



The Government of the Hong Kong Special Administrative Region

**Civil Engineering and Development Department**

# **Pier Improvement at Tung Ping Chau**

## **Project Profile**

(prepared in accordance with  
the Environmental Impact Assessment Ordinance (Cap. 499))

December 2017

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# **1 BASIC INFORMATION**

## **1.1 Project Title**

1.1.1 Pier Improvement at Tung Ping Chau (hereinafter named as the “Project”).

## **1.2 Purpose and Nature of the Project**

### Background

1.2.1 A policy initiative, Pier Improvement Programme (PIP), has been featured in the 2017 Policy Address in January 2017. The PIP aims to upgrade the structural and facility standards of a number of existing public piers at remote rural areas in phases with a view to enhancing accessibility of some remote scenic natural heritage attractions. The PIP also responds to local requests to meet basic needs of local villagers mainly relying on marine transport or fishermen’s operation. The first phase of the PIP covers about 10 public piers in the New Territories and outlying islands.

1.2.2 Spearheaded by the Development Bureau (DEVB) in coordination with relevant bureaux and departments, a Committee on Piers (the Committee) has been established to take forward the PIP. Upon an overall review of public piers over the New Territories and outlying islands and taking into account a host of factors including public safety, accessibility of nearby natural and heritage scenic attractions, local sentiment, utilization and technical feasibility, the Committee has recommended a list of 10 proposed pier items at remote rural areas for priority implementation under the first phase of the PIP. Tung Ping Chau Public Pier is one of the recommended proposed pier items.

1.2.3 Tung Ping Chau is well known for its magnificent coastal landform and beautiful underwater hard coral communities and attracts many visitors every year. The Tung Ping Chau Public Pier consists of narrow staircases and is inadequate to meet the current operational needs, therefore it is necessary to carry out improvement works to improve the existing facility standards of the pier.

1.2.4 This Project Profile is prepared for application to the Director of Environmental Protection for an EIA Study Brief for the Project.

## **1.3 Name of Project Proponent**

1.3.1 The Project Proponent is Pier Improvement Unit (PIU), Civil Engineering Office, Civil Engineering and Development Department (CEDD) of the Government of the Hong Kong Special Administrative Region.

## 1.4 Location and Scale of Project and History of Site

- 1.4.1 The Project site is located along on the north-eastern coast of Tung Ping Chau facing towards Ping Chau Hoi. It falls within the Tung Ping Chau Marine Park and partly overlaps with the Ping Chau Site of Special Scientific Interest (SSSI). It is also adjacent to the Plover Cove (Extension) Country Park which also falls within the Hong Kong UNESCO Global Geopark (Geopark). The SSSI was designated in 1979 in recognition of its geological significance. The location plan of Tung Ping Chau Public Pier is shown at **Appendix A**.
- 1.4.2 The existing pier mainly serves ferries and pleasure vessels. The existing pier is approximately 98m long and comprised of 3 components: (1) a 49m long rubble causeway or embankment; (2) a 35m long steel-concrete composite catwalk supported by the pier head and 2m diameter piles; and (3) a 14m long by 5.5m wide solid blockwork pier head with two landings and a roof. The existing pier consists of narrow staircases and is inadequate to meet the current operational needs. A photo showing the existing pier is shown at **Appendix B**.
- 1.4.3 Tentative major works items for the pier improvement works at Tung Ping Chau Public Pier include the following:
- (a) Provision of temporary berthing and mooring facilities with temporary landing pontoon and steel structure supported by piles which serve the public throughout the construction stage;
  - (b) Modification of the existing pier with pile foundation with a view to widening the pier head and its boarding staircases;
  - (c) Demolition of portions of the existing pier structure, if necessary; and
  - (d) Demolition of temporary berthing and mooring facilities after completion of pier improvement works.

## 1.5 Number and Types of Designated Projects to be Covered by the Project Profile

- 1.5.1 The Project is a designated project under Item Q.1, Part 1 of Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance.

*“Q.1 All projects including new access roads, railways, sewers, sewage treatment facilities, earthworks, dredging works and other building works partly or wholly in an existing or gazetted proposed country park or special area, a conservation area, and existing or gazetted proposed marine park or marine reserve, a site of cultural heritage, and a site of special scientific interest”*

The project site is within an existing marine park, namely, Tung Ping Chau Marine Park and it is also partly within a site of special scientific interest, namely the Ping Chau SSSI.

## **1.6 Name and Telephone Number of Contact Person**

### **1.6.1 All enquiries regarding the Project can be addressed to:**

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

Mr. YUNG Chung-bun, Thomas, Deputy Project Team Leader  
Tel.: 2762 5576  
Fax: 2714 2054

## **2 OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME**

### **2.1 Project Planning and Implementation**

2.1.1 The Project Proponent will engage consultant to undertake environmental impact assessment (EIA) study.

2.1.2 The construction works will be carried out by contractor to be appointed under works contract.

2.1.3 The preliminary design (including EIA study) is targeted to be completed in 2021. Detailed design and construction of the works under the Project will follow and targeted for completion by 2025.

### **2.2 Interactions with Other Projects**

2.2.1 Potential projects that would interface with the Project are listed below. This list should be re-visited during the EIA study to ensure all the latest projects available from the respective stakeholders are incorporated.

(i) CLP's solar power and small wind turbines project; and

(ii) Environmental Association Ltd's desalination project at Tung Ping Chau.

## **3 POSSIBLE IMPACTS ON THE ENVIRONMENT**

### **3.1 Air Quality**

#### Construction Phase

3.1.1 Since only minor earthwork will be involved, dust pollution will not be a major cause of concern. For the small amount of dust arising from the reconstruction of

the pier, the Air Pollution Control (Construction Dust) Regulation shall be followed in order not to cause adverse impacts on the air quality.

#### Operation Phase

- 3.1.2 Potential operational air quality impact is not anticipated.

### **3.2 Noise**

#### Construction Phase

- 3.2.1 Potential noise impacts on noise sensitive receivers (NSRs) are associated with construction activities and powered mechanical equipment. Off-site storage or works area for this Project are not anticipated. The potential key construction activities which would generate noise impacts may include demolition and reconstruction of existing pier, provision and demolition of temporary pier, and associated works. The site is adjacent to an NSR (i.e. Plover Cove (Extension) Country Park), and distance between the next nearest NSR (i.e. Ping Chau Tai Tong) and the works area is about 170 m. Transportation route of plant equipment, C&D material and C&D waste would be planned as far as practicable in a way to minimize noise impacts to NSRs.
- 3.2.2 Construction noise impact would be investigation and addressed in the EIA study.

#### Operation Phase

- 3.2.3 Potential operational noise impact is not anticipated.

### **3.3 Water Quality**

#### Construction Phase

- 3.3.1 The water quality of the Tung Ping Chau Marine Park may be affected by the muddy water and waste water generated during piling works, provision and demolition of temporary pier and demolition works. The waste water generated from the works area may also affect the water quality if it is not properly handled. Appropriate mitigation measures such as installation of silt curtains, provision of chemical toilets and sewerage water delivered to treatment works operated by Drainage Services Department for disposal may need to be recommended.

#### Operation Phase

- 3.3.2 Potential operation impact to water quality is not anticipated.

### **3.4 Land Contamination**

- 3.4.1 Potential land contamination within the Project site is not anticipated. The historic record of leakage or spillage of oil product, land contamination issue and its potential impact within the Project site would be reviewed and addressed in the EIA study.

### **3.5 Ecology**

#### Construction Phase

- 3.5.1 The Project site falls within the Tung Ping Chau Marine Park and there are corals scattered within the proposed site. The coral habitat may be directly affected or lost by the pier improvement works including but not limited to the proposed reconstruction and provisioning of the pier, the temporary reprovisioning of the existing pier and other associated works. The corals may be affected by the muddy water and wastewater generated during piling works and other works area on land.
- 3.5.2 The status of coral, preventive measures to avoid/ minimize the impact to coral and coral monitoring should be reviewed and updated when the results of updated coral survey are available.
- 3.5.3 The potential impact and their mitigation measure on the marine ecology (e.g. the intertidal, sub-tidal, benthic and coral communities, etc.) and the overall functionality of the Tung Ping Chau Marine Park would be assessed and addressed in the EIA study. Appropriate mitigation measures, including but not limited to, water quality monitoring and coral monitoring within the Marine Park would be undertaken by specialists before, during and after the construction phase.”

#### Operation Phase

- 3.5.4 The potential ecological impacts (including water quality and disturbance to the marine habitats due to marine traffic, boating and visitor activities) as well as the overall functionality of the Tung Ping Chau Marine Park during the operational phase of the proposed development would be assessed and addressed in the EIA study. Activities that may pollute the water body and cause nuisance to the Marine Park are prohibited or controlled under the Marine Parks Ordinance and the Marine Parks and Marine Reserves Regulation.

### **3.6 Fisheries**

#### Construction Phase

- 3.6.1 The potential direct and indirect impacts including but not limited to water quality and other disturbance to the fisheries resources and other fisheries sensitive receivers (FSRs) due to the pier improvement works during construction phase of the proposed development would be assessed and addressed in the EIA study.

#### Operation Phase

- 3.6.2 The potential direct and indirect impacts including but not limited to water quality and other disturbance to the fisheries resources and other fisheries sensitive receivers (FSRs) due to marine traffic, boating and visitor activities during operation phase of the proposed development would be assessed and addressed in the EIA study.



### **3.7 Waste Management**

#### Construction Phase

3.7.1 Construction and demolition (C&D) materials will be generated from the site activities and construction of the proposed pier. A little solid waste will be generated from piling works and the works area. These waste are mainly excavated marine sand, rock fines and rubbish which cannot be re-used and shall be disposed at landfill. The potential impact would be addressed in the EIA study.

3.7.2 The construction workforce will generate general refuse comprising food scraps, waste paper, empty containers etc. The general refuse may give rise to adverse environmental impacts e.g. odour generation, windblown litter, vermin, if the waste storage areas are not properly maintained and regularly cleared.

#### Operation Phase

3.7.3 No potential operation phase impact to waste management is expected.

### **3.8 Cultural Heritage**

#### Construction Phase

3.8.1 As the distance between the Project and the Grade 3 historic buildings, namely Tam Tai Sin Temple and Tin Hau Temple (Tung Ping Chau) are approximately 480m and 570m respectively, the potential impact on Tam Tai Sin Temple and Tin Hau Temple (Tung Ping Chau) due to construction of the pier is considered to be insignificant.

3.8.2 Marine works will be required for the pier improvement works of Tung Ping Chau Public Pier. However, the existing seabed around Tung Ping Chau has not been subjected to any Marine Archaeological Investigation (MAI), thus no information on the marine archaeological potential of the seabed is available. In order to ascertain the marine archaeological impact, a MAI will be carried out to identify any marine archaeological resource and proposed mitigation measure in prior consultation with AMO if necessary.

#### Operation Phase

3.8.3 Direct and indirect cultural heritage impacts during the operation phase are not expected.

### **3.9 Landscape and Visual**

#### Construction Phase

3.9.1 Landscape and visual impacts are expected from marine works construction, site cabins, construction plant, etc. Nevertheless, the impacts would be temporary and can be minimized by appropriate mitigation measures. Potential landscape and visual impacts including coastal landscape impact and glare / outdoor lighting impact would be assessed and addressed in the EIA study.

### Operation Phase

- 3.9.2 The proposed pier may cause impact on the visual and landscape character of Tung Ping Chau. Potential landscape and visual impacts including coastal landscape impact and glare / outdoor lighting impact would be assessed and addressed in the EIA study.

## **3.10 Potential Hazard**

- 3.10.1 The Project would not involve the use of any dangerous goods and there is no store of dangerous goods in significant quantities in the vicinity of the Project site. Hazard to life arising from the construction or operation of the Project is not expected.

# **4 MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT**

## **4.1 General**

- 4.1.1 The Project site is located on the north-eastern coast of Tung Ping Chau facing towards Ping Chau Hoi. It falls within the Tung Ping Chau Marine Park and partly overlaps with the Ping Chau SSSI. It is also adjacent to the Plover Cove (Extension) Country Park which also falls within the Hong Kong Geopark. The SSSI was designated in 1979 in the recognition of its geological significance. The major existing and planned sensitive receivers and sensitive parts of the natural environment that may be affected by the proposed project include the following:

- (i) Tung Ping Chau Marine Park;
- (ii) Plover Cove (Extension) Country Park;
- (iii) Hong Kong UNESCO Global Geopark;
- (iv) Ping Chau Site of Special Scientific Interest;
- (v) Coastal Protection Area zone;
- (vi) Coral communities; and
- (vii) Existing village of Ping Chau Tai Tong which is located about 170m from the existing pier.

- 4.1.2 The existing land uses in vicinity of the Project site other than the existing Tung Ping Chau Public Pier are generally rural areas. Tung Ping Chau Marine Park is located within the site. Existing village of Ping Chai Tai Tong and Plover Cove (Extension) Country Park are located west of the site. There are minimum source of pollutants in the surrounding area which might affect the area where the project is proposed to be located.

## **4.2 Air Quality**

- 4.2.1 The surrounding air sensitive receivers (ASRs) include Plover Cove (Extension) Country Park and the existing village of Ping Chau Tai Tong, which is over 170m from the site.

### **4.3 Noise**

- 4.3.1 The surrounding noise sensitive receivers (NSRs) include Plover Cove (Extension) Country Park and the existing village of Ping Chau Tai Tong, which is over 170m from the site.

### **4.4 Water Quality**

- 4.4.1 The Project may affect a number of water sensitive receivers (WSRs) inside and in the vicinity of the Project site. Potential WSRs are:
- (i) Tung Ping Chau Marine Park; and
  - (ii) Aquatic ecological habitats for marine organisms including coral communities.
  - (iii) Fisheries resources and other fisheries sensitive receivers

### **4.5 Ecology**

- 4.5.1 The Project site falls within the Tung Ping Chau Marine Park and there are corals scattered within the proposed site. The Tung Ping Chau Marine Park is a recognized site of conservation importance under Note 1, Annex 16 of the Technical Memorandum (TM) of the EIAO. It was designated to protect the hard coral species recorded in the subject waters and it is considered to be one of the sites in Hong Kong where the highest diversity and coverage of hard coral communities can be found. High coverage of hard corals has been recorded on both sides of the existing Tung Ping Chau Public Pier.
- 4.5.2 The Tung Ping Chau Marine Park supports rich and diverse marine lives in particular the coral communities. Detailed assessment is needed to evaluate and assess the impact to the marine ecological recourse in particular coral communities within the Marine Park.
- 4.5.3 A previous survey near the project area (by the means of coral mapping under previous Project Profile PP-222/2004 – “Improvement works to Tung Ping Chau Public Pier”) was conducted in 2004, an updated dive survey by coral specialist shall be conducted to provide sufficient and accurate ecological data to allow a complete and objective identification, prediction and evaluation of the potential ecological impacts arising from the proposed development. The status of coral, preventive measures to avoid/ minimize the impact to coral and coral monitoring should be reviewed and updated when the results of updated coral survey are available.
- 4.5.4 The Project site also encroaches to the “Coastal Protection Area” (CPA) zone on the draft Ping Chau Outline Zoning Plan (OZP) No. S/NE-PC/1. The zone comprising sandy beaches with coastal plants and flat sedimentary rock stacks which is intended to conserve, protect and retain the natural coastlines and the sensitive coastal natural environment, including attractive geological features, physical landform or area of high landscape, scenic or ecological value, with a minimum of built development.

#### **4.6 Fisheries**

4.6.1 The Project lies within the Tung Ping Chau Marine Park, in order to protect and conserve marine habitats and resource, fishing activities are prohibited in marine parks, except those with marine parks fishing permits granted by the Country and Marine Parks Authority.

#### **4.7 Cultural Heritage**

4.7.1 The Project site is at a distance approximately 480m and 570m from the Tam Tai Sin Temple and Tin Hau Temple (Tung Ping Chau) respectively which are both Grade 3 historic buildings. A MAI would be carried out to identify any marine archaeological resource.

#### **4.8 Landscape and Visual**

4.8.1 The Project site is adjacent to Plover Cove (Extension) Country Park which also falls within the Hong Kong Geopark and approximately 170 m away from the existing village of Ping Chau Tai Tong. Potential visual sensitive receivers would include the tourist and local villagers at Tung Ping Chau.

### **5 ENVIRONMENTAL PROTECTION MEASURE TO BE INCORPORATED IN THE DESIGN AND ANY FURTHER ENVIRONMENTAL IMPLICATIONS**

#### **5.1 General**

5.1.1 The EIA Study will investigate those environmental impacts (both cumulative impacts and those arising from the Project) and propose the appropriate mitigation measures with the intention that all works proposals recommended by the Project would be environmentally acceptable and cost effective. The residual impacts, if any, would be confined within the allowable limits. Environmental monitoring and auditing of potential impacts that may arise from implementation of the works proposed by the Project will be provided for the construction and operational phases. Subject to the findings of the EIA study, the following mitigation measures would be incorporated in the design and construction of the Project.

#### **5.2 Air Quality**

##### Construction Phase

5.2.1 In order to prevent adverse impacts on air quality, the control measures stipulated in the Air Pollution Control (Construction Dust) Regulations (Cap. 311R) and site good practices should be implemented wherever applicable, to limit the dust emissions from the site.

Operation Phase

- 5.2.2 No adverse air quality impact is anticipated due to this Project. Therefore, no specific mitigation measures are required.

**5.3 Noise**Construction Phase

- 5.3.1 Environmental Protection Department (EPD)'s Recommended Pollution Control Clauses for Construction Contract and further mitigation measures recommended in the EIA study (if any) would be adopted in the contract specifications for the Project to ensure that the Contractor will implement good construction site practices to minimize noise generation. Construction works during restricted hours (i.e. 19:00 to 07:00 of next day and whole day on Sundays and Public Holidays) are not anticipated. This minimizes adverse construction noise impact on Plover Cove Country Park during its visiting peak. If construction works during restricted hours are necessary due to unforeseen circumstances, they shall be controlled under Noise Control Ordinance (NCO) through the issuance of Construction Noise Permit (CNP) and the conditions of the CNP shall be followed. Transportation route of plant equipment, C&D material and C&D waste should be planned as far as practicable in a way to minimize the noise impacts to NSRs.

Operation Phase

- 5.3.2 No adverse noise impact is anticipated due to this Project. Therefore, no specific mitigation measures are required.

**5.4 Water Quality**Construction Phase

- 5.4.1 Water pollution arisen from the marine works, provision of temporary berthing and mooring facilities and demolition works should be prevented or mitigated by adopting site practices, where applicable and practicable, in ProPECC PN 1/94 "Construction Site Drainage" and "Recommended Pollution Control Clauses for Construction Contracts" issued by EPD. The mitigation measures shall include but not limited to:
- (i) installation of silt curtain during piling work and any other demolition or construction works which may cause suspended solids impact to the marine water;
  - (ii) no sewerage water shall be discharged on the site and the works area. Chemical toilets should be provided and any sewerage water generated shall be delivered to treatment works operated by Drainage Services Department for disposal;
  - (iii) the water used for piling works shall be stored in a barge and recycled for use again in the piling works. Upon completion of the piling works, the recycled water shall be discharged offsite with a valid discharge license under the Water Pollution Control Ordinance; and
  - (iv) baseline water quality monitoring before commencement of the marine works shall be carried out in the nearby waters to obtain baseline information for subsequent monitoring. Regular and frequent water quality monitoring shall

be carried out throughout the whole construction period to ensure that the potential water quality impacts arising from marine works and demolition works will be within the established environmental guidelines and standards. Parameters to be monitored shall include but not limited to turbidity, dissolved oxygen and suspended solid level. The details of the water quality monitoring scheme will be submitted separately. Personnel carrying out monitoring works shall be experienced in that speciality. Details of the environmental monitoring and audit (EM&A) programme will be submitted to DEP for approval before application for an environmental permit.

#### Operation Phase

- 5.4.2 No adverse water quality impact is anticipated due to this Project. Therefore, no specific mitigation measures are required.

### **5.5 Ecology**

#### Construction Phase

- 5.5.1 In reference to previous Project Profile, PP-222/2004 – “Improvement works to Tung Ping Chau Public Pier”, the following measures shall be carried out in different stages of construction where appropriate:

##### (1) Piling Works

- (a) Slit curtain shall be provided around the piles to prevent the release of muddy water to adjacent sensitive receivers as a result of drilling operation. Water contaminated with slurry rock fragment shall be stored in a barge and recycled for use again in the piling works.
- (b) Wastewater coming from the grouting of piles shall be treated in sedimentation tank placed in barge before discharging offsite with a valid discharge license under the Water Pollution Control Ordinance.
- (c) To ensure that no coral colonies or only the least number of corals would be affected, coral specialist shall be present underwater when the silt curtain is installed.

##### (2) Demolition Works

- (a) On-site monitoring shall be carried out by coral specialist to evaluate whether the demolition work will affect the living coral. Details of monitoring shall be investigated in the EIA study.
- (b) A temporary working platform shall be erected under the structure that is to be removed in order to collect the demolition debris. The temporary working platform should not be placed on the seabed with coral communities. Canvass curtain shall be erected around the platform where demolition works is being carried out, and the erection of the curtain shall not affect the adequacy of sunlight expose to the corals in the surrounding area.

##### (3) Recommended working area for barges

- (a) All barge activities shall be confined within an area agreed by the supervising team / coral specialist, to avoid impact on the corals, marker buoys shall be set up in suitable locations to prevent working barges

encroaching upon the shallow water area.

- (b) In accordance with s.11 of Cap. 476A Marine Parks and Marine Reserves Regulation, there should be no mooring and anchoring in the marine park except under and in accordance with a permit or at mooring buoys or mooring sites provided by the Country and Marine Parks Authority.

(4) Ecological monitoring and mitigation measures

- (a) Coral specialist shall be employed to conduct a detailed survey in and around the project site to investigate whether there are any hard corals or other important marine species in the Project area. Coral translocation and/or other mitigation measures and subsequent monitoring shall be conducted should there be any hard corals found during the detailed survey.
- (b) Coral monitoring shall be carried out on site before, during and after construction with an aim at evaluating and rectifying impacts on the living habitats of coral colonies if any. AFCD shall be consulted on the methodology, location and frequency of the coral monitoring.
- (c) For impact to the coral which is considered unavoidable, mitigation measure will be adopted to minimize such impact, e.g. translocation of important species, avoiding of percussive piling etc. Good site practice to reduce potential disturbance will be implemented to minimize the indirect impacts.
- (d) The status of coral, preventive measures to avoid/ minimize the impact to coral and coral monitoring should be reviewed and updated when the results of the updated coral survey are available.

- 5.5.2 Construction phase impact to corals and the Tung Ping Chau Marine Park would be investigated and addressed in the EIA study. Should there be any hard corals found in the works area during the detailed survey, coral translocation and/or other mitigation measures and subsequent monitoring shall be conducted.

Operation Phase

- 5.5.3 With the effective implementation of the above measures, residual ecological impacts are not predicted in operation phase. Operational marine transport impact to corals and the Tung Ping Chau Marine Park would be investigated and addressed in the EIA Study.

## **5.6 Fisheries**

Construction Phase

- 5.6.1 Construction impacts on fisheries would be investigated and addressed in the EIA study, and mitigation measures (e.g. water quality mitigation measures) will be proposed, where appropriate.

Operation Phase

- 5.6.2 Operation impacts on fisheries would be investigated and addressed in the EIA study, and mitigation measures will be proposed, where appropriate.

## 5.7 Waste Management

### Construction Phase

5.7.1 Proper waste management would be implemented to reduce and minimize generation of Construction & Demolition (C&D) materials in the execution of the construction works. The waste management would, where applicable and practicable, cover the following items:

- (i) Construction wastes and debris would be properly sorted, reused and recycled wherever possible on site; and
- (ii) Proper measures and site management practices would be taken to prevent illegal dumping of non-inert C&D materials and record the waste management and disposal activities.

### Operation Phase

5.7.2 Impact on the waste management is unlikely.

## 5.8 Landscape and Visual

### Construction Phase

5.8.1 The construction works will not cause severe visual impacts. However, the following mitigation measures would be taken, where applicable and practicable, to reduce the landscape and visual impact arisen from the Project:

- (i) The extent of site and works area will be minimized;
- (ii) Works area would be screen off; and
- (iii) Construction plant / equipment and construction materials will be stored in such a way that will not render them visually intrusive to sensitive uses;

### Operation Phase

5.8.2 Landscape and architectural design, colour scheme, finishes and texture of materials used for the Project will be endorsed by the Country and Marine Parks Board. The relevant stakeholders, including Tai Po District Council (Traffic and Transport Committee), academia and non-governmental organizations were also consulted, their views will be considered in the forthcoming technical studies. Hence, potential landscape and visual impacts for the landscape and architectural design will be assessed and addressed in the EIA study.

## 5.9 Cultural Heritage

5.9.1 No adverse cultural heritage impact to the Grade 3 historic buildings, namely Tam Tai Sin Temple and Tin Hau Temple (Tung Ping Chau) is anticipated due to this Project. Therefore, no specific mitigation measures are required.

5.9.2 Should marine archaeological potential was identified, site specific mitigation measures could be developed to minimize any potential impact on marine archaeological resources in prior consultation with AMO. The impact to marine archaeological resource would be investigated and addressed in the EIA study.

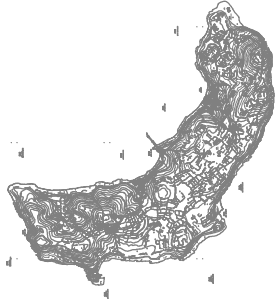


## **5.10 Severity, Distribution and Duration of Environmental Effects and Further Implications**

- 5.10.1 Base on the findings of assessments, effective control and mitigation measures will be deployed to ensure the impacts will be limited to the acceptable level. The possible severity, distribution and duration of environmental effects such as beneficial and adverse effects; short and long term effects; secondary and induced effects; cumulative effects and transboundary effects will be considered and addressed in the EIA, where applicable. The key results from community, consultation, etc, should also be documented in the EIA report.

## **6 USE OF PREVIOUSLY APPROVED EIA REPORTS**

There are no relevant EIA reports already approved under the EIA Ordinance. However, one approved Project Profile (Registration No. PP-222/2004 - Improvement Works to Tung Ping Chau Public Pier) is referred in the preparation of this project profile.

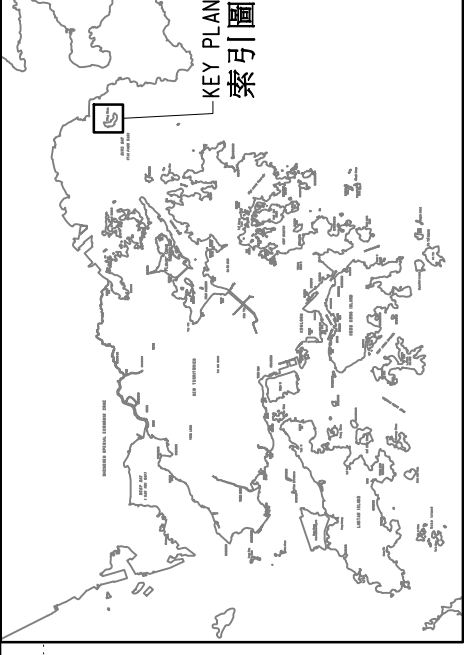


東平洲  
TUNG PING CHAU

索引圖 KEY PLAN

1 : 50 000

845 200N



KEY PLAN  
索引圖

附錄 A  
NOTES

1. 所有座標參考香港大地測量  
基準 1980 及以米為單位  
ALL CO-ORDINATES REFER TO  
HONG KONG GEODETIC DATUM  
1980 AND ARE IN METRES.

編號 no.	日期 date	說明 description	核對 checked	核准 approved
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修訂  
REVISION

姓名 name	簡章 initial	日期 date

設計  
designed

繪圖  
drawn

摹描  
traced

核對  
checked

核准  
approved

日期  
date : \_\_\_\_\_  
總工程師  
Chief Engineer

合約編號  
contract no.

檔案編號  
file no.

工程編號  
project no.

合約  
contract

名稱  
drawing title

東平洲碼頭改善工程  
- 位置圖  
PIER IMPROVEMENT AT TUNG PING CHAU  
- LOCATION PLAN

圖則編號  
drawing no.

PW-SK17-116

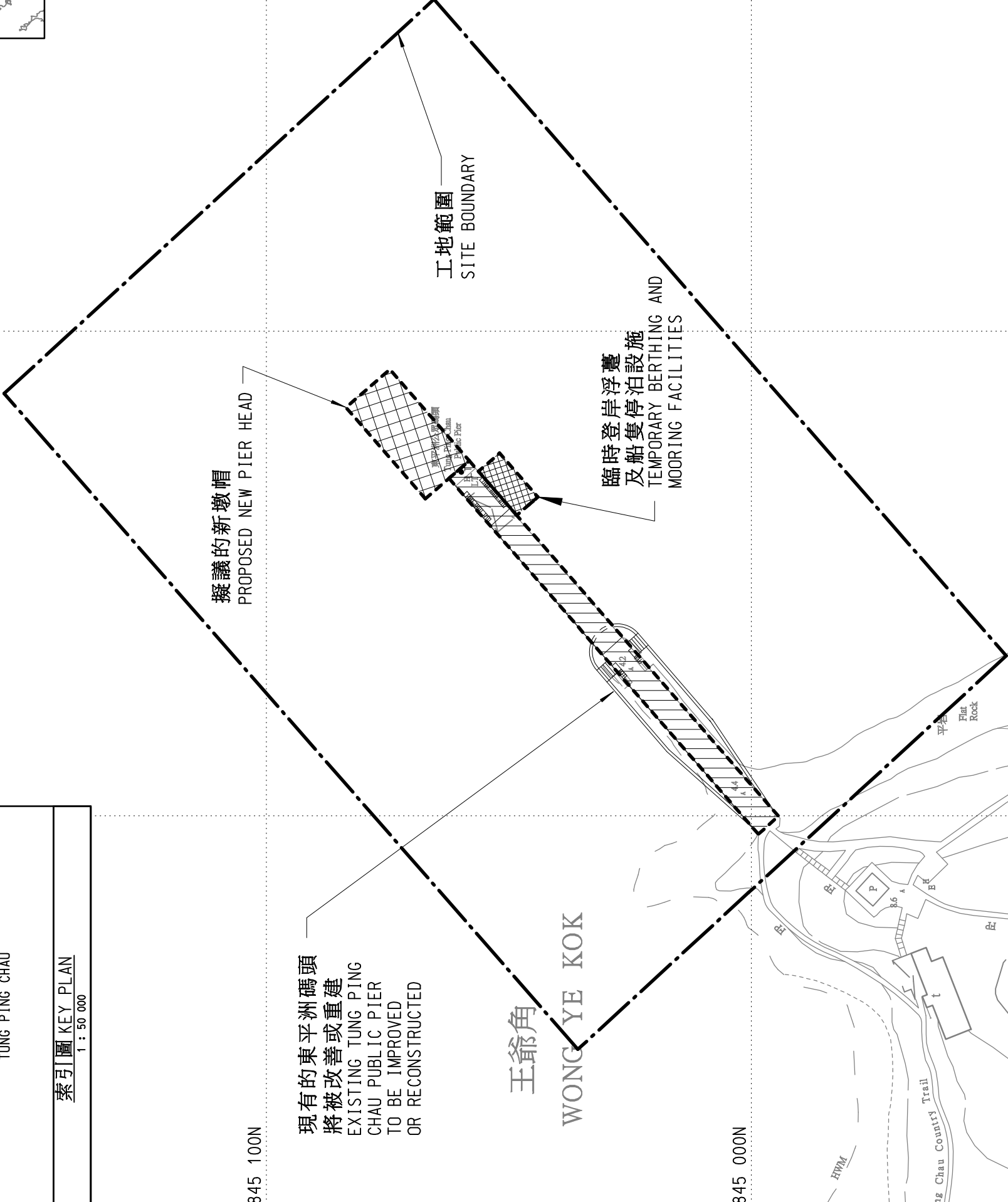
比例  
scale

1:1000

辦事處  
office  
改善碼頭工程組土木工程處  
PIER IMPROVEMENT UNIT  
CIVIL ENGINEERING OFFICE



A3 420 x 297



862 700E

862 600E

862 800E

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# Appendix B – Photo showing the existing pier

