

Appendix 10-1

Cultural Heritage Impact Assessment Report

**Proposed Low-rise and Low-density Residential
Development at Various Lots and their Adjoining
Government Land in D.D. 104, East of Kam Pok Road,
Mai Po, Yuen Long, New Territories**

CULTURAL HERITAGE IMPACT ASSESSMENT

Prepared by: China Point Consultants Limited

Date of Latest Revision: July 2016

CHINA POINT

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Version Info:

Type: FINAL

Date of Latest Revision: 28 July 2016

Details of Cultural Heritage Consultant:

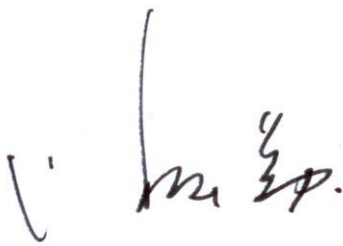
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1. Introduction

- 1.1 The aims of the Cultural Heritage Impact Assessment (CHIA) are the followings:
- to identify and highlight all archaeological deposits, cultural heritage resources, built heritage structures and cultural/ historical landscapes in the Study Area (Refers to **Figure 1** of Appendix B);
 - to assess direct and indirect impacts which may result from the proposed Project on these resources; and
 - to recommend mitigation of impacts where required.
- 1.2 The CHIA will follow the Antiquities and Monuments Office *Guidelines for Cultural Heritage Impact Assessment* and will fulfil the requirements as set out in Annex 10 and 19 of the Technical Memorandum on EIA Process (EIA Ordinance, Cap. 499, S.16).

2. Environmental Legislation and Standards

- 2.1 Legislation, Standards and Guidelines relevant to the consideration of Cultural Heritage impacts under this study include the following:
- Antiquities and Monuments Ordinance
 - Environmental Impact Assessment Ordinance
 - Hong Kong Planning Standards and Guidelines
 - Technical Memorandum on Environmental Impact Assessment Process
 - Guidelines for Cultural Heritage Impact Assessment

2.2 Antiquities and Monuments Ordinance

The Antiquities and Monuments Ordinance (the Ordinance) provides the statutory framework to provide for the preservation of objects of historical, archaeological and paleontological interest. The Ordinance contains the statutory procedures for the Declaration of Monuments. The proposed monument can be any place, building, site or structure, which is considered to be of public interest by reason of its historical, archaeological or paleontological significance.

Under Section 6 and subject to sub-section (4) of the Ordinance, the following acts are prohibited in relation to certain monuments, except under permit;

- To excavate, carry on building works, plant or fell trees or deposit earth or refuse on or in a proposed monument or monument;
- To demolish, remove, obstruct, deface or interfere with a proposed monument or monument.

The discovery of an Antiquity, as defined in the Ordinance must be reported to the Antiquities Authority (the Authority), or a designated person. The Ordinance also provides that, the ownership of every relic discovered in Hong Kong after the commencement of this Ordinance shall vest in the Government from the moment of discovery. The Authority on behalf of the Government may disclaim ownership of the relic.

No archaeological excavation may be carried out by any person, other than the Authority and the designated person, without a licence issued by the Authority. A licence will only be issued if the Authority is satisfied that the applicant has sufficient scientific training or experience to enable him to carry out the excavation and search satisfactorily, is able to conduct, or arrange for, a proper scientific study of any antiquities discovered as a result of the excavation and search and has sufficient staff and financial support.

It should also be noted that the discovery of an antiquity under any circumstances must be reported to the authority, i.e. the Secretary for Development or designated person. The authority may require that the antiquity or suspected antiquity is identified to the authority and that any person who has discovered an antiquity or suspected antiquity should take all reasonable measures to protect it.

2.3 Environmental Impact Assessment Ordinance

The Environmental Impact Assessment Ordinance (EIAO) was implemented on 1 April 1998. Its purpose is to avoid, minimise and control the adverse impact on the environment of designated projects, through the application of the EIA process and the Environmental Permit (EP) system.

2.4 Hong Kong Planning Standards and Guidelines

Chapter 10 of the HKPSG details the principles of conservation of natural landscape and habitats, historic buildings and archaeological sites. The document states that the retention of significant heritage features should be adopted through the creation of conservation zones within which uses should be restricted to ensure the sustainability of the heritage features. The guidelines state that the concept of conservation of heritage features, should not be restricted to individual structures, but should endeavour to embrace the setting of the feature or features in both urban and rural settings.

The guidelines also address the issue of the preparation of plans for the conservation of historic buildings, archaeological sites and other antiquities. It is noted that the existing Declared Monuments and proposed Monuments be listed in the explanatory

notes of Statutory Town Plans and that it be stated that prior consultation with AMO is necessary for any redevelopment or rezoning proposals affecting the Monuments and their surrounding environments.

It is also noted that planning intention for non-statutory town plans at the sub-regional level should include the protection of monuments, historic buildings, archaeological sites and other antiquities through the identification of such features on sub-regional layout plans. It also addresses the issue of enforcement. The appendices list the legislation and administrative controls for conservation, other conservation related measures in Hong Kong, and Government departments involved in conservation.

2.5 Technical Memorandum on Environmental Impact Assessment Process

The general criteria and guidelines for evaluating and assessing impacts to Cultural Heritage are listed in Annexes 10 and 19 of the Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM). It is stated in Annex 10 that all adverse impacts to Sites of Cultural Heritage should be kept to an absolute minimum and that the general presumption of impact assessment should be in favour of the protection and conservation of all Sites of Cultural Heritage. Annex 19 provides the details of scope and methodology for undertaking Cultural Heritage Impact Assessment, including baseline study, impact assessment and mitigation measures.

2.6 Guidelines for Cultural Heritage Impact Assessment

This document, as issued by the Antiquities and Monuments Office, outlines the specific technical requirement for conducting terrestrial archaeological and built heritage impact assessments and is based upon the requirements of the Technical Memorandum for Environmental Impact Assessment. It includes the parameters and scope for the Baseline Study, specifically desk-based research and field evaluation. There are also included guidelines encompassing reporting requirements and archive preparation and submission in the form of *Guidelines for Archaeological Reports* and *Guidelines for the Handling of Archaeological Finds and Archives*.

The prerequisite conditions for conducting impact assessment and mitigation measures are presented in detail, including the prediction and evaluation of impacts based upon five levels of significance (Beneficial, Acceptable, Acceptable with Mitigation Measures, Unacceptable and Undetermined). The guidelines also state that preservation in totality must be taken as the first priority and if this is not feasible due to site constraints or other factors, full justification must be provided.

Mitigation measures will be proposed in cases with identified impacts and shall have the aim of minimising the degree of adverse impact and also where applicable providing enhancement to a heritage site through means such as enhancement of the existing environment or improvement to accessibility of heritage sites. The responsibility for the implementation of any proposed mitigation measures must be clearly stated with details of when and where the measures will be implemented and by whom.

3. Methodology

Archaeology

Desk-based research

3.1 Desk-based research is carried out in order to identify any known or potential sites of archaeological interest. The following resources are consulted: the Antiquities and Monuments Office published and unpublished papers and studies; publications on relevant historical, anthropological and other cultural studies; unpublished archival, papers, records; collections and libraries of tertiary institutions; historical documents which can be found in Public Records Office, Lands Registry, District Lands Office, District Office, Museum of History; cartographic and pictorial documentation; study of existing geotechnical information.

Site visit

3.2 To supplement information gathered in the desk-based study, a site visit is undertaken to assess the current status of the Study Area and also to record the existing impacts.

Field Evaluation

3.3 If the results of the desk-based study indicate that there are known sites of archaeological interest or areas of archaeological interest within the Study Area, a field evaluation programme will be designed and submitted to the AMO for approval. The evaluation programme will include a field scan, auger testing programme and test pit excavations, if explicitly required.

Impact Assessment

3.4 The prediction and evaluation of both direct and indirect impacts must be undertaken to identify any potential adverse effects to all identified sites of archaeological interest within a project Study Area.

Mitigation Measures

3.5 As stated in the Guidelines for Cultural Heritage Impact Assessment “Preservation in totality must be taken as the first priority”. If such preservation is not feasible, as in the case where the need for a particular development can be shown to have benefits that outweigh the significance of the site of archaeological interest, a programme of mitigation measures must be designed and submitted to the AMO for approval.

Built Heritage

Desk-based research

3.6 If the Study Area is determined to contain the potential for containing heritage resources, a field survey must be conducted in all areas where built heritage potential has been established and existing information is not conclusive for purposes of the assessment. The scope of the survey will cover the site limit as well as areas within close proximity to it, which shall be defined as being a distance of 500 metres on either side. The extent of Study Area is shown in **Figure 1** of Appendix B. The heritage resources that will be included in the survey consist of the following;

- (i) all sites of archaeological interest (including marine archaeological sites);
- (ii) all pre-1950 buildings and structures;
- (iii) selected post-1950 buildings and structures of high architectural and historical significance and interest; and
- (iv) landscape features include sites of historical events or providing a significant historical record or a setting for buildings or monuments of architectural or archaeological importance, historic field patterns, tracks and fish ponds and cultural element such as fung shui woodlands and clan grave.

Site visit

3.7 To supplement information gathered in the desk-based study, a site visit is undertaken to assess the current status of the Study Area and also to record the existing impacts.

Recording

3.8 Detailed Recording of all Identified Built Heritage Features divided into the following categories: Buildings and Structures, Graves and Cultural Landscape Features. It should be noted that any sections of identified historical village wall or paving stones will be covered under the built heritage survey. The recording of the structures must adhere to the requirements of conducting built heritage survey as presented in the *Guidelines for Cultural Heritage Impact Assessment*.

Field Survey

3.9 Field survey will incorporate the following methodology:

On Built Features

3.10 The survey consisted of a field evaluation incorporating the collection of photographic, oral and written information, on the architecture and history of all structures that may be impacted by the proposed works. This information was hand recorded in the field. The information collected in the field survey was then entered onto type written forms for inclusion in the report. The design of the forms is based on AMO and ICOMOS

(International Charter for the Conservation and Restoration of Monuments and Sites) standards for the recording of historical resources with modifications to suit architectural styles and situations encountered in Hong Kong. The forms have also been designed to provide details of all identified resources, including written descriptions of each recorded feature, including; age, details of architectural features, condition, past and present uses, an architectural appraisal, notes on any modifications, direction faced and associations with historical/ cultural events or individuals. The location of each feature has also been highlighted on a 1:1000 scale map. A description of the surrounding environment has also been included as part of the survey.

On Graves

- 3.11 Pre-war clan graves were also included as part of the survey. Graves falling within any works area and which may receive direct impacts are recorded on field recording forms, which include a written description, a photographic record, a copy of the inscription and the dimensions. Graves located outside of the works area and which will not receive direct impacts, but may be indirectly impacted aesthetically by the proposed Project are assessed as a group, rather than on an individual basis. The locations of any identified graves and/or grave groupings have also been highlighted on a 1:1000 scale map.

On Cultural and Historical Landscape Features

- 3.12 The location of recorded feature, if any, has to be recorded and highlighted on a 1:1000 scale map and a photographic record of each identified feature should be made.

4. Baseline Conditions and Sensitive Receivers

Archaeology

- 4.1 The proposed works fall within the southern portion of the San Tin plain, a flat area with an elevation from 1 to 5m PD. Late Pleistocene alluvium is extensive in the plain beneath Holocene estuarine / marine deposits which are composed of a widespread deposit of clayey silt up to 15m thick. These estuarine deposits are of mixed alluvial and marine origin and occur along the old coastline from Lo Wu passing through San Tin to Fairview Park. They are regarded as Holocene in age (C-14 date of 5093-5475 BP (sample HK 5947 – 5948)).
- 4.2 Reference is made to *Geology of the Western New Territories*, it shows clearly that from early prehistory through to the early 20th Century, the Study Area was inundated and estuarine and therefore has no archaeological potential. Reference of this distribution of Quaternary superficial deposits over the onshore of Hong Kong is shown on **Figure 4**.
- 4.3 No site of archaeological interest or area of archaeological interest is situated within the Study Area.

Built Heritage

- 4.3 Declared Monuments
No declared monuments are located within the Study Area.
- 4.4 Historical Villages
No historical villages are located within the Study Area.
- 4.5 Cultural Landscaped Features
No cultural or historical landscape features are identified within the Study Area during the field survey.
- 4.6 Graves
No grave or grave groups are identified within the Study Area during the field survey.
- 4.7 Built Heritage / Graded Historic Buildings
Site visit and field scan have been conducted to identify heritage resources within the Study Area. Built Heritage / Graded historic buildings including a local Chinese temple and three graded historic buildings were recorded during site field study. They are listed below:

BUILT HERITAGE: -

Item	Address	Descriptions and Uses	AAB Grading	Date of Grading
BH1	Temple at Chuk Yuen Tsuen (竹園村), San Tin, Yuen Long	Chinese Temple for village gathering	No Grade	N/A

GRADED HISTORIC BUILDINGS: -

Item	Address	Descriptions and Uses	AAB Grading	Date of Grading
BH2	No.35 San Wai Tsuen (新圍村), San Tin, Yuen Long	Private Residential building	3	4 Feb 2010
BH3	No.36 San Wai Tsuen (新圍村), San Tin, Yuen Long	Private Residential building	3	4 Feb 2010
BH4	No.87 San Wai Tsuen (新圍村), San Tin, Yuen Long	Private Residential building	3	10 Nov 2010

4.8 **Built Heritage Item No.: BH1** - The local temple is located in Chuk Yuen Tsuen and at about 250 metres from the project site. It is a single storey temple building constructed in around 1980s. Local materials were used for its construction. Its walls are finished with shanghai plastering. The front façade has steel panelling door at the recessed entrance. The roof is constructed of pan and roll tiles. Chinese characters “保我黎民” in plaster and paint are applied at spandrel above entrance. Its condition is fair and is only open during village ceremony. Field survey record of this temple is shown in Appendix A. Its location and boundary are shown in **Figure 1** and **Figure 2** of Appendix B respectively.

4.9 **Built Heritage Item No.: BH2 and BH3** - No.35 and No.36 San Wai Tsuen are single-unit two-storey houses in Chinese Eclectic architectural style with influence of Chinese vernacular and Western. They were built in 1932 by the Lee and were adjacent to each other. Both houses are accorded Grade 3 historic buildings according to the List of Historic Buildings in AMO’s Assessment (Item No. 658 & 659). The buildings were constructed of grey bricks with Chinese pan and roll roof tiles. The upper floor has a balcony in neo-classical characters and features. Some of the windows and doors have been modified with modern materials and are considered later-additions. The houses are privately owned and currently occupied by local villagers. The two houses are at about 280 metres from the project site. Field survey records of the two houses are shown in Appendix A. Their locations are shown in **Figure 1** and **Figure 3** of Appendix B respectively.

4.10 **Built Heritage Item No.: BH4** – No.87 San Wai Tsuen is a typical two-storey Qing Vernacular style private village house with Western influence. The main part of the

house is built of grey bricks with a pitched roof of pan and roll Chinese tiles. The house, especially by the front façade, demonstrates an eclecticism of both Chinese and Western features and are well maintained. The house has been accorded Grade 3 historic buildings and it is about 280 metres from the project site. Field survey record of this house is shown in Appendix A. Its location is shown in **Figure 1** and **Figure 3** of Appendix B respectively.

5. Impact Assessment

Construction Phase

- 5.1 No sites of archaeological interest or areas of archaeological interest, declared / proposed monuments, historical villages, cultural landscaped features, and graves were identified within the Study Area. The identified Built Heritage Items (BH1, BH2, BH3 and BH4, i.e. the temple in Chuk Yuen Tsuen and three graded historic buildings in San Wai Tsuen) (about 250m-280m from the Project Site) are considerably far from the Project Site. No impact during construction phase is anticipated.

Operational Phase

- 5.2 No sites of archaeological interest or areas of archaeological interest, declared / proposed monuments, historical villages, cultural landscaped features, and graves were identified within the Study Area. The identified Built Heritage Items (BH1, BH2, BH3 and BH4, i.e. the temple in Chuk Yuen Tsuen and three graded historic buildings in San Wai Tsuen) (about 250m-280m from the Project Site) are considerably far from the Project Site. No impact during operational phase is anticipated.

6. Mitigation Measures

As there was no associated impact identified, no mitigation measure was required. As a precautionary measure however, it is recommended that care should be taken during the construction stage to report any signs of possible discovery of artefacts.

7. Residual Environmental Impacts

As no impact is predicted, no residual impact will be incurred.

8. Environmental Monitoring and Audit

There are no environmental monitoring and audit requirements proposal for cultural heritage.

9. Conclusion

The proposed development will not encroach upon any known sites of archaeological interest or areas of archaeological interest and will not have any direct or indirect impacts on any declared monuments, graded or proposed graded historic buildings, cultural landscape features, graves or historical village. No specific EM&A requirement is considered necessary.

10. Reference

Geotechnical Engineering Office 1988. *Geotechnical Area Studies Programme: North New Territories*. Hong Kong: Government of Hong Kong.

Geotechnical Engineering Office 1996. *Hong Kong Geological Survey Memoir No.5: Geology of the Northeastern New Territories*. Hong Kong: Government of Hong Kong

Hong Kong Geological Survey 1988. *San Tin Sheet 2: Solid and Superficial Geology Map*. Hong Kong: Geotechnical Control Office, Civil Engineering Services Department.

List of Declared Monuments in Hong Kong as at 11 July 2008 (Antiquities and Monuments Office Leisure and Cultural Services Department Website)

List of Graded Historic Buildings in Hong Kong

List of Government Historic Sites in Hong Kong


Mott Connell Ltd., 2008. *EIA for Proposed Comprehensive Development at Wo Shang Wai, Yuen Long*. Profit Point Entreprises Limited.

Ove Arup & Partners Hong Kong Limited, 2004. *EIA & TIA Studies for the Stage 2 of PWP Item No. 215DS – Yuen Long and Kam Tim Sewerage and Sewage Disposal, EIA (Final)*. Drainage Services Department, Hong Kong.

Website: www.cedd.gov.hk

APPENDIX A

Built Heritage Record Sheets

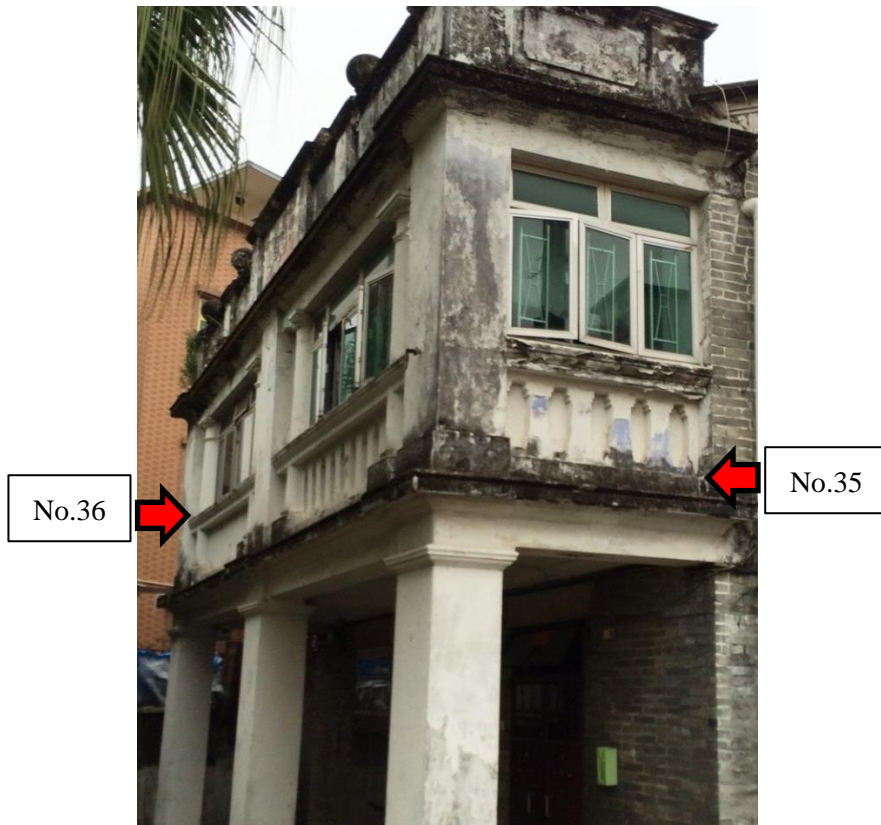
Name of Built Heritage	Chinese Temple in Chuk Yuen Tsuen	Built Heritage No.	Item BH1
AMO accorded grading	Nil Historic Grading		
District	Yuen Long District	Village / Town	Chuk Yuen Tsuen
Address	Temple in Chuk Yuen Tsuen, San Tin, Yuen Long, N.T.		
Map reference	2SE16D	Date of Inspection	9 September 2011
Construction Date	Est. 1980s	Date of Derelict	n/a
Land Condition	Ownership: Private	Current user: Local Villagers	Current use: Temple
AMO Building Types	Chinese Temple	Architectural Style	Chinese
Original Form	Temple / Ancestral Hall	Cultural Categories	Religious spot
General Condition	Fair ; Alterations observed ; Considerable up-keep of building		
Building Materials	Roof: Double layered Chinese pan & roll tiles	Wall: Grey bricks	Ex. Finishes: Shanghai plaster
Photographic record			
	View of BH1		
Record by: Curry Tse			

Built Heritage Record Sheet of BH1

Name of Built Heritage	No. 35 & 36 of San Wai Tsuen	Built Heritage No.	Item BH2 & BH3
AMO accorded grading	Grade 3		
District	Yuen Long District	Village / Town	San Wai Tsuen
Address	No. 35 & No. 36 San Wai Tsuen, San Tin, Yuen Long, N.T.		
Map reference	2SE21B	Date of Inspection	27 Feb 2012
Construction Date	1932	Date of Derelict	n/a
Land Condition	Ownership: Private	Current user: Local Villagers	Current use: Domestic
AMO Building Types	Village House	Architectural Style	Chinese Eclectic
Original Form	House	Cultural Categories	Residence
General Condition	Fair ; Alterations observed ; Considerable up-keep of building		
Building Materials	Roof: Double layered Chinese pan & roll tiles	Wall: Grey bricks	Ex. Finishes: Front façade with plastered mouldings and features finished with paint

Photographic record






Close-up view of front facades



Rear view

Record by: Curry Tse

Built Heritage Record Sheet of BH2 & BH3

Name of Built Heritage	No. 87, San Wai Tsuen	Built Heritage No.	Item BH4
AMO accorded grading	Grade 3		
District	Yuen Long District	Village / Town	San Wai Tsuen
Address	No. 87 San Wai Tsuen, San Tin, Yuen Long, N.T.		
Map reference	2SE21B	Date of Inspection	27 Feb 2012
Construction Date	Est. 1920s	Date of Derelict	n/a
Land Condition	Ownership: Private	Current user: Local Villagers	Current use: Domestic
AMO Building Types	Village House	Architectural Style	Qing vernacular with blended Chinese and Western features
Original Form	House	Cultural Categories	Residence
General Condition	Fair ; Alterations observed ; Considerable up-keep of building		
Building Materials	Roof: Double layered Chinese pan & roll tiles	Wall: Grey bricks	Ex. Finishes: Front façade with plastered mouldings and features finished with paint
Photographic record			
			
Front view			



Rear View



Close-up view

Record by: Curry Tse

Built Heritage Record Sheet of BH4

APPENDIX B

Figures

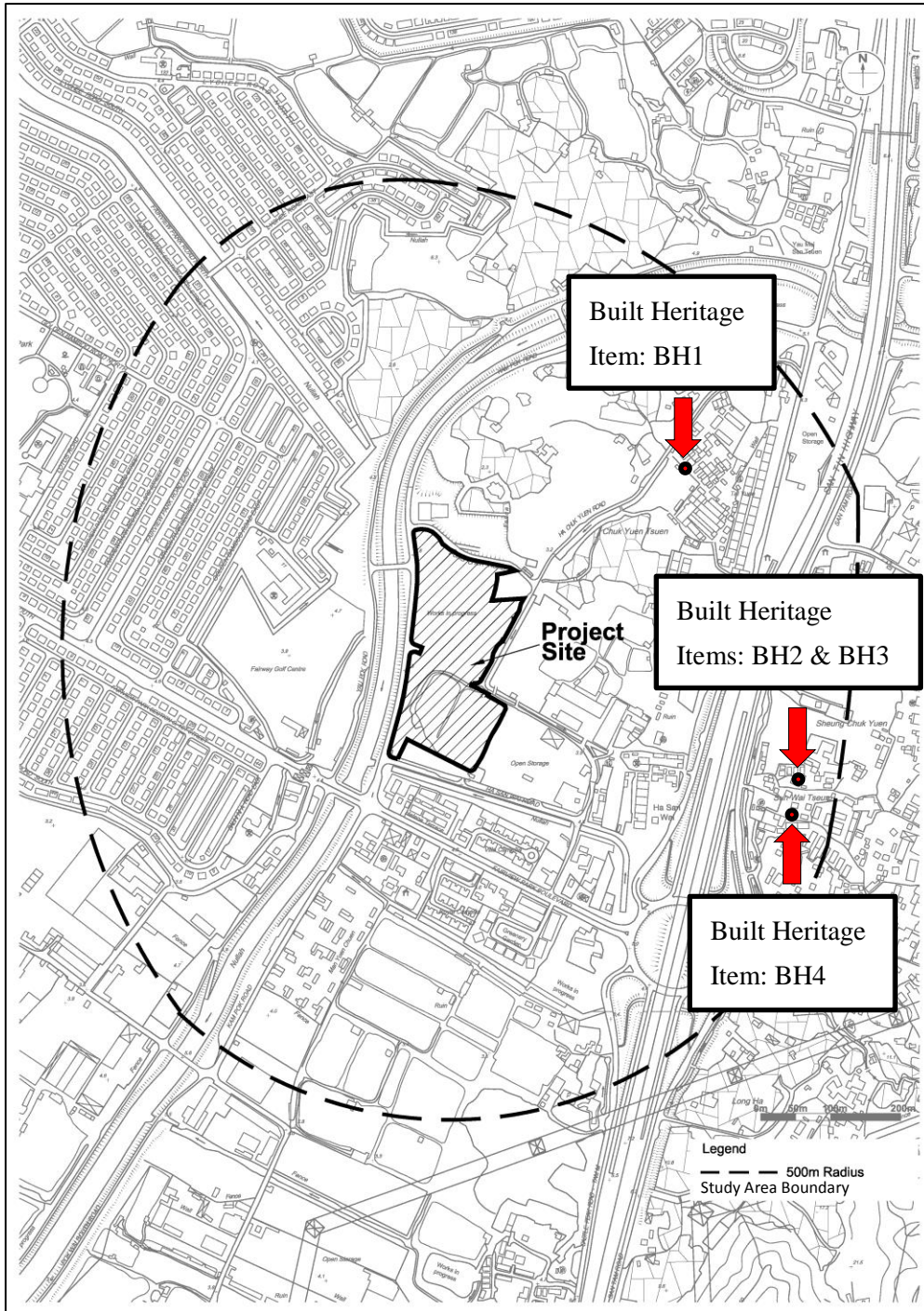


Figure 1 Identified Built Heritage Items within Study Area of Proposed Low-rise and Low-density Residential Development at Various Lots and their Adjoining Government Land in D.D. 104, East of Kam Pok Road, Mai Po, Yuen Long, N.T.

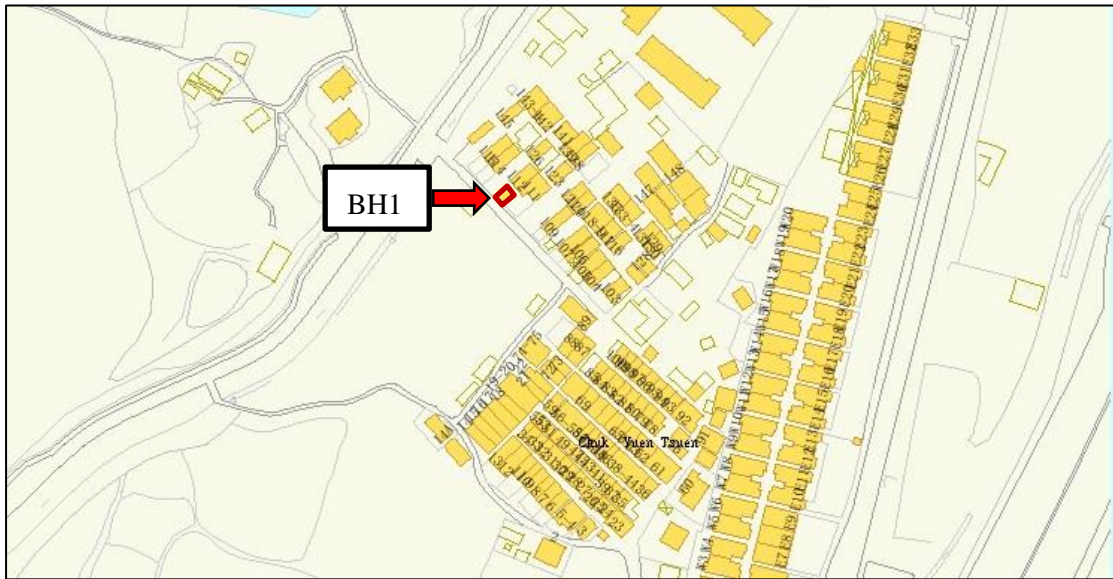


Figure 2 1:1000 map showing boundary of BH1

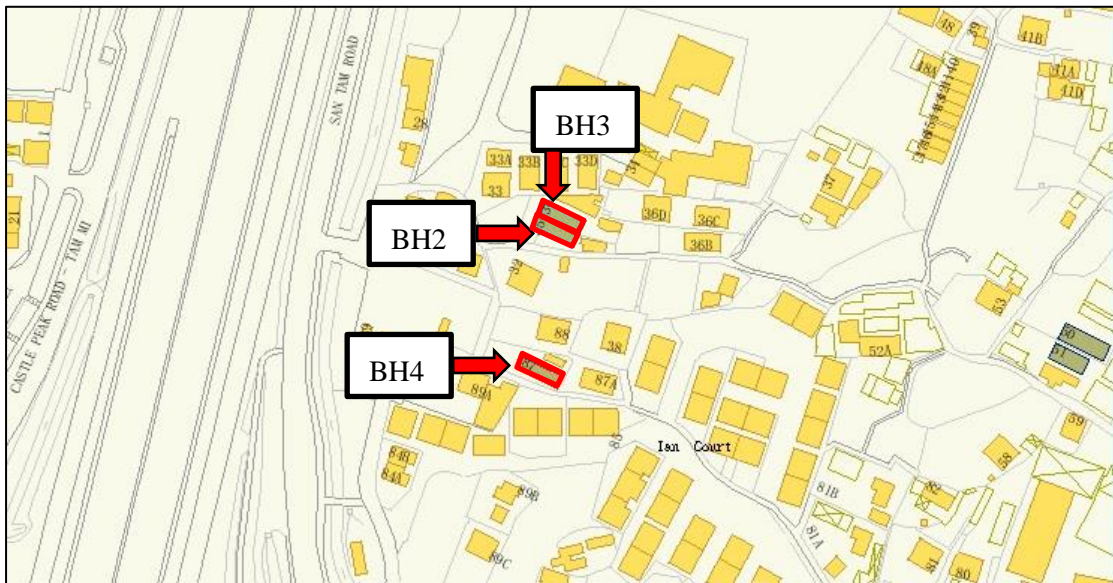


Figure 3 1:1000 map showing boundaries of BH2, BH3 and BH4

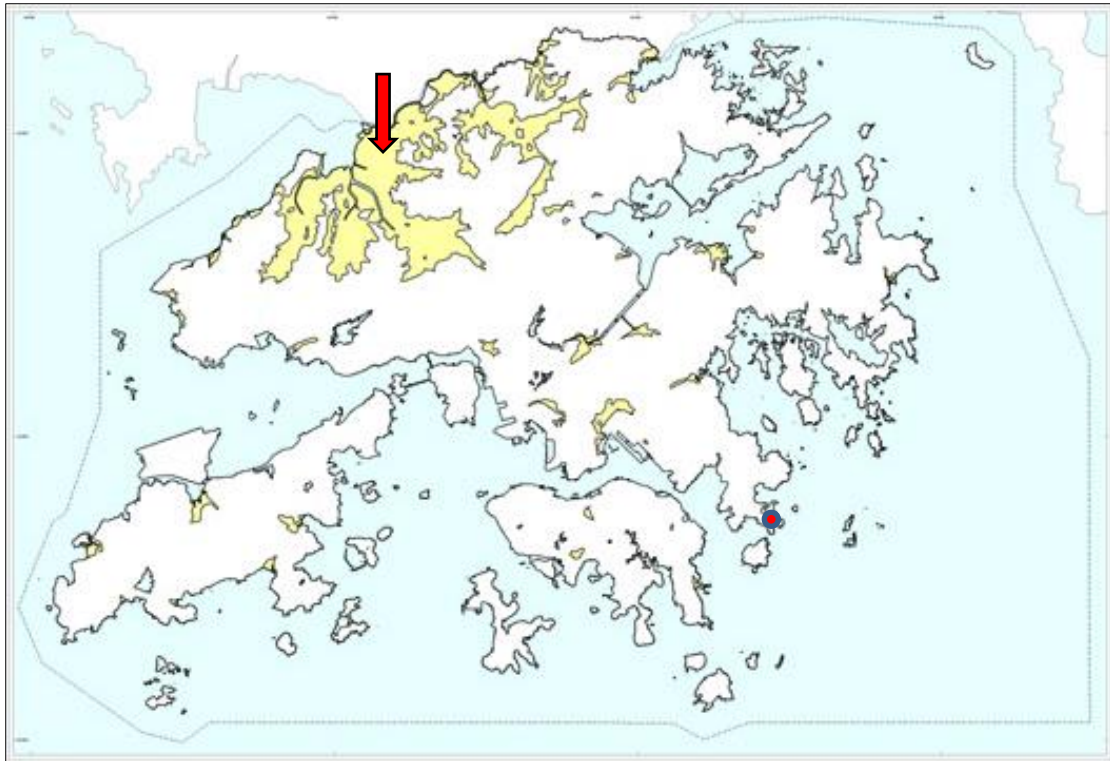


Figure 4 Map showing the location of Quaternary alluvium / Colluvium in Hong Kong
[Arrow indicate location of project site] (Source: www.cedd.gov.hk)