

China International Water and Electric
Corporation

Construction of a Secondary
Boundary Fence and New Sections
of Primary Boundary Fence and
Boundary Patrol Road (Phase 2)
Archaeological Survey at Lin Ma
Hang: *Archaeological Survey Report*

June 2013

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June 2013

Reference 0171550

For and on behalf of
ERM-Hong Kong, Limited

Approved by: Frank Wan / Dr Yao Chongxin

Signed: _____

Position: Partner / Licence Holder

Date: 20 June 2013

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NON-TECHNICAL SUMMARY

China International Water and Electric Corporation (CWE) has been commissioned by Architectural Services Department (ASD) to carry out the *Construction of a Secondary Boundary Fence and New Sections of Primary Boundary Fence and Patrol Road (the Project)* at Lin Ma Hang section.

According to the approved EIA Report for the Project, the Lin Ma Hang section is considered to have archaeological potential. Under the Environmental Monitoring and Audit manual of the EIA and *Section 2.5* of the *Environmental Permit No. FEP-05/347/2009/A*, an archaeological survey is required after land resumption and prior to commencement of the construction works at the Lin Ma Hang section and the archaeological survey report shall be submitted to the Director of Environmental Protection at least one month before the commencement of construction.

The Archaeological Survey Proposal prepared in 2008 was found to be outdated by the Antiquities and Monuments Office (AMO). Therefore, an updated archaeological survey proposal was prepared and agreed with the AMO. A *Licence to Excavate and Search for Antiquities* under the *Antiquities and Monuments Ordinance* was then granted to a qualified archaeologist, Dr Yao Chongxin, by the Authority in April 2013. The archaeological survey was conducted from 20 April to 3 May 2013 and field scanning, fourteen auger holes and eight test pits were conducted.

Only modern plastic waste, bricks, glass shards and porcelain shards observed from field scan. They are without archaeological interest. No remains of archaeological interest were identified from auger holes. All the test pits were excavated to sterile layer or reached underground water level and no high significance remains were identified. Although a total of 18 pieces of general finds (including six pieces of pottery shards, six pieces of tile fragments and six pieces of porcelain shards) were identified from test pits TP2, TP3, TP4, TP5 and TP8, the quantity is small and the finds are rounded and polished by water force. According to limited information provided by their typology, only two pieces of shards may date to Song to Yuan dynasties identified from Layers 3 and 4 respectively from TP3 but later period finds were also unearthed in Layer 5 in the same test pit. Therefore, the two porcelain shards are regarded as secondary deposits. Others remaining finds are dated to later period (modern to early 20th century). According to the condition of the finds being rounded and polished and the stratigraphy information from auger holes and test pits, all the finds are not in-situ deposits but were transported to the spot of discovery by water and considered as secondary deposits.

In summary, as the Works Area is next to river channel, the strata from fieldwork findings clearly showed that this area was formed due to sediments transported to the area and therefore only secondary deposits were found. The potential to identify early period in-situ archaeological deposits in this Works Area is very low. No significant archaeological remains will be

impacted by the Project. Therefore, no archeological mitigation measure or further archaeological action is considered necessary.

中文摘要

建築署委托中國水利電力對外公司進行蓮麻坑段的輔助邊界圍網及主圍網和邊界巡邏通路新段建造工程。

根據該工程已批核的環境影響評估報告，蓮麻坑段被評定為具有考古潛質。根據環境監察及審核手冊及環境許可證編號FEP-05/347/2009/A第2.5節的要求，收回土地後及施工之前，需要在蓮麻坑段進行考古調查，並於工程展開最少一個月前遞交考古調查報告予環境保護署署長。

由於古物古蹟辦事處認為2008年所準備的考古調查計劃書內容需要更新，因此，更新版本制訂後亦已得古物古蹟辦事處審批。姚崇新教授為是次調查的合資格考古學家，於2013年4月獲批發發掘及搜尋古物牌照。是次調查於2013年4月20日至5月3日進行，地面采集外還鑽探了14個鑽孔及發掘了8個探方。

地面采集觀察到沒有考古價值的現代塑膠廢料、磚塊、玻璃殘片及瓷片。鑽孔沒有發現考古遺物。全部探方皆下掘至生土或地下水位為止。調查結果沒有發現高價值的考古遺物。雖然在探方TP2, TP3, TP4, TP5, TP8中共發掘出18片一般器物(其中包括6片陶片、6片瓦片及6片瓷片)，但數量少，並多帶有被水流沖刷磨損的痕跡。根據這些遺物類型學方面的有限資料推斷，有兩片瓷片的年代可被推斷為宋元時期。這兩瓷片出土的位置位於探方3的第三及第四層，但因第五層還出土年代較晚的遺物，這兩瓷片乃二次堆積物。

其餘文物都被推斷為年代較晚期(二十世紀初至近代)的遺物。綜合考慮出土文物已被磨損的情況以及鑽孔和探方中揭示的地層狀況，全部文物皆經水流被運送至出土地點，為二次堆積。

總的來說，由於工程範圍臨近河道，範圍內的地層為河水沖擊淤積而成，因此所出文物皆為二次堆積。此範圍內存在潛在的原生考古遺物的機會非常低，工程不會對重要考古遺跡/遺物造成影響。因此，不需要緩解考古資源影響的措施或進一步的考古工作。

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1.1

PROJECT BACKGROUND

China International Water and Electric Corporation (CWE) has been commissioned by Architectural Services Department (ASD) to carry out the *Construction of a Secondary Boundary Fence and New Sections of Primary Boundary Fence and Patrol Road* (hereinafter referred to as “the Project”) at Lin Ma Hang section (see *Annex A* for construction drawings).

The Project is a designated project (DP) under Category Q.1, Part I, Schedule 2 of the *Environmental Impact Assessment Ordinance* (EIAO) (Cap. 499). The Environmental Impact Assessment (EIA) of the Project was approved on 8 April 2009. According to the Environmental Monitoring and Audit (EM&A) manual of the EIA, archaeological survey was required after land resumption and prior to commencement of the construction works at the Lin Ma Hang section (the red alignment at Section 3 of the Project as shown in *Figure 1* of the *Environmental Permit No. FEP-05/347/2009/A*) and the archaeological survey report shall be submitted to the Director of Environmental Protection at least one month before the commencement of construction as required in *Section 2.5* of the *Environmental Permit No. FEP-05/347/2009/A*. The construction works are illustrated in *Drawing SE/7906/3C/SE306* of *Annex A*. The construction works will involve:

- To erect an Secondary Boundary Fence (SBF) along the existing Boundary Patrol Road except the sections to the north of Pak Fu Shan and northwest of Lin Ma Hang village (approximately 7.5km);
- To construct new sections of the BPR along the Shenzhen River side to the north of Pak Fu Shan and northwest of Lin Ma Hang Village without necessitating river training (approximately 4.0km);
- To erect a new Primary Boundary Fence (PBF) with the sensor alarm system and an SBF along the northern and southern sides of the new sections of BPR respectively;
- To remove the original PBF and the sensor alarm system thereon along the existing BPR near Pak Fu Shan and Lin Ma Hang Village; and
- To remove existing checkpoints at Sha Ling and Ping Che.

ERM-Hong Kong, Limited (ERM) has been commissioned by the CWE to carry out the archaeological survey.

The Archaeological Survey Proposal prepared in 2008 (2008 AP) was found to be outdated by the Antiquities and Monuments Office. Therefore an updated Archaeological Survey Proposal (ASP) has been prepared to define the scope of the archaeological survey and agreed with the AMO. A *Licence to Excavate and Search for Antiquities* (the Licence) under the *Antiquities and Monuments Ordinance* (Cap. 53) was granted to Dr Yao Chongxin by the

Authority on 19 April 2012 before the commencement of the archaeological survey.

The archaeological survey was conducted from 20 April to 3 May 2013. Field scanning, fourteen (14) auger holes and eight (8) test pits were conducted. This *Archaeological Survey Report* (the Report) is prepared to present the findings of the archaeological survey including mitigation measures to protect archaeological potentials, if found for AMO approval.

1.2 *ARCHAEOLOGICAL TEAM MEMBERS*

The individuals participated in the archaeological survey were as follows:

Dr Yao Chongxin	Licenced Archaeologist
Ms Peggy Wong	Project manager and experience archaeologist
Ms Kitty Liu	Cultural Heritage Specialist

In addition to the above team members, 4 labourers were employed for the archaeological survey. Field recording and processing of field records were led by Dr Yao Chongxin, who was supported by Ms Peggy Wong, Mr Raymond Ng and Ms Kitty Liu. Maps and drawings were produced by GIS and graphic teams of ERM. Finds processing were conducted by Ms Peggy Wong, Mr Raymond Ng and Ms Kitty Liu. Photography of artefacts was taken by Ms Peggy Wong.

Authors of this *Report* include: Dr Yao Chongxin, Ms Peggy Wong, Ms Kitty Liu, Mr Raymond Ng and Mr William Sin.

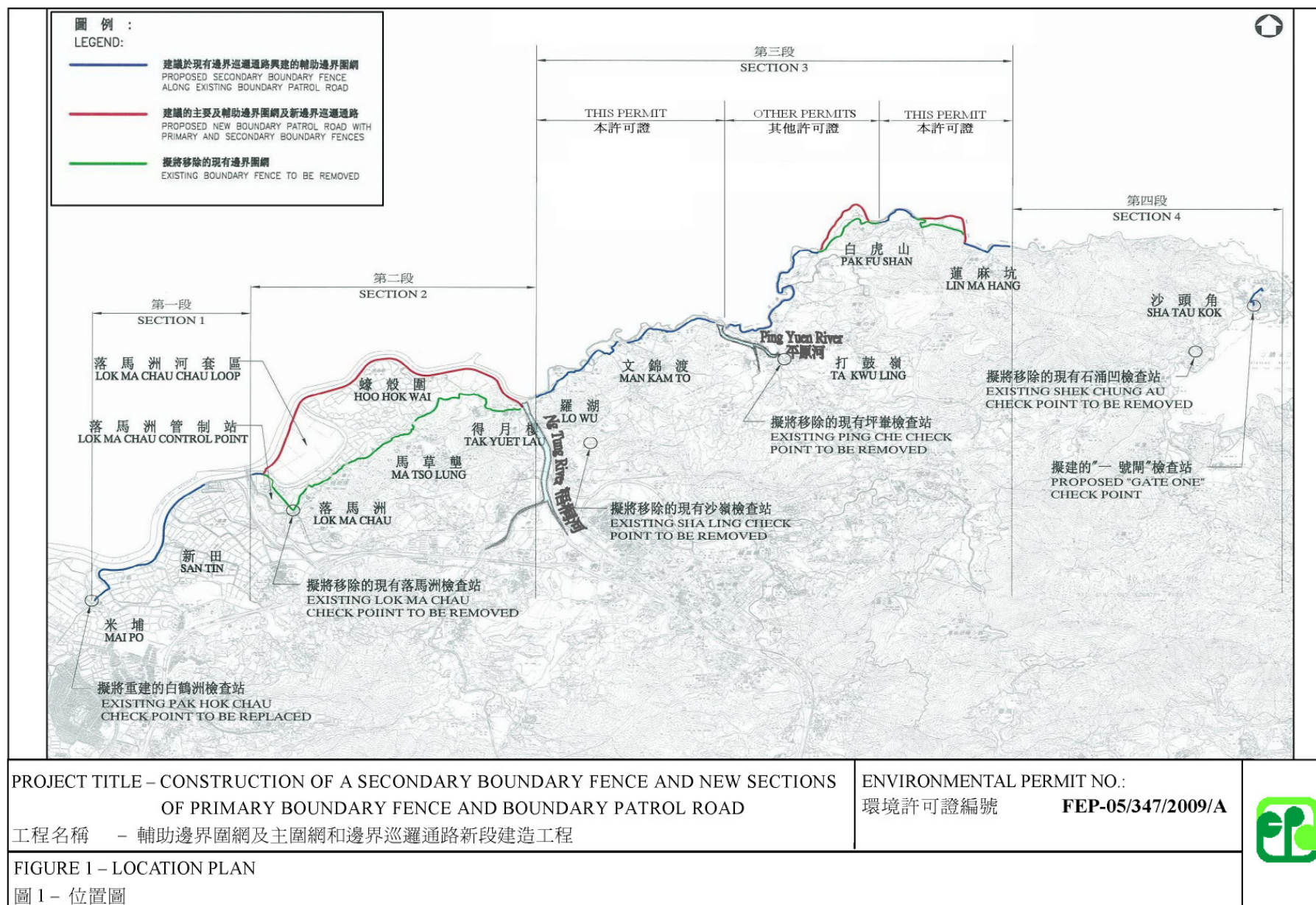
1.3 *STRUCTURE OF THE REPORT*

Following this introductory section, the remainder of the *Report* comprises the following sections:

- Section 2* presents the backgrounds of the site;
- Section 3* presents the objectives and the methodology of the archaeological survey;
- Section 4* presents the findings of the archaeological survey;
- Section 5* presents the impact assessment, mitigation measures and conclusion; and
- Section 6* provides the bibliography.

This report is supported by the following Annexes:

Annex A Relevant Drawings of the Construction Works



Annex B Fieldwork Locations of Previous Archaeological Surveys

Annex C Auger Holes Records

Annex D Test Pits Records

Annex E List and Photographs of General Finds

Annex F Land Survey Record

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2.1 TOPOGRAPHY AND GEOLOGY

Lin Ma Hang section of the secondary boundary fence is located south of the Shenzhen River. The geology of Lin Ma Hang section consists mainly of Pleistocene debris flow deposits and strips of Holocene alluvium along the coast (see Figure 2.1)⁽¹⁾. There is also an extensive outcrop of volcanic rocks of coarse ash crystal tuff of Tai Mo Shan Formation.

2.2 HISTORICAL BACKGROUND

The existence of Lin Ma Hang village was found in the 1688, 1819, and 1866 Records⁽²⁾⁽³⁾. The village therefore has over 300 years of history. The Ip (葉) clan migrated into Lin Ma Hang in 1710, and Lau family migrated into this village in middle of 18th century.⁽⁴⁾ During the 1960s, many villagers migrated to England and Holland and their farms and associated buildings were abandoned. Today, there are about one hundred villagers in the village and is almost occupied entirely by members of the Ip clan. There is only one Lau family still living in the village. Most of the clans, whether resident in the village or not still maintain their ancestral hall and members of the Lau and Koon clans still come back to visit their ancestral halls every year. The Sin clan ancestral hall collapsed in the 1970s.⁽⁵⁾

The name “Lin Ma Hang” was derived from the fact that in the past, a lot of “lin ma” fruit could be found in the stream. The villagers used to grow rice and sweet potatoes and regularly took any extra rice and collected wood to Sha Tau Kok Hui and Shenzhen Hui for sale.⁽³⁾ According to village representative, the Lin Ma Hang area is of good *Fungshui*. The village is concentrated around the western side of a small hill considered to have good *Fungshui*. The buildings are generally south, southwest or west facing. A half moon shape *Fungshui* pond is located at the southern area of the village.⁽⁶⁾

Lin Ma Hang village joined the ten community compacts of the Sha Tau Kok (沙頭角十約), and the Lin Ma Hang Yeuk was independently established in 1820-1830. Lin Ma Hang Yeuk consists of Shang Ha Hang (上下坑), Tong To Shan (塘肚山), Tao Yuen Tung (桃源洞), and San Uk (新屋) etc, though quoted from some other villagers that this community compact should consist of Lin

(1) In house GIS database. Purchase from Lands Department in 2006.

(2) 新安縣誌 (清) 1688 & 1819

(3) Volonteri, Simeon 1866, Map of San-On District (Kwangtung Province)

(4) 蕭國健 1986 《清初遷海前後香港之社會變遷》頁173。

(5) Planning Department 2010. *Land Use Planning for the Closed Area – Feasibility study*.

(6) Planning Department 2007. *Agreement No. PLNG13.2007 Survey on Features with Cultural Heritage Value in the Sha Tau Kok, Ta Kwu Ling and Ma Tso Lung Areas* (Final Report) (Unpublished)

Ma Hang, Tong To Shan, San Kwai Tin (新桂田), Keng To (徑肚) and Chang Ling (長嶺) village in Shenzhen. ⁽¹⁾

According to previous studies, the historical graves at Ngong Tong (昂堂) belong to former residents of Lin Ma Hang, whose descendants immigrated a number of years ago. A path between Lin Ma Hang and Ngong Tong had once existed, but that today is not used and graves in Ngong Tong are now accessed through the NENT landfill site ⁽²⁾. Villagers had to reach the Shenzhen River through Wang Lek.

The Declared Monument, the Residence of Ip Ting-sz is located near Lin Ma Hang village ⁽³⁾.

2.3

ARCHAEOLOGICAL BACKGROUND

The desktop study identified no Site of Archaeological Interest listed by the AMO within or adjacent to the Lin Ma Hang section ⁽⁴⁾. Nevertheless, some archaeological investigations have been conducted in its surrounding areas and the key findings are summarised in *Table 2.1* below. Locations of auger holes and test pits previously conducted are present in *Figure B* of *Annex B*.

Table 2.1

Key Findings of Previous Archaeological Projects

Year	Archaeological Project	Key Findings
1997-1998	Territory-wide Survey ⁽⁵⁾	<ul style="list-style-type: none"> • Surface scan and eight auger holes were conducted at Lin Ma Hang; one auger hole was conducted at Muk Wu Nga Yiu; and surface scan and three auger holes were conducted at Lo Shue Ling, but no archaeological materials were identified. • Surface scan and seven auger holes were conducted at Pak Fu Shan; surface scan and three auger holes were conducted at Tsung Yuen Ha, where Qing dynasty-recent period porcelain sherds were collected on surface. • Surface scan and three auger holes were conducted at Chuk Yuen but only modern porcelain sherds were collected on the surface.

(1) 阮志 2012《中港邊界的百年變遷：從沙頭角蓮蔴坑村說起》頁15.

(2) Planning Department 2010. *Land Use Planning for the Closed Area – Feasibility study*.
<http://www.pland.gov.hk/pland_en/misc/FCA/frontier_eng/frontier_e.htm>

(3) Antiquities and Monuments Office, List of Declared Monuments in Hong Kong as at 2 December 2011<
http://www.amo.gov.hk/form/DM_Mon_List_e.pdf>.

(4) Antiquities and Monuments Office, *List of Sites of Archaeological Interest in Hong Kong*, November 2012, <
http://www.lcsd.gov.hk/CE/Museum/Monument/form/list_archaeolog_site_eng.pdf>.

(5) Shenzhen Museum. 1998. 1997-1998 Territory-wide Archaeological Survey Report.

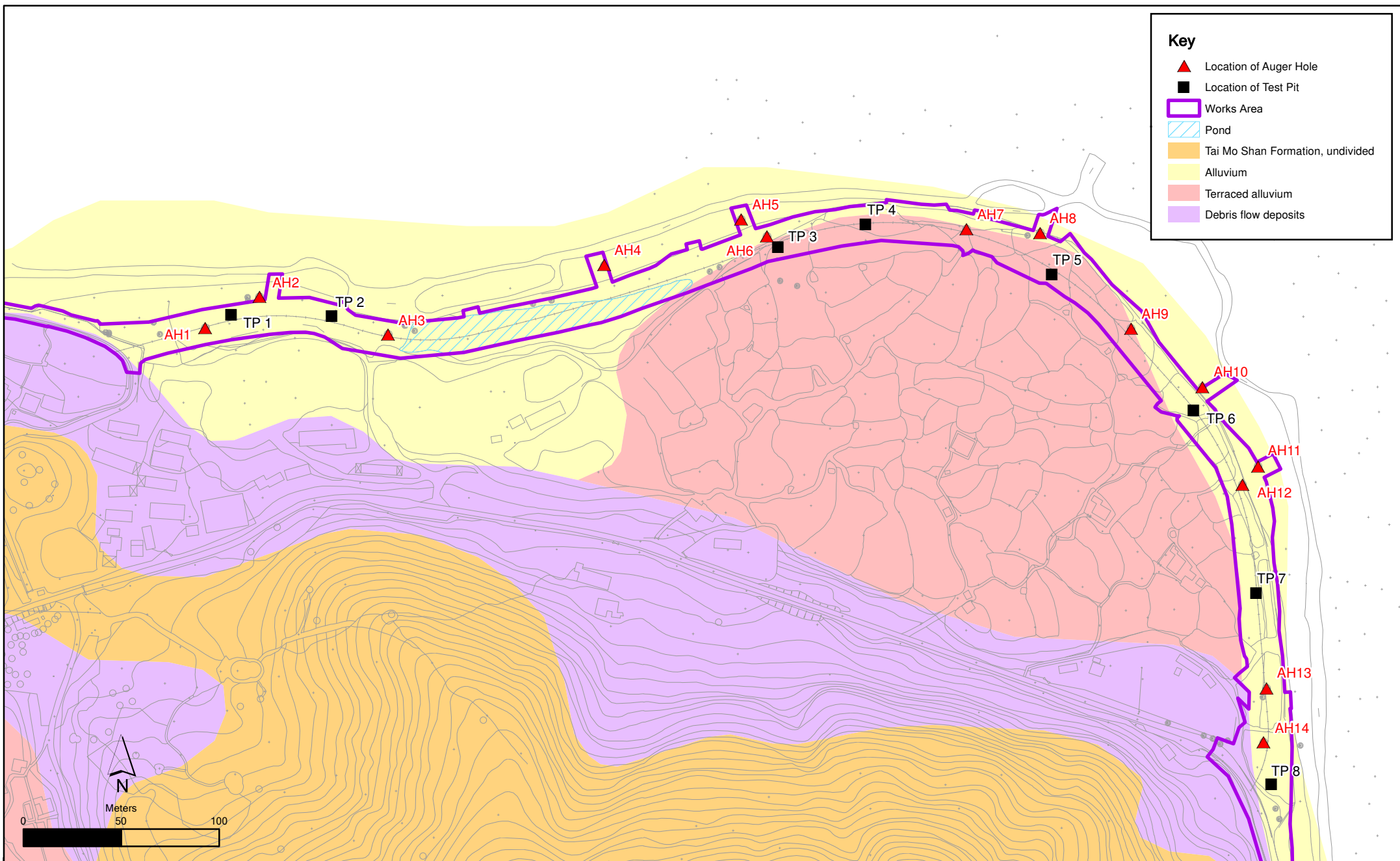


Figure 2.1

Locations of Test Pit and Auger Hole Overlay with Geology Map

File: T:\GIS\CONTRACT\0171550\Mxd\0171550_Geology.mxd
Date: 16-May-2013

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Year	Archaeological Project	Key Findings
2000, 2002	Shenzhen River Regulation Stage III EIA ⁽¹⁾	<ul style="list-style-type: none"> During the archaeological investigation for the Shenzhen River Regulation (SZRR) III Project conducted in 2000, significant archaeological findings, including geometric pottery shreds and a stone arrowhead dated to the Warring States period to the Han dynasty, were identified at the elevation between +6 and +10 mPD at Yuen Leng Chai site. (HKIA 2002) Since the river training works of the SZRR III Project would affect the archaeological deposits in Yuen Leng Chai, an archaeological survey and a rescue excavation were subsequently conducted at this site in 2002 with discoveries of significant archaeological deposits such as Bronze Age geometric pottery pot fragments and two Song-Yuan burials with complete funerary objects. ⁽²⁾
2001	Archaeological Survey & Assessment for the Proposed NENT Landfill Extension ⁽³⁾	<ul style="list-style-type: none"> An early 17th to early 20th century settlement site was identified in the Tong To Shan/ Lin Ma Hang area. Findings included six stone trackways surfaced with flat stone slabs, 74 "slope-protection walls", the remains of nine houses, and one cistern. Forty graves were also identified in the Ngong Tong area. Some Wun Yiu style blue -and-white porcelain sherds were collected at/near the house ruins.
2006	Archaeological Survey at Wang Lek near Lin Ma Hang Road ⁽⁴⁾	<ul style="list-style-type: none"> A field investigation was carried out at Wang Lek near Lin Ma Hang Road for the Secondary Boundary Fence project in 2006. The alignment of the proposed work was situated on either debris flow or alluvial deposits. A field scan, 25 auger holes and eight test pit excavations were conducted. No archaeological or historical remains were identified in the survey. However, the mound which is the only place that is similar to Yuen Leng Chai in geographic setting, was not surveyed as it was used as a graveyard.
2006	Northeast New Territories Village Sewerage Phase 2: Archaeological Monitoring Report ⁽⁵⁾	<ul style="list-style-type: none"> Archaeological watching brief was conducted within the Frontier Closed Area at Ta Kwu Ling during the construction phase of the NENT Village Sewerage project. Significant findings included the identification of a Ming Dynasty occupation site at Tsung Yuen Ha and a settlement of indeterminate age, which appeared to continue under the existing historical buildings.
2009	Land Use Planning for the Closed Area - Feasibility Study ⁽⁶⁾	<ul style="list-style-type: none"> A total of two test pits and 10 auger holes were conducted at Pak Fu Shan in 2009. Buried topsoil horizons in Area P4U2B2 probably dated back to Song- Ming and Bronze Age with residual Neolithic materials were identified. One possible Song and one possible Tang village ware and three Bronze Age hard geometric sherds with net pattern were collected during the field scan.

(1) Drainage Services Department. 2000. *Regulation of Shenzhen River Stage 3 EIA Study: EIA Report*. [information online] available from: <http://www.epd.gov.hk/eia/register/report/eiareport/eia_0392000/index.htm>

(2) HKIA 2003. *Rescue Excavation Works at Yuen Leng Chai*. (unpublished report)

(3) HKIA 2002. *The 2001 Archaeological Survey & Assessment for the Proposed NENT Landfill Extension (Final Report)*. (unpublished report)

(4) HKIA 2006. *Archaeological Survey at Wang Lek near Lin Ma Hang Road*. (unpublished report)

(5) Archaeological Assessments Ltd. 2006. *Northeast New Territories Village Sewerage Phase 2: Archaeological Monitoring Report*. (unpublished report)

(6) Planning Department 2010. *Land Use Planning for the Closed Area – Feasibility study*. <http://www.pland.gov.hk/pland_en/misc/FCA/frontier_eng/frontier_e.htm>

Year	Archaeological Project	Key Findings
2010	Liantang / Heung Yuen Wai Boundary Control Point and Associated Works ⁽¹⁾	<ul style="list-style-type: none"> A field investigation was carried out in 2010 at BCP section and the section between Lin Ma Hang and Frontier Closed Area Boundary. A total of 11 test pits and 30 auger holes were conducted. No cultural remains were identified but a test pit and some auger holes indicated the presence of a layer with human activities. The layer was a stratum of brown sandy soil with inclusion of gray colour. The gray inclusion is possibly the diffusion of organic materials. In consideration of the thickness of this stratum (0.18-0.28m) with the presence of organic materials, it indicated that this stratum might be the former ground level.
2010	2010 Shenzhen River Regulation Stage IV EIA Study ⁽²⁾	<ul style="list-style-type: none"> A total of three test pits and 14 auger holes tests were conducted in 2010 within Pak Fu Shan Section and three test pits and five auger holes tests were conducted at Chuk Yuen. No primary deposits or significant archaeological deposits were identified. The chance of finding in situ archaeological deposits is considered very low.

(1) Civil Engineering and Development Department. 2010. *Liantang / Heung Yuen Wai Boundary Control Point and Associated Works EIA report*. [information online] available from:

<http://www.epd.gov.hk/eia/register/report/eiareport/eia_1902010/index.html>

(2) Drainage Services Department. 2010. *Regulation of Shenzhen River Stage 4 EIA Study: EIA Report*.

<http://www.epd.gov.hk/eia/register/report/eiareport/eia_1892010/index.html>

3.1 OBJECTIVES OF ARCHAEOLOGICAL SURVEY

The objectives of this archaeological survey are:

- to obtain field data to assess the archaeological potential at Lin Ma Hang section;
- to identify any unknown archaeological sites affected by the proposed works;
- to confirm the archaeological impact associated with the construction works; and
- to submit a report containing all the data and results of the archaeological field survey as well as the findings and recommendations (if required) of the impact assessment.

3.2 SCOPE OF ARCHAEOLOGICAL SURVEY

The scope of the archaeological survey included the following:

- to conduct field walking in areas within Works Area after vegetation clearance by the Contractor; and
- to excavate 8 test pits with the size of 1m x 1.5m; and
- to drill 14 auger holes.

The locations of test pits and auger holes are presented in *Figure 2.1*.

3.3 METHODOLOGY OF THE ARCHAEOLOGICAL SURVEY

Upon agreement of the ASP with AMO, a qualified archaeologist, Dr Yao Chongxin, has applied the licence to *Excavate and Search for Antiquities* under the *Antiquities and Monuments Ordinance*. Land access was arranged by the Contractor.

Upon granting of the relevant licence and permit, the archaeological survey commenced and included the following tasks:

3.3.1 Task 1 – Field Survey

The archaeological survey was led by a qualified archaeologist and the fieldworks comprised the following tasks:

Task 1a: Field Scan

Field scan was undertaken at the Works Area along the Lin Ma Hang section after vegetation clearance by the Contractor. No remains of archeological interest identified during field scan.

Task 1b: Excavation (Auger Survey and Test Pitting)

A total of 8 test pits (with the size of 1m x 1.5m) and 14 auger holes were conducted.

The test pits were excavated by hand under the supervision and direction of the licensed archaeologist. The excavation of the test pits were terminated when reaching the sterile layer (at approximately 0.3m to 1.2m) or the groundwater level (approximately 0.9m below ground level (bgl) or +29mPD) where excavate further is considered unsafe. The field data collected has provided sufficient information to verify the archaeological potential of the impacted area within the Lin Ma Hang section. Upon discovery of any artifact or archaeological feature, the AMO was notified immediately for site visit.

Daily field records were prepared which included the following information:

- A schedule detailing the field works completed during each day;
- A report on the resources and equipment deployed on site;
- A report on artifacts and archaeological features discovered and the method of treatment and conservation; and
- Weather conditions.

The archaeological team recorded the field archives during the course of the field works. The field archives are handled with reference to the *Guidelines for Handling of Archaeological Finds and Archives* (as at 28 November 2011).

The levels of the excavated pits were surveyed by a team of land surveyor provided by the Contractor. The survey record is presented in *Annex F*.

Task 1c: Relics and Archives Processing and Recording

All unearthed archaeological remains were collected, recorded, dated and sorted, and representative archaeological remains were photographed. All photographs are in colour with the date, time, crew identification contained and a minimum of 4 Mega pixels in resolution in JPEG format. The relics and field records were processed and analyzed in accordance with AMO's *Guidelines for Handling of Archaeological Finds and Archives* (as at 28 November 2011).

According to *Section 10 of AM Ordinance*, the archaeological relics ownership vest in the Hong Kong SAR Government. Upon completion of the finalised survey report, the finds, artifacts and archives arising from the survey will be

handed over to AMO in accordance with the conditions of the licence under the *AM Ordinance*.

3.3.2 *Task 2 – Reporting*

The findings of the field survey, impact assessment and mitigation measures are presented in this *Draft Archaeological Survey Report* with reference to the *Guidelines for Archaeological Reports* (as at April 2011).

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4.1 INTRODUCTION

A total area of 35,236m² was field scanned; 14 auger holes and 8 test pits were conducted. The findings are presented below.

4.2 FIELD SCAN

Only modern plastic waste, bricks, glass shards and porcelain shard were observed from field scan and are considered to have no archeological interest. Thus, no remains of archaeological interest identified from field scan.

The area presently consists of abandoned and overgrown agricultural land (see *Figure 4.1a*). *Figure 4.1b* presents the 1969 Map overlaid onto the current survey map. It proves that the proposed works area has been used as agricultural purpose over decades and there are only minor changes at the river bank.



Figure 4.1a Photograph showing Current Condition of Lin Ma Hang Section

4.3 AUGERING AND TEST PITTING

A total of 14 auger hole and 8 test pits were conducted. No remains of archaeological interest identified from auger holes. Although 18 pieces of general finds were identified from test pits, they are not significant archaeological remains. The summary of findings is presented below and detailed auger holes and test pits records are presented in *Annexes C* and *D*, respectively.

4.3.1 General Stratigraphy

According to the survey data of the auger holes and test pits obtained, the existing ground level of the Works Area is gradually increase from west to east and from north to south.

The Works Area is next to an existing river channel, stratigraphy information from auger holes and test pits indicated that in general there is a top soil layer used as farmland and beneath the top soil layer lies a pad soil layer where modern rubbishes are observed. Below the pad soil layer is one or more

greyish sandy layers with prolong waterlogged condition.

These layers tend to be thinner at the east of Works Area and thicker and deeper at the west of the Works Area. Below the greyish sandy layers is a layer with cobbles regarded as sterile layer.

TP1 and TP2 show that the stratigraphy of the alluvium area at the western part of the Works Area has relatively pad thicker layer below the top soil layer and a higher underground waterlevel of about 0.9 to 1.2m bgl, which is approximately +29 mPD.

The stratigraphy of the terraced alluvium area at the middle part of the Works Area is illustrated by the results of TP3 to TP5. The pad layer below the top soil layer in this area is thick. And there are relatively more greyish sandy layers between the pad layer and the sterile layer located 0.5 to 1.5m bgl.

TP6 to TP8 reveal the stratigraphy of the alluvium area at the eastern part of the Works Area. Although having the same geology setting with the western part of the Works Area, the test pits show a relatively thinner layers and a shallower deposition. The relatively straight river channel along the area where TP6 to TP8 are located and the hill slope nearby may lead to a rather higher velocity of river flow and therefore sediment deposits are rather difficult to stay, which explains the reason why TP6 to 8 have relatively thinner layers and shallower deposition. Sterile layer is only less than 0.5m bgl. Unlike the TP6 – 8 area, the area where TP1 and TP2 located is the flood plain of the river where velocity of the river is relatively slow which usually results in thicker alluvium deposition and higher watertable.

While the Works Area is located adjacent to a meandering river, sediment deposition is found obvious. The greyish sandy layers found in the test-pitting between the pad layer and sterile layer are formed due to sediments transported to the Works Area. While the terraced alluvium part of the Works Area is situated on the inner bank of the river, it explains why a relatively more number of layers of sediments transports are found.

4.3.2 *Unearthed Archaeological Remains/Artefacts*

Only modern plastic waste, bricks, glass shards and porcelain shard were observed from field scan. They are considered to have no archaeological interest. No remains of archaeological interest identified from augering.

A total of 18 pieces of general finds were identified and they are from TP2, TP3, TP4, TP5 and TP8 including six (6) pottery shards, six (6) porcelain shards and six (6) tile shards. Test pitting observed that modern materials such as plastics and modern ceramic wares are occasionally located at pad layers (Layer 2 of TP1 to TP3, TP5 and TP8). Only TP2 to TP5 contain archaeological remains below Layer 2. No archaeological remain was unearthed in TP1, TP6 and TP7. The descriptions of the finds are detailed in *Table 4.1* below and the list of general finds and their photographs are shown in *Annex E*.

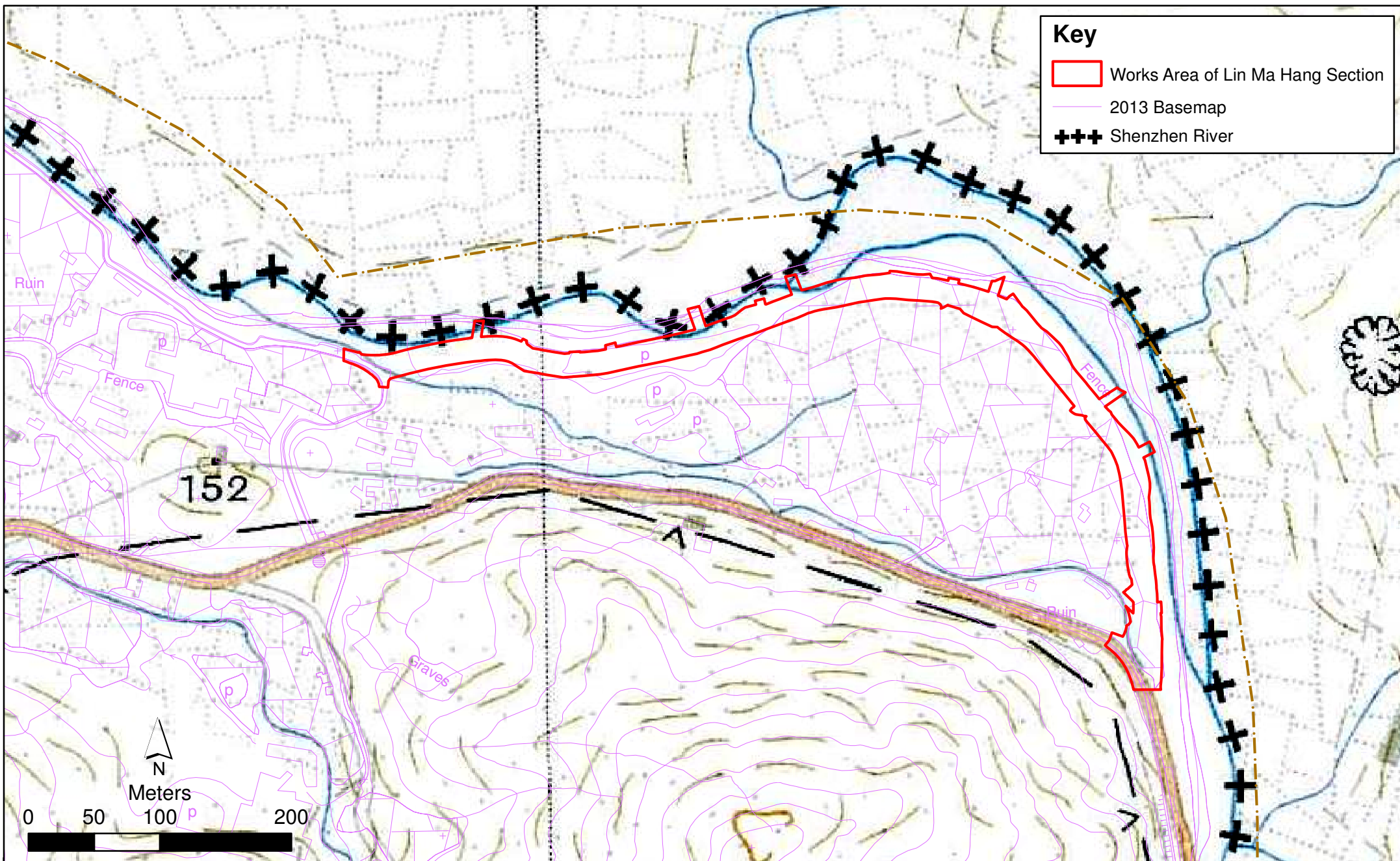


Figure 4.1b

Changes of River Bank Profile and Land Use in Work Areas
(Overlaying 1969 Historical Map; Source: Crown Lands and Survey Office, 1969)

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Date: 25/2/2013

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Table 4.1 **Description of the Unearthed Archaeological Remains**

Test Pit	Unearthed Archaeological Remains
TP2	<ul style="list-style-type: none"> One early 20th century to modern blue and white porcelain bowl shard was found in Layer 3. The glazing is greyish white and the blue and white pattern is bluish grey in color. The body is greyish white in color and the quality of the body is low. The characteristics of the base indicate the shard was the product of Tai Po Wun Yiu Kiln. It is a commonly seen kitchen ware with low quality and the archaeological significance is very low. Two early 20th century to modern red tile fragments were found in Layer 3. There are some traces of textile impression the one surfaces. The shards are seriously polished. The archaeological significance is very low. Three early 20th century to modern grey pottery shards are unearthed from Layer 3. It is a modern ordinary ware still commonly seen today. The archaeological significance is very low.
TP3	<ul style="list-style-type: none"> In Layers 3 and 4, one celadon shard and one greenish white (Qingbai) porcelain shard dated to Song-Yuan Dynasties were revealed, respectively. The celadon shard unearthed is a flaring mouth bowl shard with a linear line decoration along the rim exterior and is decorated with chrysanthemum petals on the exterior of the bowl. The greenish white porcelain shard is a flaring mouth bowl shard with no decoration. The glazing of both shards is found not well-applied and lacks of gloss. The body of both shards are greyish white in colour and contain impurities of bubbles and sand. Considering the glazing material and the body, it is believed that they are produced from kiln in Fujian province during the Song to Yuan Dynasties and in particular the celadon bowl is an imitation copy of <i>Longquan Kiln</i> (龍泉窯) products. However, the shards are too small to be identified to any particular kiln. The quality of these two shard pieces is not high. Besides, as Layer 5 contains modern artefacts, they are redeposit and isolated shard pieces and a lot of similar artefacts are found in other archaeological sites in Hong Kong. Therefore the archaeological significance of these two shard pieces is very low. Two tile fragments were unearthed in Layer 5. They are low quality local products dated to early 20th century to modern period and are still commonly seen in the New Territories. The archaeological significance is very low. Two grey pottery shards were unearthed in Layer 5 and one of them is with brown glaze. They are commonly seen pottery ware used in local villages dated to early 20th century to modern period. The archaeological significance is very low.
TP4	<ul style="list-style-type: none"> One milky red tile fragment dated to early 20th century to modern period was unearthed from Layer 3. The quality of the tile is low and is rather commonly seen. The archaeological significance is very low.
TP5	<ul style="list-style-type: none"> One blue and white porcelain bowl shard dated to early 20th century to modern period was unearthed from Layer 2. The glazing is greyish white and the blue and white pattern is bluish grey in color. The body is greyish white in color and the quality of the body is low. The characteristics of the base indicate the shard was product of Tai Po Wun Yiu Kiln. It is a commonly seen kitchenware with low quality and the archaeological significance is very low. One grey pottery shard with its interior brown glazed dated to early 20th century and modern period was unearthed in Layer 5. It is commonly seen in South China. Only a small shard was found. The archaeological significance is very low. One grey tile shard dated to early 20th century and modern period is unearthed in Layer 5. The quality is low and it is still commonly seen today. The archaeological significance is very low.
TP8	<ul style="list-style-type: none"> Two <i>wuchai</i> (five colors) porcelain shards with over-glazing decorations of flora and fruit patterns were found in Layer 2. It is a modern product and can still be found in market today. The archaeological significance is very low.

Although two small shards dated to Song-Yuan Dynasty were found in Layers 3 and 4 of TP3, since Layer 5 of TP3 contains remains dated to early 20th

century to modern period, Layers 3 and 4 of TP3 can be dated to not earlier than the early 20th century. The two shards dated to Song-Yuan Dynasty were redeposit and isolated shard pieces. Besides, a lot of similar artefacts are found in other archaeological sites in Hong Kong. Therefore the archaeological significance of these two shard pieces is very low.

All the other finds are dated to early 20th century to the modern period. A few pieces of porcelain shard are identified as products of Tai Po Wun Yiu Kiln. All the finds, except two ceramic shards of the Song-Yuan Dynasty found in Layers 3 and 4 of TP3, are commonly found in local villages. Their archaeological significance is very low.

As all the finds show a moderate degree of rounding, it suggests that all of them were transported and moved to the site. It matches with the discussion of the general stratigraphy which suggests that these layers are formed due to sediments transports. Therefore, they are not in-situ archaeological deposits and of very low archaeological significance.

No special find was identified.

According to the approved EIA Report for the *Construction of a Secondary Boundary Fence and New Sections of Primary Boundary Fence and Patrol Road*, the Lin Ma Hang section is considered to have archaeological potential. Therefore, under the EM&A manual of the EIA and *Section 2.5* of the *Environmental Permit No. FEP-05/347/2009/A*, an archaeological survey is required after land resumption and prior to commencement of construction works at the Lin Ma Hang section and an archaeological survey report shall be submitted to the Director of Environmental Protection at least one month before the commencement of construction.

An archaeological proposal prepared in 2008 was found to be outdated by AMO. Therefore, an updated archaeological survey proposal was prepared and agreed by AMO. A *Licence to Excavate and Search for Antiquities* under the *Antiquities and Monuments Ordinance* was then granted to Dr Yao Chongxin by the Authority in April 2013. The archaeological survey was conducted from 20 April to 3 May 2013 and field scanning, fourteen auger holes and eight test pits were conducted.

Only modern plastic waste, bricks, glass shards and porcelain shard observed from field scan. They are without archaeological interest. No remains of archaeological interest were identified from auger holes. All the test pits were excavated to sterile layer or reached underground water level and no high significance remains were identified. No archaeological features were unearthed from test pits. Although a total of 18 pieces of general finds (including six pieces of pottery shards, six pieces of tile fragments and six pieces of porcelain shards) were identified from test pits TP2, TP3, TP4, TP5 and TP8, the quantity is small and the finds are rounded and polished by water force. According to limited information provided from their typology, two pieces of porcelain shards may date to Song to Yuan dynasties identified from Layers 3 and 4 respectively from TP3 but later period finds were also unearthed in Layer 5 in the same test pit. Therefore, the two porcelain shards are regarded as secondary deposits.

Others remaining finds are dated to modern to early 20th century. According to the condition of the finds being rounded and polished and the stratigraphy information from auger holes and test pits, all the finds are not in-situ deposits but were transported to the spot of discovery by water and considered as secondary deposits.

In summary, as the Works Area is next to river channel, the strata from fieldwork findings clearly showed that this area was formed due to sediments transported to the area and therefore only secondary deposits were found. The potential to identify early period in-situ archaeological deposits in this Works Area is very low. No significant archaeological remains will be impacted by the Project. Therefore, no archaeological mitigation measure or further archaeological action is considered necessary.

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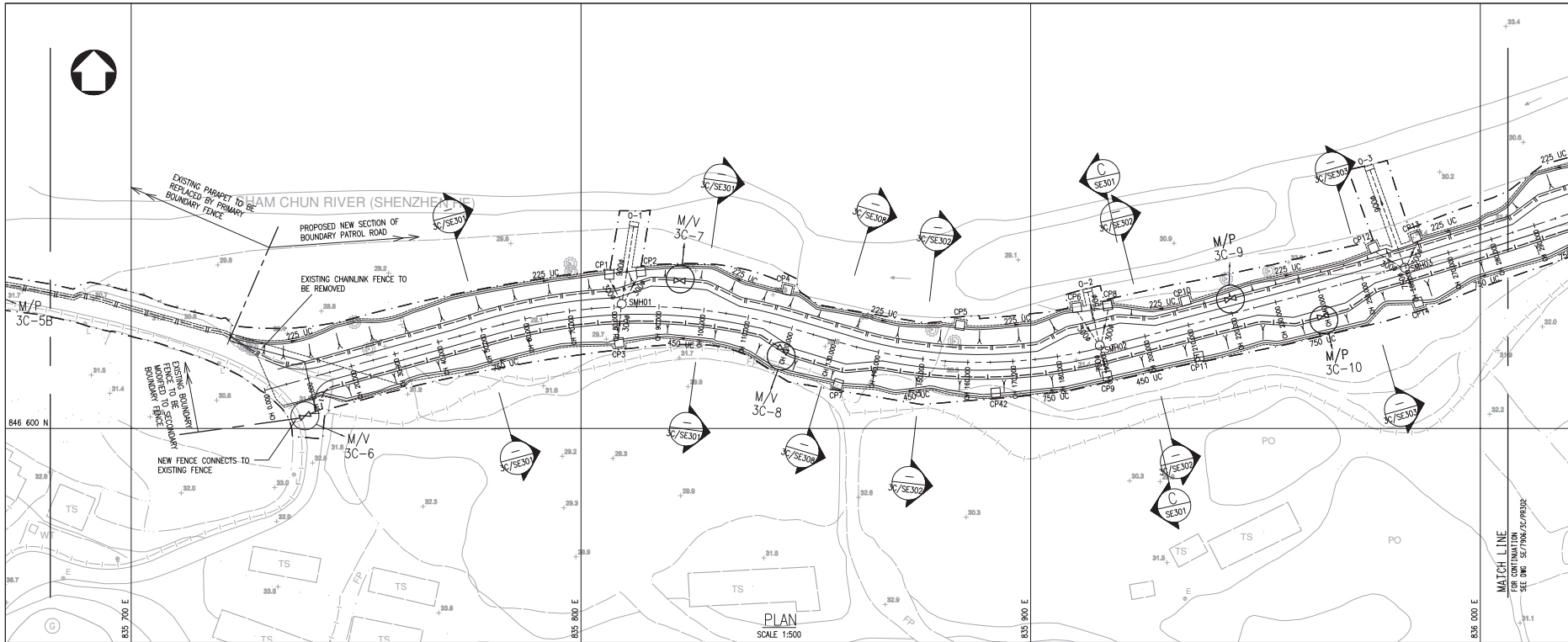
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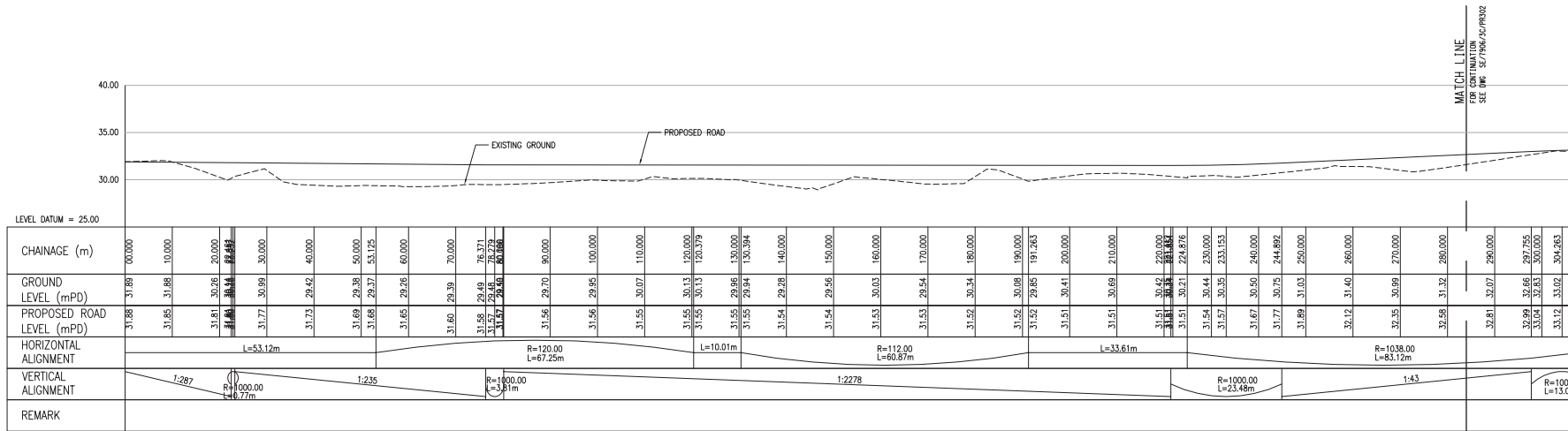
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Annex A







Construction Drawings



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Contract No.	SS Y307
File No.	ASD/201/7906
Project No.	12GB
Consultant Agreement No.	9SN005
Contract	CONSTRUCTION OF A SECONDARY BOUNDARY FENCE AND NEW SECTIONS OF PRIMARY BOUNDARY FENCE AND BOUNDARY PATROL ROAD (PHASE 2)

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FOR SECTION 3C (SHEET 1 OF 3)

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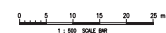
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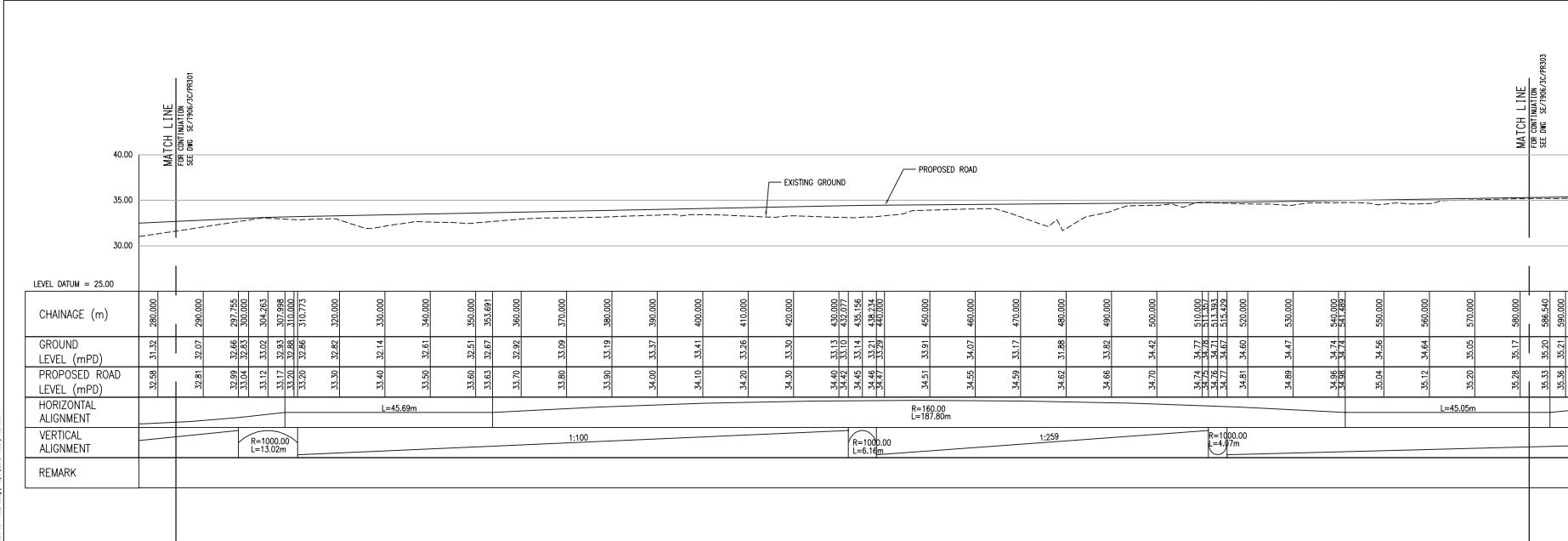
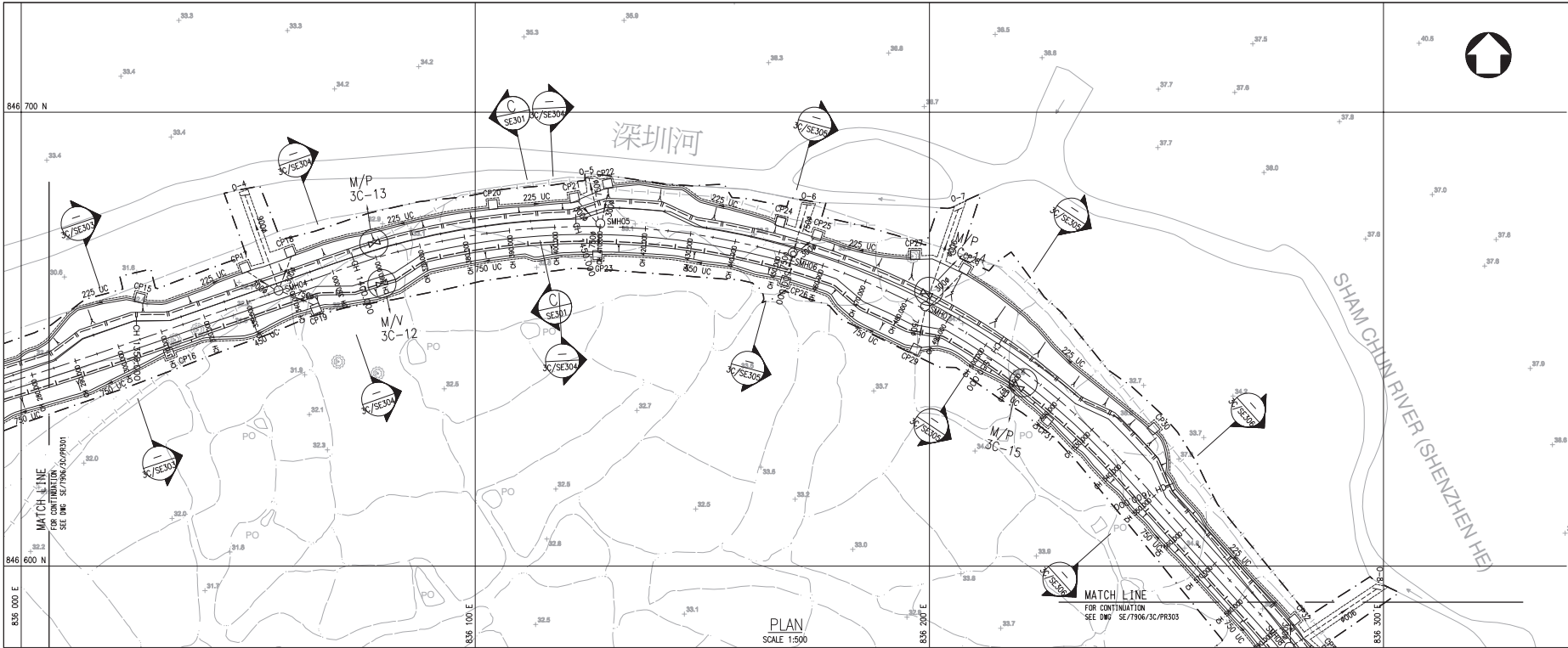
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09-08-11

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CONSTRUCTION OF A SECONDARY BOUNDARY FENCE AND NEW SECTIONS OF PRIMARY BOUNDARY FENCE AND BOUNDARY PATROL ROAD (PHASE 2)

Drawing Title

ROAD WORKS - LAYOUT AND LONGITUDINAL PROFILE FOR SECTION 3C (SHEET 2 OF 3)

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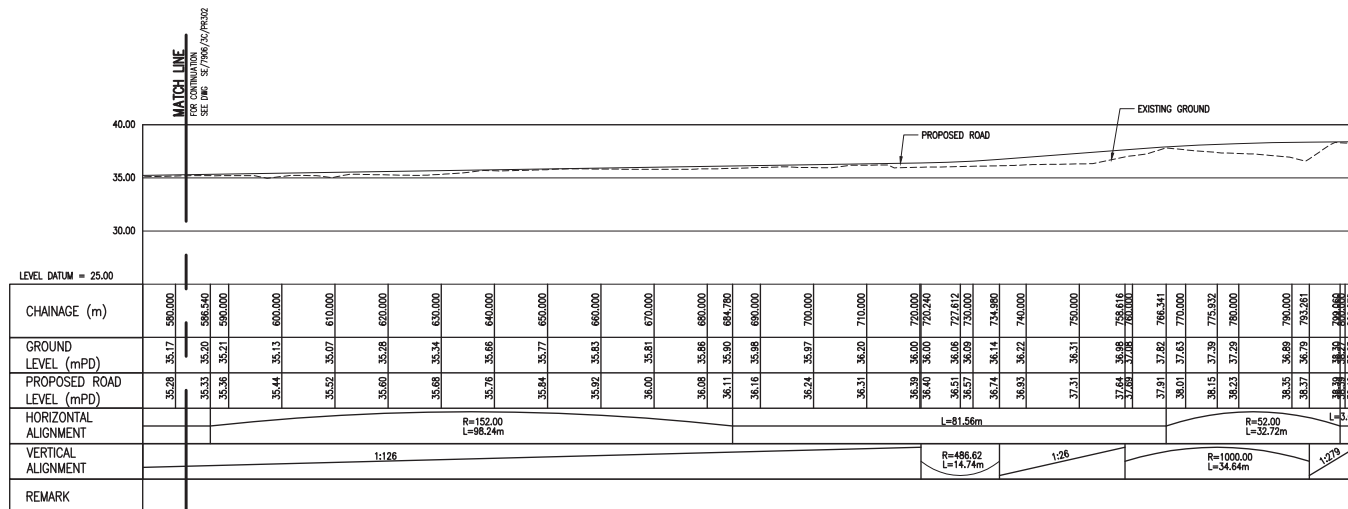
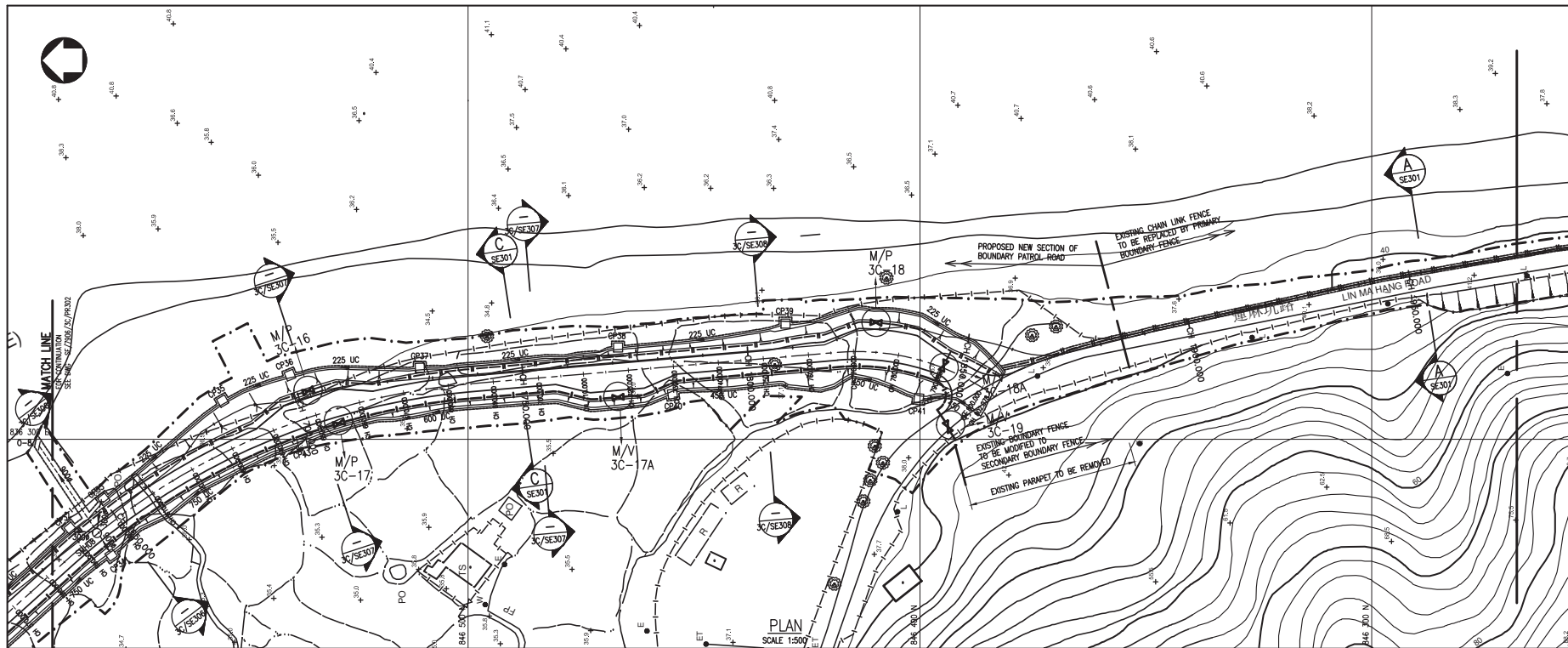
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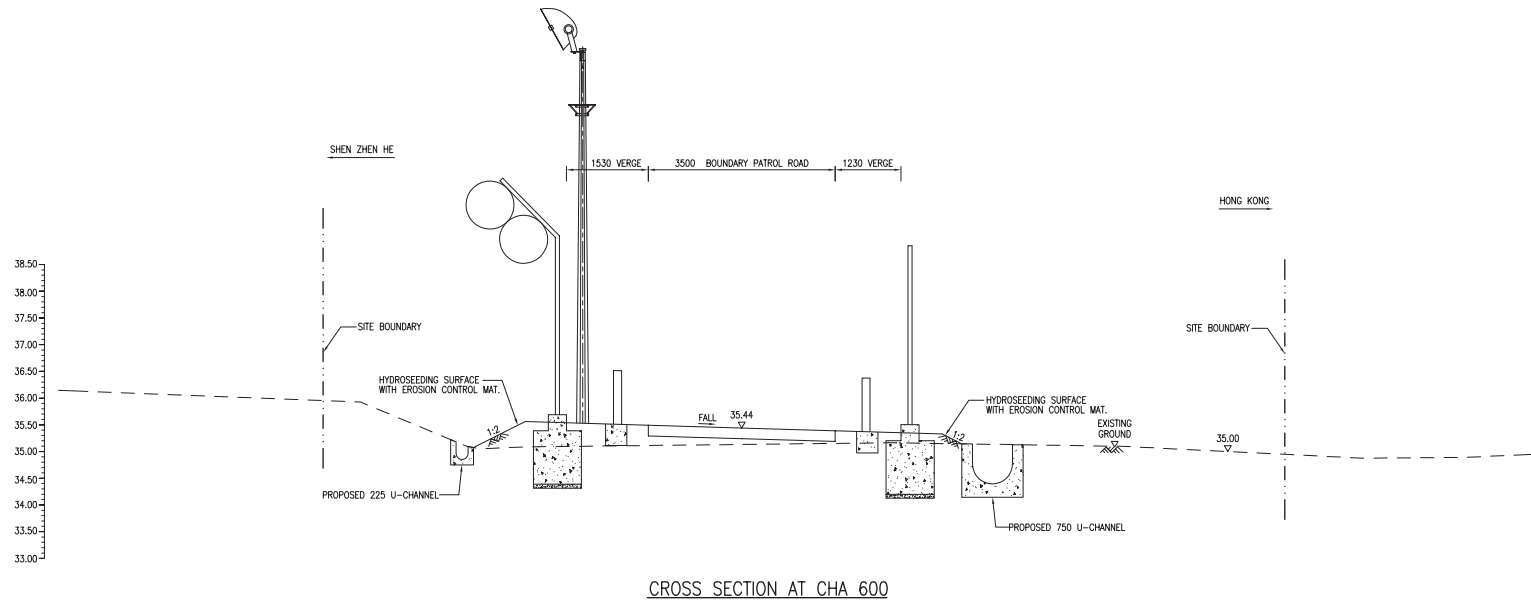
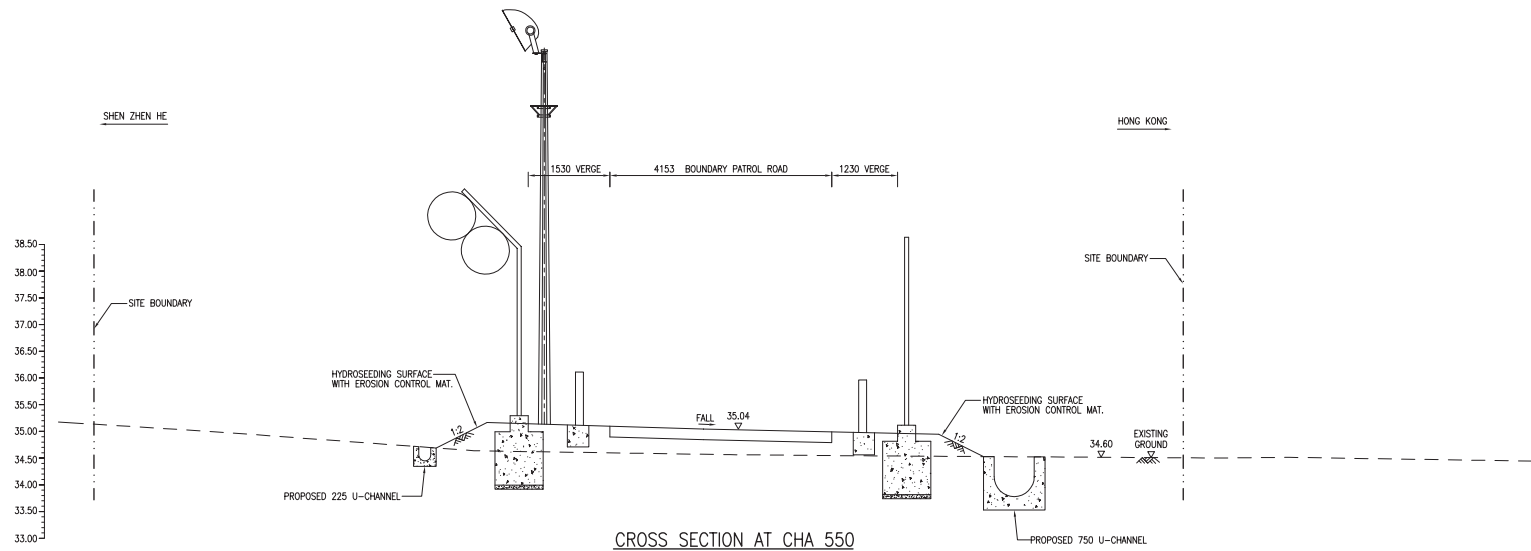
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CONSTRUCTION OF A SECONDARY BOUNDARY FENCE AND NEW SECTIONS OF PRIMARY BOUNDARY FENCE AND BOUNDARY PATROL ROAD (PHASE 2)

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ROAD WORKS - LAYOUT AND LONGITUDINAL PROFILE FOR SECTION 3C (SHEET 3 OF 3)

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(SHEET 6 OF 8)

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Annex B

Fieldwork Locations of Previous Archaeological Surveys

Key

- Auger Holes conducted in Shenzhen River for Shenzhen River Regulation IV EIA Study in 2010
- Test Pits conducted in Shenzhen River for Shenzhen River Regulation IV EIA Study in 2010
- Auger Holes conducted at Wang Lek in 2006
- Test Pits conducted at Wang Lek in 2006
- Auger Holes conducted for Liantang/Heung Yuen Wai BCP Project in 2010
- Test Pits conducted for Liantang/Heung Yuen Wai BCP Project in 2010
- ▲ Indicative Fieldwork Areas for the Territory-wide Survey in 1997-1998

Geology

- Marine sand
- Debris flow deposits
- Terraced alluvium
- Estuarine and Intertidal deposits within QHH
- Debris flow deposits
- Beach deposits
- Clay/Silt
- Alluvium
- Hang Hau Formation

- Mai Po Formation
- Tai Shek Mo Formation, undivided
- Shing Mun Formation
- Tai Mo Shan Formation, undivided
- Pat Sin Leng Formation
- Biotite
- Tai Shek Mo
- gr
- Alluvium/Colluvium
- Quartzphyric Rhyolite
- Sandstone
- Silt
- Siltstone
- Sandy Silt

Works Area of Lin Ma Hang Section

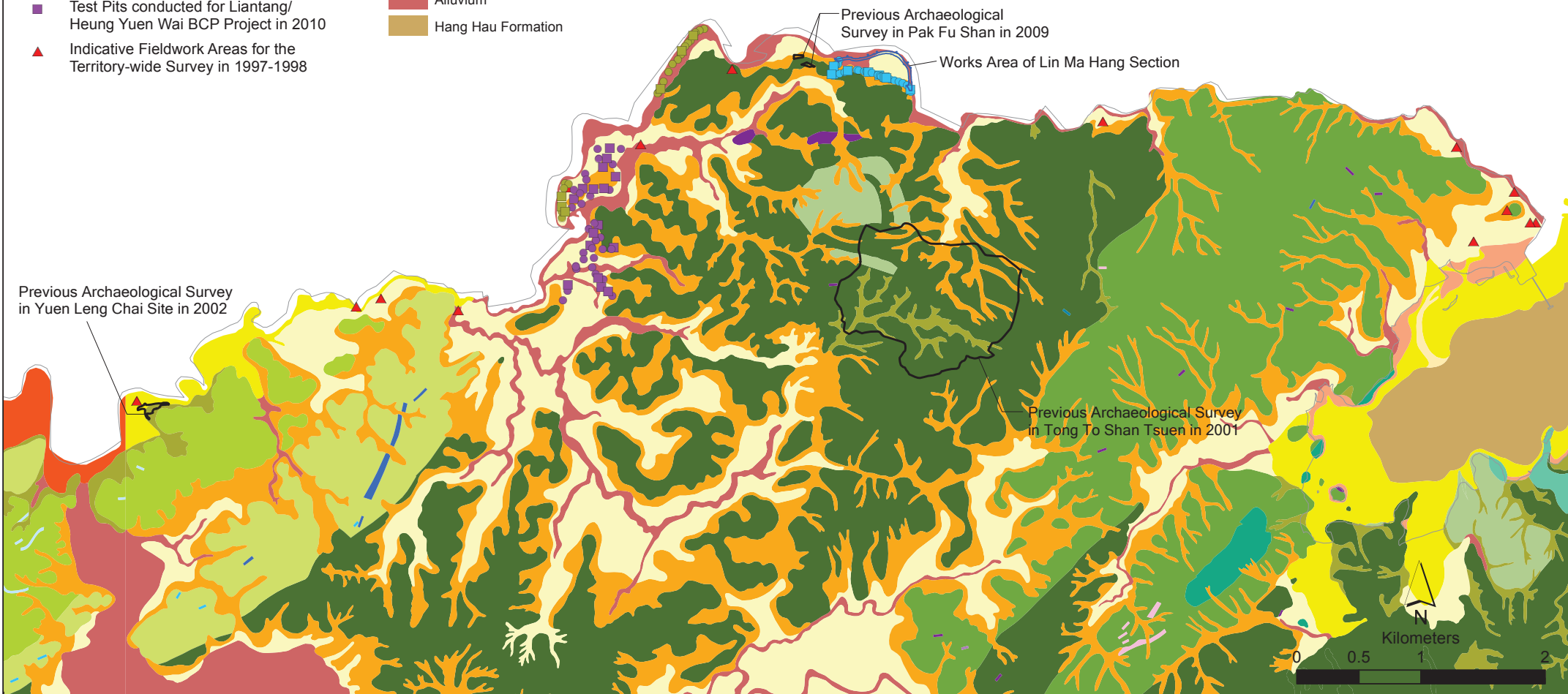


Figure B

Fieldwork Locations of Previous Archaeological Surveys

Annex C

Auger Holes Records

Detailed Record of Conducted Auger Holes

Auger Hole No.	Strata	Depth (m) (a)	Thickness (m)	Description
AH1	1	0	20	Light brownish sandy layer
	2	20	60	Light yellowish sandy layer
	3	80	25	Greyish silty sandy layer
		105		Hit on rocks
AH2	1	0	10	Light brownish sandy layer, modern agricultural layer
	2	10	100	Yellowish sandy layer with loose and soft sand with small grain and pure in composition
	3	110	10	Light greyish sandy layer with loose and soft sand with small grain and pure in composition
		120		Hit on rocks
AH3	1	0	30	Light yellowish sandy layer, modern agricultural layer
	2	30	30	Silty yellowish sandy layer with small grains, pure in composition
		60		Hit on rocks
AH4	1	0	25	Light yellowish sandy layer, modern agricultural layer
	2	25	25	Silty yellowish sandy layer
	3	50	10	Greyish silt layer
		60		Hit on rocks
AH5	1	0	10	Light brownish sandy layer, modern agricultural layer
	2	10	20	Loose and soft light yellowish sandy layer
		30		Hit on rocks
AH6	1	0	10	Light brownish sandy layer, modern agricultural layer
	2	10	30	Loose Light yellowish sandy layer, pure in composition
	3	40	15	Silty yellowish sandy layer
		55		Hit on rocks
AH7	1	0	10	Light brownish sandy layer, modern agricultural layer
	2	10	50	Light yellowish sandy layer with small grains, pure in composition
	3	60	40	Loose and soft light greyish sandy layer with small grains
		100		Hit on rocks
AH8	1	0	30	Light brownish sandy layer, modern agricultural layer
	2	30	20	Light yellowish sandy layer
		50		Hit on rocks

Auger Hole No.	Strata	Depth (m) (a)	Thickness (m)	Description
AH9	1	0	20	Light brownish sandy layer, modern agricultural layer
	2	20	25	Greyish sandy layer, pure in composition
	3	45	30	Silty yellowish sandy layer, not pure in composition
		75		Hit on rocks
AH10	1	0	25	Light brownish sandy layer, modern agricultural layer
	2	25	85	Silty light yellowish sandy layer, pure in composition
	3	110	15	Loose a soft light greyish sandy layer, is siltation layer of river
		125		Hit on roots of tree
AH11	1	0	10	Light brownish sandy layer, modern agricultural layer
	2	10	55	Soft light greyish sandy layer with small grains
	3	65	15	Silty yellowish sandy layer
		80		Hit on rocks
AH12	1	0	20	Dark brownish sandy layer, modern agricultural layer
	2	20	10	Light greyish sandy layer with small grains, pure in composition
	3	30	10	Dark yellowish sandy layer
	4	40	10	Light yellowish sandy layer
		50		Hit on rocks
AH13	1	0	20	Dark brownish sandy layer, modern agricultural layer
	2	20	10	Light greyish sandy layer with small grains
	3	30	10	Silty yellowish layer
	4	40	20	Light greyish sandy layer
	5	60	20	Silty dark yellowish sandy layer
		80		Hit on rocks
AH14	1	0	25	Dark brownish sandy layer, modern agricultural layer
		25		Hit on rocks
Note: (a) Depth measure from the ground level to the surface of the stratum.				

Annex D

Test Pits Records

Detailed Record of Conducted Test Pits

Site Code	NLMH2013		Test Pit No.	TP1	
Test Pit Coordinate (Y,X) (SE corner)	846626.87	835788.89	Test Pit Measurement	1m x 1.5m	
Digging Method	Hand Digging		Ground Level (SE Corner)	+29.61 mPD	
Stratigraphy					
Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (m)	Thickness (m)
1	Surface layer. Modern agricultural soil layer composed of loose light brownish sand with little roots of plantation and humus.	None	Modern	0	0.06-0.12
2	Modern pad soil layer under modern agricultural soil layer composed of very loose and soft light yellowish sand with small grain.	Modern garbage including plastics and bags	Modern	0.06-0.12	0.6-0.7
3	Grey silty layer. Watertable is located at 1.1m below ground level.	None		0.78-0.96	>0.32

Drawing

TP1

N

S

1

2

3

020cm

Watertable

East Section

Photographic Record



View of South Section



View of East Section

Site Code	NLMH2013		Test Pit No.	TP2	
Test Pit Coordinate (Y, X) (SE corner)	846626.43	835841.14	Test Pit Measurement	1m x 1.5m	
Digging Method	Hand Digging		Ground Level (SE Corner)	+30.82 mPD	
Stratigraphy					
Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (m)	Thickness (m)
1	Surface layer. Modern agricultural soil layer composed of loose and soft dark brownish sandy soil, with little roots of plantation and humus.	None	Modern	0	0.06-0.12
2	Modern pad soil layer under modern agricultural soil layer composed of loose and soft yellowish sand.	Various modern garbage including plastics, glass bottle and lighter	Modern	0.06-0.12	0.35-0.6
3	Loose light greyish sand with cobblestones in various sizes. Watertable is located at 1.2m below ground level.	Two tile fragments; three pottery shards and one porcelain shard.	Early 20 th century to Modern	0.52-0.71	>0.47
Drawing					
<div>TP2</div> <div><div><div>W</div><div>E</div></div><div><div><div>1</div><div>2</div><div>3</div></div><div><div>0</div><div>20cm</div></div></div><div><div>←</div><div>Watertable</div></div></div> <div>North Section</div>					

Photographic Record



TP2 from North to South



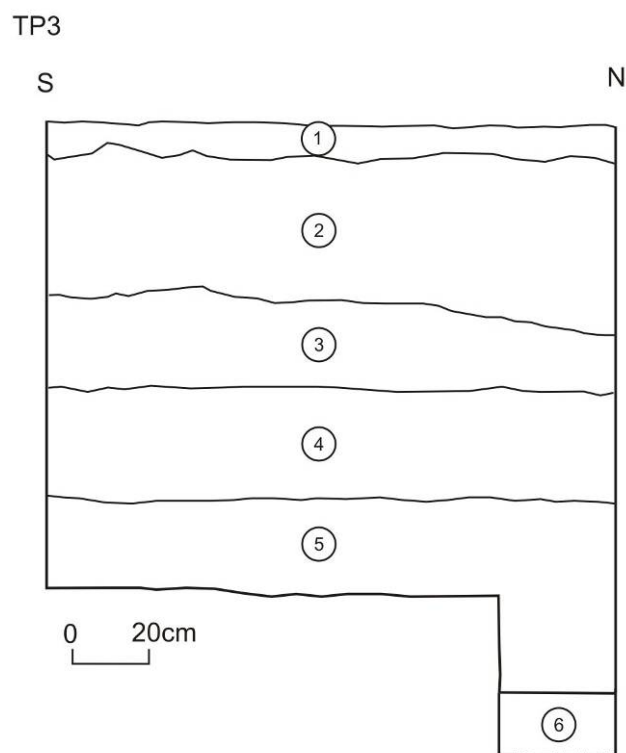
View of North Section



View of East Section

Site Code	NLMH2013		Test Pit No.	TP3	
Test Pit Coordinate (Y, X) (SE corner)	846661.43	836069.27	Test Pit Measurement	1m x 1.5m	
Digging Method	Hand Digging		Ground Level (SE Corner)	+32.81 mPD	
Stratigraphy					
Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (m)	Thickness (m)
1	Surface layer. Modern agricultural soil composed of loose and soft dark brownish sandy soil, with little roots of plantation and humus.	None	Modern	0	0.06-0.1
2	Modern pad soil under modern agricultural soil layer composed of loose and soft yellowish sandy soil layer, with little roots of plantation.	Modern garbage including plastics	Modern	0.06-0.1	0.3-0.4
3	Loose and soft light greyish sand with small grain.	A piece of celadon shard	Early 20 th century to modern	0.43-0.55	0.1-0.2
4	Loose and soft dark yellowish sand with small grain.	A piece of greenish-white (Qingbai) ware shard	Early 20 th century to modern	0.7-0.72	0.1-0.25
5	Loose and soft light greyish sand, with lots of coarse grains and various sizes of cobblestones.	Two tile fragments and two pieces of grey pottery shard	Early 20 th century to modern	0.92-1.01	0.29-0.38
6	Sterile layer composed of loose dark yellowish sandy soil layer with coarse grains and various sizes of cobblestones. Cobblestones are partly stained with rust-like stains.	None		1.3	

Drawing



West Section

Photographic Record



TP3 South to North



View of South Section



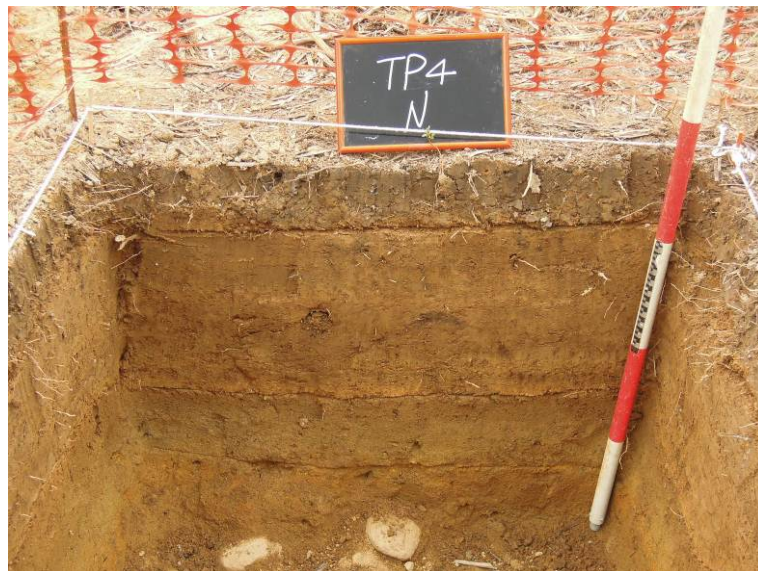
View of West Section

Site Code	NLMH2013		Test Pit No.	TP4	
Test Pit Coordinate (Y, X) (SE corner)	846673.14	836114.02	Test Pit Measurement	1m x 1.5m	
Digging Method	Hand Digging		Ground Level (SE Corner)	+33.5 mPD	
Stratigraphy					
Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (m)	Thickness (m)
1	Surface layer. Modern agricultural soil composed of loose and soft dark brownish sandy soil, with little roots of plantation and humus.	None	Modern	0	0.06-0.11
2	Hard and silty dark yellowish sand, with little roots of plantation.	None	Modern	0.06-0.11	0.15-0.3
3	Loose and soft greyish sand with small grains	A piece of milky red tile fragment	Early 20 th century to modern	0.12-0.27	0.1-0.2
4	Sterile layer composed of loose dark yellowish sandy soil layer with coarse grains and various sizes of cobblestones. Cobblestones are partly stained with rust-like stains.	None		0.55-0.6	>0.2
Drawing					
<div>TP4</div> <div><div>W</div><div>E</div><div></div><div>020cm</div><div>North Section</div></div>					

Photographic Record



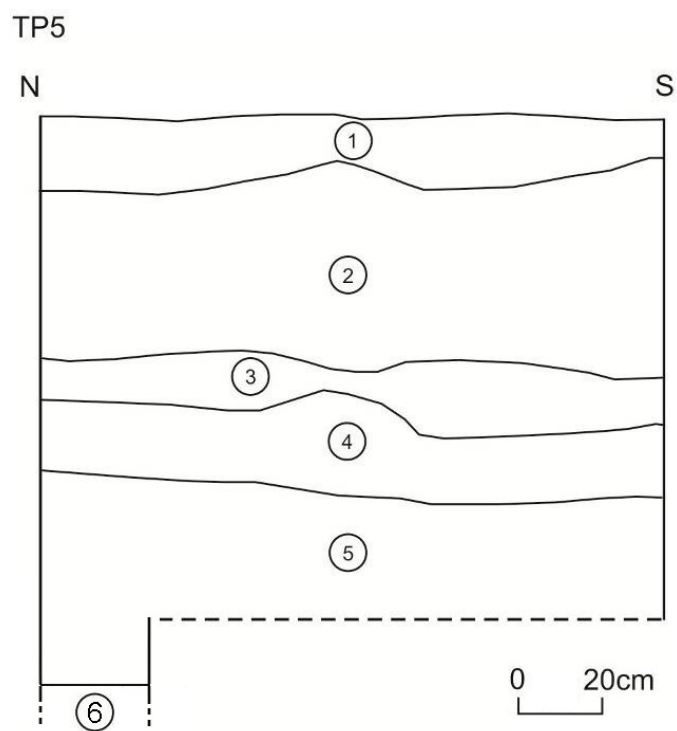
TP4



View of North Section

Site Code	NLMH2013		Test Pit No.	TP5	
Test Pit Coordinate (Y, X) (SE corner)	846647.50	836209.17	Test Pit Measurement	1m x 1.5m	
Digging Method	Hand Digging		Ground Level (SE Corner)	+34.66 mPD	
Stratigraphy					
Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (m)	Thickness (m)
1	Surface layer. Modern agricultural soil composed of loose and soft dark brownish sandy soil, with little roots of plantation and humus.	None	Modern	0	0.09-0.14
2	Very loose and soft yellowish sand with small grains.	A piece of blue and white porcelain shard and various modern garbage including bags, plastic shampoo bottle, insulation plastics	Early 20 th century to modern	0.09-0.14	0.4-0.5
3	Loose and silty dark yellowish sand	None	Early 20 th century to modern	0.5-0.64	0.05-0.1
4	Loose and soft greyish sand with small grain, pure in composition	None	Early 20 th century to modern	0.6-0.8	0.05-0.2
5	Loose light greyish sand with small amount of rotted rock pieces.	A piece of tile fragment and one grey pottery shard	Early 20 th century to Modern	0.81-0.92	0.22-0.39
6	Excavation stopped at 1.2 m below ground level due to safety consideration. This sterile layer composed of yellowish sand, pure in composition was revealed by a small supplementary trench near north wall.	None.		1.3	

Drawing



East Section

Photographic Record

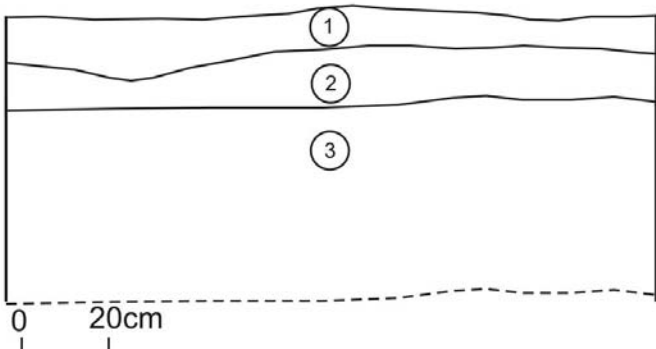


View of South Section



View of East Section

Note: Layer 6 is revealed by a small supplementary trench near the north wall.

Site Code	NLMH2013		Test Pit No.	TP6	
Test Pit Coordinate (Y, X) (SE corner)	846578.15	836281.67	Test Pit Measurement	1m x 1.5m	
Digging Method	Hand Digging		Ground Level (SE Corner)	+35.16 mPD	
Stratigraphy					
Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (m)	Thickness (m)
1	Surface layer. Modern agricultural soil composed of loose and soft dark brownish sandy soil, with little roots of plantation and humus.	None	Modern	0	0.06-0.14
2	Loose and soft greyish sand with small grain, pure in composition.	None		0.06-0.14	0.06-0.23
3	Sterile layer composed of silty yellowish sandy soil layer and with various sizes of cobblestones. Cobblestones are partly stained with rust-like stains.	None		0.18-0.31	>0.46
Drawing					
<div><div>TP6</div><div><div>S</div><div>N</div></div><div></div><div>020cm</div><div>West Section</div></div>					

Photographic Record



View of South Section



View of West Section

Site Code	NLMH2013		Test Pit No.	TP7	
Test Pit Coordinate (Y, X) (SE corner)	846484.80	836313.69	Test Pit Measurement	1m x 1.5m	
Digging Method	Hand Digging		Ground Level (SE corner)	+35.84 mPD	
Stratigraphy					
Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (m)	Thickness (m)
1	Surface layer. Modern agricultural soil composed of loose and soft yellowish brown sandy soil, with little roots of plantation and humus.	None	Modern	0	0.08-0.14
2	Loose and soft greyish sand with small grain, pure in composition	None		0.08-0.14	0.04-0.11
3	Sterile layer composed of hard and silty yellowish sandy soil layer and with various sizes of cobblestones. Cobblestones are partly stained with rust-like stains.	None		0.16-0.24	>0.34
Drawing					
<div>TP7</div> <div><div>W</div><div>E</div><div></div><div>020cm</div><div>North Section</div></div>					

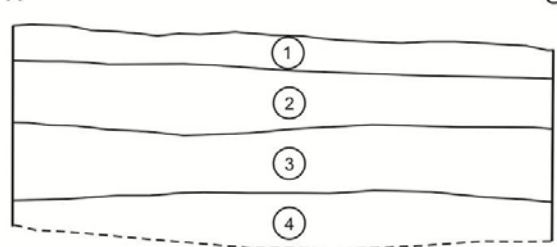
Photographic Record



View of North Section



View of East Section

Site Code	NLMH2013		Test Pit No.	TP8	
Test Pit Coordinate (Y, X) (SE corner)	846386.89	836321.36	Test Pit Measurement	1m x 1.5m	
Digging Method	Hand Digging		Ground Level (SE corner)	+36.87 mPD	
Stratigraphy					
Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (m)	Thickness (m)
1	Surface layer. Modern agricultural soil composed of loose and soft brownish sandy soil, with little roots of plantation and humus.	Modern garbage such as lighter	Modern	0	0.06-0.1
2	Modern pad soil under modern agricultural soil layer composed of loose and soft yellowish brown sandy soil layer, with little roots of plantation and cobblestone.	Two pieces of porcelain shard	Modern	0.06-0.1	0.15-0.2
3	Loose and soft greyish sand with small grain, pure in composition	None		0.19-0.28	0.16-0.22
4	Sterile layer composed of hard and silty yellowish sandy soil layer and with various sizes of cobblestones. Cobblestones are partly stained with rust-like stains.	None		0.4-0.49	>0.16
Drawing					
<div>TP8</div> <div><div>N</div><div>S</div><div></div><div>020cm</div><div>East Section</div></div>					

Photographic Record



TP8



View of East Section

Annex E

List and Photographic Record of General Finds

List of General Find

Location	Bag	Stratigraphy	Dating	Material		
				Village ware (Pottery)	Porcelain	Tile
TP2	01	L3	Early 20 th century to modern			1
TP2	02	L3	Early 20 th century to modern		1	
TP2	03	L3	Early 20 th century to modern			1
TP2	04	L3	Early 20 th century to modern	3		
TP3	05	L3	Song to Yuan Dynasties		1	
TP3	06	L4	Song to Yuan Dynasties		1	
TP3	07	L5	Early 20 th century to modern			1
TP3	08	L5	Early 20 th century to modern	1		
TP3	09	L5	Early 20 th century to modern			1
TP3	10	L5	Early 20 th century to modern	1		
TP4	11	L3	Early 20 th century to modern			1
TP5	12	L5	Early 20 th century to modern	1		
TP5	13	L2	Early 20 th century to modern		1	
TP5	14	L5	Early 20 th century to modern			1
TP8	15	L2	Early 20 th century to modern		2	
Total				6	6	6

General Finds of TP2



Early 20th century to modern blue and white porcelain (bowl) shard unearthed from Layer 3 of TP2
(Left: Interior; Right: Exterior)



Early 20th century to modern red tile fragments unearthed from Layer 3 of TP2.



Early 20th century to modern grey pottery shards unearthed from Layer 3 of TP2 (Exterior)



Early 20th century to modern grey pottery shards unearthed from Layer 3 of TP2 (Interior)

General Finds of TP3



Song to Yuan Dynasties celadon shard unearthed from Layer 3 of TP3 (Right); Song to Yuan Dynasty greenish-white (Qingbai 青白) ware shard (Left) unearthed from Layer 4 of TP3



Front view of tile fragment unearthed from Layer 5 of TP3 (Left); early 20th century to modern tile fragment (Right) unearthed from Layer 5 of TP3



Exterior of Early 20th century to modern grey pottery shard (left) and grey pottery shard with brown glaze (Right) unearthed from Layer 5 of TP3



Interior of Early 20th century to modern grey pottery shard with brown glaze (Left) and grey pottery shard with brown glaze (Right) unearthed from Layer 5 of TP3

General Finds of TP4



Early 20th century to modern milky red tile fragment unearthed from Layer 3 of TP4

General Finds of TP5



Early 20th century to modern blue and white porcelain shard unearthed from Layer 2 of TP5



Early 20th century to modern grey pottery shard with brown glaze interior unearthed from Layer 5 of TP5



Early 20th century to modern grey tile shard unearthed from Layer 5 of TP5

General Finds of TP8





Modern village ware porcelain shards with colour painted flora and fruit patterns unearthed from Layer 2 of TP8

Annex F

Land Survey Record

Corner Ref	Y	X	mPD	Location
SW	846628.359	835788.694	29.605	TP1
NW	846628.481	835789.695	29.641	TP1
SE	846626.867	835788.892	29.598	TP1
NE	846627.009	835789.878	29.591	TP1
SW	846626.367	835840.200	30.144	TP2
SE	846626.432	835841.139	30.195	TP2
NE	846627.870	835841.032	31.108	TP2
NW	846627.787	835840.111	31.073	TP2
SW	846661.391	836068.248	32.819	TP3
NW	846662.905	836068.263	32.852	TP3
NE	846662.906	836069.258	32.836	TP3
SE	846661.431	836069.274	32.811	TP3
SW	846673.095	836113.053	33.444	TP4
NW	846674.535	836113.022	33.462	TP4
NE	846674.620	836113.914	33.500	TP4
SE	846673.140	836114.015	33.504	TP4
NW	846649.003	836208.183	34.615	TP5
SW	846647.497	836208.136	34.726	TP5
SE	846647.504	836209.168	34.730	TP5
NE	846648.984	836209.196	34.659	TP5
NE	846579.564	836281.606	35.139	TP6
SE	846578.151	836281.672	35.160	TP6
SW	846578.100	836280.738	35.112	TP6
NW	846579.501	836280.678	35.136	TP6
NW	846486.140	836312.491	35.865	TP7
NE	846486.262	836313.501	35.824	TP7
SE	846484.801	836313.686	35.843	TP7
SW	846484.671	836312.693	35.889	TP7
NW	846388.384	836320.414	36.876	TP8
NE	846388.359	836321.335	36.941	TP8
SE	846386.889	836321.359	36.867	TP8
SW	846386.906	836320.439	36.874	TP8



Note:
Test Pit 
Site Boundary 

China Internation Water & Electric Corp.	Drawing Title: Archaeological and geological projects BoreHold & TrialPits As-Built Locations Layout2				Rev No:	Project: Construction of a secondary boundary fence & new sections or primary boundary fence & boundary patrol road (phase 2)
	Scale 1:1000 (A4)	Cad File : NR07052013CAD Ref Data : CS07052013/RAW07052013	Date: 7-5-2013	Contract No.SS Y307		

