

Ref.: AACWBIECEM00\_0\_12722L.21

13 May 2021

By Post and Fax (2566 2192)

China State Construction Engineering (Hong Kong) Ltd. 29/F, China Overseas Building 139 Hennessy Road Hong Kong

Attention: Mr. Chris Leung

Dear Sir,

Re: Contract No. HY/2009/15

Central - Wan Chai Bypass - Tunnel (Causeway Bay Typhoon Shelter

Section)

**Landscape Plan (Rev. 7)** 

Reference is made to your submission of the Landscape Plan (Revision 7) dated 13 May 2021 received through email on 13 May 2021 for our review and comment.

Please be informed that we have no adverse comment on the captioned submission. We write to verify the captioned submission in accordance with Condition 2.10 of FEP-06/364/2009/A.

Thank you very much for your kind attention. Please do not hesitate to contact the undersigned should you have any queries.

Yours faithfully,

David Yeung

Independent Environmental Checker

c.c. HyD Mr. Enoch Wong by fax: 2714 5289

AECOM Mr. David Kwan by fax: 2142 5577 Lam Mr. Raymond Dai by fax: 2882 3331 Ref

G1938/CS/L318/CSHK

Date

13 May 2021

China State Construction Engineering (Hong Kong) Ltd

By Post & Fax: 2566 2192

29/F, China Overseas Building, 129 Hennessy Road

Hong Kong

Attn: Mr. Chris Leung

Dear Mr. Leung,

Contract No. HY/2019/18
Wanchai Development Phase II and Central-Wanchai Bypass
Sampling, Field Measurement and Testing Works (Stage 4)

#### Landscape Plan (Revision 7) under FEP-06/364/2009/A for Contract No. HY/2009/15

Referring to the captioned submission dated on 13 May 2021 received through email on 13 May 2021, we have reviewed your submitted details and hereby certify the submission in accordance with condition 2.10 of FEP- 06/364/2009/A.

Yours faithfully,

For and On Behalf of Lam Geotechnics Limited

Raymond Dai

**Environmental Team Leader** 

Ramboll

C.C.

AECOM CWB

Mr. David KwanMr. David Yeung

By fax: 3912-3010 By fax: 3465-2899









#### **CONTRACT HY/2009/15**

# CENTRAL – WAN CHAI BYPASS TUNNEL (CAUSEWAY BAY TYPHOON SHELTER SECTION)

# **Landscape Plan**

**Submission Status: For Approval** 

Revision	Description	Date
0	1 <sup>st</sup> Submission	19 October 2011
1	2 <sup>nd</sup> Submission	13 August 2013
2	3 <sup>rd</sup> Submission	9 May 2014
3	4 <sup>th</sup> Submission	20 January 2015
4	5 <sup>th</sup> Submission	14 August 2018
5	6 <sup>th</sup> Submission	12 November 2020
6	7 <sup>th</sup> Submission	9 February 2021
7	8 <sup>th</sup> Submission	13 May 2021

Prepared by:		
Senior Environmental	Gabriel Wong	13 May 2021
Officer		



# Implementation Schedule for Landscape and Visual

EIA Ref	Environmental Protection Measures/	Location / Implementation			lementa	ation S	tages	Relevant Legislation	Implementation	Cross - Reference to
	Mitigation Measures	Timing	Agent	Des	С	О	Dec	and Guidelines	Status	Landscape Plan
Constructi										
For the W	hole Project									
Table 10.5 (AEIAR- 125/2008)	CM1 Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical.	Work site / During Construction Phase	CEDD/HyD's Contractor	<b>✓</b>	<b>✓</b>			EIAO TM	Implemented	Section 5
Table 10.5 (AEIAR- 125/2008)	CM2 Existing trees to be retained on site shall be carefully protected during construction (Site Tree Survey Report, Tree Preservation and Protection Plan, and Method Statement for Tree Transplanting Works have been submitted to the Engineer's Representatives for approval).	Work site / During Construction Phase	CEDD/HyD's Contractor	<b>√</b>	<b>√</b>			EIAO TM	Implemented	Section 7
Table 10.5 (AEIAR- 125/2008)	CM3 Trees unavoidably affected by the works shall be transplanted where practical.	Work site / During Construction Phase	CEDD/HyD's Contractor	✓	<b>✓</b>			EIAO TM	Implemented	Section 8
Table 10.5 (AEIAR- 125/2008)	CM4 Compensatory tree planting shall be provided to compensate for felled trees.	Work site / During Construction Phase	CEDD/HyD's Contractor	<b>√</b>	<b>✓</b>			EIAO TM	Implemented	Section 10
Table 10.5 (AEIAR- 125/2008)	CM5 Control of night-time lighting.	Work site / During Construction Phase	CEDD/HyD's Contractor		<b>✓</b>			EIAO TM	Implemented	Section 11



Table 10.5 (AEIAR- 125/2008)	CM6 Erection of decorative screen hoarding compatible with the surrounding setting (Please refer to Appendix C).	Work site / During Construction Phase	CEDD/HyD's Contractor	<b>✓</b>		EIAO TM	Implemented	Section 12
Table 7.5 (AEIAR- 041/2001)	Screen tree planting for Police Officers' Club (within Project boundary)	Adjacent to POC carpark	CEDD/HyD's Contractor	<b>✓</b>		WBTC 18/94	Implemented	Section 7



PlanD's observation / comment via email dated 21	Responses
April 2021	
Central-Wan Chai Bypass -Tunnel (Causeway Bay	
Typhoon Shelter Section)	
EP Condition 2.10: Landscape Plan (Rev.6)	
i) You are required to include a set of latest record of all preserved tree within the project boundary of this FEP	Added in Appendix M



Revision	Commonweat Davidian	Submission			
Kevision	Summary of Revision	Ву	Date		
0	Initial Revision	AY	19/10/2011		
1	Appendix H	DS	13/8/2013		
2	Section 2 – Master Green Plan Section 7 – Protection of existing Trees Section 8 – Transplantation of Existing Trees Section 9 – Felling of Existing Trees Section 10 – Trees Compensation	AM	9/5/2014		
3	Section 8 – Transplantation of Existing Trees Section 9 – Felling of Existing Trees Section 10 – Trees Compensation Appendix H Appendix I	AM	20/1/2015		
4	Section 8 – Transplantation of Existing Trees Section 10 – Trees Compensation Section 14 – Establishment Landscape Monitoring Appendix D Appendix F Appendix H Appendix I	DH	14/8/2018		
5	Section 8 Section 13 Section 14 Appendix E Appendix I Appendix H Implementation schedule	GW	12/8/2020		
6	Appendix L	GW	9/2/2021		
7	Appendix M	GW	22/4/2021		



# LIST OF CONTENT

1.	Introduction	. 1
2.	Master Greening Plan	. 1
3.	Identified Visual Sensitive Receivers	. 1
4.	Landscape Mitigation Measures	. 1
5.	Topsoil	. 3
6.	Tree Preservation and Protection Measures	. 3
7.	Protection of Existing Trees	4
8.	Transplantation of Existing Trees	4
9.	Felling of Existing Trees	. 5
10.	Trees Compensation	6
11.	Control of Night-time Lighting.	. 7
12.	Erection of Decorative Screen Hoarding Compatible with the Surrounding Setting	. 7
13.	Screening of Tree Planting at POC	. 7
14.	Establishment Landscape Monitoring	. 8



## **APPENDICES**

Appendix A	Site Layout Plan
Appendix B	Location Plan of Visual Sensitive Receivers
Appendix C	Design and Location Plan of Decorative Screen Hoarding
Appendix D	Location Plan of Retaining Tree and Existing Tree for transplanting
Appendix E	Tree Schedule for Retained Trees
Appendix F	Tree Schedule for Transplanted Trees and Transplanted Trees in Holding
	Nursery - Report of Dead Trees T1905, T1906, T1907 and T1909
Appendix G	Report of Tree Preservation and Protection Plan with photos of retained
	trees
Appendix H	Transplanted Trees Inspection Record with photos of transplanted trees
Appendix I	Permanent Location of compensatory trees
Appendix J	Tree Survey Report (Review of Existing Trees Proposed to be Felled at
	Portion 4 and 22)
Appendix K	Handover Record
Appendix L	Letter detailing HY/2009/15 Site Office Handing Over to HY/2010/08
Appendix M	Report of Tree Preservation with photos of retained trees conducted in Jan
	2021



#### 1. Introduction

The purpose of this plan is to demonstrate design details, locations, implementation programme, maintenance and management schedules in accordance with contract requirement, Condition 2.14 of Environmental Permit No. EP-364/2009/H and Condition 2.10 of Further Environmental Permit No. FEP-06/364/2009/A.

#### 2. Master Greening Plan

The Master Greening Plan will not form part of the scope of this project. The final planting works will be carried out by another main contractor.

#### 3. Identified Visual Sensitive Receivers

The following visual sensitive receivers (VSRs) are likely to be affected during the construction phase of this project:

- C/R4 (Elizabeth House);
- C/R5 (Riviera Mansion);
- C/R6 (Prospect Mansion);
- C/R7 (Miami Mansion);
- C/R8 (Marco Polo Mansion);
- C/R9 (Victoria Park Mansion);
- C/R18 (Belle House);
- C32 (Excelsior Hotel);
- C36 (Citicorp Centre); and
- C37 (Victoria Centre).

The above VSRs are mapped in Appendix B.

#### 4. Landscape Mitigation Measures

The CEDD/HyD's Contractor shall be responsible for implementing a series of construction phase Landscape and visual mitigation measures. All mitigation measures stated in this plan are in compliance with relevant requirements in both CWB&IECL EIA Report (Register No. AEIAR-041/2001) and the WDII&CWB EIA Report (Register No. AEIAR-125/2008). While the operational phase mitigation measures as mentioned in EIA Reports should be carried out by other contractor(s) under separate contract(s).

The proposed landscape mitigation measures during construction phase for HY/2009/15, but not limited to, are listed as below:



# Implementation Schedule for Landscape and Visual Impact Mitigation (Specific in CWB)

## Table 1

EIA Report Ref.	Environmental Protection Measures/ Mitigation Measures	Location /Timing	Implementation Agency	Relevant Legislation and Guidelines	Referring Section in this Plan
Table 10.5 (AEIAR- 125/2008)	CM1 Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical.	Work site / During Construction Phase	CEDD/HyD's Contractor	EIAO TM	Section 5
Table 10.5 (AEIAR- 125/2008)	CM2 Existing trees to be retained on site shall be carefully protected during construction (Site Tree Survey Report, Tree Preservation and Protection Plan, and Method Statement for Tree Transplanting Works have been submitted to the Engineer's Representatives for approval).	Work site / During Construction Phase	CEDD/HyD's Contractor	EIAO TM	Section 7
Table 10.5 (AEIAR- 125/2008)	CM3 Trees unavoidably affected by the works shall be transplanted where practical.	Work site / During Construction Phase	CEDD/HyD's Contractor	EIAO TM	Section 8
Table 10.5 (AEIAR- 125/2008)	CM4 Compensatory tree planting shall be provided to compensate for felled trees.	Work site / During Construction Phase	CEDD/HyD's Contractor	EIAO TM	Section 10
Table 10.5 (AEIAR- 125/2008)	CM5 Control of night-time lighting.	Work site / During Construction Phase	CEDD/HyD's Contractor	EIAO TM	Section 11
Table 10.5 (AEIAR- 125/2008)	CM6 Erection of decorative screen hoarding compatible with the surrounding setting (Please refer to Appendix C).	Work site / During Construction Phase	CEDD/HyD's Contractor	EIAO TM	Section 12
Table 7.5 (AEIAR- 041/2001)	Screen tree planting for Police Officers' Club (within Project boundary)	Adjacent to POC carpark	CEDD/HyD's Contractor	WBTC 18/94	Section 7

#### 5. Topsoil

Stripped topsoil will be re-used in the construction of the soft landscape works where practical. For the topsoil which comprises reclamation fill material and is not desirable from a horticultural maintenance point of view, approved new soilmix will be specified for new planting areas.

#### 6. Tree Preservation and Protection Measures

There are a number of measures are adopted to protect trees and the details are described below.

#### i. Label all trees with tree numbers

The preserved trees have been clearly labeled with tree reference numbers.

#### ii. Temporary protection fencing

Temporary protection fencing of 1.2m height should be erected around tree protection zone to protect the preserved trees from construction damage.

#### iii. Regular monitoring of trees

Trees shall be inspected regularly to check the health of the tree. Any sign of deterioration shall be notified to the Engineer's Representatives and remedial action shall be adopted.

#### iv. Insect and disease control

Preserved tree shall be checked for insect attraction or fungal infestation. Dead or infected or infested branches should be pruned if necessary to prevent falling down.

Any infection and infestation shall be reported to Engineer's Representatives. Remedial eradication by use of sprayed insecticide or fungicide shall be carried out.

#### v. Watering

Fresh water shall be used for watering and all planted areas shall be watered. Watering shall be carried out in early morning and later afternoon so as to keep the soil moist around the roots and plants.

Watering operation shall be completed within 24 hours of an inspection which deems watering to be necessary.

#### vi. Pruning of tree branches

If any branches of preserved trees interferes with construction works or is in poor condition which may affect public safety and health of the tree and thus pruning is required, the Engineer's approval should be obtained prior to carrying out pruning works. The pruning works shall be carried out in compliance with G.S. Clause 3.86.

( i to vi - apply to retained trees at CBTS and Police Officer's Club; i to ii - apply to retained trees at Siu Ho Wan)

#### 7. Protection of Existing Trees

The existing trees recommended to be retained shall be protected by means of fencing to prevent vehicular, construction machines or pedestrian intrusion which may potentially damage tree canopies, trunks and root zones. Site tree survey report, and tree preservation and protection plan have been approved by Engineer's Representatives. Appendix D shows the location of trees namely T009, T010, T011, T012 and T013 are being retained and protected by HY/2009/15 in Siu Ho Wan, Lantau Island. While the trees being retained near Police Office's Club and at Portion 7 of the project area are also indicated. A tree schedule summarizes the details of retained trees is shown in Appendix E. A bi-monthly report of the Tree Preservation and Protection Plan with photos of retained trees is included in Appendix G. Referred to the follow-up discussion with Planning Department (PlanD), it has been clarified that the future progress photos of the retained trees would be forwarded to PlanD on bi-monthly basis by the contractor via regular submission for the tree reports.

#### 8. Transplantation of Existing Trees

A total of 13 nos. trees were originally required to be transplanted at the commencement of the Contract. However, the trees T1905 and T1909 were found dead in November 2010(T1905) and in January 2011(T1909) respectively before any works had been carried out in the initial stage of the project. As agreed with the Engineer's Representative, CSHK has compensated for the dead trees T1905

and T1909. A total of 13 nos. trees were transplanted to the temporary holding nursery in Tai Po Lam Tsuen on 11 May 2011.

During the holding period, two trees T1906 and T1907 were confirmed dead in November 2011 at the temporary hold nursery. As agreed with the Engineer's Representative, CSHK has compensated for the dead trees T1906 and T1907. On 16 January 2013, the temporary holding nursery was moved from Lam Tsuen to Lau Fau Shan.

Appendix F presents the tree schedule for all transplanted trees. A Transplanted Trees Inspection Record with photos of transplanted trees is included in Appendix H. Referred to the follow-up discussion with PlanD, it has been clarified that the future progress photos of the transplanted trees would be forwarded to PlanD on bi-monthly basis by the contractor via regular submission for the tree reports. The transplanted trees temporarily stored at holding nursery will be handed over to Central Interchange by contract HY/2009/18. The final permanent locations of the transplanted trees will be determined by contract HY/2009/18. The corresponding planting plans are included in the landscape plan under contract HY/2009/18. Referring to the planting plans under contract HY/2009/18, all the transplanted trees under contract HY/2009/15, thirteen in total (including tree numbers T1900, T1902, T1903, T1904, T1905, T1906, T1907, T1908, T1909, T1910, T1911, T1912 and T2015), had been handed over to contract HY/2009/18 by the end of August 2016. The location plan of all transplant trees in holding nursery has been supplemented in Appendix F

#### 9. Felling of Existing Trees

In case of EIA specifically identified trees required to be felled during the construction phase, proposal and compensation scheme will be submitted to relevant government department(s) for approval and implemented accordingly upon receipt of approval. T1905, T1906, T1907 and T1909 are not EIA identified trees, the compensation of the felled trees would be handled according to the Contract and DEVB TC(W)No. 4/2020. T1905, T1906, T1907 and T1909 were observed decay in wound. As agreed with the Engineer's Representative, CSHK has compensated for the tree T1905, T1906, T1907 and

T1909.

#### 10. Trees Compensation

According to the Contract, compensatory trees for any dead tree shall be provided, and the provision of compensatory tress would be tentatively completed before end of contract. Compensatory planting shall be provided in accordance with the requirements of DEVB TC(W)No. 4/2020. This being of a ratio not less than 1:1 in terms of the total numbers of aggregated girth size of compensatory trees and shall not be less than that of dead trees. The size of compensatory trees should be at least of "heavy standard". (Please refer to Table 2 for details.) Compensatory trees will be planted in our holding nursery and had been handed over to Central Interchange by contract HY/2009/18 by the end of August 2016. Please refer to Appendix I for the permanent location.

Table 2

Tree No.	<b>Botanical Name</b>	Chinese Name	Size	Quantity
T1905	Macaranga	血桐	325 mm=< DBH=<650mm	1
	tanarius			
T1906	Celtis sinensis	朴樹	375 mm=< DBH=<750mm	1
T1907	Ficus variegata	青果榕	185 mm=< DBH=<370mm	1
T1909	Bombax ceiba	木棉	165mm=< DBH=<330mm	1

The aforementioned tree were compensated and have been handed over to contract HY/2009/18 holding nursery.

The details of compensated trees are listed below:

Table 3

Tree No.	<b>Botanical Name</b>	Chinese Name	Size (DBH)	Quantity	Transplant	
					date	
T1905	Macaranga	血桐	330mm	1	24 Aug 16	
	tanarius					
T1906	Celtis sinensis	朴樹	380mm	1	25 Jan 16	
T1907	Ficus variegata	青果榕	190mm	1	25 Jan 16	
T1909	Bombax ceiba	木棉	170mm	1	7 Jun 16	

#### 11. Control of Night-time Lighting

Sources of night-time lighting impacts during construction phase would include:

- Night-time terrestrial works;
- Construction site traffic;
- Lighting devices at site offices;

The following measures, but not limited to, would be implemented where practical to minimize impact:

- a. Carefully planning of any night-time work would be adopted to minimize the use of unnatural lighting;
- b. The need of using lighting devices would be carefully assessed based on work task to minimize usage;
- c. Where lighting devices are needed to be operated, the devices would be aimed away from the visual sensitive receivers where necessary.
- d. Site office lighting will be oriented away from VSRs.

The lighting impact will be monitored and assessed by designated person during night-time construction work. Upon any public concerns or complaints, the lights will be repositioned or shielded where necessary.

# 12. Erection of Decorative Screen Hoarding Compatible with the Surrounding Setting

Decorative screen hoarding not less than 2.4m high from ground level shall be supplied, erected and maintained in good condition, and to be removed upon completion of the works. The design of hoarding is compatible with the surround setting and has been approved by the Engineer. The design and location plan can be found in attached Appendix C.

## 13. Screening of Tree Planting at POC

Existing trees adjacent to the Police Officer's Club car park boundary (within site boundary) are retained to act as screen planting to mitigate source of landscape impact from the construction of tunnel portal.

#### 14. Establishment Landscape Monitoring

All transplanted trees under contract HY/2009/15, thirteen in total (namely tree numbers T1900, T1902, T1903, T1904, T1905, T1906, T1907, T1908, T1909, T1910, T1911, T1912 and T2015) had been handed over to contract HY/2009/18 by end of August 2016.

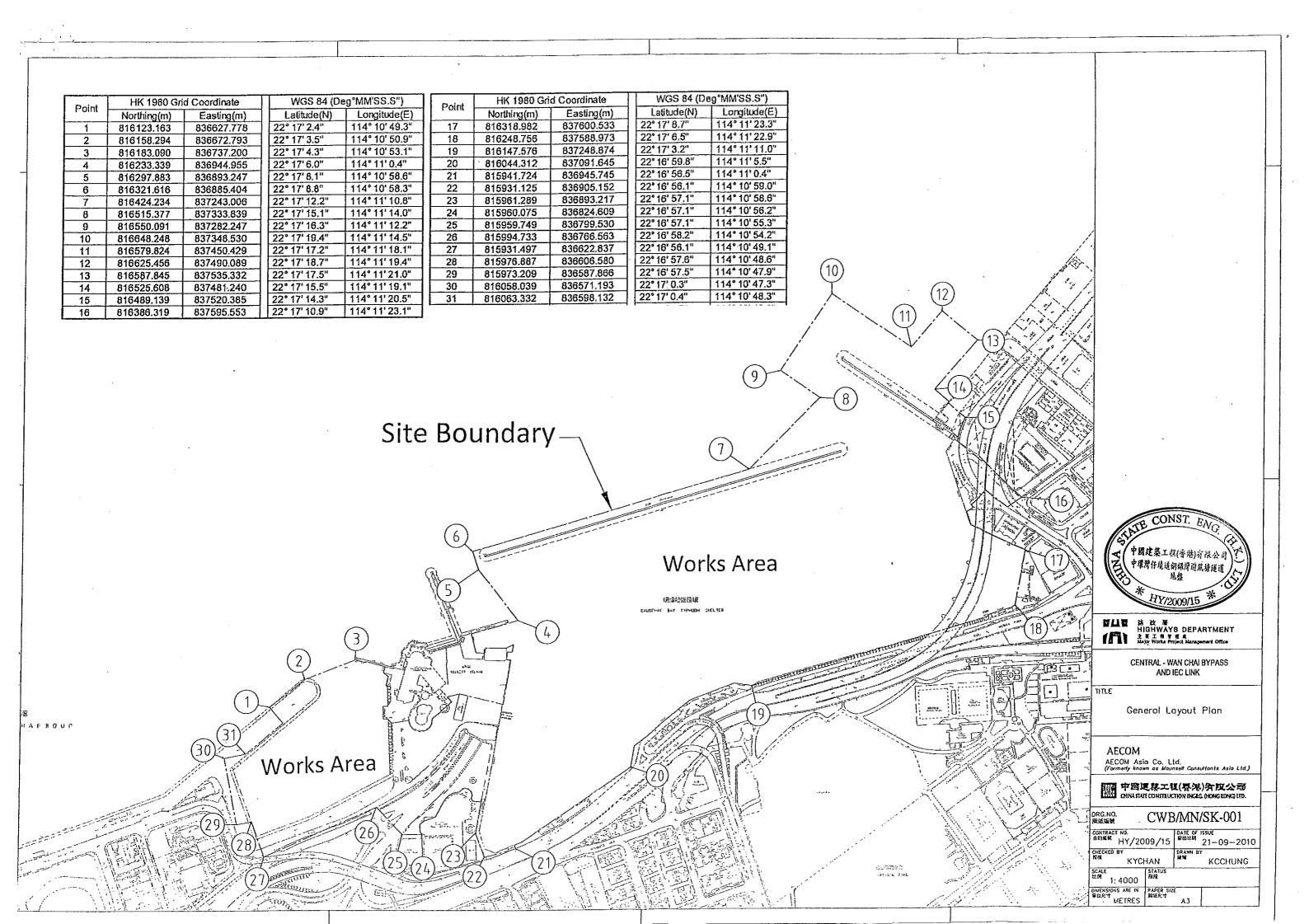
No permanent landscape works to be undertaken by contract HY/2009/15.

All retained tree under contract HY/2009/15, 11 nos. of retained trees under HY/2009/15 (namely tree numbers T009, T010, T011, T012, T013, T1920, T1921, T1922, T1923, T1924, T1925) had been handed over to contract HY/2010/08 by July 2017. Contract HY/2010/08 would be responsible for the maintenance and protection of above-mentioned retained trees as agreed with the Engineer's Representative.

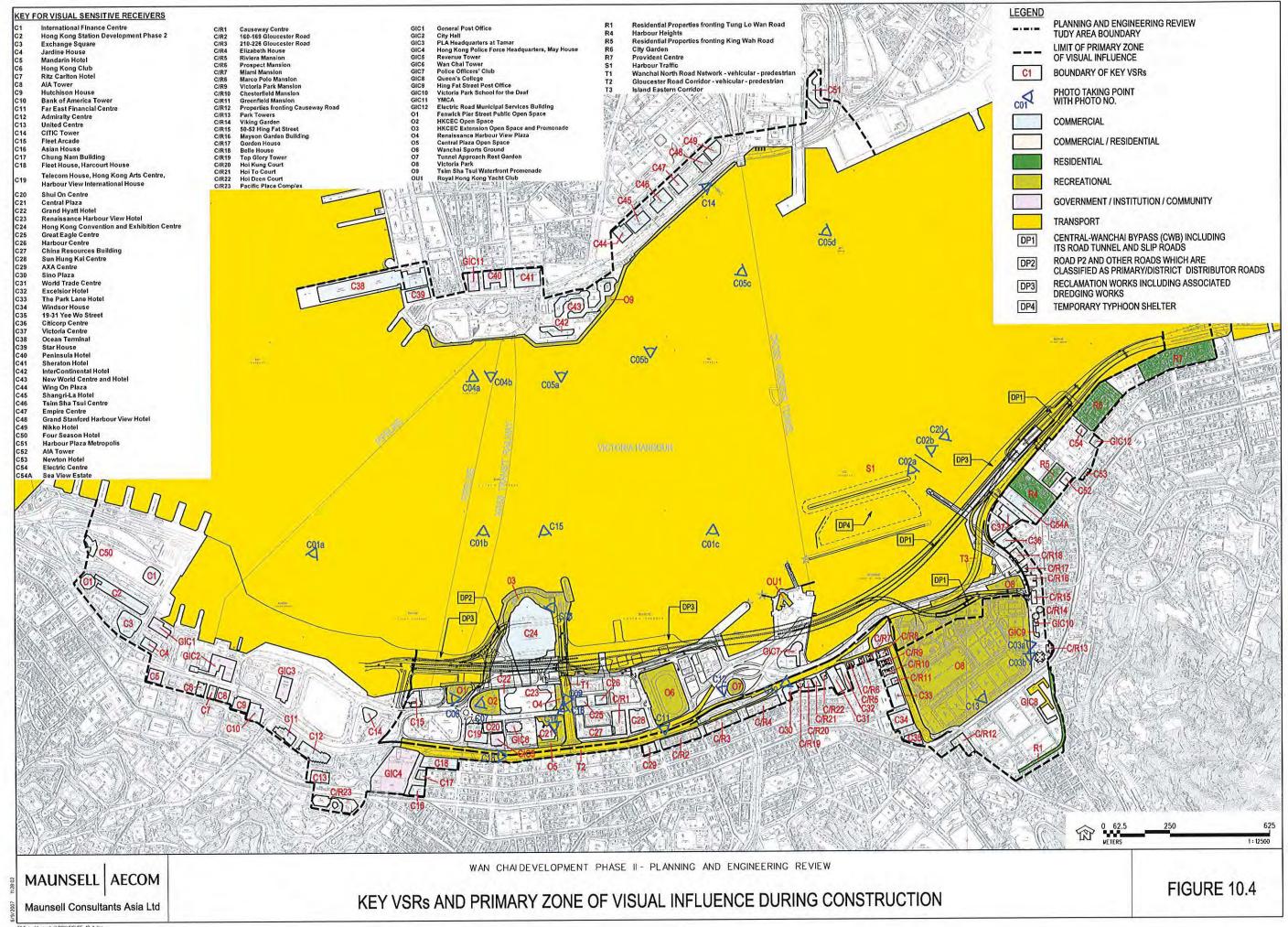
All retained tree under contract HY/2009/15, 2 nos. of retained trees under contract HY/2009/15, two in total (namely tree numbers T2013 and T2014) has been handed over to MTRC by July 2017.

No permanent landscape works to be undertaken by contract HY/2009/15.

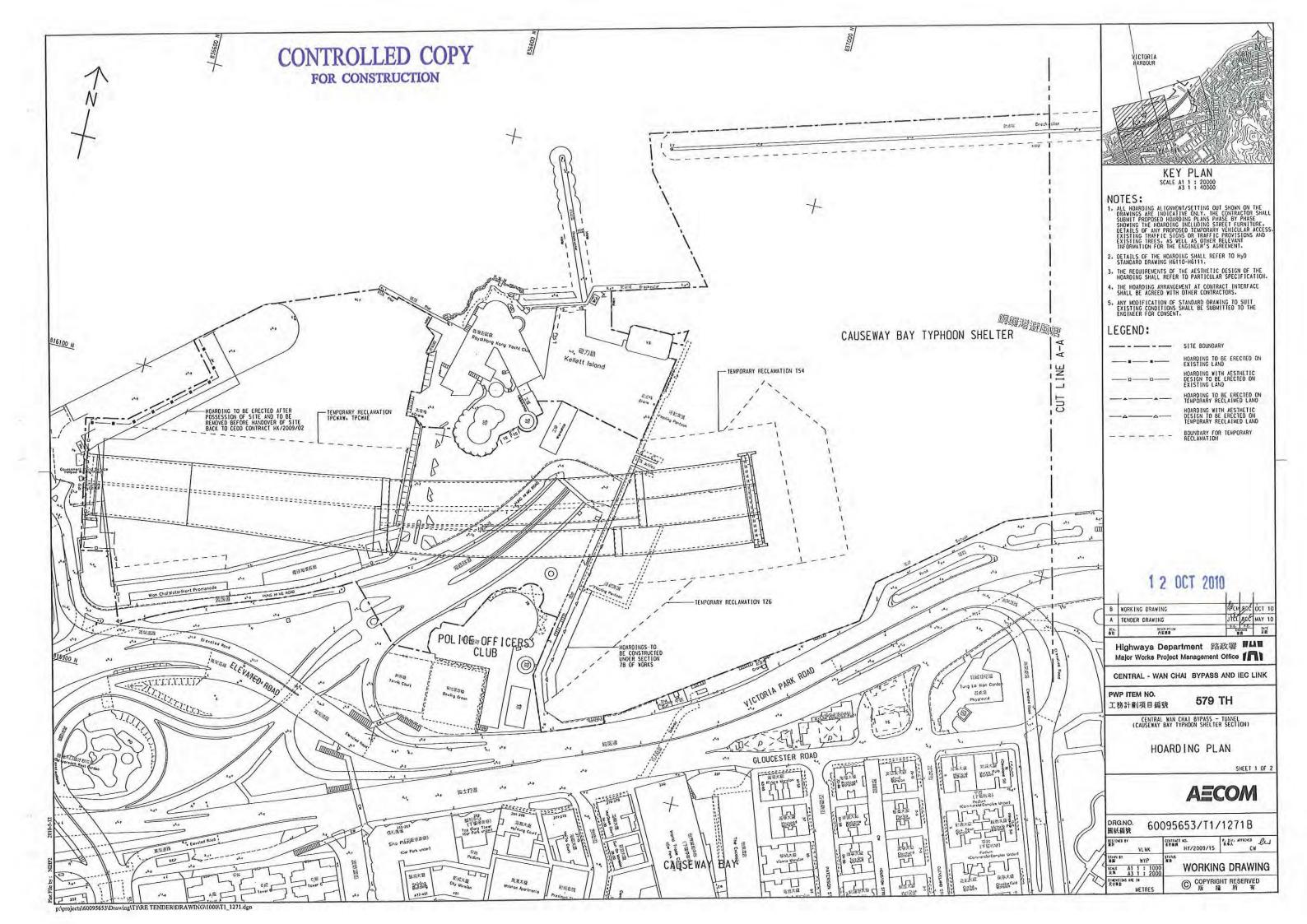
Appendix A
Site Location Plan

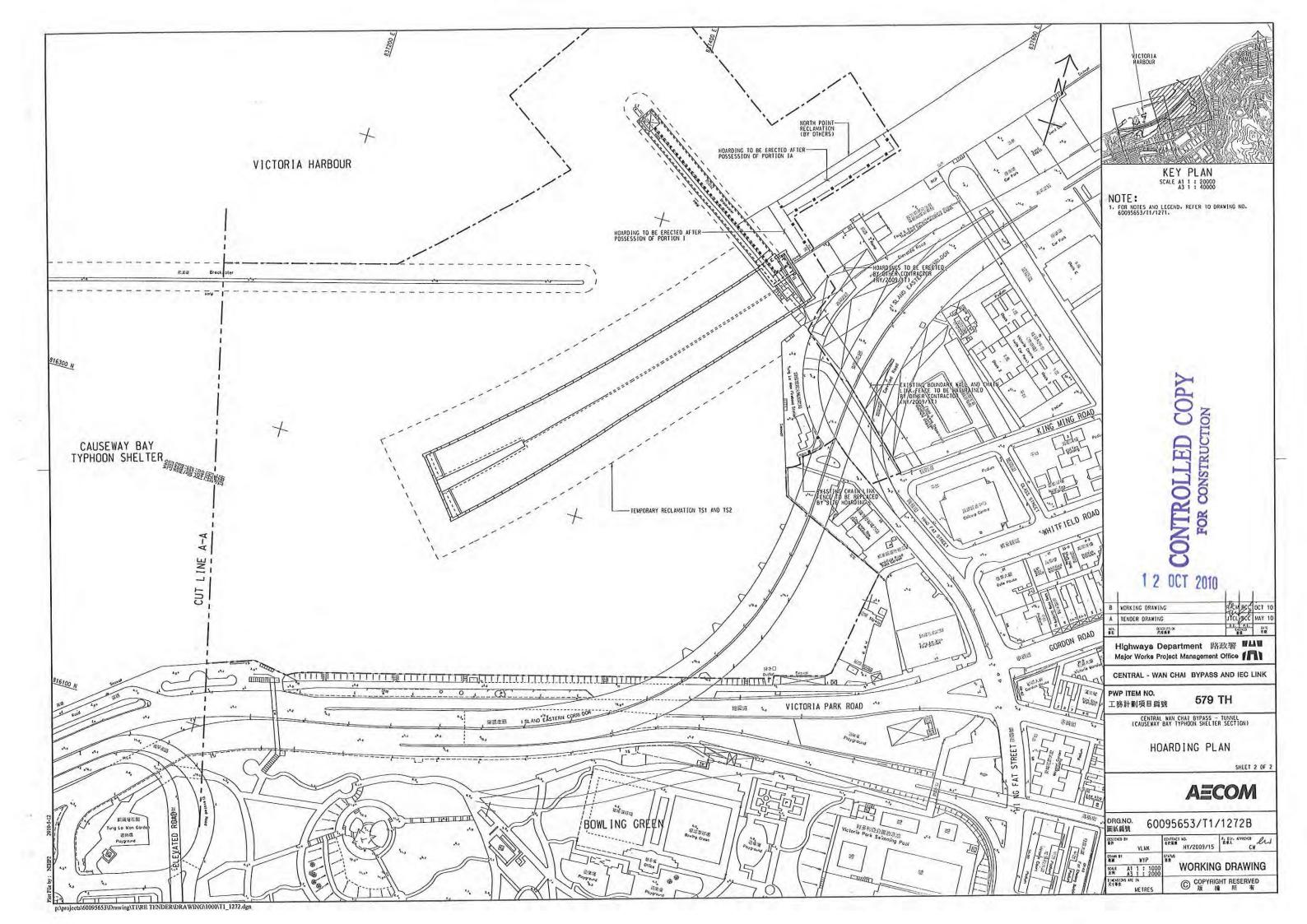


> Appendix B Location Plan of Visual Sensitive Receivers



Appendix C
Design and Location Plan of
Decorative Screen Hoarding





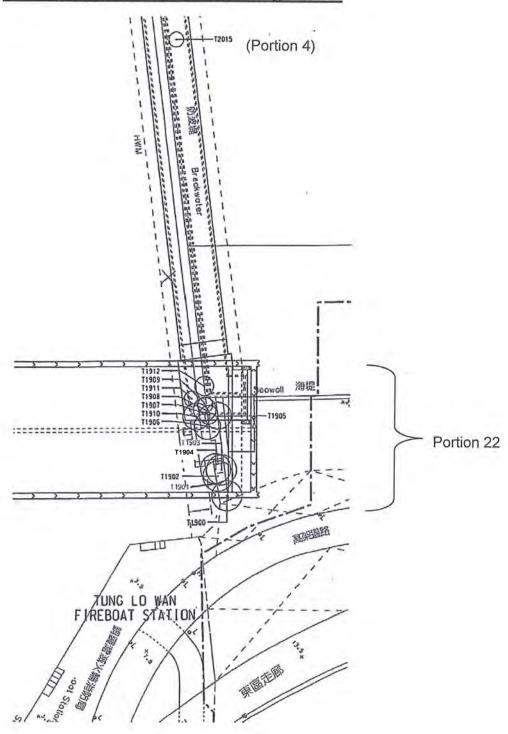


36m

Appendix D
Location Plan of Retaining Trees and
Existing Tree for Transplanting

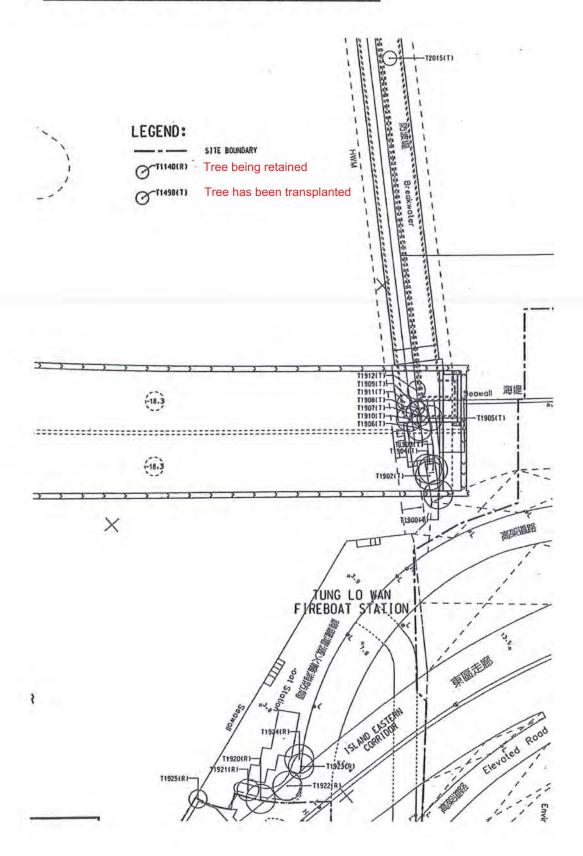


# 2. Location Plan of Existing Trees

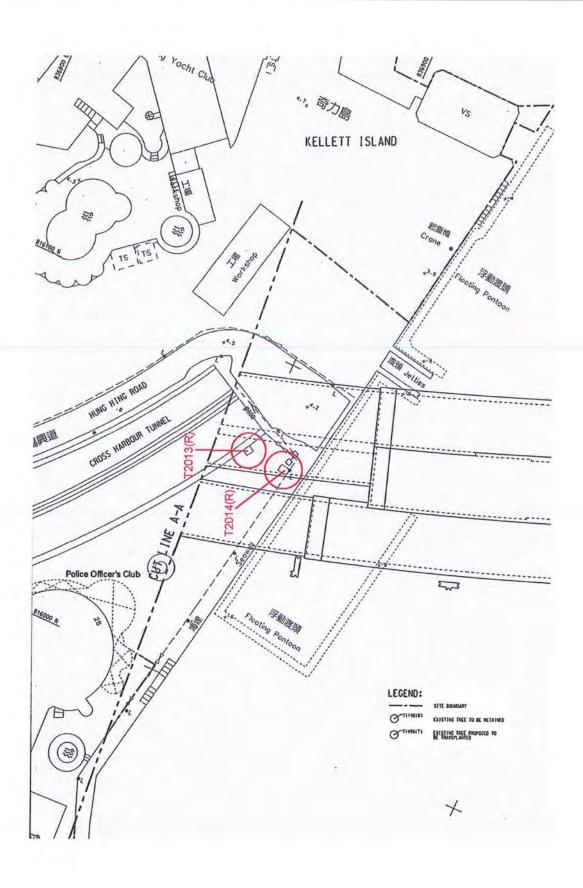


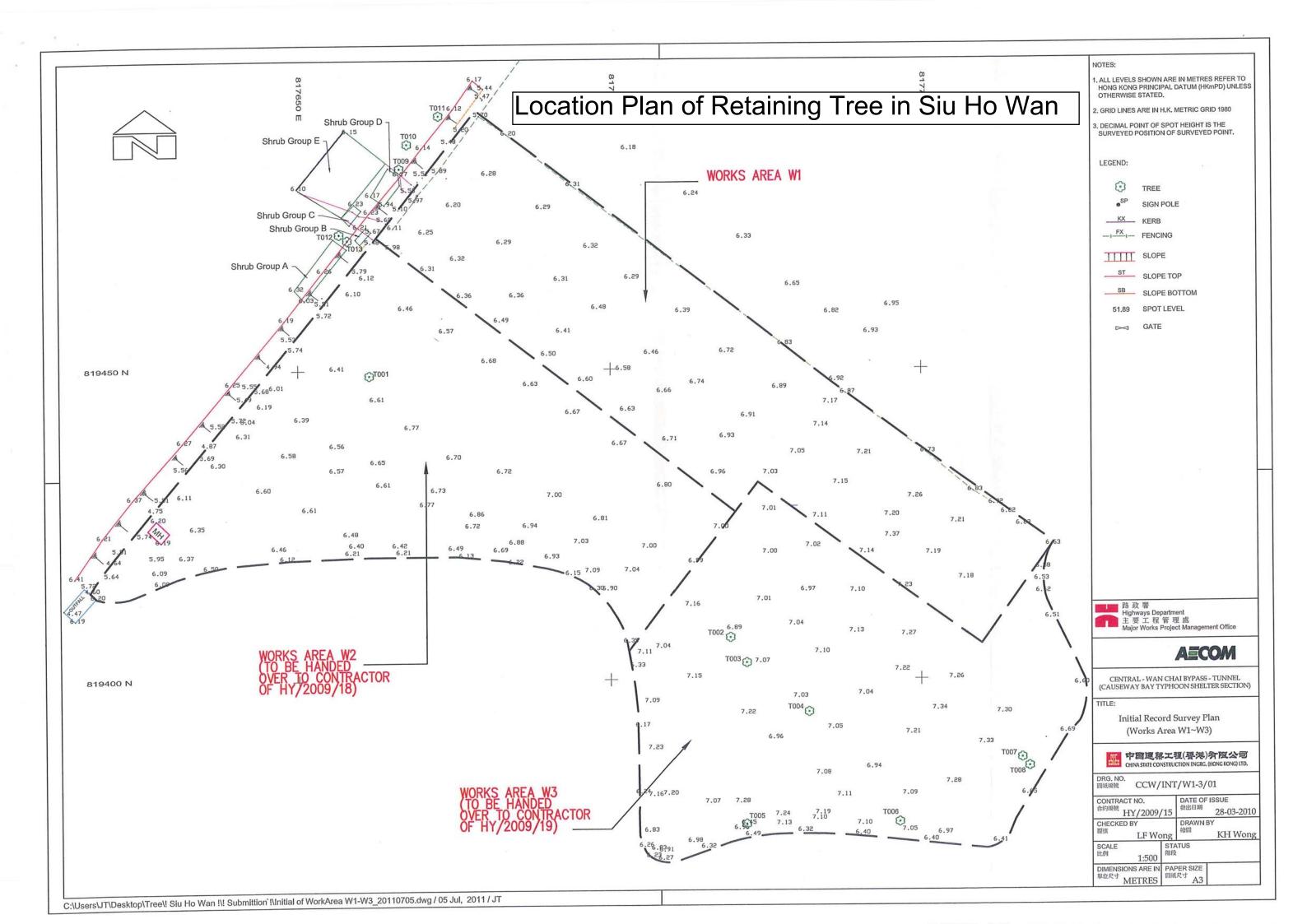


# 1. Location Plans showing the Preserved Trees









Appendix E

**Tree Schedule for Retained Trees** 



# Tree Schedule

## Handed over to HY/2010/08

				Size			Cround	Ground _			
Tree no.	Botanical Name	Chinese Name	Location	Height (m)	Crown Spread (m)	Girth (m)	Level (mPD)	Form (G/F/P)	Health (G/F/P)	Tree Condition	Mitigation Measures
T1920	Ficus virens	大葉榕, 黃葛 樹	At Portion 7	10	7	760	4.8	G	F	No significant defect observed 未有察覺明顯缺陷	Nil
T1921	Morus alba	桑	At Portion 7	8	7	330	4.4	G	F	No significant defect observed 未有察覺明顯缺陷	Nil
T1922	Ficus virens	大葉榕, 黃葛 樹	At Portion 7	9	6	360	4.74	Р	F	No significant defect observed 未有察覺明顯缺陷	Nil
T1923	Ficus microcarpa	榕樹, 細葉榕	At Portion 7	9	7	420	4.84	F	F	No significant defect observed 未有察覺明顯缺陷	Nil
T1924	Morus alba	桑	At Portion 7	8	7	360	4.77	Р	F	No significant defect observed 未有察覺明顯缺陷	Nil
T1925	Ficus virens	大葉榕, 黃葛 樹	At Portion 7	6	5	270	3.7	F	F	No significant defect observed 未有察覺明顯缺陷	Nil
T009	Liquidambar formosana	楓香	Works Area W1 at Siu Ho Wan	4	3	100	6.17	F	F	No significant defect observed 未有察覺明顯缺陷	Nil
T010	Acacia Confusa	臺灣相思	Works Area W1 at Siu Ho Wan	5	5	115	6.14	F	F	No significant defect observed 未有察覺明顯缺陷	Nil
T011	Liquidambar formosana	楓香	Works Area W1 at Siu Ho Wan	4	3	95	6.12	F	F	No significant defect observed 未有察覺明顯缺陷	Nil
T012	Acacia Confusa	臺灣相思	Works Area W1 at Siu Ho Wan	9	7	302	6.21	F	F	No significant defect observed 未有察覺明顯缺陷	Nil
T013	Acacia Confusa	臺灣相思	Works Area W1 at Siu Ho Wan	8	5	153	6.21	F	F	No significant defect observed 未有察覺明顯缺陷	Nil



# Taken over by MTRC

T2013	Aleurites moluccana	石栗	Police Officer's Club	7	5	414	5.38	G	G	Taken over by MTRC 轉由MTRC負責	Nil
T2014	Aleurites moluccana	石栗	Police Officer's Club	8	4.5	481	5.48	G	G	Taken over by MTRC 轉由MTRC負責	Nil

Appendix F

Location Plan of Transplanted Trees in Holding Nursery and Transplanted Trees in Holding Nursery – Report of Dead Trees T1906 and T1907



#### Tree Survey Schedule of Transplanted Trees at Holding Nursery

(for August 2016)

(IO) August 2010)													
				Size (m)	Size (m)		Form	Health	Date of	Date of	* Date of Transplant	Area of	
Tree No.	Botanical Name	Chinese Name	Height (m)	Crown Spread (m)	DBH (mm)	Condition ( Good / Fair / Poor / Dead )	(G/F/P	(G/F/P )	Transplant to Tai Po Lam Tsuen	Re-Transplant to Lau Fau Shan	by Contractor (HY/2009/18)	Land Occupied	Remarks
T1900	Ficus virens	大葉榕,黃葛樹	8	10.0	300	Fair	F	F	21/2/2011	16/1/2013	2/2/2016	21 m²	T1900 had been handed over to Contract HY/2009/18 temporary holding nursery near Yoho Town by end of August 2016.
T1902	Ficus benjamina	重築榕	8	10.0	370	Fair	F	F	22/2/2011	16/1/2013	25/1/2016	24 m²	T1902 had been handed over to Contract HY/2008/18 temporary holding nursery near Yoho Town by end of August 2016.
T1903	Ficus benjamina	垂葉榕	11	10.0	360	Fair	F	F	22/2/2011	16/1/2013	25/1/2016	21 m²	T1903 had been handed over to Contract HY/2008/18 temporary holding nursery near Yoho Town by end of August 2016
T1904	Ficus benjamina	垂葉榕	11	8.0	385	Fair	F	F	21/2/2011	16/1/2013	29/1/2016	21 m²	T1904 had been handed over to Contract HY/2009/18 temporary holding nursery near Yoho Town by end of August 2016.
T1905	Macaranga tanarius	血桐	7	5.0	330	Fair	F	F	Nil	26/2/2016	24/8/2016	24 m²	Refer to CCW/CSF/LDS/007627, it had been replaced by contractor on Dec 2015. Compensation tree planting at the end of Feb 2016. 11907 and been handed over to Contract 11907 Been planting on Justiney near Yoho Town by end of Aliguet 2016
T1906	Celtis sinensis	朴樹	8.5	6.0	380	Fair	F	F	21/2/2011	16/1/2013	25/1/2016	24 m²	Refer to CCW/CSF/LDS002073, it had been replaced by contractor on Feb 2015. Replacement by heavy standard size on Feb 2015. 11906 had been handed over to Contract HY/2008/18 temporary holding nursery near Yoho Town by end of August 2016
T1907	Ficus variegata	青果榕	8	4.0	190	Fair	F	F	18/2/2011	16/1/2013	25/1/2016	21 m²	Refer to CCW/CSF/LDS/002073, it had been replaced by contractor on Dec 2015. Compensation tree planting at the end of Feb 2016. In the Property of the Property of the Property of the Property Online Propert
T1908	Albizia lebbeck	大葉合歡	8.5	7.0	280	Fair	F	F	18/2/2011	16/1/2013	25/1/2016	21 m²	T1908 had been handed over to Contract HY/2008/18 temporary holding nursery near Yoho Town by end of August 2016
T1909	Bombax ceiba	木棉	4.5	0.0	170	Fair	F	F	Nii	26/2/2016	7/6/2016	21 m²	Refer to CCW/CSF/LDS/007627, it had been replaced by contractor on Dec 2015. Compensation tree planting at the end of Feb 2016. The Property of the Property o
T1910	Ficus virens	大葉榕,黃葛樹	6	5.0	600	Fair	F	F	23/2/2011	16/1/2013	26/1/2016	24 m²	T1910 had been handed over to Contract HY/200818 temporary holding nursery near Yoho Town by end of August 2016
T1911	Albizia lebbeck	大葉合歡	2.5	5.0	130	Fair	F	F	18/2/2011	16/1/2013	28/1/2016	10 m²	T1911 had been handed over to Contract HY/2009/18 temporary holding nursery near Yoho Town by end of August 2016.
T1912	Ficus benjamina	垂葉榕	3.5	4.0	170	Fair	F	F	18/2/2011	16/1/2013	26/1/2016	10 m²	T1912 had been handed over to Contract HY/2009/18 temporary holding nursery near Yoho Town by end of August 2016.
T2015	Ficus microcarpa	榕樹,細葉榕	3.5	7.0	212	Fair	F	F	23/2/2011	16/1/2013	28/1/2016	30 m²	T2015 had been handed over to Contract HY/2009/18 temporary holding nursery near Yoho Town by end of August 2016.

Total area of land occupied by the trees : 293 m²

<sup>\*</sup> Remark: All transplanted trees under contract HY/2009/15, thirteen in total had been handed over to contract HY/2009/18 by end of August 2016



# Location Plan of Transplanted Tree (HY/2009/18)

TEL: (852) 2572-0048 FAX: (822)2573-9099 E-mail: info@melofield.com

#### Melofield's Holding Nursery near YOHO Town

## Tree Assessment Plan





# HY/2009/15: Central – Wan Chai Bypass-Tunnel (Causeway Bay Typhoon Shelter Section)

	Contractor's		0.0
то: The Engineer'	s Representativ	re – Attn: I	Mr Peter Poon
Title of Submission: Tra	nsplanted Trees in F port of Dead Trees T		
Submission Ref. No.:	CCW/CSF	/LDS/00	2073
Description of Contents:	(for materials submiss	sions, use Ma	terial Submission Form)
Please refer to attack	nment	□ s	See Below
Specification/Drawing R	eference (if applicab	le):	
We refer to your corresp concerning the dead trees			30/940/15B004797 dated 3 January 2012 ursery.
Pursuant to PS Clause 3 perusal.	3.101(3), we submit h	nerewith a re	port for the aforesaid dead trees for your
Purpose of Submission:  For Approval	For Inf	ormation	☐ For Record Purposes
From: Contractor's Repr	esentative		
Name:	Signature:		Date Response required by:
David Lau	mel de	,	N/A
Date: 17/01/2012	-7		

Prepared by: DL/RC/GO'Se cc: MasterFile/QA/

eSIEe	Report of Damages to the Plant i	n Holdi	ng Nu	ırsery
Central-W Shelter Se	an Chai Bypass - Tunnel (Causeway Bay Typhoon ection)	Contract HY/2009/15	MS	Revision :
Tree Mark:	T1906 and T1907			

#### 1. Report of Damages

Pursuant to PS Clause 3.101(3)(b), we report that the trees T1906 and T1907, transplanted from Portion IV of the Site to the temporary holding nursery in Yuen Long, were both identified dead during our routine inspection for the month in November 2011. The photographical records are appended in Annex A.

#### 2. Reason of Damages

After thorough investigation, the reasons that the trees die are as follow:

- 1. The trees grew near the seaside of the rocky embankment of the East Breakwater before they were transplanted. During the transplanting works in early 2011, concrete and rock breaking around their root balls could not be avoided. During the process, we also found that the root balls were not intact attached with soil and hence no pruning works were done for the transplanting. After transplanted to the holding nursery, they intended to grow unhealthily and became week gradually and died as a consequence.
- Referring to the Tree Survey Report submitted under cover of Contractor's Submission ref CCW/CSF/LDS/000037B dated 23 December 2010, our landscape specialist had already highlighted the following:
  - (a) For tree No. T1906, the root system distorted due to confined growing space between rock. Preparation of root ball was unfeasible for survival of transplanting.
  - (b) For tree No. T1907, the root system distorted due to rock and limited root system coverage for stability.

#### 3. Remedial Measure

There were pre-existed conditions that the trees T1906 and T1907 were not suitable for being transplanted that we had pointed out before the execution of such works. Nevertheless, we have made our best endeavors to maintain the trees in healthy conditions during the whole process of the transplanting and in the holding nursery as required under the Contract. Therefore, under such circumstances, it is considered that we are not responsible for remedial works or replacement for the dead trees.

-SCE-	Report of Damages to the Plant i	n Holdi	ng Nı	ursery
Central-W Shelter Se	an Chai Bypass - Tunnel (Causeway Bay Typhoon ection)	Contract HY/2009/15	MS	Revision:
Tree Mark:	T1906 and T1907			

#### Annex A

Record Photos of Dead Trees T1906 and T1907



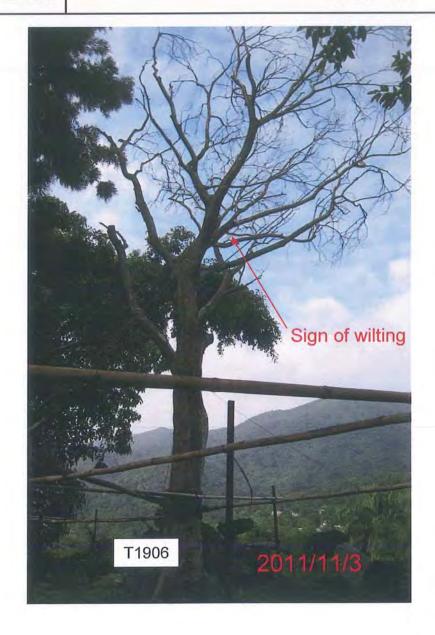
Central-Wan Chai Bypass - Tunnel (Causeway Bay Typhoon Shelter Section)

Contract HY/2009/15

MS Revis

Α

Tree Mark:





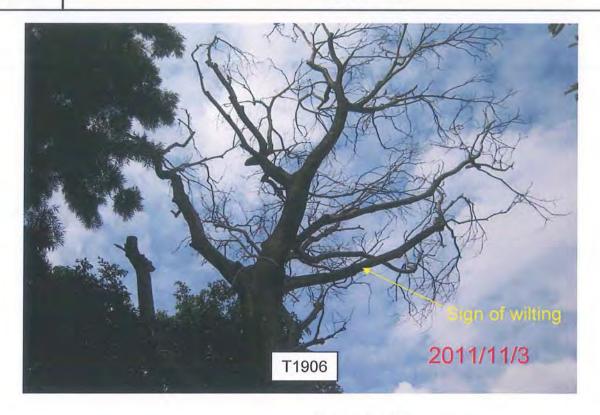
Central-Wan Chai Bypass - Tunnel (Causeway Bay Typhoon Shelter Section)

Contract HY/2009/15

MS Revision:

A

Tree Mark:



Sign of wilting



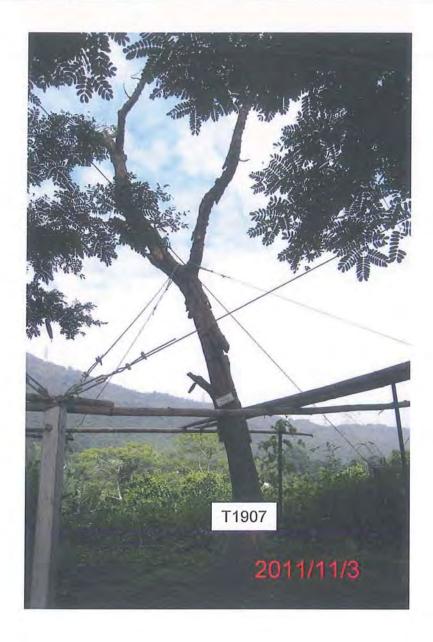
Central-Wan Chai Bypass - Tunnel (Causeway Bay Typhoon Shelter Section)

Contract HY/2009/15

MS Revision

A

Tree Mark:





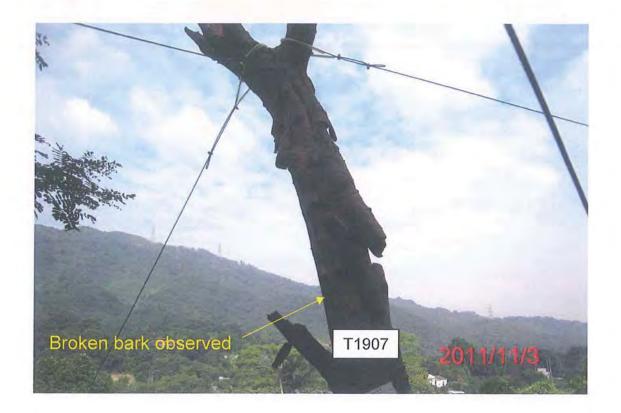
Central-Wan Chai Bypass - Tunnel (Causeway Bay Typhoon Shelter Section)

Contract HY/2009/15

MS Revision:

A

Tree Mark:



Appendix G
Report of Tree Preservation and
Protection Plan with Photos of
Retained Trees



### 中國連禁工程(香港)有限公司

Contract No. HY/2009/15 Central - Wan Chai Bypass – Tunnel CHINA STATE CONSTRUCTION ENGINEERING (HONG KONG) LTD. (Causeway Bay Typhoon Shelter Section)

			- Journal Pay . Jb	Thous Sheller Section
C	ONTRACTO	R'S SUBMIS	SION FORI	M
To : The Engineer's	s Representative n	9		
CSF Ref. No.:	CCW / 2002 / C	SF / LDS / ALL /	008594	
	Old CSF ref. no. (if AECOM ref. no. (if	applicable) :		
Title of Submission:	Plan	eport No.41 of the	Tree Preservati	ion and Protection
Description of Conten	ts:			
Please refer to atta	chment	See Be	elow	Sec.
Specification/Drawing	Reference (if app	licable):		
We are pleased to submit plan for your perusal.	it herewith the bi-m	nonthly report no.41	1 of the tree prese	ervation and protection
Encl.				
Purpose of Submission	1:		7	
☐ For Approval	☐ Fo	r Information	For Re	ecord Purposes
From: Contractor's Rep	resentative			
Name : Chris Leung ຖຸຖີ.	3		Date Respons	se required by:
Signature: Patra	alto			
Date : 18/09/2017				

Prepared by: DC/GL cc: MasterFile / QA /



# **Tree Preservation and Protection Plan**

# Bi-Monthly Report No. 41

(For the Month of September 2017)

Endorsed b

David Bloxham

Senior Landscape Architect

**China State Construction** 

Engineering(Hong Kong)Ltd.

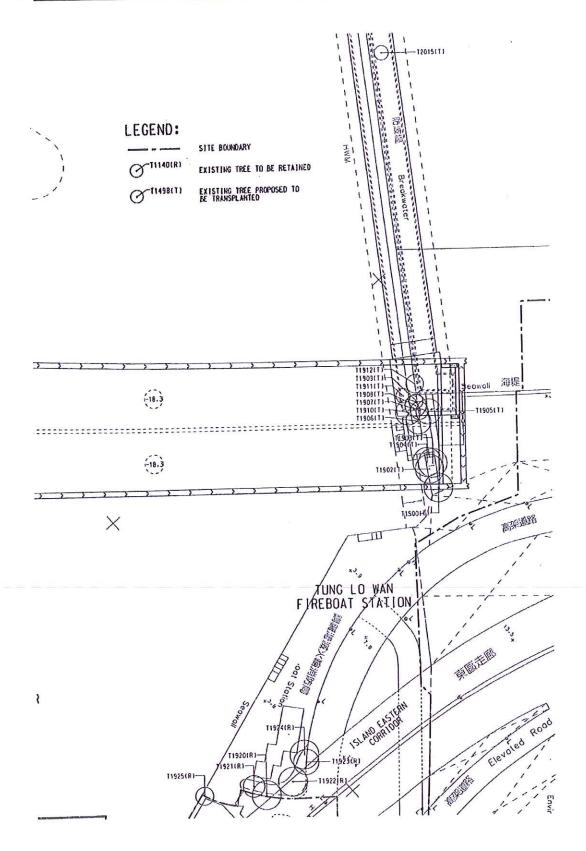


#### Contents -

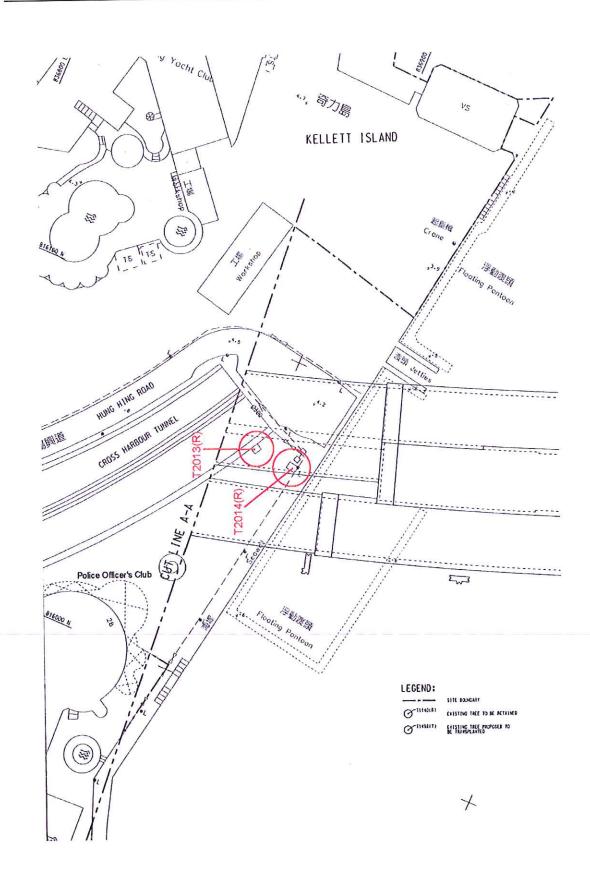
- 1. Location plans showing the preserved trees
- 2. Tree Schedule
- 3. Photographic Records of the Preserved Trees



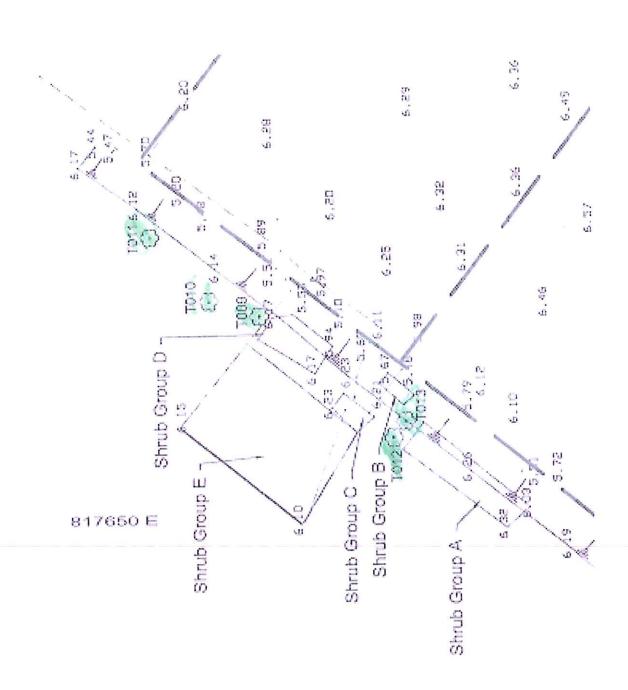
## 1. Location Plans showing the Preserved Trees



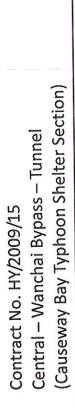












# Tree Schedule

		Mitgation Measures	NII.	IIV.	Nil	IIN.	Nii	Nii	Nil	Nil	Nil	Nil	Nil	Ni.	Nil
		Tree Condition	No significant defect observed 未有察觉明顯缺陷		No significant defect observed 未有察覺明顯缺陷	No significant defect observed 未有察僚明顯缺陷	No significant defect observed 未有察營明顯缺陷	No significant defect observed 未有察覺明顯缺陷	Taken over by MTRC 轉由MTRC 負責	Taken over by MTRC 轉由MTRC 負責	No significant defect observed 未有察覺明顯缺陷	No significant defect observed 未有察覺明顯缺陷	No significant defect observed 未有察學明顯缺陷	No significant defect observed 未有察學明顯缺陷	No significant defect observed 未有察覺明顯缺陷
		(G/F/P)	ш	Щ	ш	Щ	Ш	۵	უ	ტ	ш	ш	ш	ш	LL.
	,	Form (G/F/P)	ပ	ტ	۵	ш	டட		ტ	9	ш	ш	ш	ш	ш
	Ground	Level (mPD)	4.8	4.4	4.74	4.84	4.77	3.7	5.38	5.48	6.17	6.14	6.12	6.21	6.21
		Girth (mm)	760	330	360	420	360	270	414	481	100	115	92	302	153
č	Size	Crown Spread (m)	7	7	9	7	7	5	22	4.5	т	ഹ	က	7	2
		Height (m)	10	80	6	o o	∞	ø	7	æ	4	2	4	თ	∞
		Location	At Portion 7	At Portion 7	At Portion 7	At Portion 7	At Portion 7	At Portion 7	Police Officer's Club	Police Officer's Club	Works Area W1 at Siu Ho Wan	Works Area W1 at Siu Ho Wan	Works Area W1	Works Area W1 at Siu Ho Wan	Works Area W1 at Siu Ho Wan
		Chinese Name	大葉榕,黃葛樹	иЖ	大葉榕,黃葛樹	榕樹, 細葉榕	燃	大葉榕,黃葛樹	石票	石票	楓香	臺灣相思	楓香	臺灣相思	臺灣相思
		Botanical Name	Ficus virens	Morus alba	Ficus virens	Ficus microcarpa	Morus alba	Ficus virens	Aleurites	Aleurites	Liquidamber	Acacia Confusa	Liquidamber	Acacia Confusa	Acacia Confusa
		Tree No.	T1920	T1921	T1922	T1923	T1924	T1925	T2013	T2014	T009	T010	T011	T012	T013

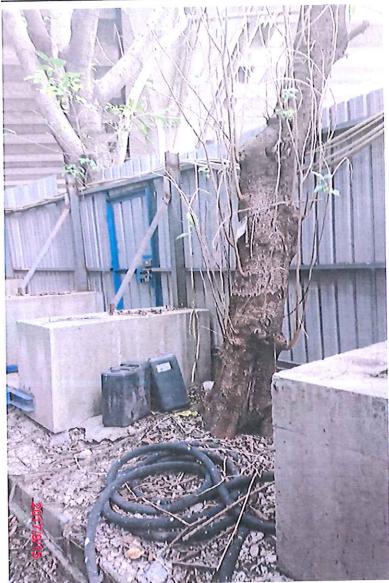


## 3. Photographic Records of the Preserved Trees

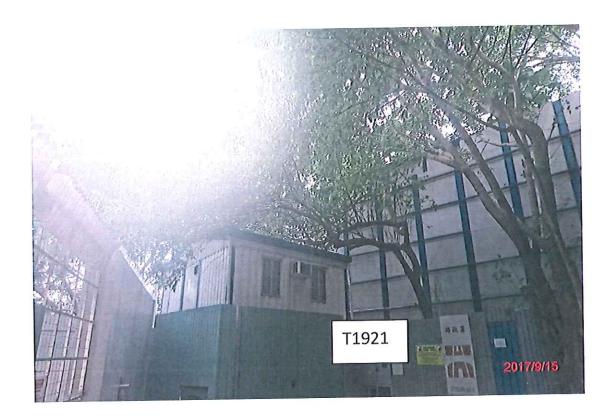




#### T1921 - Morus alba 桑









T1922 - Ficus virens 大葉榕, 黃葛樹









T1924 - Morus alba 桑

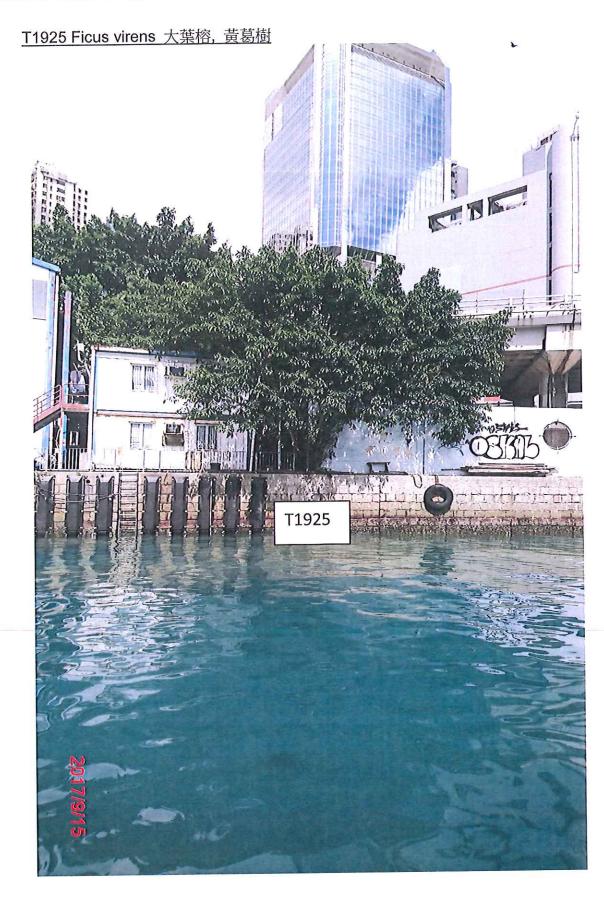




T1923 - Ficus microcarpa 榕樹, 細葉榕

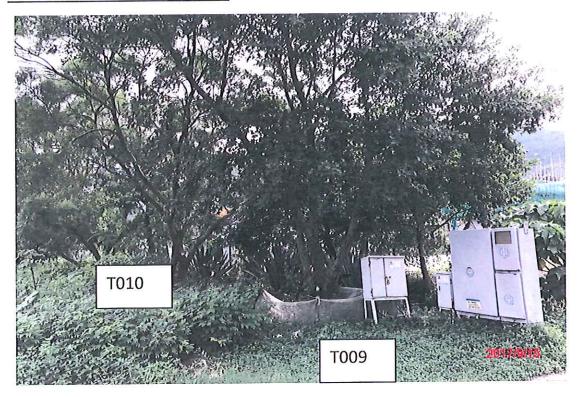






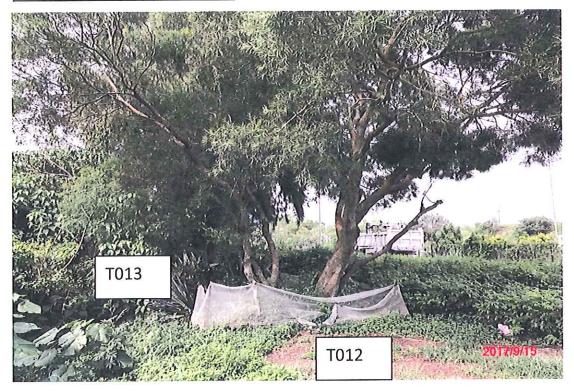


#### T009 Liquidamber Formosana 楓香 T010 Acacia Confusa 臺灣相思



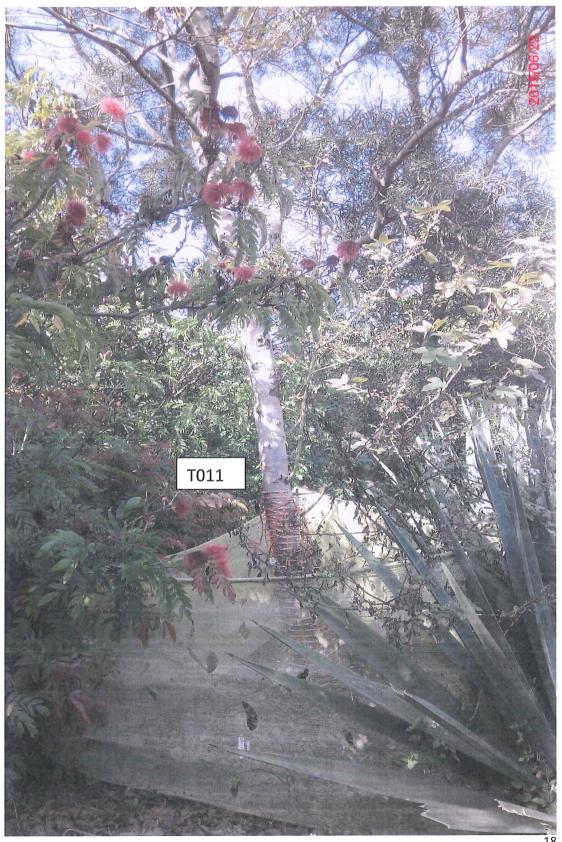


T012 Acacia Confusa 臺灣相思 T013 Acacia Confusa 臺灣相思





### T011 Liquidamber Formosana 楓香



Appendix H
Transplanted Trees Inspection Record
with Photos of Transplanted Trees



# **Transplanted Trees Inspection Record**

For the Month of August 2016



## Content

- 1. Tree Survey Schedule of Transplanted Trees at Holding Nursery
- 2. Photographic Records



#### 1. Tree Survey Schedule of Transplanted Trees at Holding Nursery

#### (for August 2016)

			Size (m)				Form	Health Date of			Date of		
Tree No.	Botanical Name	Chinese Name	Height (m)	Crown Spread (m)	DBH (mm)	Health Condition ( Good / Fair / Poor / Dead )	(G/F/P )	(G/F/P )	Transplant to Tai Po Lam Tsuen	Date of Re-Transplant to Lau Fau Shan	Transplant by Contractor (HY/2009/18)	Area of Land Occupied	Remarks
T1900	Ficus virens	大葉榕,黃葛樹	8	10.0	300	Fair	F	F	21/2/2011	16/1/2013	2/2/2016	21 m²	
T1902	Ficus benjamina	垂葉榕	8	10.0	370	-			22/2/2011	16/1/2013	25/1/2016	24 m²	It had been replaced by contractor on Feb 2015 due to decay in woung. Replacement by heavy standard size on Feb 2015
T1903	Ficus benjamina	垂葉榕	11	10.0	360	-			22/2/2011	16/1/2013	25/1/2016	21 m²	It had been replaced by contractor on Feb 2015 due to decay in woung. Replacement by heavy standard size on Feb 2015
T1904	Ficus benjamina	垂葉榕	11	8.0	385	Fair	F	F	21/2/2011	16/1/2013	29/1/2016	21 m²	
T1905	Macaranga tanarius	血桐	7	5.0	330	-			Nil	26/2/2016	24/8/2016		Termite attack and removal before tree transplanting. Refer to letter bar code 15A000937. Compensation tree planting at the end of Feb 2016. Rejected on May 2016 due to poor condition. Replacement tree on June 2016 but rejected due to poor health condition. Replacement by heavy standard size on July 2016.
T1906	Celtis sinensis	朴樹	8.5	6.0	380	-			21/2/2011	16/1/2013	25/1/2016	24 m²	Refer to CCW/CSF/LDS002073, it had been replaced by contractor on Feb 2015. Replacement by heavy standard size on Feb 2015
T1907	Ficus variegata	青果榕	8	4.0	190	-			18/2/2011	16/1/2013	25/1/2016	21 m²	Refer to CCW/CSF/LDS/002073, it had been replaced by contractor on Dec 2015. Compensation tree plantin at the end of Feb 2016
T1908	Albizia lebbeck	大葉合歡	8.5	7.0	280	-			18/2/2011	16/1/2013	25/1/2016	21 m²	It had been replaced by contractor on Dec 2015 du to decay in woung and seropus tree bark damage Replacement by heavy standard size on Dec 2015
T1909	Bombax ceiba	木棉	4.5	0.0	170	-			Nil	26/2/2016	7/6/2016		Dead before site possession. It was felled by Contractor on 23/01/2011. Compensation tree plantin at the end of Feb 2016
T1910	Ficus virens	大葉榕,黃葛樹	6	5.0	600	-			23/2/2011	16/1/2013	26/1/2016	24 m²	It had been replaced by contractor on Dec 2015 du to decay in woung and seropus tree bark damage Replacement by heavy standard size on Dec 2015
T1911	Albizia lebbeck	大葉合歡	2.5	5.0	130	Fair	F	F	18/2/2011	16/1/2013	28/1/2016	10 m²	
T1912	Ficus benjamina	垂葉榕	3.5	4.0	170	Fair	F	F	18/2/2011	16/1/2013	26/1/2016	10 m²	
T2015	Ficus microcarpa	榕樹,細葉榕	3.5	7.0	212	Fair	F	F	23/2/2011	16/1/2013	28/1/2016	30 m²	



## 2. Photographic Records

### **General View of the Holding Nursery**







































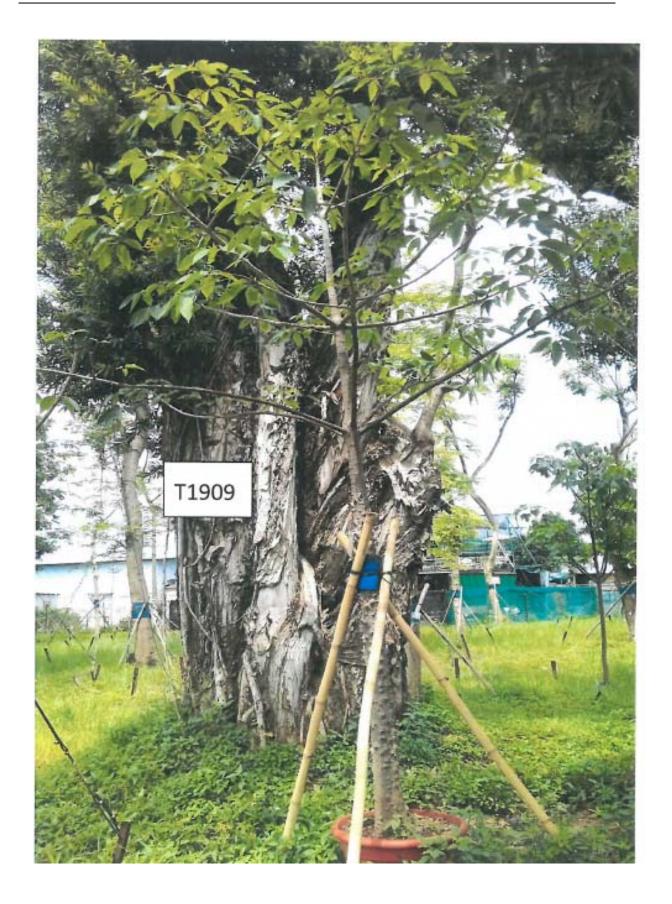








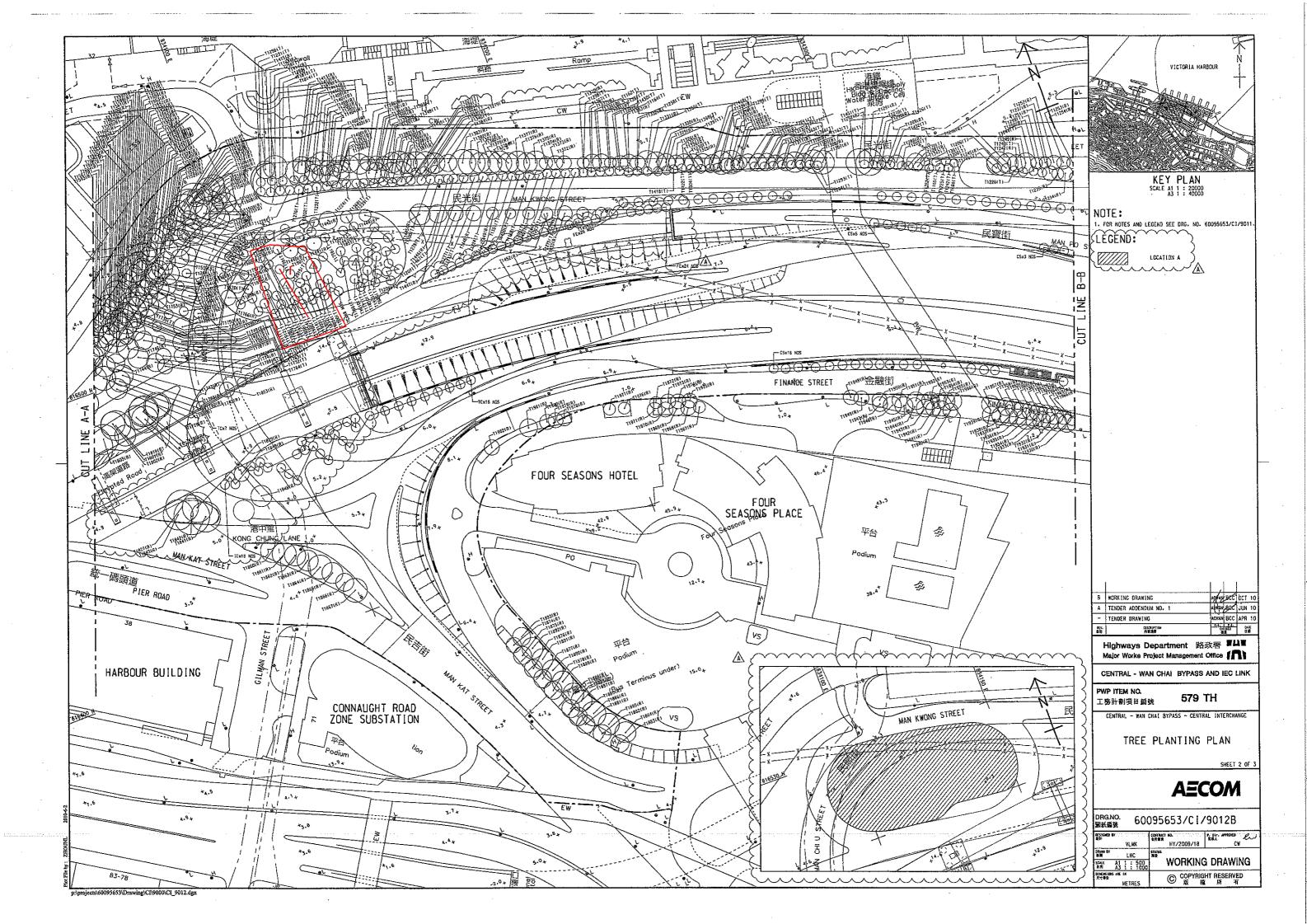




Appendix I

**Permanent Location of Compensatory** 

**Trees** 



Appendix J

Tree Survey Report (Reviewing of Existing Trees Proposed to be Felled at Portions 4 and 22)

**AECOM** 8/F, Grand Central Plaza, Tower 2, 138 Shatin Rural Committee Road. Shatin, Hong Kong 香港新界沙田鄉事會路 138 號 新城市中央廣場第2座8樓 www.aecom.com

+852 2605 6262 tel +852 2691 2649 fax



1 DEC 2010 30/940

Your Ref. :

Our Ref. : CWB/(HY/2009/15)/C30/940/15B000278

1 December 2010

Lands Department Lands Administration Office District Lands Office, Hong Kong East 19th floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong

Attn.: Mr. Brian M. H. Au Yeung

Dear Sir,

Contract No. HY/2009/15 Central-Wan Chai Bypass - Tunnel (Causeway Bay Typhoon Shelter Section)

Submission of Tree Survey Report - Review of Existing Trees Proposed to be Felled at Portions IV and XXII

I am pleased to submit herewith a Tree Survey Report enclosing a thorough condition review of 13 nos. of existing trees, located along the existing eastern breakwater of the Causeway Bay Typhoon Shelter, that need to be transplanted under the above Contract for your perusal and consideration.

Based on a survey carried out recently by my Contractor, China State Construction Engineering Ltd., the report reveals that 11 of the trees will have a very slim chance of survival after transplanting owing to their existing growing condition such as, the root system in rock with sloping topography making root ball preparation difficult which will severally inhibit the trees chances of withstanding the stress of transplanting or in some cases where the existing trees grow at an angle that will have a distorted root structure making them unable to be located upright in any new-level ground location, whilst the remaining 2 nos. of trees are found dead.

In light of the report findings, I am in support of my Contractor's recommendation to fell the 13 nos. of existing trees with compensatory planting as outlined in the report and would be most grateful to your approval of my Contractor's proposal. For ease of reference, Section 5 of the enclosed report presents the proposed compensatory tree planting for the tree felling.

Should you have any queries on this submission, please feel free to contact the undersigned or my Resident Engineer, Ms Fanny Lau, at 6463 3080.

Yours faithfully,

For and on behalf of

AECOM Asia Co. Ltd.

Denis Norton

Senior Resident Engineer

See distribution list

Encl.

C.C. CE3/MW, HyD Attn.: Mr. Kelvin Lo

(W/o)

**AECOM** 

Attn.: Mr. Conrad Ng.

(w/o)



#### **Distribution List**

 Leisure and Cultural Services Department 9/F, Lockhart Road Complex, 225 Hennessy Road, Wanchai, Hong Kong

Attn.: Mr. Hoo Lam

(By hand) (w/e)

2. Home Affairs Department
Eastern District Office
Causeway Bay Liaison Team
1/F, 7 Fook Yum Road,
Causeway Bay,
Hong Kong

Attn.: Ms. Grace Chan

(By hand) (w/e)

Agriculture, Fisheries and Conservation Department
 7/F, Cheung Sha Wan Government Offices
 303 Cheung Sha Wan Road
 Kowloon, Hong Kong

Attn.: Dr. K. H. Cheung

(By hand) (w/e)



# Tree Survey Report

Review of Existing Trees Proposed to be Felled at Portion 4 and 22

Date: 26 November 2010

Prepared by:

David Bloxham Dip La BA (Hons) MLI (UK Chartered) China State Construction Engineering Ltd Senior Landscape Architect.



#### Contents -

- Tree survey schedule
- 2. Location plan of existing trees
- 3. Existing tree photographs
  - 4. Previous experience of successful & practical Tree Transplanting (For reference only)
- Tree survey report on the unfeasibility of successful Transplanting of the identified trees

# 1. Tree Survey Schedule

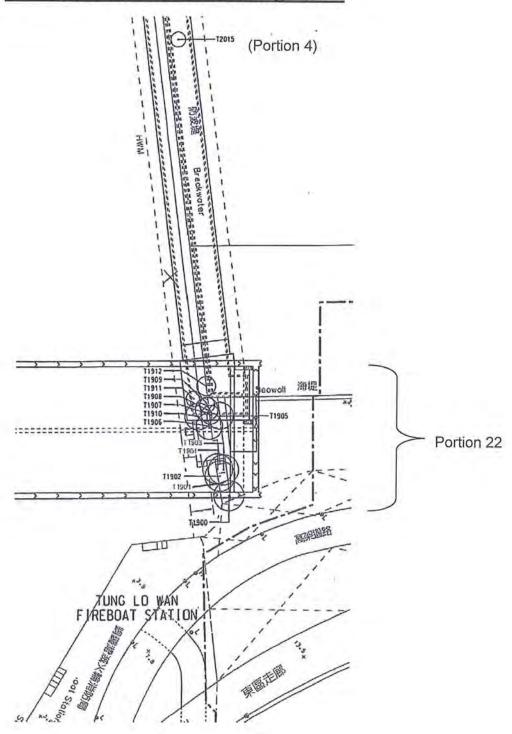
Site Tree survey - November 2010 (Read in conjunction with photographic record and attached location plan)



Tree No.	Botanical Name	Chinese Name	Location	Size (m)			Form	Health	Amenity	Transplanting	A STATE OF	
				Height (m)	Crown Spread (m)	Girth (mm)	(G/F/P)	(G/F/P)	Value (H/M/L)	Survival Rate (H/M/L)	CSCE Recommendation	Remarks
T1900	Ficus virens	大葉榕, 黃葛樹	At Portion 22	8	10	300	F	F	T.	1		4 9 9 9
T1901	Ficus benjamina	垂葉榕	At Portion 22	7	8	382			-		Fell	Refer to site report
T1902	Ficus benjamina	垂葉榕	At Portion 22	8	10	370	F	F			Fell	Dead Tree
T1903	Ficus benjamina	垂葉榕	At Portion 22	11	10	360	F		L	2	Fell	Refer to site report
T1904	Ficus benjamina	垂葉榕	At Portion 22	11		1015		F	L	L	Fell	Refer to site report
T1905	Macaranga tanarius	血桐	1 7 7 7 7 7 7 7 7		8	385	F	F	.M.	L	Fell	Refer to site report
T1906	4		At Portion 22	7	5	330	Р	F	L	L	Fell	Crown branches have beer damaged by other works
I Market	Celtis sinensis	朴樹	At Portion 22	8.5	6	380	F	F	М	L	Fell	Refer to site report
T1907	Ficus variegata	青果榕	At Portion 22	8	4	190	F	F	L	L	Fell	Refer to site report
T1908	Albizia lebbeck	大葉合歡	At Portion 22	8.5	7	280	F	F	L	L	70.07	Refer to site report
T1909	Bombax ceiba	木棉	At Portion 22	4.5	0	170					10000	Dead Tree
T1910	Ficus virens	大葉榕, 黃葛樹	At Portion 22	6	5	600	F	F	1	1	1000	No. of the last of
T1911	Albizia lebbeck	大葉合歡	At Portion 22	2.5	5	130	р	F	0	-	Fell	Refer to site report
T1912	Ficus benjamina	垂葉榕	At Portion 22	3.5	4	170	P		L	1		Refer to site report
T2015	Ficus microcarpa	榕樹,細葉榕	At Portion 4	3.5	7		-	F	L	4	Fell	Refer to site report
		[[그라이 : 에니기드][[	7 it i ortion 4	3,3	1	212	F	F	L	L	Fell	Refer to site report



# 2. Location Plan of Existing Trees





### 3. Existing Tree Photographs

(a) Tree no. T1900 - Ficus virens 大葉榕,黃葛樹







Root system distorted due to confined growing space between rock. Preparation of rootball is unfeasible for survival of transplanting



#### (b) Tree no. T1901 - Ficus benjamina 垂葉榕

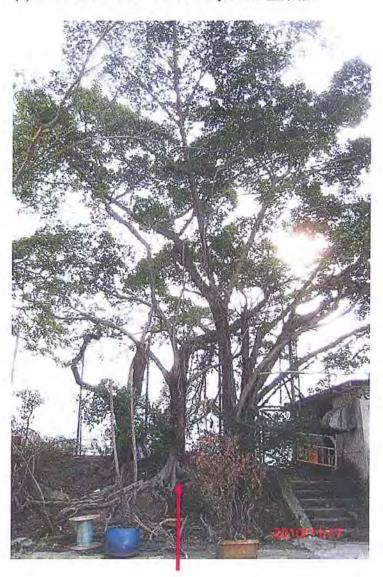


Dead tree

. .



### (c) Tree no. T1902 - Ficus benjamina 垂葉榕



Contract No. HY/2009/15 Central – Wanchai Bypass - Tunnel (Causeway Bay Typhoon Shelter Section)







T1902





Rootball locates on large boulder at slope and clashing with adjacent roots of trees. Preparation would drastically affect rootball and structural stability



### (d) Tree no. T1903 - Ficus benjamina 垂葉榕









Growing on slope area

Root system distorted due to confined growing space between rock. Preparation of rootball is unfeasible for survival of transplanting.



### (e) Tree no. T1904 - Ficus benjamina 垂葉榕





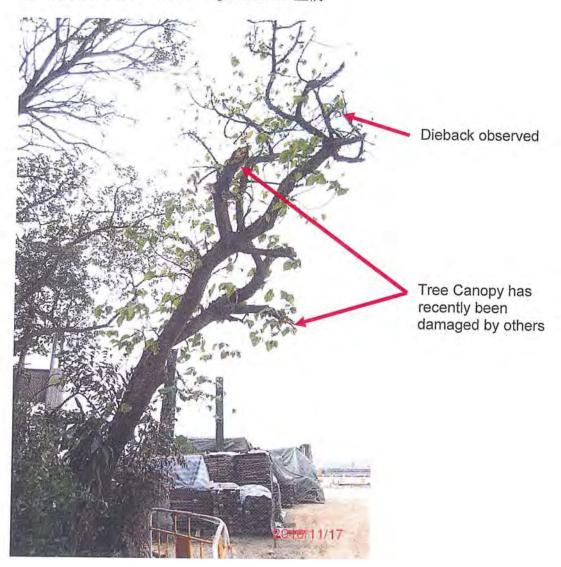




Rootball locates on large boulder at slope and clashes with adjacent roots of trees. Preparation would drastically affect rootball and structural stability



#### (f) Tree no. T1905 - Macaranga tanarius 血桐









# (g) Tree no. T1906 - Celtis sinensis 朴樹



Tree locates on uneven levels





Root system distorted due to confined growing space between rock. Preparation of rootball is unfeasible for survival of transplanting



### (h) Tree no. T1907 - Ficus variegate 青果榕







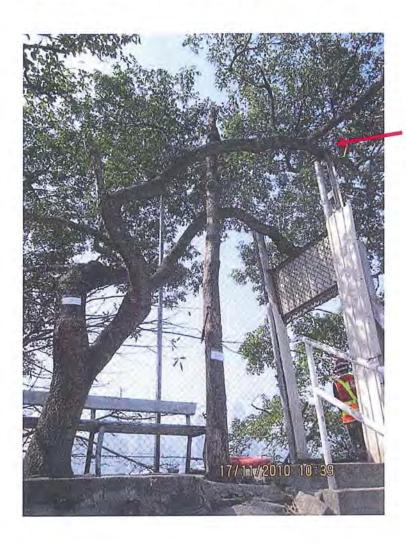
Root system distorted due to rock. Limited root system coverage for stability.



# (i) Tree no. T1908 - Albizia lebbeck 大葉合歡







Tree is leaning using adjacent steel as support for main canopy





Rootball locates in rocks. Limited area due to rock and adjacent slope profile. Root system distorted within ground profile.



## (j) Tree no. T1909 - Bombax ceiba 木棉





## (k) Tree no. T1910 - Ficus virens 大葉榕, 黃葛樹





Distored rootball grows in 45 degree rock slope



#### (I) Tree no. T1911 - Albizia lebbeck 大葉合歡



Leaning severely within existing rock slope



Rootball distorted due to growth in rock slope gradient



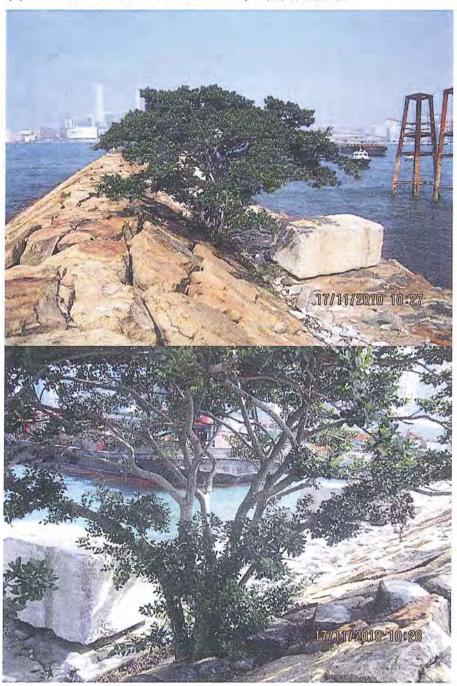
(m) Tree no. T1912 - Ficus benjamina 垂葉榕



Root system distorted due to confined growing space between rocks. Preparation of rootball is unfeasible for survival of transplanting.



#### (n) Tree no. T2015 - Ficus microcarpa 榕樹, 細葉榕



Root system has developed at a 45 degree slope elevation in rocks. Root system distorted due to confined growing space between rocks.



# 4. Previous Experience of Successful and Practical Tree Transplanting





Transplanting existing Ficus rumphii & Ficus macrophylla trees from Australia .Pennys Bay Infrastructure



Transplanting trees for Beijing 2008 Olympic Equestrian Event HK Jockey Club



Tree Transplanting works - Wideneing of Tolo Highway NT



#### 5. Tree Survey Report

Review of existing trees condition and trees proposed to be felled

#### Introduction

This report has been prepared as part of the works for the Central – Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section) under Highways Department Contract No.: HY/2009/15 at Causeway Bay, Hong Kong.

14 nos. existing trees are proposed to be felled. This tree survey report provides a review of their current up to date site condition as part of the requirements of the General Specification.

Following a site field survey, we have undertaken a detailed review to assess and evaluate the captioned trees and their suitability for transplanting looking at the potential risks for preparation methods to survive transplanting. We also review the timeline process for transplanting twice as stated in the specification.

#### Site and Situation

The existing trees are situated along a narrow strip of existing marine breakwater and an old dilapidated utility building at the eastern boundary of the Causeway Bay Typhoon Shelter in Victoria harbour. The majority of trees are grouped at one main location and a single tree is found towards the northern end of the Breakwater. The Breakwater consists of loose laid large rock boulders installed to form steep sloping sides (approx 45 degree) with a narrow flat profile section at the top of the slope.

There is no evidence of topsoil or that the trees were specifically planned to form part of the breakwater design. It would appear that if soil had been incorporated into the structure that the soil would have been subject to erosion over time due to its function.

The site is open, exposed and receives full sunshine and prevailing winds along the Victoria Harbour. It can be classed as an exposed open low caliber site that has some physical constraints for growth that is eminently conducive to robust tree performance.



#### Tree Species

The species identified on site are not rare and are commonly cultivated in Hong Kong and Southern China for botanical and landscape tree planting use. The following botanical species are found to be:

Albizia lebbeck 大葉合歡 (Tree no. T1908 and T1911)

Native of Africa and Asia that can commonly 15 – 20 meters in height with spreading canopy, stands up to wind moderately well and is tolerant to salt

Bombax ceiba 木棉 (Tree no. T 1909)

Common to India, Malaysia and South China region that can reach a height of 25 meters with a clear straight central trunk commonly seen on roadsides and flowering in Spring in the New Territories.

Celtis sinensis 朴樹 (Tree no. T1906)

Growing within Asia that is slow growing and can reach a height of 20 metres . it has a hardy nature that thrives in poor soil conditions and is frequently planted in Hong Kong roadside verges and parks.

Ficus benjamina 垂葉榕 (Tree no. T1901, T1902, T1903, T1904 and T1912)

Evergreen fig of medium to large size with a fine leaved canopy and smooth bark. Aerial roots develop in mature trees

Ficus microcarpa 榕樹, 細葉榕 (Tree no. T2015)

Large wide spreading evergreen tree with aerial roots. A popular native tree will grow in almost any site and can be found clinging to rocks, retaining walls and other unlikely locations.

• Ficus virens sublanceolata 大葉榕,黃葛樹 (Tree no. T1900 and T1910)

A native tree, slow growing but develops into a large 20 metre high tree requiring plenty of space to develop buttress root system and canopy.



Macaranga tanarius 血桐 (Tree no. T1905)

Common fast growing species, often self propagates in woodland planting and seashore in large thickets. Stands up in well in wind conditions

All the trees identified on site are not found to be of exceptional size for their species or of High Amenity Value. The age of trees are estimated between 10 to 30 years old. From their condition some of the trees are deformed due to growing in between large rocks on a slope exposed to the prevailing winds in the harbour. There are evidence of previous damage has occurred to some of the trees. There is little indication that the trees have undergone any arboricultural maintenance over the past 30 years or are currently having any ongoing reasonable maintenance. 2 nos. of trees are found dead and void of any canopy during initial inspection at handover of the site and Macaranga tanarius tree has previously suffered damage to its branches by other Contractor's works.

#### Existing growing conditions

Any transplanting operation will have significant impact on the health and welfare of a tree. When proposing any tree for transplanting, factors regarding the ground conditions and growing habit should be considered to assess the risk viability and survival rate of re-establishment after transplanting to a new location.

One of the fundamental risks during the process will be the loss of root system under any staged root cutting preparation for up rooting to a new site. The physical method of breaking rock to form an intact root ball for transportation will cause damage to the existing limited root system. Once bare roots are exposed they cause stress to the health of the tree. A tree should always be transplanted with an intact root ball of existing soil for any chance of survival.

The existing trees have a poor contorted root system that has primarily developed by attaching to the rocks and crevices within the breakwater with little access to develop in any significant topsoil growing medium. Roots have limited development to certain sides of the tree for their structural support for growing on a slope of rocks and boulders. Any root system will be unbalanced for a root ball preparation.

#### Feasibility assessment for successful Transplanting works

In estimating the feasibility for tree transplanting operations the following issues must be thoroughly investigated to identify the risks of tree survival rates:-



#### Form and Health of a Tree

If a tree has an unbalanced form and poor growth it is unlikely to withstand the stress of transplanting. Subsequently following crown thinning works as part of the preparation will further reduce the amenity visual value of the tree

#### Root Extent

A tree growing on rocky ground surrounded by large boulders is going to have a distorted root system seriously reducing the physical preparation of preparing a large root ball for transplanting.

#### Root ball preparation

Existing site topography needs to be considered, a tree growing in a sloping ground will be unable to be located in an upright position at its final receptor due to its original distorted root formation. Relocating a tree onto a new slope is a potential tree safety hazard to public due to period required for successful new root regeneration for structural stability. Changing the growing form of a tree will cause stress on the trees overall health.

#### Conclusion

Based on the existing onsite growing conditions, it is not feasible to transplant the trees successfully because of the root system growth in rock with sloping topography. There will be substantial loss of an already distorted root system. This will inhibit the trees chances to withstand the stress of transplanting.

Any preparation to break out rocks and boulders to form a root ball box will severely affect the trees structural integrity since the trees are located in little or no existing soil. The trees are required to be transplanted more than once. Leaving such trees containerized as root balls in any holding nursery to comply with the programme would also reduce their chance of survival. We therefore have little confidence that the trees can be handed over to another Contract in good condition.

Existing trees growing at an angle will have a distorted root structure making them unable to be located upright in any new level-ground location. Semi-mature trees if transplanted into sloping ground would also pose a long term safety hazard as they will be unbalanced, lacking in root support and liable to fall in inclement weather conditions.



Based on the evidence collected from the joint site investigation and professional analysis, there is little confidence on the success of transplanting the trees located on the existing Breakwater, we would therefore advise and seek the Engineer's approval to obtain the relevant permission to fell the said trees and procure a quantity of new trees from a Nursery to the Engineer's requirement as a compensation tree planting proposal as part of the works.

#### Compensatory Tree Planting for Tree felling

Subject to approval of tree removal by felling, compensatory planting shall be provided in accordance with the requirements of WBTC 3/2006. This being of a ratio not less than 1:1 in terms of the total numbers of aggregated girth size of compensatory trees shall not be less than that of trees felled.

Compensatory trees = 3707mm ÷ 100mm dbh = <u>37 nos. Heavy Standard Trees</u> based on proposed 12 nos. existing growing trees to be felled based on compensation ratio requirement.

The proposed compensatory trees shall be of minimum Heavy Standard size with girth diameter of 100mm. Actual species shall be confirmed and agreed with Engineer / HyD.

AECOM Asia Co., Ltd.

HY/2009/15 Central Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter section)

#### Report of Serious Incidents of Fallen Tree

1. Location of the Incident: At Portion 22

2. Tree No.: T1905

3. Species of Trees: Macaranga tanarius 血桐

4. Size of Trees: Height 7m, Crown Spread 5m, DBH 330mm

5. Status: Transplant

6. Date and Time (incident occurred): 24/1/2011, 15:00

7. Nature and Brief Account of the Incident:

i. Termite attack

ii. Less than 20% of sound wood (xylem) remains.(Refer to appendix A)

8. Follow-up Actions being taken:

i. Removed the infected tree

ii. Used the registered pesticide to prevent further infection to other trees. (Refer to appendix B)

iii. Inspection the other trees to check whether the invasion of termites.

#### 9. Relevant Background Information: recently photos for T1905

Photo taken on 18 Oct 2010





## Photo taken on 11 Nov 2010



Photo taken on 10 Dec 2010





Submitted By: Ken Tin (RFOI)

27/1/2011

Landscape Team

Photo taken on 25 Jan 2011

Tree No. T1905





Appendix K
Handover Record



Your ref

: CCW/2002/L/CA1/ALL/ 006142

Date

Our ref

: 26 October 2015

**Principal Resident Engineer** 

AECOM Asia Company Ltd., 8/F., Grand Central Plaza, Tower 2, 138 Shatin Rural Committee Road, Sha Tin, New Territories, Hong Kong

**Attn: Mr. Peter Poon** 

Dear Sir,

Contract No. HY/2009/15

Central – Wan Chai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section) Existing Trees No. T2013 & T2014 Located at Hong Kong Police Officers' Club

With reference to the captioned subject, we would like to record that the Police Officers' Club (POC) site was taken over by Contractor for the MTRC Shatin to Central Link (SCL) Contract 1128 on 03 August 2015. Therefore, we should no longer liable to preserve and protect the existing trees no. T2013 & T2014.

Should you have any query, please feel free to contact us.

Yours faithfully, For and on behalf of

China State Construction Engineering (Hong Kong) Limited

Andrew Wong

Contractor's Representative

AW/AM

香港軒尼詩道一三九號中國海外大厦二十九樓 29/F, China Overseas Building, 139 Hennessy Road, Hong Kong. 電話Tel: (852)2823 7888 傳真Fax: (852)2527 6782

網址: http://www.csci.com.hk

By Hand



AECOM 8/F, Grand Central Plaza, Tower 2, 138 Shatin Rural Committee Road, Shatin, Hong Kong 香港新界沙田鄉事會路 138 號 新城市中央廣場第 2 座 8 樓 www.aecom.com

Engineer's Representative's Office 25 Hung Hing Road, Causeway Bay, Hong Kong 香港銅鑼灣鴻興道 25 號 +852 3912 3000 tel +852 3912 3010 fax

08B011029

-8 NOV 2017

Your Ref.:

Our Ref. : CWB/(HY/2010/08)/C30/940/01/08B011029

4 November 2017

China State Construction Engineering (Hong Kong) Limited 29/F China Overseas Building, 139 Hennessy Road, Wan Chai, Hong Kong

Attn.: Mr. Thomas Lui

Dear Sir,

Contract No. HY/2010/08 Central-Wan Chai Bypass – Tunnel (Slip Road 8 Section)

#### Tree Protection and Preservation of Existing Trees within the Allocated Site Areas

I refer to my letter ref. no. CWB/(HY/2010/08)/C05/100/08B010804 dated 16 September 2017 and the Engineer's letter ref. CWN:PP:ttmk:60095653/C8/C05/200/1032-2017010601T dated 25 September 2017. In accordance with GCC Clause 6(3), I enclose Sketch Nos. 60095653/T2/SK0753 and SK0755 clarifying that there are existing trees which are deemed to be included in the allocated Site Areas.

Please carry out the following works in accordance with G.S. Section 26 and P.S. Section 26:-

 Preservation and protection of the existing trees within the allocated Site Areas as per enclosed Sketch Nos. 60095653/T2/SK0753 and 60095653/T2/SK0755.

Yours faithfully, For and on behalf of AECOM Asia Co. Ltd.

Denis Norton

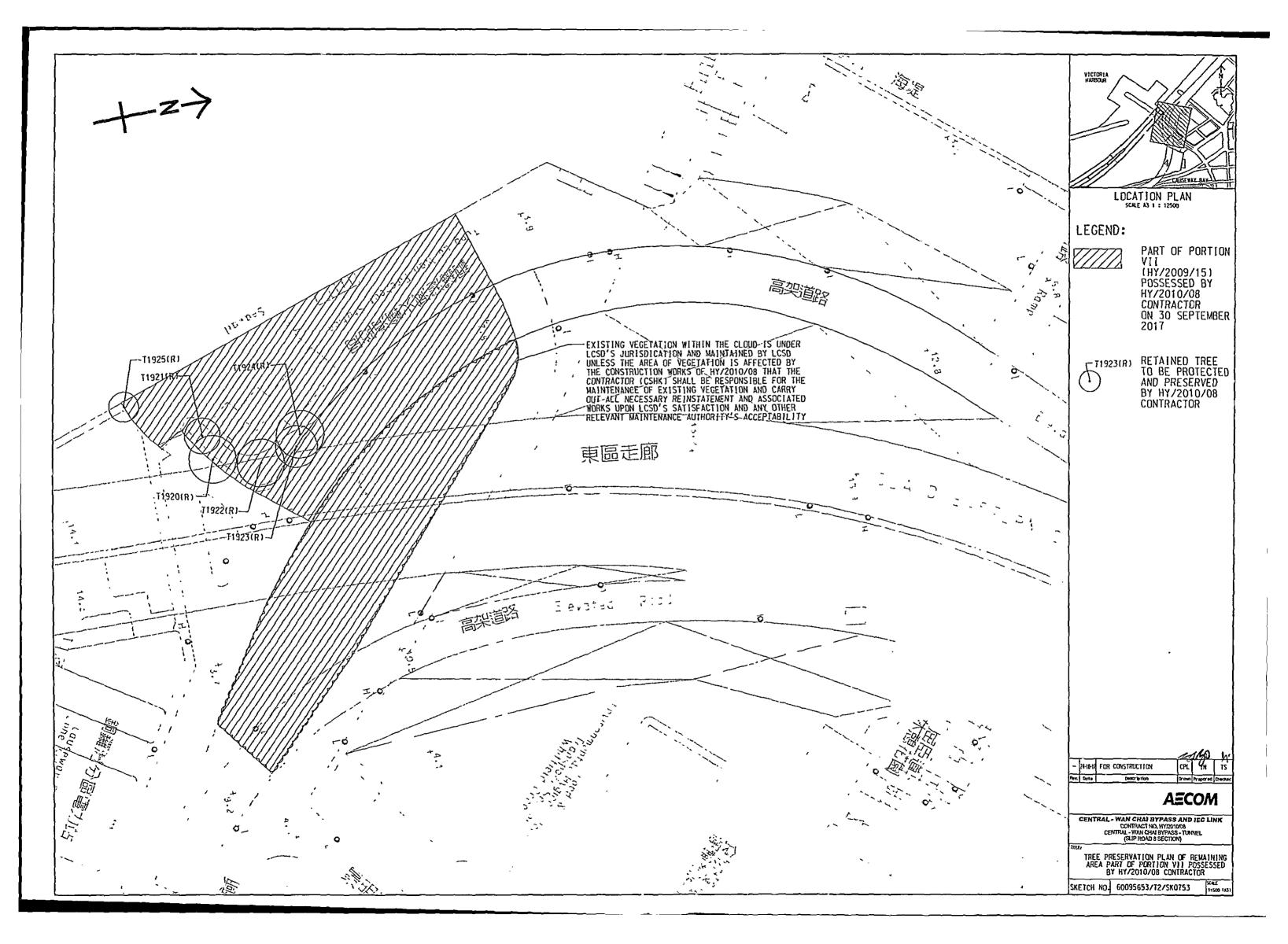
Engineer's Representative

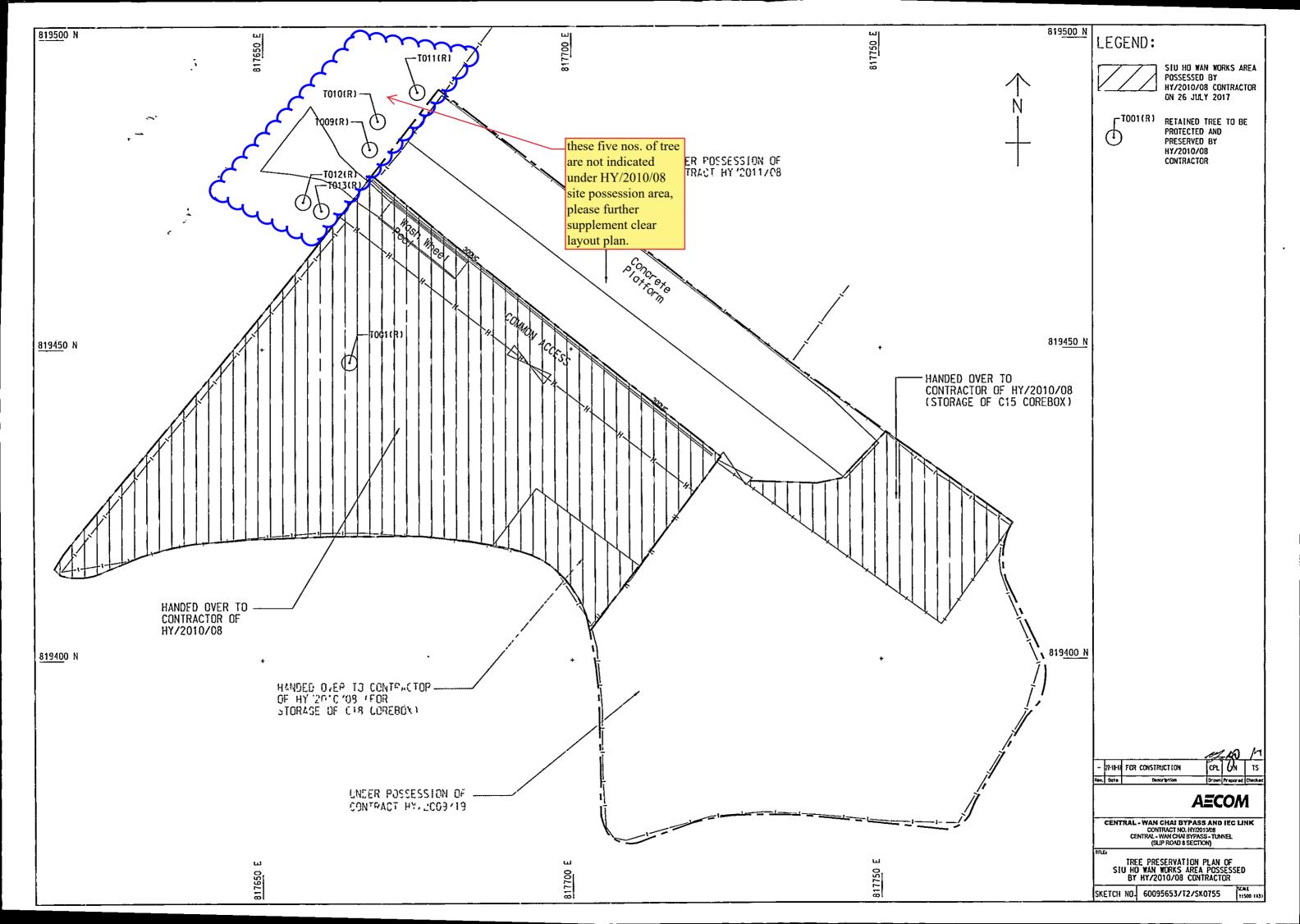
Encl.

c.c. R10/110

e.c. AECOM - Attn.: Mr. Raymond Pau

DAN/TS/YN/EC/gw





> Appendix L Letter Detailing HY/2009/15 Site Office Handing Over to HY/2010/08



AECOM 8/F Grand Central Plaza, Tower 2 138 Shatin Rural Committee Road Shatin, Hong Kong 香港新界沙田鄉事會路 138 號 新城市中央廣場第 2 座 8 樓 www.aecom.com

+852 3922 9000 tel +852 3922 9797 fax

Your Ref.: CDD/2002/L/GEN/ALL/012474 and ~/013385

Our Ref. : CWN:PP:ttmk:60095653/C8/C05/200/1032-2017010601T

25 September 2017

China State Construction Engineering (Hong Kong) Limited 29/F China Overseas Building, 139 Hennessy Road, Wan Chai, Hong Kong

2 8 SEP 2017

By Lo 12707

Attn.: Mr. Thomas Lui

Dear Sir,

Contract No. HY/2010/08 Central-Wan Chai Bypass – Tunnel (Slip Road 8 Section)

## Site Office Area - Portion VII under Contract No. HY/2009/15

Your letters ref. CDD/2002/L/GEN/ALL/012474 and ~/013385 dated 24 April 2017 and 14 August 2017 refer.

In your above referred letters, you have requested the allocation of the site office area of Contract HY/2009/15 (Portion VII of the Site under Contract HY/2009/15), for your use for a period of 12 months, giving an undertaking which was confirmed by you as to be not limited to the removal of all temporary structures and to reinstate this site area upon completion.

We confirm that the said area as indicated on Sketch No. 60095653/T2/SK0746 shall form part of the Site under Contract HY/2010/08 pursuant to GCC Clause 1(1) with effect from 30 September 2017 to 30 September 2018.

In consideration of PS Clause 1.50 and the relevant contract provisions, you are reminded that you shall arrange your site office in a nearby office building. As such, upon your occupation and use of this additional area, it shall be subject to a cost saving to the Contract, to be agreed.

Yours faithfully, For and on behalf of AECOM Asia Co. Ltd.

Conrad Ng Executive Director

Encl.

c.c. CE3/MW, HyD - Attn.: Mr. Stephen Wong PRE/CWB - Attn.: Mr. Peter Poon SRQS-B / RQS-B2

	CHINA STA	JE CO	NSTRU	CTION
	ENGINE	ERING	(H.K.)	LID
i	HY/	2010/0	8 FILE	-
1		ACT	ICOP)	ISIGN
-	PL)		-	1
-	SM		1	
20.00	SA			10-
100	SCM		7	-
3	CM(SR8)			1
"MICE	CM(TS3)	1		
10.00	CM(N)	1		
	DV MVSRR)		1	
i	DOM(183)	1		
Tak.	DCMINI,	1		
à la	Lawrence Apr			
ļ	PLANNING.		1	
	DESIGN	Marrie Married		
	Tivet			
Ĺ	CMMM		/	
	PER	/	/	
	SLRIEY			
	SAFUTY		-	
	Eli v			
	21			
	ADMINICLU		-	
,.				

**AFCOM** 8/F Grand Central Plaza, Tower 2 138 Shatin Rural Committee Road Shatin, Hong Kong 香港新界沙田鄉事會路 138 號 新城市中央廣場第2座8樓

+852 3922 9000 tel +852 3922 9797 fax

Your Ref. : CDD/2002/L/GEN/ALL/012474 and ~/013385

Our Ref. : CWN:PP:ttmk:60095653/C8/C05/200/1032-2017010601T

25 September 2017

China State Construction Engineering (Hong Kong) Limited 29/F China Overseas Building, 139 Hennessy Road. Wan Chai, Hong Kong

Attn.: Mr. Thomas Lui

Dear Sir,

Contract No. HY/2010/08 Central-Wan Chai Bypass - Tunnel (Slip Road 8 Section)

#### Site Office Area - Portion VII under Contract No. HY/2009/15

Your letters ref. CDD/2002/L/GEN/ALL/012474 and ~/013385 dated 24 April 2017 and 14 August 2017 refer.

In your above referred letters, you have requested the allocation of the site office area of Contract HY/2009/15 (Portion VII of the Site under Contract HY/2009/15), for your use for a period of 12 months, giving an undertaking which was confirmed by you as to be not limited to the removal of all temporary structures and to reinstate this site area upon completion.

We confirm that the said area as indicated on Sketch No. 60095653/T2/SK0746 shall form part of the Site under Contract HY/2010/08 pursuant to GCC Clause 1(1) with effect from 30 September 2017 to 30 September 2018.

In consideration of PS Clause 1.50 and the relevant contract provisions, you are reminded that you shall arrange your site office in a nearby office building. As such, upon your occupation and use of this additional area, it shall be subject to a cost saving to the Contract, to be agreed.

Yours faithfully, For and on behalf of AECOM Asia Co. Ltd.

Conrad Ng

**Executive Director** 

Encl.

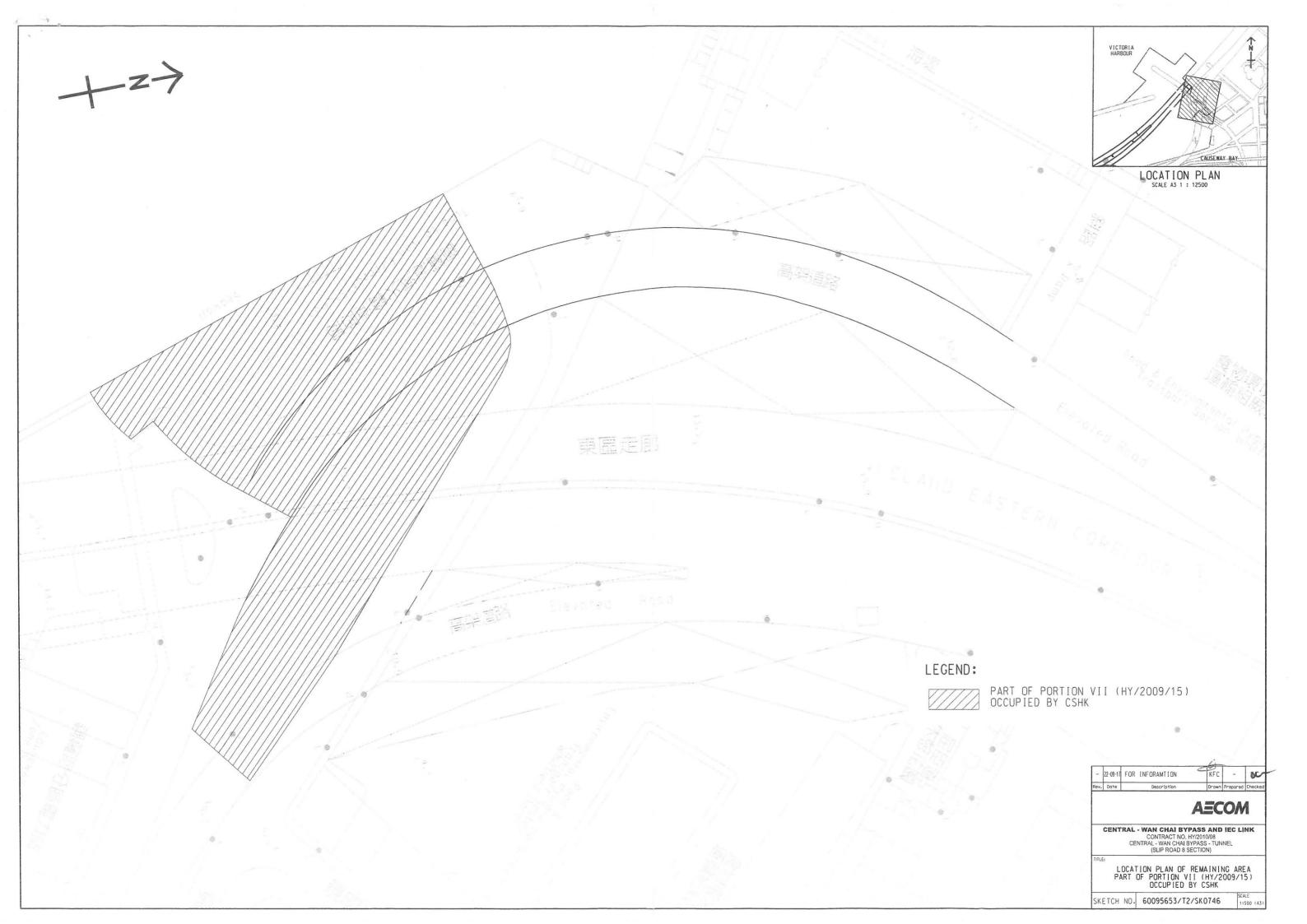
C.C.

CE3/MW, HyD -

Attn.: Mr. Stephen Wong

PRE/CWB SRQS-B / RQS-B2

Attn.: Mr. Peter Poon



Appendix M
Report of Tree Preservation with
Photos of retained trees conducted in
Jan 2021

#### Tree Risk Assessment Form 1: Tree Group Inspection 樹木風險評估表格1: 樹群檢查表

<b>General Information</b>	基本資料
----------------------------	------

Form 1 Ref. No.:	1		
and the second s	HYD	2020	000-0001-0
完格1編號·	nib	2020	000-0001-0

Dept. / A	Agency 部門	門/機構:		HyD		Inspection C	fficer 巡查人員	₹:	Hindley Lau	Post 職位:		Certifled Arborist		
Project /	Contract I	No.工程 /合約編	號:			HY/2010/08				File Ref. 檔案	編號:			
Date of I	Inspection		08/01/20 (da/mm/y		Last Inspec				Inspection Fre 巡查週期:	equency:	12 months 個月			
		nformatio	on 位置資料	<i>III</i>	12/22/1			ļuo		JAMES AND THE PROPERTY OF THE				
	Masterzone Ref.主面編號: Subzone Ref. 副転換號:													
Masterzo	one Ref.±	[區編號:	Ŀ				Subzone Ref	7. 副區編號:						
Location : 地點(英	(English) 文):	Site office und	er Island Eastern Comidor		Location (CI 地點 (中文)		東區走廊 工力	地辦工室			District: 地區:	Wa	n Chai 灣仔區	
Tree Ris	k Managei	ment Zone 樹木	風險管理地區類別:	Category I 第	一類					-				
Location	Types						The same							
地點類別		bewolls	Roadside landscaped						t compound 政府建築物		AND TO THE			
(multiple selections allowed 可遵多於一項) Public park/recreation venue 公園/康榮噶地 Unleased/uallocated government land未批相/未撥用的政府土地 Planter box 花盆														
			☑ Tree pit 樹穴						es 系統性鑑辨維修責任	的斜坡				. 1
			☐ Housing estate 屋邨	短解				SIMAR slop	e ref:					]
	□ Central divider 中央分隔甲 □ Others (please specify) 其他 (請說明):													
	Site office													
Nearby!	Ifiliby Doct	No. 就近公用設	<b>阿瓜</b>	48706										
[Indaiby C	Juny Post	110. 秋红公州最	UG 1949 3VV.	140/00								X		J
Tree	Inform	nation 棱	木基本資料			namous and a second								
			be defined by location ty 點類別・如公園・系統性						consideration given to	the limitations	of visual tre	e assessment.		
			Require Remedial Acti											
	木及需要	進行緩減措施	/ 表格 2 評估的樹木				O	1 72	Daniel Addin	15 0.1			r	1
Tree ID	Dept.		Tree Spacies 樹種	Estimated Tree	Crown	Tree Status 樹木類別	Overall Tree	Colour	Remedial Action 経済措施	n / Form 2 Asse 施 / 喪格2評估	ssment	Completion	of	Coordinates Tree
樹木編號	部門			Height (m)	Spread (m)		Conditions 整體樹木	分流颜色				Date 預計完成日期	樹木製	考座標 Y
	編號			大約樹高 (米)	大的樹冠 閩度		狀況					(dd/mm/yyyy)		
					(米)									
			yn. Ficus virens var.			Other Trees			Crown thinning 樹冠頭	i				
	T1920	(sublanceolata)		10.00	10.00	其他樹木	Fair 一般	No 無	理			31/05/2021	937530 000	816381.000
			大渓榕(黃葛樹)				i		C			31/03/2021	037 330.000	010001,000
	T1921	Morus alba桑	大某格(資惠樹)	8.00	11.00	Other Trees 其他樹木	Fair 一般	No 無	Crown thinning 樹冠鞘 理	ī		31/05/2021		816384.000
		Ficus virens (s	yn. Ficus virens var.			其他樹木 Other Trees			理 Crown thinning 樹冠爾			31/05/2021	837533.000	816384.000
	T1921 T1922	Ficus virens (s		9.00	11.00	其他樹木 Other Trees 其他樹木	Fair 一般 Fair 一般	No 無	理 Crown thinning 樹冠疏 理	I			837533.000	
		Ficus virens (a sublanceolata)	yn. Ficus virens var.			其他樹木 Other Trees			理 Crown thinning 樹冠爾	I		31/05/2021	837533.000 837536.000	816384.000
	T1922	Ficus virens (a sublanceolata)	yn. Ficus virens var. 大葉榕(黃萬樹)	9.00	10.00	其他樹木 Other Trees 其他樹木 Other Trees	Fair 一般	No 無 No 無	理 Crown thinning 樹冠師理 Crown thinning 樹冠師	ī		31/05/2021 31/05/2021 31/05/2021	837533.000 837536.000 837536.000	816384.000 816388.000 816394.000
	T1922 T1923	Ficus virens (s sublanceolata) Ficus microcar Morus alba  Ficus virens (s	yn. Ficus virens var. 大葉俗(黃萬樹) pa恪樹(細葉伶) yn. Ficus virens var.	9.00	10.00	其他樹木 Other Trees 其他樹木 Other Trees 其他樹木 Other Trees 其他樹木 Other Trees	Fair 一般 Fair 一般 Fair 一般	No 無	理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 理 Crown thinning 桜冠師	ī ī		31/05/2021 31/05/2021 31/05/2021 31/05/2021	837533.000 837536.000 837536.000 837534.000	816384.000 816388.000 816394.000 816396.000
	T1922 T1923 T1924	Ficus virens (s sublanceolata)  Ficus microcar  Morus alba  Ficus virens (s sublanceolata)	yn. Ficus virens var. 大葉俗(黃萬樹) pa恪樹(細葉伶) yn. Ficus virens var.	9.00 10.00 9.00 9.00	10.00 10.00 7.00	其他樹木 Other Trees 其他樹木 Other Trees 其他樹木 Other Trees 其他樹木	Fair — fig Fair — fig	No 無 No 無	理 Crown thinning 樹冠爾 理 Crown thinning 樹冠爾 理 Crown thinning 樹冠爾 理	ī ī		31/05/2021 31/05/2021 31/05/2021	837533.000 837536.000 837536.000 837534.000	816384.000 816388.000 816394.000
	T1922 T1923 T1924	Ficus virens (s sublanceolata) Ficus microcar Morus alba  Ficus virens (s	yn. Ficus virens var. 大葉俗(黃萬樹) pa恪樹(細葉伶) yn. Ficus virens var.	9.00 10.00 9.00 9.00	10.00	其他樹木 Other Trees 其他樹木 Other Trees 其他樹木 Other Trees 其他樹木 Other Trees	Fair 一般 Fair 一般 Fair 一般	No 無	理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 理 Crown thinning 桜冠師	ī ī		31/05/2021 31/05/2021 31/05/2021 31/05/2021	837533.000 837536.000 837536.000 837534.000	816384.000 816388.000 816394.000 816396.000
	T1922 T1923 T1924 T1925 Add Ro	Ficus virens (s sublanceolata) Ficus microcar Morus alba桑 Ficus virens (s sublanceolata)	yn. Ficus virens var. 大禁格(黃哥樹) pa俗樹(細葉格) yn. Ficus virens var. 大葉格(黃哥礎)	9.00 10.00 9.00 9.00 Delete R	10.00 10.00 7.00 12.00 ows 剛豫到	其他樹木 Other Trees 其他樹木 Other Trees 其他樹木 Other Trees 其他樹木 Other Trees	Fair 一般 Fair 一般 Fair 一般	No 無	理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 理 Crown thinning 桜冠師	ī ī		31/05/2021 31/05/2021 31/05/2021 31/05/2021	837533.000 837536.000 837536.000 837534.000	816384.000 816388.000 816394.000 816396.000
	T1922 T1923 T1924 T1925 Add Ro	Ficus virens (s sublanceolata) Ficus microcar Monus alba桑 Ficus virens (s sublanceolata) wa 独加列 (Non-Triage	yn. Ficus virens var. 大葉俗(黃萬樹) pa恪樹(細葉伶) yn. Ficus virens var.	9.00 10.00 9.00 9.00 Delete R	10.00 10.00 7.00 12.00 ows 剛豫到	其他樹木 Other Trees 其他樹木 Other Trees 其他樹木 Other Trees 其他樹木 Other Trees	Fair 一般 Fair 一般 Fair 一般	No 無	理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 理 Crown thinning 桜冠師	ī ī		31/05/2021 31/05/2021 31/05/2021 31/05/2021	837533.000 837536.000 837536.000 837534.000	816384.000 816388.000 816394.000 816396.000
	T1922 T1923 T1924 T1925 Add Ro	Ficus virens (s sublanceolata) Ficus microcar Monus alba桑 Ficus virens (s sublanceolata) wa 独加列 (Non-Triage	yn. Ficus virens var. 大葉榕(黃萬樹) pa榕樹(細葉榕) yn. Ficus virens var. 大葉榕(黃萬樹) Trees - trees do not n 進一步行動的樹木) Tree Species	9.00 10.00 9.00 9.00 Delete R	10.00 10.00 7.00 12.00 ows 剛豫到	其他樹木 Other Trees 其他酱木 Other Trees 其他酱木 Other Trees 其他酱木 Other Trees 其他酱木	Fair 一般 Fair 一般 Fair 一般	No 無	理 Crown thinning 樹冠研理 ee Height	ī ī		31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021	837536,000 837536,000 837536,000 837534,000 837524,000	816384.000 816388.000 816394.000 816396.000
	T1922 T1923 T1924 T1925 Add Ro	Ficus virens (s sublanceolata) Ficus microcar Monus alba桑 Ficus virens (s sublanceolata) wa 独加列 (Non-Triage	yn. Ficus virens var. 大葉俗(黃萬樹) pa俗樹(細葉帘) yn. Ficus virens var. 大葉俗(黃萬樹) Trees - trees do not n 雪一步行動的樹木)	9.00 10.00 9.00 9.00 Delete R	10.00 10.00 7.00 12.00 ows 剛豫到	其他樹木 Other Trees 其他螫木 Other Trees 其他螫木 Other Trees 其他螫木 Other Trees ,其他齿木	Fair 一般 Fair 一般 Fair 一般	No 無	理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 理 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 To (m)	ī ī		31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021	837536,000 837536,000 837536,000 837534,000 837524,000	816384.000 816388.000 816394.000 816396.000
	T1922 T1923 T1924 T1925 Add Ro	Ficus virens (s sublanceolata) Ficus microcar Monus alba桑 Ficus virens (s sublanceolata) wa 独加列 (Non-Triage	yn. Ficus virens var. 大葉榕(黃萬樹) pa榕樹(細葉榕) yn. Ficus virens var. 大葉榕(黃萬樹) Trees - trees do not n 進一步行動的樹木) Tree Species	9.00 10.00 9.00 9.00 Delete R	10.00 10.00 7.00 12.00 ows 剛豫到	其他樹木 Other Trees 其他酱木 Other Trees 其他酱木 Other Trees 其他酱木 Other Trees 其他酱木 Other Trees	Fair 一般 Fair 一般 Fair 一般	No 無	理 Crown thinning 樹冠師理 Peo Height	ī ī		31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021	837536,000 837536,000 837536,000 837534,000 837524,000	816384.000 816388.000 816394.000 816396.000
	T1922 T1923 T1924 T1925 Add Ro er Trees 木(非分)	Ficus virens (s sublanceolata) Ficus microcar Monus alba桑 Ficus virens (s sublanceolata) wa 独加列 (Non-Triage	yn. Ficus virens var. 大葉榕(黃萬樹) pa榕樹(細葉榕) yn. Ficus virens var. 大葉榕(黃萬樹) Trees - trees do not n 進一步行動的樹木) Tree Species	9.00 10.00 9.00 9.00 Delete R	10.00 10.00 7.00 12.00 ows 開歌到	其他樹木 Other Trees 其他螫木 Other Trees 其他螫木 Other Trees 其他螫木 Other Trees ,其他齿木	Fair 一般 Fair 一般 Fair 一般	No 無	理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 理 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 To (m)	ī ī		31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021	837536,000 837536,000 837536,000 837534,000 837524,000	816384.000 816388.000 816394.000 816396.000
其他樹才	T1922 T1923 T1924 T1925 Add Ro	Ficus virens (a sublanceolata) Ficus microcar Morus alba桑 Ficus virens (s sublanceolata) wa 增加列 (Non-Triage 旅樹木 - 無願)	yn. Ficus virens var. 大葉榕(黃萬樹) pa榕樹(細葉榕) yn. Ficus virens var. 大葉榕(黃萬樹) Trees - trees do not n 進一步行動的樹木) Tree Species	9.00 10.00 9.00 9.00 Dekte R	10.00 10.00 7.00 12.00 ows 開歌到	其他樹木 Other Trees 其他螫木 Other Trees 其他螫木 Other Trees 其他螫木 Other Trees ,其他齿木	Fair 一般 Fair 一般 Fair 一般	No 無	理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 理 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 To (m)	ī ī		31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021	837536,000 837536,000 837536,000 837534,000 837524,000	816384.000 816388.000 816394.000 816396.000
其他樹z	T1922 T1923 T1924 T1925 Add Ro er Trees 木(非分類	Ficus virens (s sublanceolata) Ficus microcar Morus alba桑 Ficus virens (s sublanceolata) wa 增加列 (Non-Triage 森樹木 - 無需)	yn. Ficus virens var. 大葉榕(黃竜樹) pa榕樹(細葉榕) yn. Ficus virens var. 大葉榕(黃竜樹) Trees - trees do not n 進一步行動的樹木) Tree Species 樹槿	9.00 10.00 9.00 9.00 Dekte R	10.00 10.00 7.00 12.00 ows 開歌到	其他樹木 Other Trees 其他螫木 Other Trees 其他螫木 Other Trees 其他螫木 Other Trees ,其他齿木	Fair 一般 Fair 一般 Fair 一般	No 無	理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 理 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 To (m)	ī ī		31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021	837536,000 837536,000 837536,000 837534,000 837524,000	816384.000 816388.000 816394.000 816396.000
文化图7 Overall No signi The plei	T1922 T1923 T1924 T1925 Add Ro er Trees 木(非分)	Ficus virens (a sublanceolata) Ficus microcar Morus alba奏 Ficus virens (s sublanceolata) wa 增加列 (Non-Triage 旅樹木 - 無鴨3	yn. Ficus virens var. 大葉格(黃麗樹) pa榕樹(細葉榕) yn. Ficus virens var. 大葉格(黃麗樹) Trees - trees do not n 也一步行動的樹木) Tree Species 場種	9.00 10.00 9.00 9.00 Delete R	10.00 10.00 7.00 12.00 ows 耐除到 ctions)	其他樹木 Other Trees 其他醬木 Other Trees 其他醬木 Other Trees 其他醬木 Other Trees 其他醬木 Other Trees ,其他醬木	Fair 一般 Fair 一般 Fair 一般 Fair 一般	No 無 No 無 No 無 No 無 No 無 No 無 Range of Yi 樹滿鏡	理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 Crown thinning 樹冠師 理 Crown thinning 梭冠師 理 Crown thinning 椒冠師 理 To (m) 至(米)		Ovi	31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021	837536,000 837536,000 837536,000 837534,000 837524,000	816384.000 816388.000 816394.000 816396.000
文化图7 Overall No signi The pier T1920 a	T1922 T1923 T1924 T1925 Add Ro er Trees 休(非分》	Ficus virens (s sublanceolata) Ficus microcar Morus alba桑 Ficus virens (s sublanceolata) wa 增加列 (Non-Triage 旅樹木 - 無關) s 整體評語 fect was foun open to public 2 were prune	yn. Ficus virens var. 大葉俗(黃蕊樹) pa俗樹(細葉榕) yn. Ficus virens var. 大葉俗(黄蕊磁) Trees - trees do not n 進一步行動的樹木) Tree Species 樹槿	9.00 10.00 9.00 9.00 Dekte R	10.00 10.00 7.00 12.00 ows 開除到 ctions)	其他樹木 Other Trees 其他齒木 Other Trees 其他齒木 Other Trees 其他齒木 Other Trees 其他齒木 Other Trees ,其他齒木	Fair 一般 Fair 一般 Fair 一般 Fair 一般 Fair 一般	No 無 No 無 No 無 No 無 No 無 No 無 diam no (m)	理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 To (m) 至(※)	aken after the	Ovi	31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021 erail Tree Conditio 整體樹木狀況	837536,000 837536,000 837536,000 837534,000 837524,000	816384.000 816388.000 816394.000 816396.000
Overall No signi The plei T1920 a T1923 a	T1922 T1923 T1924 T1925 Add Ro er Trees 木 (非分對	Ficus virens (s sublanceolata) Ficus microcar Morus alba桑 Ficus virens (s sublanceolata) wa 增加列 (Non-Triage 森樹木 - 無需) wa 增加列 s 整體評語 fect was foun open to public 2 were pruned	yn. Ficus virens var. 大菜俗(黃哥樹) pa俗樹(細葉榕) yn. Ficus virens var. 大菜俗(黃哥樹)  Trees - trees do not n 直一步行動的樹木) Tree Species 樹槿 d during inspection. c after the site office rer of on the bridge in 2020.	9.00 10.00 9.00 9.00 Dekte R	10.00 10.00 7.00 12.00 ows 開除到 ctions)	其他樹木 Other Trees 其他藍木	Fair 一般 Fair 一般 Fair 一般 Fair 一般 Fair 一般 T1925 will be T1920 and T1923 and T	No 無 No 無 No 無 No 無 No 無 No 無 diam n(m) X )	理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 To (m) 至(※)	aken after the	Ovi	31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021 erail Tree Conditio 整體樹木狀況	837536,000 837536,000 837536,000 837534,000 837524,000	816384.000 816388.000 816394.000 816396.000
Overall No signi The pier T1920 a T1923 a	T1922 T1923 T1924 T1925 Add Ro er Trees 木 (非分對	Ficus virens (s sublanceolata) Ficus microcar Morus alba奏 Ficus virens (s sublanceolata) was 增加列 (Non-Triage 旅樹木 - 無需到 was 增加列 s 整體評語 fect was foun open to public 2 were pruned 4 were pruned	yn. Ficus virens var. 大菜俗(黃哥樹) pa俗樹(細葉榕) yn. Ficus virens var. 大菜俗(黃哥樹)  Trees - trees do not n 直一步行動的樹木) Tree Species 樹槿 d during inspection. c after the site office rer of on the bridge in 2020.	9.00 10.00 9.00 9.00 Dekte R	10.00 10.00 7.00 12.00 ows 開除到 ctions)	其他樹木 Other Trees 其他藍木	Fair 一般 Fair 一般 Fair 一般 Fair 一般 T1925 will be T1920 and T1923 and	No 無 No 無 No 無 No 無 No 無 No 無 diam n(m) X )	理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 To (m) 至(※)	aken after the	Ovi	31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021 ani Tree Condilic 整體樹木狀況	837536,000 837536,000 837536,000 837534,000 837524,000	816384.000 816388.000 816394.000 816396.000
Overall No signi The pler T1920 a T1923 a Sub-tota (A) 憂想	T1922 T1923 T1924 T1925 Add Ro er Trees 木 (非分) Add Ro Remark ificant de r may be and T1925 and T1926 and T1926	Ficus virens (s sublanceolata) Ficus microcar Morus alba奏 Ficus virens (s sublanceolata) was 增加列 (Non-Triage 旅樹木 - 無需到 was 增加列 s 整體評語 fect was foun open to public 2 were pruned 4 were pruned	yn. Ficus virens var. 大葉榕(黄鹭樹) pa榕樹(細葉榕) yn. Ficus virens var. 大葉榕(黄鹭磁)  Trees - trees do not n 進一步行動的樹木) Tree Species 粉種 d during inspection. after the site office rer i on the bridge in 2020. d on the bridge in 2020.	9.00  10.00  9.00  9.00  Delete R  Delete Ro  moved this yes Follow-up act	10.00 10.00 7.00 12.00 ows 開除到 ctions)	其他樹木 Other Trees 其他醬木 Other Trees 上類他醬木 Other Trees 上類他醬木 Other Trees 「類他醬木	Fair 一般 Fair 一般 Fair 一般 Fair 一般 T1925 will be T1920 and T1923 and	No 無 No 無 No 無 No 無 No 無 No 無 diam n(m) X )	理 Crown thinning 樹冠師 理 Crown thinning 樹冠師 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 Crown thinning 梭冠師 理 To (m) 至(※)	aken after the	Ovi	31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021 31/05/2021 ani Tree Condilic 整體樹木狀況	837536,000 837536,000 837536,000 837534,000 837524,000	816384.000 816388.000 816394.000 816396.000

#### Attached Information 附夾資料

Attachment Type	Attachment Name	Description	
PHOTO 照片	Photo Form 1 Site Office		
MAP 地圖	Map Site Office		
Add Rows 增加列	Delete Rows 删除列		

#### Declaration 聲明

I, the Inspection Officer for the above TRA Form 1, confirm that I have inspected the tree group(s) at the specified date with due diligence, and the information given in the Form(s) is truly reflecting what I observed on site.

本人作為以上樹群檢查表格1的巡查人員·確認本人已在本表格所列日期·蘊領小心完成有關樹群的檢查·而本表格上填入的資料均真確無訛地反映本人在現場觀緊所得·

My academic, professional, training records and work experience met the requirements of inspection Officer specified in the TRAM Guidelines.

本人的學術、專業、培訓紀錄及相關工作經驗均符合「樹木屋險評估及管理安排」指引中對巡查人員的要求。

Name of Inspection Officer: 巡查人員姓名	75	Hindley Lau 環以英文正確書寫	
# (If more than one Inspection Office		oup Inspection, each Inspection Officer should submit individual Form 1 containing the trees inspected by him/her.	如多於一位巡查
Date of Form Completion: 完成表格日期	11/01/2021 (dd/mm/yyyy)		
(If Form 1 is submitted in paper t	form 若以文本形式號交表格1)		
Signature of Inspection Officer: 派在人員答案・		Hay	

Contract No.: HY/2010/08 Central-Wan Chai Bypass - Tunnel (Slip Road 8 Section) Form 1 (Site Office) Photo on 8 January 2021



General view (1).JPG



General view (3).JPG



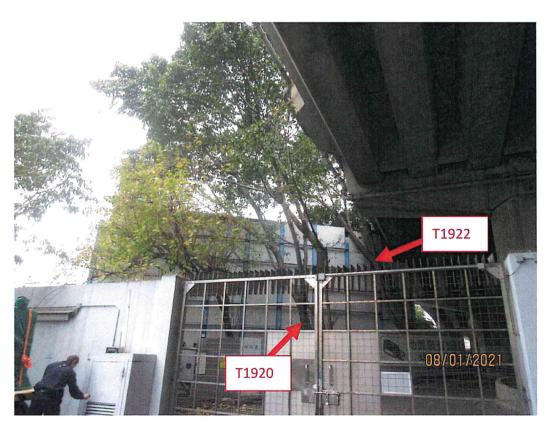
General view (2).JPG



General view (4).JPG



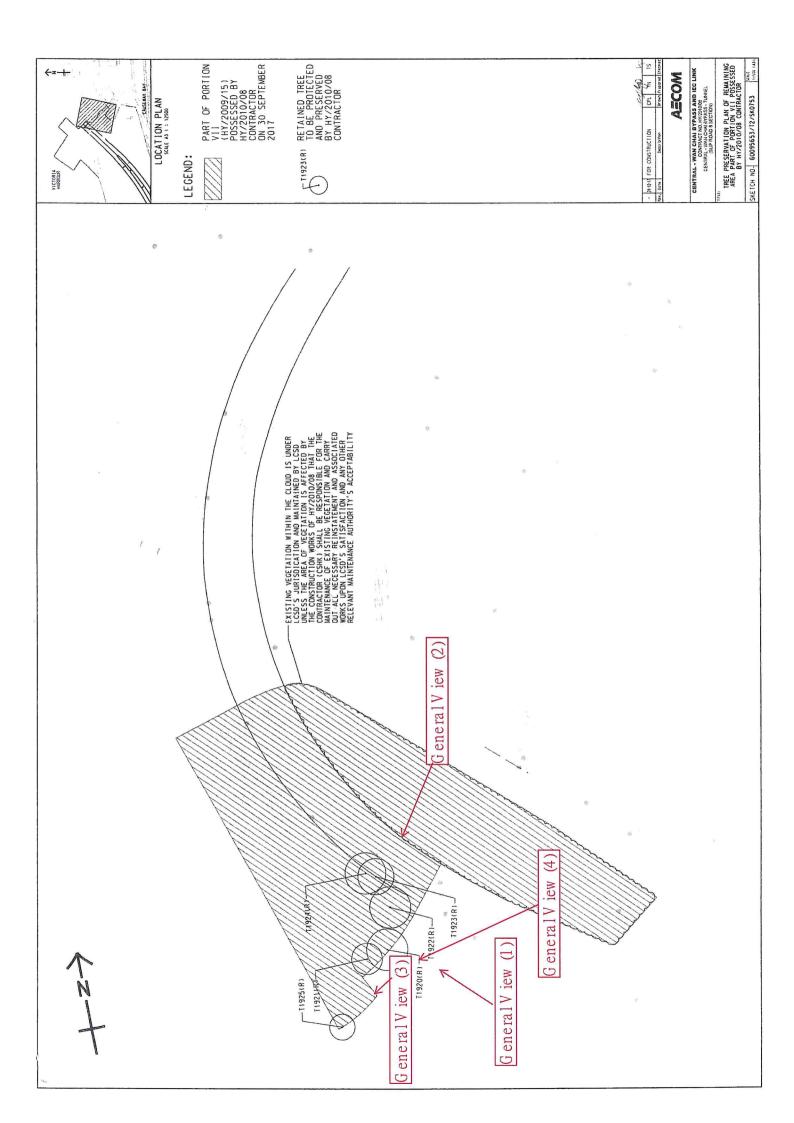
The pier may be open to public after the site office removed this year. Follow-up action on T1925 will be considered to be taken.



T1920 and T1922 were pruned on the bridge in 2020. Follow-up action on the office side of T1920 and T1922 will be considered to be taken after the site office removed.



T1923 and T1924 were pruned on the bridge in 2020. Follow-up action on the office side of T1923 and T1924 will be considered to be taken after the site office removed.



Tree Risk Assessment Form 1: Tree Group Inspection 樹木風險評估表格1:樹群檢查表

#### General Information 基本資料

Form 1 Ref. No.:	T		
表格1編號:	HYD	2020	000-0002-0
C			

Dept / Agency 部門 / 機構:	НуО	Inspection Officer 巡查	E人員: Hindley Lau	Post 腱位:	Certified Arborist	
Project / Contract No.工程 /合約編號:		HY/2010/08		File Ref. 檔案編號:		
Date of Inspection	08/01/2021	Last Inspection Date:	23/12/2019	Inspection Frequency: 巡查週期:	12 months 個月	
巡查日期:	(dd/ <b>m</b> m/yyyy)	上次巡查日期:	i: (dd/mm/yyyy)		וב וווטווטוז ישיר	

#### Location Information 位置資料

Masterzone Ref.主巫編號:		***************************************	Subzone Ref. 副區編號:							
MIGSIGIZUNG FIGI.工型開发.										
Location (English) : 地點 (英文):	Material storage site, Slu Ho Wan, Lantau Island		大與山小藻灣物料儲存地		District: 地區:	Islands 陰馬區				
Tree Risk Management Zone 樹木風險管理地區類別: Category I 第一類										
			□ Government compound 政府違 □ Unleased/uallocated governmen □ Recreational site/facility inside c □ SIMAR slopes 系紀性重辨維修す SIMAR slope ref:	nt land未批租/未投用的 ountry park郊野公園の		<b>始</b>				
Nearby Utility Post No. 就近公用	設施編號: FB7278									

#### Tree Information 樹木基本資料

The size of a tree group should be defined by I	ocation types, such as public parks, SIA	AAR slopes, tree pits, etc. with due consideration given to the limitations of visual tree assessment.
在決定樹群的大小時·應參照地點類別·如公園	<ul><li>永統性鑑辨維修責任的斜坡、樹穴等</li></ul>	・並需考慮目測法的局限・

#### (A) Triage Trees and Trees Require Remedial Actions or Form 2 Assessment

分流樹木及需要進行緩減措施	/ 表格 2 評估的樹木
---------------	--------------

TMCP Tree ID 樹木 編號	Dept. Tree ID 部門 樹木	Tree Species 樹種	Estimated Tree Height	Crown Spread	Tree Status 樹木類別	Overall Tree Conditions 整體樹木	Triage Colour 分流颜色	Remedial Action / Form 2 Assessment 細減情態 / 表格2評估		Anticipated Completion Date	of '	Coordinates Tree 考座標
PRISC	編號		(m) 大約樹高 (米)	(m) 大約樹冠 閩度 (米)		野畑田小 狀況				預計完成日期 (dd/mm/yyyy)	×	Y
T009		Liquidambar formosana機香	10.00	8.00	Other Trees 其他樹木	Fair 一般	No 無	Crown cleaning 清理樹 冠	Removal of dead twigs	30/06/2021	817669.000	819488.000
T010		Acacia confusa台灣相思	10.00	10.00	Other Trees 其他樹木	Fair 一般	No無	Crown cleaning 清理樹 冠	Removal of dead branches	30/06/2021	817665.000	819485.000
T012		Acacia confusa台灣相思	12.00	13.00	Other Trees 其他樹木	Fair 一般	No 無	Crown reduction 缩減 樹冠		30/06/2021	817654.000	819476.000

(B) Other	Trees (No	n-Triage Tre	es - trees de	o not need t	further actions)

s) Other Trees (Non-Triage Trees - trees do not need further actions  他樹木(非分流樹木 - 無爾進一步行動的樹木)   Tree Species   樹種	App. Quantity of	Range of Tree Height 概高範圍		Overall Tree Conditions 整體樹木狀況
*****	Trees 大約樹木數	From (m) 由(木)	To (m) 至 (内)	- AME PARK MAY   1707/170
Acada confusa 台屬相原	1	9	g	Fair — ₩
Liquidambar formosana 🖫 着	1 1	11	11	Fair —₩
Syzygium cumini無數(海南洲桃)	1 1	10	10	Fair — 49

Add Rows 增加列

Delete Rows 削除列

Overall Remarks 整體評語
T009: Minor dead twigs are recommended to be removed.
T010: Dead branches are recommended to be removed.
T012: Branch reduction away from the traffic is recommended.

Sub-total No. of Trees in Table (A): (A) 表樹木數量小結: Sub-total No. of Trees in Table (B): (B) 衰樹木數量小結: 3 3

Total No. of Trees (A+B): 樹木均數 (A+B): 6

Summary of TRIAGE Trees 分流樹木總結

Black 居

Red 紅 0 Yellow黄 0 No Triage colour 無 3

#### Attached Information 附夾資料

Attachment Type	Attachment Name	Description	
PHOTO 照片	Photo Form 1 Siu Ho Wan		
MAP #E	Map Siu Ho Wan		
	, i		

Add Rows 增加列	Delete Rows 開除列	
Declaration 聲明		
I, the Inspection Officer for the above TRA Form observed on site.	1, confirm that I have inspected the tree group(s	s) at the specified date with due diligence, and the information given in the Form(s) is truly reflecting what
本人作為以上樹群檢查表格1的巡查人員·確認2	5人已在本表格所列日期・謹慎小心完成有關樹素	群的檢查・而本表格上填入的資料均真確無飢地反映本人在現場觀察所得・
My academic, professional, training records and 本人的學術、專業、培訓紀錄及相關工作經驗均		
Name of Increasing Officers	117-11	

TYTHI THE PROPERTY HERE	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	
	Hindley Lau (舒以英文正报音器) volved in the same Tree Group Inspection, each Inspection Officer should submit individual Form 1 containing the trees inspected by him/her. 通應將其檢查的樹木以另一來格1填報・)	如多於一位巡
Date of Form Completion: 完成表格日期	11/01/2021 (dd/mm/yyyy)	
(If Form 1 is submitted in paper form	若以文本形式過交表格1)	¥
Signature of Inspection Officer: 巡查人員簽署:		

Contract No.: HY/2010/08 Central-Wan Chai Bypass - Tunnel (Slip Road 8 Section) Form 1 (Siu Ho Wan) Photo on 8 January 2021



General view (1).JPG



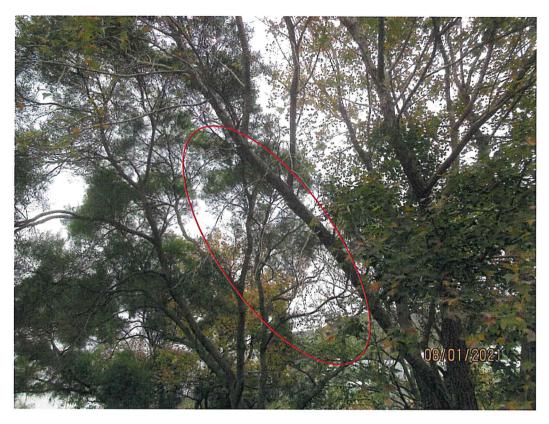
General view (3).JPG



General View (2).JPG



General view (4).JPG



T009: Minor dead twigs are recommended to be removed.



T010: Dead branch is recommended to be removed.



T10: Dead branches are recommended to be removed.



T012: Branch reduction away from the traffic is recommended.

