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Agreement No. CE40/2023 (CE)

Development of Tseung Kwan O Area 137 and Associated Reclamation Sites - Investigation, Design and Construction

Coral Translocation and Enhancement Plan for EP-668/2025 (Final)

January 2026



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January 2026

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1. INTRODUCTION

1.1 Background

1.1.1 The Development of Tseung Kwan O Area 137 and Associated Reclamation Sites include the redevelopment of the Tseung Kwan O Area 137 (TKO 137) to a new community primarily for housing purpose, and reclamation at Tseung Kwan O Area 132 (TKO 132) for public facilities. The Development of Tseung Kwan O Area 137 and Associated Reclamation Sites is a Designated Project under Schedule 3 of the Environmental Impact Assessment Ordinance (EIAO) and also comprises of various Designated Projects (DPs) under Schedule 2 of the EIAO, which are essential engineering infrastructures works/ public facilities.

1.1.2 An Environmental Impact Assessment (EIA) Report for the Development of Tseung Kwan O Area 137 and Associated Reclamation Sites (Register No.: AEIAR-265/2025) (the Approved EIA Report) was submitted and approved on 30 April 2025 under the EIAO. Subsequently, three Environmental Permits (EP) were granted on 23 July 2025. They are EP for construction and operation of carriageway bridge for “Development off Tseung Kwan O Area 132” (hereinafter referred as “TKO 132 carriageway bridge”) (under EP No. EP-667/2025), EP for reclamation works for “Development at Tseung Kwan O Area 137” (hereinafter referred as “TKO 137 reclamation works”) (under EP No. EP-668/2025), and EP for reclamation works for “Development off Tseung Kwan O Area 132” (hereinafter referred as “TKO 132 reclamation works”) (under EP No. EP-669/2025).

1.2 Purpose of this Coral Translocation and Enhancement Plan

1.2.1 Pursuant of the EP Condition 2.14 of the EP-668/2025, a Coral Translocation and Enhancement Plan (CTEP) shall be deposited to the Environmental Protection Department (EPD) no later than 3 months before commencement of marine works of the corresponding parts of the reclamation works for “Development at Tseung Kwan O Area 137” (the Project) (TKO 137 reclamation works). This CTEP is therefore submitted to EPD for fulfilment of the EP Condition 2.14 of the EP-668/2025 and requirements in the Approved EIA Report and Environmental Monitoring and Audit (EM&A) Manual. Separate CTEPs are prepared and submitted for the TKO 132 carriageway bridge and TKO 132 reclamation works in accordance with the respective EP Conditions.

1.2.2 The CTEP includes details on the results of the Pre-construction Detailed Coral Survey (PDCS), coral translocation methodology, location and suitability of the coral recipient site(s), the post-translocation monitoring programme, the implementation details of the proposed coral enhancement measures (such as collection of bodies of unmovable corals and coral fragments for coral plantation, etc.) and the overall implementation programme.

1.3 Structure of this Coral Translocation and Enhancement Plan

1.3.1 This CTEP is written in accordance with the approved EIA and corresponding EP requirements, apart from this introductory section, other sections are structured as follows:

- Section 2 Outlines the survey methodology, results of the pre-construction coral survey to assess and evaluate coral translocation and enhancement feasibility and details the criteria for confirmation of appropriate recipient sites for coral translocation
- Section 3 Details the coral enhancement measures adopted
- Section 4 Details the procedure of enhanced coral translocation
- Section 5 Details the implementation schedule of coral enhancement measures
- Section 6 Conclusion of the CTEP

2. PRE-CONSTRUCTION DETAILED CORAL SURVEY

2.1 Survey Methodology

Survey Areas

2.1.1 To identify coral colonies that will be directly affected by the marine works of the Project and inform the subsequent coral translocation, PDCS were conducted in the marine works areas for TKO 137 reclamation works (i.e. donor site), as shown in **Figure 1**.

2.1.2 In addition, PDCS was also conducted in potential coral recipient sites to evaluate the suitability of these sites to receive the translocatable corals. The survey areas in the potential coral recipient sites are shown in **Figure 2**.

Survey Methodology (Donor Site)

2.1.3 The PDCS in the donor site was undertaken from July to August 2025 to investigate the number and location of coral colonies to be directly affected by the marine works of the Project. The proposed survey area indicated in **Figure 1** was divided into 45 grids in TKO 137 reclamation works, majority of the grids are about 150 m in length and 40m in width (except grids near the shoreline and the marine works area boundary). A zig-zag dive route with active searching technique was conducted within each grid of the survey area to locate the coral colonies. All field data was collected by marine ecologists using SCUBA equipment.

2.1.4 All corals, including hard, soft, gorgonian and black corals, observed during the survey were identified to species level as far as possible. A list of coral species identified within the survey area during the PDCS was provided, along with the overall coral coverage within the survey area. Other information that could help establish relevant and up-to-date coral baseline, including species diversity and composition (e.g. dominant species) was also collected, so as to inform the subsequent coral enhancement measures in Junk Bay.

2.1.5 Furthermore, to inform the subsequent coral translocation for hard and black coral species, all hard and black coral colonies observed during the survey were recorded individually, except for locally common pioneer and/or non-reef-building hard coral species. These species were not recorded individually due to their high abundance, rapid recolonisation potential, and limited contribution to reef structure, allowing resources to be prioritised for hard and black coral species with greater ecological and conservation interest. The grid locations where these colonies and associated substrates were identified were recorded, while the coral colonies were also sized, with their health status recorded (including percentage cover of bleaching, mortality, and any observed sedimentation on the coral colonies). The translocation feasibility of each recorded coral colony was evaluated. Representative photographs of the recorded coral colonies were also taken during the surveys.

2.1.6 All hard and black coral colonies attached to moveable substrates (i.e. boulders with a diameter less than 50 cm), if any, were assigned with a specific code and will be tagged accordingly before the subsequent coral translocation.

2.1.7 In accordance with the approved EIA report, coral species of high ecological value that are habitat sensitive (e.g. *Acropora* sp. which prefer certain waterflow and light conditions), coral species considered as uncommon or above in Hong Kong, and / or

possessing threatened status (e.g. listed Vulnerable or above in IUCN Red List) will be translocated as far as possible. Special attention was given to colonies of these species found to be in good condition but attached to non-movable large boulders (i.e. more than 50 cm in diameter) during the survey. These colonies were also assigned with a specific code and tagged. Information (e.g. health condition, size) regarding these species was included in the CTEP for further consideration of alternative translocation methods.

- 2.1.8 In addition, as part of the coral enhancement measures for this Project, the presence of any corals of opportunity (i.e. detached living coral fragments that have broken off from a larger colony) were identified during the PDCS. The number, species and condition of corals of opportunity, if encountered, was recorded.

Survey Methodology (Recipient Sites)

- 2.1.9 In accordance with the approved EIA report, Joss House Bay was preliminary identified as the potential coral recipient site, while Cape Collinson was also mentioned as another potential location for further study. To further verify the suitability of Joss House Bay and Cape Collinson as coral recipient sites, PDCS were undertaken to confirm the condition of these sites, detailed in **Section 2.1.10 to 2.1.14** below.

Spot-check Dive

- 2.1.10 A spot-check dive survey covering the potential recipient sites (**Figure 2** refers) was conducted. The survey was conducted by suitably trained and qualified SCUBA divers and marine ecologists swimming in a search pattern (e.g. zig-zag), at random depths within the spot-check dive area. Subtidal substrata (hard substratum seabed) within the spot-check dive area was surveyed for the presence of coral communities, including hard corals, octocorals (sub-class Octocorallia) and black corals. Coral parameters including estimated number of species, coral cover, partial mortality and the presence of any rare corals were also recorded during the spot-check dive. The divers also paid 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 was recorded during the dives on waterproof paper in preparation for a later consolidation and analysis.
- 2.1.11 During the spot-check dive, the general environmental conditions of the potential recipient site were also observed (e.g. presence of healthy coral community with similar coral species as the donor site, sufficient space to receive the newly translocated coral colonies, etc.). The preliminary survey findings also revealed the suitability of the potential recipient sites.

Rapid Ecological Assessment

- 2.1.12 If corals were recorded during the spot-check dives and the potential recipient sites are found suitable during the spot-check dive, a more detailed Rapid Ecological Assessment (REA) was carried out with reference to DeVantier *et al.* (1998) (see **Appendix 1** for details). The substrate type and taxonomic composition of the recipient sites were assessed. The REA survey was 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) was recorded at 1 m intervals. The benthic cover, taxon abundance, and ecological attributes along the transects were also recorded in a swathe of 2 m wide, 1 m either side of the

transect. The location of the REA transects was 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 was also be recorded. Photographs of representative taxa along the transects were also be taken during the surveys. Health status of coral was also assessed and recorded.

2.1.13 To verify the suitability of the coral recipient sites, data collected including environmental conditions, bathymetry, and benthic composition at the coral recipient sites was compared with the donor site. The suitability of the sites was assessed following the characteristics below:

- 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 coral colonies to be permanently stabilised or attached;
- Sufficient space to receive the newly translocated coral colonies;
- Presence of protection from storm / typhoon damage; and
- Not to be impacted by marine works of this Project and other planned / committed projects.

2.1.14 In addition, the survey revealed if the proposed coral recipient sites have any identified constraints to the future growth and proliferation of the corals to be translocated.

2.2 Survey Findings

Donor Site

2.2.1 The PDCS covered the entire survey area in TKO 137 reclamation works. The substrates of the survey area were mainly composed of boulders and tetrapods along the shoreline of the TKO 137 fill bank, and soft substrata (sandy and muddy bottom) at deeper depths further from the shore. Representative photos of the donor sites are shown in **Appendix 2**.

2.2.2 For the coral communities in the survey area, a total of nine coral species were recorded (**Table 2.1** refers), comprising eight hard coral species and one octocoral species. Most of the species recorded in the baseline study of the EIA report were also observed. The overall coral coverage was low, at about <1-5%. According to **Section 2.1.5**, all hard coral colonies observed during the survey were recorded individually. Locally common pioneer and/or non-reef-building hard coral species (i.e. *Oulastrea crispata* and *Tubastraea* sp), as well as octocoral species were recorded as distinct colonies. Representative photos of the coral species recorded in the surveyed area are shown in **Appendix 2**.

Table 2.1 Coral Species Recorded in the Survey Area of TKO 137 Reclamation Works during Pre-construction Detailed Coral Survey

Species	Rarity in Hong Kong ¹ ; Conservation Status
Hard Coral	
<i>Psammocora profundacella</i>	Abundant; Cap. 586 ² , Class II ³ , Least Concern ⁴
<i>Bernardpora stutchburyi</i>	Common; Cap. 586 ² , Class II ³ , Least Concern ⁴
<i>Porites lutea</i>	Dominant; Cap. 586 ² , Class II ³ , Least Concern ⁴
<i>Duncanopsammia peltata</i>	Common; Cap. 586 ² , Class II ³ , Least Concern ⁴
<i>Montipora peltiformis</i>	Common; Cap. 586 ² , Class II ³ , Endangered ⁴
<i>Oulastrea crispata</i> [#]	Common; Cap. 586 ² , Class II ³ , Least Concern ⁴
<i>Tubastraea</i> sp. 1 [#]	N/A; Cap. 586 ² , Class II ³
<i>Tubastraea</i> sp. 2 [#]	N/A; Cap. 586 ² , Class II ³
Octocoral – Gorgonian	
<i>Echinomuricea</i> sp.	Common; N/A

Note:

1. Chan *et al.* (2005b), AFCD (2018)
 2. Cap. 586: Protected under the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586).
 3. List of Wild Animals and Plants Under State Protection (promulgated by State Forestry Administration and Ministry of Agriculture in 2021).
 4. IUCN (2025). The IUCN Red List of Threatened Species (2025.1)
- # Ahermatypic (non-reef-building) species.

2.2.3 Among the recorded hard coral species as stated in **Table 2.1**, five of which (*Bernardpora stutchburyi*, *Duncanopsammia peltata*, *Montipora peltiformis*, *Porites lutea* and *Psammocora profundacella*) are considered as reef-building coral species and their colonies were recorded individually. The representative photos of the species recorded are shown in **Appendix 2** and summary table of coral colonies recorded during the PDCS is presented in **Appendix 3**. A total of fifty-eight (58) hard coral colonies were identified within the survey area. The size of the hard coral colonies ranged from 10 to 45 cm. Most colonies were in good condition, but some colonies suffered from low levels of mortality. These coral colonies were attached to non-movable boulders (i.e. boulder >50cm).

2.2.4 No black coral species and coral of opportunity were recorded during the PDCS in TKO 137 reclamation works.

Potential Coral Recipient Sites

Spot-Check Dive

2.2.5 The spot-check dives in the potential coral recipient sites (i.e. Joss House Bay and Cape Collinson) were carried out in early September 2025. The location the spot-check dive survey is shown in **Figure 2**. The weather was sunny with wind of north or northeast force 3-4. Average underwater visibility was about 1.5-3 m. The GPS coordinates, route distance, maximum depth and bottom substrate at each surveyed sites were summarized in **Table 2.2**.

Table 2.2 General Information on the Spot-Check Dives

Site	Location (GPS) (Starting Point)	Approximate Route Distance (m)	Max. Depth (m)	Bottom Substrate
Joss House Bay	22.27024, 114.28475	1400	6	Natural Bedrock / Boulder
Cape Collinson	22.26477, 114.25558	835	10	Natural Bedrock / Boulder

2.2.6 The substrate of both coral recipient sites was mainly composed of natural bedrock and boulders, with sparsely distributed rubbles and sand with gravel. A total of 12 and 17 coral species were in Cape Collinson and Joss House Bay during the spot-check survey respectively (**Table 2.3** refers). Most of the recorded coral species are common in Hong Kong. In particular, all coral species recorded in Joss House Bay are hard corals, with coverage of about 5-10%. While there are only seven hard coral species recorded in Cape Collinson, yet one black coral species was presented. The overall coral coverage in Cape Collinson is <1%. Following the spot-check dive surveys, both sites were found suitable for being a coral recipient site, a more detailed REA survey was conducted to collect more information on the coral communities.

Table 2.3 Coral species Recorded from the Spot-Check Dives

Coral Species	Cape Collinson	Joss House Bay	Abundance in Hong Kong
Hard Coral			
<i>Cyphastrea serailia</i>		x	Dominant
<i>Dipsastraea speciosa</i>		x	Abundant
<i>Dipsastraea veroni</i>		x	Abundant
<i>Dipsastraea rotumana</i>		x	Abundant
<i>Favites abdita</i>		x	Dominant
<i>Favites chinensis</i>		x	Dominant
<i>Favites flexuosa</i>		x	Uncommon
<i>Favites pentagona</i>		x	Dominant
<i>Goniastrea aspera</i>		x	Common
<i>Bernardpora stutchburyi</i>	x	x	Common
<i>Montipora peltiformis</i>		x	Common
<i>Oulastrea crispata</i>	x	x	Common
<i>Pavona decussata</i>		x	Abundant
<i>Plesiastrea versipora</i>	x	x	Abundant
<i>Porites lutea</i>		x	Dominant
<i>Psammocora profundacella</i>	x	x	Abundant
<i>Turbinaria peltata</i>		x	Common
<i>Cladopsammia gracilis</i>	x		Common
<i>Tubastrea</i> sp. 1	x		Common
<i>Tubastrea</i> sp. 2	x		Common
Black Coral			
<i>Cirrhopathes sinensis</i>	x		Common
Gorgonian			
<i>Menella</i> sp.	x		Common
<i>Echinogorgia</i> sp.	x		Common
<i>Anthogorgia</i> sp.	x		Common
<i>Echinomuricea</i> sp.	x		Common
Total No. of Coral Species	12	17	
~ Coral Coverage (%)	<1%	5 to 10%	

Rapid Ecological Assessment Survey

- 2.2.7 The REA survey was performed in early September 2025 right after the spot check survey. One 100 m transects were laid parallel to the coastline along both spot check site in Joss House Bay and Cape Collinson. The location the REA survey is shown in **Figure 2**. The GPS coordinates, maximum depth, bottom substrate and bottom visibility were shown in **Table 2.4**.

Table 2.4 General Information of the REA Survey

Transect	Location (GPS) (Starting Point)	Location (GPS) (End Point)	Max. Depth (m)	Bottom Substrate	Visibility (m)
JHB1	22.26402, 114.27777	22.26283, 114.27767	7	Natural Bedrock / Boulder	1.5-3
CC1	22.26213, 114.25745	22.26113, 114.25708	10	Natural Bedrock / Boulder	1.5-3

- 2.2.8 Ecological and substrate attributes, and taxonomic Inventories along the REA transects at the sites are presented in **Table 2.5** and **Table 2.6**. Representative photos of the coral recipient sites are shown in **Appendix 2**.
- 2.2.9 In Joss House Bay, the substrates mainly composed of bedrocks and boulders. A total of 11 hard coral species were observed along the REA transect (**Table 2.7** refers). The size of the hard corals ranged from 10 cm to 40 cm. The coral species recorded along the REA transect were evenly distributed. No octocoral and black coral species were recorded. The coverage of hard coral was about 6-10%. Majority of the coral colonies were in good condition with no or low level of sedimentation, bleaching or partial mortality.
- 2.2.10 In Cape Collinson, the substrates also mainly composed of bedrocks and boulders. A total of four hard coral species, two gorgonian species and one black coral species were observed along the REA transect (**Table 2.8** refers). The size of the hard corals ranged from 8 cm to 35 cm. The coral species recorded along the REA transect were also evenly distributed. The coverage of hard coral, gorgonian and black coral along CC1 was about 1-5%. All coral colonies were in good condition with no or low level sedimentation, bleaching or partial mortality.

Table 2.5 Ecological Attributes on REA Transects

Ecological Attributes	JHB1	CC1
	Rank	Rank
Hard Coral	1	0.5
Dead Coral	0	0
Octocoral (Soft corals, gorgonians and black corals)	0	0.5
Anemone Beds	0	0
Dead Standing Corals	0	0
Other Benthos (sponges, zoanthids, ascidinas and bryozoans)	1	1
Macro-algae	0	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 2.6 Substratum Attributes on REA Transects

Substrata	JHB1	CC1
	Rank	Rank
Hard Substrata		
Bedrock/continuous pavement	4	4
Boulder Blocks (diam.>50cm)	2	2
Boulder Blocks (diam.<50cm)	1	1
Rubble	0	0
Other	0	0
Soft Substrata		
Sand	1	1
Mud/Silt	1	1
Mud	0	0

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

Table 2.7 Ranks of Taxon Abundance along the REA Transect JHB1

Benthic Communities	Abundance in JHB1
Hard Corals	
<i>Cyphastrea serailia</i>	3
<i>Favites chinensis</i>	3
<i>Dipsastraea speciosa</i>	3
<i>Favites abdita</i>	3
<i>Bernardpora stutchburyi</i>	3
<i>Oulastrea crispata</i>	3
<i>Pavonna descussata</i>	3
<i>Platygyra carnosus</i>	3
<i>Porties lutea</i>	3
<i>Psammocora profundacella</i>	3
<i>Turbinaria peltata</i>	3
Other Benthos	
<i>Thais luteostoma</i>	3
<i>Septifer virgatus</i>	3
<i>Anthocidaris crassispina</i>	3
<i>Diadema sp.</i>	3

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

Table 2.8 Ranks of Taxon Abundance along the REA Transect CC1

Benthic Communities	Abundance in CC1
Hard Corals	
<i>Bernardpora stutchburyi</i>	3
<i>Oulastrea crispata</i>	3
<i>Psammocora profundacella</i>	3
<i>Tubastrea</i> sp. 1	3
Black Coral	
<i>Cirrhopathes sinensis</i>	3
Gorgonian	
<i>Anthogorgia</i> sp.	3
<i>Echinomuricea</i> sp.	3
Other Benthos	
<i>Thais luteostoma</i>	3
<i>Septifer virgatus</i>	3
<i>Anthocidaris crassispina</i>	3
<i>Diadema</i> sp.	3

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

2.3 Recommendation on Coral Translocation and Enhancement

- 2.3.1 According to the results from the PDCS in the Donor Site, given that the recorded hard coral colonies, including the pioneer hard coral species *Oulastrea crispata*, were attached to unmovable boulders (i.e. tetrapod or large boulders), thus they are considered untranslocatable under the standard translocation method (i.e. translocating coral colonies with the attached moveable substrate with diameter <50 cm). Hence, no standard coral translocation would be proposed under this CTEP.
- 2.3.2 Nonetheless, one hard coral species, *Montipora peltiformis*, is considered as coral species of high ecological value (i.e. hard or black coral species, which is habitat sensitive, uncommon, and/or threatened (e.g. listed Vulnerable or above in IUCN Red List)) as it is listed as “Endangered” in the IUCN Red List (**Table 2.1** refers). According to the approved EIA report, and in compliance with the EIA approval conditions, proper coral enhancement measures (e.g. collection of bodies by detachment) have been explored in the translocation of these unmovable coral colonies of high ecological value. Collection of bodies will be carried out through detachment or fragmentation of this species, as detailed in **Section 3** below.
- 2.3.3 Coral colonies of *Montipora peltiformis* having good health condition and with diameters over 9 cm, are suitable for translocation with the implementation of enhancement measures. Those identified coral colonies that are suitable for translocation will be translocate before the commencement of marine works of the corresponding parts of the Project.

2.4 Recommendation of Coral Recipient Site

2.4.1 Joss House Bay located to the east of Junk Bay is more suitable than the Cape Collinson as coral recipient site (also refer to **Figure 2** for the suggested coral recipient site in Joss House Bay), in particular for hard corals, due to the following results:

- Joss House Bay has similar substrate type (i.e. hard substrates with bedrocks boulders), similar water depth and wave exposure (i.e. semi-exposed) as the area inhabited by hard coral at the donor site in TKO 137 reclamation works;
- The sea bottom of Joss House Bay has sufficient space available for the newly translocated coral;
- Presence of suitable substratum to allow the translocated coral colonies to be permanently stabilised or attached;
- The occurrence of coral species at both coral recipient sites and donor sites are summarised in **Table 2.9** below. Although both sites supported similar coral species as the donor site, the Joss House Bay supported a healthy coral community with higher species diversity, particular in hard coral, and higher coral coverage;
- Presence of protection from storm / typhoon damage; and
- Not to be impacted by marine works of this Project and other planned / committed projects.

Table 2.9 Occurrence of Hard and Black Coral Species at Coral Recipient and Donor Sites

Coral Species	TKO 137 Reclamation Works (Donor Site)	Joss House Bay (Recipient Site)	Cape Collinson
Hard Coral			
<i>Cyphastrea serailia</i>		X	
<i>Dipsastraea speciosa</i>		X	
<i>Dipsastraea veroni</i>		X	
<i>Dipsastraea rotumana</i>		X	
<i>Duncanopsammia peltata</i>	X		
<i>Favites abdita</i>		X	
<i>Favites chinensis</i>		X	
<i>Favites flexuosa</i>		X	
<i>Favites pentagona</i>		X	
<i>Goniastrea aspera</i>		X	
<i>Coscinaraea</i> sp.			
<i>Bernardpora stutchburyi</i>	X	X	X
<i>Montipora peltiformis</i>	X	X	
<i>Oulastrea crispata</i>	X	X	X
<i>Pavona decussata</i>		X	
<i>Platygyra carnosus</i>		X	

Coral Species	TKO 137 Reclamation Works (Donor Site)	Joss House Bay (Recipient Site)	Cape Collinson
<i>Plesiastrea versipora</i>		X	X
<i>Porites lutea</i>	X	X	
<i>Psammocora profundacella</i>	X	X	X
<i>Turbinaria peltata</i>		X	
<i>Cladopsammia gracilis</i>			X
<i>Tubastrea</i> sp. 1	X		X
<i>Tubastrea</i> sp. 2	X		X
Black Coral			
<i>Cirrhopathes sinensis</i>			X

2.4.2 The Cape Collinson will be reserved as a backup site in case the recipient site in Joss House Bay was considered not suitable during the translocation process.

3. CORAL ENHANCEMENT

3.1 Introduction

- 3.1.1 According to the approved EIA and EP conditions, coral translocation, if considered feasible, and coral enhancement measures shall be implemented before the commencement of marine works. In particular, special attention shall be given to coral species of high ecological value, enhanced translocation method including collection of bodies of unmovable corals through detachment and / or fragmentation should be explored and implemented. As stated in **Section 2.3.2** above, coral colonies of one hard coral species, *Montipora peltiformis*, is identified as species of high ecological value and shall be translocated through the enhanced translocation method as far as possible. The details of the enhancement measures for the coral translocation are presented in the sections below.
- 3.1.2 As mentioned under **Section 2.1.9**, recipient sites for coral translocation were preliminary identified under the approved EIA report. Surveys and dive checks were performed to determine the site's suitability as coral recipient sites. Factors to be considered include depth, water flow, water condition, substrate, human disturbance, indigenous coral population, vicinity to donor site, etc.

3.2 Enhancement Measures for Coral Translocation

Literature Review

- 3.2.1 Collection of bodies of unmovable corals for translocation work, or similarly, out-planting coral fragment, has been carried out in Hong Kong and oversea previously. With proven methodologies, this Project can draw on the success of past enhanced translocation using coral fragments as reference.
- 3.2.2 Coral translocation / out-planting of unmovable corals / coral fragments in Hong Kong were conducted both in response to construction activities under EIA studies, and academic research (e.g. (CA, 2022; CEDD, 2022a; HKIA, 2020). Fragmentation or detachment of coral colonies attached to unmovable substrates was conducted prior to the translocation. Recipient sites were usually near project sites or coral donor sites, with the presence of natural coral colonies, and have suitable conditions for coral growth. The monitoring showed successful results with high survivorship (over 90%) of the translocated colonies / out-planted coral fragments (CA, 2022; CEDD, 2022b; HKIA, 2020). With a track record of demonstrated success, coral translocation using coral fragments has been proven as an effective enhancement to coral translocation and will be adopted for the Project.
- 3.2.3 In addition to local studies, successful coral translocation projects have also been conducted outside Hong Kong, with fragments of *Montipora* spp. found to be widely translocated for restoration of degraded coral colonies (Yang *et al.*, 2024). Kuta Lagoon in Bali, Indonesia implemented a large-scale coral fragment translocation project to rehabilitate the degraded coral community due to coral mining and coastal erosion (Onaka *et al.*, 2013). The project achieved great results, with *Acropora* spp. (95% after 1.5 years) and *Montipora* spp. (100% after 1.5 years) having the highest survival rates as well as rapid growth rate of all translocated corals species. The study also reveals that the genus of *Montipora* is suitable to be translocated with fragments.

Proposed Enhancement Measures

- 3.2.4 A total of five colonies of *Montipora peltiformis* with diameter over 9 cm and in good health condition is proposed (**Appendix 3** refers) to be completely detached from unmovable substrata as far as possible and translocated to the coral recipient site.

4. PROCEDURE OF ENHANCED CORAL TRANSLOCATION

4.1 Confirmation of Recipient Site

4.1.1 According to **Section 2.4**, the Joss House Bay would be selected as the coral recipient site. The collected colonies of unmovable coral will be translocated to this recipient site.

4.2 Proposed Translocation Period and Personnel

4.2.1 The coral enhancement works, (i.e. translocation through detachment) undertaken outside the coral spawning period in order to avoid disturbance to the spawning activities (specifically from July to mid-September).

4.2.2 All the coral enhancement works should be conducted by divers with SCUBA diving qualification and supervised / lead by a qualified marine ecologist(s) with SCUBA diving qualification and at least 5 years of relevant experience. The qualified marine ecologist(s) shall be certified by the Environmental Team Leader (ETL) and verified by the Independent Environmental Checker (IEC) prior to the commencement of coral translocation and enhancement works.

4.3 Collection of Unmovable Coral Colonies

4.3.1 Colonies of *Montipora peltiformis* with diameter over 9 cm and in good health condition (identified in the PDCS) shall be collected and translocated. Divers will carefully remove coral colonies (detach the whole body as far as practicable) from the existing substrate using a hammer and chisel. Each coral colony will be marked / tagged, 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).

4.3.2 Once collected, the coral colony will be moved and lifted from the sea bottom and loaded to ship / boat with a lifting bag immediately. Throughout this process, exposure of corals to direct UV light will be avoided to minimise stress and prevent damage.

4.4 Transportation

4.4.1 During transport (to the recipient site), corals must remain submerged in water at an appropriate depth within suitable containers (e.g. 80 cm x 100 cm x 40 cm in dimension and 32 litres in volume each) to maintain physiological stability. The placement of corals colonies in containers will ensure that the coral colonies are fully covered by seawater. Coral exposure to air should be avoided as far as possible during the translocation process from the donor site to the recipient site. Shading will also be provided by placing the seawater tanks under roof of the vessel to avoid exposure to direct sunlight. They should also be transported to the recipient site as soon as possible (on the same day) following the removal. The journey must be conducted within a controlled speed limit to minimise physical damage and stress to the corals.

4.5 Translocation of Collected Coral Colonies

4.5.1 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.

- 4.5.2 When arriving at the suggested coral recipient site, SCUBA divers, with the supervision of the marine ecologist, will carefully translocate the coral colonies to the recipient site and minimise disturbance to the seabed and/or sediment. The coral colonies will be attached to suitable substrates by using underwater epoxy and positioned to similar water depths with orientations as their previous location at the donor site as much as possible.
- 4.5.3 Divers will tag translocated colonies at the recipient site by using plastic tags (~3.5 cm diameter) with colony number, which will be glued onto substrates 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-enhancement stage, if necessary.
- 4.5.4 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 for record.

5. POST-ENHANCEMENT MONITORING

- 5.1.1 Post-enhancement monitoring will be conducted to assess the status of the coral colonies translocated through enhancement measures, using the original coral colonies in the recipient site as reference.
- 5.1.2 Ten reference natural coral colonies at the recipient site will be tagged and monitored as 'control corals' to provide a baseline for comparison and to assess the success of the translocation effort.
- 5.1.3 The monitoring will be conducted within one year at the 3rd, 6th, and 12th month after the coral enhancement work. 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. The general environmental conditions including weather, sea, and tidal conditions of the coral recipient site will also be monitored.
- 5.1.4 All the tags for marking the translocated and natural coral colonies will be removed / retrieved once the monitoring programme is completed.
- 5.1.5 If observations of any die-off / abnormal conditions of the translocated corals are made during the post-enhancement monitoring, the Environmental Team (ET) should inform the Contractor, Independent Environmental Checker (IEC), Engineer Representative (ER), EPD and AFCD, and liaise with AFCD to investigate any follow-up actions or measures needed.
- 5.1.6 Post-enhancement 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 5.1**.

Table 5.1 Action and Limit Levels for Post-Enhancement Monitoring

Parameter	Action Level Definition	Limit Level Definition
Mortality	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 reference corals at the recipient site.	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 recipient site.

- 5.1.7 If the defined Action Level or Limit Level for coral monitoring as listed in **Table 5.1** is exceeded, the actions as set out in **Table 5.2** will be implemented.

Table 5.2 Event and Action Plan for Post- Enhancement Monitoring

Event	Action			
	ET Leader	IEC	ER	Contractor
Action Level Exceedance	1. Check monitoring data; 2. Inform the IEC, ER, and Contractor of the findings; 3. Conduct additional monitoring to confirm findings; 4. Propose follow-up actions or measures for consideration.	1. Discuss monitoring with the ET and the Contractor; 2. Review proposals for additional monitoring and any follow-up actions or measures submitted by the Contractor and advise the ER accordingly.	1. Discuss with the IEC additional monitoring requirements and any other follow-up actions or measures proposed by the ET; 2. Make the agreement on the follow-up actions or measures to be implemented.	1. Inform the ER and confirm notification of the non-compliance in writing; 2. Discuss with the ET and the IEC and propose follow-up actions or measures to the IEC and the ER; 3. Implement the agreed follow-up actions or measures.
Limit Level Exceedance	1. Undertake Steps 1-4 as in the Action Level Exceedance. If further exceedance of Limit Level, propose follow-up actions or measures for consideration.	1. Discuss monitoring with the ET and the Contractor; 2. Review proposals for additional monitoring and any other follow-up actions or measures submitted by the Contractor and advise the ER accordingly.	1. Discuss with the IEC additional monitoring requirements and any other follow-up actions or measures proposed by the ET; 2. Make the agreement on the follow-up actions or measures to be implemented.	1. Inform the ER and confirm notification of the non-compliance in writing; 2. Discuss with the ET and the IEC and propose follow-up actions or measures to the IEC and the ER; 3. Implement the agreed follow-up actions or measures.

5.1.8 Findings from post-enhancement monitoring for the translocated corals 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-enhancement monitoring.

5.1.9 Although no standard coral translocation was proposed under this CTEP, if there is any coral colony considered suitable to be translocated through standard method during the enhancement works, as determined by the qualified marine ecologist(s), post-translocation monitoring shall be conducted, following the post-enhancement monitoring requirement as stated in **Section 5.1.1 to Section 0** above.

6. IMPLEMENTATION PROGRAMME

6.1 Implementation Timing of Coral Enhancement Measures for TKO 137 Reclamation Works

6.1.1 Coral translocation and enhancement measures proposed under this CTEP should be completed prior to commencement of TKO 137 reclamation works. The following section sets out the requirements to avoid potential adverse impact to the corals proposed to be translocated and/or enhanced due to potential interfacing projects.

Impact On Water Quality arising from Construction and Operation of TKO 132 Carriageway Bridge (EP-667/2025)

6.1.2 The water quality impact assessment of the approved EIA report assumed concurrent marine construction works at TKO 132 and TKO 137. As presented in Section 5.7.2.21 and Appendix 5.6 (i.e. Table A5-6-2) of the approved EIA report, scenario A1 assumed a work rate of maximum concurrent installation of 6 marine piles per each working day for the construction of TKO 132 carriageway bridge without permanent seawall in-place.

6.1.3 Nevertheless, the respective modelling results of the water quality impact assessment of the approved EIA report suggested that the extents of sediment plumes of the marine construction of TKO 132 carriageway bridge are limited to and confined at their source points under the mitigated scenarios where silt curtains are installed. In particular, with mitigation measures in place, it has been demonstrated in Appendices 5.10c and 5.10d of the approved EIA report that the nearest water sensitive receiver C1a, which is 230m away from the Suspended Solids (SS) release point D2 of the TKO 132 carriageway bridge¹, will achieve full water quality compliance. Therefore, it is supported that the SS release arising from the marine construction of the TKO 132 carriageway bridge¹ will not induce adverse water quality impact beyond a distance of 230m from the assumed marine construction works, and hence the potential impacts arising from the assumed pollution sources are considered localized. No adverse water quality impact to the water sensitive receivers (WSRs) at TKO 137 area is therefore expected due to marine construction works of TKO 132 carriageway bridge¹, which are located more than 2000m away from TKO 137 area.

6.1.4 On the above basis, it is considered completion of the coral translocation and/or enhancement works under this CTEP prior to the commencement of marine construction works of TKO 132 carriageway bridge would not be compulsory, on a condition that the work rate of the marine construction works of TKO 132 carriageway bridge would not be greater than that assumed in the approved EIA report¹. The Contractor to implement the coral translocation and enhancement works detailed in this CTEP will closely liaise with the project proponent/ contractor of the TKO 132 carriageway bridge for regular updates on the work rate of the marine construction works of the TKO 132 carriageway bridge.

¹ Assuming a maximum work rate of concurrent installation of 6 marine piles per each working day (production rate of 18.85 m³/day) without permanent seawall in-place according to Section 5.7.2.21 and Appendix 5.6 (i.e. Table A5-6-2) of the approved EIA report

Impact On Water Quality arising from TKO 132 Reclamation Works (EP-668/2025)

- 6.1.5 The water quality impact assessment of the approved EIA report assumed concurrent marine construction works at TKO 132 and TKO 137. As presented in Sections 5.7.2.14 – 5.7.2.18 and Appendix 5.6 (i.e. Tables A5-6-2 and A5-6-4) of the approved EIA report, scenario A1 (i.e. Table A5-6-2) assumed a work rate of maximum concurrent sediment removal of 2,100 m³ per each working day and sand blanket laying at 4 locations of 1,060 m³ per location per each working day for the construction of TKO 132 reclamation works without permanent seawall in-place. Scenario A2 (i.e. Table A5-6-4) assumed a work rate of maximum concurrent sand blanket laying at 2 locations of 1,060 m³ per location per each working day and underwater filling at 3 locations of 2,120 m³ per location per each working day for the construction of TKO 132 reclamation works with permanent seawall in-place.
- 6.1.6 Nevertheless, the respective modelling results of the water quality impact assessment of the approved EIA report suggested that the extents of sediment plumes of the marine construction of TKO 132 reclamation works are limited to and confined at their source points under the mitigated scenarios A1 and A2 where double silt curtains are installed. In particular, with mitigation measures in place, it has been demonstrated in Appendices 5.10c and 5.10d of the approved EIA report that the nearest water sensitive receivers C1e, C1f, C1g and C2, which are surrounding the TKO 132 works at distances of 70 m – 160 m, will achieve full water quality compliance. Therefore, it is supported that the SS release arising from the marine construction of the TKO 132 reclamation works will not induce adverse water quality impact beyond a distance of 160m from the assumed marine construction works, and hence the potential impacts arising from the assumed pollution sources are considered localized. No adverse water quality impact to the water sensitive receivers (WSRs) at TKO 137 area is therefore expected due to marine construction works of TKO 132 reclamation works, which are located more than 2000m away from TKO 137 area.
- 6.1.7 On the above basis, it is considered completion of the coral translocation and/or enhancement works under this CTEP prior to the commencement of marine construction works of TKO 132 reclamation works would not be compulsory, on a condition that the work rate of the marine construction works of TKO 132 reclamation works would not be greater than that assumed in the approved EIA report^{2 3}. The Contractor to implement the coral translocation and enhancement works detailed in this CTEP will closely liaise with the project proponent/ contractor of the TKO 132 reclamation works for regular updates on the work rate of the marine construction works of the TKO 132 reclamation works.

² Assuming a maximum work rate of concurrent construction of sediment removal (1 work front) (total production rate of 2,100 m³/day) and sand blanket laying (4 work fronts) (total production rate of 4,240 m³/day) per each working day without permanent seawall in-place according to Section 5.7.2.15 and Appendix 5.6 (i.e. Table A5-6-2) of the approved EIA report

³ Assuming a maximum work rate of concurrent construction of sand blanket laying (2 work fronts) (total production rate of 2,120 m³/day) and underwater filling (6 work fronts) (total production rate of 6,360 m³/day) per each working day with permanent seawall in-place, according to Section 5.7.2.16 and Appendix 5.6 (i.e. Table A5-6-4) of the approved EIA report

6.2 Overall Implementation Programme

6.2.1 The overall implementation of the coral enhancement measures is listed in **Table 6.1** below: Table 6.1 Implementation Schedule of Coral Enhancement Measures

EIA Ref.	EP Condition	Recommended Mitigation Measures / Enhancement Measures	Location	Timing	Implementation Party	Overall Environmental Performance Target
9.10.3.9; 9.12.1.3; 16.8.1.4	2.14	Conduct pre-construction detailed coral survey in the marine works area prior to the commencement of marine work, to identify the location, condition, number, and translocation feasibility of coral colonies within the affected subtidal habitats.	TKO 137 reclamation works	No later than 3 months before commencement of marine works	Project Proponent	EIAO-TM
9.10.3.9 - 9.10.3.10	2.14	Coral Translocation and Enhancement Plan (CTEP) should be submitted to EPD before commencement of marine works.	TKO 137 reclamation works	No later than 3 months before commencement of marine works	Project Proponent	EIAO-TM
9.10.3.9	2.14	Implementation of coral enhancement measure (i.e. collection of bodies of unmovable corals).	TKO 137 reclamation works	Before commencement of marine works	Contractor	EIAO-TM
9.10.3.10	2.14	Conduct post-enhancement monitoring.	Coral recipient site	After the completion of coral enhancement works	Contractor	EIAO-TM

7. CONCLUSION

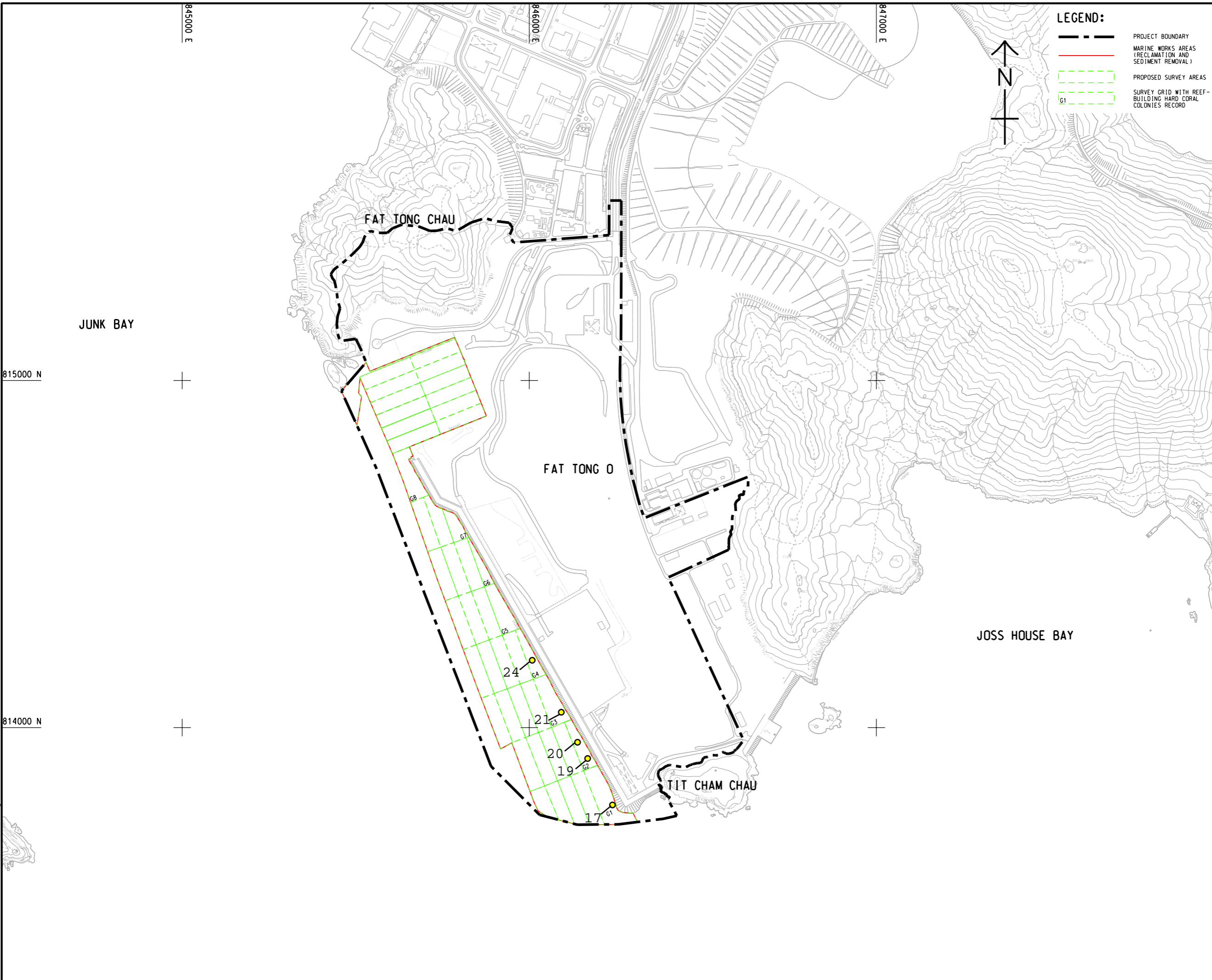
- 7.1.1 This CTEP reports on PDCS conducted to identify coral colonies directly affected by the marine works of this Project and inform the subsequent coral translocation. According to the survey results, the recorded hard coral colonies under the Project were attached to unmovable boulders and are considered as untranslocatable under standard translocation methods (i.e. translocating coral colonies with the attached moveable substrate with diameter <50 cm).
- 7.1.2 The suitability of the coral recipient sites (Joss House Bay and Cape Collinson) was also reviewed during the PDCS. The Joss House Bay was considered to be the suitable recipient site with consideration of the overall condition, substratum, existing coral communities and species composition.
- 7.1.3 In compliance with the EIA approval conditions, proper coral enhancement measures have been explored in the translocation of unmovable coral colonies of high ecological value. A total of five coral colonies of *Montipora peltiformis* having good health conditions are considered suitable for translocation through detachment.
- 7.1.4 Based on coral translocation projects in other countries, fragments of *Montipora* spp. have been successfully detached and translocated for restoration of degraded coral colonies, achieving high survival rates (100% after 1.5 years). As such coral colonies of *Montipora peltiformis* recorded within the Project site will be translocated through detachment to the identified recipient site.

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Figures

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LEGEND:

- PROJECT BOUNDARY
- MARINE WORKS AREAS (RECLAMATION AND SEDIMENT REMOVAL)
- PROPOSED SURVEY AREAS
- SURVEY GRID WITH REEF-BUILDING HARD CORAL COLONIES RECORD



PROJECT
 項目
 DEVELOPMENT OF TSEUNG KWAN O AREA 137 AND ASSOCIATED RECLAMATION SITES - INVESTIGATION, DESIGN AND CONSTRUCTION

CLIENT
 業主
 土木工程拓展署
 Civil Engineering and Development Department

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ISSUE/REVISION
 修訂

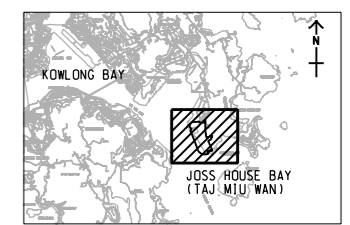
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STATUS
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SCALE **DIMENSION UNIT**
 比例尺 尺寸單位

A1 1 : 5000 METRES

KEY PLAN A1 1 : 200000



PROJECT NO. **CONTRACT NO.**
 項目編號 合約編號

60720423 CE 40/2023(CE)

SHEET TITLE
 圖則名稱

MARINE WORKS AREAS AND PROPOSED SURVEY AREAS FOR PRE-CONSTRUCTION DETAILED CORAL SURVEY - TKO137

SHEET NUMBER
 圖則編號

60720423/SK7052/FIGURE 1

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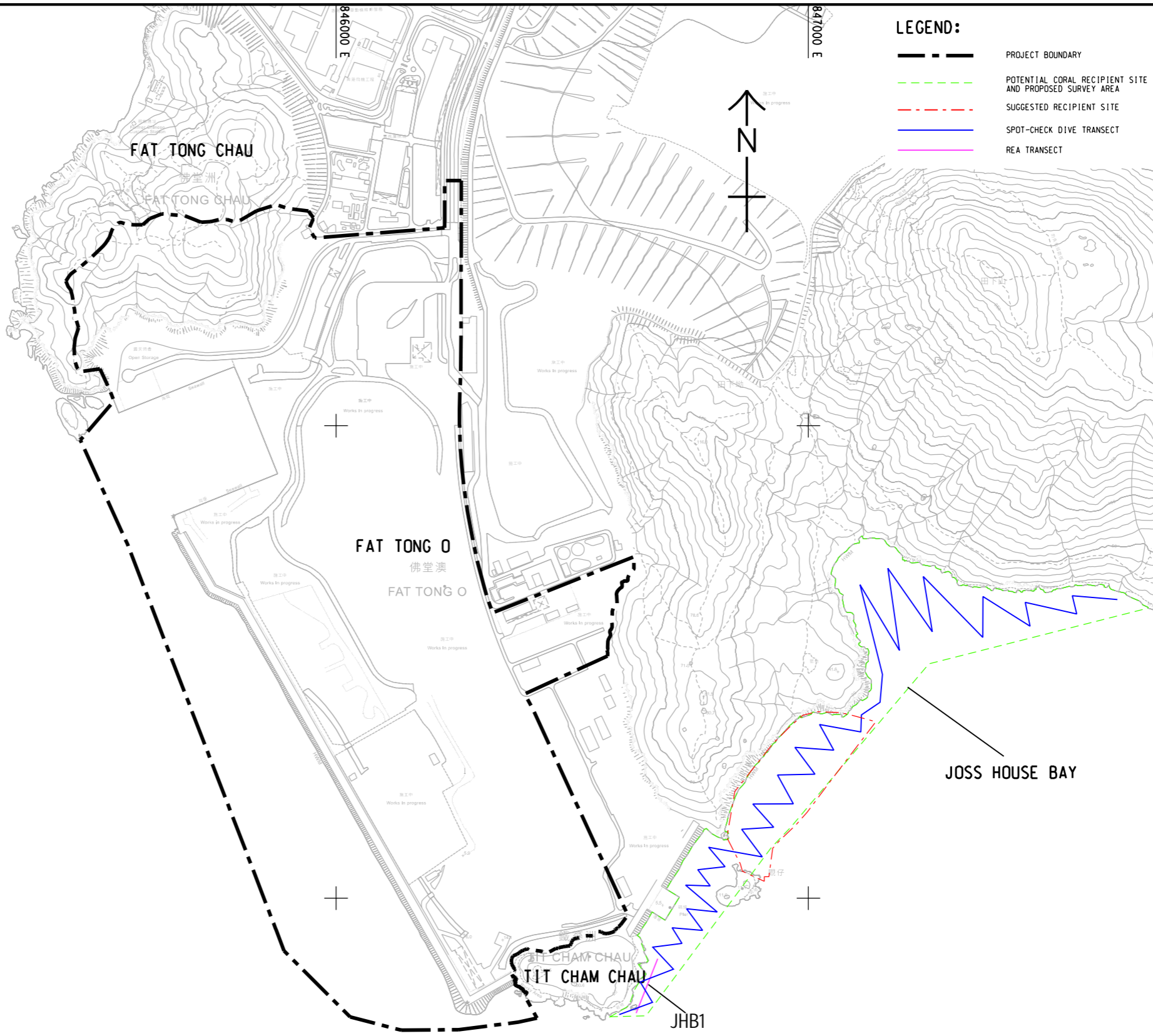
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LEGEND:

- PROJECT BOUNDARY
- POTENTIAL CORAL RECIPIENT SITE AND PROPOSED SURVEY AREA
- SUGGESTED RECIPIENT SITE
- SPOT-CHECK DIVE TRANSECT
- REA TRANSECT

PROJECT
 項目
 DEVELOPMENT OF
 TSEUNG KWAN O AREA 137
 AND ASSOCIATED
 RECLAMATION SITES
 – INVESTIGATION,
 DESIGN AND CONSTRUCTION

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ISSUE/REVISION
 修訂

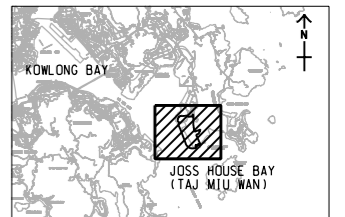
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修訂	日期	修訂描述	核對

STATUS
 狀態

SCALE **DIMENSION UNIT**
 比例 尺寸單位

A1 1 : 5000 METRES

KEY PLAN A1 1 : 200000



PROJECT NO. **CONTRACT NO.**
 項目編號 合約編號
 60720423 CE 40/2023(CE)

SHEET TITLE
 圖紙名稱
 POTENTIAL RECIPIENT SITES

SHEET NUMBER
 圖紙編號
 60720423/SK7053/FIGURE 2

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Appendix 1

Rapid Ecological Assessment

Appendix 1 Rapid Ecological Assessment

Rapid ecological assessment (see ¹DeVantier et al. 1998) is a two-tiered approach for underwater survey to assess the sub-littoral substrata and benthic organisms. This methodology has been modified to suit Hong Kong conditions and has become a standardised and widely adopted way to establish ecological baseline conditions. Two levels of information are to be recorded in a swathe ~2m wide, 1m on either side of each transect:

- Tier 1 will assess the relative cover of major benthic groups and substrata
- Tier II will provide an inventory of sedentary/ sessile benthic taxa, which are also ranked in terms of their abundance in the community at the survey site.

Self-evidently, data have to be recorded by an expert who is experienced in field identification of sedentary/ sessile benthic taxa, particularly corals.

Tier I : Categorisation of benthic cover

For each transect, ecological and substratum attributes should be categorised and ranked. The required attributes are detailed as follows:

Table 1 Tier 1 Benthic Attribute Categories

Ecological Attributes		Substratum Attributes	
	Hard Corals		Hard substrata
	Octocorals (soft corals and gorgonians)		Bedrock / continuous pavement
	Black corals		Boulder blocks (diam. >50cm)
	Dead Standing Corals		Boulder blocks (diam. <50cm)
			Rubble
			Other
			Soft substrata
			Sand
			Mud/Silt

Table 2 Tier 1 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%

*Note: For substratum attributes, it is preferable to record actual estimates of cover. 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%) and is also an approach adopted by similar recent survey reports.

¹ DeVantier, L.M., G. De'ath, T.J. Done and Turak, E. (1998). Ecological Assessment of a Complex Natural System: A Case Study from the Great Barrier Reef. *Ecological Applications* 8:480-496.

Tier 2 :Taxonomic inventories to define types of benthic communities

An inventory of benthic taxa along each transect should be compiled during the survey. The taxa should be defined in situ to at least the following levels:

Table 3 Taxonomic Inventory Identification

Type of Benthos	Level of Taxa
Hard corals	Species level, wherever possible
Octocorals	Genus level
Black Corals	Genus level

For each transect, each taxon in the inventory should be ranked in terms of abundance in the community.

Table 4 Ordinal Ranks of Taxon Abundance

Taxon Abundance Rank	Abundance
0	Absent
1	Rare
2	Uncommon
3	Common
4	Abundant
5	Dominant

The taxon categories should 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 should be taken.

Appendix 2

Representative and Coral Photos of the Coral Recipient Sites and the Donor Site

Appendix 2 Representative and Coral Photos of the Coral Recipient Sites and the Donor Site

2.1 Substrate Photos at Coral Survey Locations

Cape Collinson (Recipient Site)







Joss House Bay (Recipient Site)



TKO 137 (Donor Site)



2.2 Representation Coral Photos at Donor Site

	
<i>Psammocora profundacella</i>	<i>Bernardpora stutchburyi</i>
	
<i>Duncanopsammia peltata</i>	<i>Montipora peltiformis</i>

Appendix 3

Species, Number and Conditions of the Recorded Hard Coral Colonies in TKO 137

Appendix 3 Summary Table of Coral Colonies Recorded in TKO 137 Reclamation Works

Coral Species	No. of Colonies Recorded	Translocatable Number	Actual Number to be Translocated	Translocation Method	Recorded Grid Number of Translocatable Colonies
Hard Coral#					
<i>Bernardpora stutchburyi</i>	10	0	0	N/A	N/A
<i>Duncanopsammia peltata</i>	4	0	0	N/A	N/A
<i>Montipora peltiformis</i> [^]	10	5	5	Enhancement measure (Detachment)	G1, G2, G3, G4
<i>Porites lutea</i>	16	0	0	N/A	N/A
<i>Psammocora profundacella</i>	18	0	0	N/A	N/A
Other Corals					
Non-reef-building hard coral species and other octocoral species*	~180	0	0	N/A	N/A

Note:

Reef-building hard coral species.

[^] Coral species of high ecological value.

* *Oulastrea crispata* , *Tubastraea* sp. 1, *Tubastraea* sp. 2 and *Echinomuricea* sp.