/Sewage Pipe Installation

Item	Major Works
1	Fresh water service reservoir
2	Water mains laying

Contract Period : July 2021 to 2024 Q3

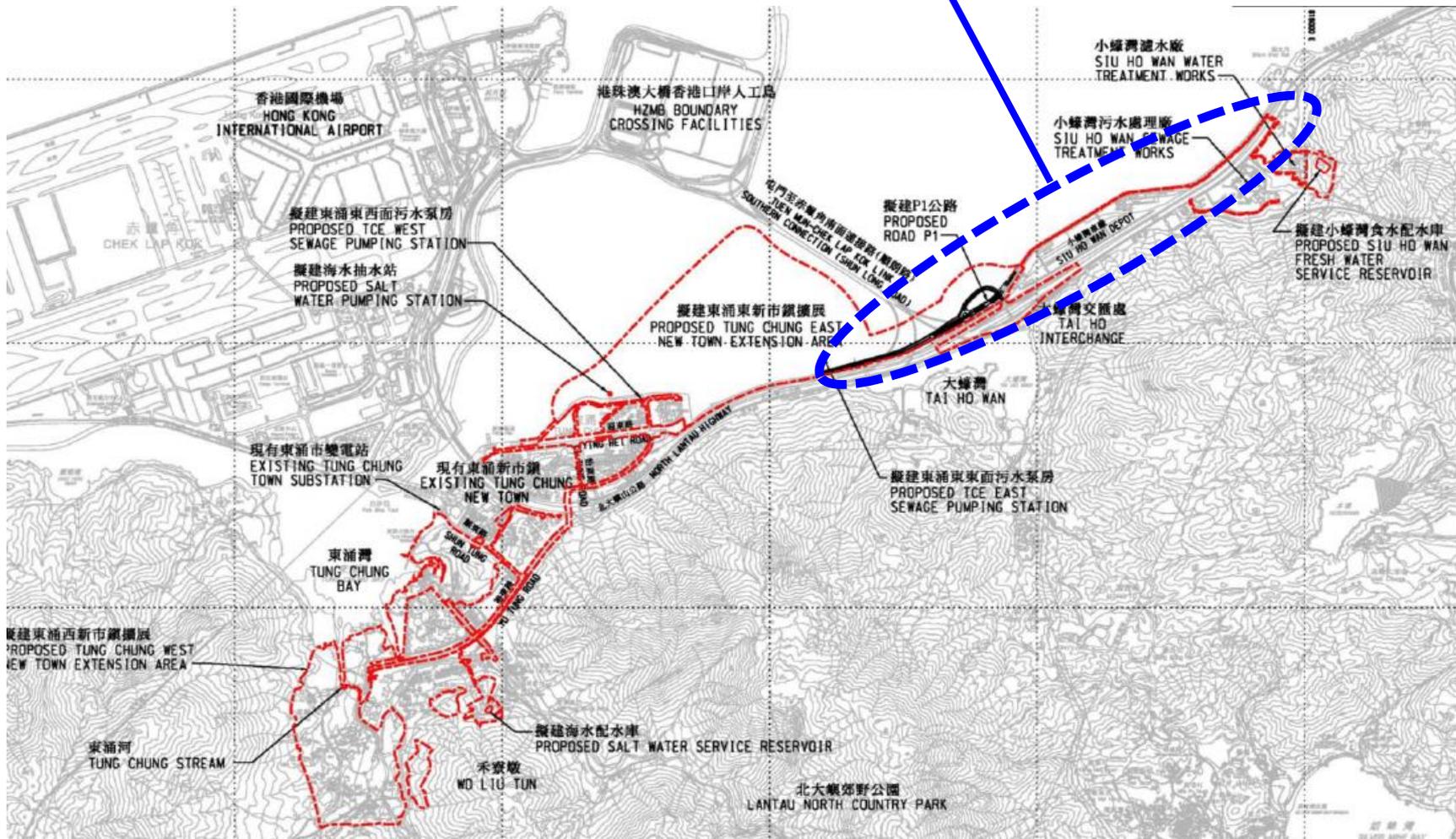
Major activities in forthcoming three months:-

- Slope formation for service reservoir
- Water mains laying

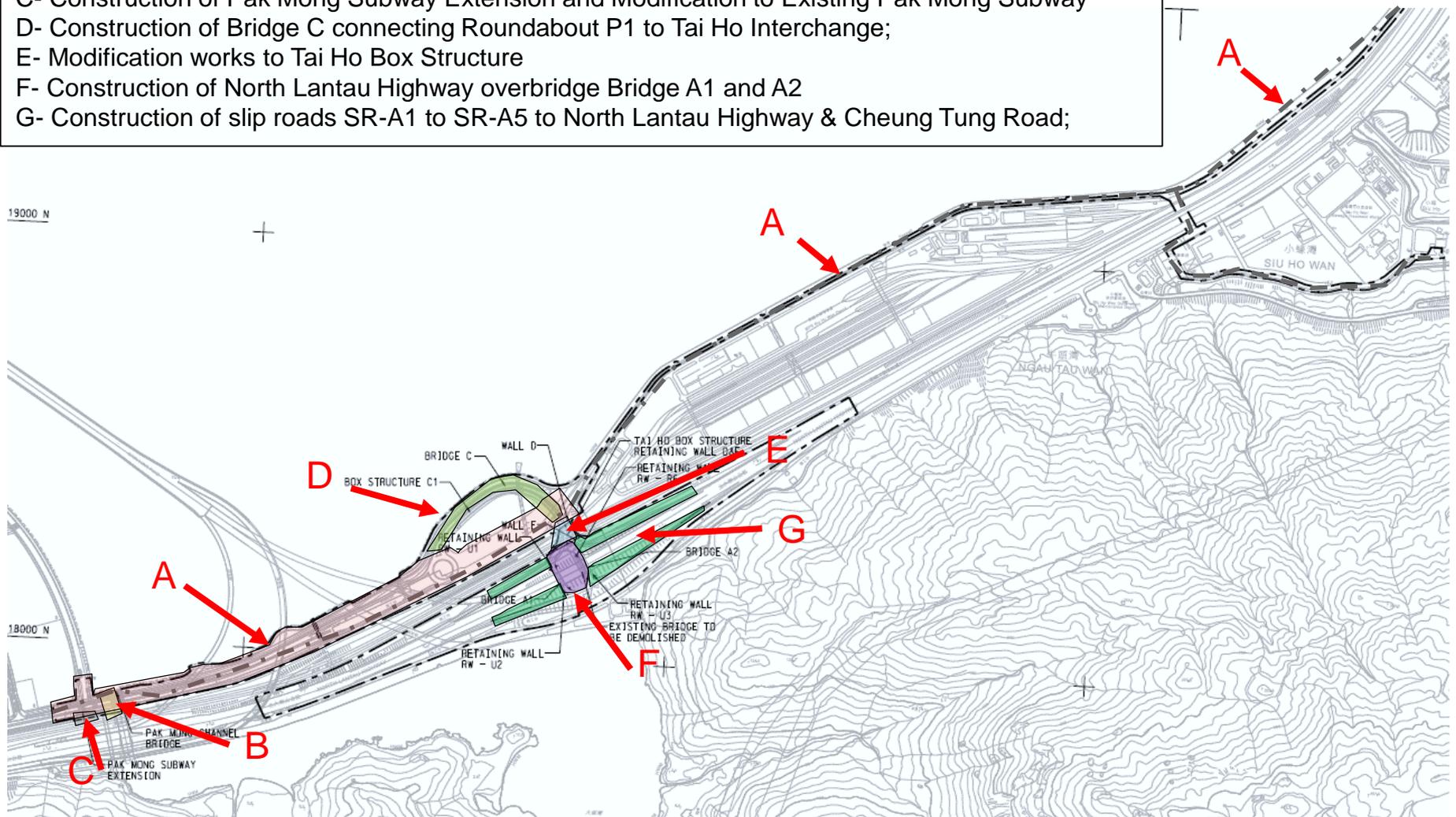


Site Location

NL/2020/07



- A- Construction of around 4km of road, drainage, sewerage, watermains and utilities respectively;
- B- Construction of Pak Mong Channel Bridge
- C- Construction of Pak Mong Subway Extension and Modification to Existing Pak Mong Subway
- D- Construction of Bridge C connecting Roundabout P1 to Tai Ho Interchange;
- E- Modification works to Tai Ho Box Structure
- F- Construction of North Lantau Highway overbridge Bridge A1 and A2
- G- Construction of slip roads SR-A1 to SR-A5 to North Lantau Highway & Cheung Tung Road;



Newsletter Issues

東涌新市鎮擴展—填海及前期工程
LUNG CHUNG NEW TOWN EXTENSION—RECLAMATION AND ADVANCE WORKS

第十三期通訊
NEWSLETTER SS, E NO. 13

2021•08

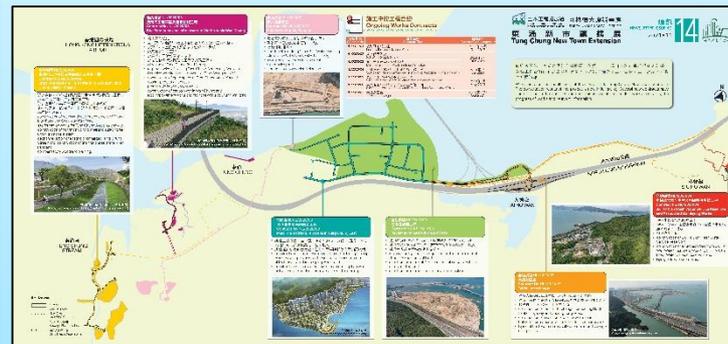
數碼分身技術
Digital Twin Technology

為達此目標，填海及前期工程處與創新中心(Inno-TCE)合作，計劃於東涌填海工程建設智慧填海工程。Inno-TCE設有智慧填海數據分析與模擬平台，透過物聯網和地理資訊系統等技術，將填海工程數據與智慧填海平台連接，向填海工程人員提供數據及資訊，以協助填海工程人員進行填海工程。填海工程人員可透過智慧填海平台，即時掌握填海工程進度，並可透過智慧填海平台，即時掌握填海工程進度，並可透過智慧填海平台，即時掌握填海工程進度。

Findings the initiatives of Inno-TCE, the Tung Chung East project team has established an Innovation Hub at the Tung Chung East reclamation works. Inno-TCE aims to speed up the reclamation works by developing a smart construction solution for reclamation management. The Intelligent Management Platform in the Inno-TCE adopts the latest Digital Twin technology. Through the application of Internet of Things sensors and wireless connectivity, construction activities at the site could be captured and recorded on the Intelligent Management Platform. With this, the project team can monitor the real-time information of the construction site or making any site-related decisions at the convenience of mobile devices. It is a handy platform to help the daily management, no laborer is required to report the site information to daily supervisors.

東涌填海工程智慧填海中心
Innovation Hub – Inno-TCE of the Tung Chung East reclamation works

工程師利用智慧填海分身技術即時掌握填海工程進度，作出填海工程決定。
The latest Digital Twin technology allows the construction team to monitor the entire construction site in real-time for making timely and accurate decisions.



To take note of
construction
progress

2. Tung Chung East

c) Environmental Monitoring and Audit

Dedicated Website under EP-519/2016



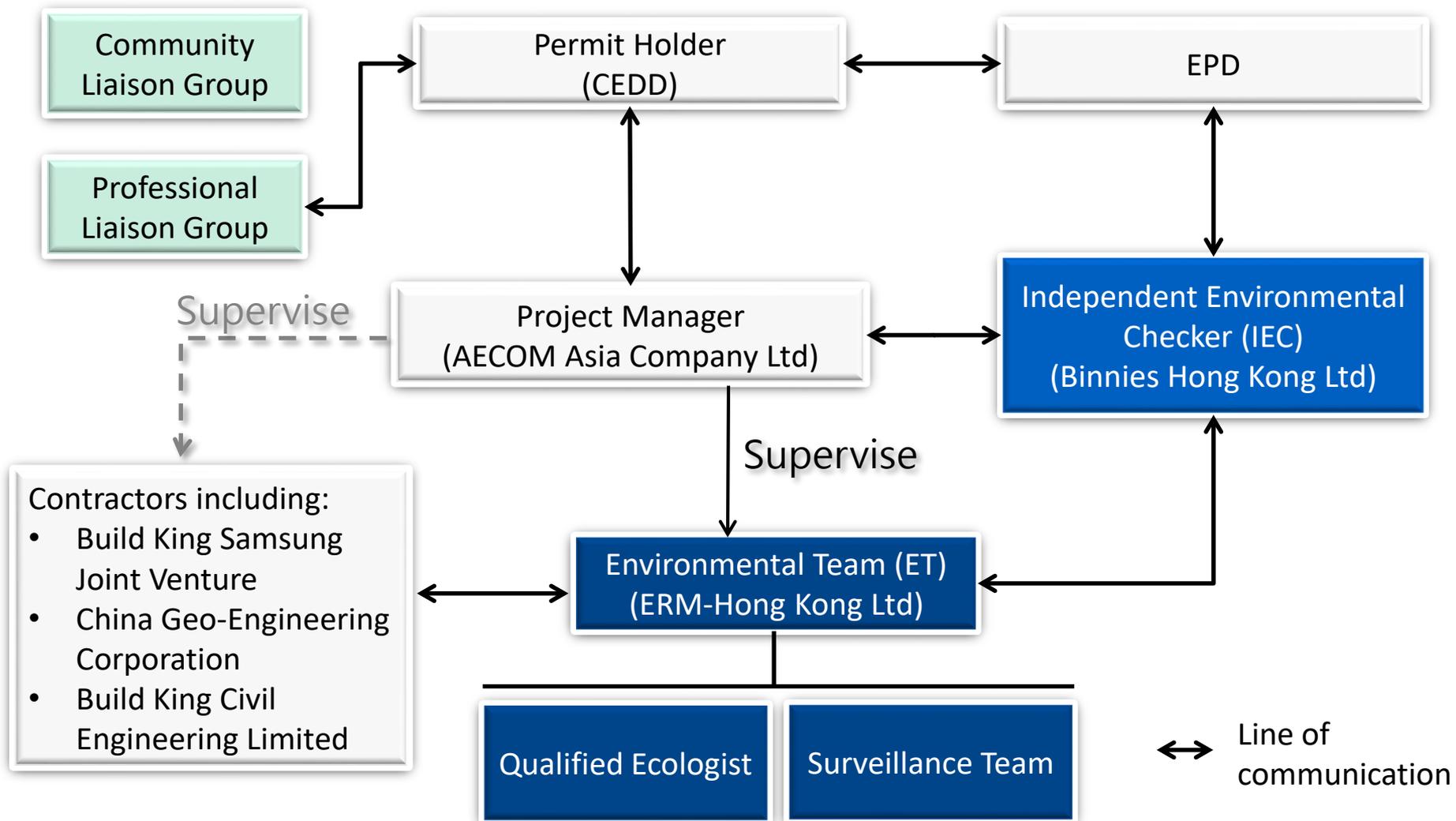
Website: <http://env.tcnte.hk/index-TCE.html>



Tung Chung New Town Extension (East)

This dedicated website is set up in accordance with the requirements in the Environmental Permit (EP) (EP NO. EP-519/2016) to enable user-friendly public access of information of the Tung Chung New Town Extension (East) and the associated environmental monitoring data.

EM&A Management Organization



Protection and Mitigation Measures on Construction Activities



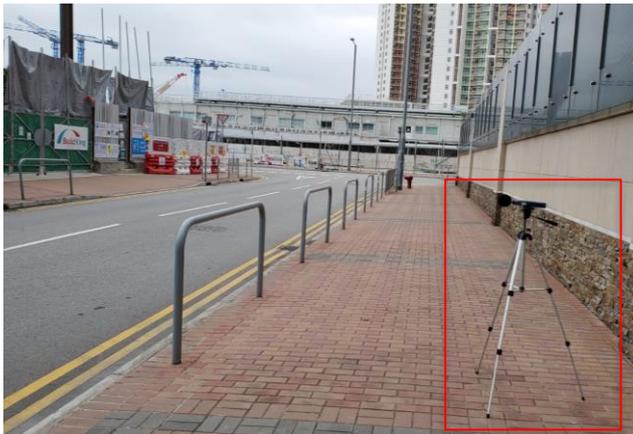
Water spraying by water truck for dust control



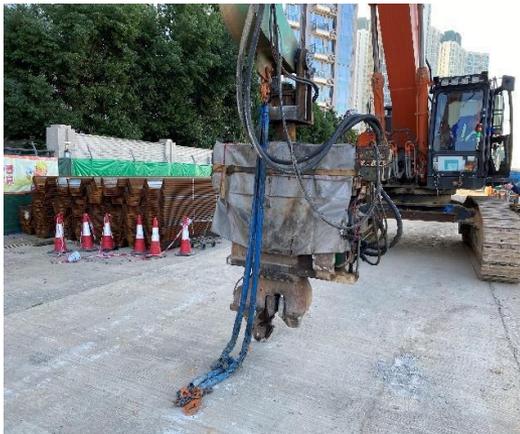
Dark smoke inspection using Micro-Ringelmann Chart



Noise damper



Noise monitoring



Noise mitigation measures on sheet piling works



Noise barrier

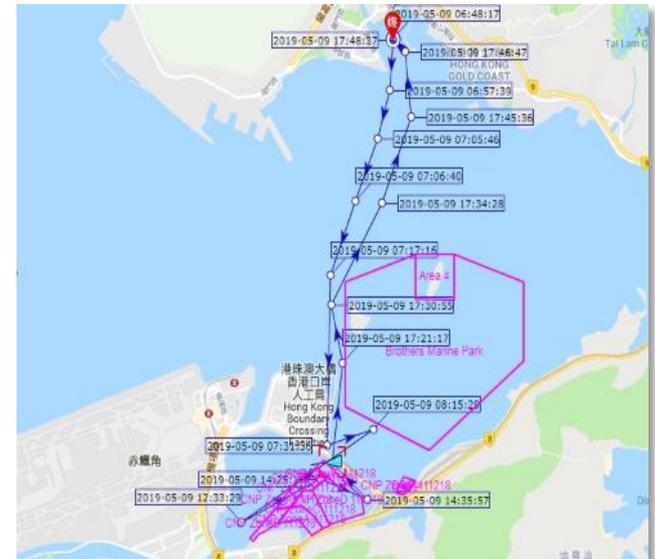
Protection and Mitigation Measures on Construction Activities



Maintenance of
perimeter silt curtain

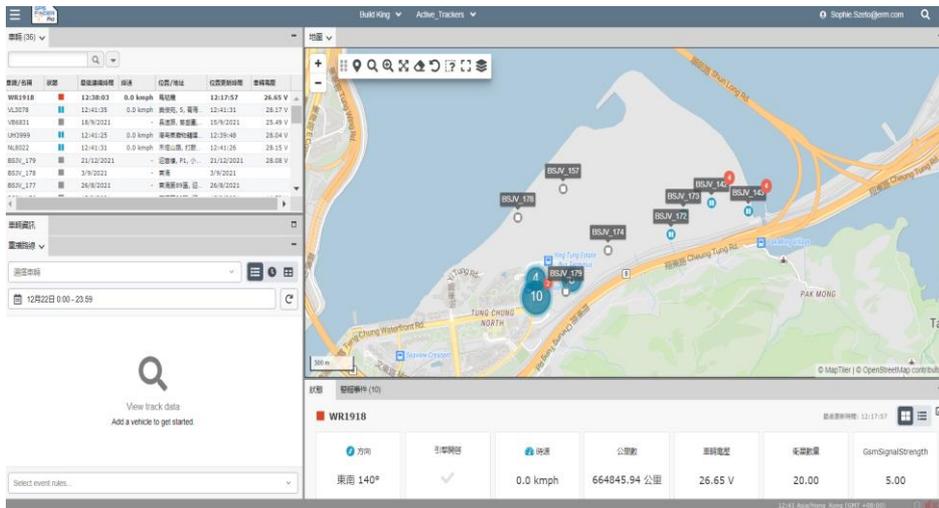


Water quality monitoring

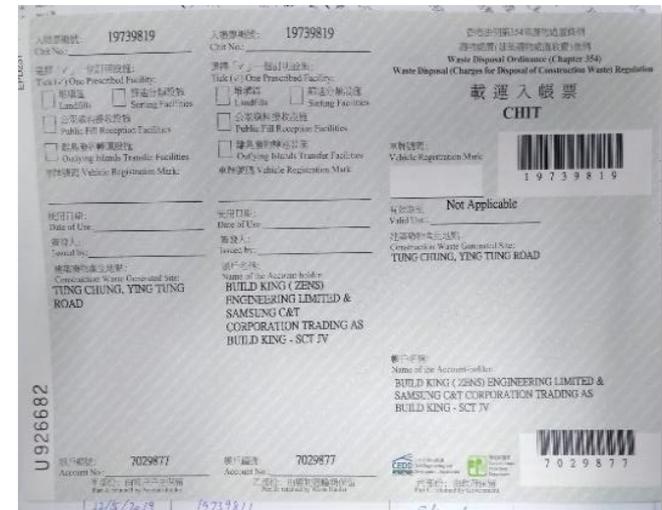


Tracking and Speed control of
works vessels

Protection and Mitigation Measures on Construction Activities



Real time tracking and monitoring system for dump trucks



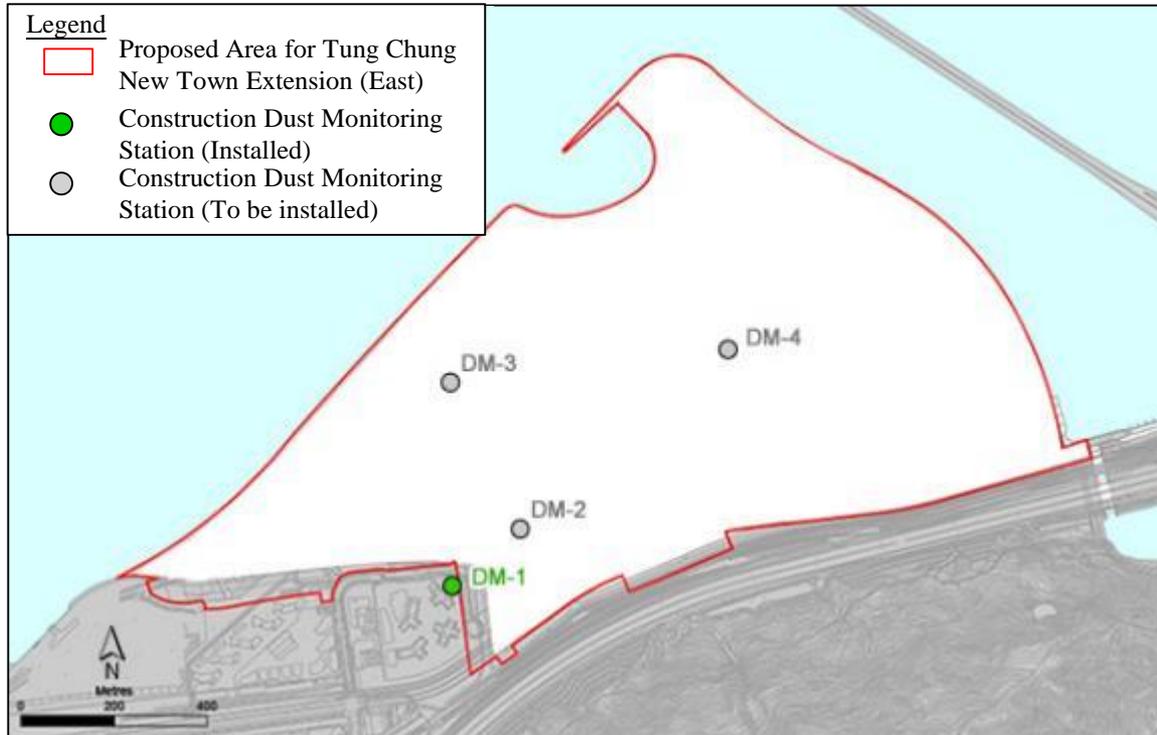
Trip ticket for waste control

EM&A Monitoring – Air Quality



Air Quality Monitoring

Frequency Three times every six days
Monitoring Parameter 1-hour Total Suspended Particulate



Monitoring Results between Jul 2021 and Dec 2021

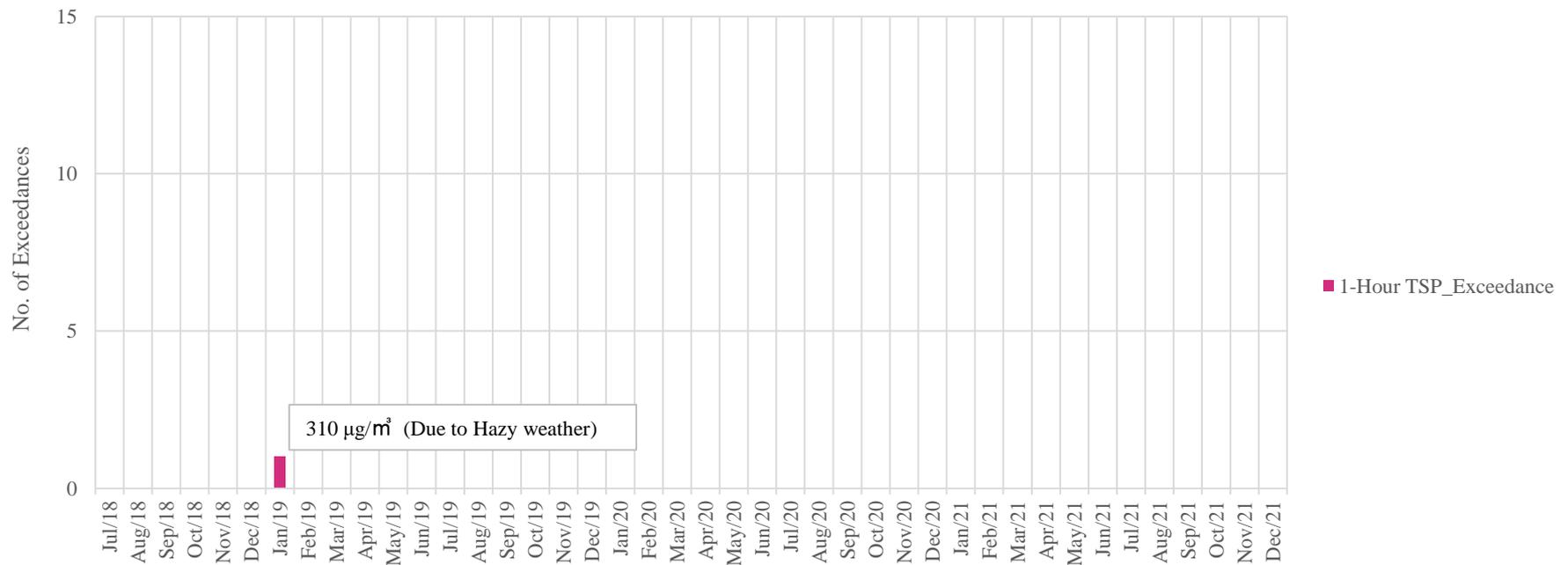
No project-related exceedance was recorded.



Dust monitoring near Ying Tung Estate (DM-1)

EM&A Monitoring – Air Quality

Tung Chung New Town Extension
1-Hour TSP Exceedance Record of Air Quality Monitoring



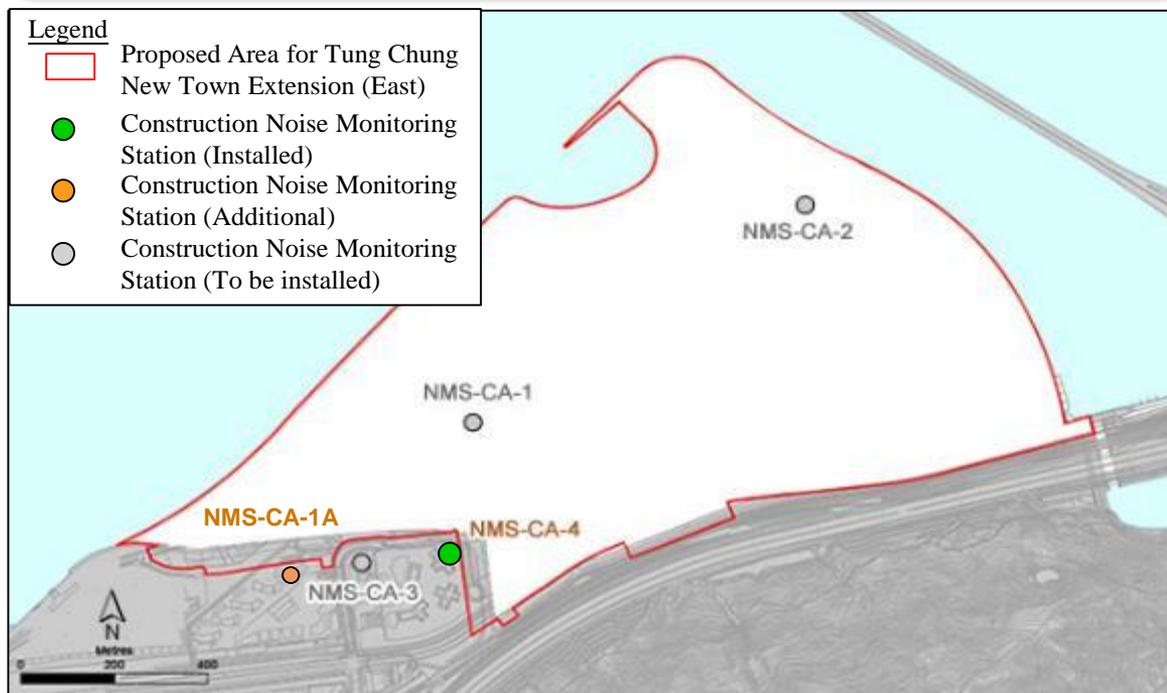
EM&A Monitoring – Noise



Noise Monitoring

Frequency Once per week

Monitoring Parameter L_{eq} (30mins)



Monitoring Results between Jul 2021 and Dec 2021

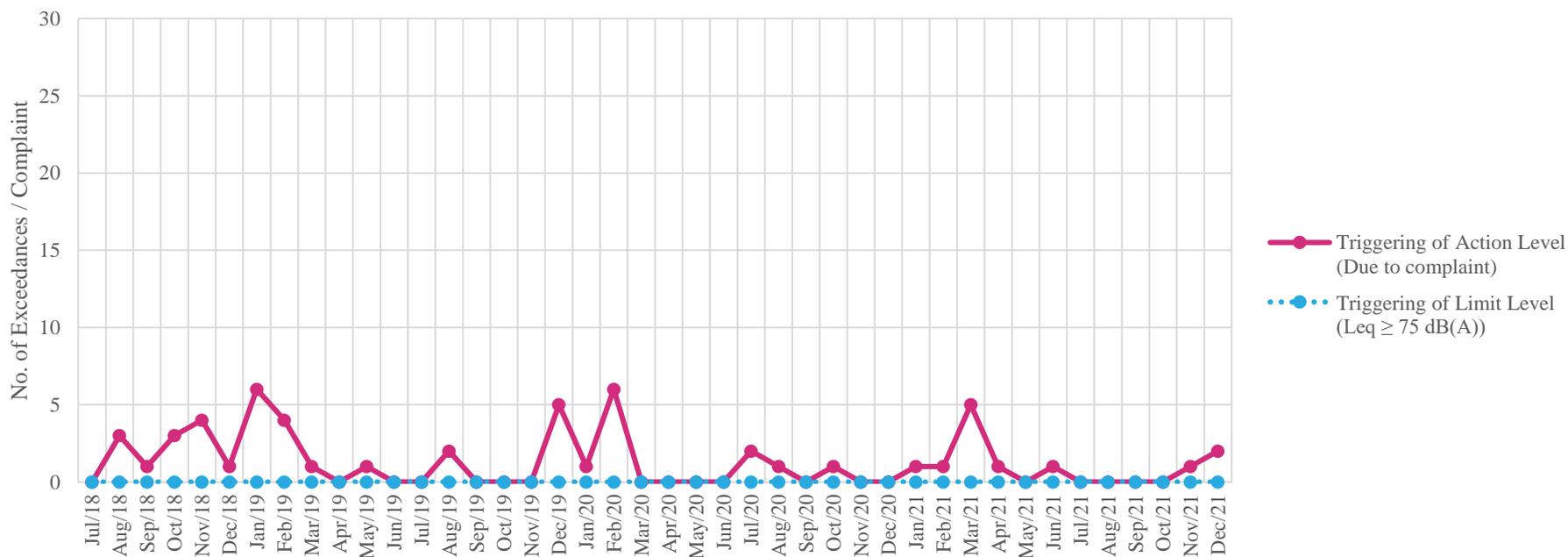
Results of noise monitoring indicated that noise levels were within acceptable level (75dBA)



Noise monitoring near Ying Tung Estate (NMS-CA-4)

EM&A Monitoring – Noise

Tung Chung New Town Extension
Exceedance / Complaint Record of Noise Monitoring



EM&A Monitoring – Water Quality



Water Quality Monitoring

Frequency 3 times per week, at mid-flood & mid-ebb tides
Monitoring Parameter Dissolved Oxygen, pH Value, Salinity, Turbidity, Suspended Solids, Temperature



Monitoring Results between Jul 2021 and Dec 2021

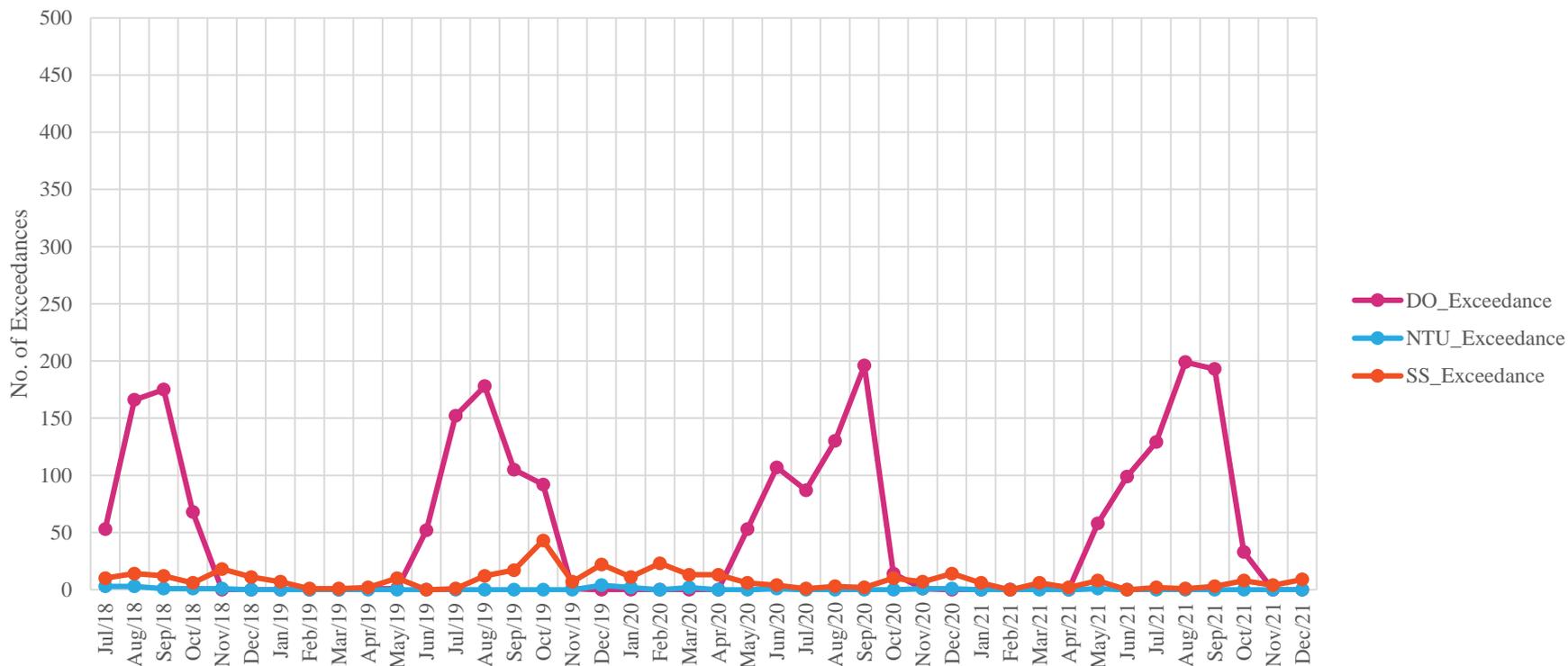
No project-related exceedance was recorded.



Water monitoring by ET (TCE-WQM2b)

EM&A Monitoring – Water Quality

Tung Chung New Town Extension Exceedance Record of Water Quality Monitoring



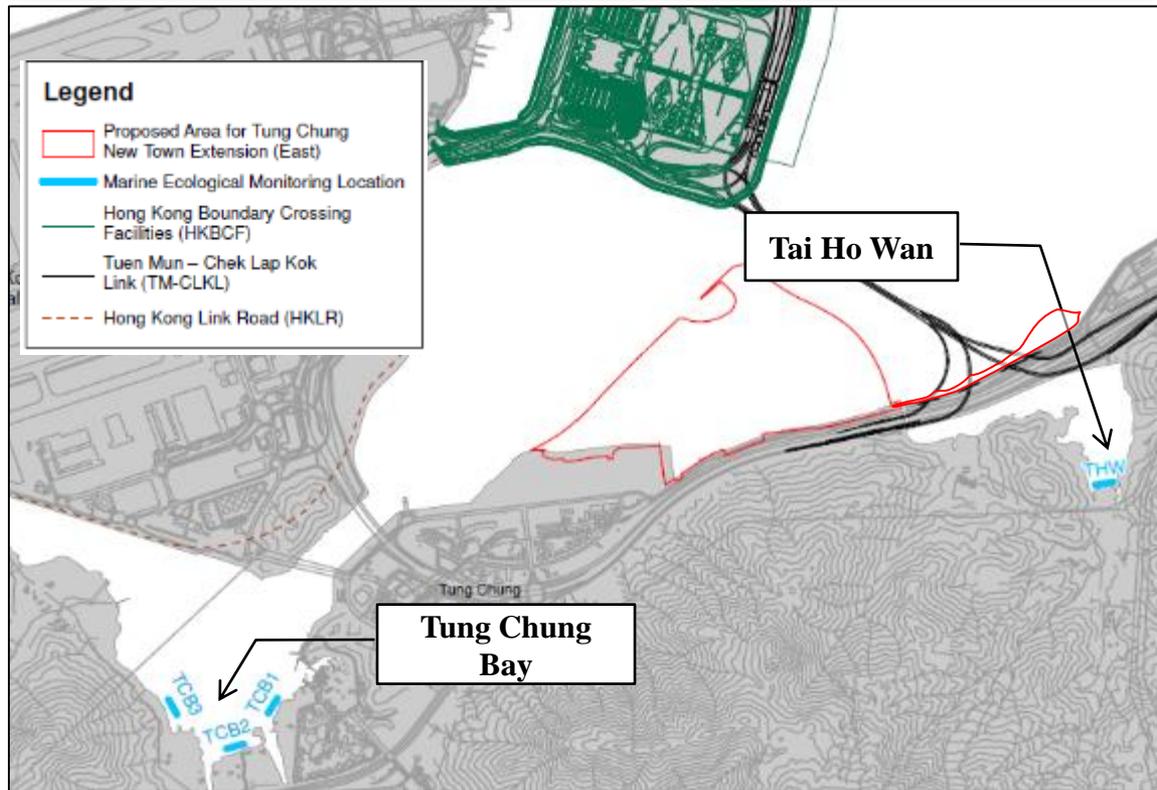
The majority exceedances recorded were DO exceedances. Low levels of DO were recorded during summer period. This trend suggested the changes should be due to seasonal fluctuation.

EM&A Monitoring – Ecology



Ecological Monitoring

Frequency	Quarterly
Monitoring Parameter	Horseshoe Crabs, Seagrass, Intertidal Soft Shore Communities



Monitoring Results between Sep 2021 and Dec 2021

Ecological monitoring was conducted in Dec 2021.

Horseshoe crabs were found in both Tung Chung Bay and Tai Ho Wan.

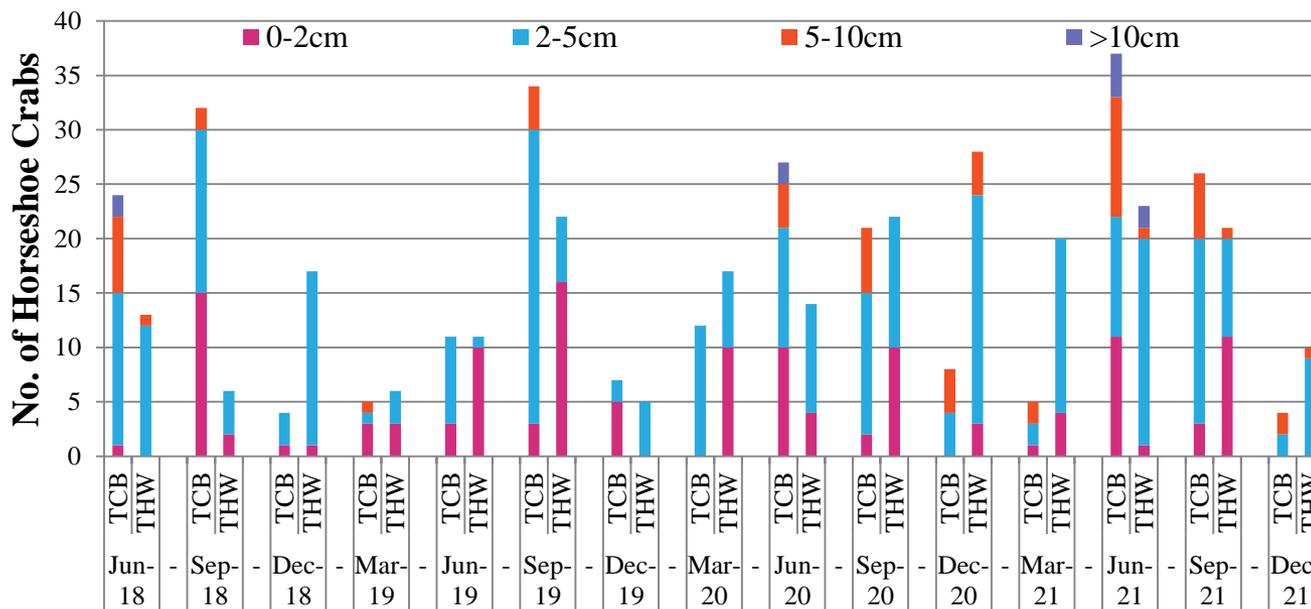


Juvenile *Tachypleus tridentatus* found at Tung Chung Bay

Horseshoe Crab

- Numbers of horseshoe crabs varied over time and were generally higher in summer period (May – Sep)
- Small juvenile horseshoe crabs (prosomal width <2 cm) were recorded during all impact monitoring since Sep 2018

Size (Prosomal Width) of Horseshoe Crabs



Baseline
(May-Jun 18)



Recorded at Tung Chung Bay

Complaint received

Date	Water	Air	Noise	Others (Light, Waste, Ecology)
Jul 18 – Dec 18	2	1	12	4
Jan 19 – Jun 19	4	4	12	2
Jul 19 – Dec 19	1	4	7	0
Jan 20 – Jun 20	1	6	7	0
Jul 20 – Dec 20	4	24	4	0
Jan 21 – Jun 21	3	10	9	0
Jul 21 – Dec 21	1	1	3	0
Categories for recent complaints	<ul style="list-style-type: none"> Sea pollution (Discharge) 	<ul style="list-style-type: none"> Dust Dark smoke 	<ul style="list-style-type: none"> Noise from Sheet pile installation Noise early at the morning 	



土木工程拓展署
Civil Engineering and
Development Department



ARUP

Overview and Progress

Environmental Monitoring and Audit

Tung Chung West

6th PLG Meeting

Date: 17 January 2022



土木工程拓展署
Civil Engineering and
Development Department



ARUP

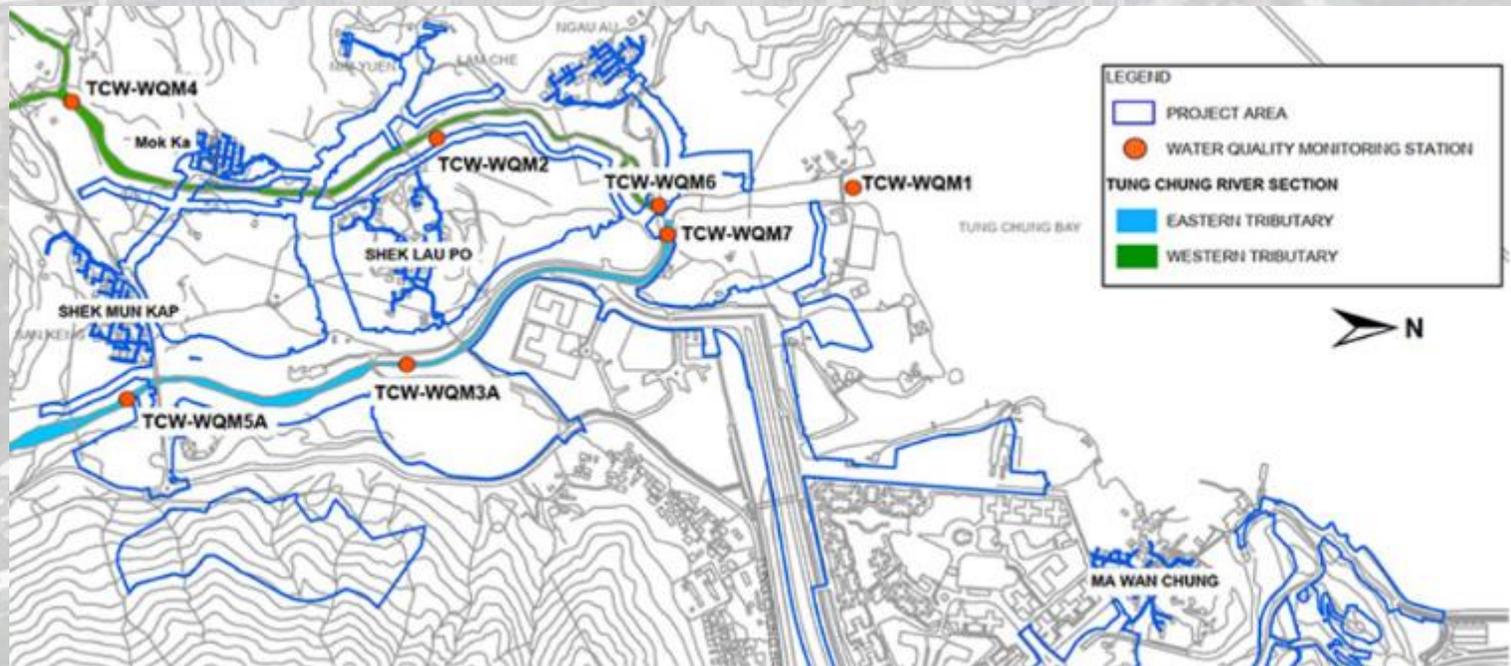
Tung Chung West

a) Matters Arising from Last Meeting

Follow Up on Discussion in Last PLG Meeting

1. Stream Water Monitoring Programme (para. 5.2.1 of notes of last meeting)

- Conductivity measurement as an indicator of the nutrient level in the stream water has been included in both baseline and construction impact monitoring.



Turbidity (NTU)	Conductivity ($\mu\text{S}/\text{cm}$)	SS (mg/L)
2.7	71	0.5
2.7	70	0.6
2.9	59	<0.5

Follow Up on Discussion in Last PLG Meeting

2. Presence of Invasive Species in Tung Chung Stream (para. 5.2.4 of notes of last meeting)

- The following exotic fish species were recorded in Tung Chung stream during the baseline monitoring. As all these species are not uncommon and well established in Hong Kong river, their population will be kept in view during the impact monitoring.

Common Name	中文名	Species name
Swordtail	劍尾魚	<i>Xiphophorus hellerii</i>
Variable Platyfish	雜色劍尾魚	<i>Xiphophorus variatus</i>
Mosquito Fish	食蚊魚	<i>Gambusia affinis</i>
Redbelly Tilapia	齊氏非鯽	<i>Coptodon zillii</i>



土木工程拓展署
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Development Department



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Tung Chung West

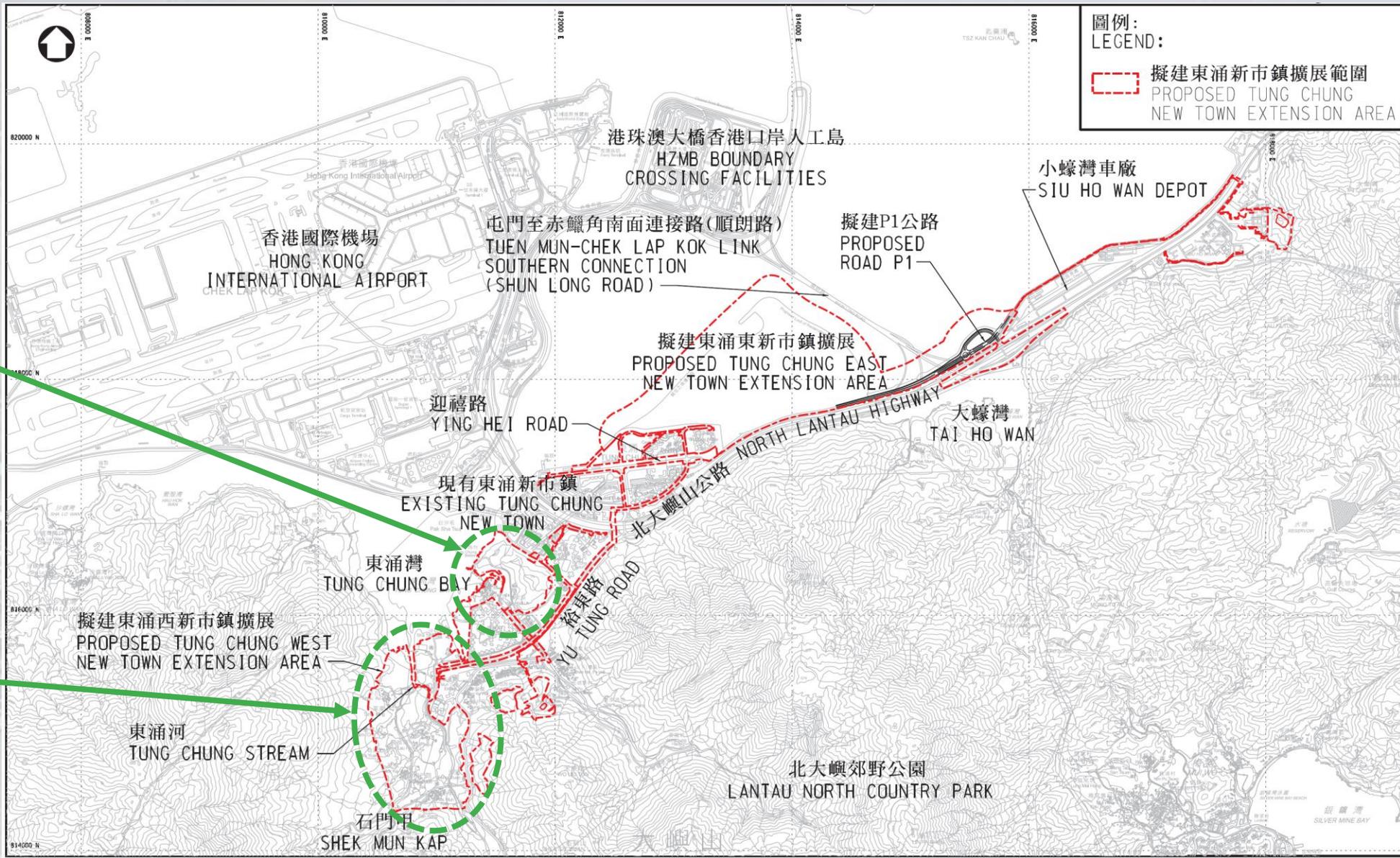
b) Overview and Progress



Location of Tung Chung West Works Contracts

Contract No. NL/2020/05 – Site Formation and Infrastructure Works at Ma Wan Chung

Contract No. NL/2020/06 – Site Formation and Infrastructure Works at Tung Chung Valley, Phase 1



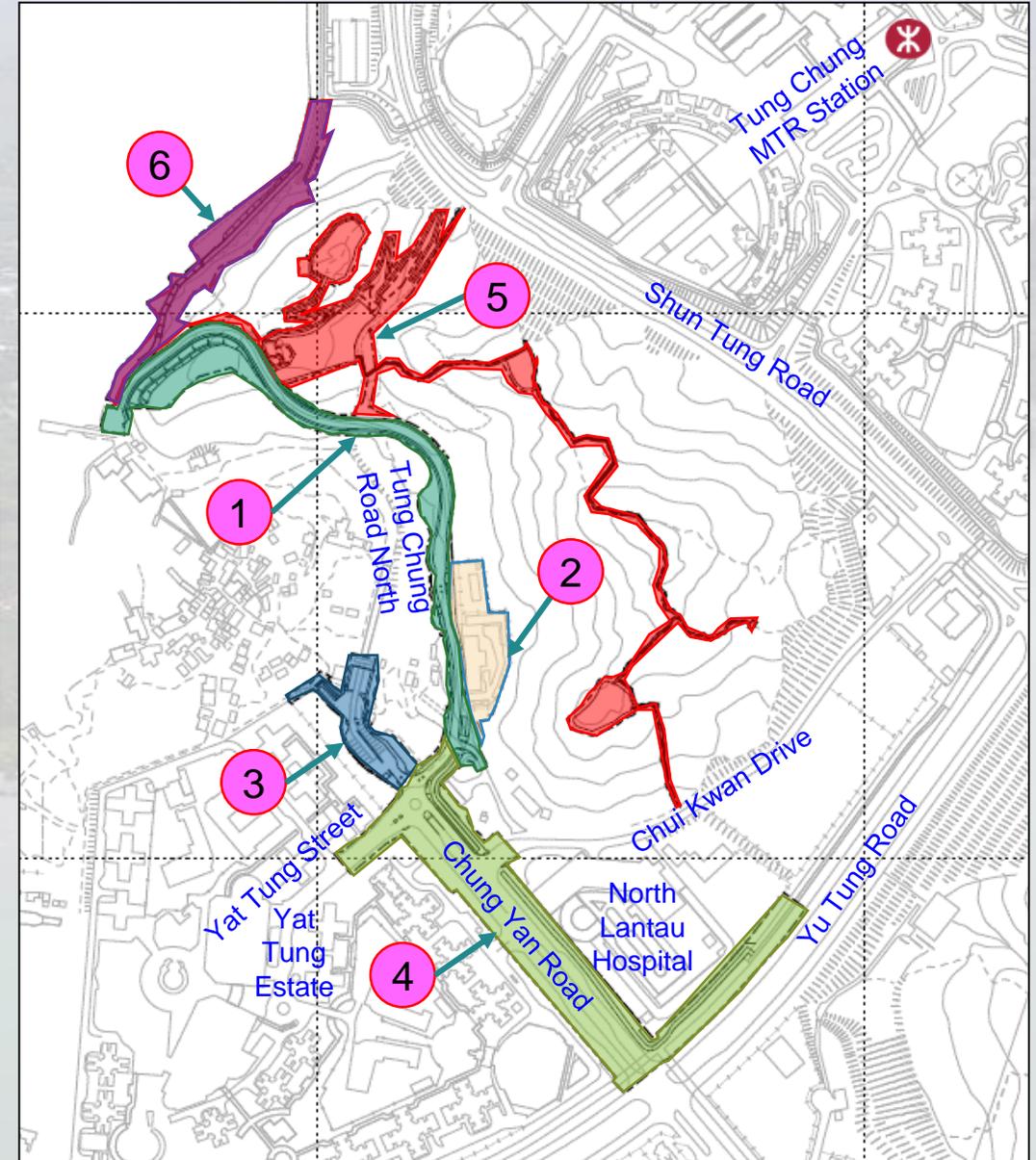
Contract No. NL/2020/05 – Site Formation & Infrastructure Works at Ma Wan Chung

Item	Major Works
1	Widening of Tung Chung Road North
2	Site Formation of Area 23
3	Construction of Carpark at Ma Wan Chung
4	Road Improvement Works and Drainage Works at Chung Yan Road
5	Construction of Open Space at Area 29A
6	Construction of the Coastal Pedestrian Access

Contract Period : May 2021 to January 2025

Major activities in coming three months :-

- Archaeological survey
- Construction of Ma Wan Chung Carpark
- Slope works and pipe laying works along Tung Chung Road North
- Site formation works at Area 23
- Ground investigation works and site formation works for Town Park at Area 29A
- Ground investigation works at Coastal Pedestrian Access



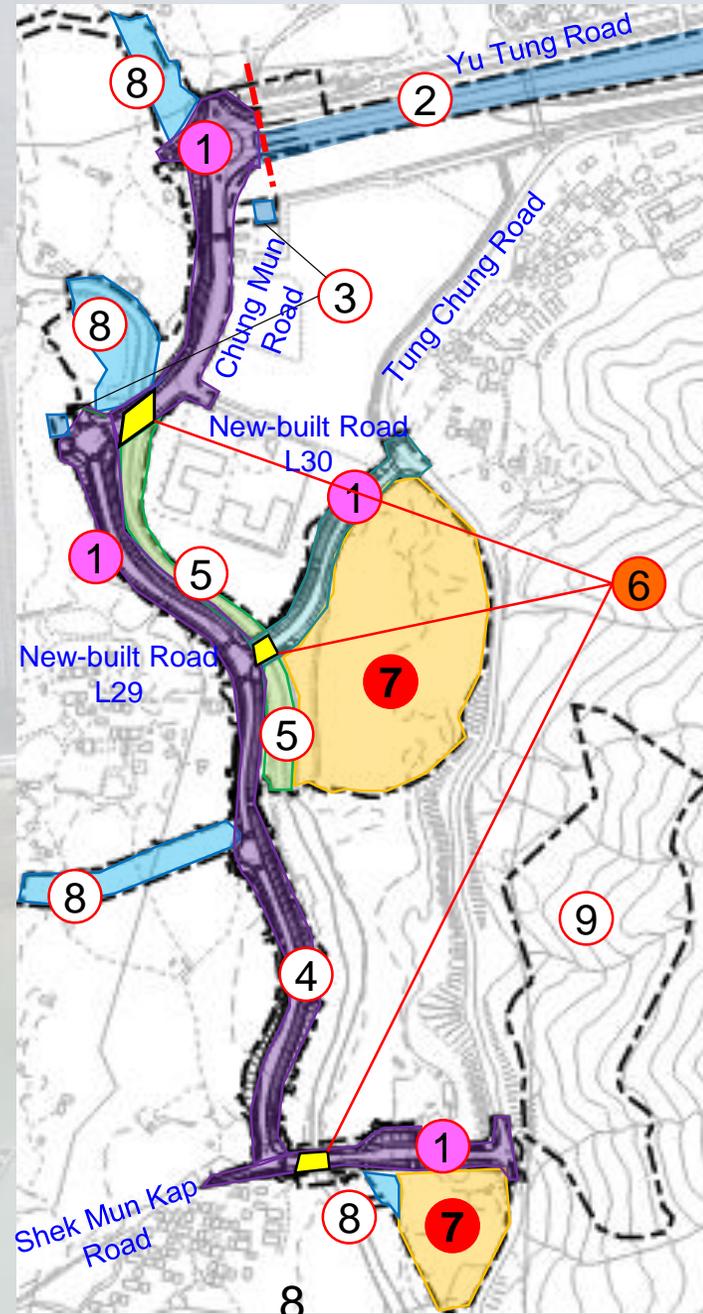
Contract No. NL/2020/06 – Site Formation and Infrastructure Works at Tung Chung Valley, Phase 1

Item	Major Works
1	Road Works for Chung Mun Road, Road L29, Road L30 & Shek Mun Kap Road
2 & 3	Sewerage Pumping Station & Associated Pressurized Pipes
4	Common Utility Tunnel
5	River Park & Visitor Center
6	Bridges across Tung Chung River
7	Site Formation at Area 42 & Area 46
8	Sustainable Urban Drainage System
9	Woodland Compensatory Planting

Contract Period : May 2021 to January 2025

Major activities in coming three months :-

- Archaeological survey
- Installation of temporary bridge A
- Ground investigation for permanent bridge A
- Site clearance and site formation works at Area 42
- Construction of sewerage pumping station
- Road works and pipe laying works along Yu Tung Road
- Woodland compensatory planting





土木工程拓展署
Civil Engineering and
Development Department



ARUP

Tung Chung West

c) Environmental Monitoring and Audit

Dedicated Website under EP-519/2016

Website for TCNTE:

<https://env.tcnte.hk>

Website for TCW:

<https://env.tcnte-west.hk>



Tung Chung New Town Extension

This dedicated website is set up in accordance with the requirements in the Environmental Permit (EP) (EP NO. EP-519/2016) to enable user-friendly public access of information of the Tung Chung New Town Extension and the associated environmental monitoring data.

Project Website of
Tung Chung New Town Extension (West)

- ENTER -

Project Website of
Tung Chung New Town Extension (East)

- ENTER -



Tung Chung New Town Extension (West)

This dedicated website is set up in accordance with the requirements in the Environmental Permit (EP) (EP NO. EP-519/2016) to enable user-friendly public access of information of the Tung Chung New Town Extension (West) and the associated environmental monitoring data.

Management Organisation



Major Components of EM&A for the Project in TCW

Environmental Submissions to be made before and during the construction including:

- Complaint Management Plan
- Waste Management Plan
- Plan on Provision of Buffer Zones
- River Park Plan
- Habitat Enhancement and Translocation Plan for Amphibian Species of Conservation Importance
- Detailed Preservation and/or Translocation Plan for Plant Species of Conservation Importance
- Detailed Compensatory Woodland Planting Plan
- Plan for Review of Use of New Low Noise Road Surfacing Material(s)

Environmental Monitoring during the construction stage:

- Air Quality Monitoring
- Noise Monitoring
- Stream Water Quality Monitoring
- Ecology Monitoring (Stream Water, Fish Species and Aquatic Invertebrates)
- Regular Site Inspection

Mitigation Measures

EP Submission

Complaint Management Plan

Waste Management Plan

Plan on Provision of Buffer Zones

River Park Plan

Key Mitigation Measures

- Set up of a dedicated complaint hotline (+852 9326 1161)
- Set up of a dedicated complaint email (general.enquiry@tcw.c5c6.hk)
- Arrangements for avoidance, minimization, recovery, recycling, reuse, storage, collection, treatment and disposal of different categories of waste from construction activities
- Implementation of Trip Ticket System
- Real time tracking and monitoring (RTTM) system for dump truck's traveling time, routing and parking locations
- Demarcation of the zones for conservation, coastal protection, other specified use or other appropriate zonings alongside the eastern and western branches as well as the major tributary of Tung Chung Stream for its protection.
- Demarcation of the location of the existing Tung Chung Stream to be revitalized
- Details of the proposed storm attenuation and treatment ponds in Tung Chung Stream
- Details of the design and planting of the River Park

Mitigation Measures (Cont'd)

EP Submission

Habitat Enhancement and Translocation Plan for Amphibian Species of Conservation Importance

Detailed Preservation and/or Translocation Plan for Plant Species of Conservation Importance

Detailed Compensatory Woodland Planting Plan

Plan for Review of Use of New Low Noise Road Surfacing Material(s)

Key Mitigation Measures

- Methodology for pre-construction survey, capture and translocation of target amphibian species (Romer's Tree Frogs and Chinese Bull Frogs)
- Implementation and post-release monitoring programme

- Methodology for pre-construction survey, preservation and/or translocation of target plant species
- Receptor sites identification with recommended measures for habitat enhancement
- Implementation and post-translocation monitoring programme

- Plant species to be selected for compensation with justifications
- Site conditions and sizes of compensatory planting areas
- Detailed post-planting monitoring and maintenance programme

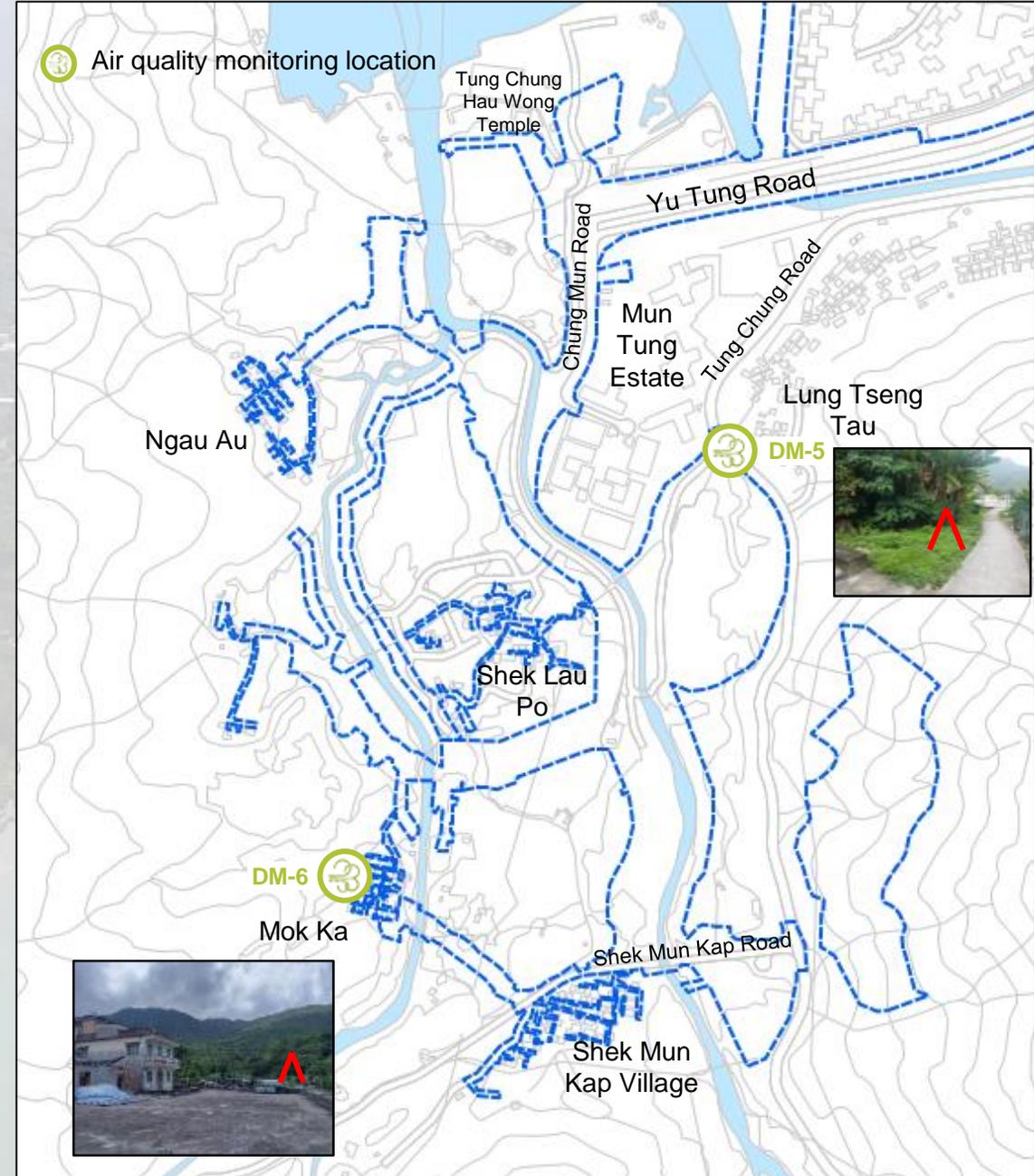
- Extents and locations of providing the new road surfacing material(s) for the roadworks with justifications
- Environmental benefits of the application of the new road surfacing material(s)

EM&A Monitoring – Air Quality

ID	Description	Monitoring Parameter	Monitoring Frequency
DM-5	Lung Tseng Tau	1-hr TSP	Three times every six days
DM-6	Mok Ka		

Monitoring Results from 2 to 30 Dec 2021

No exceedances were recorded

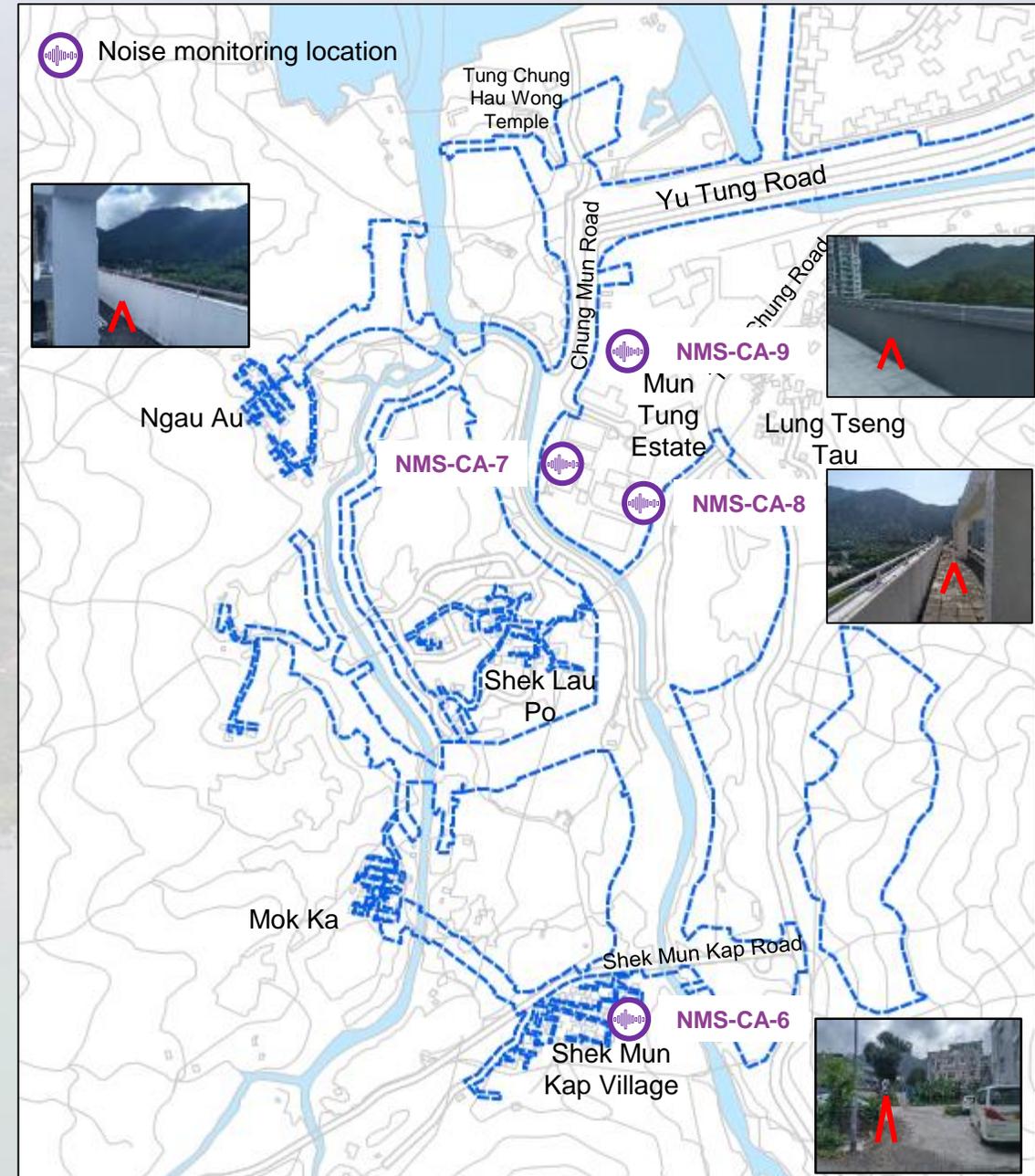


EM&A Monitoring – Noise

ID	Description	Monitoring Parameter	Monitoring Frequency
NMS-CA-5	Village house in Ma Wan Chung	A-weighted equivalent continuous sound pressure level L_{eq}	Once per week
NMS-CA-6	Village house in Shek Mun Kap		
NMS-CA-7	YMCA of Hong Kong Christian College		
NMS-CA-8	Caritas Charles Vath College (Roof Floor)		
NMS-CA-9	Hong Chi Shiu Pong Morninghope School (Roof Floor)		

Monitoring Results from 3 Nov to 29 Dec 2021

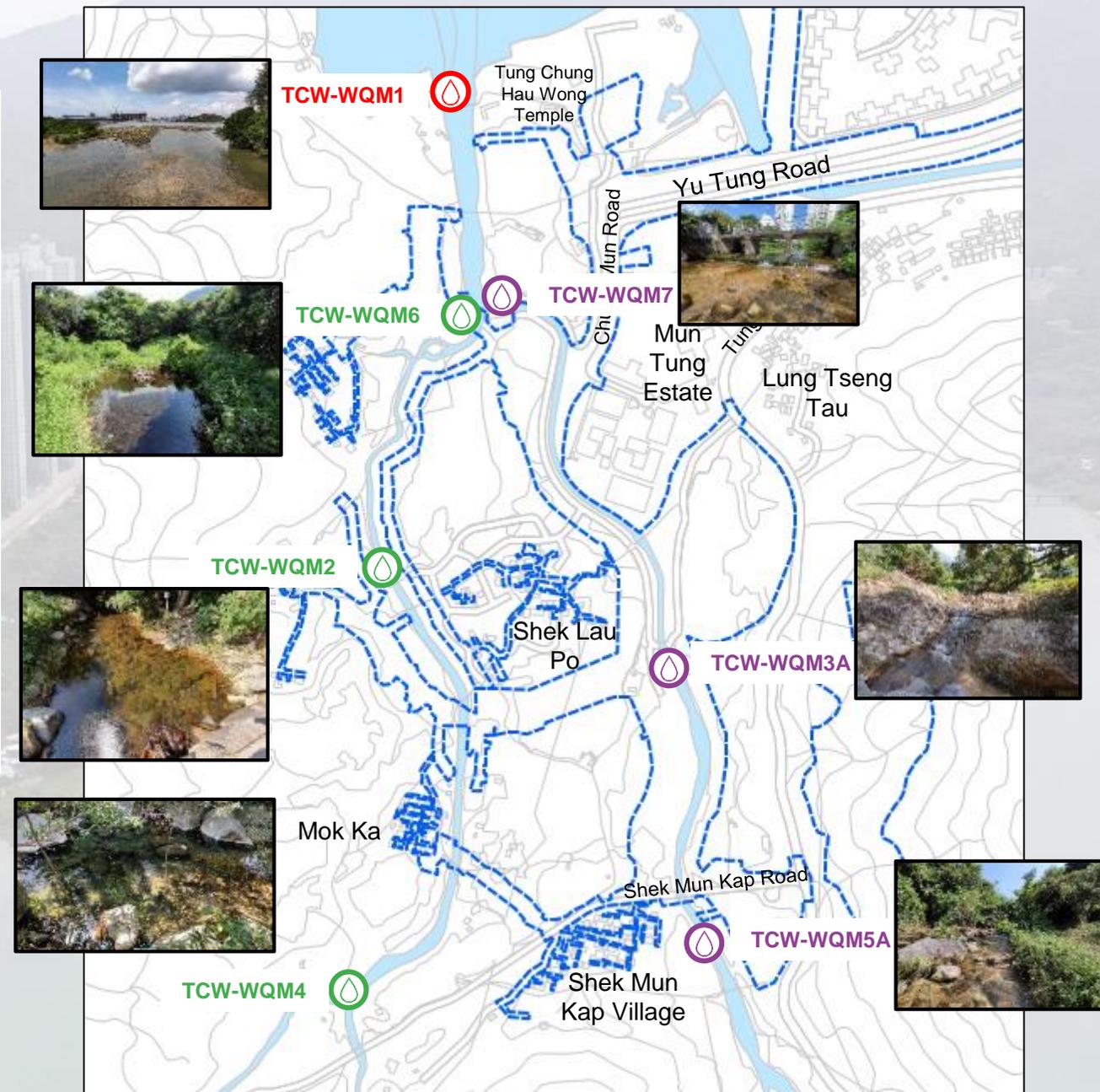
No exceedances were recorded



EM&A Monitoring – Stream Water

ID	Description	Monitoring Parameter	Monitoring Frequency
TCW-WQM-1	Downstream of Tung Chung Stream	<ul style="list-style-type: none"> • Temperature • Salinity • Conductivity • pH • Dissolved Oxygen • Turbidity • Suspended Solids 	3 days per week
TCW-WQM-2	Middle of Tung Chung Stream (West)		
TCW-WQM-3A	Middle of Tung Chung Stream (East)		
TCW-WQM-4	Upstream of Tung Chung Stream (West)		
TCW-WQM-5A	Upstream of Tung Chung Stream (East)		
TCW-WQM-6	Downstream of Tung Chung Stream (West)		
TCW-WQM-7	Downstream of Tung Chung Stream (East)		

-  Stream water quality monitoring location (River Mouth)
-  Stream water quality monitoring location (West Tributary)
-  Stream water quality monitoring location (East Tributary)



EM&A Monitoring – Stream Water

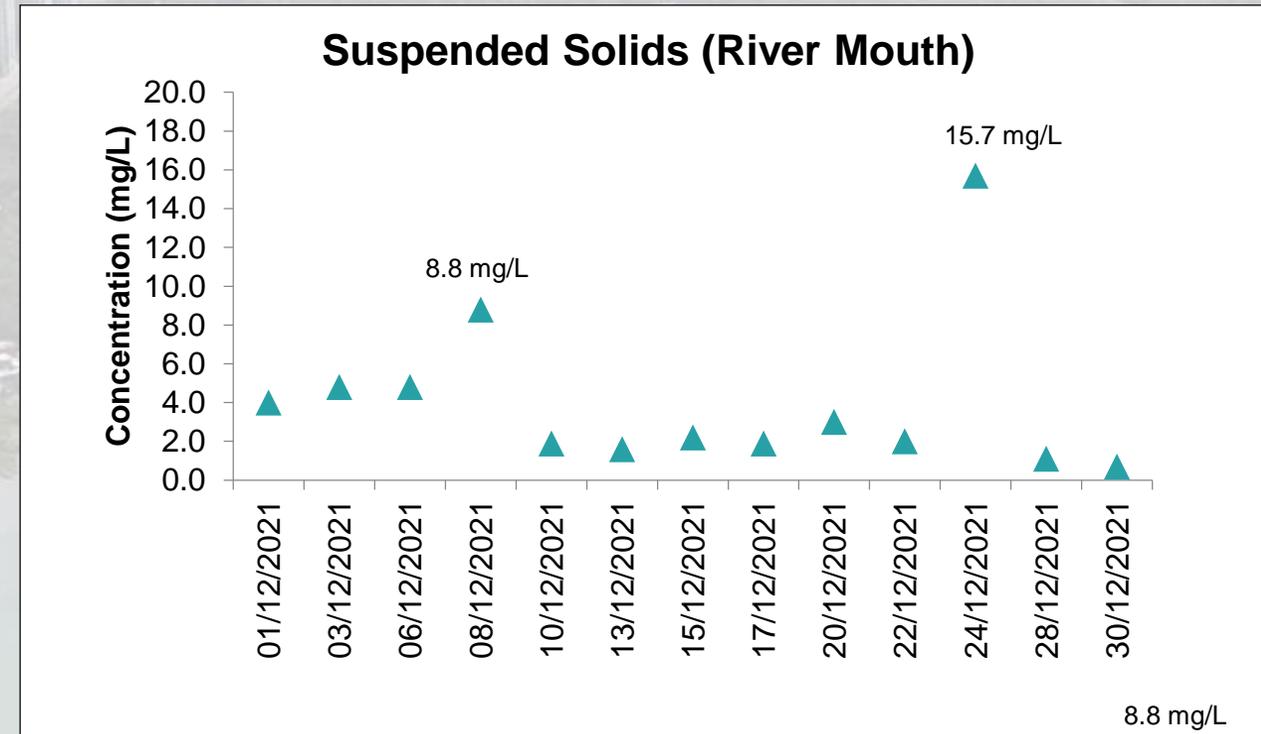
Monitoring Results from 1 to 30 Dec 2021

No exceedances in Dissolved Oxygen and Turbidity were recorded.

Exceedance in Suspended Solid was recorded at WQM1 on 8 and 24 Dec 2021. The exceedances were considered not related to the Project.



Photos taken at WQM1 on 24 Dec 2021



Action Level: 7.2 mg/L; Limit Level: 9.7 mg/L

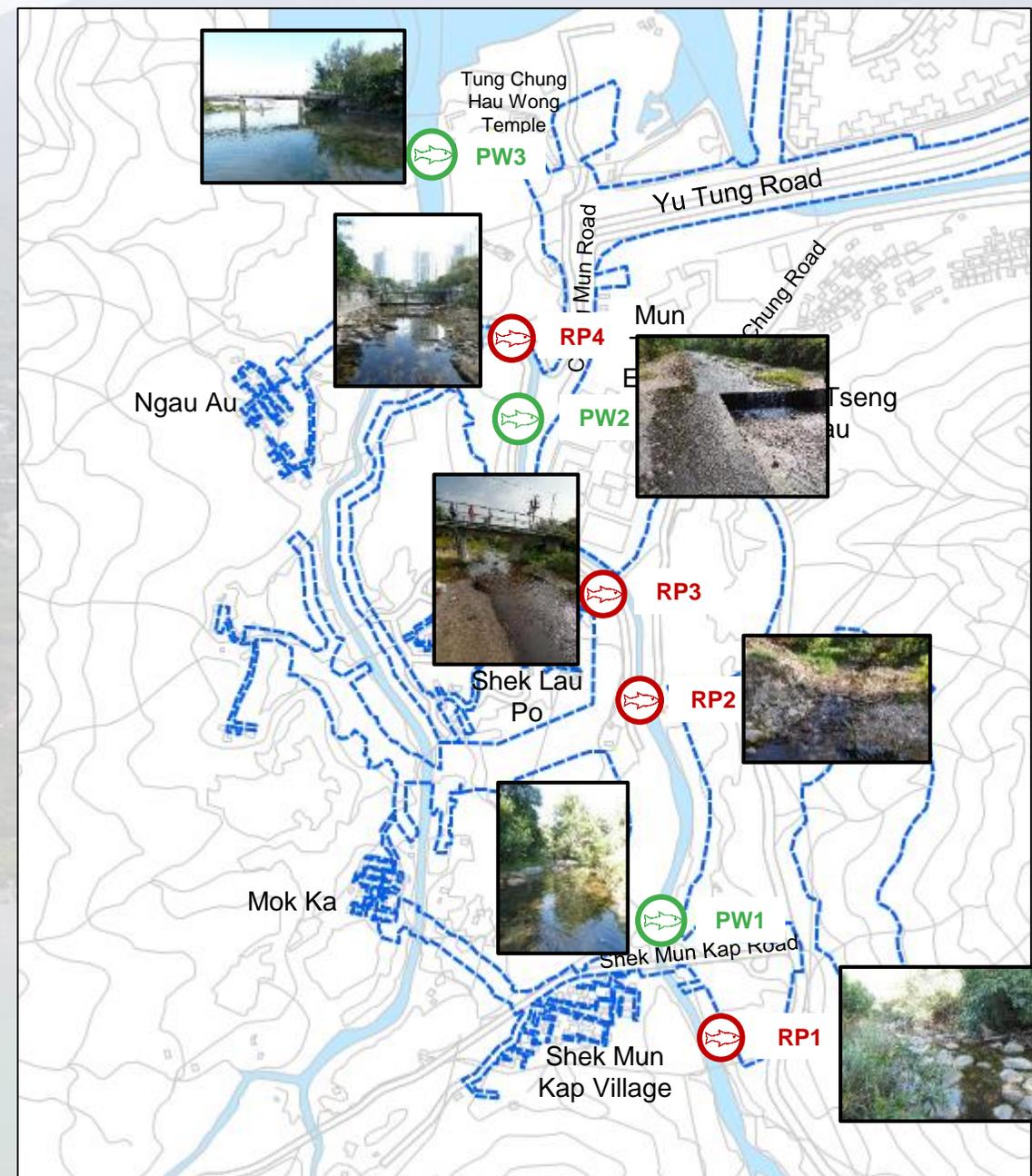
EM&A Monitoring – Ecology

ID	Description	Monitoring Parameter	Monitoring Frequency
RP1	Conservation Zone (Natural Section)	<ul style="list-style-type: none"> Water Quality [Note] Taxa diversity of Fish Species and Aquatic Invertebrate 	Once per month
RP2	Upstream of River Park		
RP3	Revitalisation Zone (Channelised Section)		
RP4	Downstream of River Park		
PW1	Near Public Works		
PW2	Near Public Works		
PW3	Near Public Works		

Note: pH, salinity, Temperature, Turbidity, Dissolved Oxygen, Suspended Solids, Ammonia as N, Total Kjeldahl Nitrogen, E. Coli, Biochemical Oxygen Demand, Chemical Oxygen Demand, Oil & Grease

Monitoring Results on 10 and 13 December 2021

No exceedances were recorded



Ecological monitoring location for other public works

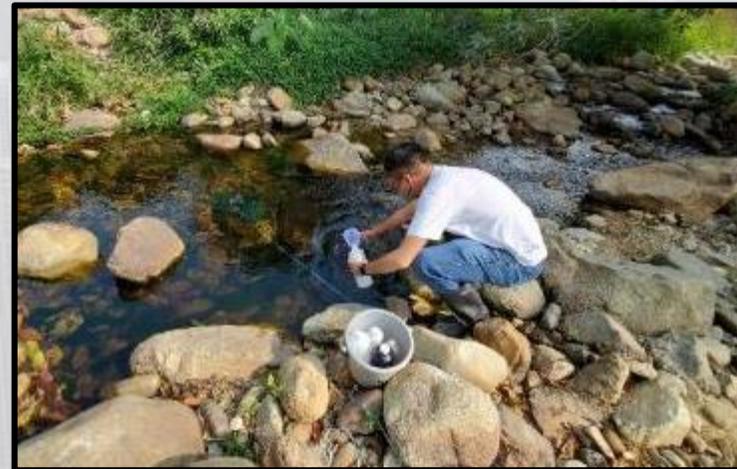


Ecological monitoring location for the proposed River Park

Snapshots of Ecological Monitoring



Ecological monitoring by ET (PW1)



Ecological monitoring (water quality) by ET (RP2)



Ecological monitoring by ET (PW1)



Ecological monitoring by ET (PW3)



Ecological monitoring by ET (PW2)



Ecological monitoring by ET (PW1)

EM&A Monitoring – Ecology

Summary of Aquatic Invertebrate Species Recorded in December 2021

Common Name	Species Name	River Park Study Area				Public Works Study Area		
		RP1	RP2	RP3	RP4	PW1	PW2	PW3
Scud	<i>Amphipoda</i>		✓					✓
Small Minnow Mayfly	<i>Baetidae</i>	✓	✓	✓	✓	✓	✓	
Freshwater Snail	<i>Biomphalaria straminea</i>					✓		
Freshwater Shrimp	<i>Caridina cantonensis</i>	✓					✓	
Freshwater Snail	<i>Clithon retropictus</i>				✓			
Yellow Featherlegs (Larva)	<i>Copera marginipes</i>					✓		
Mitten Crab	<i>Eriocheir japonica</i>				✓			
Black-banded Gossamerwing (Larva)	<i>Euphaea decorata</i>	✓	✓			✓		
Prong-gilled Mayfly	<i>Leptophlebiidae</i>					✓		
Freshwater Prawn	<i>Macrobrachium sp.</i>	✓						
Water Strider	<i>Ptilomera tigrina</i>	✓			✓			
Smaller Water Strider	<i>Rhagovelia sp.</i>	✓			✓	✓		
Freshwater Snail	<i>Tarebia granifera</i>				✓		✓	
Mayfly	<i>Teloganodidae</i>		✓	✓			✓	
Dropwings (Larva)	<i>Trithemis sp.</i>					✓		
Emerald Cascader (Larva)	<i>Zygonyx iris</i> ⁽¹⁾		✓	✓	✓			
	Total no. of species	6	5	3	7	7	4	1

Note (1): Species of conservation importance (Fellowes, 2002)

EM&A Monitoring – Ecology

Summary of Aquatic Fish Species Recorded in December 2021

Common Name	Species Name	River Park Study Area				Public Works Study Area		
		RP1	RP2	RP3	RP4	PW1	PW2	PW3
Beijiang Thick-lipped Barb	<i>Acrossocheilus beijiangensis</i> ⁽¹⁾	✓	✓			✓		
Asiatic Glassfish	<i>Ambassis</i> sp.				✓			✓
Redbelly Tilapia	<i>Coptodon zillii</i>							✓
Sharphead Sleeper	<i>Eleotris oxycephala</i>				✓			
Mosquito Fish	<i>Gambusia affinis</i>		✓			✓		
Long Rayed Silverbidy	<i>Gerres filamentosus</i>				✓			
Common Silverbidy	<i>Gerres oyena</i>				✓			
Fork Tongue Goby	<i>Glossogobius giuris</i>				✓			
Broken-band Hillstream Loach	<i>Liniparhomaloptera disparis</i>	✓	✓					
Mangrove Snapper	<i>Lutjanus argentimaculatus</i>				✓			
Mullet	<i>Mugilidae</i>				✓			✓
Rice Fish	<i>Oryzias curvinotus</i> ⁽¹⁾				✓			
Predaceous Chub	<i>Parazacco spilurus</i> ⁽²⁾	✓	✓			✓		
Common Mudskipper	<i>Periophthalmus modestus</i>							✓
Southern Platyfish	<i>Poecilia maculatis</i>					✓		
Sucker-belly Loach	<i>Pseudogastromyzon myersi</i>	✓						
Javanese Fatnose Goby	<i>Pseudogobius javanicus</i>							✓
-	<i>Rhinogobius duospilus</i>	✓	✓			✓		
Jarbua Terapon	<i>Terapon jarbua</i>							✓
Swordtail	<i>Xiphophorus hellerii</i>		✓		✓	✓		
Variable Platyfish	<i>Xiphophorus variatus</i>	✓	✓	✓		✓	✓	
	Total no. of species	6	7	1	9	7	1	6

Note (1): Species of conservation importance (Fellowes, 2002)

(2): Species of conservation importance (Zheng & Wang, 1998)



土木工程拓展署
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Thank you