

Your ref. -  
Our ref 5207869/18.30/OC341/WL/DL/SW/JC/fl

Date 21 March 2023

## By Post and Email

Environmental Protection Department  
Environmental Assessment Division  
Strategic Assessment Group  
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Attn: Ms. FUNG Hoi Ying, Ada  
Env Protection Offr (Strategic Assessment) 62

Dear Madam,

**Agreement No. CE 32/2021 (CE)**  
**Improvement Works at Lai Chi Wo Pier and Tung Ping Chau Public Pier**  
**– Design and Construction**  
**Environmental Permit No. EP-587/2021**  
**Submission of Coral Translocation Plan for Tung Ping Chau Public Pier (Rev. 1)**

Pursuant to Condition 2.13 of the Environmental Permit No. EP-587/2021, we hereby submit the Coral Translocation Plan (Rev. 1) for the pier improvement works at Tung Ping Chau Public Pier.

The aforesaid submission has been certified by the Environmental Team (ET) and verified by the Independent Environmental Checker (IEC). The ET certification and the IEC verification letters have been enclosed for your record.

Should you have any queries regarding the above, please feel free to contact our Ms. Grace Yang (Email: [Grace.Yang@atkinsglobal.com](mailto:Grace.Yang@atkinsglobal.com)) at 2972 1173 or Mr. Joe Chiu (Email: [Joe.Chiu@atkinsglobal.com](mailto:Joe.Chiu@atkinsglobal.com)) at 2972 1119.

**Yours faithfully,**  
**For and on behalf of**  
**Atkins China Ltd**



**Dickson LAW**  
**Project Manager**

Response required	No.
Due date	N/A
Attachment	(1) Coral Translocation Plan for Tung Ping Chau Public Pier (Rev. 1) (3 x hard copies + 1 x CD) (2) ET Certification and IEC Verification Letters

cc CEDD/CEO - Mr. CHIK Kan To (Project Coordinator /Projects 3 A) (w/o)  
Wilson Acoustic limited - Mr. Morgan Cheng (IEC) (w/o)

<b>Our ref</b>	5207869/18.30/OC341/WL/DL/SW/JC/fl
<b>Title</b>	Submission of Coral Translocation Plan for Tung Ping Chau Public Pier (Rev.1)
<b>Date</b>	21 March 2023

## Attachment 1

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## Coral Translocation Plan for Tung Ping Chau Public Pier (Rev. 1)



## Agreement No. CE 32/2021 (CE) Improvement Works at Lai Chi Wo Pier and Tung Ping Chau Public Pier -Design and Construction

Coral Translocation Plan at Tung Ping Chau Public  
Pier (Rev.1)  
(5207869-OR017B-01)

21 March 2023



## Notice

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# 1. Introduction

## 1.1 Background

- 1.1.1 Hong Kong is an international metropolis and comprises many natural scenic spots, rare geological features, attractions with traditional culture and heritage, and hiking trails with rich biological diversity. The famous Hong Kong UNESCO Global Geopark (Geopark), Marine Parks, old temples, eco-tourism sites and beautiful beaches in coastal areas are some examples. Many attractions are located at remote rural areas without land access and rely on marine transport. In recent years, number of local and non-local visitors attracted to these remote destinations has been constantly increasing.
- 1.1.2 Public piers play an important role in accessing these remote destinations. There are about 120 public piers in Hong Kong. Majority of these piers are built, maintained and managed by the Government.
- 1.1.3 Although regular inspections and maintenance for the remote public piers are carried out by the Government to ensure its structural integrity, some public piers at remote rural areas have been in place for many years and cannot cope with the current needs / usages, such as:
- a) small or primitive piers leading to safety concerns during berthing and unsatisfactory boarding conditions especially for kids and elderly;
  - b) inadequate depth of water for berthing during low tide;
  - c) limited berthing space or narrow accesses which cannot cater for the fluctuating utilization during festive times or weekends; and
  - d) aged pier structures with a need for improvement works.
- 1.1.4 Civil Engineering and Development Department (CEDD) commissioned an Investigation Study (IS), “Study for Pier Improvement at Lai Chi Wo and Tung Ping Chau – Investigation” (Agreement No. CE 2/2018 (CE)), in June 2018 to verify the technical feasibility of improving two potential pier items located within Yan Chau Tong Marine Park and Tung Ping Chau Marine Park in the northeast region of Hong Kong. The improvement of these two piers are designated project under Item Q.1, Part 1 of Schedule 2 of the EIAO.
- 1.1.5 EIA study has been carried out in accordance with the requirement of the EIA Study Briefs including assessment of the potential environmental impacts, in particular water quality impact and ecological impact, and specified environmental monitoring and audit requirements to ensure the effective implementation of the recommended environmental protection and mitigation measures. The EIA Reports of the two piers were approved by DEP under the EIAO on 29 December 2020 and Environmental Permits (EPs) for construction and operation of the improvement works were granted on 19 February 2021. The EIA study made recommendations on the scope of improvement to the Lai Chi Wo Pier and Tung Ping Chau Public Pier with preliminary engineering studies for individual pier taking into account public aspiration and other constraints, prepared preliminary engineering layouts, and evaluated the feasibility of adopting innovative design elements for the piers.

1.1.6 Atkins China Ltd. was commissioned by the Civil Engineering and Development Department of the Hong Kong Government Special Administrative Region on 16 September 2021 to provide consultancy services for Agreement No. CE 32/2021 (CE) Design Consultancy for Improvement Works at Lai Chi Wo Pier and Tung Ping Chau Public Pier - Design and Construction (hereinafter called “the Assignment”).

## 1.2 Project Description

1.2.1 Pier Improvement at Tung Ping Chau (the Project) is governed by the Environmental Permit, EP-587/2021, under the EIAO. The scale and scope of the Project includes:

- Modification of the existing pier and construction of new pier structures. The improved pier would be of approximately 124m long and 6m wide, and further increased to a gross width of 15m, including the floating pontoon, at the pier head;
- Construction and removal of a temporary pier of approximately 20m long and 5.5m wide;
- Site investigation works for detailed design; and
- Associated facilities (e.g. barrier-free access, canopy, seats) and landscaping works, etc under the Project.

1.2.2 The Project Site is located in the vicinity of Tung Ping Chau Public Pier, which falls within the Tung Ping Chau Marine Park. Its location is shown in **Figure 1**.

1.2.3 The site investigation (SI) works for detailed design will be commenced on early 2024 to collate necessary engineering and sediment quality information for the study for pier improvement at Tung Ping Chau.

## 1.3 EP Requirements and Relevant Licenses

1.3.1 Pursuant to Condition 3.4 of EP-587/2021, the Permit Holder shall, no later than 1 month before the commencement of construction of the Project, submit 3 hard copies and 1 electronic copy of Coral Translocation Plan (CTP) to the DEP for approval. The CTP shall include the following information:

- Pre-translocation coral survey/baseline survey;
- Coral translocation methodology, including the stabilization of the translocated corals, identification of coral recipient site; and
- Post- translocation monitoring methodology and programme.

## 1.4 Objective of the Report

1.4.1 The objectives of the Report are to record the species, number, locations and the sizes of coral colonies on the existing TPC Public Pier (**Figure 2**) identified during the pre-construction dive survey conducted by the Qualified Ecologist, Mr. Keith L W Kei; to present the coral translocation methodology, including the stabilization of

the translocated corals and identification of coral recipient site for all translocatable coral colonies; and, to propose post-translocation monitoring methodology. The Report will also verify the results of the previously conducted coral survey(s) by comparing the species and number of corals recorded during the pre-construction dive survey.

## 2. Introduction

### 2.1 Methodology

2.1.1 Coral colonies were recorded at the proposed pier extension and temporary pier (73 colonies on seabed beneath the proposed pier extension, 12 colonies on the existing pier head to be modified and 5 colonies on seabed beneath the proposed temporary pier) during the EIA. In order to identify all affected coral colonies, a detail coral survey at the direct impact site and suggested recipient sites will be conducted before starting any coral translocation work.

#### **Coral Mapping Survey at Direct Impact Site (Donor Site) – Proposed Pier Extension and Temporary Pier of TPC**

2.1.2 A coral mapping will be conducted at the donor site (TPC Public Pier) as part of the detailed coral survey to locate all translocatable.

2.1.3 Any translocatable corals will be identified to species level as far as practicable and their locations will be recorded. A specific code will be assigned to each recorded coral colony.

2.1.4 The results will be presented as a map showing the approximate locations of all translocatable coral colonies along the proposed pier extension and temporary pier. The total number of coral colonies, their sizes and species will be provided according to their assigned codes. The health condition (including percentage cover of bleaching, mortality, degree of sedimentation) of the corals will also be recorded and the feasibility of translocation of corals of conservation value will be assessed.

2.1.5 Upon completion of the surveys, the requirement for translocation and the required dimensions of the recipient site will be identified. Size will be the key criteria to determine whether a coral or encrusting coral colonies are suitable for translocation. Based on the results of the donor site (including the Proposed Pier Extension, Temporary Pier and the existing Pier), all corals with suitable size (coral colonies with size more than 9 cm, Shek Kwu Chau Coral Translocation 2017, EP/SP/66/12) and are still alive will be considered feasible for translocation.

#### **Detailed Coral Survey at Potential Recipient Sites**

##### Spot Check Dive

2.1.6 A spot-check dive survey covering the potential recipient sites (**Figure 3**) will be conducted. The survey is to check the presence of coral species similar to the donor site and the presence of suitable substratum to allow the translocated boulders/rocks to be permanently stabilized. The spot-check dive survey requires suitably trained and qualified SCUBA divers and marine ecologists swimming in a search pattern, at random depths within the spot-check dive area. Subtidal substrata (hard substratum seabed) within the proposed spot-check dive area will be surveyed for the presence of coral communities, including hard coral (order Scleractinia), octocorals (sub-class Octocorallia) and black-corals (order Antipatharia). Surface parameters such as water temperature, salinity and pH will be recorded. Target species parameters including estimated number of species,

coral cover, partial mortality and the presence of any rare corals will also be recorded during the spot-check dive. The divers will also pay attention to the presence of non-typical reef structures, unusual coral species associations, unique or peculiar assemblages of the local reef formations, and reefs that are almost completely dominated by one particular species. Data will be recorded during the dives on water proof paper in preparation for a later consolidation and analysis.

- 2.1.7 During the spot-check dive, the general environmental conditions of the potential recipient site will also be observed (e.g. presence of healthy coral community with similar coral species as the donor site, presence of suitable substratum to allow the translocated boulders/rocks to be permanently stabilized, sufficient space to receive the newly translocated coral colonies, etc.). If the preliminary survey findings reveal that the potential recipient site is not suitable, alternative recipient site(s) (**Figure 3**) will be searched.

Rapid Ecological Assessment (REA)

- 2.1.8 If corals are recorded during the spot-check dives and the potential recipient site is found suitable during the preliminary screening, a more detailed Rapid Ecological Assessment (REA) will be carried out with reference to DeVantier *et al.* (1998). The substrate type and taxonomic composition of the recipient site will be assessed.
- 2.1.9 The REA survey will be conducted along 100 m transect(s) parallel to the coastline (based on the preliminary results from the spot-check dives). The substrate type along the length of the transect(s) will be recorded at 1 m intervals. The benthic cover, taxon abundance, and ecological attributes along the transects will also be recorded in a swathe of 2 m wide, 1 m either side of the transect.
- 2.1.10 The locations of the REA transects will be recorded on-site using a portable GPS unit. The number of colonies, sizes and types of corals, their coverage, abundance, depth, health status of coral species will also be recorded. Photographs of representative taxa along the transects will also be taken during the surveys.
- 2.1.11 Health status of coral will be assessed by the following criteria and recommendation of the translocation plan would be provided in reference with the PER report:
- Gorgonian coral: Percentage of branches exhibiting partial mortality and secretion of mucus; and
  - Hard coral: Percentage of surface area exhibiting partial mortality and blanched/bleached.

Tier I – Categorization of Benthic Cover

- 2.1.12 Upon the completion of each transect, ecological and substratum attributes (refer to **Table 2.1**) will be assigned to standard ranked ordinal categories (refer to **Table 2.2**).

**Table 2.1 - Tier I Benthic Attribute Categories**

Ecological Attributes	Substratum Attributes
Hard Coral	Hard substrata
Dead Coral	Bedrock / continuous pavement

Ecological Attributes	Substratum Attributes
Octocoral (Soft corals and Gorgonains)	Boulders blocks (diam. >50 cm)
Black Coral	Cobble
Anemone beds	Rubble
Dead Standing corals	Other
Other benthos (sponges, zoanthids, ascidians and bryozoans)	Soft substrata
Macro-algae	Sand
-	Mud / Silt
-	Mud

**Table 2.2 - Tier II Ordinal Ranks of Percentage Cover of Benthic Attributes**

Rank	Percentage Cover
0	None Recorded
0.5	1-5 %
1	6-10 %
2	11-30 %
3	31-50 %
4	51-75 %
5	76-100 %

- 2.1.13 For substratum attributes, it is preferable to record actual estimates of coverage. The percentage of hard substrata vs. soft substrata can be provided (e.g. 80% and 20% respectively). The percentage cover of the types of hard or soft substrata could also then be presented (e.g. bedrock pavement 60%, rubble 20%, sand 15%, mud/silt 5%). Similarly, recording and presenting actual estimates of, for instance, hard and soft coral cover may be more informative (e.g. <1%)

Tier II – Taxonomic Inventories to Define Types of Benthic Communities

- 2.1.14 An inventory of benthic taxa along each transect will be compiled during the survey. Taxa will be identified in situ to the following levels:
- Corals to species, where possible;
  - Soft corals, anemones and conspicuous macroalgae to genus level, where possible;
  - Other benthos (including sponges, zoanthids, ascidians ,and bryozoans) to genus level, where possible.

2.1.15 For each transect, each taxon in the inventory will be ranked in terms of abundance in the community (refer to **Table 2.3**). The taxon categories will be ranked in terms of relative abundance of individuals, rather than the contribution to benthic cover along each transect. The ranks are visual assessments of abundance, rather than quantitative counts of each taxon. Representative photos of organisms will be taken.

**Table 2.3 - Ordinal Ranks of Taxon Abundance**

Rank	Percentage Cover
0	Absent
1	Rare
2	Uncommon
3	Common
4	Abundant
5	Dominant

2.1.16 To verify the suitability of the coral recipient site, data collected including environmental conditions, bathymetry, benthic composition at the coral recipient site will be compared with the donor site. It is preferable to select the recipient site with the following characteristics:

- Presence of a healthy coral community of the similar coral species as the donor site;
- Similar environmental conditions, or better than the donor site, such as bathymetry, water depth, benthic composition, etc.;
- Presence of suitable substratum to allow the translocated boulders/rocks to be permanently stabilized;
- In the vicinity of the original coral colony;
- Sufficient space to receive the newly translocated coral colonies; and
- Presence of protection from storm/typhoon damage.

2.1.17 In addition, the survey will be confirmed if the proposed recipient site had the space requirements to accommodate the number of corals to be translocated, and the absence of identified constraints to their future growth and proliferation.

## 2.2 Survey Findings

### Coral Mapping Survey at Direct Impact Site (Donor Site) – Proposed Pier Extension and Temporary Pier of TPC

2.2.1 Coral mapping surveys were conducted on 6<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> October 2022 along Tung Ping Chau existing pier (**Figure 2**) and the weather condition on **Table 2.4**.

**Table 2.4 - Weather Condition for Coral Mapping on 6th and 7th December 2021**

Date	Condition	Average Underwater Visibility
6 <sup>th</sup> October 2022	Northeast force 4 to 5, Sunny	2-3 m
8 <sup>th</sup> October 2022	Northeast force 4 to 5, Sunny	1-2 m
9 <sup>th</sup> October 2022	East force 4 to 5, Sunny	1-2 m

2.2.2 During the mapping survey, a total of sixty-one coral colonies (**Figure 2** and **Photo Plate A** with selected coral colonies photos) were found inside the proposed pier extension and temporary pier and their species name, size and health condition were shown in **Table 2.5**.

**Table 2.5 - Species, Health Condition, Size and Abundance in Hong Kong of the Recorded Coral Colonies**

Coral #	Coral species	Health Condition	Size (Diameter)	Abundance in Hong Kong
1	<i>Porites lutea</i>	Good	13	Abundant
2	<i>Platygyra yaeyamaensis</i>	Good	32	Uncommon
3	<i>Platygyra yaeyamaensis</i>	Good	25	Uncommon
4	<i>Plesiastrea versipora</i>	Good	15	Common
5	<i>Platygyra yaeyamaensis</i>	Good	30	Uncommon
6	<i>Platygyra carnosa</i>	Good	18	Dominant
7	<i>Platygyra yaeyamaensis</i>	Good	16	Uncommon
8	<i>Platygyra acuta</i>	Good	15	Dominant
9	<i>Dipsastraea rotumana</i>	Good	8	Abundant
10	<i>Dipsastraea helianthoides</i>	Good	10	Uncommon
11	<i>Dipsastraea rotumana</i>	Good	8	Abundant
12	<i>Platygyra carnosa</i>	Good	6	Dominant
13	<i>Platygyra yaeyamaensis</i>	Good	13	Uncommon
14	<i>Dipsastraea speciosa</i>	Good	6	Abundant



Coral #	Coral species	Health Condition	Size (Diameter)	Abundance in Hong Kong
15	<i>Dipsastraea speciosa</i>	Good	11	Abundant
16	<i>Porites lutea</i>	Good	4	Abundant
17	<i>Cyphastrea serailia</i>	Good	10	Common
18	<i>Cyphastrea serailia</i>	Fair	9	Common
19	<i>Cyphastrea serailia</i>	Good	10	Common
20	<i>Porites lutea</i>	Good	4	Abundant
21	<i>Leptastrea purpurea</i>	Good	3	Abundant
22	<i>Dipsastraea veroni</i>	Good	18	Common
23	<i>Plesiastrea versipora</i>	Good	12	Abundant
24	<i>Plesiastrea versipora</i>	Good	8	Abundant
25	<i>Cyphastrea japonica</i>	Good	21	Abundant
26	<i>Leptastrea purpurea</i>	Good	5	Abundant
27	<i>Dipsastraea speciosa</i>	Good	8	Abundant
28	<i>Psammocora profundacella</i>	Good	10	Abundant
29	<i>Dipsastraea rotumana</i>	Good	9	Abundant
30	<i>Porites lutea</i>	Good	5	Abundant
31	<i>Favites flexuosa</i>	Good	8	Uncommon
32	<i>Cyphastrea serailia</i>	Good	18	Common
33	<i>Porites lutea</i>	Good	14	Abundant
34	<i>Porites lutea</i>	Good	16	Abundant
35	<i>Psammocora profundacella</i>	Good	11	Abundant
36	<i>Porites lutea</i>	Good	12	Abundant
37	<i>Porites lutea</i>	Good	13	Abundant
38	<i>Psammocora profundacella</i>	Good	8	Abundant
39	<i>Dipsastraea veroni</i>	Good	8	Common
40	<i>Pavonna discussata</i>	Good	5	Abundant
41	<i>Porites lutea</i>	Good	11	Abundant
42	<i>Cyphastrea serailia</i>	Good	15	Common
43	<i>Leptastrea purpurea</i>	Good	12	Abundant
44	<i>Duncanopsammia peltata</i>	Good	9	Common

Coral #	Coral species	Health Condition	Size (Diameter)	Abundance in Hong Kong
45	<i>Leptastrea purpurea</i>	Good	34	Abundant
46	<i>Dipsastraea speciosa</i>	Good	18	Abundant
47	<i>Dipsastraea rotumana</i>	Good	14	Abundant
48	<i>Leptastrea purpurea</i>	Good	6	Abundant
49	<i>Leptastrea purpurea</i>	Good	13	Abundant
50	<i>Leptastrea purpurea</i>	Fair	7	Abundant
51	<i>Leptastrea purpurea</i>	Good	9	Abundant
52	<i>Leptastrea purpurea</i>	Good	8	Abundant
53	<i>Leptastrea purpurea</i>	Good	9	Abundant
54	<i>Leptastrea purpurea</i>	Good	15	Abundant
55	<i>Leptastrea purpurea</i>	Good	45	Abundant
56	<i>Leptastrea purpurea</i>	Good	16	Abundant
57	<i>Leptastrea purpurea</i>	Good	8	Abundant
58	<i>Leptastrea purpurea</i>	Good	8	Abundant
59	<i>Leptastrea purpurea</i>	Good	26	Abundant
60	<i>Leptastrea purpurea</i>	Good	19	Abundant
61	<i>Leptastrea purpurea</i>	Good	18	Abundant

2.2.3 Among the 61 mapped coral colonies, 2 were recorded inside the temporary pier, 14 were recorded on the existing pier and 45 were recorded at the proposed pier extension. Except coral number 18 and 50, other recorded translocatable coral colonies showed good in health condition

### Detailed Coral Survey at Potential Recipient Sites

#### Spot Check Dive

2.2.4 The spot-check dive was carried out on 8<sup>th</sup> and 9<sup>th</sup> October 2022 and the weather conditions were summarized in **Table 2.6**.

**Table 2.6 - Weather Condition for the Spot-Check Dive on 8<sup>th</sup> and 9<sup>th</sup> October 2022**

Date	Condition	Average Underwater Visibility
8 <sup>th</sup> October 2022	Northeast force 4 to 5, Sunny	1-2 m
9 <sup>th</sup> October 2022	East force 4 to 5, Sunny	1-2 m

2.2.5 Spot check dive was carried out at the suggested recipient sites A Ma Wan and A Ye Wan (**Figure 3**). The GPS coordinates, route distance, maximum depth, bottom substrate and bottom visibility each surveyed sites were summarized in **Table 2.7**.

**Table 2.7 - GPS Coordinates, Route Distance, Maximum Depth, Minimum Depth, Bottom Substrate and Bottom Visibility of Spot-Check Dive Site A Ma Wan and A Ye Wan**

Site	Location (GPS) (Starting Point)	Route Distance (m)	Min. Depth (m)	Max. Depth (m)	Bottom Substrate	Visibility (m)
A Ma Wan	E 114°26'17.42" N 22°32'34.44"	200	1.5	2.5	Natural Bedrock and Sand	1.5-2.5
A Ye Wan	E 114°25'52.82" N 22°32'55.17"	200	1.5	2.5	Natural Bedrock and Sand	1.5-2.5

A Ma Wan

2.2.6 The spot check site was mainly composed of natural bedrock and sand. Substrates beyond the maximum depth are all sandy with scattered boulders and rocks with visibility around 1.5 m to 2.5 m. Sponges, bryozoans, *Diadema* sea urchin and tubeworms *Sabelastarte japonica* were the dominant animal species in the surveyed site in which they are commonly found in Hong Kong waters.

2.2.7 A total of 32 (**Table 2.8**) coral species were recorded along the suggested recipient site during the spot check survey. Most of the recorded coral species are common in Hong Kong. REA transect was laid along the coral area.

**Table 2.8 - Coral species and their Abundance in Hong Kong in A Ma Wan**

Coral Species	Abundance in Hong Kong
<i>Acropora digitifera</i>	Uncommon
<i>Acropora tumida</i>	Uncommon
<i>Coelastrea aspera</i>	Common
<i>Cyphastrea chalcidicum</i>	Uncommon
<i>Cyphastrea japonica</i>	Abundant
<i>Cyphastrea serailia</i>	Common
<i>Dipsastraea helianthoides</i>	Uncommon
<i>Dipsastraea lizardensis</i>	Common
<i>Dipsastraea matthaii</i>	Uncommon
<i>Dipsastraea rotumana</i>	Abundant
<i>Dipsastraea speciosa</i>	Abundant
<i>Dipsastraea veroni</i>	Common
<i>Duncanopsammia peltata</i>	Common

Coral Species	Abundance in Hong Kong
<i>Echinophyllia aspera</i>	Common
<i>Favites abdita</i>	Dominant
<i>Favites chinensis</i>	Dominant
<i>Favites flexuosa</i>	Uncommon
<i>Favites pentagona</i>	Dominant
<i>Goniopora columna</i>	Abundant
<i>Hydnophora exesa</i>	Abundant
<i>Oulastrea crispata</i>	Abundant
<i>Leptastrea purpurea</i>	Abundant
<i>Montipora peliformis</i>	Common
<i>Pavonna descussata</i>	Abundant
<i>Platygyra acuta</i>	Dominant
<i>Platygyra carnosa</i>	Dominant
<i>Platygyra verweyi</i>	Uncommon
<i>Platygyra yaeyamaensis</i>	Uncommon
<i>Plesiastrea versipora</i>	Abundant
<i>Porites areanetai</i>	Uncommon
<i>Porites lutea</i>	Abundant
<i>Psammocora profundacella</i>	Abundant

#### A Ye Wan

2.2.8 The spot check site was mainly composed of natural bedrock and sand. Substrates beyond the maximum depth are all sandy with scattered boulders and rocks with visibility around 1.5 m to 2.5 m. Sponges, bryozoans, *Diadema* sea urchin and tubeworms *Sabelastarte japonica* were the dominant animal species in the surveyed site in which they are commonly found in Hong Kong waters.

2.2.9 A total of 24 (**Table 2.9**) coral species were recorded along the suggested alternate recipient site during the spot check survey. Most of the recorded coral species are common in Hong Kong. REA transect was laid along the coral area.

**Table 2.9 - Coral species and their Abundance in Hong Kong in A Ye Wan**

Coral Species	Abundance in Hong Kong
<i>Acropora digitifera</i>	Uncommon
<i>Cyphastrea japonica</i>	Abundant
<i>Cyphastrea serailia</i>	Common
<i>Dipsastraea danae</i>	Uncommon

Coral Species	Abundance in Hong Kong
<i>Dipsastraea favus</i>	Abundant
<i>Dipsastraea lizardensis</i>	Common
<i>Dipsastraea rotumana</i>	Abundant
<i>Dipsastraea speciosa</i>	Abundant
<i>Duncanopsammia peltata</i>	Common
<i>Echinophyllia aspera</i>	Common
<i>Favites chinensis</i>	Dominant
<i>Favites flexuosa</i>	Uncommon
<i>Goniopora columna</i>	Abundant
<i>Goniopora lobata</i>	Common
<i>Hydnophora exesa</i>	Abundant
<i>Lithophyllon undulatum</i>	Common
<i>Montipora peliformis</i>	Common
<i>Pavona decussata</i>	Abundant
<i>Platygyra acuta</i>	Dominant
<i>Platygyra carnosa</i>	Dominant
<i>Platygyra yaeyamaensis</i>	Uncommon
<i>Porites lobata</i>	Common
<i>Porites lutea</i>	Abundant
<i>Psammocora profundacella</i>	Abundant

### Rapid Ecological Assessment Survey

2.2.10 The REA survey was performed on 8<sup>th</sup> and 9<sup>th</sup> October 2022 right after the spot check survey. One 100 m transects were laid parallel to the coastline along spot check site of A Ma Wan and A Ye Wan (**Figure 4**). The GPS coordinates, maximum depth, bottom substrate and bottom visibility were shown in **Table 2.10**.

**Table 2.10 - GPS of Transect Starting and Ending, Maximum Depth, Bottom Substrate and Bottom Visibility of the Two REA Transects**

Transect	Location (GPS) (Starting Point)	Location (GPS) (End Point)	Max. Depth (m)	Bottom Substrate	Visibility (m)
A Ma Wan	E 114°26'21.11" N 22°32'33.67"	E 114°26'24.32" N 22°32'32.40"	3	Natural Bedrock and Sand	1.5
A Ye Wan	E 114°25'53.11" N 22°32'52.11"	E 114°25'53.16" N 22°32'48.89"	2.5	Natural Bedrock and Sand	1.5

A Ma Wan

- 2.2.11 A 100 m transect was laid down along the coastline which covered part of spot check site A Ma Wan (**Figure 4**). The average depth for the transect was about 3 m and visibility around 1.5 m
- 2.2.12 The substrate along the transect line is mainly composed of natural bedrocks (**Table 2.12**). Common marine life such as common sponges, bryozoans, rock oyster *Saccostrea cucullata*, common green mussel *Perna viridis*, *Diadema* sea urchin and tubeworm *Sabelastarte japonica* were found on survey area.

**Table 2.11 - Ecological Attributes on AMW REA Transect**

Ecological Attributes	Rank
Hard Coral	4
Dead Coral	0
Octocoral (Soft corals and gorgonians)	0
Black Coral	0
Anemone Beds	0
Dead Standing Corals	0
Other Benthos (sponges, zoanths, ascidinas and bryozoans)	0.5
Macro-algae	0

\* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

**Table 2.12 - Substratum Attributes on AMW REA Transect**

Hard Substrata	Rank
Bedrock/continuous pavement	3
Boulder Blocks (diam.>50cm)	2
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0

Soft Substrata	Rank
Sand	1
Mud/Silt	0
Mud	0

\* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

**Table 2.13 - Ranks of Taxon Abundance along the AMW REA Transect**

<b>Benthic Taxa</b>	<b>Rank</b>
<i>Acropora digitifera</i>	2
<i>Acropora tumida</i>	2
<i>Coelastrea aspera</i>	3
<i>Cyphastrea japonica</i>	3
<i>Cyphastrea serailia</i>	3
<i>Dipsastraea rotumana</i>	3
<i>Dipsastraea speciosa</i>	3
<i>Dipsastraea veroni</i>	3
<i>Duncanopsammia peltata</i>	2
<i>Echinophyllia aspera</i>	2
<i>Favites abdita</i>	3
<i>Favites chinensis</i>	3
<i>Favites pentagona</i>	2
<i>Goniopora columna</i>	3
<i>Hydnophora exesa</i>	2
<i>Leptastrea purpurea</i>	3
<i>Montipora peliformis</i>	2
<i>Oulastrea crispata</i>	4
<i>Pavonna descussata</i>	3
<i>Platygyra acuta</i>	4
<i>Platygyra carnosa</i>	4
<i>Platygyra verweyi</i>	2
<i>Plesiastrea versipora</i>	2
<i>Porites lutea</i>	4
<i>Psammocora profundacella</i>	3
Sponges	3
Bryozoan	3
<i>Saccostrea cucullata</i>	3
<i>Perna viridis</i>	3
Common Black Sea Cucumber	2

\* Rank of Abundance: 0 = Absent; 1 = Rare; 2 = Uncommon; 3 = Common; 4= Abundant; 5 = Dominant.

2.2.13 This site supported high percentage (51-75%) of hard coral. A total of 24 coral species (**Table 2.13**) were recorded during the REA survey. They were of medium to large size (about 15 to 100 cm in diameter) and in high coverage. All the coral colonies were in good condition.

A Ye Wan

2.2.14 A 100 m transect was laid down along the coastline which covered part of spot check site A Ye Wan (**Figure 4**). The average depth for the transect was about 2.5 m and visibility around 1.5 m

2.2.15 The substrate along the transect line is mainly composed of natural bedrocks (**Table 2.15**). Common marine life such as common sponges, bryozoans, rock oyster *Saccostrea cucullata*, common green mussel *Perna viridis*, *Diadema* sea urchin and tubeworm *Sabelastarte japonica* were found on survey area.

**Table 2.14 - Ecological Attributes on AYW REA Transect**

Ecological Attributes	Rank
Hard Coral	3
Dead Coral	0
Octocoral (Soft corals and gorgonians)	0
Black Coral	0
Anemone Beds	0
Dead Standing Corals	0
Other Benthos (sponges, zoanths, ascidinas and bryozoans)	0.5
Macro-algae	0

\* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

**Table 2.15 - Substratum Attributes on AYW REA Transect**

Hard Substrata	Rank
Bedrock/continuous pavement	0
Boulder Blocks (diam.>50cm)	5
Boulder Blocks (diam.<50cm)	1
Rubble	0
Other	0
Soft Substrata	Rank
Sand	0



Hard Substrata	Rank
Mud/Silt	0
Mud	0

\* Rank of percentage cover: 0 = None recorded; 0.5 = 1-5%; 1 = 6-10%; 2 = 11-30 %; 3 = 31-50%; 4= 51-75 %; 5 = 76-100%.

**Table 2.16 - Ranks of Taxon Abundance along the AYW REA Transect**

Benthic Taxa	Rank
<i>Acropora digitifera</i>	2
<i>Cyphastrea japonica</i>	3
<i>Cyphastrea serailia</i>	3
<i>Dipsastraea danae</i>	2
<i>Dipsastraea favus</i>	2
<i>Dipsastraea rotumana</i>	3
<i>Dipsastraea speciosa</i>	3
<i>Duncanopsammia peltata</i>	2
<i>Echinophyllia aspera</i>	2
<i>Favites chinensis</i>	3
<i>Favites flexuosa</i>	2
<i>Goniopora columna</i>	2
<i>Goniopora lobata</i>	2
<i>Montipora peliformis</i>	3
<i>Pavona decussata</i>	3
<i>Platygyra acuta</i>	4
<i>Platygyra carnosa</i>	4
<i>Platygyra yaeyamaensis</i>	2
<i>Porites lobata</i>	2
<i>Porites lutea</i>	3
<i>Psammocora profundacella</i>	3
Sponges	3
Bryozoan	3
<i>Saccostrea cucullata</i>	3
<i>Perna viridis</i>	3
Common Black Sea Cucumber	2

\* Rank of Abundance: 0 = Absent; 1 = Rare; 2 = Uncommon; 3 = Common; 4= Abundant; 5 = Dominant.

2.2.16 This site supported medium percentage (31 to 50%) of hard coral. A total of 21 coral species (**Table 2.16**) were recorded during the REA survey. They were of medium to large size (about 15 to 100 cm in diameter) and in high coverage. All the coral colonies were in good condition.

## 2.3 Conclusion

2.3.1 The pre-translocation surveys were conducted in October 2022. A total of 61 coral colonies were recorded inside the proposed pier extension and temporary pier.

2.3.2 The size of the recorded 61 coral colonies were ranging from 3 cm to 45 cm in diameter with 16 species and most of them were in good health condition. According to the translocation requirement for (2.1.5), only 36 coral colonies (size more than 9 cm) are suitable for translocation.

2.3.3 The suggested recipient is one of the Reef Check sites (A Ma Wan Reef Check Site) in Hong Kong with higher percentage of coral coverage (>50%). A total of 24 coral species were recorded during the REA survey. Also another Reef Check Site A Ye Wan showed medium percentage of coral coverage (31 – 50%) with 21 coral species recorded. All the 16 coral species recorded inside the proposed pier extension and temporary pier were also recorded in these two suggested recipient sites (AMW and AYW).

2.3.4 As AMW has a higher species diversity and higher coral coverage, it is concluded that AMW will be a suitable site to adopt the 36 coral colonies recorded at the proposed pier extension and temporary pier as well as the existing pier. AYW will be the alternative recipient site for coral translocation.

2.3.5 The proposed schedule for coral translocation work will be in October to November 2023, following 4 times quarterly post-translocation monitoring till October 2024.

### 3. Coral Translocation

#### 3.1 Coral Translocation Procedures

- 3.1.1 Translocation of all identified translocatable coral colonies in the direct impact site will be needed in order to minimize the impact to existing coral communities. All coral colonies recorded inside the proposed pier extension and temporary pier will be translocated.
- 3.1.2 The translocatable coral colonies identified during the Pre-translocation Survey will be translocated before any construction works.
- 3.1.3 During the coral translocation, divers will carefully remove coral colonies from the existing pier by using hammer and chisel. Each coral colonies will be marked, and photographs of each colony will be taken and additional information for each of the coral colonies will also be collected (water depth, orientation and size).
- 3.1.4 The coral colony will be moved and lifted from the sea bottom and loaded to ship/boat with lifting bag immediately.
- 3.1.5 The translocated coral colonies transferred onto the vessel will be submerged in seawater tanks (e.g. 80 cm x 100 cm x 40 cm in dimension and 32 liters in volume each) with continuous aeration onboard. Each seawater tank will hold no more than 4 coral colonies to avoid overcrowding.
- 3.1.6 Ambient water quality parameters of sea surface temperature and dissolved oxygen will be measured once (with at least triplicate sampling) at the coral donor site on the day of coral translocation.
- 3.1.7 Corals will be transported to the suitable recipient site as soon as possible following the removal. The vessel will progress at a slow and steady speed (<5 knots) to the recipient site.
- 3.1.8 When arriving at the suggested coral recipient site, scuba divers, with the supervision of the marine ecologist, will carefully place the coral colonies one by one to the seabed in order to minimize disturbance to the seabed and/or sediment. The coral colonies will then be attached to suitable boulders by using underwater epoxy and positioned to similar water depths with orientations as their previous location at the donor site as much as possible.
- 3.1.9 Divers will tag translocated colonies at the recipient site by using plastic tags with colony number (~3.5 cm diameter), which will be glued onto boulders by just adjacent to the coral colonies. All tags will be anchored in the vicinity of the coral colonies but not so near as to interfere with potential growth. This would allow the revisit of the coral colonies during the post-translocation monitoring. Ten natural coral colonies with the same species of the translocated coral colonies at the recipient site will also be tagged for post-monitoring and their size, health conditions (percentage of mortality and bleaching), the percentage of sediment cover will be monitored.
- 3.1.10 Divers will keep records of size, location, health conditions (percentage of mortality and bleaching), the percentage of sediment cover of each translocated coral colony

after the completion of translocation works. Photographs of each translocated coral upon completion of translocation will be taken and used as a baseline for future monitoring.

## 3.2 Post-translocation Monitoring

- 3.2.1 In order to monitoring the health of all translocated coral colonies, post-translocation monitor will be conducted right after the all translocation work has been done. All or minimum of twenty translocated colonies will be monitored during the monitoring period.
- 3.2.2 The post-translocation monitoring will be proposed to Agriculture, Fisheries and Conservation Department for agreement. Following coral translocation in the recipient site, the translocated coral colonies as well as the tagged natural coral colonies at the recipient site will be monitored quarterly for one year (i.e. a total of four post-translocation monitoring as suggested in previous translocation plan, e.g. Shek Kwu Chau Coral Translocation Plan). Monitoring will record the following parameters; the size, presence, survival, health conditions (percentage of mortality/bleaching) and percentage of sediment of each translocated coral colony and each tagged natural colony. The general environmental conditions including weather, sea, and tidal conditions of the coral recipient site will also be monitored.
- 3.2.3 Photographic records of the translocated and natural coral colonies will be taken as far as possible maintaining the same aspect and orientation as photographs taken for the pre-translocation surveys. All the tags for marking the translocated and natural coral colonies will be removed / retrieved once the monitoring programme is completed.
- 3.2.4 The results of the post-translocation monitoring surveys should be reviewed with reference to findings of the baseline survey and the data from original colonies at the recipient site.
- 3.2.5 If observations of any die-off / abnormal conditions of the translocated corals are made during the post-translocation monitoring, the Environmental Team (ET) should inform the Contractor, Independent Environmental Checker (IEC), EPD and AFCD, and liaise with AFCD to investigate any mitigation measures needed.
- 3.2.6 Post-translocation monitoring results will be evaluated against Action and Limit Levels. Evaluation will be based on recorded changes in percentage of partial mortality of the corals. Action and Limit Levels are defined in **Table 3.1**.

**Table 3.1 - Action and Limit Levels for Post-Translocation Coral Monitoring**

Parameter	Action Level Definition	Limit Level Definition
Mortality	If during Impact Monitoring a 15% increase in the percentage of partial mortality on the corals occurs at more than 20% of the translocated coral colonies that are not recorded on the original corals at the receptor site, then the Action Level is exceeded.	If during Impact Monitoring a 25% increase in the percentage of partial mortality on the corals occurs at more than 20% of the translocated coral colonies that are not recorded on the original corals at the receptor site, then the Limit Level is exceeded.

\*If the defined Action Level or Limit Level for coral monitoring as listed in **Table 3.1** is exceeded, the actions as set out in **Appendix A** will be implemented.

### 3.3 Reporting

- 3.3.1 Findings from Post-Translocation Monitoring will be presented in the Monitoring Results Section under monthly EM&A Report of the respective reporting month and submitted to EPD and AFCD after completion of each Post-Translocation Monitoring. The results of the post-translocation monitoring surveys should be reviewed with reference to the pre-translocation survey results and findings.
- 3.3.2 In addition to reporting the findings of the post-translocation monitoring, the performance/ result of the actual coral translocation work should be reported in the corresponding EM&A Report as well.

## 4. Reference

Brian Morton and John Morton. 1983. The Sea Shore Ecology of Hong Kong. Hong Kong University Press.

Binnie Consultants Limited. 1995. Marine Ecology of Hong Kong: Report on Underwater Dive Surveys. Volume I. Civil Engineering Department Geotechnical Engineering Office

Katharina Fabricius and Philip Alderslade 2001. Soft Corals and Sea Fans: A comprehensive guide to the tropical shallow-water genera of the Central-West Pacific, the Indian Ocean and the Red Sea. AIMS.

Chan A.L.K., Choi, C.L.S., McCorry D., Chan K.K., Lee, M.W., and Put, A. Jr. 2005. Field Guide to Hard Corals of Hong Kong. AFCD.

# Figures





Figure 1 Layout of the Project Area

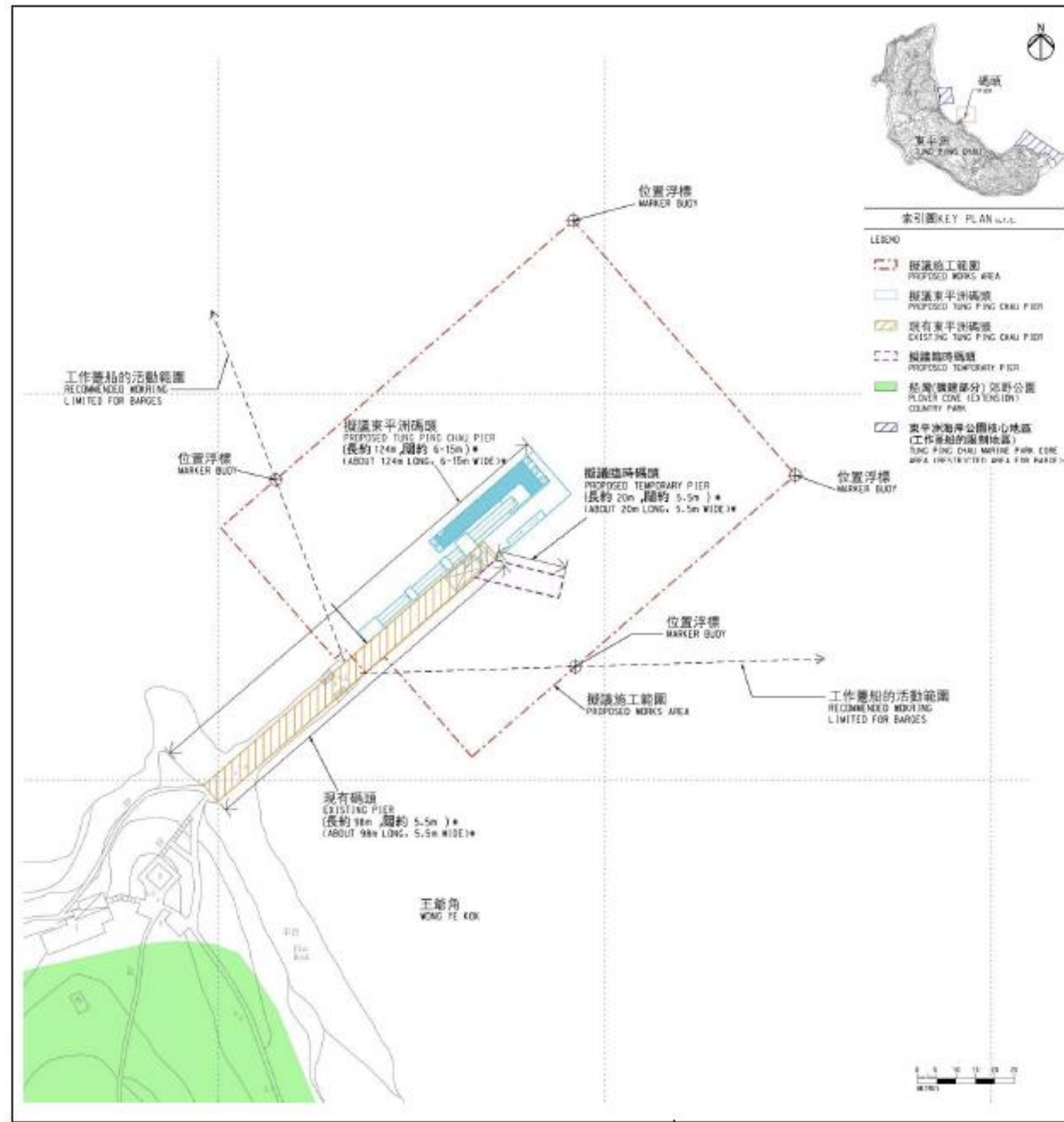


Figure 2 Locations of Coral Colonies Recorded inside the Proposed Pier extension and Temporary Pier

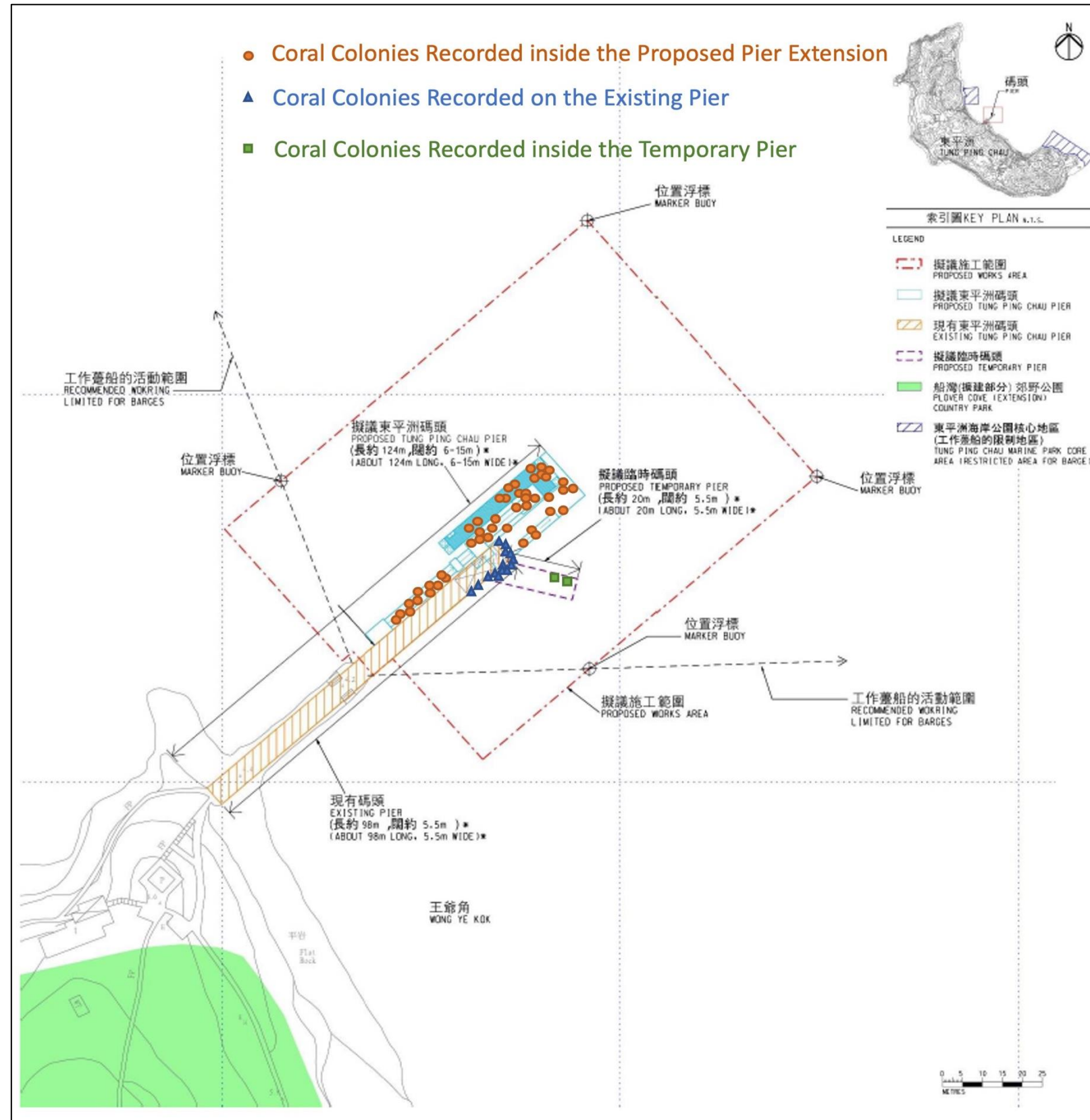


Figure 3 Suggested Recipient Sites

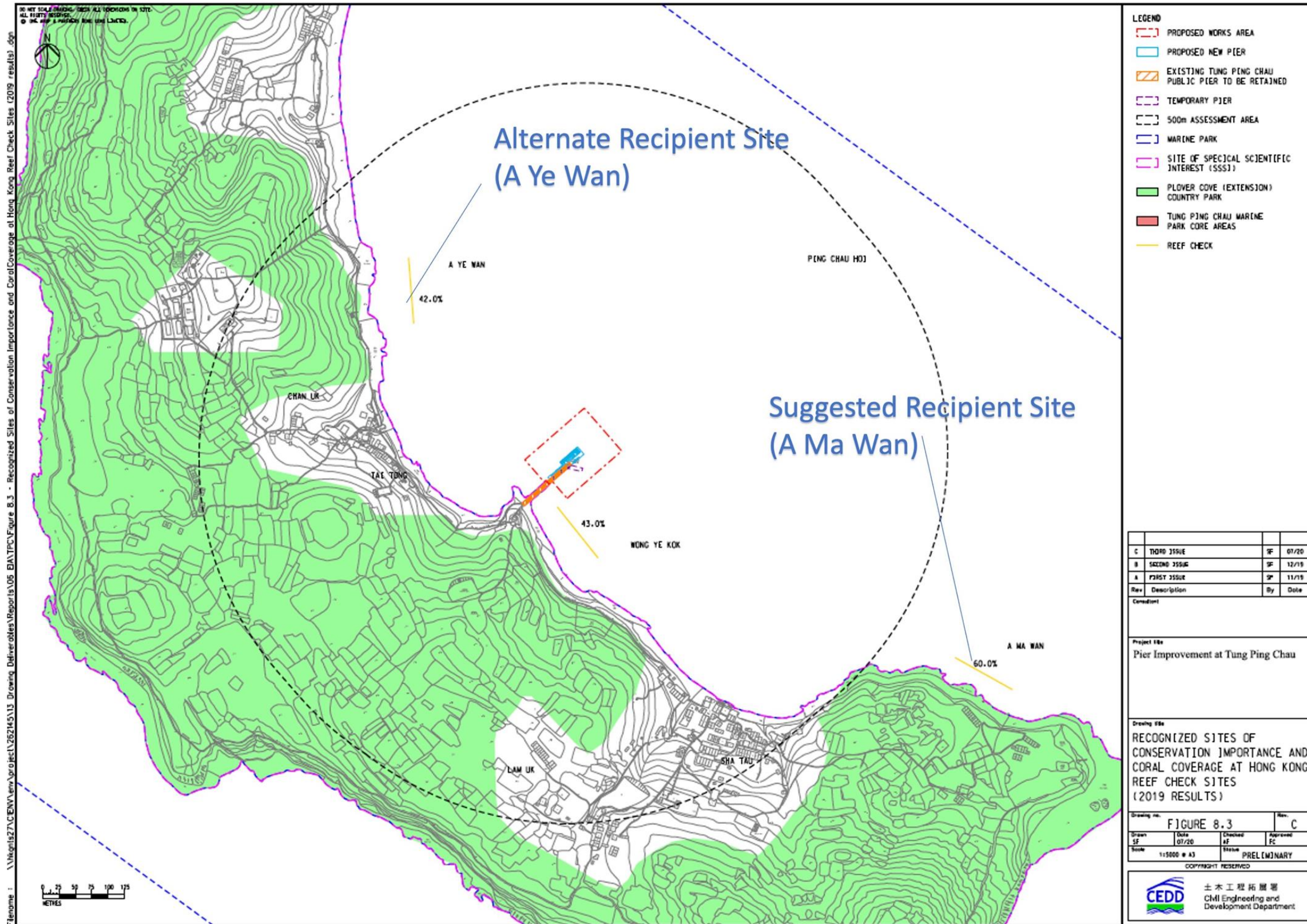


Figure 4 Location of Spot Check and REA Survey



# Photo Plates




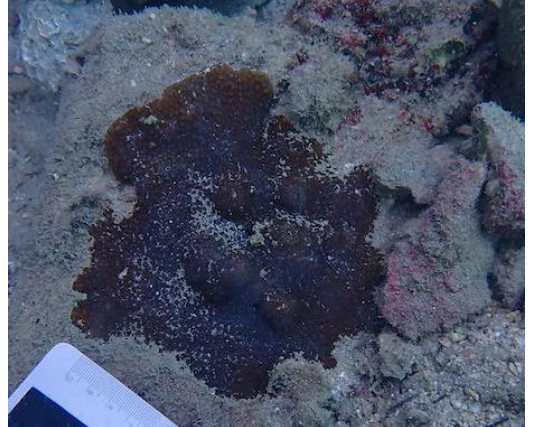
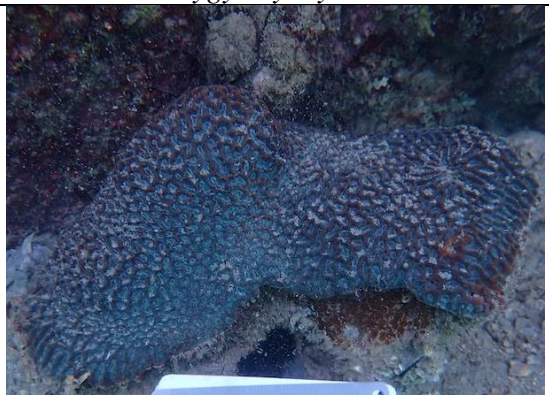
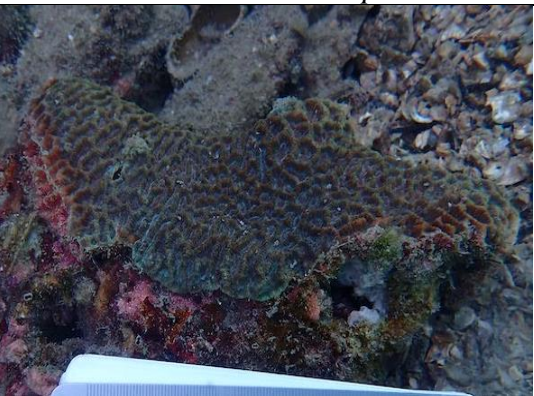








# Photo Plate A

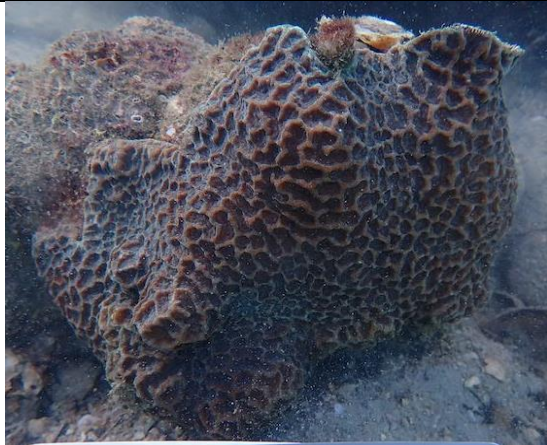
## Coral Colonies Recorded inside the Proposed Pier Extension





	
#1 <i>Porites lutea</i>	#2 <i>Platygyra yaeyamaensis</i>
	
#3 <i>Platygyra yaeyamaensis</i>	#4 <i>Plesiastrea versipora</i>
	
#5 <i>Platygyra yaeyamaensis</i>	#6 <i>Platygyra carnosa</i>

	
#7 <i>Platygyra yaeyamaensis</i>	#8 <i>Platygyra acuta</i>
	
#9 <i>Dipsastraea rotumana</i>	#10 <i>Dipsastraea helianthoides</i>
	
#11 <i>Dipsastraea rotumana</i>	#12 <i>Platygyra carnosa</i>



#13 *Platygyra yaeyamaensis*



#14 *Dipsastraea speciosa*



#15 *Dipsastraea speciosa*



#16 *Porites lutea*



#17 *Cyphastrea serailia*



#18 *Cyphastrea serailia*



#19 *Cyphastrea serailia*



#20 *Porites lutea*



#21 *Leptastrea purpurea*









#22 *Dipsastraea veroni*















#23 *Plesiastrea versipora*











#24 *Plesiastrea versipora*







	
#25 <i>Cyphastrea japonica</i>	#26 <i>Leptastrea purpurea</i>
	
#27 <i>Dipsastraea speciosa</i>	#28 <i>Psammocora profundacella</i>
	
#29 <i>Dipsastraea rotumana</i>	#30 <i>Porites lutea</i>






	
#31 <i>Favites flexuosa</i>	#32 <i>Cyphastrea serailia</i>
	
#33 <i>Porites lutea</i>	#34 <i>Porites lutea</i>
	
#35 <i>Psammocora profundacella</i>	#36 <i>Porites lutea</i>

	
#37 <i>Porites lutea</i>	#38 <i>Psammocora profundacella</i>
	
#39 <i>Dipsastraea veroni</i>	#40 <i>Pavonna descussata</i>
	
#41 <i>Porites lutea</i>	#42 <i>Cyphastrea serailia</i>

	
#43 <i>Leptastrea purpurea</i>	#44 <i>Duncanopsammia peltata</i>
	
#45 <i>Leptastrea purpurea</i>	#46 <i>Dipsastraea speciosa</i>
	
#47 <i>Dipsastraea rotumana</i>	#48 <i>Leptastrea purpurea</i>
	
#49 <i>Leptastrea purpurea</i>	#50 <i>Leptastrea purpurea</i>



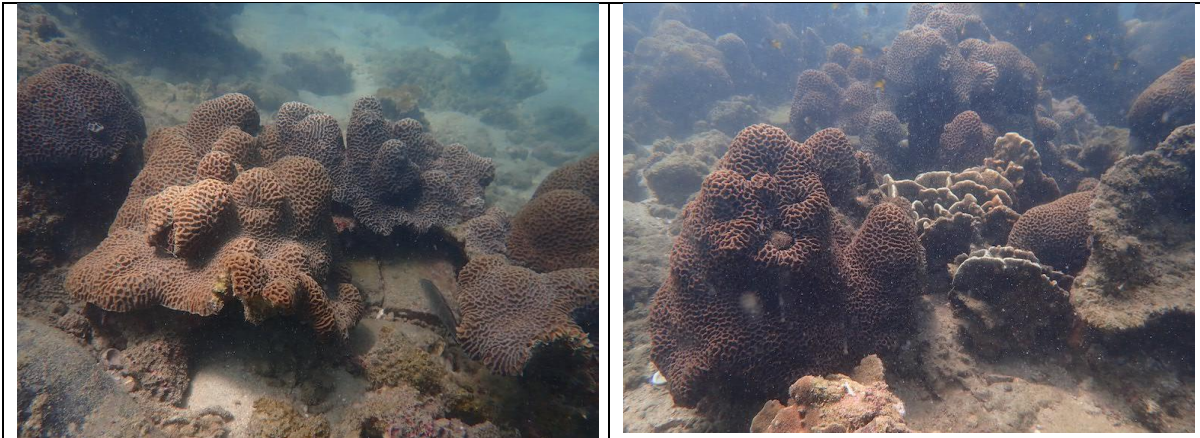
	
#51 <i>Leptastrea purpurea</i>	#52 <i>Leptastrea purpurea</i>
	
#53 <i>Leptastrea purpurea</i>	#54 <i>Leptastrea purpurea</i>
	
#55 <i>Leptastrea purpurea</i>	#56 <i>Leptastrea purpurea</i>

	
#57 <i>Leptastrea purpurea</i>	#58 <i>Leptastrea purpurea</i>
	
#59 <i>Leptastrea purpurea</i>	#60 <i>Leptastrea purpurea</i>
	
#61 <i>Leptastrea purpurea</i>	

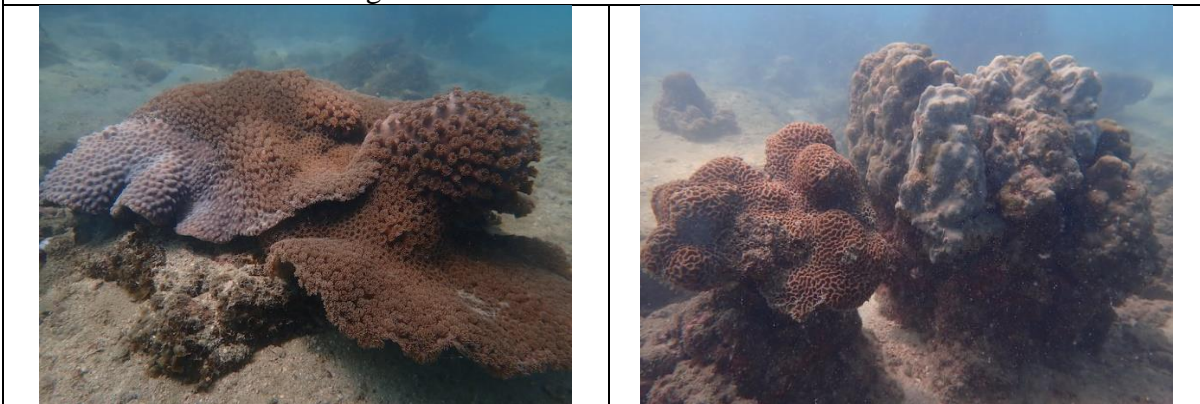
# Photo Plate B

## Photos of the Suggested Recipient Sites

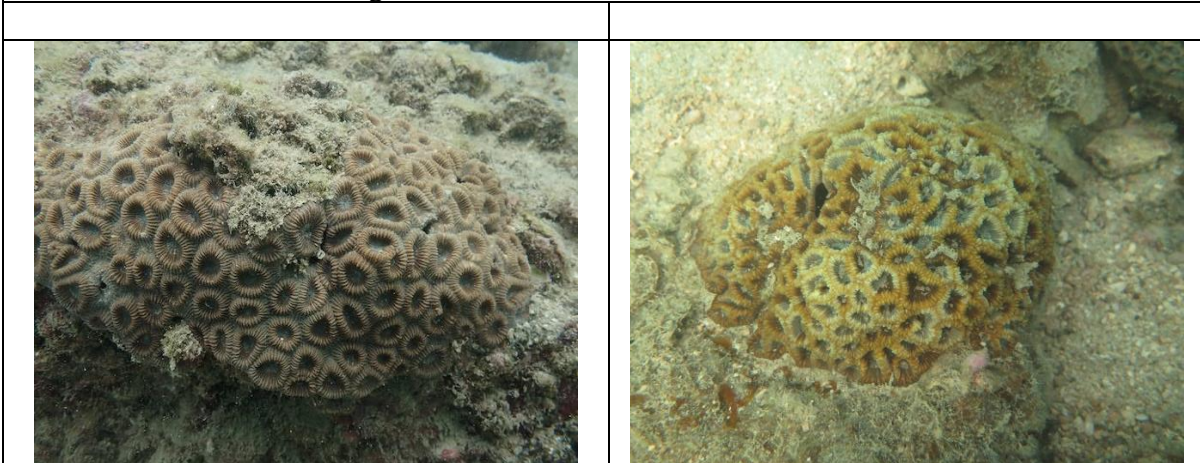




Big coral colonies recorded in A Ma Wan



Big coral colonies recorded in A Ye Wan



*Dipsastraea helianthoides* recorded in  
AMW

*Favites flexuosa* recorded in AMW



*Platygyra yaeyamaensis* recorded in AMW

# Appendix A

## Event and Action Plan for Post- Translocation Monitoring





## Appendix A Event and Action Plan for Post-Translocation Monitoring

Event	Action			
	ET Leader	IEC	Resident Engineer (RE)	Contractor
Action Level Exceedance	<ol style="list-style-type: none"> <li>1. Check monitoring data</li> <li>2. Inform the IEC, RE, and Contractor of the findings;</li> <li>3. Increase the monitoring to at least once a month to confirm findings;</li> <li>4. Propose mitigation measures for consideration</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss monitoring with the ET and the Contractor;</li> <li>2. Review proposals for additional monitoring and any other measures submitted by the Contractor and advise the RE accordingly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with the IEC additional monitoring requirements and any other measures proposed by the ET;</li> <li>2. Make the agreement on the measures to be implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the RE and confirm notification of the non-compliance in writing;</li> <li>2. Discuss with the ET and the IEC and propose measures to the IEC and the RE;</li> <li>3. Implement the agreed measures.</li> </ol>
Limit Level Exceedance	<ol style="list-style-type: none"> <li>1. Undertake Steps 1-4 as in the Action Level Exceedance. If further exceedance of Limit Level, propose enhancement measures for consideration.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss monitoring with the ET and the Contractor;</li> <li>2. Review proposals for additional monitoring and any other measures submitted by the Contractor and advise the RE accordingly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with the IEC additional monitoring requirements and any other measures proposed by the ET;</li> <li>2. Make the agreement on the measures to be implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the RE and confirm notification of the non-compliance in writing;</li> <li>2. Discuss with the ET and the IEC and propose measures to the IEC and the RE;</li> <li>3. Implement the agreed measures.</li> </ol>



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<b>Our ref</b>	5207869/18.30/OC341/WL/DL/SW/JC/fl
<b>Title</b>	Submission of Coral Translocation Plan for Tung Ping Chau Public Pier (Rev.1)
<b>Date</b>	21 March 2023

## Attachment 2

—

## ET Certification and IEC Verification Letters

Your ref. -  
Our ref 5207869/18.30/OC340/WL/DL/SW/AL/fl  
Date 21 March 2023

**By Post and By Email**

Civil Engineering and Development Department  
Civil Engineering Office  
Pier Improvement Unit  
Projects Section 3  
4/F, Civil Engineering and Development Building  
101 Princess Margaret Road  
Homantin, Kowloon

**Attn: Mr. LEE Man Chow, Francis**  
**Project Team Leader**

Dear Sir,

**Agreement No. CE 32/2021 (CE)**  
**Improvement Works at Lai Chi Wo Pier and Tung Ping Chau Public Pier**  
**- Design and Construction**  
**Certification of Coral Translocation Plan for Tung Ping Chau Public Pier (Rev. 1)**

Pursuant to Condition 2.13 of the Environmental Permit No. EP-587/2021, I hereby certify the Coral Translocation Plan (Rev. 1) for the pier improvement works at Tung Ping Chau Public Pier.

Should you have any queries regarding the above, please feel free to contact us by telephone number 2972 1173.

**Yours faithfully,**  
**For and on behalf of**  
**Atkins China Ltd**



**Grace YANG**  
**Environmental Team Leader**

cc EPD - Ms. FUNG Hoi Ying, Ada (Env Protection Offr (Strategic Assessment) 62)  
Wilson Acoustic limited - Mr. Morgan Cheng (IEC)



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Web: www.wal.hk

**Our Ref: 21411-61**

By Email

21 March 2023

Civil Engineering and Development Department  
Civil Engineering and Development Building,  
101 Princess Margaret Road,  
Kowloon, Hong Kong

Attention: Mr. LEE Man-chow

**Subject: Agreement No. PI 2/2021 Independent Environmental Checker Services for Improvement Works at Lai Chi Wo Pier and Improvement Works at Tung Ping Chau Public Pier**  
**Verification of TPC Coral Translocation Plan (Rev 1)**

Dear Mr Lee,

We refer to the email on 21 March 2023 from Atkins China Limited about Coral Translocation Plan at Tung Ping Chau Public Pier.

We have no comment and hereby verify Environmental Permit (EP) Submission Schedule as required under Condition 2.13 of the Environmental Permit (EP-587/2021).

Should you have any queries, please feel free to contact us by telephone number 2637-0623 or fax 3422-8117.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Morgan Cheng".

Morgan Cheng  
Independent Environmental Checker, Wilson Acoustics Limited

MC

Encl.

c.c. Civil Engineering and Development Department (Attn.: Mr. YUNG Chung Bun, Thomas)  
Environmental Protection Department (Attn.: Ms. FUNG Hoi Ying, Ada)  
Atkins China Limited (Attn.: Mr. Sean Wong)