

JOB NO.: TCS00491/09

DSD CONTRACT No.: DC/2009/08

CONSTRUCTION OF YUEN LONG SOUTH BRANCH SEWERS AND EXPANSION OF HA TSUEN SEWAGE PUMPING STATION

THE FORTH-FOURTH RESULTS OF LANDSCAPE AND VISUAL IMPACT MONITORING FOR SEPTEMBER 2013 (No.44)

PREPARED FOR

CHINA STATE CONSTRUCTION ENGINEERING (HONG KONG) COMPANY LIMITED

Quality Index

Date	Reference No.	Prepared By	Certified By
		Donald Kwok (Assistant Environmental Consultant)	T.W. Tam (Environmental Team Leader)
2 December 2013	TCS00491/09/600/R0506v3	7	Janu -

Version	Date	Description
1	25 October 2013	First submission
2	25 November 2013	Amended against IEC's comments on 4 November 2013
3	2 December 2013	Amended against IEC's comments on 27 November 2013

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Your Ref:

Our Ref:



13 December 2013

By E-mail

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Unit A, 20/F, Gold King Industrial Building, 35-41 Tai Lin Pai Road,
Kwai Chung,
New Territories,
Hong Kong.

For attention of: Mr. T. W. Tam

Dear Mr. Tam,

Contract No.: DC/2009/08

Construction of Yuen Long South Branch Sewers and Expansion of Ha Tsuen Sewage

Pumping Station

Monthly EM&A Report for Designated Project, Landscape and Visual Impact Sections, August and September 2013 – IEC Verification

With reference to ET's captioned Landscape and Visual Impact sections of monthly EM&A Report of the reporting months, August 2013 (ET's ref.: TCS0491/09/600/R0505v4) submitted on 11 December 2013, and September 2013 (ET's ref.: TCS0491/09/600/R0506v3) submitted on 2 December 2013, we have no further comment and hereby verify the captioned Landscape and Visual Impact sections of the monthly EM&A Report.

Yours sincerely,

for and on behalf of Hyder Consulting Limited

F.C. TSANG

Independent Environmental Checker

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1

1. INTRODUCTION

- 1.01 This Results of Landscape and Visual Impact Monitoring (hereinafter "the LVIM Results") is part of the monthly EM&A report under DSD Contract No.: DC/2009/08 Construction of Yuen Long South Branch Sewers and Expansion of Ha Tsuen Sewage Pumping Station: *Results of Landscape and Visual Impact* of Chapter 4 *Impact Monitoring Results*. The LVIM Results should therefore be read in conjunction with the corresponding monthly EM&A reports.
- 1.02 Pursuant to Chapter 6 *Landscape and Visual* of the EM&A Manual, EM&A for landscape and visual resources is considered to be a key aspect during both the construction and operational phases of the Project. The implementation and maintenance of landscape compensatory planting measures should therefore be checked to ensure that they are fully realized and that potential conflicts between the proposed landscape measures and any other project works and operational requirements are resolved at the earliest possible date and without compromise to the intention of the mitigation measures.
- 1.03 Monitoring of the recommended implementation of the mitigation measures is required to be conducted throughout the construction phase of the Project.
- 1.04 As a member of the ET, the landscape architect is responsible for the implementation of landscape construction works and subsequent maintenance operations during the 12 month establishment period. The establishment works should be undertaken throughout the Contractor's one year maintenance period which will be within the first operational year of the Project.
- 1.05 All measures undertaken by both the Contractor and the Landscape Contractor during the construction phase and first year of the operational phase should be audited by the landscape architect on a regular basis to ensure compliance with the intended aims of the measures.
- 1.06 Site inspections should be undertaken at least once every two weeks throughout the construction period and once every two months during the operational phase.
- 1.07 The LVIM Results has been prepared by the landscape architect and compiled by the ET upon receipt for submission to EPD after verification by the IEC.
- 1.08 To cater to closer compliance of the EM&A reporting with the EP requirements, it has been agreed among the RE, IEC and ET that The LVIM Results is submitted separately as a stand-alone submission.
- 1.09 This is the forty-fourth (No. 44) LVIM Results, covering the construction period from 1 to 30 September 2013 (hereinafter "the Result Period").

2. LVIM RESULTS

- 2.01 The LVIM Results are presented in the site inspection checklist of the Result Period enclosed in Appendix A.
- 2.02 The trees at Ha Tsuen Sewage Pumping Station have been handed over to DSD since January 2011 for management and monitoring thereafter.
- 2.03 The typhoon signal no.8 approached on 22/9/2013 further damaged the trees and 15 trees were found to be damaged/dead after this typhoon, the location plan and summary of damaged/dead trees are enclosed in Appendix B and C respectively. After the site inspections by Landscaping architect of Drainage Services Department, total of 35 nos. of damaged trees were decided to be felled and the programme is enclosed in Appendix D. The summary of tree number, species and condition damage for those trees were attached with the site inspection checklist.
- 2.04 A total of 20 nos. of new trees will be planted after those trees are felled, however the species and approximate locations of new/transplanted trees are still pending, the relevant information will be attached in LVIM results in October 2013.

3. STRUCTURE OF THE LVIM RESULTS

3.01 The structure of this LVIM Results is as follows:-

1. INTRODUCTION

DSD Contract No. DC/2009/08 - Construction of Yuen Long South Branch Sewers and Expansion of Ha Tsuen Sewage Pumping Station
The Forty-fourth Results of Landscape and Visual Impact Monitoring for September 2013 (No.44)



2. LVIM RESULTS 1

APPENDIX A SITE INSPECTION CHECKLIST

APPENDIX B LOCATION PLAN OF DAMAGED/DEAD TREES

APPENDIX C SUMMARY OF DAMAGED/DEAD TREES

APPENDIX D PROGRAMME OF TREE FELLING



Appendix A

Site Inspection Checklist

Co	ntract No.:	DC/2009/08						
Co	ntract title:	Construction of Yuen Long South Sewer and Expansion	n of Ha T	suen Sew	age Pum	ping Station	ı	
Co	ntractor:	China State Construction Engrg. (HK) Ltd.						
Location:		Ha Tsuen Sewage Pumping Station						
Ins	spection Date:	16-Sep-2013						
			S	Satisfacto	ry	Rectifie	d	
			N/A	Yes	No	Yes N	0	Remarks
I. (General							_
1.	Erect hoardin	g around site boundary properly		\checkmark		✓		
2.	Keep well ma	intenance of hoarding		\checkmark		✓		
3.	All constructi	on works are carried out within site boundary properly		\checkmark		√		
4	Carry out the	initial tree survey prior to construction		\checkmark		√		
5	Provide tree la	abels according to tree survey records		\checkmark		✓		
Co	mments:							
Sta	ndard hoarding	was erected and well maintained around the works area a	at Ha Tsu	en Sewag	ge Pumpi	ng Station (I	HTS	PS).
The	e construction h	as no implication to protected tree.						
II.	Transplanting	Works						
1.	All transplant specifications	ing works are carried out in accordance with the		\checkmark		✓		
2.	The transplan establishment	ted trees are kept in regular inspection within the period			√		/	Some trees were damaged by typhoon
3.	The transplan	ted trees are kept in maintenance thoughout the estanlish	ment per	iod as fol	lowings:			
	(i) Watering		\checkmark					
	(ii) Weeding		✓			一一	ī	
	(iii) Fertilising	g	✓					
	(iv) Littering		✓					
	(v) Grass cutt	ing	✓					
	(vi) Firming u	ір	✓					
	(vii) Pest cont	trol	✓					
	(viii) Disease	control	✓			一一二	司	
	(ix) Pruning		✓		一		ī	
	(x) Replaceme	ent	✓					
Co	mments:							
The	ere had total 73	nos. of transpalnted trees in Ha Tsuen Sewage Pumping	Station du	ie to cons	struction	works under	r this	s contact.
All	tree have been	handover back to DSD.						
III	. Landscaping	Works						
1.	All landscapin	ng works are carried out in accordance with the		V		V		
2.	The landscapi	ing plants are kept in regular inspection within the		✓		V		

	Satisfactory Rectified
	N/A Yes No Yes No Remarks
3. The landscaping plants are kept in maintenance thoughout the esta	
(i) Watering	
(ii) Weeding	
(iii) Fertilising	
(iv) Littering	
(v) Grass cutting	
(vi) Firming up	
(vii) Pest control	
(viii) Disease control	
(ix) Pruning	
(x) Replacement	
Comments:	
No landscaping works were carried out in the reporting month	
IV. Preservation and Protection of Trees	
1. All preserved trees are protected in accordance with the specification	ns 🔽 🔲 🔲 🔲
2. All preserved trees are fenced off properly	
No construction activities are carried out in the protection zone of the preserved trees	
Comments:	
All retained trees were fenced off and protected properly within the works	s area of the site. DSD is corruing out the processing
and protection.	s area of the site. DSD is carrying out the preservation
Conclusioд	
Landscaping architect of Drainage Services Department visited the site an	d inspected the trees on 29/8/2013. It was decided to fell the
damaged trees and total of 20 nos, of new trees will be planted after the th	ose trees are felled.
Remarks	
ACHIAI KS	
Signatures:	
Senior landscape Architect	
NITA	
(Name: David Blotham)	









Co	ntract No.:	DC/2009/08					
Co	ntract title:	Construction of Yuen Long South Sewer and Expansion	n of Ha T	suen Sew	age Pum	ping Station	
Co	ntractor:	China State Construction Engrg. (HK) Ltd.					
Lo	cation:	Ha Tsuen Sewage Pumping Station					
Ins	spection Date:	30-Sep-2013					
			S	atisfacto	ry	Rectified	
			N/A	Yes	No	Yes No	Remarks
I. (General						
1.	Erect hoarding	g around site boundary properly		\checkmark		✓]
2.	Keep well ma	intenance of hoarding		\checkmark		✓]
3.	All constructi	on works are carried out within site boundary properly		\checkmark		√]
4	Carry out the	initial tree survey prior to construction		\checkmark		✓]
5	Provide tree la	abels according to tree survey records		\checkmark		√]
Co	mments:						
Sta	ndard hoarding	was erected and well maintained around the works area a	nt Ha Tsuc	en Sewag	e Pumpir	ng Station (H	TSPS).
The	e construction h	as no implication to protected tree.					
II.	Transplanting	Works					
1.	All transplant specifications	ing works are carried out in accordance with the		✓		/]
2.	The transplan establishment	ted trees are kept in regular inspection within the period			\checkmark		Some trees were damaged by typhoon
3.	The transplan	ted trees are kept in maintenance thoughout the estanlish	ment peri	iod as fol	lowings:		
	(i) Watering		√		П		7
	(ii) Weeding		√	一	一	一一	<u> </u>
	(iii) Fertilising	g	✓	$\overline{\Box}$	一	一一	i
	(iv) Littering		✓	一	$\overline{\Box}$	一一	i
	(v) Grass cutt	ing	✓]
	(vi) Firming u	ір	\checkmark]
	(vii) Pest cont	trol	√				
	(viii) Disease	control	\checkmark]
	(ix) Pruning		\checkmark]
	(x) Replacement	ent	\checkmark]
Co	mments:						
The	ere had total 73	nos. of transpalnted trees in Ha Tsuen Sewage Pumping	Station du	ie to cons	truction	works under t	this contact.
All	tree have been	handover back to DSD.					
III	. Landscaping	Works					
1.	All landscapin	ng works are carried out in accordance with the		✓		V]
2.	The landscapi	ing plants are kept in regular inspection within the period		√		√]

		-	Satisfacto	ry	Rectified	
		N/A	Yes	No	Yes No	Remarks
3.	The landscaping plants are kept in maintenance thoughout the estanlish	hment pe	eriod as fo	ollowings	:	
	(i) Watering		\checkmark		V]
	(ii) Weeding		\checkmark]
	(iii) Fertilising		\checkmark		V]
	(iv) Littering		\checkmark		V	
	(v) Grass cutting		\checkmark		\checkmark	
	(vi) Firming up		\checkmark		✓	
	(vii) Pest control		\checkmark		\checkmark	
	(viii) Disease control		\checkmark		V	l
	(ix) Pruning		\checkmark		V	
	(x) Replacement		\checkmark			
Con	nments:					
No I	andscaping works were carried out in the reporting month					
						100
IV.	Preservation and Protection of Trees					
1.	All preserved trees are protected in accordance with the specifications	\checkmark				
2.	All preserved trees are fenced off properly	\checkmark				
3.	No construction activities are carried out in the protection zone of the preserved trees	\checkmark				
Com	ments:					
	etained trees were fenced off and protected properly within the works are	ea of the	site DCF) is some	ing out the mee	
	protection.	ca of the	Site. DSL	is carry.	ing out the pre	servation
	clusion					
	scaping architect of Drainage Services Department visited the site and in					
	aged trees and total of 20 nos. of new trees will be planted after the those					approached
on 2	2/9/2013 further damaged the trees. Landscaping sub-contractor was arra	anged to	fell the da	ımaged tr	ees shortly.	
D	arks					
Kem	arks					
	Signatures:					
	Senior landscape Architect					
	NITI					
	(Name: David Blokham)					









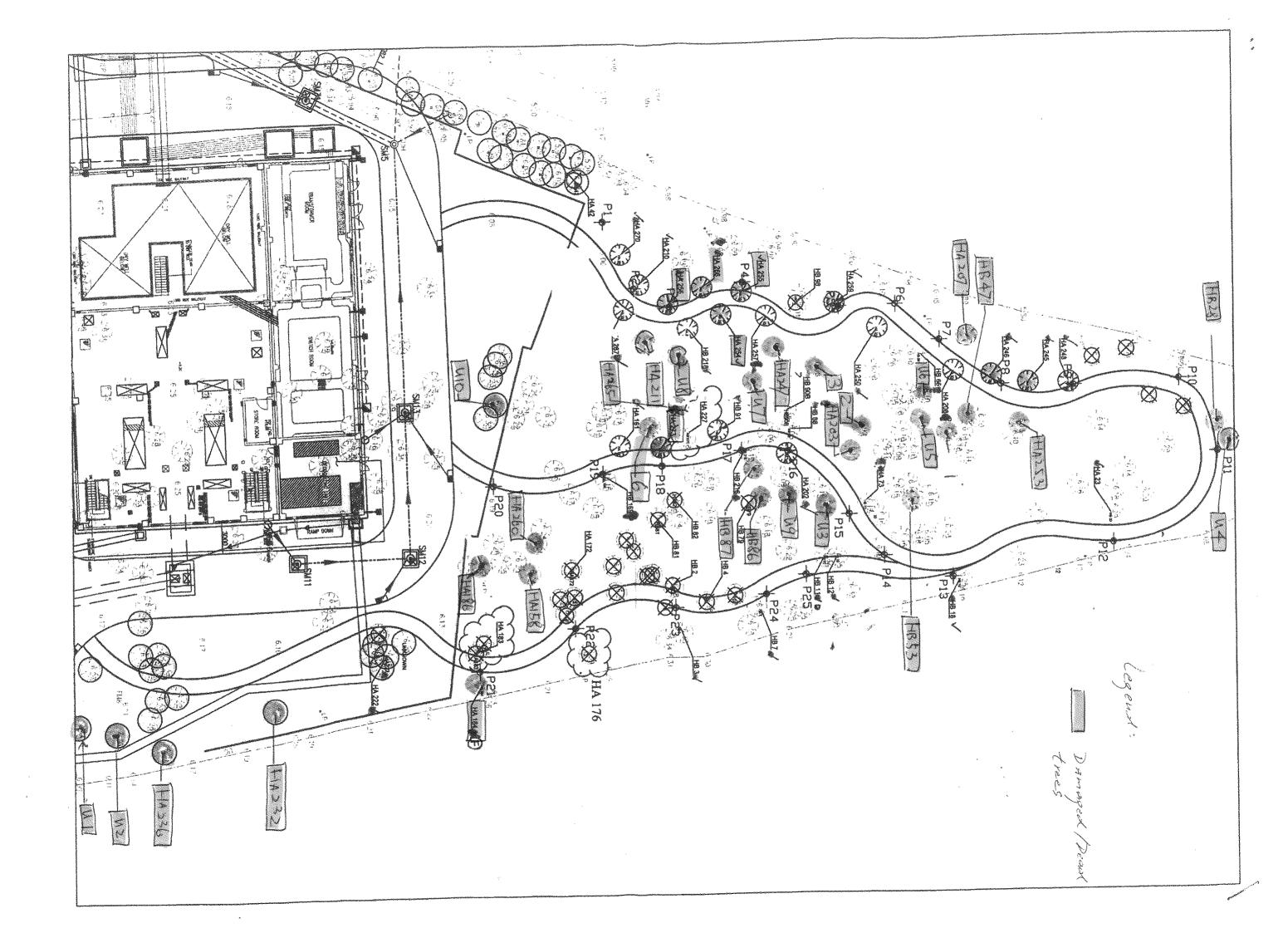
Summary of Damaged/Dead Trees to be Felled inside Ha Tsuen Sewage Pumping Station Area

Tree No.	Species	Chinese Name	Remarks
HA158	Acacia confusa	台灣相思	Leaning, uprooting
HA184	Acacia auriculiformis	耳果相思	Dead tree
HA186	Acacia auriculiformis	耳果相思	Trunk damaged
HA203	Eucalyptus torelliana	毛葉桉	Dead tree
HA207	Acacia confusa	台灣相思	Trunk damaged
HA211	Albizia lebbeck	大葉合歡	Trunk damaged
HA232	Acacia confusa	台灣相思	Dead tree
HA236	Acacia auriculiformis	耳果相思	Trunk damaged
HA247	Eucalyptus torelliana	毛葉桉	Dead tree
HA253	Acacia auriculiformis	耳果相思	Dead tree
HA254	Eucalyptus torelliana	毛葉桉	Dead tree
HA255	Acacia auriculiformis	耳果相思	Dead tree
HA256	Acacia auriculiformis	耳果相思	Dead tree
HA260	Acacia confusa	台灣相思	Trunk damaged
HA265	Acacia auriculiformis	耳果相思	Dead tree
HA266	Acacia confusa	台灣相思	Dead tree
HA273	Acacia auriculiformis	耳果相思	Dead tree
HB47	Acacia auriculiformis	耳果相思	Dead tree
HB28	Bauhinia blakeana	洋紫荆	Trunk damaged, leaning
HB53	Acacia confusa	台灣相思	Bark damaged, sprouts
HB86	Acacia auriculiformis	耳果相思	Dead tree
HB87	Acacia auriculiformis	耳果相思	Trunk damaged, leaning
U1	Acacia auriculiformis	耳果相思	Trunk damaged
U2	Acacia auriculiformis	耳果相思	Trunk damaged
U3	Acacia auriculiformis	耳果相思	Trunk damaged
U4	Acacia auriculiformis	耳果相思	Dead tree
U5	Acacia auriculiformis	耳果相思	Dead tree
U6	Acacia auriculiformis	耳果相思	Dead tree
U7	Acacia auriculiformis	耳果相思	Dead tree
U8	Acacia confusa	台灣相思	Trunk damaged
U9	Acacia confusa	台灣相思	Trunk damaged
U10	Acacia confusa	台灣相思	Trunk damaged
2	Acacia auriculiformis	耳果相思	Trunk damaged
3	Acacia auriculiformis	耳果相思	Dead tree
6	Acacia auriculiformis	耳果相思	Dead tree



Appendix B

Location Plan of Damaged/Dead Trees





Appendix C

Summary of Damaged/Dead Trees

Summary of Damaged/Dead Trees to be Felled inside Ha Tsuen Sewage Pumping Station Area

					Damage/Dead	Damage/Dead
					Caused by Typhoon	Caused by Typhoon
Tree No.	Species	Chinese Name	Condition	Existing/Transplanted	on 14 August 2013	on 23 Sept 2013
HA158	Acacia confusa	台灣相思	Leaning, uprooting	Existing	✓	
HA184	Acacia auriculiformis	耳果相思	Dead tree	Existing	✓	
HA186	Acacia auriculiformis	耳果相思	Trunk damaged	Existing		✓
HA203	Eucalyptus torelliana	毛葉桉	Dead tree	Transplanted	✓	
HA207	Acacia confusa	台灣相思	Trunk damaged	Transplanted	✓	
HA211	Albizia lebbeck	大葉合歡	Trunk damaged	Transplanted		✓
HA232	Acacia confusa	台灣相思	Dead tree	Existing	✓	
HA236	Acacia auriculiformis	耳果相思	Trunk damaged	Existing		✓
HA247	Eucalyptus torelliana	毛葉桉	Dead tree	Transplanted		✓
HA253	Acacia auriculiformis	耳果相思	Dead tree	Transplanted	✓	
HA254	Eucalyptus torelliana	毛葉桉	Dead tree	Transplanted		✓
HA255	Acacia auriculiformis	耳果相思	Dead tree	Transplanted		✓
HA256	Acacia auriculiformis	耳果相思	Dead tree	Transplanted	✓	
HA260	Acacia confusa	台灣相思	Trunk damaged	Transplanted		✓
HA265	Acacia auriculiformis	耳果相思	Dead tree	Transplanted		✓
HA266	Acacia confusa	台灣相思	Dead tree	Transplanted	✓	
HA273	Acacia auriculiformis	耳果相思	Dead tree	Transplanted	✓	
HB47	Acacia auriculiformis	耳果相思	Dead tree	Existing	✓	
HB28	Bauhinia blakeana	洋紫荆	Trunk damaged, leaning	Existing		✓
HB53	Acacia confusa	台灣相思	Bark damaged, sprouts	Existing	✓	
HB86	Acacia auriculiformis	耳果相思	Dead tree	Existing	✓	
HB87	Acacia auriculiformis	耳果相思	Trunk damaged, leaning	Existing		✓
U1	Acacia auriculiformis	耳果相思	Trunk damaged	Existing	✓	
U2	Acacia auriculiformis	耳果相思	Trunk damaged	Existing		✓

Summary of Damaged/Dead Trees to be Felled inside Ha Tsuen Sewage Pumping Station Area

					Damage/Dead Caused by Typhoon	Damage/Dead Caused by Typhoon
Tree No.	Species	Chinese Name	Condition	Existing/Transplanted	on 14 August 2013	on 23 Sept 2013
U3	Acacia auriculiformis	耳果相思	Trunk damaged	Existing		✓
U4	Acacia auriculiformis	耳果相思	Dead tree	Existing		✓
U5	Acacia auriculiformis	耳果相思	Dead tree	Existing	✓	
U6	Acacia auriculiformis	耳果相思	Dead tree	Existing	✓	
U7	Acacia auriculiformis	耳果相思	Dead tree	Existing		✓
U8	Acacia confusa	台灣相思	Trunk damaged	Existing	✓	
U9	Acacia confusa	台灣相思	Trunk damaged	Existing	✓	
U10	Acacia confusa	台灣相思	Trunk damaged	Existing	✓	
2	Acacia auriculiformis	耳果相思	Trunk damaged	Existing		✓
3	Acacia auriculiformis	耳果相思	Dead tree	Existing	✓	
6	Acacia auriculiformis	耳果相思	Dead tree	Existing	✓	
				TOTAL	20	15



Appendix D

Programme of Tree Felling

Contract No. DC/2009/08 Construction of Yuen Long South Branch Sewers and Expansion of Ha Tsuen Sewage Pumping Station

Activity	Description		Rem	Early	Early		2013					2014									2015			
ID	,	Dur	Dur	Start	Finish	SEP	OCT NOV DEC	JAN FEE	B MAR	APR	MAY			UG SE	P OC	NO/	DEC	JAN	FEB	MAR		AY J	JUN J	JUL
1180	Summary of programme of tree felling at HTSPS	1*	1*	12OCT13	12OCT13		Summary of	program	me of	tree f	felling 	at H1	S											
1190	Mobilize equipment and plant on site	1	1	12OCT13	12OCT13		Mobilize equ	ipment a	and pla	ant on	site													
1191	Fell damaged/dead trees	1	1	12OCT13	12OCT13		Fell damage	d/dead tr	rees															
1200	Dispose felled trees	1	1	12OCT13	12OCT13		Dispose felle	d trees																
1210	Demobilize equipment and plant	1	1	14OCT13	14OCT13		Demobilize	equipmer	nt and	l plant	t													
1220	Tidy up tree felling area	1	1	14OCT13	14OCT13		Tidy up tree	felling ar	rea															

Start date	12OCT13		Early bar
Finish date	140CT13		Progress bar
Run date	29NOV13		Critical bar
Page number	1A		Summary bar
Company name	CSHK	6	Start milestone point
c Primavera Sy	stems, Inc.	ŏ	Finish milestone point
		1 -	i iliani ilianotorio poriti

Programme of Tree Felling at Ha Tsuen Sewage Pumping Station