# **Review of Archaeological Potential**

#### 1. INTRODUCTION

#### **Project Description**

The following review will include an evaluation of archaeological potential for the following works areas;

- Underground Magazine Site near Mount Davis
- All works areas as highlighted on the Key Plan in Figure 2.12

#### 2. METHODOLOGY

A desk-based study will be undertaken to gather known information regarding the study area; this information will include, geotechnical, geological and geomorphological, previous archaeological investigations, current and previous land use, historical records, maps and aerial photographs. The objective of the desk-based review is to identify areas of archaeological potential as well as to eliminate areas which have known severe disturbances.

Recommendations for further action will also be presented for any areas of archaeological potential identified in the desk-based review that will be directly impacted by the proposed project.

### 3. HISTORICAL BACKGROUND

The Study Area for the proposed project runs from Mount Davis, through Kennedy Town to Sai Ying Pun. The following section will present a brief historical background for the areas that will be affected by the project;

#### The Jubilee Battery

Construction of the battery was commissioned during the late 1930's and it was completed in 1939. The battery contained three six inch gun emplacements, other features of the site included a search light position, battery buildings, tunnels and a magazine. There is only one recorded military action associated with the battery. This occurred on 11<sup>th</sup> of December 1941 and was directed at a Japanese attempt to land on Lamma Island. The battery was blown up by its own personnel on 25<sup>th</sup> of December 1941, just prior to the surrender of Hong Kong (Ko & Wordie 1996). There are no other historical associations with the area.

### Sai Ying Pun

Sai Ying Pun was sparsely settled at the time of the British arrival, but quickly became a populated area and it has been postulated that the area may have been used as a stronghold by the famed pirate Chang Po Tsai in pre-colonial days (Lau 1997). It was also noted that a path existed along the coast prior to the British arrival in 1841 and that the path was eventually widened and improved to become Queen's Road (Smith 1995). The early British occupation of the area was by a mixture of military and mercantile interests. It is noted that a battery of three guns was located slightly to the west of a stream (running along the alignment of the current Water Street) at West Point. As well barracks were constructed up the hillside all the way to what is currently Bonham Road (Smith 1995).

The government began the division of Sai Ying Pun into Lots (with the first land sale reserved for the government) as early as 1842. It is likely that the government wished to be able to call upon the reserved lots for additional Naval Stores, if and when they might be required. The first European resident of Sai Ying Pun was a Mr. Robert Webster, who was granted inland lot 5 in 1842 and who had formerly been a trader out of Canton between 1835 and 1841 (Smith 1841).

Sai Ying Pun was designated as District No. 1 in 1857 when Hong Kong was divided into seven urban districts. The exact boundaries of the original district are not known, as the earliest sources make reference to the western boundary as being at the former village of Cow Ee Wan (exact location unknown) and running to the location of the current Bonham Strand.

The layout of the early streets in the district such as Eastern, Centre and Western Street that ran up the hillside from the coast were designed in straight alignments and did not make any concessions for the existing topography. On the other hand the existing path running from Pok Fu Lam to Aberdeen was retained (Pok Fu Lam Road) and Water Street was constructed along the lines of an existing stream (Smith 1995).

The area around what is currently the Eastern section of King George V Memorial Park was formerly occupied by a small pox ward as can be seen in a map of the area from 1889 (Empson 1992).

The district developed rapidly as a trading centre along the coast and also as an area of small businesses along the hillside and larger commercial establishments along Queen's Road, especially pawn shops and Chinese Medicine shops (Smith 1995). A photograph of Centre Street taken in 1925 shows the mixed commercial and residential nature of the district (ed. Cheng 2000).

#### **Shek Tong Tsui**

This area was originally a granite quarry that was used by Hakka stonecutters who were based in Kowloon prior to 1841. Development in the area was much slower than in neighbouring Sai Ying Pun. The area gained notoriety as a red light district in the first part of the 20<sup>th</sup> Century, but declined after the prohibition of prostitution in 1935 (HK Museum of History 1994). Hill Road was constructed between 1871 and 1890 and Queen's Road West between 1841 and 1850 (ed. Cheng 2000).

## Kennedy Town

Kennedy Town was named after Sir Arthur Kennedy, who was Governor of Hong Kong between 1872 to 1877 (Rodwell 1992). The area was originally known as West Bay or Rubbish Bay (from the local inhabitants' use of the bay for dumping rubbish).

The development of Kennedy town is closely linked to reclamations and the area grew as a Chinese commercial and residential area in the 1870's and 1880's HK Museum of History 1994). The main street in Kennedy Town was Belcher Street, which was constructed between 1871 and 1890. Other streets in Kennedy Town also dating to this period include Chater Street (currently Catchick Street), Cadogan Street and Davis Street (ed. Cheng 2000).

The photograph in Figure 1 which was taken in 1910 shows a view of Kennedy Town along what is currently called Catchick Street (known as Chater Street at the time the photograph was taken). The structure that can be seen on the left of the photograph is the Kennedy Town abattoir as it existed in 1894 (HK Museum of History 1994).

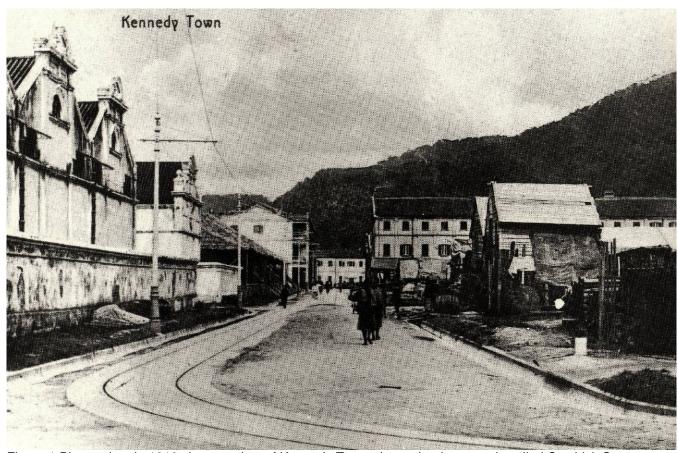


Figure 1 Photo taken in 1910 shows a view of Kennedy Town along what is currently called Catchick Street

### Reclamations

As has been noted in the previous sections the history of the districts covered in the current project Study Area is closely linked to reclamations and the geological map in Figure A6.2.1 and A6.2.2 shows the history of reclamations in the Study Area. The earliest reclamations date to the 1860's and the latter to the mid Twentieth Century (Strange 1985).

#### 4. GEOLOGICAL AND TOPOGRAPHICAL BACKGROUND

The archaeological potential for each area to be impacted by the proposed works will be presented in this section. The evaluation will be based on geological and topographical features as well as the history of the site and the potential for historical archaeological remains to be present.

#### Area MA (Figure 2.20)

As can be seen on the geological map in Figure A6.2.1, the site is located on a hillside running down to the coast and is in an area of Quaternary Debris Flow Deposits, as such there is no potential for prehistoric archaeological deposits. The only known usage of the site is as a short lived World War II Battery (it was constructed in 1939 and destroyed in 1941). The battery and associated features have been covered in the built heritage section of this report and there is no potential for additional archaeological deposits to be located in this study area.

#### Site A (Figure 2.21)

This site is located on solid geology (coarse ash crystal tuff with a small section of sandstone) see geological map in Figure A6.2.1. Topographically, it is situated at the base of Mount Davis, somewhat back from the original shoreline, also visible on the geological map in Figure A6.2.1.

#### Site B (Figure 2.21)

This site is situated entirely on reclamation, as can be seen in the geological map on Figure A6.2.1.

### Site C (Figure 2.22)

This site is situated on solid geology (coarse ash crystal tuff) beside an area of Quaternary debris flow deposit. As can be seen in the geological map in Figure A6.2.1, it is also situated just back from the original shoreline.

### Site D (Figure 2.22)

This site is situated at the edge and into reclamation. The original coastline was characterised by an area of Quaternary debris flow deposits on either side of a small area of Quaternary alluvium (see Geological Map in Figure A6.2.1).

### Site E, Site F and Site G (Figures 2.22 and 2.23)

As can be seen in the geological map in Figure A6.2.1, these sites are all situated on reclamation.

#### Site H (Figure 2.23)

This site is situated on an area of solid geology (mixture of coarse ash tuff and sandstone) on a former promontory at the eastern end of Belcher Bay. As can be seen in the geological map in Figure A6.2.1, the original landform has been completely obscured by subsequent reclamations.

### Site I (Figure 2.23)

This site is situated on a hillside of medium grained granite and also on Quaternary debris flow deposits, see Figure A6.2.1 and A6.2.2 for geological map highlighting the site.

#### Site J, J1 and J2 (Figure 2. 23)

These three sites are located on Quaternary debris flow deposits on the hillside that was originally situated up from an area of Quaternary alluvium along the former coastline, see geological map in Figure A6.2.2.

### Site J3 (Figure 2. 23)

Site J3 is situated to the south of the proposed University Station in an area of medium grained granite and Quaternary debris flow deposits, see geological map in Figure A6.2.2.

#### Site K, L and L1 (Figure 2. 24)

These sites are located on reclamation as can be seen on the geological map in Figure A6.2.2.

### Site M (Figure 2. 24)

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This site is located on medium grained granite and Quaternary debris flow deposits, set back slightly from the original coastline, see Figure A6.2.2 showing the geological map with this site highlighted.

### Site M1 and M2 (Figure 2. 24)

These two sites are situated on an area of Quaternary debris flow deposit (see Figure A6.2.2).

### Site M3 (Figure 2. 24)

This site is located on an area of Quaternary debris flow deposit on the hillside leading down to the former coastline, see geological map in Figure A6.2.2.

### Site N1 (Figure 2. 24)

This site is located on an area of reclamation as can be seen on the geological map in Figure A6.2.2.

#### 5. EXISTING IMPACTS

This section will highlight the existing impacts for all sites that are not situated on reclamation, as the latter sites do not contain archaeological potential.

#### Area MA

The site is located on a steep wooded hillside containing abandoned World War II structures, see plan in Figure 2.20.

#### Site A

This site is currently occupied by the existing Block A and C of the Ex-Police Quarters Kennedy Town, which will be demolished. See Plan in Figure 2.21.

### Site B

This site is currently occupied by the former Kennedy Town Incinerator and Abattoir site which will be subject to demolition and remediation. See Plan in Figure 2.21.

#### Site C and Site D

These sites include an area currently occupied by a playground to the west of Smithfield and to the south of Forbes Street, roads and modern buildings. See Plan in Figure 2.22.

### Site H

This site is located at a section of hill slope along Belcher Street, see plan in Figure 2.23.

### Site I

This site is located on a wooded hillside to the north of Pok Fu Lam Road near the Belcher's Residential Development, see location plan in Figure 2.23.

#### Site J and J1

These sites are located in and adjacent to an open space at the eastern end of South Lane. See location plan in Figure 2.23.

### Site J2

This site is located in an open area (with existing public toilet to be demolished) between Clarence Road and Queen's Road West, see location plan in Figure 2.23.

#### Site J3

This site is currently a vehicular access to the University of Hong Kong, see location plan in Figure 2.23.

#### Site M

This site is located at the western side of an existing sports track and playground. See location plan in Figure 2.24.

#### Site M3

This site is currently occupied by the Hong Kong Government David Trench Rehabilitation Centre, to be demolished, see location plan in Figure 2.24.

#### 6. EVALUATION OF ARCHAEOLOGICAL POTENTIAL

The following section will present the archaeological potential for each of the sites to be affected by the proposed project.

#### Site MA

The site is located on a steep hillside in an area of debris flow deposits and as such does not have the potential to contain archaeological deposits. It should be noted that the proposed site contains remains associated with the WWII Jubilee Battery. The battery is a built heritage feature and any impacts to the battery and all of its components will be addressed in the built heritage section of this report.

Table 1 Evaluation of Archaeological Potential for the affected sites that are not situated on reclamation

Site Ref	Situated on Reclamation*	Geology/ Topography	Existing Impacts	Archaeological Potential	Recommended Action
A	No	Base of hill/ Coarse ash crystal tuff and sandstone	Police accommodation block	No, as the building construction would have destroyed any previously existing archaeological deposits	No further action
В	Yes	N/A	N/A	No	No further action

Site Ref	Situated on Reclamation*	Geology/ Topography	Existing Impacts	Archaeological Potential	Recommended Action
C	No	Coarse ash crystal tuff and sandstone	Site formation for park	Yes, although the impacts are likely to be minimal as there is no evidence of extensive utility provision in this works area.	**Watching brief is recommended for the directly impacted areas for the identification of any historical structure foundations and any other archaeological deposits identified during the watching brief
D	Partially	Area not in reclamation is at the former coastline in an area of debris flow deposits and alluvium	Modern structures, roads	No, based on the fact that the majority of the site is located in reclamation and that the remainder is situated at the former coastline in the vicinity of debris flow deposits	No further action
E	Yes	N/A	N/A	No	No further action
F	Yes	N/A	N/A	No	No further action
G	Yes	N/A	N/A	No	No further action
Н	No	Coarse ash tuff and sandstone/ Former Promontory	No record of existing impacts	Yes (the degree of existing impacts cannot be determined due to lack of information)	Watching brief is recommended for the directly impacted areas for the identification of any historical structure foundations and any other archaeological deposits identified during the watching brief

Site Ref	Situated on Reclamation*	Geology/ Topography	Existing Impacts	Archaeological Potential	Recommended Action
I	No	Hillside/ Medium grained granite and debris flow deposits	Road construction/ Hong Kong Electric cables and Telecom cables	Yes, although the existing impacts from previous works may have damaged or destroyed archaeological deposits, there is potential for undisturbed archaeological deposits to be present	Watching brief is recommended for the directly impacted areas for the identification of any historical structure foundations and any other archaeological deposits identified during the watching brief
J & J1	No	Hillside/ Debris flow deposits	WSD mains, DSD drains, gas mains, Hong Kong Electric cables and Telecom cables	Yes, although the existing impacts from previous works may have damaged or destroyed archaeological	Watching brief is recommended for the directly impacted areas for the identification of any historical structure foundations and
J2			J2 public toilet on part of site/ Hong Kong Electric cables	deposits, there is potential for undisturbed archaeological deposits to be present	any other archaeological deposits identified during the watching brief
J3	No	Hillside/ Medium grained granite and debris flow deposits	WSD mains, DSD drains, gas mains, Hong Kong Electric cables and Telecom cables	Yes, although the existing impacts from previous works may have damaged or destroyed archaeological deposits, there is potential for undisturbed archaeological deposits to be present	Watching brief is recommended for the directly impacted areas for the identification of any historical structure foundations and any other archaeological deposits identified during the watching brief
K	Yes	N/A	N/A	No	No further action
L	Yes	N/A	N/A	No	No further action
L1	Yes	N/A	N/A	No	No further action

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Site	Situated on	Geology/	Existing	Archaeological	Recommended
Ref	Reclamation*	Topography	Impacts	Potential	Action
M	No	Hillside/ Medium grained granite and debris flow deposits	Site formation for park, DSD Mains and Telecom cables	Yes, although the existing impacts from previous works may have damaged or destroyed archaeological deposits, there is potential for undisturbed archaeological deposits to be present	Watching Brief is recommended as the remains of the small pox ward or other associated structures may be located in the affected area.
M1	No	Hillside/ Medium grained granite and debris flow deposits	Structure to be demolished (Centre Street Market and Cooked Food Centre)	No, as the building construction would have destroyed any previously existing archaeological deposits	No further action
M2	No	Hillside/ Medium grained granite and debris flow deposits	Vacant Site	Yes, although the existing impacts from previous works may have damaged or destroyed archaeological deposits, there is potential for undisturbed archaeological deposits to be present	Watching brief is recommended for the directly impacted areas for the identification of any historical structure foundations and any other archaeological deposits identified during the watching brief
M3	No	Hillside/ Debris flow deposits	Structure to be demolished (David Trench Rehabilitation Centre)	No, as the building construction would have destroyed any previously existing archaeological deposits	No further action
N1	Yes	N/A	N/A	No	No further action

<sup>\*</sup>Sites located on reclamation have been determined to have no archaeological potential and no further action will be recommended on this basis.

\*\*Watching brief is recommended in areas that have existing impacts, as these areas have low potential for undisturbed archaeological deposits to be present and do not warrant archaeological survey.

#### 7. ARCHAEOLOGICAL WATCHING BRIEF

The watching brief must be undertaken by a qualified archaeologist who must apply to the Antiquities Authority for a Licence (it should be noted that the time for processing the licence application will be no less than two months). The archaeologist should liaise with the contractor with respect to details of the construction programme. The contractor must immediately inform the archaeologist and the AMO if any significant archaeological deposits are identified during the course of the construction works. The methodology of the watching brief can be found in Annex 6.2A.

#### References

Cheng P H (ed) 2000 A Century of Hong Kong Roads and Streets, Joint Publishing (H.K.) Ltd, Hong Kong

Empson H. 1992 Mapping Hong Kong: A Historical Atlas, Government Information Services, Government Printer, Hong Kong

Ko T & Wordie J 1996 Ruins of War: A Guide to Hong Kong's Battlefields and Wartime Sites, Joint Publishing, Hong Kong.

Rodwell S. 1992 A Visitor's Guide to Historic Hong Kong, The Guidebook Company Limited/ Hong Kong Tourist Association, Hong Kong

Smith C. 1995 A Sense of History: Studies in the Social and Urban History of Hong Kong, Hong Kong Educational Publishing Company, Hong Kong

Strange P. 1986 Hong Kong and Kowloon Sheet 11 Solid and Superficial Geology Series HGM20 Edition I – 1986, Geotechnical Control Office, Civil Engineering Services Department, Hong Kong

ENSR Asia (HK) Ltd. 5 October 2008

# Annex A Methodology for Archaeological Watching Brief

A watching brief should be undertaken by a qualified and licensed archaeologist during excavation works at the construction stage. A qualified archaeologist should inspect the site at an interval that will depend on the nature and duration of the construction programme. Details of the frequency of inspection will be provided to AMO for review and comment once the detailed construction programme has been finalised. A construction programme should be provided to the monitoring archaeologist prior to the commencement of site works in order to arrange the inspection schedule. The archaeologist should be notified no less then 2 working days prior to any changes to the construction programme so that arrangements can be made to monitor the works. The Engineer should facilitate arrangements and liaise between the archaeologist and construction contractor.

Archaeological Watching Brief is a form of mitigation which is required when engineering works impact on areas that have been assessed as having some degree of archaeological potential and where conventional testing methods are deemed insufficient. The range of archaeological resources that require monitoring include both historical and prehistoric material and features.

The watching brief process entails the observation of the engineering groundworks by qualified archaeologists in order to identify any archaeological material or features revealed during the excavation phase of the works schedule. Upon identification of such material or features the archaeologists will require immediate access to the excavation area for recording of the location of material/features *in situ*, antiquities retrieval and sample collection.

These guidelines serve for two basic purposes, firstly, that the archaeological resources are adequately recorded and recovered and secondly, that appropriate measures are taken on site to create a minimum of delays to the engineering schedule.

Methodology of the Watching Brief:

### Monitoring personnel

Watching brief should be undertaken by a qualified archaeologist, who must apply for a licence under the Antiquities and Monuments Ordinance (Cap. 53) from the Antiquity Authority before the monitoring works commence.

### Areas to be monitored

The areas which require watching brief must be defined and submitted by the qualified archaeologist under the project and agreed with AMO prior to commencement of works.

### Site access

Archaeologists should be allowed reasonable access to relevant areas of groundworks, so that deposits can be examined and recorded. Trenches may require temporary shoring and groundworks might need to be temporarily rescheduled, to provide a safe environment for such works. Provision should be made, at the earliest stage of construction programming, for unrestricted archaeological access to areas of groundworks in the identified area of archaeological potential.

### Monitoring and retrieval methodology

**Table 1**, below, shows the various categories of archaeological material and features that are most likely to occur in local contexts. Also listed are the recommended type and degree of recording and retrieval required for each category.

### Recording forms for watching brief

Full and proper records (written, graphic, electronic and photographic as appropriate) should be made for all works undertaken. A set of forms for the recording of any archaeological material identified during the watching brief process must be approved by the AMO. They should include the following:

- Registers to record finds, special finds, contexts, photographs, drawings, levels and samples
- Context description forms
- A daily record form designed specifically for archaeological watching brief, which must locate clearly the area of works monitored, the nature/extent of the works, a summary of the day's findings, cross-referenced to all register numbers used that day.

### Safety requirements

Archaeologists and staff employed in monitoring must follow the safety procedures enforced by the contractors on site.

### Watching brief report

The procedures and result of the Watching Brief should be presented in report form, following standards set by the AMO for reports on other types of archaeological field work. This includes details of the overall programme, methodology, sampling strategy, implementation, findings and interpretation. The report should be submitted to the AMO for approval in draft and, following resolution of any comments in final form. All data, material and records forming the site archive must be submitted to the AMO upon completion of the project.

 The monitoring report should be prepared in accordance with the Guidelines for Archaeological Report issued by AMO

Table 1: Categories of archaeological finds and recommended action, including, significant findings and appropriate follow-up action

Categories of archaeological material	Retrieval Procedures	Significance
Human Burial -Skeletal remains -Items associated with human burial, i.e. grave goods	Full Recording and Recovery of Human Remains and Associated Features -Complete recording by photography, drawing, written description -Full measurement of burial and surrounding matrix -Retrieval of human remains and associated materials -Retrieval of surrounding soil for further analysis	High Follow up: Rescue Excavation as appropriate
Intact Features -Structural/architectural remains -Undisturbed contexts, e.g. hearth, midden, habitation area, assemblages of artefacts and/or environmental material	Limited Recording and Recovery of Archaeological Features -Recording and measurement of salient features by photography, drawing and written description -Retrieval of all archaeological material -Retrieval of samples from the surrounding matrix	High Follow up: Rescue Excavation as appropriate
Intact Artefacts -complete objects, e.g. pottery, metal objects, stone and bone tools. The objects are complete but isolated and are not part of assemblage of feature	Recovery of Artefacts -Recovery of objects -Sampling of surrounding matrix -Recording by written description and photography	Medium  Upon discovery, AMO should be informed and follow up procedures agreed with AMO on as appropriate
Isolated Material -Sherds, non-human bone, artefact fragments (metal, pottery, glass). There are no complete objects, the material is isolated and fragmentary in nature.	Recovery of Artefacts Fragments/ Archaeological Material -Recovery of material, e.g. artefact fragment, environmental material -Recording written description and by photography, if appropriate	Low  Upon discovery, AMO should be informed and follow up procedures agreed with AMO as appropriate
Deposits with Archaeological Potential -Soil deposits which exhibit characteristics associated with archaeological remains in Hong Kong	Sampling of Deposit -Recording of soils by photography and written description -Collection of soil samples from deposits displaying archaeological potential	Low  Upon discovery, AMO should be informed and follow up procedures agreed with AMO on as appropriate

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