Appendix D Landscape Establishment Monitoring Checklist



WELLAB LIMITED

Rm 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong

Tel.: (852) 2898 7388 Fax: (852) 2898 7076

E-MAIL

TO: Distribution List DATE 19 December 2019

FROM Dr. Priscilla Choy SHEET 1 OF 1 + 24

REF. NO. WL/MA12014/Corres/Out/DCVJV it191219audit191129 v1

Contract HY/2011/09

Hong Kong-Zhuhai-Macao Bridge

SUBJECT Hong Kong Link Road-Section between HKSAR Boundary and Scenic Hill

Site Audit for Landscape & Visual Mitigation Measures during Establishment Period

on 29 November 2019

Dear Sir.

We have conducted the Site Audit for the above contract on 29 November 2019. Please find attached the completed checklist for your information and action.

Should you require any further information, please feel free to contact our Ms. Ivy Tam at 2151 2090 or the undersigned at 2151 2089.

Yours faithfully,

WELLAB LIMITED

Dr. Priscilla Choy

Environmental Team Leader

Encl.

Distribution List (via E-mail):

DCVJV (Attn.: Mr. Sing Chu) chungsing.chu@dcvjv.com
(Attn.: Mr. WK Poon) waikwong.poon@chechk.com
ARUP (Attn.: Mr. Dennis Yu) Dennis.Yu@hklr.hy09.net
(Attn.: Mr. Ray Yan) iec.hlr@ramboll.com
(Attn.: Mr. Harris Wong) ess.hlr@ramboll.com

Contract HY/2011/09

Hong Kong-Zhuhai-Macao Bridge

Hong Kong Link Road-Section between HKSAR Boundary and Scenic Hill

Site Inspection Record Summary

Checklist Reference Number	191129
Date	29 November 2019 (Friday)
Time	10:30-12:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item
	A. Landscape and Visual	
191129-O01	• The groundcovers (Catharanthus roseus and Lantana montevidensis) were observed to be in poor health or dead. The Contractor was reminded to review the health	C5.2a
191129-O02	 condition of all groundcovers and re-planted if necessary. Weeds and unwanted plants were observed. The Contractor was reminded to remove them and replant the approved species for groundcovers according to the approved plan. 	C5.1 & 5.5
191129-O03	 Kwo Lo Wan Road Some <i>Phoenix roebelenii</i> were removed. The Contractor was reminded to re-plant them according to the approved plan. 	C3.1
191129-004	Airport Road • Weeds and unwanted plants were observed. In addition, the <i>Phoenix roebelenii</i> are also in poor health or dead. The Contractor was reminded to remove the weeds and unwanted plants to ensure the healthy establishment of the target species accordingly.	C4.2a & C4.5
191129-005	 Portion A Some trees (<i>Phoenix roebelenii</i>) and shrubs (<i>Rhododendron pulchrum</i>) were observed to be in poor health or dead. The Contractor was reminded to review the health of all trees and shrubs and replace them if confirmed dead. 	C1.2a
	B. Others	
	Follow-up on previous audit session (ref no. 190923), follow up action is needed to be reviewed for item 190923-O01, 190923-O02 and 190923-O03 which are renamed as 191129-O05, 191129-O04 and 191129-O02 respectively.	

	Name	Signature	Date
Recorded by	Ivy Tam	Lug	29 November 2019
Checked by	Dr. Priscilla Choy	WF	29 November 2019

Environmental Monitoring and Audit Landscape and Visual Audit Checklist (Establishment Works)

Contract No. HY/2011/09

Hong Kong-Zhuhai-Macao Bridge

Hong Kong Link Road - Section between HKSAR Boundary and Scenic Hill

				itaary (Audit	Ref. No.	19429
Cont	ract	Contract HY/2011/09	Env. Team	2	Wellab Li	mited		
		Hong Kong-Zhuhai-Macao Bridge	SO Rep.	_	ARUP			
		Hong Kong Link Road-Section between	ENPO/IEC		Ramboll I	long Kon	g Ltd.	
		HKSAR Boundary and Scenic Hill						
Inspected By		ET Auditor: Tun low CTO / SIOW / IOW / Engineer: ENPO / IEC: Pay	Inspection Date Time Period	_	10:30 ~ 12:00			
Part A	We	ather,	-50					
Condi	tion	Sunny Fine Overcast Drizzle	Rain		Storm [Hazy		
Temp	erature	<i>>Y</i> ∘c						
Humic	lity	High (RH>90%) Moderate (90%>RH>50%)	Low (F	:H<50%)				
Wind		Calm Light Breeze Strong						
Part B	Are	a of Inspection						
	Port	tion A / Portion C / Kwo Lo Wan Road / Airport Road / Viaduct between	n P112 and P114					
Part C	Lan	N/A or	not observed	Yes	No	Follow-up	N/C	Remarks
1.	Portion A			/				
1.1		anting works complied with the approved Landscape and Visual Plan? location and plant species)						0
1.2a	Are the pl	ants' health conditions satisfactory?						(X)
1.2b	If not, are	replacement planting carried out immediately?	\square					
1,3	Are all pla	ants properly trimmed regularly to maintain/enhance the aesthetic						
1.4		funtimed plants as a result of wind rock or other causes avoided?						
1.5	Are all gra	assed and planted area kept free from weeds/unwanted plants?		Ø				8
1,6	Is compac	tion of the soil avoided for the plants?						
1.7	Are litter/	unwanted material removed within the planting area?		Z				
1.8	Is mulch the	hat disturbed by replacement planting, weeding or watering made						
1.9	100000000000000000000000000000000000000	ds/mechanical injuries avoided on tree trunk?						
1.10	Are leanin	g of trees avoided?						
1,11	Are dead/o	detached branches avoided?		1				
1.12	Are decay	/cavity avoided on tree trunks?		Z,				
1.13	Are all tree	es kept free from pest, disease or fungal infection?						
1.14	Are trees v	were topped or pruned (if any) properly?	\checkmark					
1.15	Are there	enough area for growth and development of tree roots?		Z				
1.16a	Is exposur	e of tree roots avoided?	\Box	\triangle				s -
1 166	If not wer	a broken off or rotting of roots avoided?			Г1			

Environmental Monitoring and Audit Landscape and Visual Audit Checklist (Establishment Works)

Contract No. HY/2011/09

Hong Kong-Zhuhai-Macao Bridge

Hong Kong Link Road - Section between HKSAR Boundary and Scenic Hill

2.	Portion C	N/A or not observed	I	Yes	No	Follow-up	N/C	Remarks
2.1	Are the planting works complied with the approved Landscape and Visual (e.g. size, location and plant species)	Plan?						•
2.2a	Are the plants' health conditions satisfactory?							
2.2b	If not, are replacement planting carried out immediately?	Ę	2					
2.3	Are all plants properly trimmed regularly to maintain/enhance the aesthetic		1					
2,4	value? Are loose/unfirmed plants as a result of wind rock or other causes avoided	?						
2.5	Are all grassed and planted area kept free from weeds/anwanted plants?							
2.6	Is compaction of the soil avoided for the plants?							
2.7	Are litter/ unwanted material removed within the planting area?							
2.8	Is mulch that disturbed by replacement planting, weeding or watering made good?	e	7					
2,9	Are wounds/mechanical injuries avoided on tree trunk?							
2.10	Are leaning of trees avoided?							
2.11	Are dead/detached branches avoided?							
2.12	Are decay/cavity avoided on tree trunks?]	Ø,				k
2,13	Are all trees kept free from pest, disease or fungal infection?							
2.14	Are trees were topped or pruned (if any) properly?	Z	1					
2.15	Are there enough area for growth and development of tree roots?							
2.16a	Is exposure of tree roots avoided?							
2.16b	If not, were broken off or rotting of roots avoided?		<u> </u>					
3.	Kwo Lo Wan Road							\bigcirc
	Kwo Lo Wan Road Are the planting works complied with the approved Landscape and Visual (e.g. size, location and plant species)	Plan?						<u>(3)</u>
3.	Are the planting works complied with the approved Landscape and Visual	Plan?						<u> </u>
3. 3.1	Are the planting works complied with the approved Landscape and Visual (e.g. size, location and plant species)	Plan?						<u> </u>
3. 3.1 3.2a	Are the planting works complied with the approved Landscape and Visual (e.g. size, location and plant species) Are the plants' health conditions satisfactory? If not, are replacement planting carried out immediately? Are all plants properly trimmed regularly to maintain/enhance the aesthetic							<u>3</u>
3. 3.1 3.2a 3.2b	Are the planting works complied with the approved Landscape and Visual (e.g. size, location and plant species) Are the plants' health conditions satisfactory? If not, are replacement planting carried out immediately?							<u> </u>
3. 3.1 3.2a 3.2b 3.3	Are the planting works complied with the approved Landscape and Visual (e.g. size, location and plant species) Are the plants' health conditions satisfactory? If not, are replacement planting carried out immediately? Are all plants properly trimmed regularly to maintain/enhance the aesthetic value?							<u> </u>
3. 3.1 3.2a 3.2b 3.3	Are the planting works complied with the approved Landscape and Visual (e.g. size, location and plant species) Are the plants' health conditions satisfactory? If not, are replacement planting carried out immediately? Are all plants properly trimmed regularly to maintain/enhance the aesthetic value? Are loose/unfirmed plants as a result of wind rock or other causes avoided.							<u> </u>
3. 3.1 3.2a 3.2b 3.3 3.4 3.5	Are the planting works complied with the approved Landscape and Visual (e.g. size, location and plant species) Are the plants' health conditions satisfactory? If not, are replacement planting carried out immediately? Are all plants properly trimmed regularly to maintain/enhance the aesthetic value? Are loose/unfirmed plants as a result of wind rock or other causes avoided. Are all grassed and planted area kept free from weeds/unwanted plants?							<u>3</u>
3. 3.1 3.2a 3.2b 3.3 3.4 3.5 3.6 3.7	Are the planting works complied with the approved Landscape and Visual (e.g. size, location and plant species) Are the plants' health conditions satisfactory? If not, are replacement planting carried out immediately? Are all plants properly trimmed regularly to maintain/enhance the aesthetic value? Are loose/unfirmed plants as a result of wind rock or other causes avoided. Are all grassed and planted area kept free from weeds/unwanted plants? Is compaction of the soil avoided for the plants? Are litter/ unwanted material removed within the planting area? Is mulch that disturbed by replacement planting, weeding or watering made							
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3. 3.1 3.2a 3.2b 3.3 3.4 3.5 3.6 3.7 3.8 3.9 3.10 3.11	Are the planting works complied with the approved Landscape and Visual (e.g. size, location and plant species) Are the plants' health conditions satisfactory? If not, are replacement planting carried out immediately? Are all plants properly trimmed regularly to maintain/enhance the aesthetic value? Are loose/unfirmed plants as a result of wind rock or other causes avoided. Are all grassed and planted area kept free from weeds/unwanted plants? Is compaction of the soil avoided for the plants? Are litter/ unwanted material removed within the planting area? Is mulch that disturbed by replacement planting, weeding or watering made good? Are wounds/mechanical injuries avoided on tree trunk? Are leaning of trees avoided?							
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3. 3.1 3.2a 3.2b 3.3 3.4 3.5 3.6 3.7 3.8 3.9 3.10 3.11 3.12 3.13 3.14 3.15	Are the planting works complied with the approved Landscape and Visual (e.g. size, location and plant species) Are the plants' health conditions satisfactory? If not, are replacement planting carried out immediately? Are all plants properly trimmed regularly to maintain/enhance the aesthetic value? Are loose/unfirmed plants as a result of wind rock or other causes avoided. Are all grassed and planted area kept free from weeds/unwanted plants? Is compaction of the soil avoided for the plants? Are litter/ unwanted material removed within the planting area? Is mulch that disturbed by replacement planting, weeding or watering made good? Are wounds/mechanical injuries avoided on tree trunk? Are leaning of trees avoided? Are dead/detached branches avoided? Are all trees kept free from pest, disease or fungal infection? Are trees were topped or pruned (if any) properly?							

Environmental Monitoring and Audit Landscape and Visual Audit Checklist (Establishment Works)

Contract No. HY/2011/09

Hong Kong-Zhuhai-Macao Bridge

Hong Kong Link Road - Section between HKSAR Boundary and Scenic Hill

		N/A or not observed	Yes	No	Follow-u	p N/C	Remarks
4.	Airport Road		,				
4.1	Are the planting works complied with the approved Landscape and Visu (e.g. size, location and plant species)	al Plan?					
4,2a	Are the plants' health conditions satisfactory?						(4)
4.2b	If not, are replacement planting carried out immediately?						
4.3	Are all plants properly trimmed regularly to maintain/enhance the aesther value?	tic 🗾					
4.4	Are loose/unfirmed plants as a result of wind rock or other causes avoide	ed?					
4.5	Are all grassed and planted area kept free from weeds/unwanted plants?						<u>(A)</u>
4.6	Is compaction of the soil avoided for the plants?						
4.7	Are litter/ unwanted material removed within the planting area?						
4.8	Is mulch that disturbed by replacement planting, weeding or watering ma good?	de					
4.9	Are wounds/mechanical injuries avoided on tree trunk?		\square				
4.10	Are leaning of trees avoided?						P
4.11	Are dead/detached branches avoided?		Z				
4.12	Are decay/cavity avoided on tree trunks?						
4.13	Are all trees kept free from pest, disease or fungal infection?						
4.14	Are trees were topped or pruned (if any) properly?						
4.15	Are there enough area for growth and development of tree roots?						
4.16a	Is exposure of tree roots avoided?						h
4.16b	If not, were broken off or rotting of roots avoided?						
5.	Viaduct between P112 and P114						
5.1	Are the planting works complied with the approved Landscape and Visua (e.g. size, location and plant species)	l Plan?					<u>~</u>
5.2a	Are the plants' health conditions satisfactory?						$\mathcal{U}_{\underline{\hspace{1cm}}}$
5.2b	If not, are replacement planting carried out immediately?						
5.3	Are all plants properly trimmed regularly to maintain/enhance the aesthetic value?						
5.4	Are loose/unfirmed plants as a result of wind rock or other causes avoided	1?	Ø				
5.5	Are all grassed and planted area kept free from weeds/unwanted plants?						(y)
5.6	Is compaction of the soil avoided for the plants?						
5.7	Are litter/ unwanted material removed within the planting area?						
5.8	Is mulch that disturbed by replacement planting, weeding or watering mad	e					

Environmental Monitoring and Audit

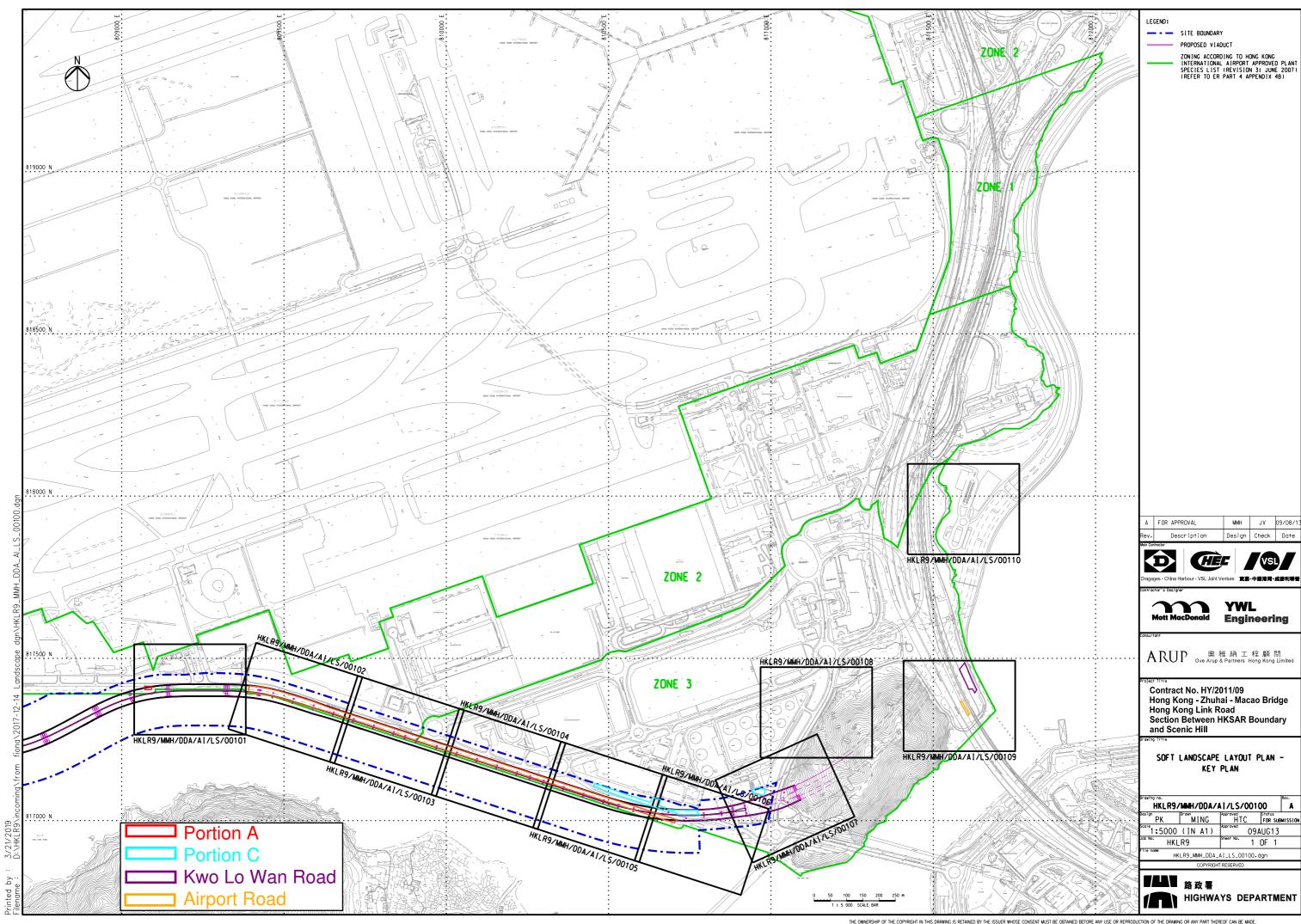
Landscape and Visual Audit Checklist (Establishment Works)

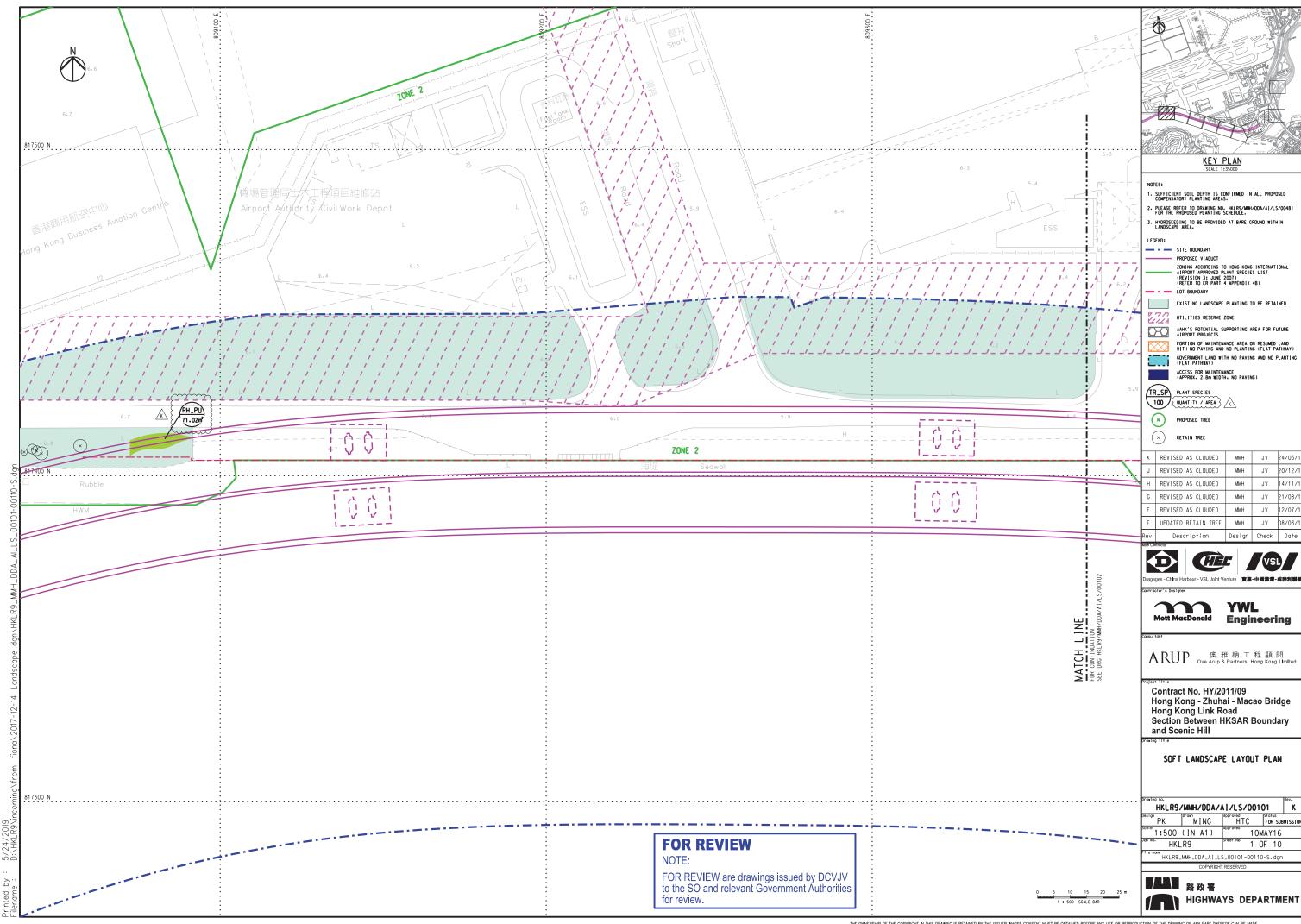
Contract No. HY/2011/09

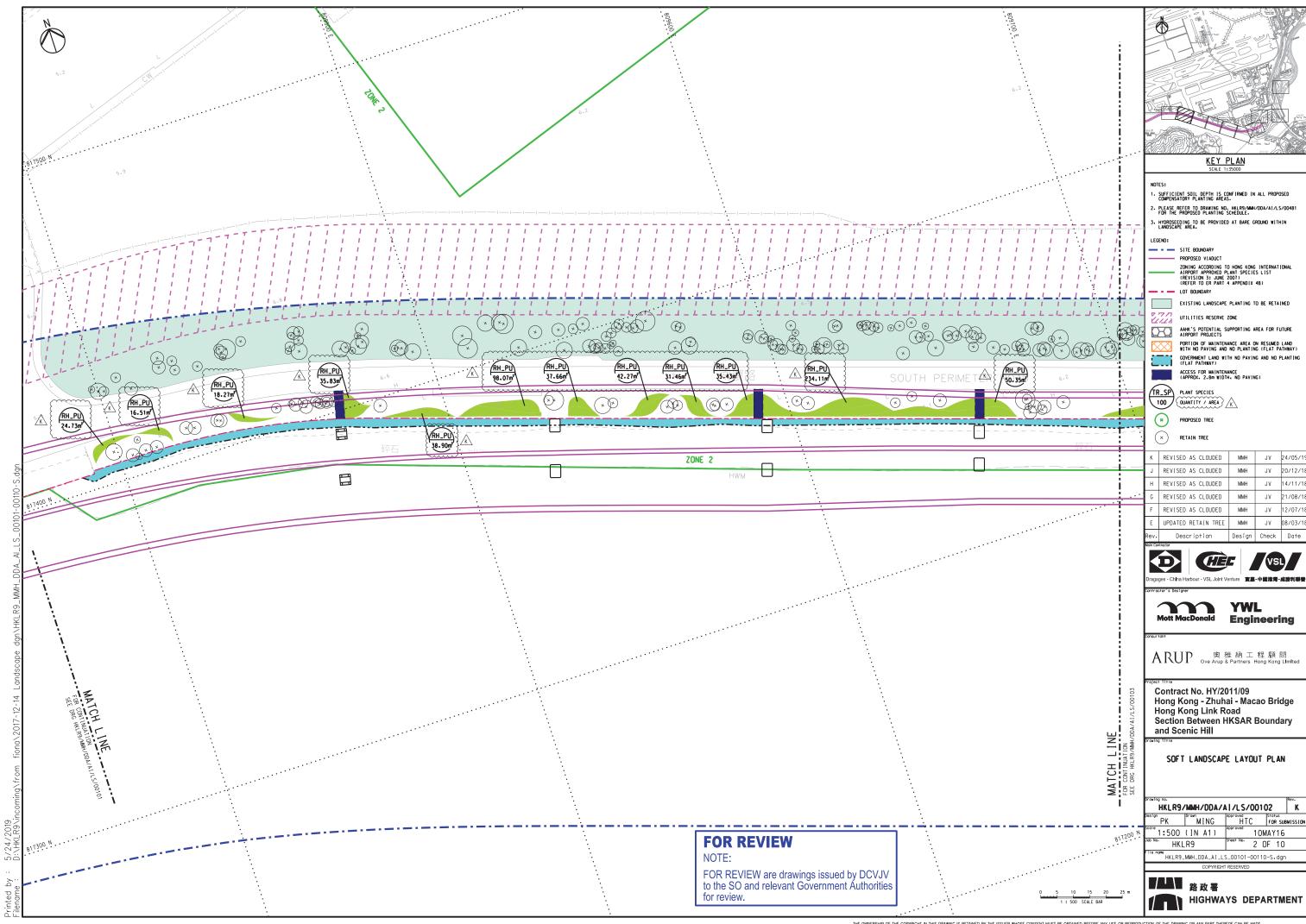
Hong Kong-Zhuhai-Macao Bridge

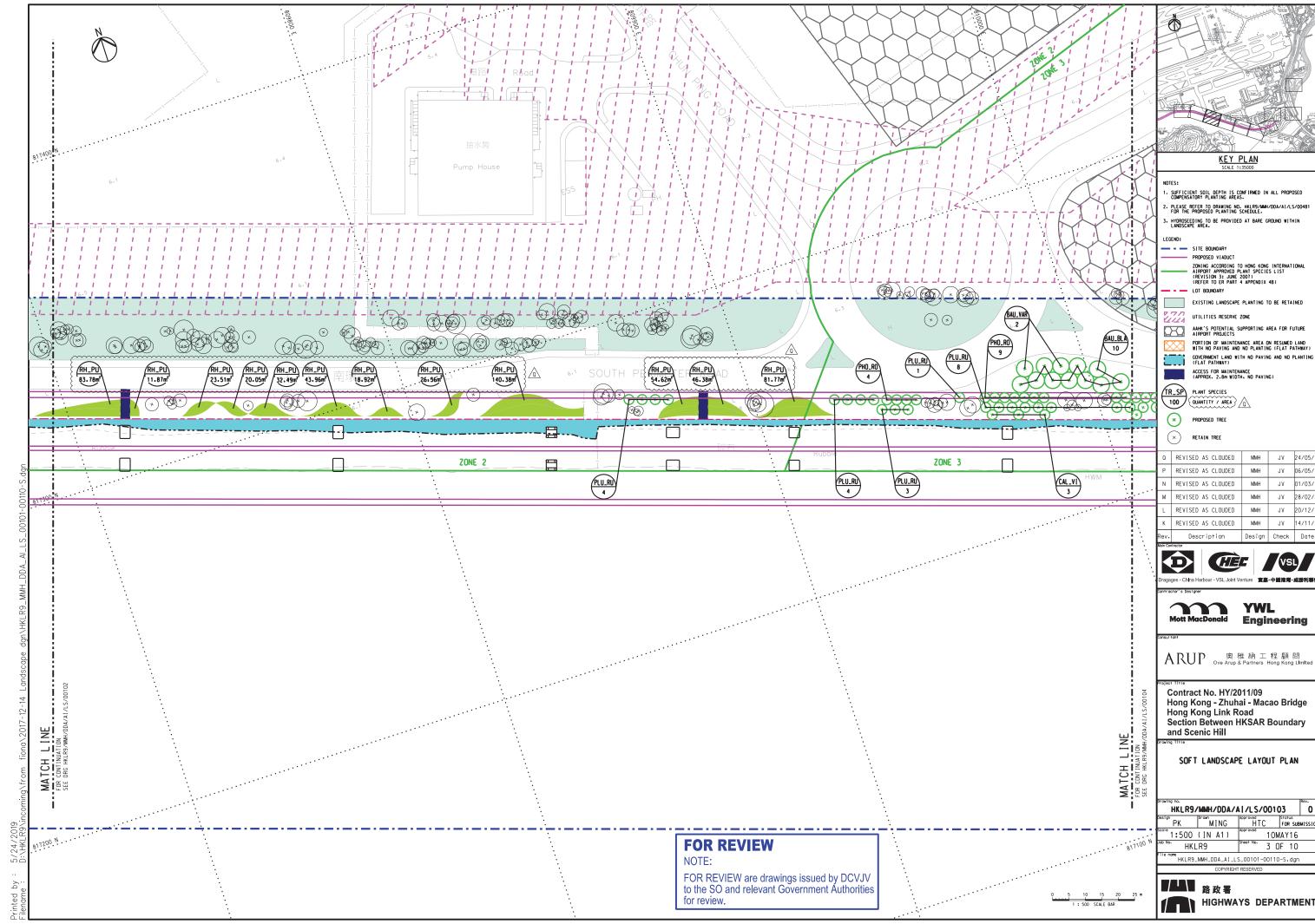
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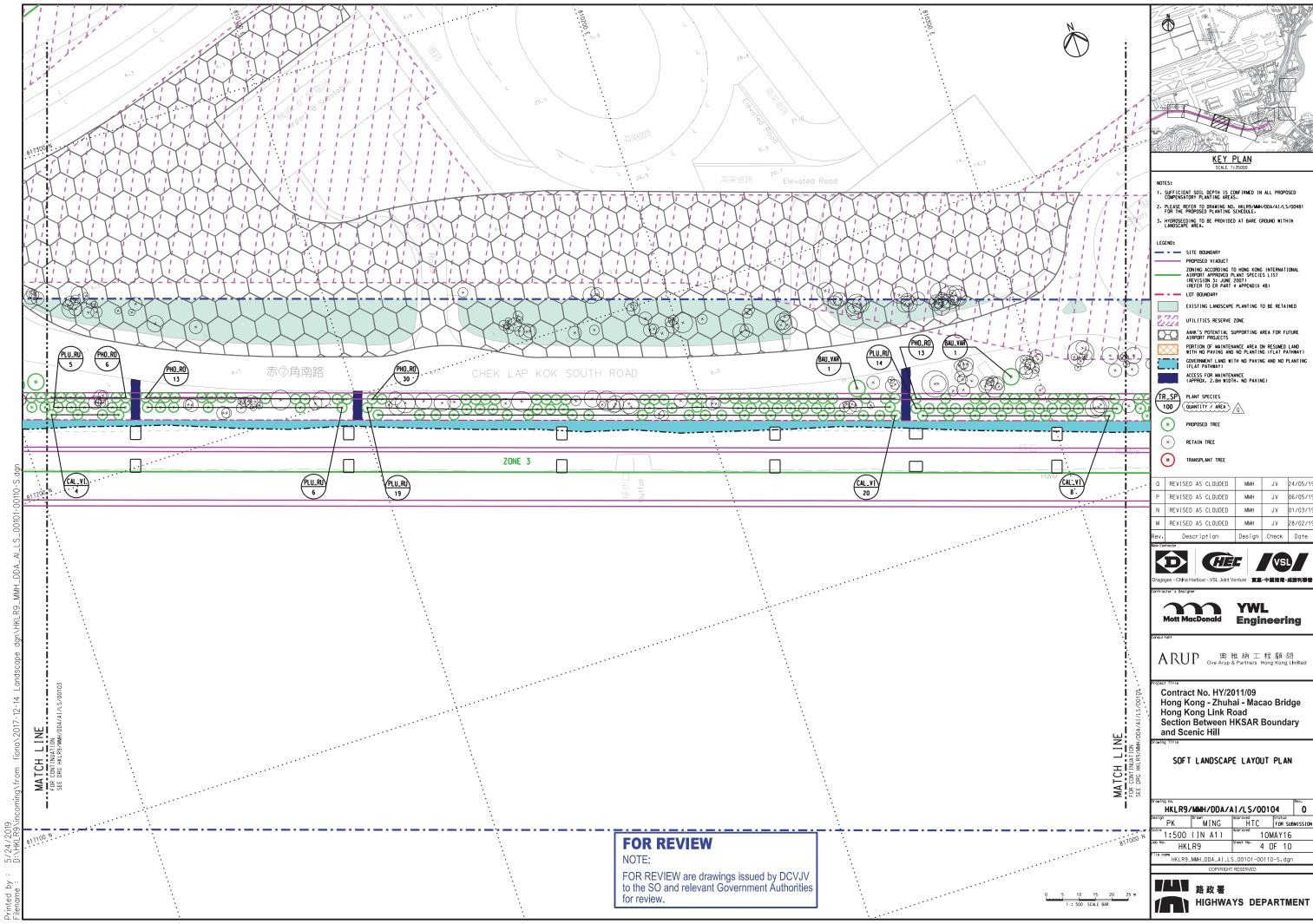
					·		
Part D	Follow-up for the Previous Site Audit of	n Date: 23 Copt 19 (Ref. No. 1	rved Yes	_) s No	Follow-up N/C	Remarks	
1.	Is the situation in item OUL improve	ed/rectified?				I <u>&</u>	
2.	1	ed/rectified?				! <u>—</u> (4)	
3.	Is the situation in item 005 improve	ed/rectified?				_ 	
4.	Is the situation in item improve	cd/rectified?					
5.	-	ed/rectified?				<u> </u>	
6.	•	ed/rectified?				•	
7. 8.	•	ed/rectified? ed/rectified?					
Oba	duct between Pin as a grand covers (Ca		autua i	ŧ.	1 1	poor headle	, or dead.
<u></u>	he Contineter has retained	thorauthur Rosens) h	2004 ما المعالمة الما المسالمة	envall Londiti	en of Al	I ground cons	irs and
	Le A firster has retained	ed to verten the	Try Con			t 8 a.	41 os.
7	the constant of wearing.	(phitos 19-20)	71. Mada	uctor v	ins pendi	ald to himo	
<u> </u>	he Contractor has retained planted pla	cuts were obscorred	enc.	contly	to the	approved pla	in,
01	will a and control of approx	ed species for from a c	ALCON FOR	3		Cpi	noto (19-21)
Kno	Lo Wan Road : one Phoenix rocketer	~wA	. 71.	C. tim	etor leas	reminded t	o re-plant
	· showing rottelen	i had hard removed	9 Mg	Lower			
(4) 4	them according to the A	pproud plan. Colleto	(4)			·	Letail are
Aup O A	ort Road? 1864, and unhanted pla 1866 to poor health condition and ununited plants to accordagly. (puto 17)	nts to have observed in or Lead. The Amino ensure the heatthy	1 Tu.	eddila 14 res shuart	n, the midded to of the	phoenix rux ranovl th thrap! speci	he pueds
0. 0				1) i 4		ed to be
18 G	ome their (phoenix role) in poor herten or dead. I	denil) and shoubs (. The Contractor has relu	Rhidoder Lided to	om p	wecome) i	athof all t	nus and
 	Signatures: Chrub 4 And repla			Pholo			
	ET Auditor	CTO / SIOW / IOW / Enginner		Contractor	's Representative		
	- lug	D	-,	(Name:		***************************************	
	(Name: Tuftum) (Date: 24/11/2019)	(Name: (Date:)	(Date:		ý	
	IEC/ENPO Auditor						
	Kan						
	(Name: Ray Yan) (Date: 2 Jan 2020)						

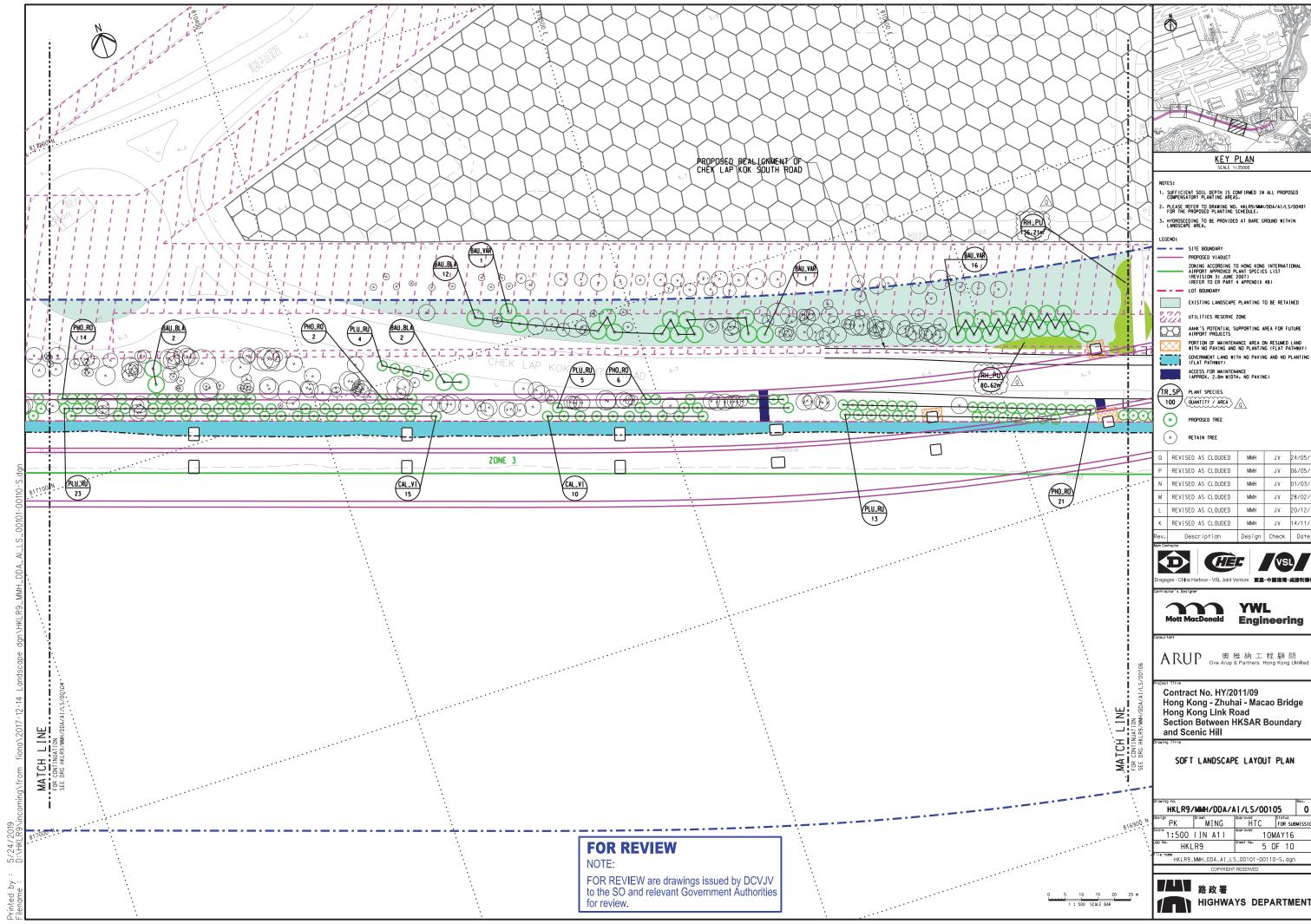


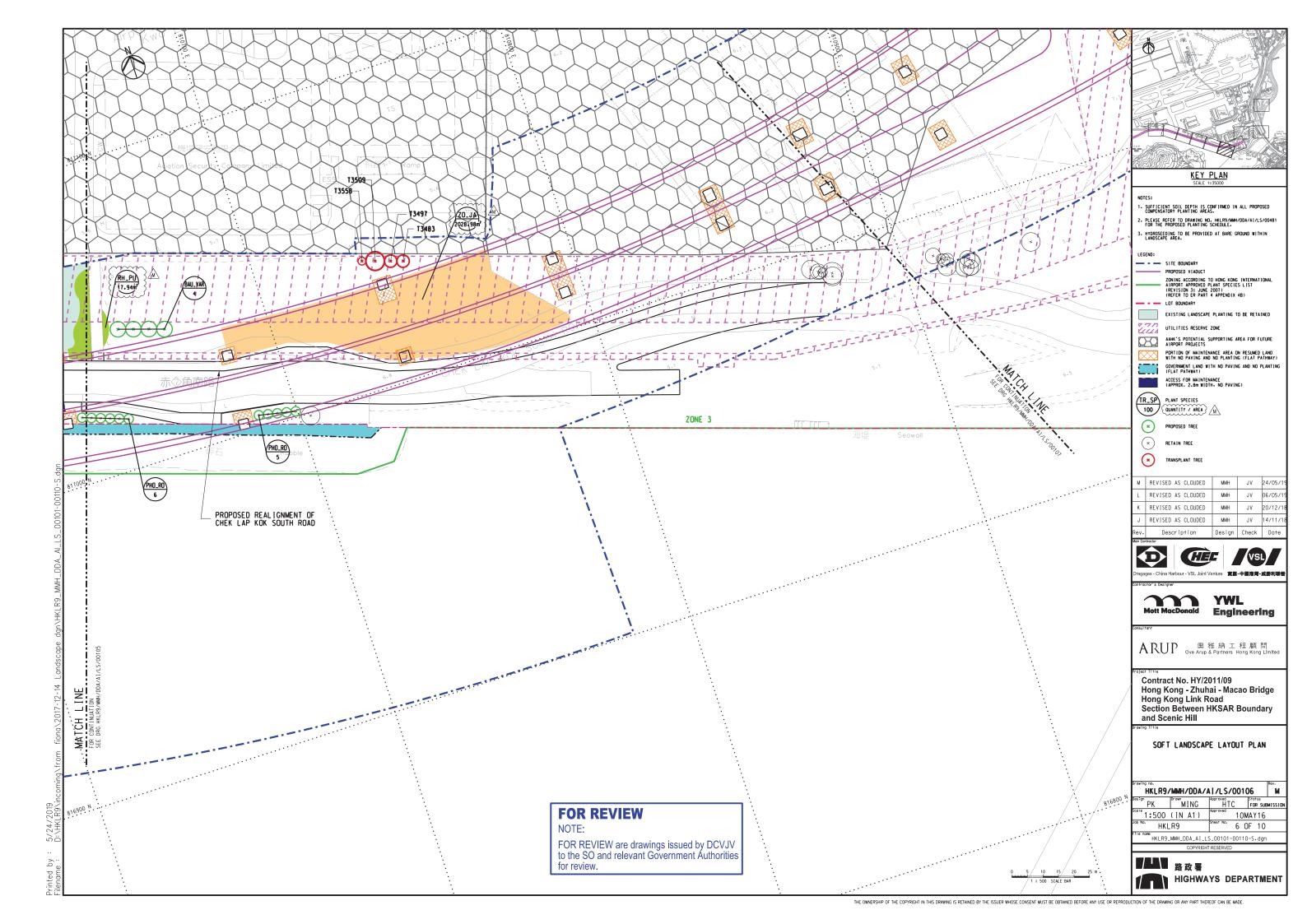


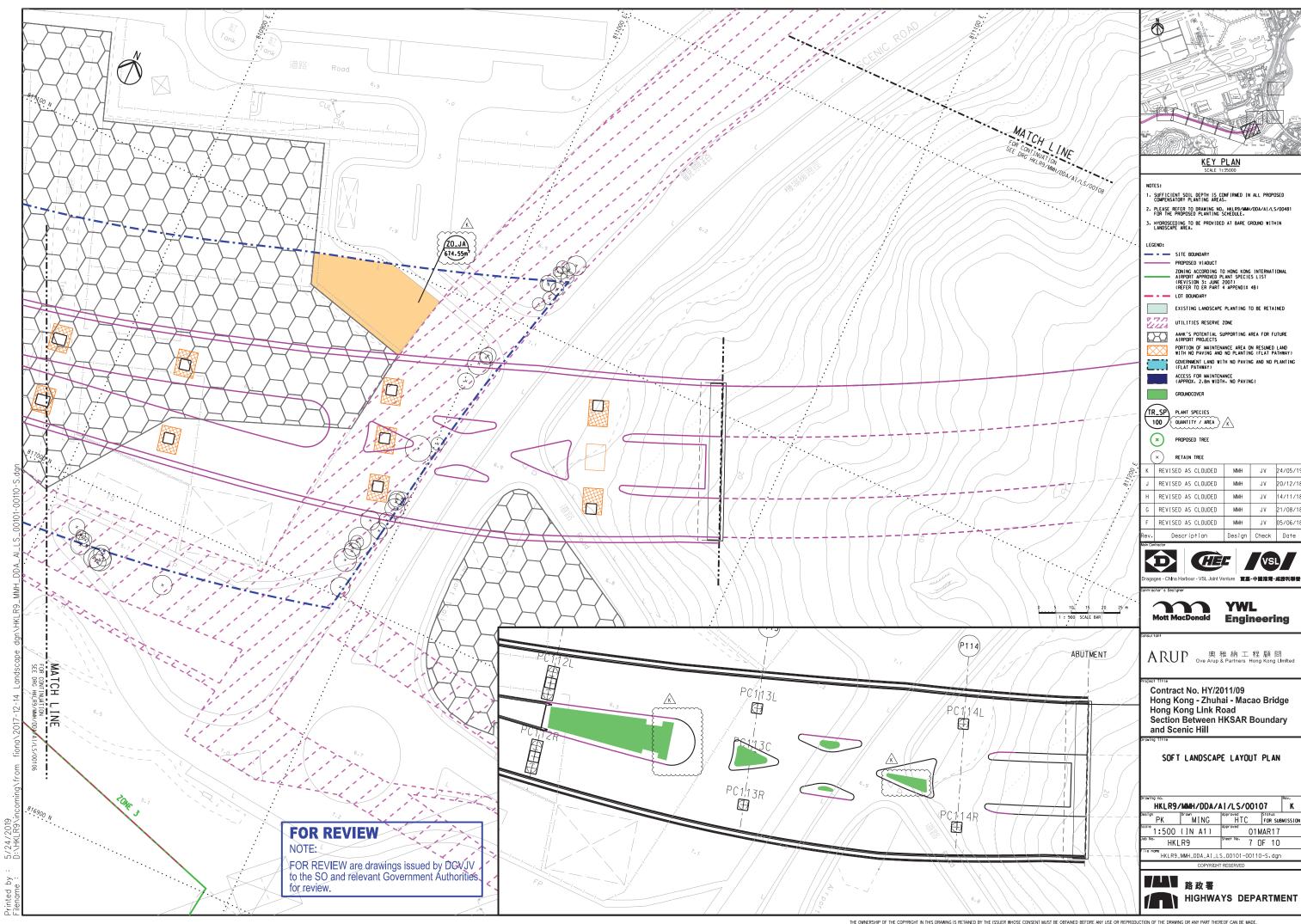


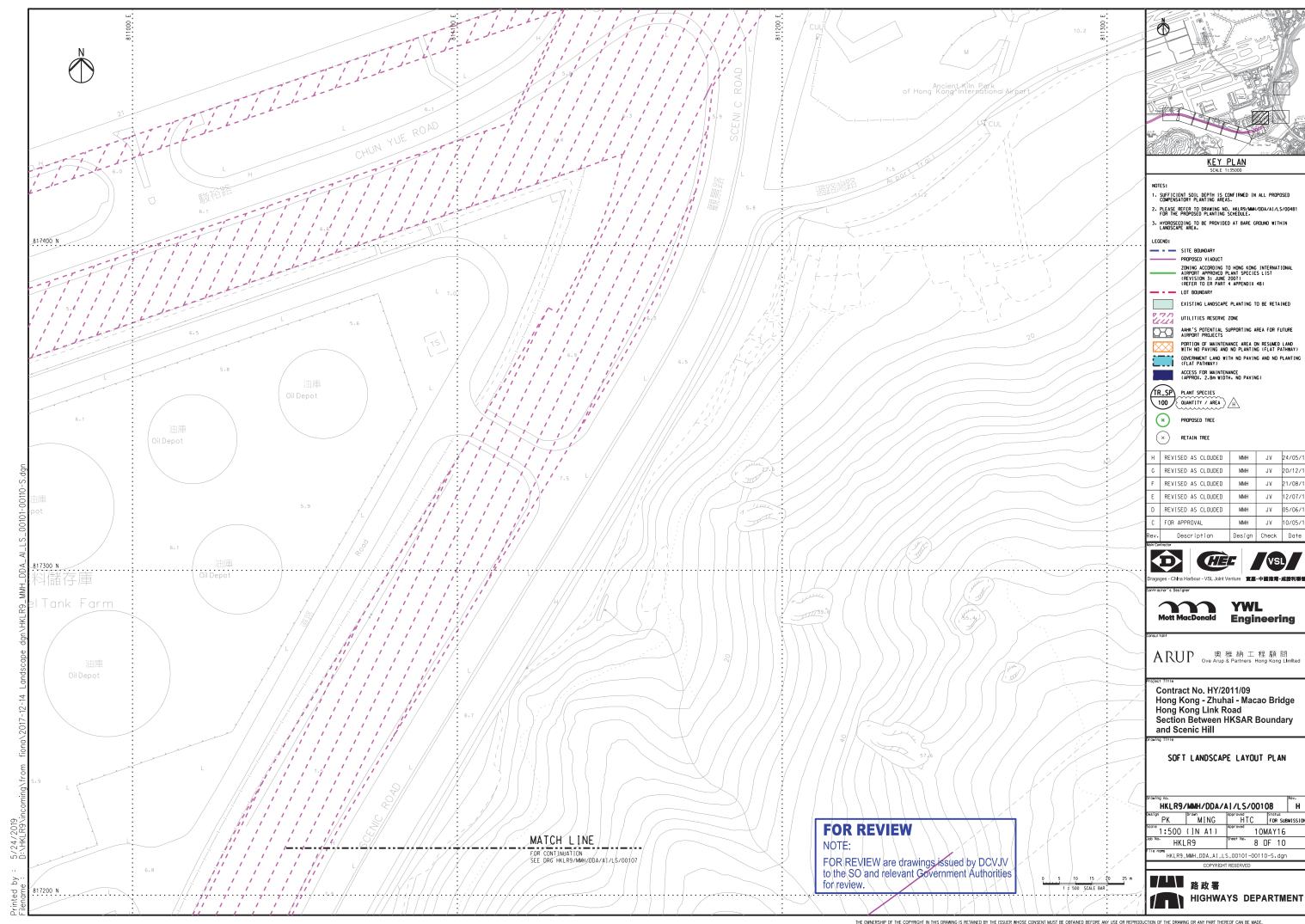


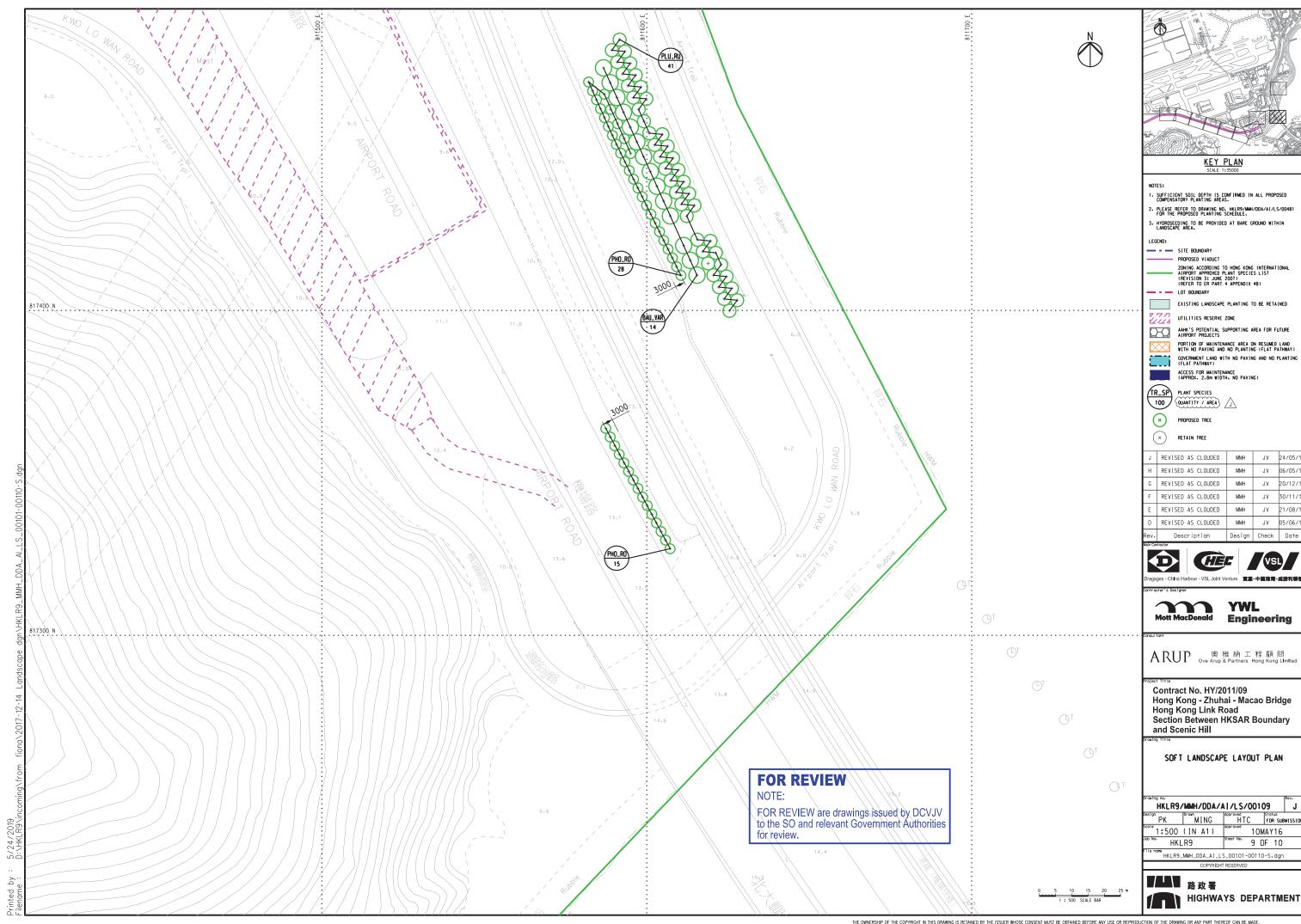


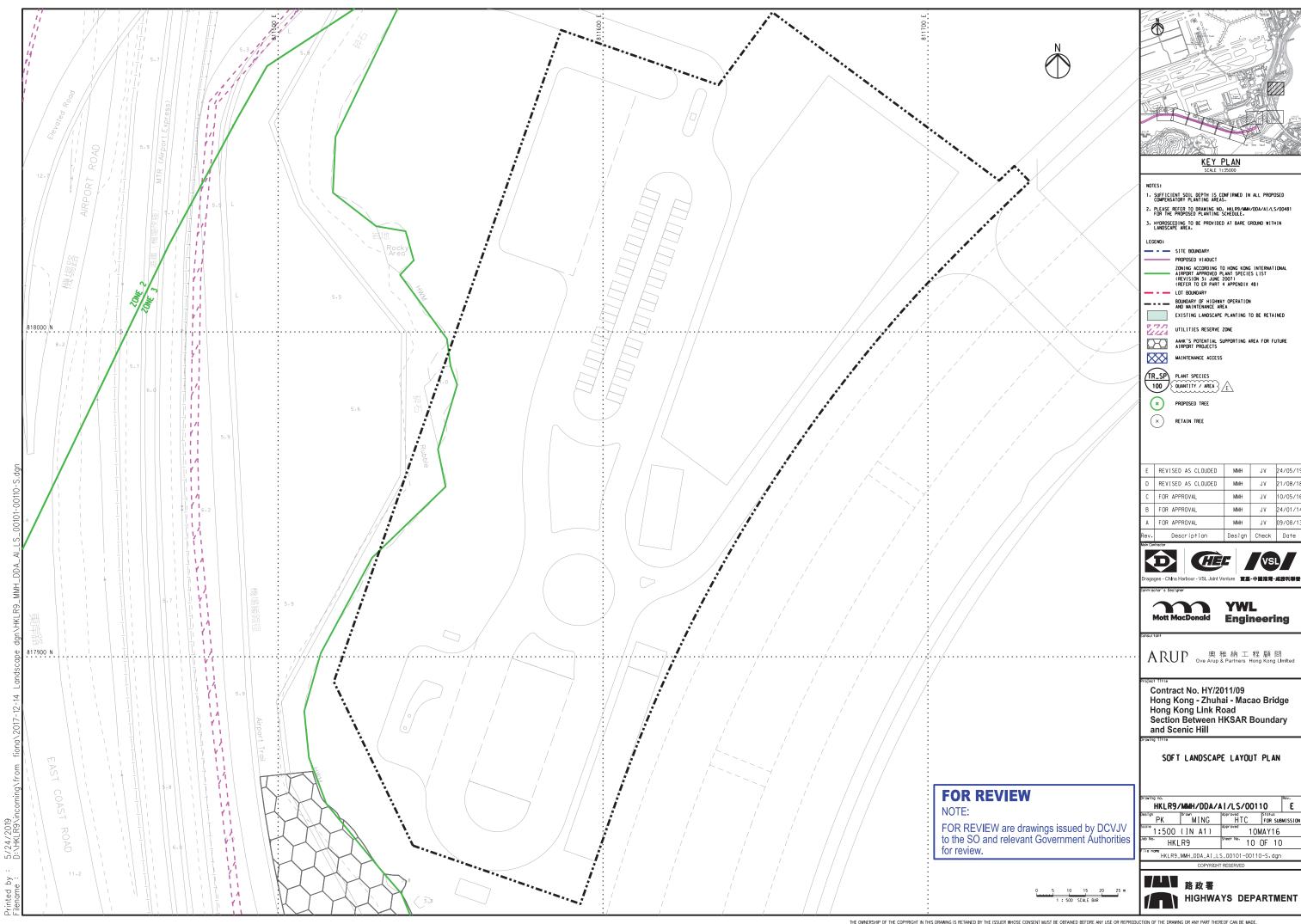












Location: Portion A

Photo 1



Description: General view of planted shrubs (*Rhododendron pulchrum*)

Photo 3



Description: The planted shrubs (*Rhododendron pulchrum*) was observed in poor health or dead.

Photo 2



Description: General view of planted shrubs (Rhododendron pulchrum)

Photo 4



Description: General view of planted trees (*Plumeria rubra*)

Location: Portion A

Photo 5



Description: General view of planted trees (*Plumeria rubra*, *Callistemon viminalis* and *Phoenix roebelenii*)

Photo 7



Description: The planted tree (*Phoenix roebelenii*) was observed in poor health or dead.

Photo 6



Description: General view of planted trees (*Bauhinia variegata and Bauhinia blakeana*)

Photo 8



Description: General view of planted trees (*Plumeria rubra* and *Phoenix roebelenii*)

Location: Portion A





Description: General view of planted trees (*Phoenix roebelenii*)

Location: Portion C

Photo 10



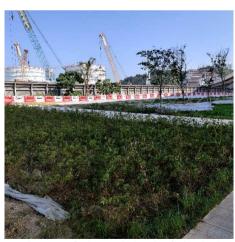
Description: General view of planted trees (*Bauhinia variegata and Bauhinia blakeana*)

Photo 11



Description: Description: General view of planted trees (*Bauhinia variegata*)

Photo 12



Description: General view of planted shrubs (Rhododendron pulchrum)

Photo 13



Description: General view of Zoysia japonica

Location: Kwo Lo Wan Road





Description: General view of planted trees (*Plumeria rubra*)

Photo 15



Description: General view of planted trees (*Bauhinia variegata* and *Phoenix roebelenii*)

Photo 16



Description: The planted tree (*Phoenix roebelenii*) was removed.

Location: Airport Road

Photo 17



Description: Weeds and unwanted plants were observed and *Phoenix* roebelenii are also in poor health condition or dead.

Location: Viaduct between P112 - P114

Photo 17



Description: General view of groundcover (Nephrolepis auriculata)

Photo 19



Description: Weeds and unwanted were observed and *Catharanthus roseus* are also in poor health condition or dead.

Photo 18



Description: General view of groundcover (Nephrolepis auriculata)

Photo 20



Description: Weeds and unwanted were observed and *Lantana* montevidensis are also in poor health condition or dead.

Location: Viaduct between P112 - P114

Photo 21



Description: Weeds and unwanted were observed and *Nephrolepis* auriculata, *Catharanthus roseus and Lantana montevidensis* are also in poor health condition or dead.

Photo 22



Description: Weeds and unwanted were observed and *Nephrolepis* auriculata, *Catharanthus roseus and Lantana montevidensis* are also in poor health condition or dead.