

-- Agreement No. HKI 1/2002

**Tung Chung Cable Car Project
Ecological Baseline Survey**

BRIEF

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<u>Contents</u>	<u>Page</u>
1. Introduction	2
2. Description of the Project	2
3. Objectives of the Assignment	3
4. Description of the Assignment	3
5. Deliverables	4
6. Services to be Provided by the Consultants	5
7. Response to Queries	7
8. Programme of Implementation	8
9. Progress Reports and Meetings	9
10. Director's Representative	9
11. Control of the Project and Assignment	10
12. Information and Facilities Provided by the Employer	10
13. Consultants' Office and Staffing	11
14. Specialist and Sub-consultant Services	11
15. Insurance	11

Appendix A	Drawing No. HKI-Z288
Appendix B	Drawing No. HKI-Z193A
Appendix C	Drawing No. HKI-Z284
Appendix D	Sample Index Page for Deliverables

**Tung Chung Cable Car Project
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BRIEF

1. Introduction

- 1.1 This Brief is to be read in conjunction with the Memorandum of Agreement, General Conditions of Employment of Engineering and Associated Consultants for an Investigation Assignment (1997 Edition) (hereinafter referred to as the "General Conditions of Employment"), Schedule of Fees, and any other instructions as may be issued by the Director's Representative from time to time.

2. Description of the Project

- 2.1 The Government intends to award a franchise to construct and operate a cable car system between Tung Chung Town centre and Ngong Ping on Lantau Island (the Project).
- 2.2 The Project will include the following:
- construction of a cable car system of about 5.7km long between Tung Chung and Ngong Ping;
 - construction of associated pylons and other support structures, and ancillary works;
 - construction of two terminals, one at Tung Chung and the other at Ngong Ping; and
 - construction of associated intermediate station, turning station(s) and other associated infrastructures
- 2.3 The indicative alignment of the cable car, based on which the ecological baseline survey will be carried out, is shown on Drawing No. HKI-Z288 (Appendix A). Part of the alignment is within Lantau North Country Park and the proposed Lantau North (Extension) Country Park. The indicative location of the Airport Intermediate station and the Ngong Ping terminal are shown on Drawing Nos. HKI-Z193A (Appendix B) and HKI-Z284 (Appendix C) respectively.

2.4 The Project is a Designated Project under the Environmental Impact Assessment Ordinance (EIAO). Pursuant to section 5(7)(a) of the EIAO, the Director of Environmental Protection (DEP) has issued EIA Study Brief No. ESB-068/2001 for the carrying out of an EIA study for the Project. The successful proponent for the cable car will be required to fulfil the statutory requirements for the issue of an environmental permit under the EIAO.

2.5 The EIA study includes an assessment of ecological impacts arising from the Project. The assessment aims to identify and quantify any potential losses or damage to flora, fauna and natural habitats, and to propose measures to mitigate these impacts.

3. Objectives of the Assignment

3.1 The objective of the Assignment is to carry out an Ecological Baseline Survey (the Survey) to collect terrestrial, aquatic and marine ecological information within the Survey Area along the indicative cable car alignment for subsequent assessment of ecological impacts of the Project. The Survey will form part of the EIA under EIA Study Brief No. ESB-068/2001 "Tung Chung - Ngong Ping Cable Car Project". To enable satisfactory completion of the subsequent EIA for the Project, the Consultants shall demonstrate proven management expertise in the previous undertaking of similar surveys under the EIAO.

3.2 The Consultants shall demonstrate in the report of the Survey that the method and approach in collecting ecological information and the quality of such information provided will fully comply with the criteria set out in the relevant sections of the Technical Memorandum (TM) on Environmental Impact Assessment Process of the Environmental Impact Assessment Ordinance (EIAO)(1997), published by Environmental Protection Department (EPD).

4. Description of the Assignment

4.1 The Consultants shall follow the general guidelines in the EIAO Guidance Note No. 7/2002 for conducting the Survey.

4.2 The Consultants shall examine the flora, fauna and other components of the terrestrial, aquatic and marine ecological habitats within the Survey Area, including the Lantau North Country Park and proposed Lantau North (Extension) Country Park. The Survey Area shall cover 500m to 600m either side of the PPA and from the boundaries of the proposed terminals at Tung Chung and Ngong Ping, as shown in Appendix A.

5. Deliverables

5.1 The Consultants shall, in accordance with the time table stipulated in section 8 below, prepare and submit 10 copies each of Draft and Final Reports for the Survey. The reports should include the following major information:

- (a) Description of the physical environment;
- (b) Habitat maps of suitable scale (1:1000 to 1:5000) showing the types and locations of habitats in the survey area;
- (c) Ecological characteristics of each habitat type such as size, vegetation type, species present, dominant species found, species diversity and abundance, community structure, seasonality and inter-dependence of the habitats and species, and presence of any features of ecological importance;
- (d) Representative colour photos of each habitat type and any important ecological features identified;
- (e) Investigate and describe the existing wildlife uses of various habitats with special attention to those wildlife groups and habitats with conservation interests as specified in Clause 6.3;
- (f) Species found that are rare, endangered and/or listed under local legislation, international conventions for conservation of wildlife/habitats or red data books.

5.2 Deliverables in Digital Format

- (i) One copy of the finalized versions of the Final Ecological Survey Report and drawings to be delivered to the Director's Representative shall be accompanied with a digital copy.

The digital copy shall be saved in a compact disc and kept in a protective pocket attached to the hard copy delivered.

- (ii) When requested, the Consultants shall also provide the digital copies of the draft versions of the Deliverables in (i) above.
- (iii) Unless otherwise agreed by the Director's Representative, the digital copies of the Deliverables shall be in Microsoft Word 97 or 2000 format or shall be printable by Microsoft Word 97 or 2000 without loss of data and change in appearance compared with the corresponding hard copies, except that:

- Drawings shall be in Microstation DGN format and in Hong Kong 1980 Grid and WGS84 datum if applicable.

- Photographs, illustrations, portraits, documents provided by others and documents involving signatures shall be scanned and saved in TIFF, GIF, JPEG, bitmap or Acrobat formats.

(iv) Upon completion of the Assignment, the Consultants shall submit to the Director's Representative a set of compact disc(s) in duplicate kept in rigid plastic cases and containing the digital copies of all Deliverables mentioned in (i) above as well as a digital copy of the Brief to be provided by the Director's Representative. The compact discs shall also include an index file in HTML (hypertext markup language) or equivalent format containing the salient points of the Assignment and the following information about each of the digital copies provided:

- (a) Title of the Deliverable;
- (b) Version number and date of issue of the Deliverable;
- (c) File name of the Deliverable;
- (d) Software used to create the Deliverable;
- (e) Version of the software; and
- (f) Highlights of any pre-existing intellectual property rights.

A sample of the index file is included in Appendix D.

(v) The compact discs submitted shall be clearly labelled on the label side and the protective cases with the date of production of the compact discs and the agreement number and title of the Assignment. In addition, the surface of the compact discs shall be stamped with the company chop of the Consultants and the spines of the cases should be marked with the agreement number.

(vi) When requested by the Director's Representative, the Consultants shall seek the agreement of the owners of the intellectual property rights to allow the Government to copy, distribute or amend those Deliverables in respect of which there is a pre-existing intellectual property right.

6. Services to be provided by the Consultants

6.1 During the course of the Assignment, the Consultant shall report direct to the Director's Representative and all documentation for the ecological baseline survey report shall be submitted to him for his initial comments or approval.

6.2 The Consultants shall liaise with, but not limited to, the following:

- (i) Working Group formed by Territory Development Department (TDD), Agriculture, Fisheries and Conservation Department (AFCD), EPD and others to provide comments, advice, review and decision on the work and outputs of the Survey;
- (ii) AFCD on preservation of trees, protection of wildlife and wetland, and on matters related to ecology, nature conservation, agriculture, fisheries, farm access and irrigation facilities, and on matters affecting existing and proposed Country Parks, Marine Parks/Reserves, Special Areas and Sites of Special Scientific Interest;
- (iii) District Lands Office (DLO) and District Survey Office of the Lands Department on all land and land-related matters including surveying and mapping;
- (iv) Leisure and Cultural Services Department on matters relating to the existing and planned leisure and cultural facilities that may be affected and on matters affecting amenity areas, preservation of trees, and if their provision of services are required;

Requirements of the Ecological Baseline Survey

6.3 The Survey shall include the following:

- (i) review the finding of relevant studies and collate all available information regarding the ecological character of the Survey Area;
- (ii) evaluate the information collected and identify any information gap relating to the assessment of potential ecological impacts to the terrestrial, aquatic and marine environment;
- (iii) carry out necessary field surveys for a period of not less than 9 months which shall cover both the wet and dry seasons, and investigations to verify the information collected in (ii), fill the information gaps identified and fulfil the objectives of the assignment;
- (iv) establish the general ecological profile and describe the characteristics of each habitat found; major information to be provided shall include:
 - (a) description of the physical environment;
 - (b) habitat maps of suitable scale (1:1000 to 1:5000) showing the

types and locations of habitats in the Survey Area;

- (c) ecological characteristics of each habitat type such as size, vegetation type, species present, dominant species found, species diversity and abundance, community structure, seasonality and inter-dependence of the habitats and species, and presence of any features of ecological importance;
 - (d) representative colour photos of each habitat type and any important ecological features identified;
 - (e) investigate and describe the existing wildlife uses of various habitats with special attention to those wildlife groups and habitats with conservation interests; including woodlands; wetlands; natural stream courses and rivers; mangroves; seagrass beds; intertidal and subtidal zones of Tung Chung Bay; vertebrates such as Romer's Tree Frog and Eagle Owl, macroinvertebrates such as the Birdwing Butterfly and horseshoe crab, and any other habitats & wildlife groups identified as having special conservation interests by the study; and
 - (f) species found that are rare, endangered and/or listed under local legislation, international conventions for conservation of wildlife/habitats or red data books;
- (v) describe all recognized sites of conservation importance in the Survey Area and its vicinity including San Tau SSSI, Ngong Ping SSSI, Lantau Peak SSSI and Special Area, Lantau North Country Park and the proposed Lantau North (Extension) Country Park.

Safety and sampling conditions

- 6.4 During sampling, the Consultants shall comply with requirements of the relevant Government departments on safety.
- 6.5 All field surveys carried out shall not cause any unnecessary stress or damage to the existing habitats and wildlife. Relevant permits for collecting specimens must be obtained from AFCD prior to surveys.

7. Response to Queries

- 7.1 The Consultants shall respond to queries under Clause 20 of the General Conditions of Employment raised during the course of the Assignment and until 6 months after submission of the Final Report.

8. **Programme of Implementation**
- 8.1 The due date for the commencement of the Study is April 2002.
- 8.2 The Survey is to be completed before January 2003.
- 8.3 Pursuant to Clause 26(B) of the General Conditions of Employment, the Consultants shall submit a draft programme and revised draft programme (if necessary) and the Director's Representative shall agree or instruct within the following period:-
- | | |
|--|---|
| (a) Submission of draft programme: | Within 1 week after commencement of the Assignment. |
| (b) Submission of revised draft programme (if necessary): | Within 2 weeks from the instruction of the Director's Representative. |
| (c) Agreement of the draft programme or revised draft programme: | Within 2 weeks from receipt of the programme. |
- 8.4 The Consultants shall also submit details of the survey schedule and sampling methods for the groups listed in Clauses 8.5 (a) to (g) together with the programme for agreement by the Director's Representative and consideration by AFCD before the surveys commence.
- 8.5 The Consultants shall forward the initial results to the Director's Representative within 3 weeks after completion of each of the following surveys:
- | | |
|-----|--|
| (a) | Habitat survey; |
| (b) | Mammal survey; |
| (c) | Bird survey; |
| (d) | Amphibian and Reptile survey; |
| (e) | Insects (dragonflies and butterflies) survey; |
| (f) | Stream benthos and freshwater fish survey; and |
| (g) | Coastal and marine survey (mangroves, seagrass beds, intertidal and subtidal zones of Tung Chung Bay). |
- 8.6 The Consultants shall submit the Interim and Final Ecological Survey Reports within the following periods:
- | | |
|--|---|
| (a) Submission of the Interim Ecological Survey Report | By the end of 20 th week after commencement of the Assignment or |
|--|---|

as agreed between the Director's Representative and the Consultants.

(b) Submission of the Final Ecological Survey Report

By the end of 40th week after commencement of the Assignment or as agreed between the Director's Representative and the Consultants.

9. Progress Reports and Meetings

- 9.1 The Consultants shall submit to the Director's Representative monthly progress reports on all aspects of their work, with proposals to expedite the work if necessary.
- 9.2 The Consultants shall attend meetings with the Director's Representative at monthly intervals, and at occasions to be determined by the Director's Representative to ensure satisfactory progress of the Survey.

10. Director's Representative

- 10.1 The Director's Representative as defined in the General Conditions of Employment shall be the Project Manager/HKI&I or such other person as may be authorized by the Director in writing and notified to the Consultants. The Director's Representative may delegate any of the powers and functions vested in him to other officers. If the Consultants are dissatisfied with a decision or instruction of any such officer the matter shall be referred to the Director's Representative for a ruling.
- 10.2 During the course of the Assignment the Consultants shall report directly to the Director's Representative via the Chief Engineer/Islands (CE/Is).
- 10.3 It should be noted that the Government may at any time during the term of the Survey by 7 days' advance notice in writing appoint such third party (the "Appointee") as the Government deems fit to supervise the progress of the Survey and accept Deliverables from the Consultants or otherwise deal with the Consultants in relation to the Survey (whether during or in the aftermath of the Survey) in the stead of the Director's Representative and upon such appointment coming into effect all references to the Director's Representative in this Brief or in the Consultancy Agreement shall thenceforth be taken to mean the Appointee to all intents and purposes.

11. Control of the Project and Assignment

- 11.1 The Project shall be under the control of the Director's Representative who may delegate any of the powers and function vested in him to other Government officers. Subject to Clause 10.3 above, the Chief Engineer/Islands will, however, generally be responsible for the Project, and all day-to-day communications in connection with or arising from the Agreement are to be addressed to him. For the purpose of this Assignment, any correspondence, notes, meeting minutes and progress reports arising from the liaison between the Consultants and other Government departments or public bodies shall be copied to the Director's Representative.
- 11.2 The Assignment will be managed by the Director's Representative through progress and Working Group (WG) meetings. Such Working Group may be set up and meet as required by the Director's Representative for providing guidance on technical matters to the Consultants in carrying out the Services.
- 11.3 The Consultants shall attend all meetings held in connection with the Assignment for the presentation of papers, documents, progress reports, recommendations, and the like. The Consultants will be expected to attend a maximum of 14 numbers of these meetings during the whole Assignment period. The anticipated frequency of these meetings are as follows :

<u>Types of Meeting</u>	<u>Anticipated Frequency</u>
(i) Progress meetings with Director's Representative as mentioned in Clause 9.2 of this Brief	monthly
(ii) WG meetings with Director's Representative as mentioned in Clause 11.2 of this Brief	as required

12. Information and Facilities Provided by the Employer

- 12.1 All available information relevant to the Assignment will be provided to the Consultants. Relevant documents, reports, drawings and other background materials are listed below: -
- (a) EIA Study Brief No. ESB-068/2001 (April 2001) - 'Tung Chung - Ngoing Ping Cable Car Project'.

- 12.2 A copy of the above document will be supplied free of charge by the Director's Representative on request from the Consultants. In the case of plans and drawings, one velograph and two prints of each plan or drawing will be provided free of charge if requested by the Consultants.

13. **Consultant's Office and Staffing**

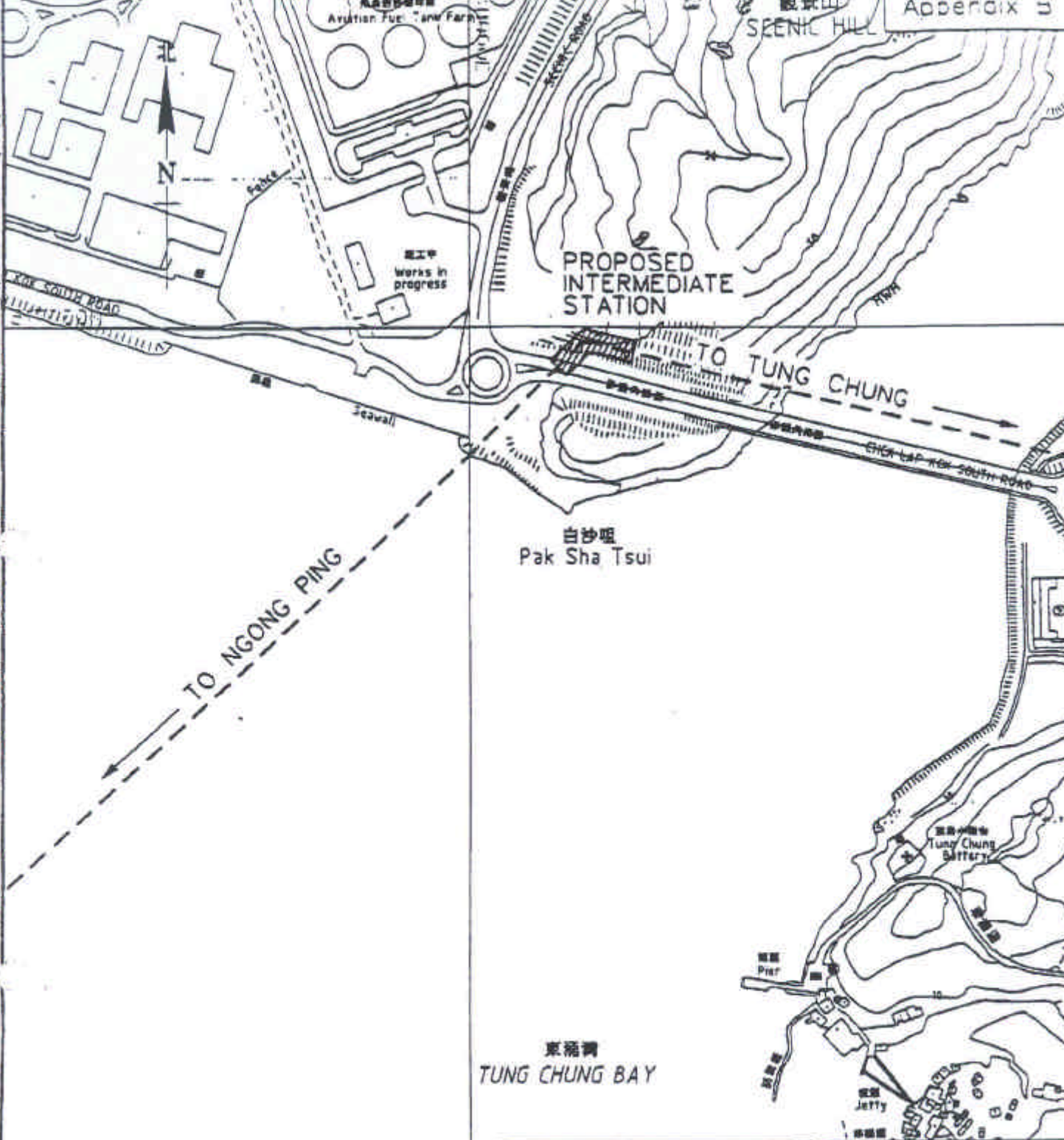
- 13.1 The Consultants shall maintain for the duration of this Assignment an office in Hong Kong under the control of the Project Director of the Consultants who shall be responsible for the Assignment. He shall have adequate authority and sufficient professional, technical and administrative support staff in all relevant disciplines to ensure progress to the satisfaction of the Director's Representative. The Project Director shall be resident in Hong Kong during the entire period of the Assignment.

14. **Specialist and Sub-consultant Services**

- 14.1 The Consultants shall provide at their own expense all specialist and sub-consultant services required for the satisfactory completion of the Assignment. No additional fees or expenses for provision of such services rendered locally or overseas shall be payable by the Employer except as otherwise provided for in the Schedule of Fees.


15. **Insurance**

- 15.1 The amount of insurance cover to be maintained in accordance with sub-clause (A) of Clause 47 of the General Conditions of Employment shall be equal to the estimated value of the fee.



LEGEND :

--- INDICATIVE CABLE CAR ALIGNMENT

 SITE FOR PROPOSED INTERMEDIATE STATION (INDICATIVE ONLY)

圖則名稱 drawing title

**TUNG CHUNG CABLE CAR PROJECT
LOCATION OF PROPOSED INTERMEDIATE STATION
ON THE AIRPORT ISLAND**

繪圖 drawn	簽署 initial	日期 date	項目編號 item no.
W L Lam	SIGNED	28-3-01	
核對 checked	簽署 initial	日期 date	比例 scale
K T Wong	SIGNED	28-3-01	1:5000
核准 approved	簽署 initial	日期 date	圖則編號 drawing no.
			HKI-Z193A

辦事處 office
 地產及屋宇科辦事處
 HONG KONG ISLAND AND
 ISLANDS DEVELOPMENT OFFICE

 地產及屋宇科
 TERRITORY
 DEVELOPMENT
 DEPARTMENT



圖則名稱 drawing title

TUNG CHUNG CABLE CAR PROJECT
REVISED POSSIBLE LOCATION OF
PROPOSED NGONG PING TERMINAL

繪圖 drawn
W. L. Lam簽署 initial
SIGNED日期 date
20-03-02核對 checked
K. T. Wong簽署 initial
SIGNED日期 date
20-03-02

核准 approved

簽署 initial

日期 date

項目編號 item no.

比例 scale
1:3 000

圖則編號 drawing no.

HKI-2284

辦事處 office

新界發展局
HONG KONG ISLAND AND
ISLAND DEVELOPMENT OFFICE

新界發展局
TERATOR
DEVELOPMENT
DEPARTMENT

Agreement No. HKI 1/2002

TUNG CHUNG CABLE CAR PROJECT ECOLOGICAL BASELINE SURVEY

Sample Index Page for Deliverables

Details of Agreement

Agreement No.	
Title of Agreement	
Brief	Brief.htm^{1,3}

Details of Consultants²

Name of Consultants	
Address	
Telephone No	
Fax No	
E-mail Address	

Details of Sub-Consultants²

Name of Sub-consultants	
Address	
Telephone No	
Fax No	
E-mail Address	

Deliverables

Title of deliverables	Version no.	Date of issue	Hyperlink ³ to constituent files	Software used to create the constituent files (with version)	Highlights of any pre-existing intellectual property right
[e.g. Report No. 1 – Inception Report]	[e.g. 3.1]	[e.g. 3 September 1999]	Main Text.doc	Microsoft Word 97	Nil
			Table 1.xls	Microsoft Excel 97	Nil
			Appendix 1.doc	Microsoft Word 2000	Nil
			Appendix 2.doc	Microsoft Word 2000	Nil
			Photo 1.gif	Microsoft Photo Editor 3.01	Company X owns the copyright of this file. Their agreement for the Government to copy, distribute and amend this file has been obtained.

¹ A hyperlink to the finalized version of the Brief of the Assignment should be included. In case, the Brief comprises several documents, hyperlinks to all such documents should be included.

² In case there are more than one consultant firm or sub-consultant, additional tables should be inserted and their information should be provided in the tables.

³ The hyperlink should be set relative to the file location of this index file.