#### 7 IMPACT ON CULTURAL HERITAGE

#### 7.1 Introduction

As the Sai Kung area is known to have a number of archaeological sites, and one site was reported from the Ho Chung Valley in the vicinity of the proposed project works, a heritage impact assessment of the project area was undertaken in accordance with the requirements of the Study Brief and annexes 10 and 19 of the *TM on EIA Process*.

The objective of this assessment was defined as: "To assess the possibility of impact on cultural heritage sites by the proposed construction and to consider the need for further investigation and/or the need for on-site monitoring during the construction phase."

# 7.2 Methodology

First, a study of all available data was made to identify archaeological sites within the Impact Area. The materials searched included the following: Journal of the Hong Kong Archaeological Society vols. 1-14, Journal of the Hong Kong Branch of the Royal Asiatic Society vols. 1-21, the Report of the Archaeological Survey of Hong Kong submitted to Government in 1985, a database of archaeological sites in Hong Kong prepared by the Hong Kong Archaeological Society in 1992-5, an annotated bibliography of published material on Hong Kong archaeology prepared by W. Meacham in 1992, the Archaeological Map of Hong Kong published by Government Printer in 1972, an archaeological map of Hong Kong prepared by Prof. S.G. Davis ca. 1960, a map of 129 numbered sites compiled from work done in the 1930's, archives of the University Archaeological Team 1956-67, and various records and unpublished reports. The Antiquities and Monuments Office (AMO) was also consulted about possible sites in the Ho Chung valley.

Secondly, selected aerial photos and topographic maps were studied to identify any features or landforms that might require archaeological investigation. Finally, the area of the proposed overhead/underground power cable was inspected.

### 7.3 Baseline conditions

Records of previous archaeological investigation revealed only one possible site within or near the Impact Area -- in the Ho Chung Valley. This site and the possible disturbance to it by the proposed cable works are discussed further below.

## The Ho Chung Site

There is nothing in the notes made during preparation of the 1972 Archaeological Map of Hong Kong or in the files of the Hong Kong Archaeological Society to indicate what was found in that area to warrant a site being indicated. There is no site in the Ho Chung Valley on the 1930's map or the map compiled by Prof. Davis in ca. 1960. The archives of the University Archaeological Team reveal that its members searched the Ho Chung Valley for a day in Nov. 1957 but nothing was found.

The territory-wide survey commissioned by Government in 1982-85 found no basis for a site being assigned to that area: "The source of the data, on which inclusion of this site is based, could not be ascertained." Four survey visits to the valley were made by the consultants between 1982 and 1984. Their conclusion was as follows: "In spite of a careful examination of the entire Ho Chung valley, including the much terraced alluvial infill, and colluvium-covered slopes, no archaeological remains whatsoever were observed. Recent developments seem to preclude the survival of any *in situ* [undisturbed] archaeological deposits with potential for investigation."

The inclusion of this "site" on the 1972 map must have been the result of a verbal report and/or a chance find of artifacts, sometime between 1960 and 1972. The fact that nothing was found there during the pre-war period, or in 1957, or in 1982-84, would strongly suggest that no site of any significance is present, especially in view of the fact that the valley was heavily cultivated at that time and the slopes have seen considerable erosion. Furthermore, there are topographic considerations which make it unlikely that any in situ cultural deposits exist on the valley floor. Despite the above-cited consultants description of "alluvial infill," much of the valley floor shows evidence of cobble and small boulder deposits, indicating that there has been persistent strong water action down the valley. Stream meanders and flooding may well have obliterated any site that had survived from an earlier era.

There is always a possibility of cultural deposits forming in areas of seemingly unfavourable conditions, and surviving by burial under later sediments, but the possibility must be rated as low in this instance. Any site on the valley floor would have most likely been subject to erosion and re-deposition by stream action, and to disturbances due to terracing and cultivation. A site may have been present on a hillock such as that behind Shui Hau village, and/or on low slopes just above the valley floor, with erosion carrying some artifacts into the valley sediments.

Information provided recently by the AMO indicates that artifacts of prehistoric and early historical periods were found in a 1997 survey of the Ho Chung valley. The area where artifacts were reported was a large expanse (ca. 250,000 sq.m.) of valley floor from Shui Hau to Wo Mei, artifacts being found either on the surface or within 50 cm of the surface. The western end of this area includes the proposed site of trenching for the underground cable.

The centre of this area as well as the exact location of the mark (+) on the 1972 map is about 200-300m down-valley and east of the proposed cable line. The actual Impact Area where the 1.2m wide trench will be dug seems to be cobble and boulder stream deposit with about 1m of soil overlying, as far as can be judged from existing exposures. Whilst there may be artifacts in the overlying soil, the possibility that this Impact Area contains any *in situ* cultural deposits should be rated as low, for the reasons given above.

## 7.4 Impact Assessment

Maps and aerial photos show that all of the proposed overhead cable line will be situated in rugged inland terrain, quite distant from the coast and lower slopes that might be expected to yield cultural deposits. There is always the possibility of isolated artifacts or hillside graves being uncovered in such terrain, but this possibility must be rated as very low for the limited area impacted by the proposed works.

For the underground cable routes, with the exception of the approximately 300m section across Ho Chung Valley, the archaeological potential also appears very low. The section from A10 to A11 is at quite a high elevation in rough terrain most unlikely to have archaeological remains. The sections from Tui Min Hoi S/S to A56 and from A1 to Po Lam S/S run mostly along roads and through areas that have seen considerable disturbance from modern construction and landscaping. They are not, in any event, in areas of prime archaeological interest, and neither area has ever had any reported finding of artifacts.

Regarding the proposed underground section across Ho Chung Valley, even though an impact of low intensity is predicted based on previous evidence, rescue excavation is recommended to be carried out prior to the commencement of the construction work due to the cultural relics recovered recently in the vicinity and the chance that the trench area may contain *in situ* cultural deposits cannot be eliminated. This will not affect the proposed alignment of the underground cable and hence the feasibility of the proposed project.

# 7.5 Mitigation Measures

For the entire overhead/underground cable route except the Ho Chung valley, impact on potential archaeological sites is deemed very low, and no further investigation or monitoring is considered necessary.

For the Ho Chung valley segment, due to the concern of the cultural relics recently recovered by a large scale excavation in the area, a rescue excavation is recommended to be carried out before commencement of trenching to salvage the cultural relics. The project proponent, CLP Power, is committed to allow sufficient time in the Project Programme to conduct such rescue excavation. No laying of cables across Ho Chung Valley can be carried out until the rescue excavation is completed to the satisfaction of the Antiquities & Monuments Office.

With implementation of this mitigation measure, it is anticipated that no significant adverse residual impacts on the local cultural heritage are likely to arise from the proposed Project.