



The Government of the Hong Kong Special Administrative Region

Civil Engineering and Development Department

Pier Improvement at Lai Chi Wo

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 Lai Chi Wo (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. Lai Chi Wo Pier is one of the recommended proposed pier item.

1.2.3 Lai Chi Wo is located in the Hong Kong Geopark and the Yan Chau Tong Marine Park, also at its heart is a 300-year-old Hakka walled village, it is a popular attraction for green tourism. The Lai Chi Wo Pier is used by tourists to reach Lai Chi Wo, but the existing pier has a relatively narrow access and only one primitive berth with inadequate draft for berthing at low tide. The pier 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 coastal area of Northeast New Territories. It is located within the Geopark (Double Haven Geo-Area) and Yan Chau Tong Marine Park, and adjacent to Plover Cove Country Park. Lai Chi Wo Beach Site of Special Scientific Interest (SSSI) is located about 180m to the south of the existing pier. It was designated in 1979 due to the presence of seagrass *Zostera japonica*. Two buildings at nearby Lai Chi Wo Village, namely Hip Tin Temple & Hok Shan Monastery are Grade 3 historic buildings and Lai Chi Wo Site of Archaeological Interest is also located nearby. The location plan of Lai Chi Wo Pier is shown at **Appendix A**.
- 1.4.2 The existing pier mainly serves ferries and pleasure vessels. It is approximately 64m long and 2.5m wide. The existing pier has only one primitive berth with inadequate draft for berthing at low tide. A photo showing the existing pier is shown at **Appendix B**.
- 1.4.3 The tentative major works items for the pier improvement works at Lai Chi Wo Pier includes the following:
- (a) Provision of temporary berthing and mooring facilities using 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 extending the pier, widening the catwalk and the pier head;
 - (c) Demolition of a portion 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, Yan Chau Tong Marine Park and it is also adjacent to Plover Cove Country Park.

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 project that would interface with the Project is 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) Home Affairs Department's Signature Project Scheme "Improvement of Trails and Provision of Facilities in Sha Tau Kok"

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 Country Park), and the distance between the next nearest NSR (i.e. Lai Chi Wo Village) and the works area is about 330 m. Transportation route of plant equipment, 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 investigated 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 Yan Chau Tong 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 Service Department for disposal may need to be recommended.

Operation Phase

3.3.2 Potential operational 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 Yan Chau Tong Marine Park and it is also located about 180m away from the Lai Chi Wo Beach SSSI. The SSSI was designated in 1979 due to the presence of seagrass *Zostera japonica*. The seagrass bed may be affected by the muddy water and wastewater generated during piling works and other works area on land.

3.5.2 In addition to the seagrass bed, Yan Chau Tong Marine Park is also one of the best growing sites for corals. The corals may be affected by the muddy water and wastewater generated during piling works and other works area on land. 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 construction impact on the marine ecology (e.g. the intertidal, sub-tidal, benthic, coral communities and seagrass communities, etc.) and the overall functionality of the Yan Chau Tong 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 Yan Chau Tong 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 Based on previous studies/ surveys, the Yan Chau Tong Marine Park was identified as the spawning and nursery grounds for commercial fisheries resources. 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 Based on previous studies/ surveys, Yan Chau Tong Marine Park was identified as the spawning and nursery grounds for commercial fisheries resources. 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 The Lai Chi Wo Site of Archaeological Interest will not be affected. Beside, as the distance between the Project and the Grade 3 historic buildings, namely Hip Tin Temple & Hok Shan Monastery at Lai Chi Wo Village is approximately 430 m, the potential impact on the Hip Tin Temple & Hok Shan Monastery due to construction of pier is considered to be insignificant.

3.8.2 Marine works will be required for the pier improvement works of Lai Chi Wo Pier. However, the existing seabed around Lai Chi Wo 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 Lai Chi Wo. 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 along coastal area of Northeast New Territories. It is located within the Geopark (Double Haven Geo-Area) and Yan Chau Tong Marine Park, and adjacent to Plover Cove Country Park. Lai Chi Wo Beach SSSI is located about 180m to the south of the existing pier. It was designated in 1979 due to the presence of seagrass *Zoetera japonica*. Two buildings at nearby Lai Chi Wo Village, namely Hok Shan Monastery and Hip Tin Temple are listed as Grade 3 historic buildings. The major existing and planned sensitive receivers and sensitive parts of the natural environment that may be affected by the proposed project include, but not limited to, the following:

- (i) Yan Chau Tong Marine Park;
- (ii) Plover Cove Country Park;
- (iii) Lai Chi Wo Beach SSSI;
- (iv) Lai Chi Wo Village which is located about 330 m from the existing pier; and
- (v) Coral communities at the coastal area of Lai Chi Wo.

- 4.1.2 The existing land uses in vicinity of the Project site other than the existing Lai Chi Wo Pier are generally rural areas. Yan Chau Tong Marine Park is located within the site. Existing village of Lai Chi Wo and Plover Cove 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 Country Park and the existing village of Lai Chi Wo, which is over 300m from the site.

4.3 Noise

- 4.3.1 The surrounding noise sensitive receivers (NSRs) include Plover Cove Country Park and the existing village of Lai Chi Wo, which is over 300m 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) Yan Chau Tong Marine Park;
 - (ii) Lai Chi Wo Beach SSSI
 - (iii) Fish culture zones at Sai Lau Kong and other nearby areas;
 - (iv) Aquatic ecological habitats for marine organism including seagrass bed and coral communities; and
 - (v) Fisheries resources and other fisheries sensitive receivers

4.5 Ecology

- 4.5.1 The Project site falls within the Yan Chau Tong Marine Park, it is a recognized site of conservation importance under Note 1, Annex 16 of Technical Memorandum (TM) of the EIAO. Lai Chi Wo Beach SSSI is located about 180m to the south of the existing pier. It was designated in 1979 due to the presence of seagrass *Zostera japonica*. Beside seagrass bed, coral communities in Lai Chi Wo is also one of the marine habitats targeted to be protected within Yan Chau Tong Marine Park.
- 4.5.2 The Yan Chau Tong Marine Park supports rich and diverse marine lives in particular seagrass beds and the coral communities. As limited ecological information is available in and around the project site, a dive survey by coral specialist shall be carried out 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.

4.6 Fisheries

- 4.6.1 The Project lies within the Yan Chau Tong Marine Park, which was identified as the spawning and nursery grounds for commercial fisheries resources in 1998. 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. The Project may affect a number of FSRs in the vicinity of the Project site. Potential FSRs are:
- (i) Nursery and spawning ground of commercial fisheries at northeast waters of Hong Kong (including Yan Chau Tong Marine Park);
 - (ii) Fishing grounds for capture fisheries in the vicinity of Project site;
 - (iii) Sai Lau Kong Fish Culture Zone; and
 - (iv) Fishponds at Lai Chi Wo.

4.7 Cultural Heritage

- 4.7.1 The Project site is at a distance approximately 430 m from the Hip Tin Temple & Hok Shan Monastery at Lai Chi Wo Village which are 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 Country Park and approximately 330 m away from the existing village of Lai Chi Wo. Potential visual sensitive receivers would include the tourist and local villagers at Lai Chi Wo.

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 EcologyConstruction Phase

- 5.5.1 In order to prevent adverse impact on marine ecology including but not limited to seagrass bed and coral communities, 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 other 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, seagrass bed and the Yan Chau Tong 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, seagrass bed and the Yan Chau Tong 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. good site practice, water quality mitigation measures) will be proposed, where appropriate.

Operation Phase

5.6.2 Operational 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 VisualConstruction 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 North District Council (District Minor Works and Environmental Improvement Committee), academia, non-governmental organizations and village representatives 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 would be assessed and addressed in the EIA study.

5.9 Cultural HeritageConstruction Phase

5.9.1 No adverse cultural heritage impact to the Lai Chi Wo Site of Archaeological Interest and the Grade 3 historic buildings, namely Hip Tin Temple & Hok Shan Monastery 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

No previously approved EIA reports are referred to in the preparation of this project profile.

注釋
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
修訂 REVISION				
		姓名 name	簡簽 initial	日期 date
設計 designed				
繪圖 drawn				
摹描 traced				
核對 checked				

核准 approved	總工程師 Chief Engineer
合約編號 contract no.	日期 date
檔案編號 file no.	
工程編號 project no.	
合約 contract	

名稱 drawing title
荔枝窩碼頭改善工程
- 位置圖
PIER IMPROVEMENT AT LAI CHI WO -
LOCATION PLAN

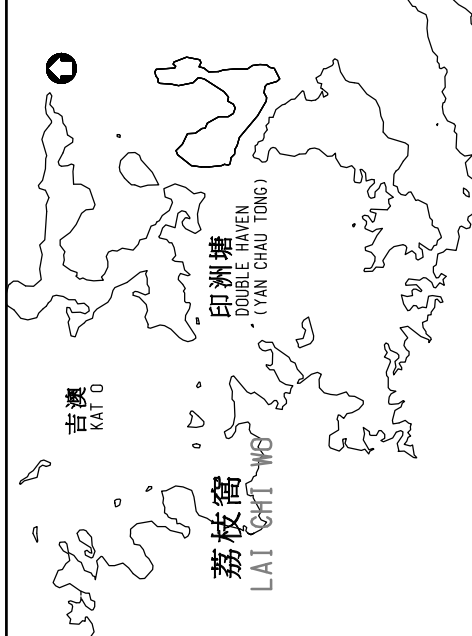
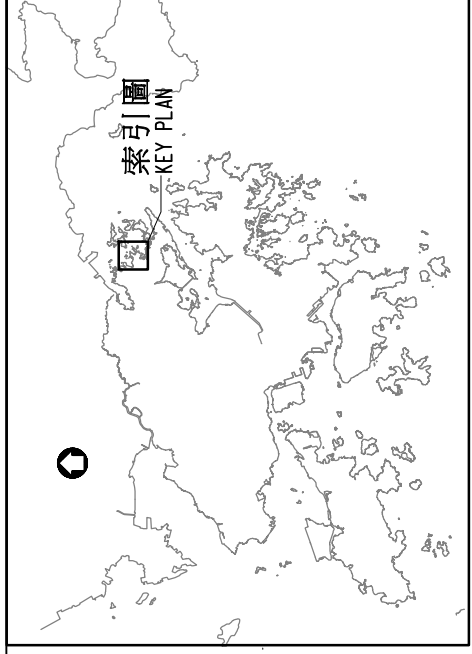
圖則編號 drawing no.
PW-SK17-117

比例
scale
1:1000

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

土木工程拓展署
CIVIL ENGINEERING
AND DEVELOPMENT
DEPARTMENT

A3 420 x 297



845 200E

845 100E

843 300N

843 200N

843 400N

845 300E



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Appendix B – Photo showing the existing pier

