

M+CONSULTANCY JV SUBMISSION OF TREE AND TURF GRASS PLANTING AND LANDSCAPE PLANS (REV. E) 30.06.2020

Project					
Museum for Visual Culture in West Kowloon Cultural District					
Client	Consultant				
WKCDA	M+ Consultancy JV (MJV)				
Element	Other				
3AXXX-TFP-LAN-REP-0001-LMP-WS2-XE					
Submission of Tree and Turf Grass Planting					
and Landscape Plans					
Discipline					
LAN					

E	30 JUN 2020	Arup	TFP			Submission of Tree and Turf Grass Planting and Landscape Plans	For approve
D	22 MAR 2020	Arup	TFP			Submission of Tree and Turf Grass Planting and Landscape Plans	For approve
с	29 JUL 2015	Arup	TFP			Submission of Tree and Turf Grass Planting and Landscape Plans	For approve
в	11 Nov 2014	Arup	TFP			Submission of Tree and Turf Grass Planting and Landscape Plans	For approve
Α	23 Jun 2014	Arup	TFP			Submission of Tree and Turf Grass Planting and Landscape Plans	For review
Rev	Date	Prepared by	Checked by	Approved by	Endorsed by	Description	Status

F	30 JUN 2020	Arup	TFP			Submission of Tree and Turf Grass Planting and Landscape Plans	For approve
Е	15 MAR 2020	Arup	TFP			Submission of Tree and Turf Grass Planting and Landscape Plans	For approve
D	29 JUL 2015	Arup	TFP			Submission of Tree and Turf Grass Planting and Landscape Plans	For approve
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CHECKING ROUTING SHEET

 CLIENT
 West Kowloon Cultural District Authority

PROJECT TITLEConsultancy Services for M+ Museum for Visual Culturein West Kowloon Cultural District

DOCUMENT TITLE Tree and Turf Grass Planting and Landscape Plan

(Rev E)

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1 **OBJECTIVE AND PURPOSE OF THE REPORT**

- 1.1.1 Further to the approval of the Environmental Impact Assessment (EIA) Report in the register (AEIAR-178/2013), the project proponent is required to submit the Tree and Turf Grass Planting and Landscape Plan to comply with the Condition of Approval under Section 8(3) of the EIA Ordinance (**Appendix H**). This report is only prepared for the M+ Museum, because the Tree and Turf Grass Planting and Landscape Plan will be developed in phases as such there will not be an entire plan serving for the WKCD.
- 1.1.2 Revision B of this report under report ref. 3AXXX-TFP-LAN-REP-0001-LMP-WS2-XB was submitted on 18 Nov 2014. Subsequent comments on the submitted report were received from Planning Department dated 06 July 2015, and Revision C Report was made on 04 August 2015.
- 1.1.3 Comments from PlanD on Revision C Report was received on 23 September 2015, and comments are addressed in this Revision D and responses to comments are attached in Appendix E for further review.

2 INTRODUCTION

- 2.1.1 The West Kowloon Cultural District Authority (named "Authority" hereafter) is invested by the Government of the Hong Kong Special Administrative Region to meet the long term infrastructure needs of the arts and cultural sector, which is a vital part of any world-class city's economic and social fabric. The West Kowloon Cultural District Authority ("WKCDA") was established under the West Kowloon Cultural District Authority Ordinance ("WKCDA Ordinance"), Cap. 601, to develop the WKCD (named "the Site" hereafter). The WKCD include:
 - i) Planning, design and construction of 17 core arts and cultural facilities (CACF) (comprising 15 performing arts venues, a cultural institution with museum functions (M+) together with its off-site conservatory laboratory and storage facilities, and as exhibition centre), other arts and cultural facilities (OACF), Retail, Dining and Entertainment (RDE) facilities, transport facilities and 23 ha public open space (which collectively constitute the "Capital Projects");
 - ii) Planning of the WKCD and project management which include consultancies, technical studies and public consultations for the preparation of a development plan for the whole WKCD site, and project management during the planning and construction stage;

- Major repair and renovation of the facilities; and iii)
- iv) Collection, exhibition development, conservation laboratory equipment and library setup for the M+.
- 2.1.2 M+ Consultancy JV (MJV) was appointed as the consultant for the Design and Administration of the Construction of M+ (Phase 1) for the West Kowloon Cultural District Authority on 16 July 2013.

LANDSCAPE TREE AND PLANTING PLAN

Ground Floor and B1 Floor

3

3.1

3.1.1

- Along the northern perimeter, inter-planting of diverse trees forms a thick living wall, providing a sense of enclosure internally and visually buffering the large buildings to the north of the site. Specific placement of the trees is dependent on the structural elements below grade. Trees have been selected for their structural characteristics. Eucalyptus tereticornis forms the upper canopy. It is traditionally planted to form barriers, and grows tall and straight very quickly. It has fragrant leaves and flowers, and lovely peeling bark. The lower canopy consists of the native trees Sterculia lanceolata and Viburnum odoratissimum. These species have an expressive and organic habit, and will grow out and away from the Eucalyptus flank. The understory is composed of Polyspora axillaris and Ligustrum sinense. These are flowering small trees or large shrub with a light canopy and wide branching habit. The species provides immediate screening at planting and bears a profusion of white flowers in spring and winter (refer to Table C and D). For the planting plan and planting schedule, please refer to Drawing No. 3A39A-TFP-LAN-DWG-0501-P01-L000-WS4 and 3A39A-TFP-LAN-DWG-0502-P01-L000-WS4 in Appendix A accordingly.
- 3.1.2 Behind the tree planting, climbing vines, Campsis grandiflora and Ficus pumila are planted to effectively cover the boundary fence. These species are quick and vigorous growers, perform well in variety of conditions, and are particularly amenable to the changing light conditions that will occur as the trees in front of the fenceline grow in (refer to Table E). For the planting plan and planting schedule, please refer to Drawing No. 3A39A-TFP-LAN-DWG-0501-P01-L000-WS4 and 3A39A-TFP-LAN-DWG-0502-P01-L000-WS4 in Appendix A accordingly.
- 3.2 3.1.3 Not used 3.2.1 3.1.4 The tightly planted tree clusters along the waterfront promenade control and enhance view-sheds from the M+ Museum to the waterfront. The groups are formed of *Terminalia mantaly*, evergreen trees which provide shade, screen winds, and loosely define zones

for congregation along the promenade. Terminalia mantaly could reach to a potential height of 10-15 m, and is distinguished by its erect stem and conspicuously layered branches. It has smooth leaves with wavy margins that are bright green in youth, held in terminal rosettes (refer to Table B). For the planting plan and planting schedule, please refer to Drawing No. 3AXXX-TFP-LAN-DWG-0507-P00-LB01-WS4 and 3AXXX-TFP-LAN-DWG-0508-P00-LB01-WS4 in Appendix A accordingly.

In both the North and the South, trees are to be planted at different calibers and heights, even within the species group. This helps to more closely mimic the natural variation of mature stands of trees, and more quickly naturalizes the appearance of a new planting. In the same vein, trees are to be planted at slightly irregular intervals, and not on a straight line, again to simulate more mature environmental habits of the species.

The required built-up for the lawn is a minimum of 0.30 metres and for trees 1.20 metres. The trees should be of heavy standard size when being planted, and again, planted at a variety of heights, ages, and calibres. Especially next to the high buildings, they should a have a strong visual and spatial impact from the day of planting.

In the current design as shown in Appendix C, the green area at pedestrian zone provided for the B1 floor and Ground floor are approx. 198 m² and 989 m² respectively (refer to Table A).

Hydroseed turf grass is proposed at pedestrian zone of B1 floor and Ground floor, covering approximately 1287 m², which is 14.3% of the total greenery area. The details of the percentage of grass coverage refer to Appendix C. Further to the approval condition of EIAR-178/2013, it is confirmed that Carpet Grass of the Axonopus genus including Axonopus compressus will not be planted within M+ Boundary for compliance. Hydroseed species to refer to Appendix

The percentage of the native tree to be planted in the ground floor and B1 floor in terms of total quantity number are 37.5% (6 number out of 16 number are native species) (refer to Table B - Table F).

3 Floor Podium Roof

On the roof, slabs of concrete are divided by long joints. Built into the strict geometry of the concrete are curvilinear, biomorphic planting fields. Slender paths wind around and through these organically shaped planting zones, carving out a range of scaled gathering spaces. Twelve related plant palettes, composed largely of subtropical monocots, have been selected for foliage, suitability, and form. The selected species are marked by their subtle gradations and modulations of colour, as well as the formal architecture of their leaves and flowers. These species are arranged into vegetative clans, led by a majority species, and supported by a set of supporting species. Dense mass-planting of a restrained planting palette in wide swaths will generate a subtle, graphic field condition, legible from upper stories of the building, as well as on the roof itself.

- 3.2.2 There is general gradient in height from the Northern edge to the Southern face, moving smoothly between 2.0 meters down to 0.1 meters in the South. Additionally, within each zone, plants are arranged by height and foliage colour, building a cadence of vegetation that modulates in section as well as plan, while still preserving sight lines across and over the flora towards the Hong Kong skyline and beyond. This overall height scheme is altered in specific locations, to provide for moments of greater insularity or exposure.
- 3.2.3 Proposed shrub planting is to be planted on an informal grid. Plants are to be planted in groups of the same species (group size of at least 20-30 plants) according to the percentages in the provided plan of the Podium Roof. The flowering cycles of the individual plants are to be left visible, seedpods, dried blooms, etc. are to be left on the plants, nuancing the formal qualities of the scheme throughout the year.
- 3.2.4 For the shrub and ground cover planting plan and planting schedule for the 3 floor podium roof, please refer to drawing no. 3A40X-TFP-LAN-DWG-0521-P00-L003-WS4, 3A40X-TFP-LAN-DWG-0522-P00-L003-WS4, 3A40X-TFP-LAN-DWG-0523-P00-L003-WS4,3A40X-TFP-LAN-DWG-0524-P00-L003-WS4 and 3A40X-TFP-LAN-DWG-0551-P00-L003-WS4 in the Appendix A.
- 3.2.5 Greening coverage for the 3 floor podium roof is approx. 7,336 m², as illustrated in Appendix C and summarized in Table A.

Table A – Greening Coverage Summary Table

Location	Green Coverage (m ²)	Remarks
Green area at pedestrian	zone	
B1 Floor	297.940	(GP3), Refer to Appendix C
Ground Floor	989.065	(GP1 + GP2), Refer to Appendix C
Vertical Greenery at pede	estrian zone	
Green Area at Pedestrian zone	500.556	(VP1 + VP2), Refer to Appendix C
Green area at 3 Floor Te	rrace Zone	
3 Floor podium roof	7215.213	(GT1-GT18), Refer to Appendix C
Total Greenery Area	9002.774	
Total Greenery Area Percentage	~ 39% ¹	Comply with the Master Register greenery requirement. ²

SCIENTIFIC NAME	HEIG HT (MM)	SPREA (MM		DB	H (MN	1)	QTY
Terminalia mantaly	5000)		100		3
please refer to Drawing No TFP-LAN-DWG-0508-P00-Lf These 3 trees planting is pla is subject to the planting de	BO1-WS anted at	4 in Append t a planter ir	ix A. Iterfacii	ng wit	h prom	nenad	
Table C- Tree Planting Sch SCIENTIFIC NAME	edule 1	for Ground HEIGHT (MM)	Floor SPRE (MN		DB (MI		QTY
Eucalyptus tereticornis		5000	300	0	75	5	4
Eucalyptus tereticornis		7000	400	0	10	0	3
Sterculia lanceolata *		4000	300	0	10	0	4
Viburnum odoratissimun	n *	3000	200	0	75	5	2
Table D- Large Shrub Sche SCIENTIFIC NAME		or Ground F GHT (MM)	S	PREA (MM			QTY
Polyspora axillaris *		2000		1000			17
Ligustrum sinense		2000		1000		18	
*: native species please refer to Drawing No TFP-LAN-DWG-0502-P01-L0 able E- Climber Schedule SCIENTIFIC NAME	000-WS	4 in Append ound Floor	ix A.		1-L000-	SPA	CING
please refer to Drawing No TFP-LAN-DWG-0502-P01-L0 able E- Climber Schedule SCIENTIFIC NAME	000-WS	4 in Append ound Floor HEIGH	ix A. T (MM		1-L000-	SPA (N	ACING /IM)
please refer to Drawing No TFP-LAN-DWG-0502-P01-L0 able E- Climber Schedule SCIENTIFIC NAME Campsis grandiflora	000-WS	4 in Append ound Floor HEIGH	ix A. T (MM 00		1-L000-	SPA (N	ACING /IM) 200
please refer to Drawing No TFP-LAN-DWG-0502-P01-LC Table E- Climber Schedule SCIENTIFIC NAME Campsis grandiflora Ficus pumila*	000-WS	4 in Append ound Floor HEIGH 6 6	ix A. T (MM		1-L000-	SPA (N 2	ACING /IM)
please refer to Drawing No TFP-LAN-DWG-0502-P01-L0 able E- Climber Schedule SCIENTIFIC NAME Campsis grandiflora	000-WS	4 in Append ound Floor HEIGH 6 6 6	ix A. T (MM 00 00		1-L000-	SPA (N 2 2 2	ACING /IM) 200
please refer to Drawing No TFP-LAN-DWG-0502-P01-LC able E- Climber Schedule SCIENTIFIC NAME Campsis grandiflora Ficus pumila* Epipremnum aureum	ooo-ws	4 in Append ound Floor HEIGH 6 6 6 6	T (MM 00 00 00		1-L000-	SPA (N 2 2 2 2 2 2	ACING AM) 200 200 200

¹ The site area of this project is approx. 22,966 m². The green coverage is 9002.774m² / 22,966m², which is approximately <u>39%</u>.

² Based on the Approved West Kowloon Cultural District Development Plan No. S/K20/WKCD/2, there is a requirement for the provision of minimum green coverage of 30% and 60% for the whole WKCD and the Park respectively.

Table F- Hydroseeding Seed Mix for Ground Floor

SCIENTIFIC NAME	RATE
Imperata cylindrica Var.major*	20 G/SQ.M
Celosia argentea *	5 G/SQ.M
Kalimeris indica *	5 G/SQ.M
*: native species	

4 POST PLANTING CARE PLAN

- 4.1.1 It is anticipated that proposed landscape works would be implemented in year 2020 (refer to **Appendix G**).
- 4.1.2 Routine maintenance operations for the landscape works, i.e.post planting care plan are provided in **Appendix D**.

APPENDIX A: PLANTING PLANS AND SCHEDULE

Drawing no:-

3AXXX-GAM-LAN-DWG-9002-P00-L000-WS4 3AXXX-GAM-LAN-DWG-9003-P00-L000-WS4 3AXXX-GAM-LAN-DWG-9005-P00-L003-WS4 3AXXX-GAM-LAN-DWG-9006-P00-L003-WS4 3AXXX-GAM-LAN-DWG-9007-P00-L003-WS4 3AXXX-GAM-LAN-DWG-9008-P00-L003-WS4 3AXXX-GAM-LAN-DWG-9009-P00-L003-WS4 3AXXX-TFP-LAN-DWG-0507-P00-LB01-WS4 3AXXX-TFP-LAN-DWG-0508-P00-LB01-WS4

Description

G/F Landscape Trees and Shrubs Plan (Sheet 1 of 2) G/F Landscape Trees and Shrubs Plan (Sheet 2 of 2) 3/F Landscape Trees and Shrubs Plan (Sheet 1 of 4)

3/F Landscape Trees and Shrubs Plan (Sheet 2 of 4)

3/F Landscape Trees and Shrubs Plan (Sheet 3 of 4)

3/F Landscape Trees and Shrubs Plan (Sheet 4 of 4)

3/F Shrubs and Groundcovers Schedule

B1/F Landscape Tree and Shrubs Plan (Sheet 1 of 2)

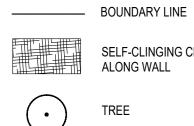
B1/F Landscape Tree and Shrubs Plan (Sheet 2 of 2)

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HYDROSEEDING

CLIMBER PLANTING AREA

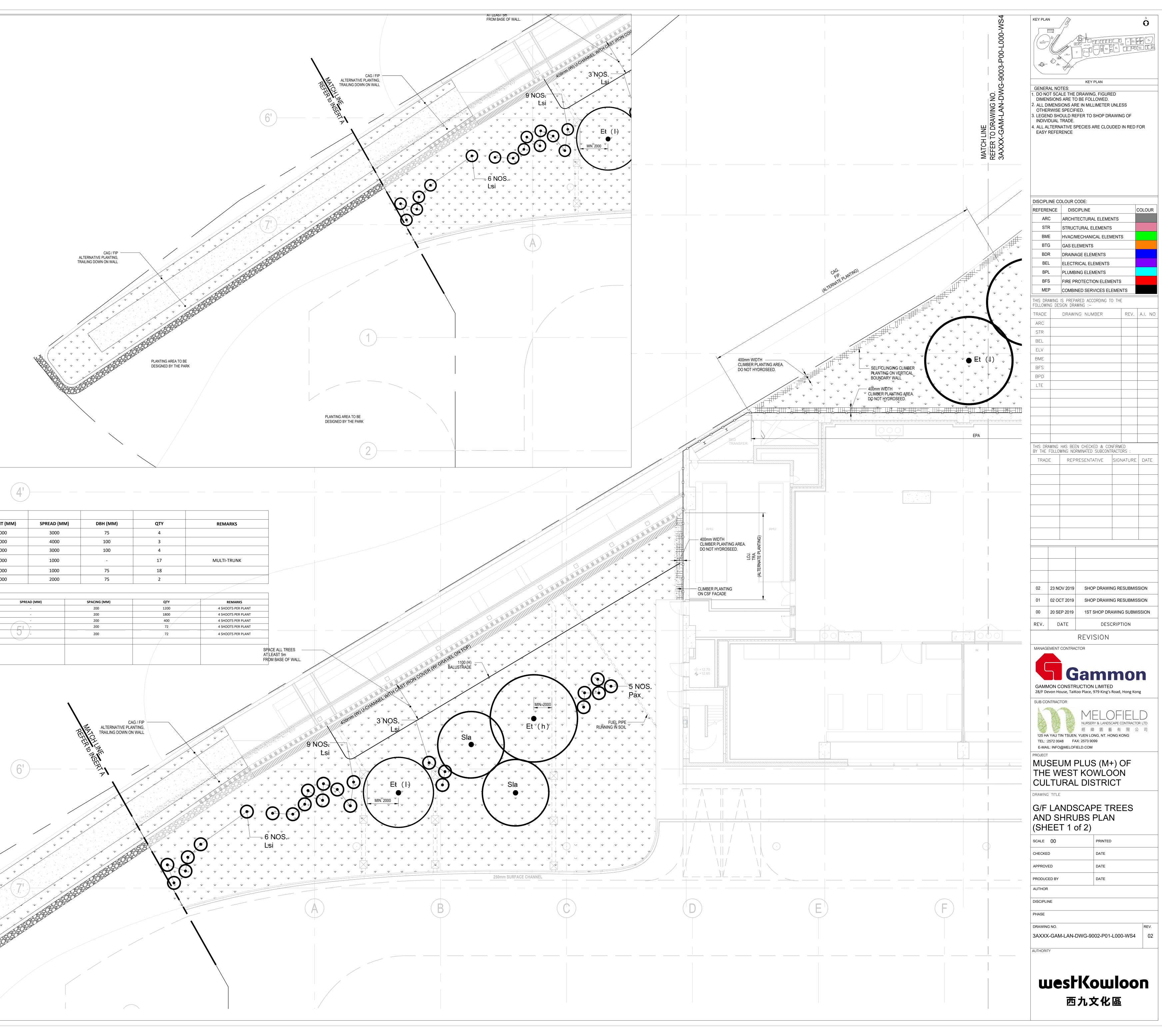


SELF-CLINGING CLIMBER

TREE

NOTES

1. TREE AND SHRUB SCHEDULE FOR G/F REFER TO DRAWING NO. 3AXXX-GAM-LAN-DWG-9002-P00-L000-WS4

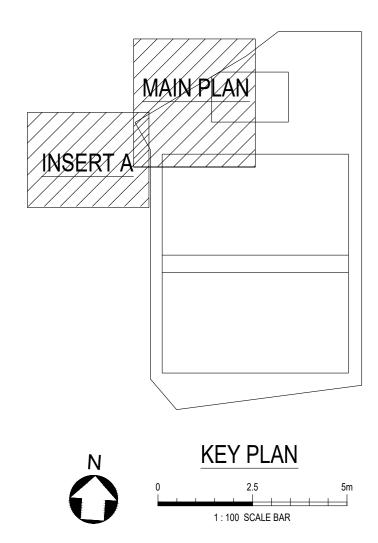


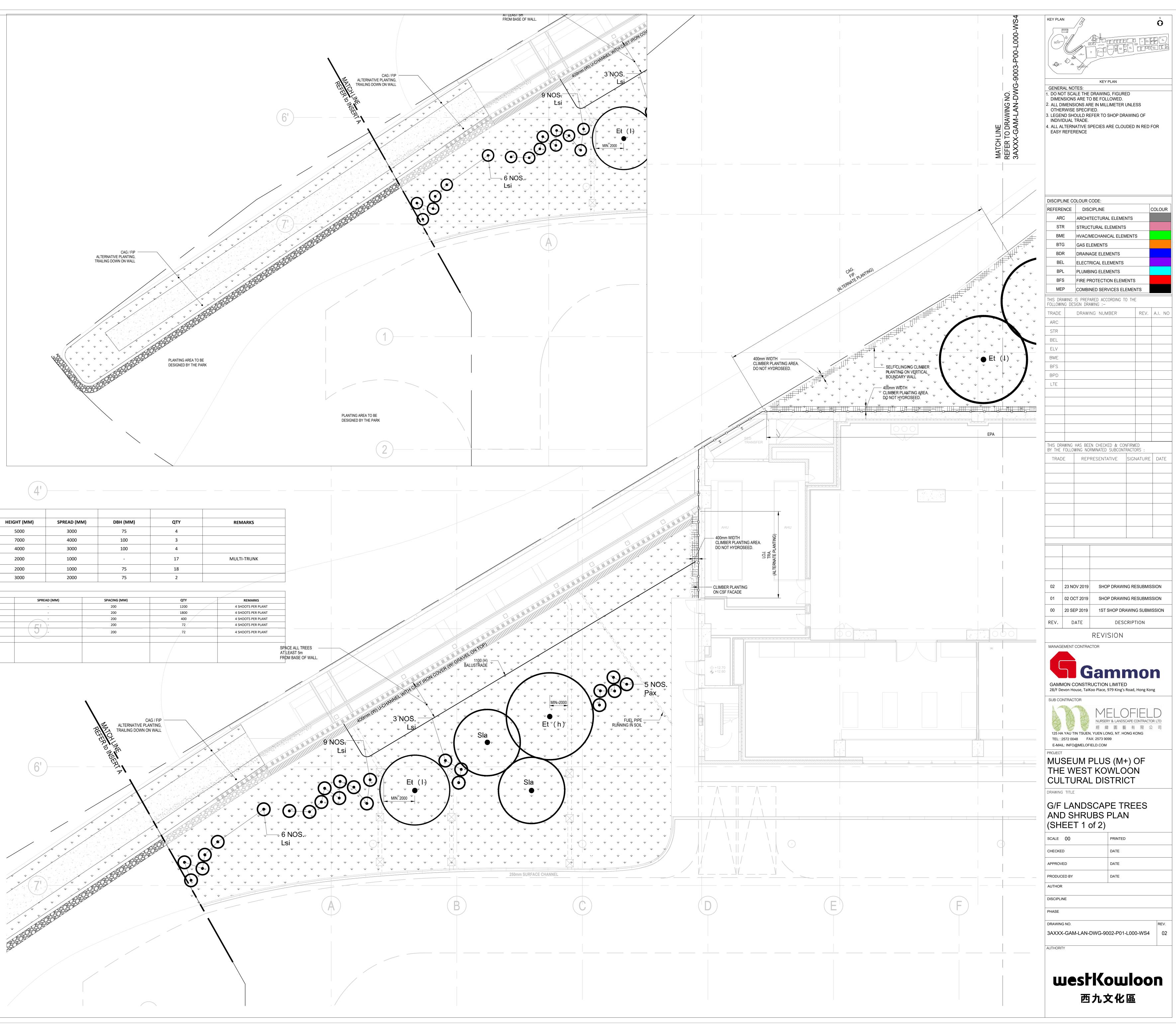
G/F - TREE SCHEDULE					
CODE	SCIENTIFIC NAME	CHINESE NAME	HEIGHT (MM)	SPREAD (MM)	
Et(I)	EUCALYPTUS TERETICORNIS	細葉桉	5000	3000	
Et(h)	EUCALYPTUS TERETICORNIS	細葉桉	7000	4000	
Sla *	STERCULIA LANCEOLATA	假蘋婆	4000	3000	
Pax	POLYSPORA AXILLARIS	大頭茶	2000	1000	
Lsi	LIGUSTRUM SINENSE	山指甲	2000	1000	
Vod*	VIBURNUM ODORATISSIMUM	珊瑚樹	3000	2000	

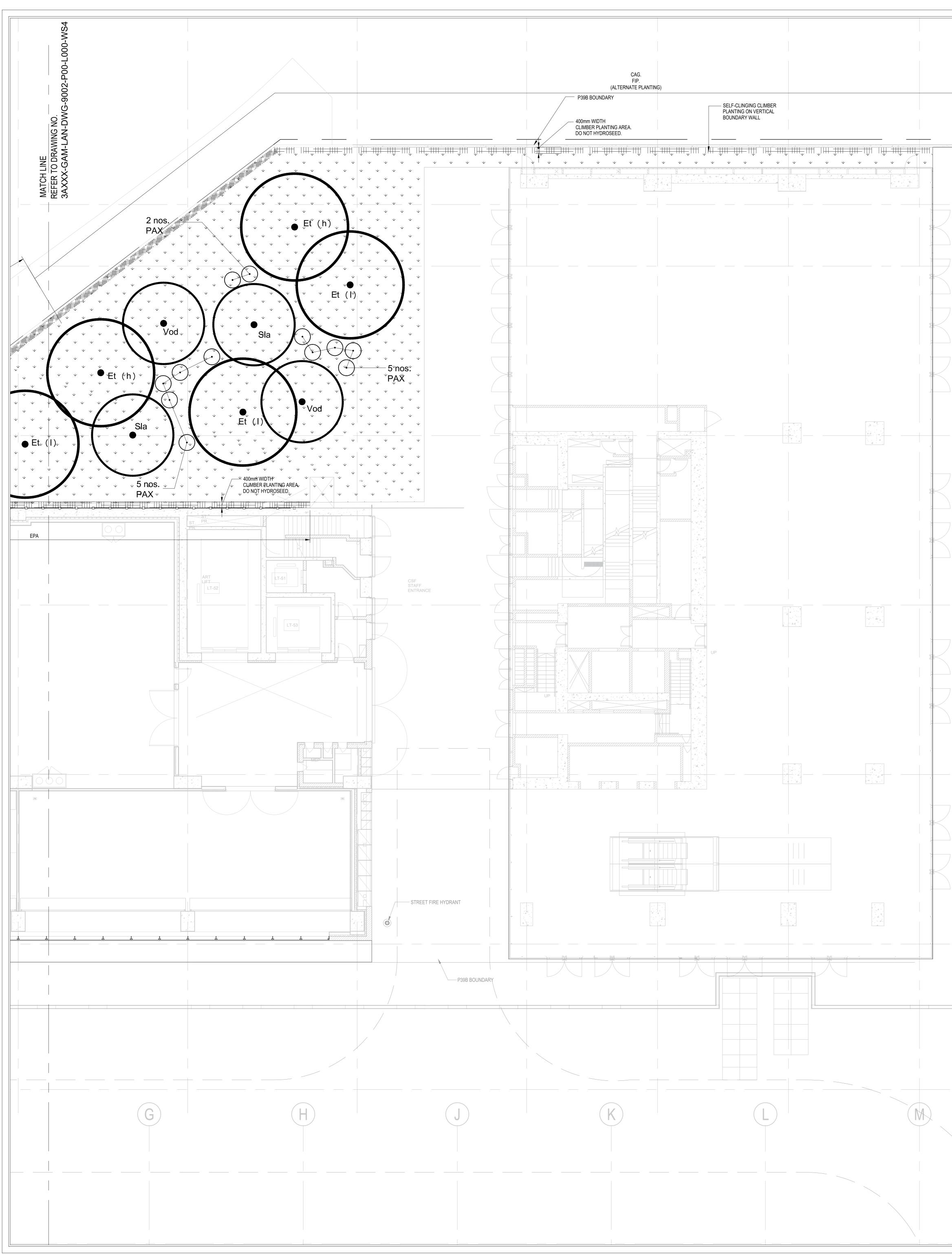
G/F CLIMBER SCHEDULE							
CODE	SCIENTIFIC NAME	CHINESE NAME		HEIGHT (MM)		SPREAD (MM)	S
CAG	CAMPSIS GRANDIFLORA	凌霄		600		-	
FIP*	FICUS PUMILA	薜荔		600		-	
EPA	EPIPREMNUM AUREUM	綠蘿		600		<u> </u>	
LOJ*	LONICERA JAPONICA	忍冬 (金銀花)		600			
TRA	TRISTELLATEIA AUSTRALASIAE	三星果		600		- C)	
CLIMBER SPECIES ARE TO BE ALTERNATELY PLANTED AS STATED							
					1		
					_		
HYDROSEEDING SEED MI	X						
SCIENTIFIC NAME	CHINESE NAME			RATE			
	占士		2		1		

SCIENTIFIC NAME	CHINESE NAME	RATE
IMPERATA CYLINDRICA*	白茅	20 G/SQ.M
CELOSIA ARGENTEA*	青葙	5 G/SQ.M
KALIMERIS INDICA*	馬蘭	5 G/SQ.M

* Native Species







				NOTES 1. TREE AND	HYDROSEEDING CLIMBER PLANTING AF BOUNDARY LINE SELF-CLINGING CLIMB ALONG WALL TREE PROPRIETARY WIRE GREEN WALL SYSTEM	ER F REFER TO DRAWING NO.	KEY PLAN Image: Constraint of the second
21 P39B CLIMBER SCHEDULE CODE SCIENTIFIC NAME CAG CAMPSIS GRANDIFLORA FIP* FICUS PUMILA ALL CLIMBER SPECIES ARE TO BE ALTERNATELY PLANTED P39B HYDROSEEDING SEED MIX SCIENTIFIC NAME IMPERATA CYLINDRICA* 白茅 CELOSIA ARGENTEA* 青箱 KALIMERIS INDICA* J	CHINESE NAME 凌霄 藤荔 回 日	HEIGHT (MM) 600 600	SPREAD (MM) - -	SPACING (MM) 200 200 200	QTY / 2000 / 200	REMARKS 4 SHOOTS PER PLANT 4 SHOOTS PER PLANT	DISCIPLINE COLOUR CODE: REFERENCE DISCIPLINE COLOUR ARC ARCHITECTURAL ELEMENTS Image: Colour of the state
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6'							經緯國藝有限公司 125 HA YAU TIN TSUEN, YUEN LONG, NT. HONG KONG TEL: 2572 0048 FAX: 2573 9099 E-MAIL: INFO@MELOFIELD.COM PROJECT MUSEUM PLUS (M+) OF THE WEST KOWLOON CULTURAL DISTRICT DRAWING TITLE G/F LANDSCAPE TREES AND SHRUBS PLAN (SHEET 2 of 2)
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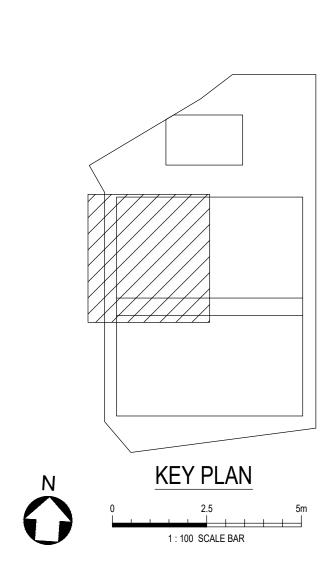
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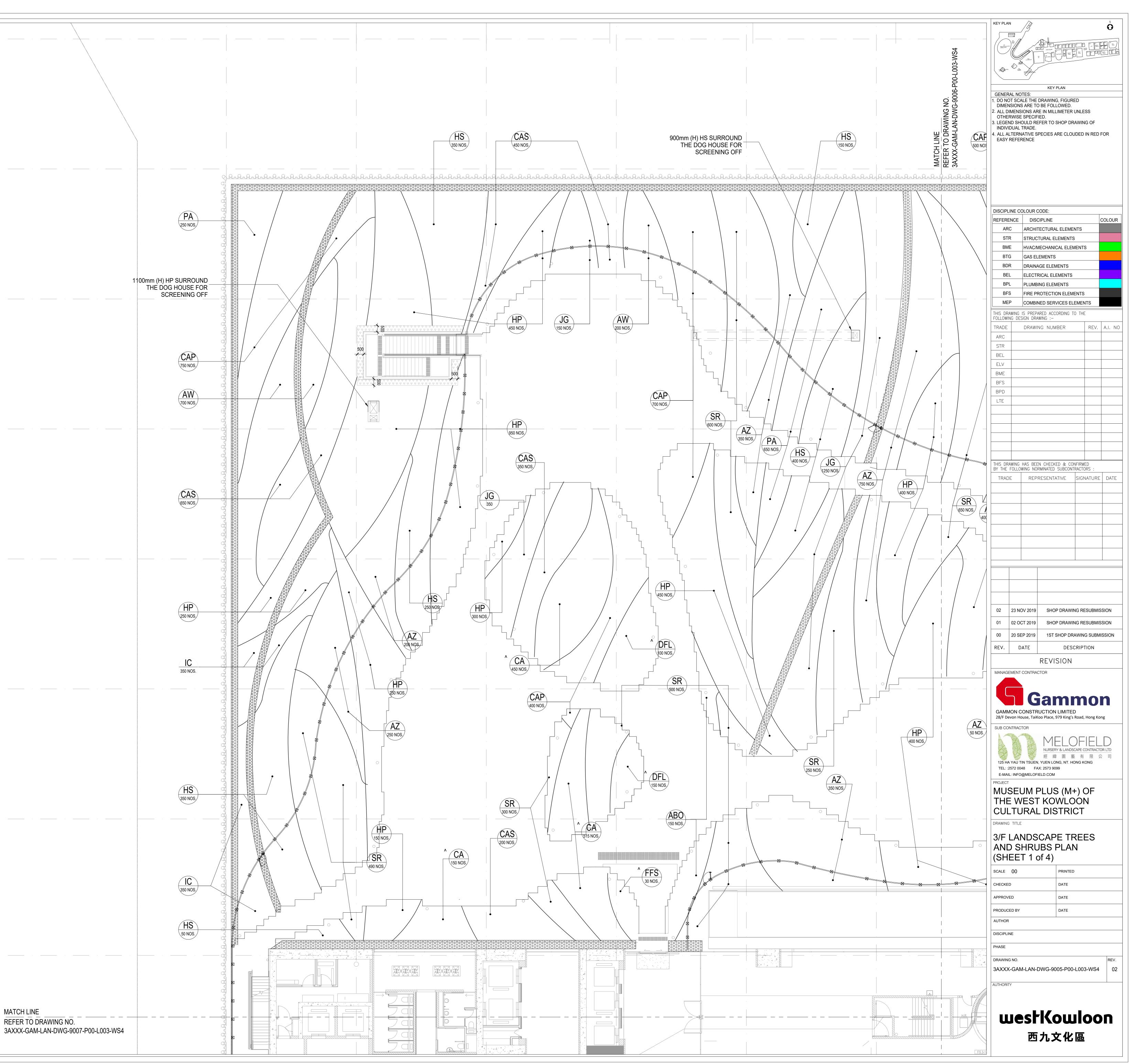
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DRAWINGS 3AXXX-GAM-LAN-DWG-9009-P00-L003-WS4

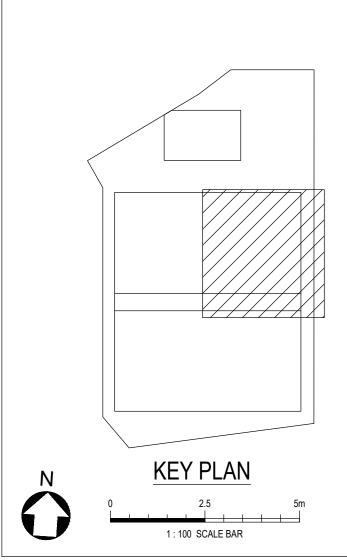
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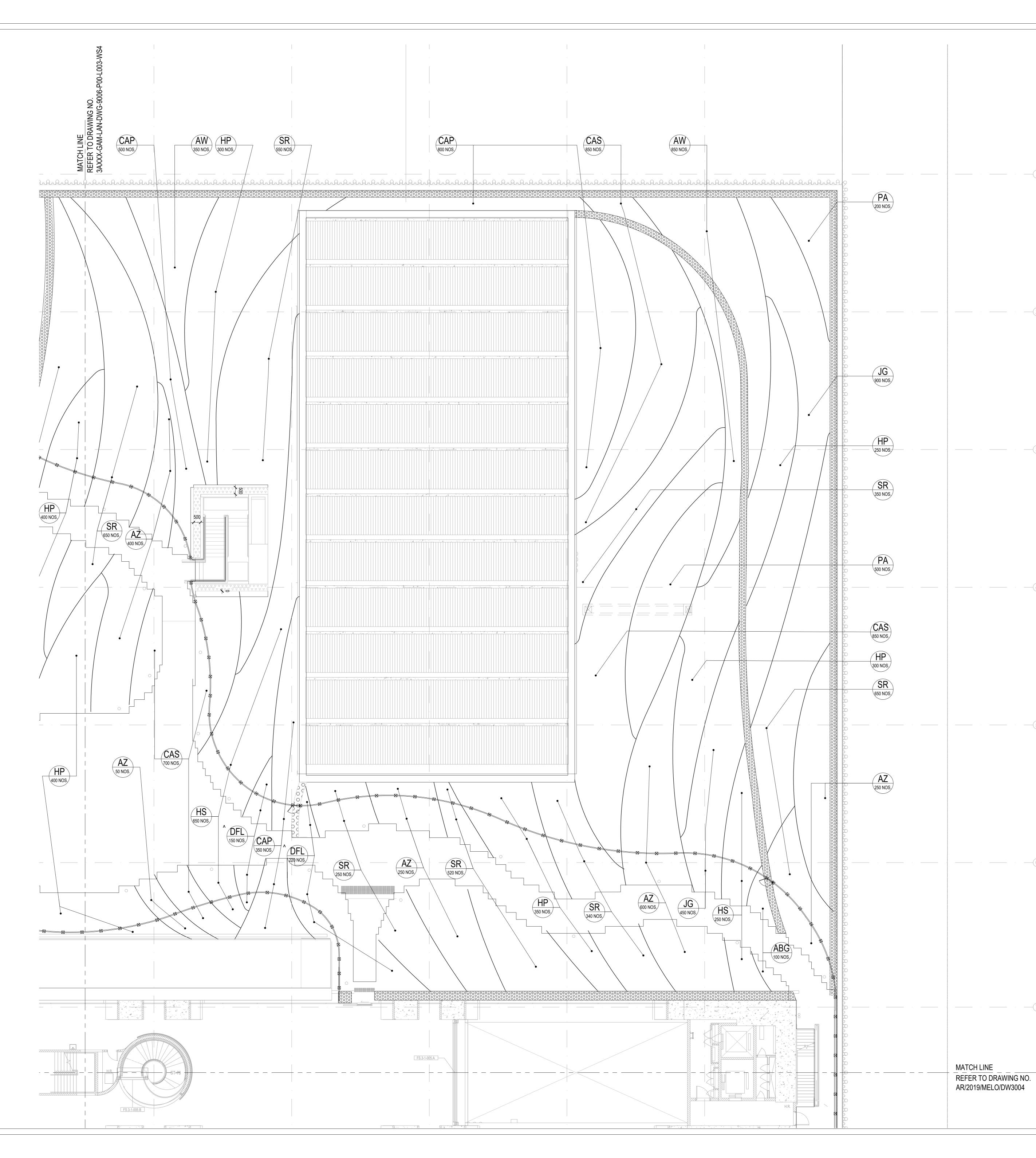




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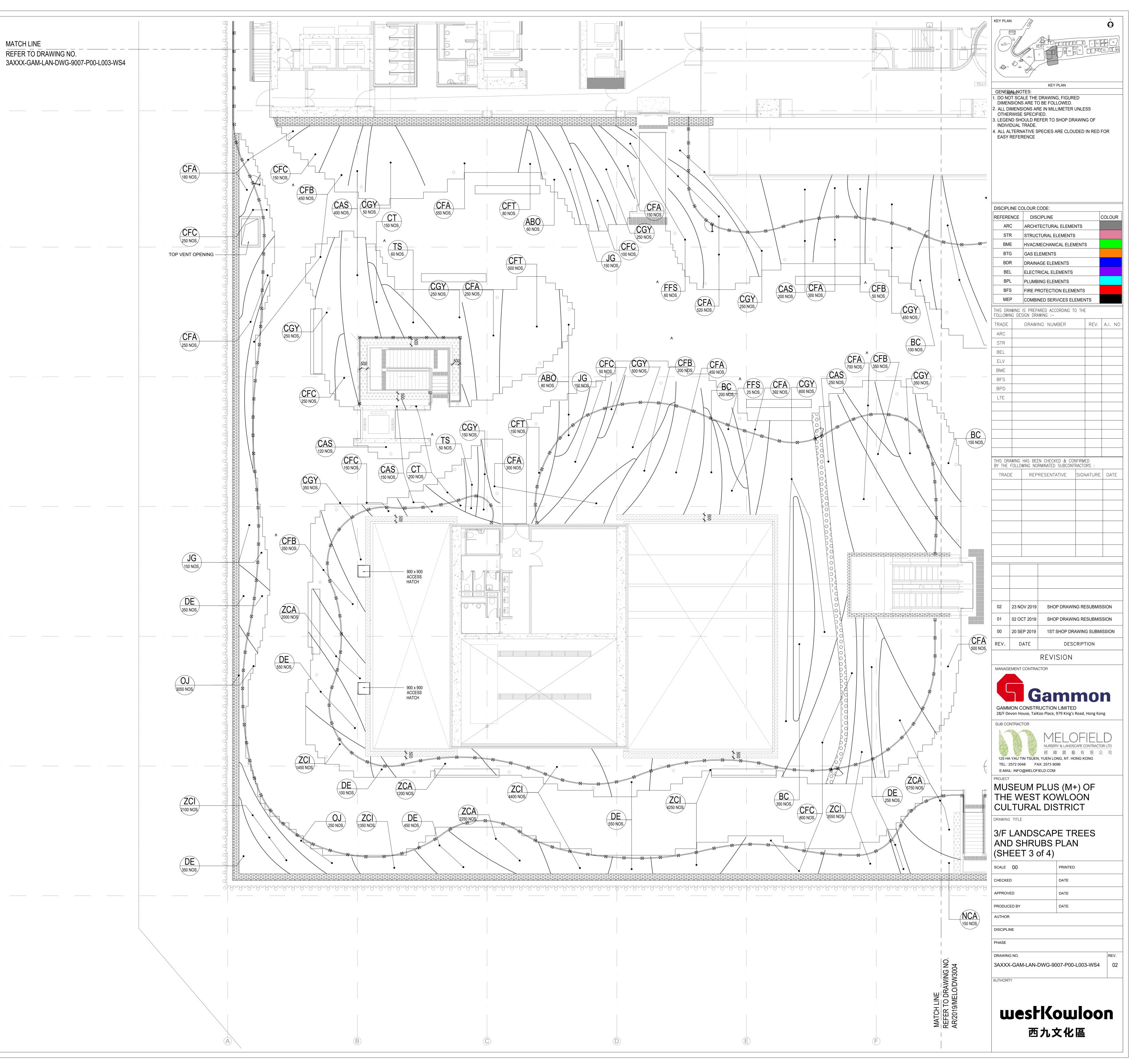


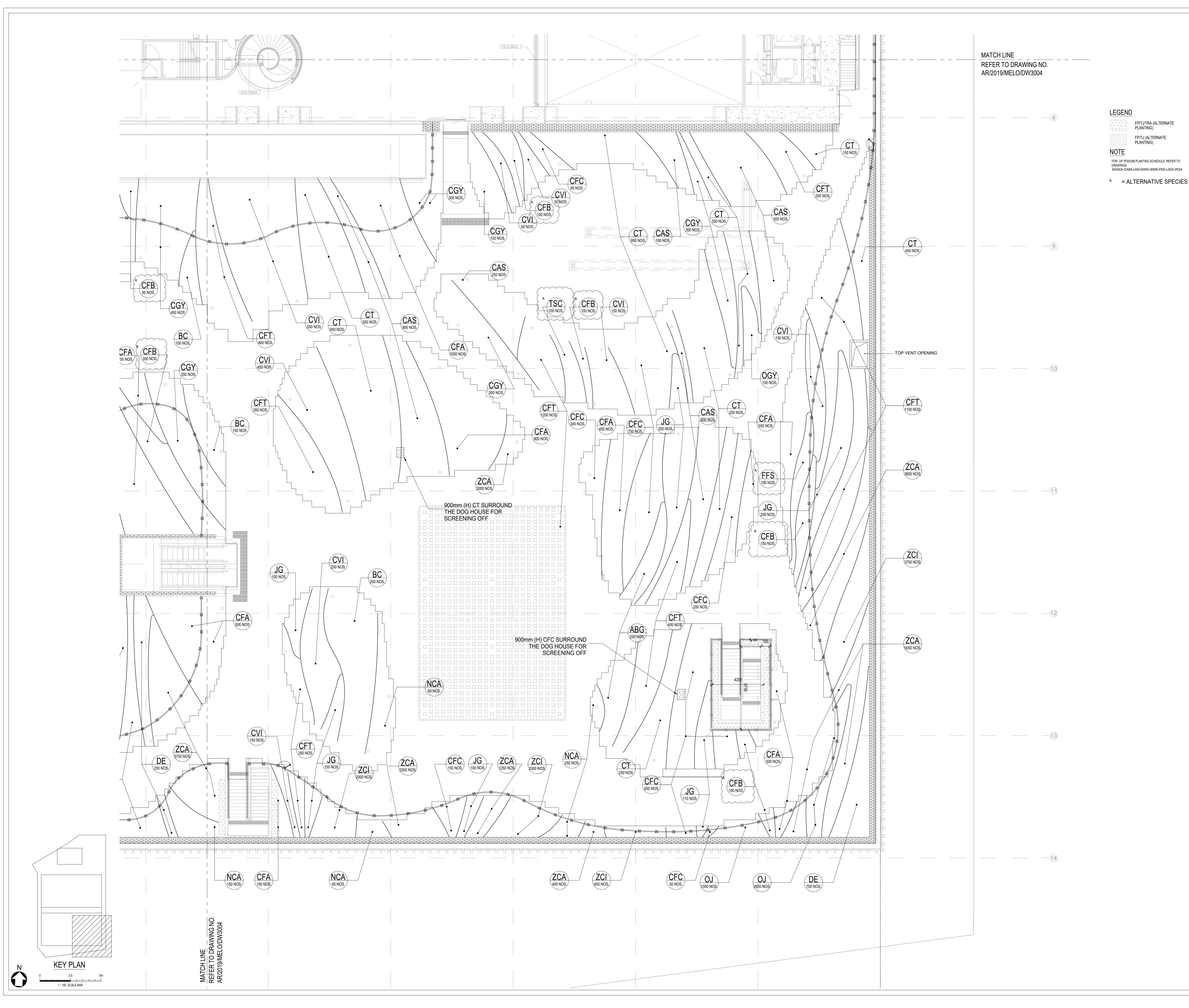


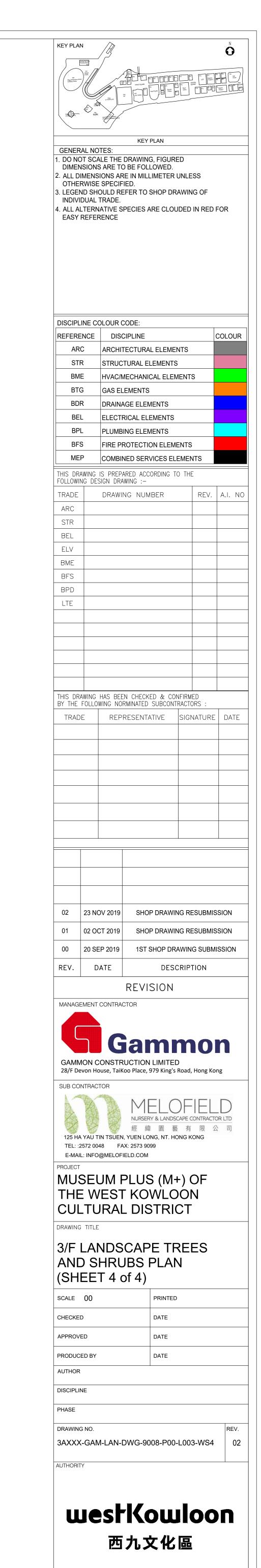
	KEY PLAN
-(1)	KEY PLAN GENERAL NOTES: 1. DO NOT SCALE THE DRAWING, FIGURED DIMENSIONS ARE TO BE FOLLOWED. 2. ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED. 3. LEGEND SHOULD REFER TO SHOP DRAWING OF INDIVIDUAL TRADE. 4. ALL ALTERNATIVE SPECIES ARE CLOUDED IN RED FOR EASY REFERENCE
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6	GAMMON CONSTRUCTION LIMITED 28/F Devon House, Taikoo Place, 979 King's Road, Hong Kong SUB CONTRACTOR MELOFIELD MURSERY & LANDSCAPE CONTRACTOR LTD 經緯國藝有限公司 125 HA YAU TIN TSUEN, YUEN LONG, NT. HONG KONG TEL: :2572 0048 FAX: 2573 9099 E-MAIL: INFO@MELOFIELD.COM PROJECT MUSEUM PLUS (M+) OF THE WEST KOWLOON CULTURAL DISTRICT
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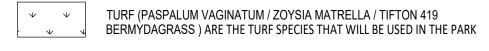
	M+ 3/F PODIUM SHRUBS							
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	CODE	SCIENTIFIC NAME	CHINESE NAME	HEIGHT (MM)	SPREAD (MM)	SPACING (MM)	REMARKS	QTY.
	AW		紅桑	500	400	400	-	2350
	ABG	AECHMEA BLANCHETIANA	珊瑚鳳梨屬(綠葉)	600	600	500	-	100
								641719-450
	ABO	'ORANGE'	珊瑚鳳梨屬(橙葉)	600	600	500	-	150
٨	DFL	DRACAENA FRAGRANS	金邊巴西鐵	600	800	500	-	470
		LINDENII			who are extended in			
*	AZ	ALPINIA ZERUMBET CRINUM ASIATICUM VAR.	薑山醬	800	600	500	-	3500
	САР	PROCERUM	紅葉文殊蘭	600	600	400		3350
*	CAS	CRINUM ASIATICUM VAR.		600	600	400		5550
2		SINICUM	文殊蘭				-	
	HP		小天堂鳥燕	800	600	500	-	4550
	HS	ELIBAEA EOETIDA CV	黄麗鳥燕	800	600	500	-	2700
^	FFS	'STRIATA'	黃紋萬年麻	600	600	500	-	30
*	IC		龍船花	500	400	400	-	450
*	JG		小駁骨	500	400	400	-	1900
	PA	PSYCHOTRIA ASIATICA	九節	500	400	400	-	1600
	SR	STRELITZIA REGINAE	天堂鳥	800	600	500	-	5250 815
~	CA	CURCUMA ALISMATIFOLIA	薑荷花	800	600	400	-	815
							+ +	
	SOUTH PODIUM - SHRUB							
	CODE	SCIENTIFIC NAME	CHINESE NAME	HEIGHT (MM)	SPREAD (MM)	SPACING (MM)	REMARKS	QTY.
	ABG	AECHMEA BLANCHETIANA	珊瑚鳳梨屬(綠葉)	600	600	500	-	320
	ABG	GREEN	111-111月(秋末)	000	000	500	-	520
	АВО	AECHMEA BLANCHETIANA	珊瑚鳳梨屬(橙葉)	600	600	500	-	140
		URANGE						
^	TS	TRADESCANTIA SPATHACEA	紫背萬年青	600	600	500	-	100
٨	тѕс	TRADESCANTIA	矮蚌花	500	400	400	_	100
		SPATHACEA CONPACTA					-	
	BC		射千	600	400	300		800
	ст	CANNA X GENERALIS	紅葉美人蕉	800	400	300	-	3150
	CGY	(YELLOW)	黃花美人蕉	800	400	300	H	6330
	суі	CODIAFUM VARIEGATUM	彩霞變葉木	500	400	400		1130
	evi		杉葭安禾小	500		+00	-	1150
	CFA	CORDYLINE FRUTICOSA	亮葉朱蕉	600	400	300	-	6556
	CFC	'CRYSTAL'	翡翠朱蕉	600	400	300	-	4100
۸	CFB	CORDYLINE FRUTICOSA	娃娃朱蕉	600	400	300	-	1430
		DADT DULL	建建木麻			500		1430
	CFT	CORDYLINE FRUTICOSA	三色朱蕉	600	400	300	-	4430
1971		CRINUM ASIATICUM VAR.				-		
*	CAS	SINICUM	文殊蘭	600	600	400	-	2200
*	DE		山菅蘭	300	300	200		3350
^	FFS	FURCRAEA FOETIDA CV.	黃紋萬年麻	600	600	500	-	135
		SHATA						
	JG NCA	JUSTCIA GENDARUSSA NEOREGELIA CAROLINAE	小駁骨 紅心彩葉鳳梨	500 200	400 400	400 300	-	1410 370
	OJ		<u>私心杉枈鳯采</u> 麥冬	200	200	100	-	7050
	ZCA		葱蘭	200	200	100	•••	30150
	ZCI		黃花蔥蘭	200	200	100	-	26800
-								
	SOUTH PODIUM - SHRUB							
	CODE	SCIENTIFIC NAME	CHINESE NAME	HEIGHT (MM)	SPREAD (MM)	SPACING (MM)	REMARKS	
^	FP	FICUS PUMILA	薜荔	600	-	200	4 SHOOTS PER PLANT	3154
		TRACHELOSDERMUM		279,200,370,0				
^	נד	JASMINOIDES	絡石	600	-	200	4 SHOOTS PER PLANT	950
	TRA	TRISTELLATEIA	三星果	600		300	4 SHOOTS PER PLANT	1575
		AUSTRALASIAE						
		-					+	
= notive		1						
* = native species								
* = native species ^ =								
species								

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NOTE

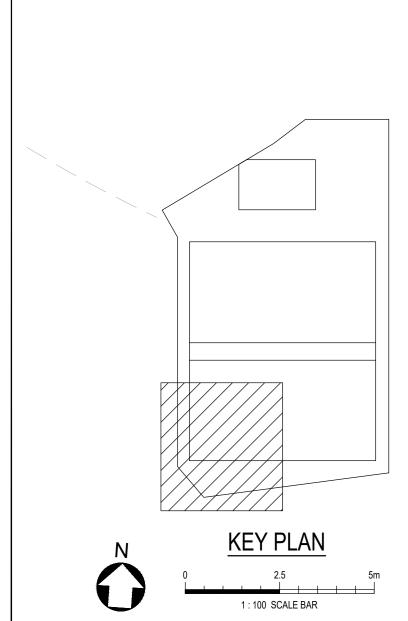
- 1. APPLY MULCH ON 1M DIAMETER CIRCLE AROUND ALL TREES IMMEDIATELY AFTER TREE PLANTING. KEEP MULCH AWAY FROM TREE TRUNK FLARE.
- 2. APPLY HYDROSEEDING ONLY AFTER COMPLETION OF TREE PLANTING AND MULCHING.
- DO NO HYDROSEED INTO MULCHED AREA. COVER ALL MULCHED AREA WITH NEWSPAPER, HESSIAN, NYLON SHEET OR THE LIKE BEFORE HYDROSEEDING, AND DISCARD AFTERWARDS.
- 4. KEEP ALL MULCHED AREA FREE FROM GRASS GROWTH AT ALL TIMES.
- 5. TREE AND TURF SPECIES AT B1/F WITHIN AND OUTSIDE M+ SITE BOUNDARY ARE INDICATED FOR REFERENCE ONLY. SOFT LANDSCAPE WORKS TO BE CARRIED OUT BY SEPARATE CONTRACT

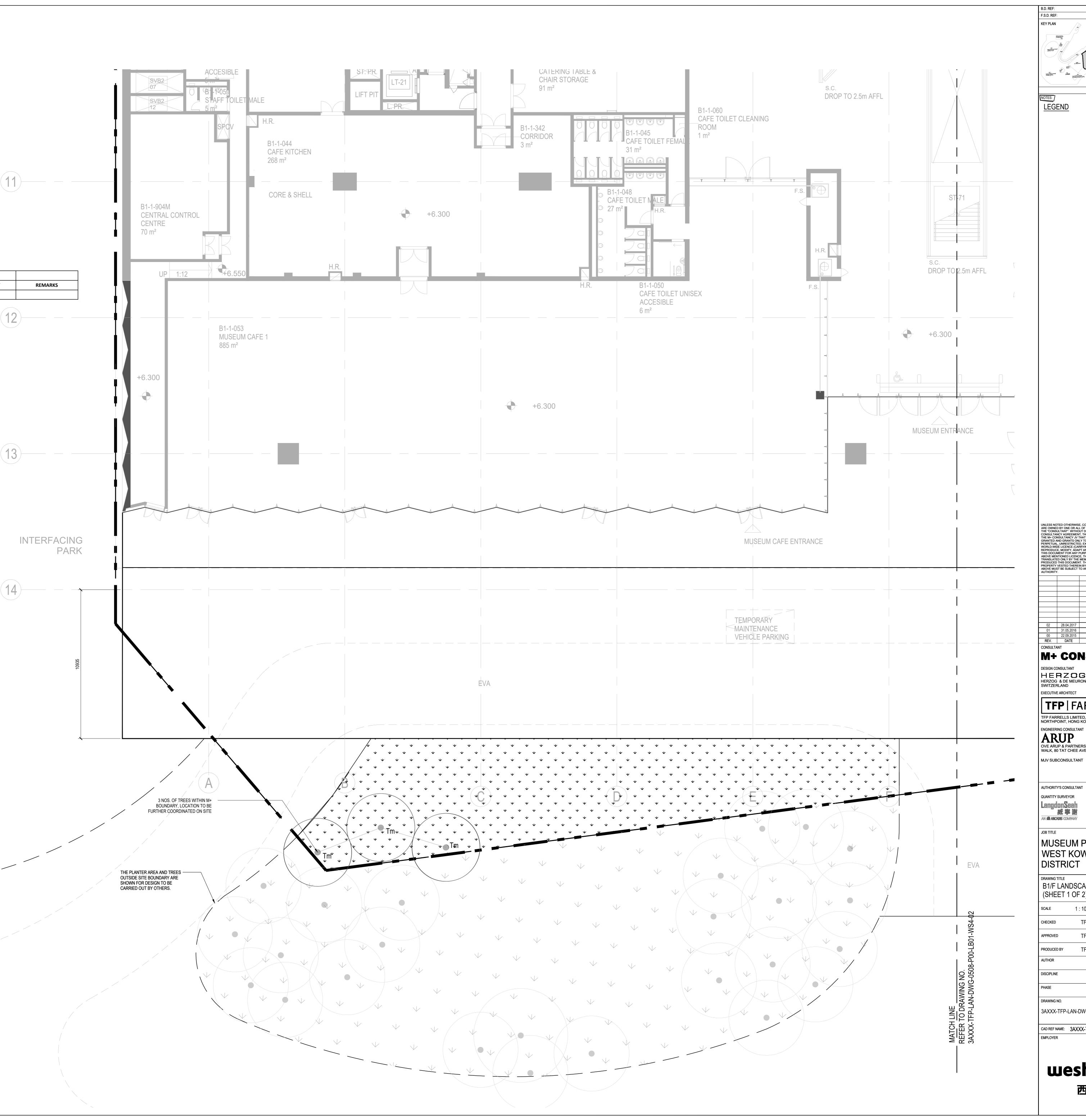
LEGEND



BOUNDARY LINE

B1/F - TREE SCHEDULE						
CODE	SCIENTIFIC NAME	CHINESE NAME	HEIGHT (MM)	SPREAD (MM)	DBH (MM)	QTY
Tm	TERMINALIA MANTALY	小葉欖仁	5000	3000	100	3





No. No.</th KEY PLAN UNLESS NOTED OTHERWISE, COPYRIGHT AND DESIGN RIGHTS IN THIS DOCUMENT ARE OWNED BY ONE OR ALL OF THE MEMBERS OF THE M+ CONSULTANCY JV FORMING THE "CONSULTANT". WITHOUT DEROGATION TO ANY PROVISION OF THE CONSULTANCY AGREEMENT, THE CONSULTANT, RESPECTIVELY THE MEMBER OF THE M+ CONSULTANCY JV THAT OWNS SUCH INTELLECTUAL PROPERTY, HAS GRANTED AND GRANTS ONLY TO THE AUTHORITY, ITS SUCCESSORS AND ASSIGNS A PERPETUAL, UNRESTRICTED, EXCLUSIVE, FREELY ASSIGNABLE AND IRREVOCABLE WORLD-WIDE LICENCE (CARRYING THE RIGHT TO GRANT SUB LICENCES) TO USE, REPRODUCE, MODIFY, ADAPT AND TRANSLATE THE INTELLECTUAL PROPERTY IN THIS DOCUMENT FOR ANY PURPOSE OF THE AUTHORITY. NOTWITHSTANDING THE ABOVE MENTIONED LICENCE, THIS DOCUMENT SHALL BE MODIFIED ADAPTED OR TRANSLATED ONLY BY THE MEMBER OF M+ CONSULTANCY JV INDICATED AS HAVING PRODUCED THIS DOCUMENT. THE USE OF THIS DOCUMENT AND THE ILLECTUAL PROPERTY VESTED THEREIN BY ANY OTHER PARTY THAN THOSE MENTIONED ABOVE MUST BE SUBJECT TO AN AGREEMENT OR AUTHORISATION BY OR WITH THE AUTHORITY. 02 28.04.2017 LAN LIGHTING DESIGN UPDATE TFP/HdM 01 31.05.2016 REVISED B1/F PROMENADE TFP/HdM 00 22.09.2015 CONSTRUCTION DRAWINGS TFP/HdM REV. DATE PURPOSE OF RELEASE PRODUCED BY M+ CONSULTANCY JV HERZOG & DE MEURON HERZOG & DE MEURON BASEL LTD., RHEINSCHANZE 6, 4056 BASEL, **|| TFP** | FARRELLS | TFP FARRELLS LIMITED, SUITES 130-02, 13/F, 625 KING'SROAD, NORTHPOINT, HONG KONG OVE ARUP & PARTNERS HONG KONG LIMITED, LEVEL5 FESTIVAL WALK, 80 TAT CHEE AVENUE, KOWLOON TONG, HONG KONG MUSEUM PLUS (M+) OF THE WEST KOWLOON CULTURAL B1/F LANDSCAPE TREES AND SHRUBS PLAN (SHEET 1 OF 2)

SCALE	1 : 100 @A0	PRINTED	A0				
CHECKED	TFP/HdM	DATE	28.04	4.2017			
APPROVED	TFP/HdM	DATE	28.04	4.2017			
PRODUCED BY	TFP/HdM	DATE	28.0	28.04.2017			
AUTHOR			TF	P/HdM			
DISCIPLINE				LAN			
PHASE				WS4			
DRAWING NO.				REV.			
3AXXX-TFP-L	3AXXX-TFP-LAN-DWG-0507-P00-LB01-WS4						

CAD REF NAME: 3AXXX-TFP-LAN-DWG-0507-P00-LB01-WS4-02.dwg
EMPLOYER

westKowloon 西九文化區

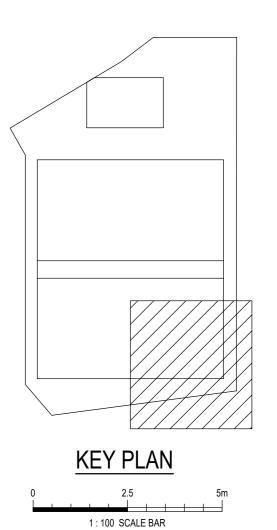


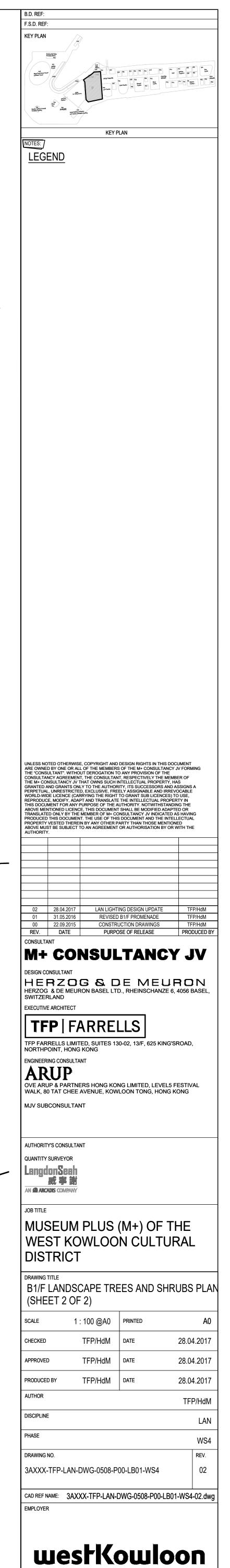
LEGEND

VV BOUNDARY LINE

NOTES

- TREE AND SHRUB SCHEDULE FOR B1/F REFER TO DRAWING NO. 3AXXX-TFP-LAN-DWG-0507-P00-LB01-WS4.
- 2. TREE AND TURF SPECIES AT B1/F WITHIN AND OUTSIDE M+ SITE BOUNDARY ARE INDICATED FOR REFERENCE ONLY. SOFT LANDSCAPE WORKS TO BE CARRIED OUT BY SEPARATE CONTRACT





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APPENDIX B: NOT USED

APPENDIX C: GREEN COVERAGE PLANS

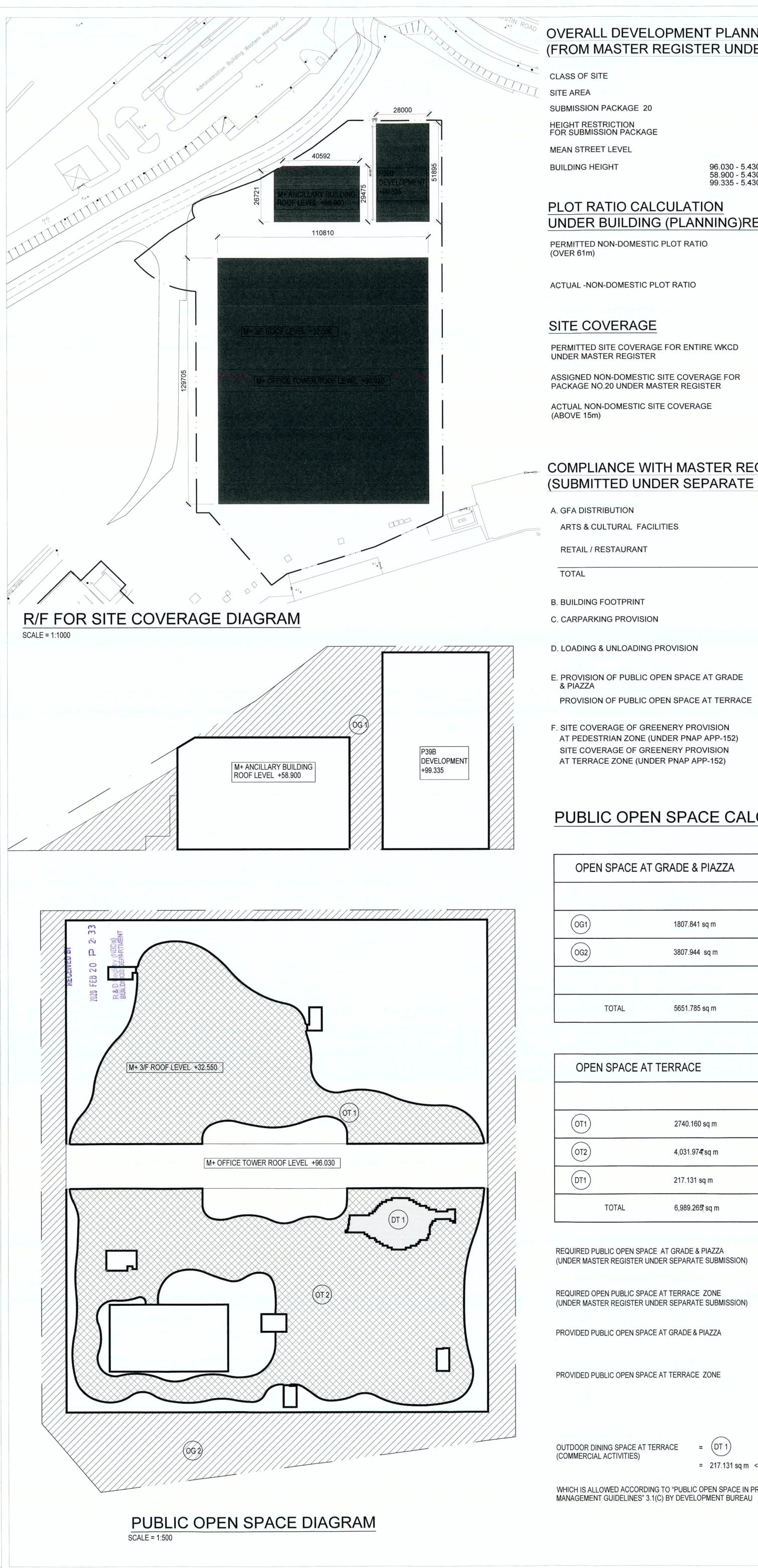
Drawing no:-

Description

3AXXX-TFP-ARC-SCH-9200-P00-XXXX-GBP

Calculations of Site Coverage, Plot Ratio, Schedule of FRC and Diagrams





A0 (1188mm x 840mm) Sheet Size

RALL DEVELOPMENT PL			TABLE 1: CAR PACKAGE	PARKING	AND MOTOCYCLE PARK	CACF	OACF	CULATIONS	RDE		TOT	L CAR PARK	ING	TOTAL MOTOCYCLE P	RKING		
M MASTER REGISTER L	UNDER	SEPARATE SUBMISSION	PACKAGE	PARCEL	VENUE/LANDSCAPE	REQ	REQ	GFA (m ²)	FACTOR	REQ	RE		PRO	FACTOR	REQ	PR	0
				39A	M+ ANCILLARY BUILDING	-	-		-	-	-	4					
OF SITE	=	"A"	20	39B	OACF / RDE	-	26	8952.608	1 SPACE FOR EVERY 300 SQM.	30	56	224	152*	7.36% OF THE TOTAL PROVISIONS FOR PRIVATE CAR	5 17	17 8*	* THIS
				40	M+ / OACF / RDE	150	6	3,418.410	1 SPACE FOR EVERY 300 SQM.	12	168						
REA	=	40.91 ha (ABOUT)	NOTE:	.1			-										
SSION PACKAGE 20	=	22966 sq. m		The second se					T PACKAGE 23A / PSO (REFER TO P AT PACKAGE 23A / PSO (REFER TO								
RESTRICTION	=	+70 mPD & +100mPD													_	-	
	=	+5.43 mPD			NLOADING PROVISION C	10 - 10 S AV.		1				TOTALLAN		PEANDUC.			
			PACKAGE	PARCEL	VENUE/LANDSCAPE	CACF REQ	OACF	GFA (m²)	RDE FACTOR	REQ	RE	TOTAL L/UL O	PRO	REMARKS			
NG HEIGHT 96.03	30 - 5.430 = 00 - 5.430 =	90.600 m 53.470 m		39A	M+ ANCILLARY BUILDING	-	-	-	-	-	-						
99.33	35 - 5.430 =	93.905 m	20	39B	OACF / RDE	-	4	8952.608	1 SPACE FOR EVERY 1200 SQM.	8	12	16	17	THIS SUBMISSION			
				40	M+ / OACF / RDE	-	1	3,418.410	1 SPACE FOR EVERY 1200 SQM.	3	4						
FRATIO CALCULATION																	
ER BUILDING (PLANNIN		20.8.2.1			ING PROVISION CALCULA			1									
		20 0 2 1	PACKAGE	PARCEL	VENUE/LANDSCAPE	COACH P REQ	PRO	-	REMARKS								
TED NON-DOMESTIC PLOT RATIO				39A	M+ ANCILLARY BUILDING		1110										
61m)	=	15	20	39B	OACF / RDE	0	4		THIS SUBMISSION								
				40	M+ / OACF / RDE												
L -NON-DOMESTIC PLOT RATIO	=	(80,055.328 + 12,371.018) / 409,100													ODEEN		
		92,426.346 / 409,100													GREEN	ERY	ARE
	=	0.226 < 15															
COVERAGE		0.220 - 10															
COVERAGE															VERTIC	AL G	REE
ITED SITE COVERAGE FOR ENTIRE WK	CD =	54.43%															
MASTER REGISTER																	
NED NON-DOMESTIC SITE COVERAGE F GE NO.20 UNDER MASTER REGISTER	FOR =	17,231 sq. m													GREEN	AREA A	T PEDE
GE NO.20 ONDER MASTER REGISTER													G				
L NON-DOMESTIC SITE COVERAGE	=	(145,352 - 17,144 + 17,230.311) / 40.91 ha.															
E 15m)	=	145,438.311 / 40.91 ha.															
	=	35.55% < 54.43%													(VP1)		
																	41

COMPLIANCE WITH MASTER REGISTER (SUBMITTED UNDER SEPARATE SUBMISSION)

DISTRIBUTION			
S & CULTURAL FACILITIES	=	75,001.708 sq.m < 75,950 sq.m (COMPLY WITH LATEST MR DWG. P00-A-CP001 Rev. P)	
AIL / RESTAURANT	=	12,371.018 sq.m < 12,500 sq.m (COMPLY WITH LATEST MR DWG. P00-A-CP001) Rev. P)	
AL	=	87,372.726 sq.m < 88,450 sq.m (COMPLY WITH LATEST MR DWG. P00-A-CP001 Rev. P)	ELEVATIONS (NORTH
DING FOOTPRINT	=	17,230.311 sq.m < 17,231 sq.m (TOTAL SITE COVERAGE < 54.43%)	SCALE = 1:500
PARKING PROVISION	=	152 (REFER TO LATEST MR DWG. P00-A-CP011 Rev) (4 NOS. FOR DISABLED)	
DING & UNLOADING PROVISION	=	17 (COMPLY WITH LATEST MR DWG. P00-A-CP011 Rev)	,
VISION OF PUBLIC OPEN SPACE AT GRADE	=	5651.785 sq.m > 5100 sq.m (COMPLY WITH LATEST MR DWG. P00-A-CP001 Rev. P)	
VISION OF PUBLIC OPEN SPACE AT TERRACE	=	6989.265 sq.m > 5400 sq.m (COMPLY WITH LATEST MR DWG. P00-A-CP001 Rev. P)	
COVERAGE OF GREENERY PROVISION EDESTRIAN ZONE (UNDER PNAP APP-152)	=	1,787.561 sq.m > 1787 sq.m (COMPLY WITH LATEST MR DWG. P00-A-CP001 Rev. P)	
COVERAGE OF GREENERY PROVISION ERRACE ZONE (UNDER PNAP APP-152)	=	7215.213 sq.m > 7215 sq.m (COMPLY WITH LATEST MR DWG. P00-A-CP001 Rev. P	

PUBLIC OPEN SPACE CALCULATION

PEN SPACE AT	GRADE & PIAZZA	
)	1807.841 sq m	
	3807.944 sq m	
TOTAL	5651.785 sq m	

PEN SPACE AT TERRACE		
)	2740.160 sq m	
)	4,031.97 4 ;sq m	
)	217.131 sq m	
TOTAL	6,989.265 <mark>7</mark> sq m	

PUBLIC OPEN SPA	CE AT GRA	DE & PIAZZA	
ASTER REGISTER U	INDER SEP/	ARATE SUBMIS	SION)

REQUIRED OPEN PUBLIC SPACE AT TERRACE ZONE (UNDER MASTER REGISTER UNDER SEPARATE SUBMISSION)

PROVIDED PUBLIC OPEN SPACE AT GRADE & PIAZZA

PROVIDED PUBLIC OPEN SPACE AT TERRACE ZONE

= 5100.000 sq m

= 5400.000 sq m

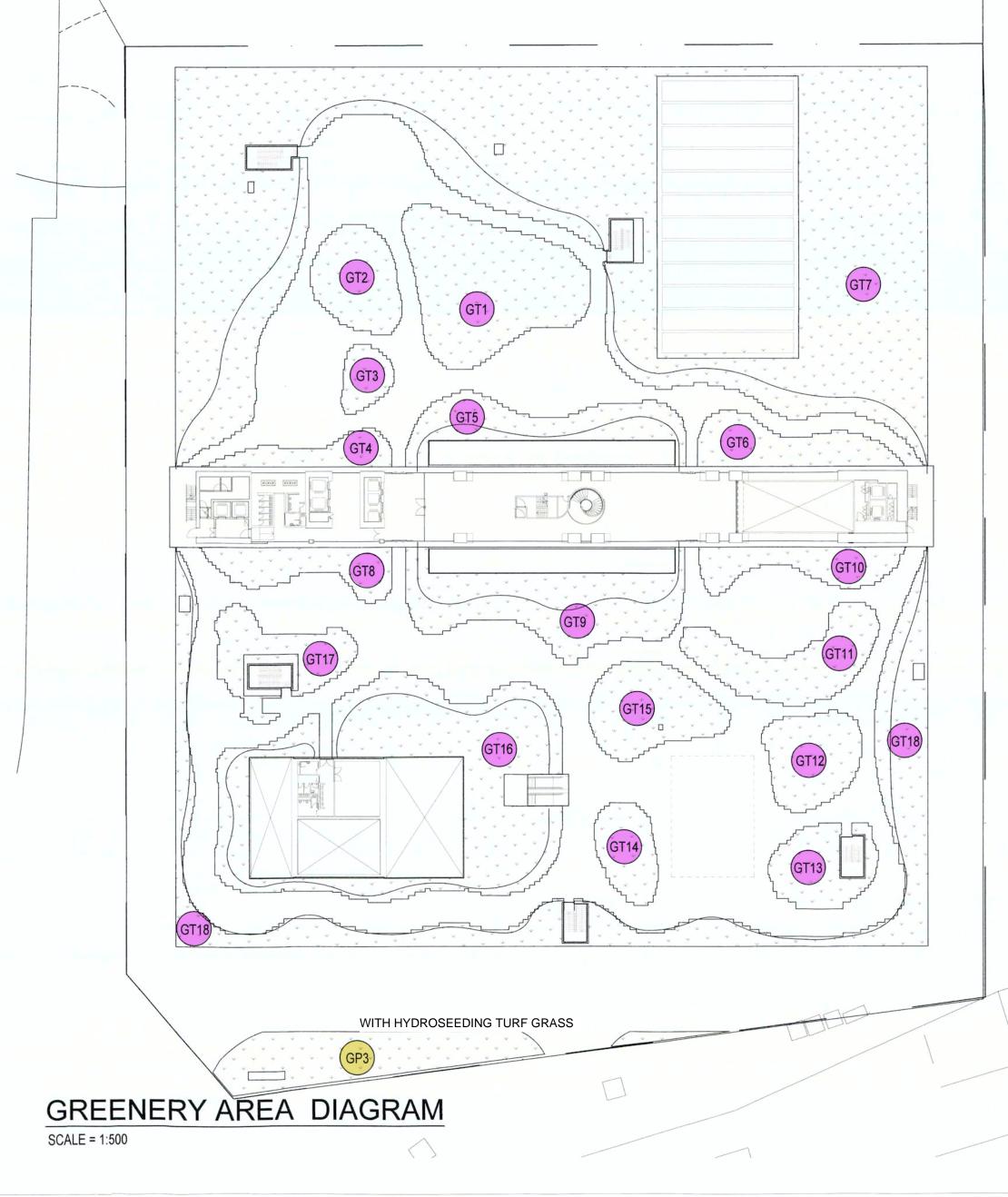
= 5651.785 sq m > 5100.000 sq m

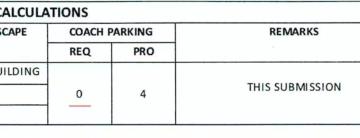
= 6,989.265 sq m > 5400.000 sq m

OUTDOOR DINING SPACE AT TERRACE

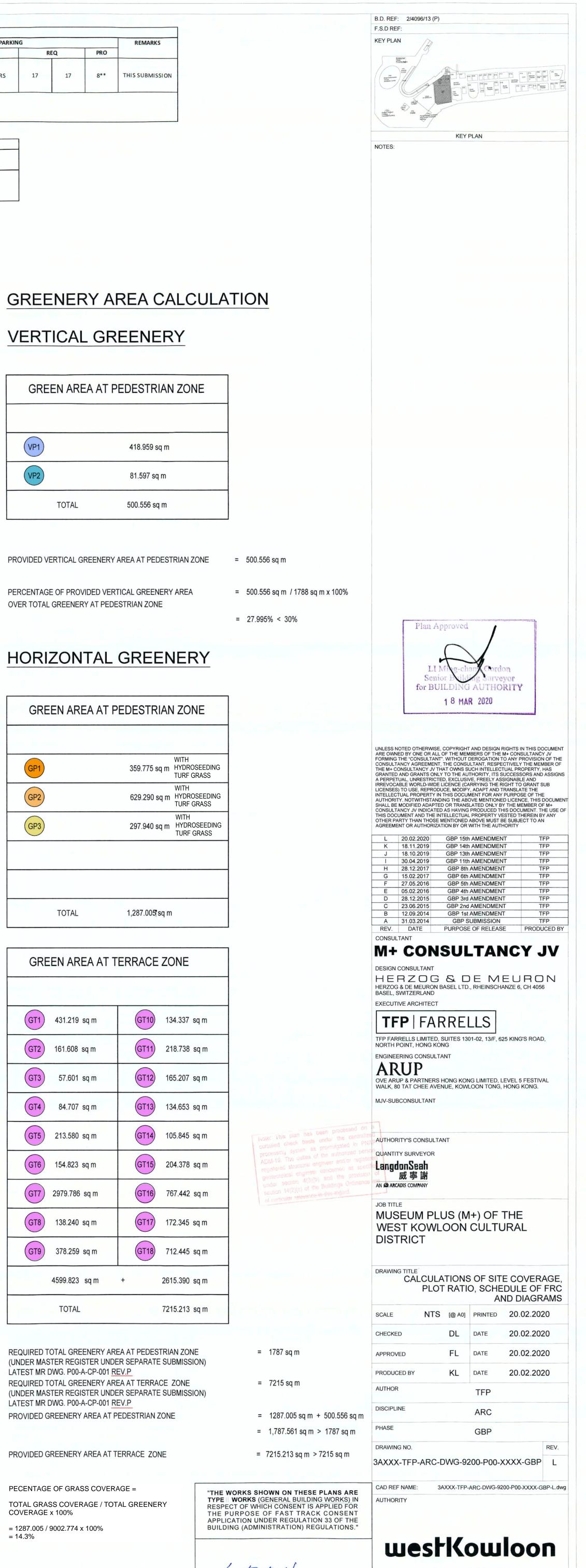
= (DT 1) = 217.131 sq m < 701.697 sq m (10% OF POS AT TERRACE)

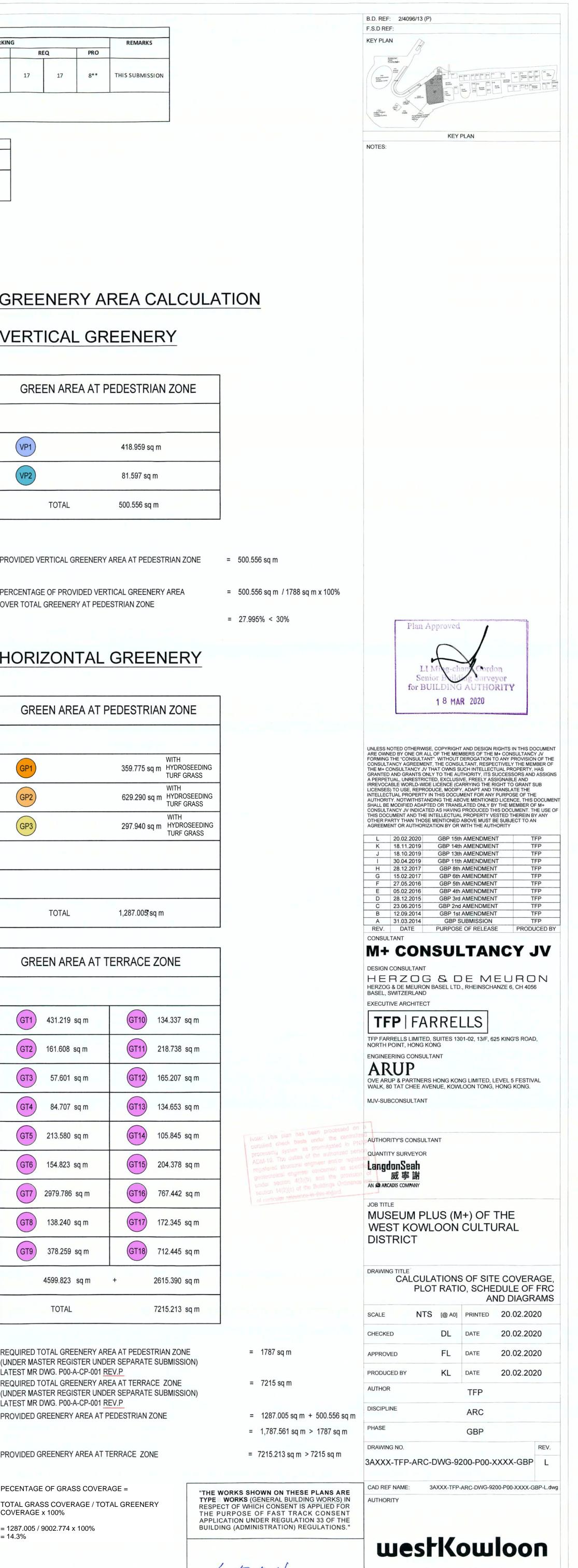
WHICH IS ALLOWED ACCORDING TO "PUBLIC OPEN SPACE IN PRIVATE DEVELOPMENTS DESIGN AND

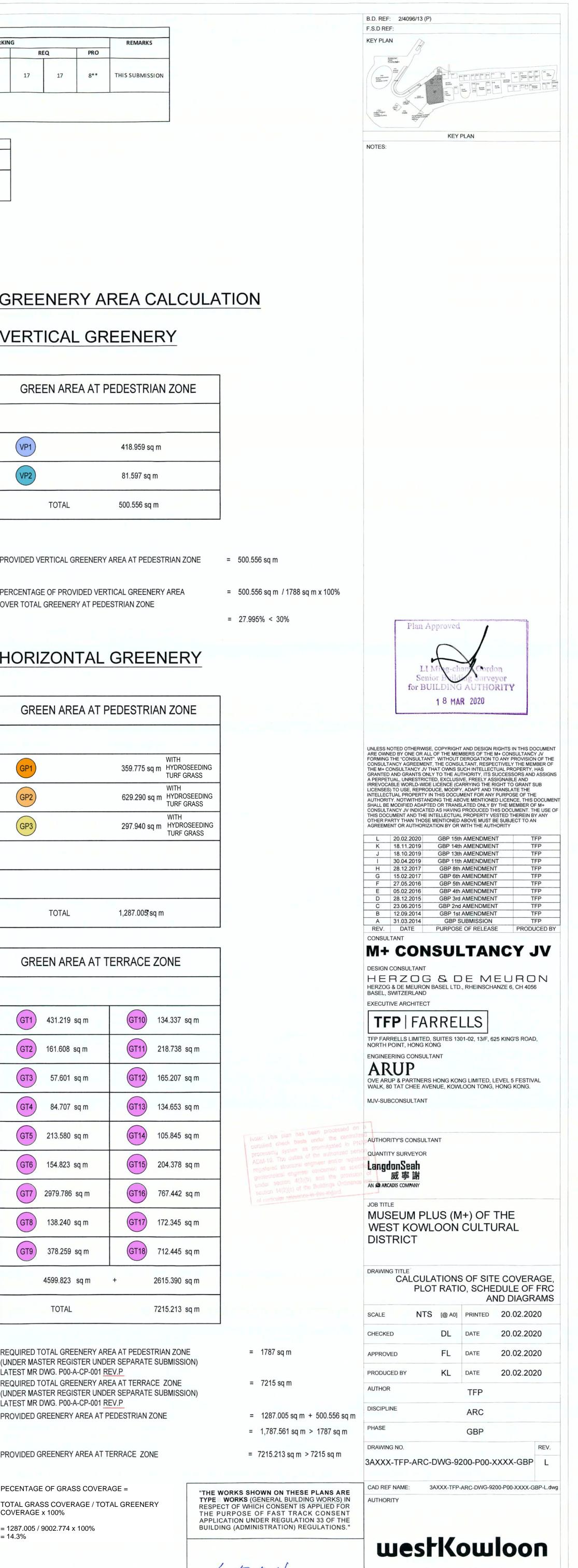




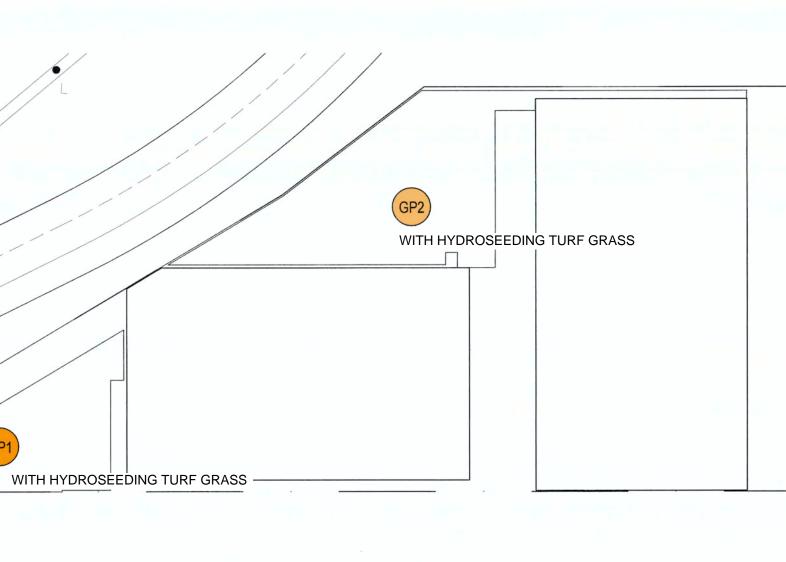








	71:41	
GT1	431.219 sq m	
GT2	161.608 sq m	
GT3	57.601 sq m	
GT4	84.707 sq m	
GT5	213.580 sq m	
GT6	15 <mark>4</mark> .823 sq m	
GT7	2979.786 sq m	
GT8	138.240 sq m	
GT9	378.259 sq m	
	4599.823 sq m	+
	TOTAL	



1 Tuox they I KWOK-HING REGISTERED ARCHITECT, AUTHORIZED PERSON (ARCHITECT) AP (A) 39/95

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APPENDIX D: POST-PLANTING CARE PLAN



M+ Post Planting Care Plan

Operation	Description	Frequency	Notes
a. Replacement planting	Replacement of dead , dying plants, e.g. failure grass species . Replanting and/or reseeding of annual herbaceous plants depending on rate of self-regeneration.	As directed by the Architect	Immediately follo planting season
b. Watering	Watering of planted areas as required	Daily operation except where rainfall > 20mm/day. Early morning and/or late afternoon	Duration of the in reviewed periodi
c. Weeding	Removal of all non-specified plants for all planting areas	12 times per year – once every three weeks in growing season, once every five weeks at other times	The three weeks the winter seaso
d. Noxious and invasive weeds	Remove species of noxious and invasive weeds, e.g. Mikania micrantha and Leucaena leucocephala, immediately when discovered	Daily check as part of other inspections – immediate treatment as necessary	Observe the guid AFCD on treatm
e. Post-planting fertilizer	Application of fertilizer to all planting areas	Two applications with 100 to 300 days in first Spring / Autumn after completion of planting / grass laying	Application of fe
f. Soil aeration	Forking over to a depth of 100mm for grass / shrubs & groundcover plants	First Spring / Autumn following completion of planting	Operation condu
g. Mulching	Topping up of mulch to specified depth	Top up twice during the establishment period. Timing dependent on completion of planting – first immediately after aeration + second immediately before end of Establishment Period	Observe GLTMS trunk flare
h. Firming up	Firming of trees and shrubs to ensure plants are set upright and properly established in the ground	As directed by the Architect – immediately after strong winds / typhoons and as necessary	Review on a mo
i. Staking and tying	Adjustment of stakes and tying materials for trees and palms to ensure that they are secure, but allow room for plant growth	Review on a monthly basis, adjustments made as necessary	-
j. Pruning of trees / palms	 Pruning of trees and palms to remove dead or damaged branches / fronds and to promote better canopy / crown shape. (Formative pruning should be undertaken during plant preparation and immediately prior to planting) 	According to species, as determined by the Architect.	Observe relevan promulgated by

ollowing weeding operations. Preferably during on i.e. Mar-Sep.

e irrigation system watering time to be odically and any necessary adjustment made

eks weeding cycle – adjusted to five weeks in ason (continuous cycle of weeding)

uidelines and practice notes promulgated by tment of noxious weeds

fertilizer twice during the first year

ducted concurrently with fertilizer application

MS guidelines on keeping mulch away from

monthly basis, adjustments made as necessary

vant guidelines and Proper Planting Practices by GLTMS of DEVB

M+ Post Planting Care Plan

Operation	Description	Frequency	Notes
k. Pruning of shrubs and groundcovers	Pruning of shrubs and groundcovers to encourage bushy growth, tidy up appearance, topiary as intended, and remove dead / diseased branches	Review on a monthly basis. Prune according to species and agreed design intent, as directed by the Architect	Pruning as necess for shrubs (action each species / loca
I. Training and pruning climbers	Train climbers to obtain the desired effect. Pruning of climbers to prevent uncontrolled spreading and strangling of other plants. Adjust climber ties and wires to give proper support to climbing plants	As directed by the Architect. Training and pruning according to agreed design intent. Monthly check ties and wires and adjust as necessary	-
m. Lawn care	Includes grass cutting, rolling, weeding and general lawn care operations	Review on a weekly basis. Cutting as required in accordance with grass height	Cut grass to a heig
n. Top dressing for grass areas	Top dress grass areas as required to smooth out minor depressions	Twice – timing to be agreed	-
o. Plant division	Remove selected plants to reduce overcrowding and replant elsewhere on site	As directed by the Architect, review on a monthly basis. (Preferably during planting season i.e. Mar-Sep)	-
p. Plant thinning	Remove selected plants to reduce overcrowding and dispose off-site	As directed by the Architect. Review on a monthly basis	-
q. Infestation by rodents etc.	Check all planting areas for signs of infestation by rodents etc. as part of the regular monthly inspection of the establishment works. Treatment by pest control measures.	Daily check as part of other inspections – immediately treatment as necessary	-
r. Pest, disease, fungal growth and parasitic plants	Check all plants for signs of pest, disease, fungal growth and parasitic plants as part of the regular monthly inspection of the establishment works. Treat pest, disease and fungal growth by applying suitable chemical or pruning as appropriate. Treat parasitic plants by physical removal.	Daily check as part of other inspections – immediately treatment as necessary	-
s. Protective fencing	Check and repair protective fencing	As required	-
t. Typhoon damage	Reinstatement of all displaced trees and shrubs, treatment or replacement of damaged plants	As required	-

cessary to maintain the agreed design height tion trigger height down to pruned height for / location)
height of 50 mm when it reaches 100 mm high
neight of 50 min when it reaches 100 min high

M+ Post Planting Care Plan

Operation	Description	Frequency	Notes
u. Clearance of unwanted vegetation	Carry out as part of site clearance and weeding. Remove all unwanted vegetation including undersized wild growth undesirable to be kept at the location.	As directed by the Architect	-
v. Litter collection	Collection of litter and debris from site	Daily operation across site	-
w. Erosion control	Application of erosion control measures as required preventing / controlling soil erosions. Repair of eroded areas.	As required	On-going exercise
x. Removal of stakes & pro fencing	tective Removal of stakes, guys, ties and protective fencing at the end of the Establishment Period	Once	Part of the Final I



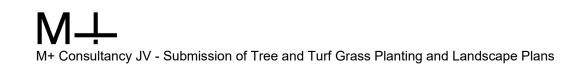
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Operation	Frequency	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	
Replacement planting	Mar-Sept (as required)											T
Watering	daily											
Weeding	monthly											
Removal of noxious and invasive weeds	daily											
Apply post-planting fertilizer	Feb/Aug											
Soil aeration	Feb/Aug											
Top up mulching	2 times per year											
Firming up of tilted plants	(as required)											
Adjust staking and tying of trees / palms	monthly											
Pruning of trees / palms	(as required)											
Pruning of shrubs and groundcovers	(as required)											
Training and pruning of climbers, adjust climber ties and wires	(as required)											
Lawn care	(as required)											
Top dressing for grass areas	2 times per year											Γ
Plant division	Mar-Sept (as required)											
Plant thinning	(as required)											
Control infestation by rodents etc.	(as required)											
Control pest, disease, fungal growth and parasitic plants	(as required)											
Check and repair protective fencing	(as required)											
Repair typhoon damage	(as required)											
Clearance of unwanted vegetation	(as required)											
Removing litter, stone, rubbish and the like	daily											
Erosion control	(as required)											



Nov	Dec

APPENDIX F: SUPPLEMENTARY INFORMATION





規 劃 署



Planning Department

Tsuen Wan & West Kowloon District Planning Office 27/F, Tsuen Wan Government Offices, 38 Sai Lau Kok Road, Tsuen Wan, New Territorics

盜灣及西九龍規劃處 新界差灣西樓角路38號 荃灣政府台署27樓

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本的檔號	Your Reference	
本習檔號	Our Reference	TPB/A/K20/121 (DPO)
電話號碼	Tel. No. :	2417 6256
傳真機號碼	Fax No. :	2412 5435

16 November 2018

By Fax only (2526 3281)

Llewelyn-Davies Hong Kong Ltd. 10/F, Cheung Wah Industrial Building 10-12 Shipyard Lane Quarry Bay Hong Kong

(Attn.: Ms. Winnie WU)

Dear Winnie,

Fulfilment of Approval Condition (a) Application for Proposed Minor Relaxation of Gross Floor Area and Building Height Restrictions <u>West Kowloon Cultural District (WKCD)</u> (Application No. A/K20/121)

I refer to your letter of 31 October 2017 enclosing the submission for compliance with approval condition (a) on 'the submission of a revised Landscape Concept Plan to illustrate the design and provision of public open space and green coverage to the satisfaction of the Director of Planning or of the Town Planning Board'.

Our Chief Town Planner/Urban Design & Landscape has no further comment on the Landscape Concept Plan (LCP) from landscape planning perspective. As such, approval condition (a) has been complied with. You are requested to submit eight sets of the latest accepted LCP for certification. The certified copies of the LCP would be sent to concerned parties for their record or further action.

Should you have any questions, please contact Ms. Caroline TANG at 2417 6257.

Janto in commune

我們的理想 - 「透過規劃工作。使香港成為世界知名的國際都市。」 Our Vision - "We plan to make Hong Kong an international city of world prominence,"

Yours sincerely,

(Derek CHEUNG) District Planning Officer/ Tsuen Wan, Kwai Tsing and Shan Shui Po Planning Department

<u>c.c.</u> CTP/UD&L HAB WKCDA Secy. of TPB

(Attn.: Ms. Irene LAU) (Attn.: Ms. Karen WONG) (Attn.: Mr. Derek SUN) Fax: 2117 0773 Fax: 3102 5997 Fax: 2895 0016

<u>Internal</u>

Site Record DC/CT/EKST [L-A-K20-121_AC_a-16 Nov 2018.doc]

EXTRACTED APPENDIX A UNDER APPROVED LANDSCAPE CONCEPT PLAN TO FULFILL PLANNING APPROVAL CONDITION (a) -(APPLICATION NO. A/K20/121)

Appendix A –

M+ Landscape Design Development

Justification of Omission of Tree Line along G/F Avenue

Appendix A

M+ Landscape Design Development

Justification of Omission of Tree Line Along G/F Avenue

M+ LANDSCAPE DESIGN DEVELOPMENT

INTRODUCTION

The West Kowloon Cultural District Authority and the M+ Joint Venture team genuinely value greenery and landscape; we believe it greatly enriches the architecture and enjoyment of our site and have incorporated planting wherever possible. We have also to the best of our ability conformed to the districts' Development Plan (*refer to page 4 of the attached presentation*), originally published in 2013, and in some regards have gone above and beyond its recommendations in terms of landscaping. However since 2013 a number of enhancements have been made to the architecture, planning, and landscape design of M+, which now require some necessary and inevitable developments to the original Development Plan. In particular, the planting of trees along the M+ Avenue would be both extremely difficult and detrimental to the functioning of the museum. The following document serves to explain these operational, programmatic and structural difficulties, and also to illustrate the measures that the M+ team has taken to maintain or enhance the original intent of the Development Plan (*refer to page 2 & 3 of the attached presentation*).

A MUSEUM CLUSTER

The 2013 Development Plan predates the architectural competition for M+. In this original scheme, all the M+ functions would be housed in one building, which would be separated from its neighbors by a tree-lined Avenue (*refer to Page 5*). However, the winning design for the M+ competition proposed grouping the M+ programs into a cluster of buildings: the M+ museum and the Conservation and Storage Facility (CSF) building, with the P39B building providing the supporting retail/dining/entertainment functions (*refer to page 6*). From the very early stages of M+ planning, it's therefore been critical that the M+, CSF and P39B buildings function not as 3 separate neighboring entities but as one cluster, and that they be clearly visually and physically linked. For example, various exhibitions related to the M+ art collection will be staged in the CSF G/F rooms for the public to view. The porous plan of the museum's G/F and the large windows along the CSF and P39B buildings have been designed to ensure the link between them.

In order to maintain this link, the trees along the Avenue were relocated to two "pocket parks" around the CSF and P39B buildings. These pocket parks will be described in greater detail further on.

EXTENSION OF ARTIST SQUARE INTO THE M+ SITE

In the 2013 Development Plan, the Artist Square was clearly defined and bound by the buildings at its perimeter. Shifting the trees along the M+ Avenue trees to the North allows us to extend the Artist Square into our site and under the canopy of the M+ podium, which will provide ample shade in place of the trees as well as protection from the elements. The expanded Artist Square space will allow the museum flexibility in staging outdoor events or shows as well as ensure the visual and physical connection of the museum buildings (*refer to pages 6 & 7*).

EXTENSION OF THE PARK INTO THE DISTRICT

The original Development Plan created a very clear boundary between the M+ site and the Park. At G/F within the M+ site, the primary planted area was the Tree Avenue.

In the current M+ scheme, just as the Artist Square extends into the M+ site, so does the Park. The planted areas have been expanded and interconnected (refer to pages 6 & 8).

The proposed pocket park next to the CSF opens the Park onto the M+ site and spreads Southwards to create a lush, verdant backdrop visible from all points of the M+ Avenue (*refer to pages 9 & 10*).

Further connecting the Park and M+ are the "Learning Center Courtyard," a 24-hour publically accessible set of stairs with seating areas, escalators, lifts and suspended planters, and the 3/F podium roof terrace with its public paths, benches, shading structure, and programmed areas supporting museum functions.

From the Park you have a clear view to the steps of the Learning Center courtyard (*refer to page 11*). The Learning Center courtyard is both a direct connection to the roof garden and also a place to sit and admire the view from the G/F South terrace. Both North and South walls of the courtyard are lined with columns of vertical planters which enhance the setting (*refer to page 12*).

The 3/F podium roof is planted both on the North and South sides. Paved paths carve through the landscape, providing Harbor views and seating and leading into larger spaces for public events/education and an outdoor Cafe space. As we have provided a shaded pavilion to the South side, and as the M+ tower should provide shade to the North side, we believe the roof garden will be used year-round. The roof garden will be visible from within the M+ tower and from all surrounding towers, greatly enhancing views within the district (*refer to page 13*).

POCKET PARKS AND THE GREEN BELT

As previously noted, in order to maintain the link between the M+, CSF & P39B buildings, the trees along the Avenue were relocated to two pocket parks around the CSF and P39B buildings. These parks enrich the program of these buildings are create a new, enhanced environment that was not planned for in the initial Development Plan. Together with the Park they form a Green Belt which buffers the pedestrian areas along the Avenue from traffic noise and pollution coming from the access road to the North (*refer to pages 8 to10*).

The pocket park between the CSF & P39B buildings will be visible from the Avenue and also create an enhanced environment for the F&B space in the G/F of P39B. The suspended lighting design around the trees should create a very special atmosphere in the evenings (*refer to page 14*).

Along the northern perimeter, interplanting of diverse trees forms a thick living wall, providing a sense of enclosure internally and visually buffering the large buildings to the north of the site. Trees have been selected for their structural characteristics. *Eucalyptus tereticornis* is traditionally planted to form barriers, and grows tall and straight very quickly. It has fragrant leaves and flowers, and lovely bark texture. *Sterculia lanceolata* and *Viburnum odoratissimum* may, like the Eucalyptus, be planted in tight proximity, making it ideal for forming fencelike stands. They have an expressive and organic habit, and will grow out and away from the Eucalyptus flank. This forms the lower canopy. The understory is composed of *Polyspora axillaris* and *Ligustrum sinense*. These are flowering small tree or large shrub with a lush canopy and wide branching habit. The species provides immediate screening at planting and bears a profusion of white flowers from summer to autumn *(refer to page 15)*.

The climber species selected for the pocket parks are *Campsis grandiflora* and *Ficus pumila* and should also be visible at street level along the PIW Carriageway entrance (*refer to page 16*).

REROUTING OF PIW CARRIAGEWAY ROAD

The original Carriageway was laid out along the West and South sides of the M+ site, which had the advantage of allowing flexibility in the design of the M+ basement and in setting the basement's levels (and therefore facilitating Avenue recessed tree planting). However the road effectively cut M+ off from the surrounding area. During the competition stage, the architects therefore proposed rerouting the Carriageway to create a direct pedestrian connection between M+ and the Park & Waterfront areas (*refer to page 17*). While greatly improving circulation on the site, this has had the effect of constraining the levels of the Carriageway on the M+ site.

AEL TUNNEL CONTRAINTS

The rerouted Carriageway road crosses directly above the MTR AEL Tunnel *(refer to page 18).* The level of the Carriageway floor is therefore constrained and could not be lowered without clashing with the tunnel *(refer to page 19).* The levels of the Carriageway soffit have been set by the level of the Avenue above and by the structural & drainage requirements of the soffit. Therefore the structural levels of the Carriageway floor and soffit are essentially fixed, allowing the planning team very little flexibility. The structural drawing prepared by the M+ Registered Structural Engineer (RSE) demonstrates that the extent of the AEL tunnel directly underneath the M+ structural has governed the structural level of B1 carriageway *(refer to page 20).*

CARRIAGEWAY CLEAR HEIGHT CONSTRAINTS

The B1/F Carriageway runs directly below the G/F Avenue; therefore any tree plantings along the Avenue would directly affect the structural loading and/or the clear height of the Carriageway.

To recess a tree planter in the Avenue, while maintaining a reasonable distance from the M+, CSF & P39B buildings and avoiding the EVA, the planter would have to be placed directly above either a) the Carriageway traffic lanes or b) the pedestrian drop-off area.

- a) The clear height of the Carriageway traffic lanes is quite tight as is. Of the 5700mm clear height available, 600mm are necessary for MEP services, leaving just the 5100mm clear height required for Carriageway traffic. As a recessed planter would reduce the clear height to less than 5100mm, it is therefore not possible to place a recessed planter above the traffic lanes (*refer to pages 21 & 22*).
- b) Over the pedestrian drop-off area of the Carriageway, the clear height requirement is lower (only 3500mm). However in this area it is structurally impossible to recess a planter because it would cut into the key primary beam (*refer to page 26*). Again, the structural drawings prepared by the RSE indicate the location of the required primary beam at the G/F slab which is already stretched to the limit in terms of depth and reinforcement content (*refer to pages 23 to 25*).

Since it is not possible to recess a tree either over the Carriageway traffic lanes or over the pedestrian dropoff, it is therefore not possible to recess a planter at any point along the M+ Avenue.

OPERATIONAL AND FUNCTIONAL CONSTRAINTS

While placing above-ground planters on the Avenue would be technically possible, these planters would need to be quite large to allow the healthy growth of a tree. According to the Sustainable Building Design Guidelines (APP-152) issued by Building Departments, the recommended minimum soil depth for trees are 1.2m. In addition to the soil requirement, 150mm THK. drainage aggregate would be needed beneath the soil layer to avoid waterlogging. As such, 1.4m (H) planter would be required to ensure healthy growth of trees. Such large, above-ground planters

would be problematic for a number of reasons. As noted earlier, the 3 buildings in the museum cluster should function as one entity, with the Artist Square extending into the site. Above-ground planters would defeat the fundamental design principles of M+ by visually and physically disconnecting the CSF and P39B buildings from M+ and from the Artist Square, reducing flexibility in staging outdoor events or shows, concealing museum signage, and impeding site maintenance and museum access, among other things *(refer to page 27)*. Therefore above-ground planters are strongly opposed.

CONCLUSION

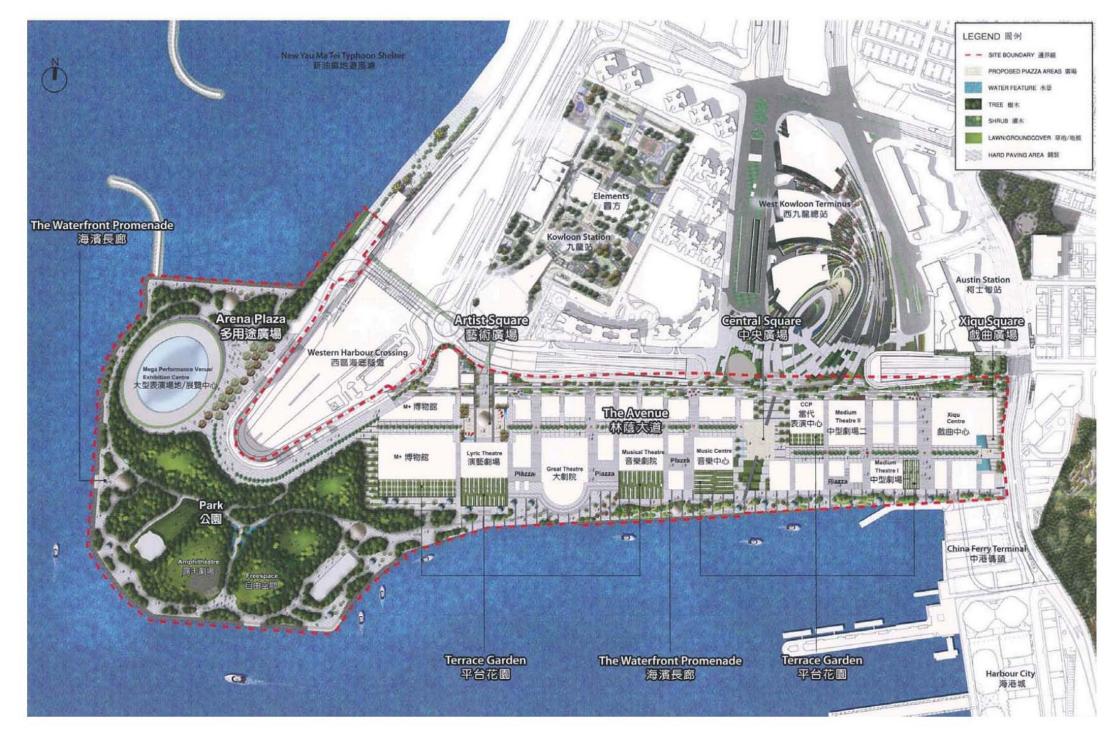
We believe our proposal (*refer to page 28*) to shift the Avenue trees to the northern Green Belt is necessary and justifiable and, together with the creation of vibrant pocket parks as well as the Learning Center Courtyard and podium roof garden, represents a genuine improvement of the original Development Plan, going even further than originally anticipated in providing publically accessible planted spaces along the Avenue and the district's ground level.





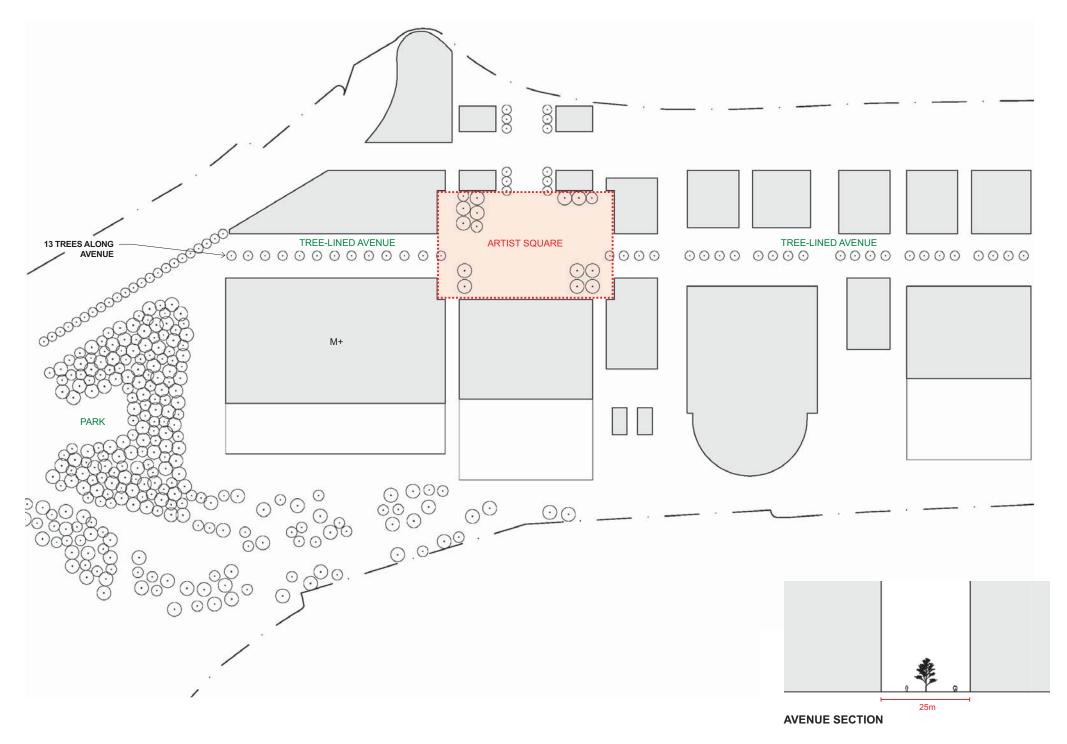
IMAGE CREDIT AND SOURCE: DLN/WEST8





WKCD DEVELOPMENT PLAN - LANDSCAPE CONCEPT - 8.1.2013

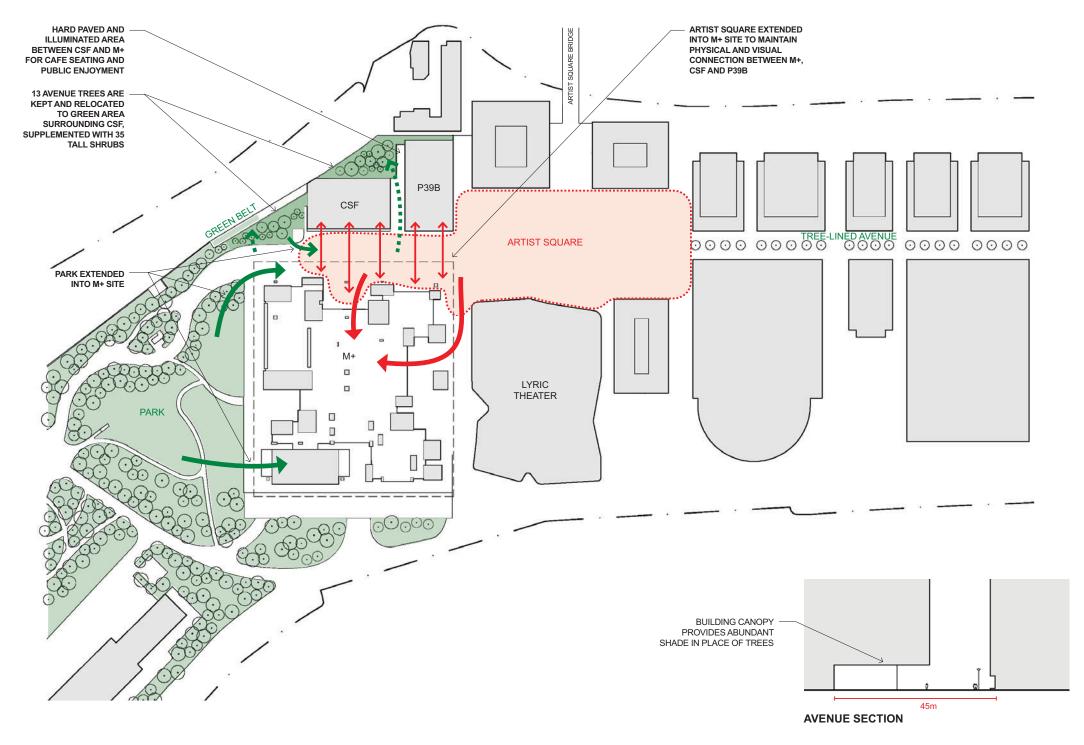
M+ LANDSCAPE



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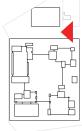
M-L M+ Consultancy JV - 08.06.2017

WKCD DEVELOPMENT PLAN - M+ AND ARTISTS SQUARE



M-L M+ Consultancy JV - 08.06.2017 CURRENT SITE PLAN M+ LANDSCAPE





AVENUE VIEW FROM THE EAST M+ LANDSCAPE











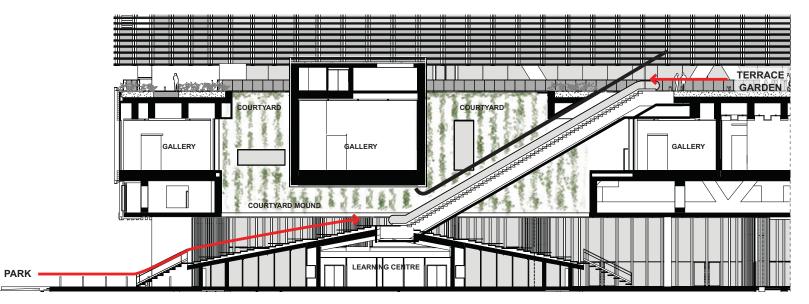




VIEW OF LEARNING CENTER COURTYARD FROM PARK



COVERED ESCALATOR TO M+ ROOF TERRACE GARDEN





SECTION THROUGH LEARNING CENTER COURTYARD



VIEW TO ROOF TERRACE GARDEN FROM CAFE

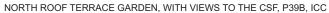


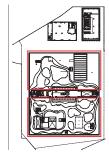
SHADING STRUCTURE IN SOUTH ROOF TERRACE GARDEN

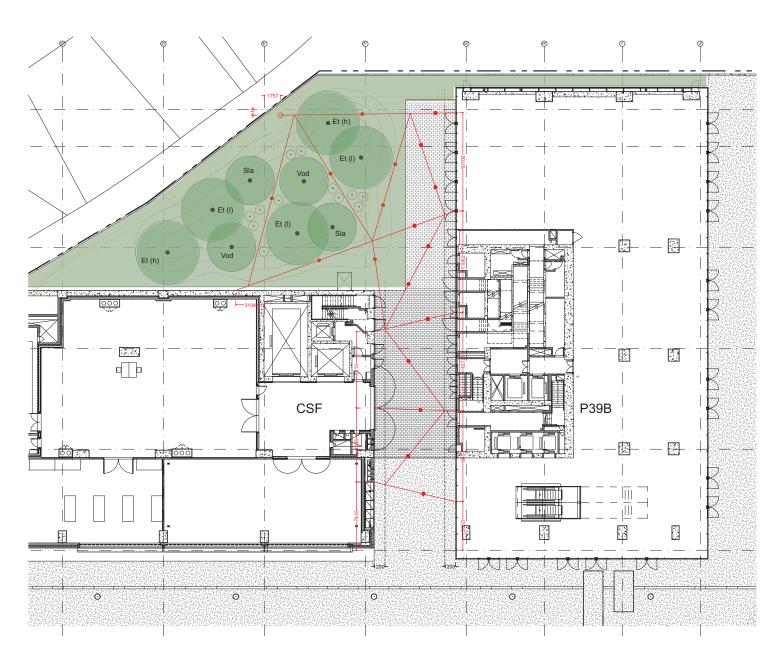


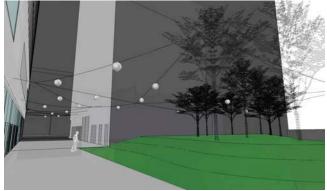
PATHS AND BENCHES IN ROOF TERRACE GARDEN







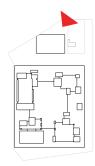




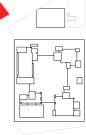
G/F VIEW FROM THE NORTH

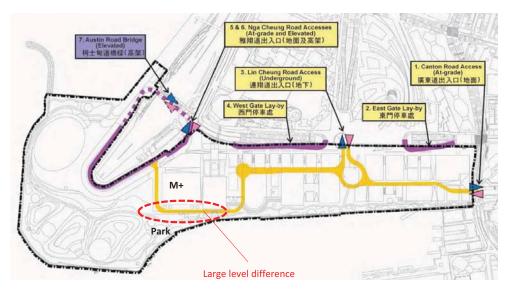


VIEW FROM P39B 1/F WINDOW

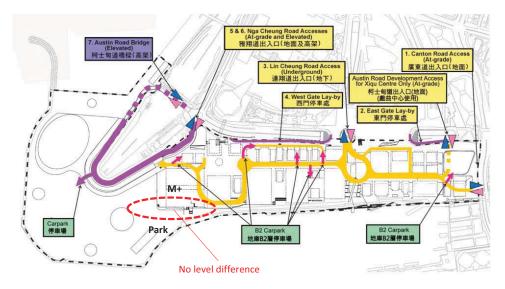




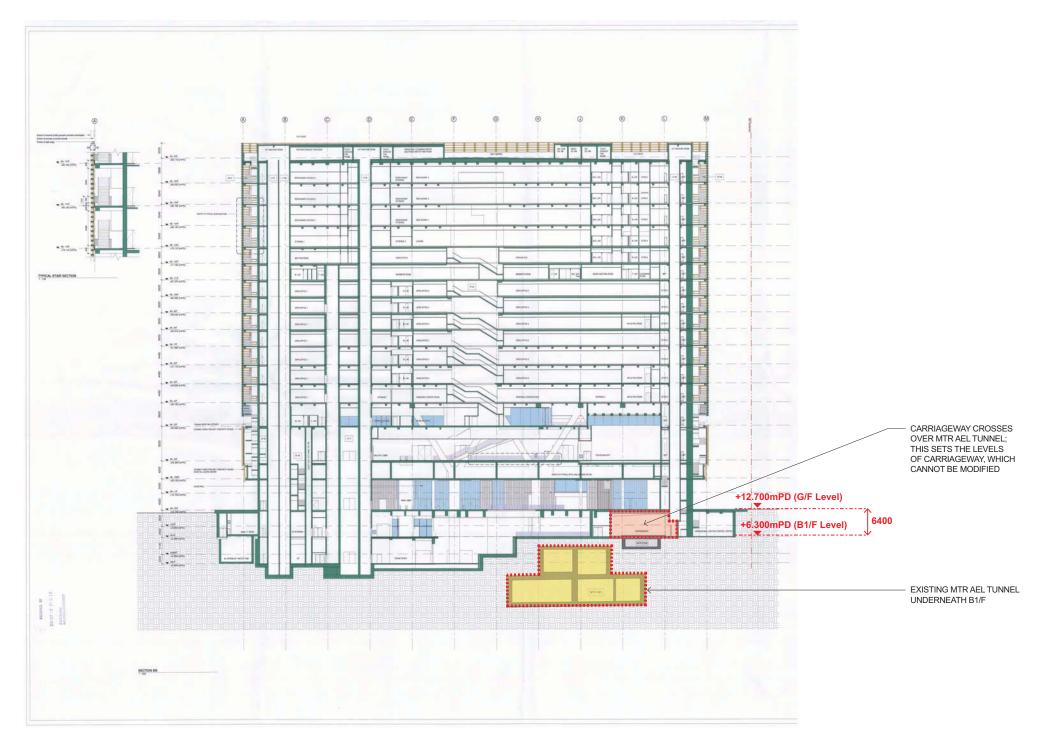




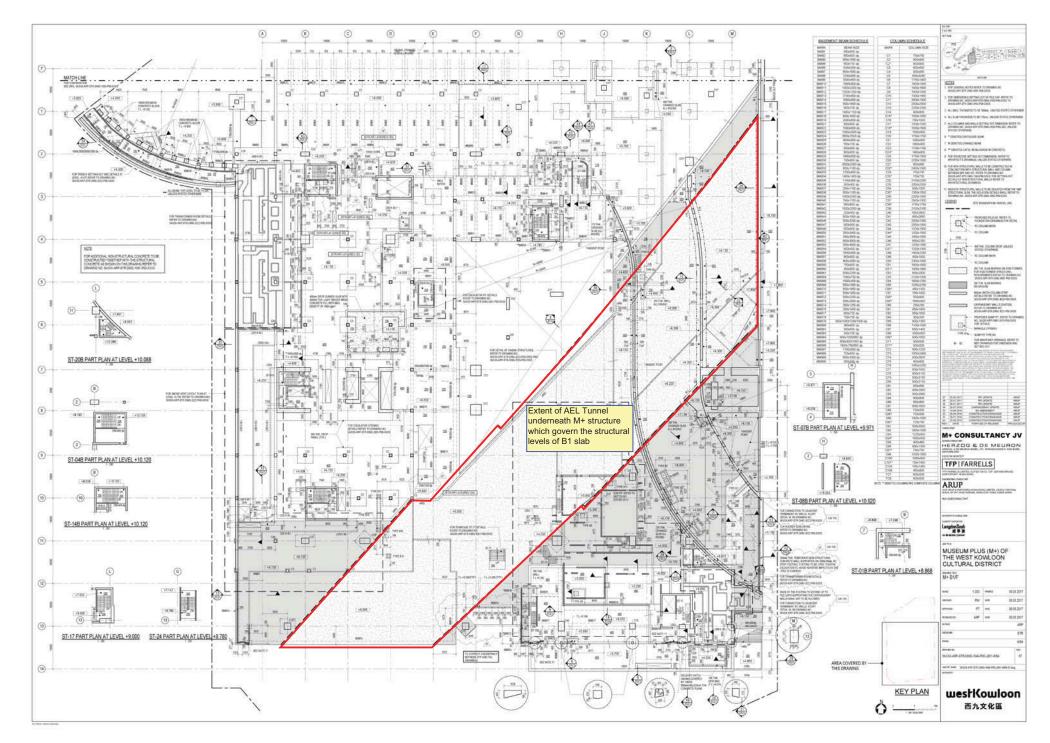
UNDERGROUND ROAD IN DP - M+ largely inaccessible from the Park due to the underpass road



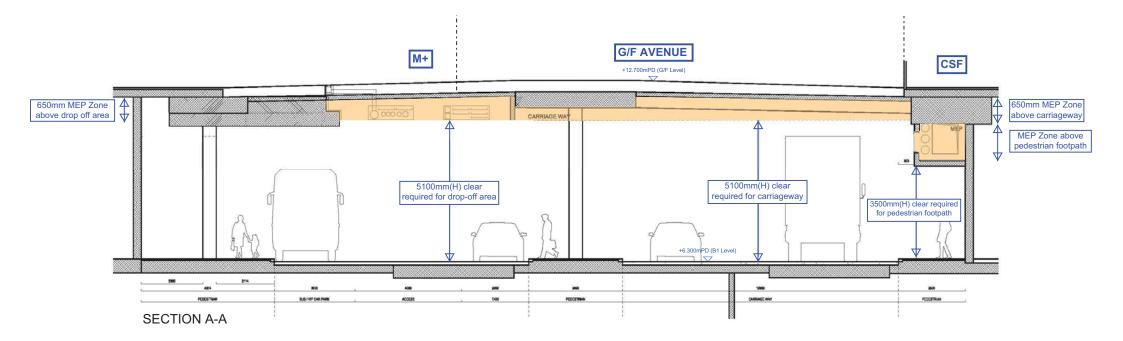


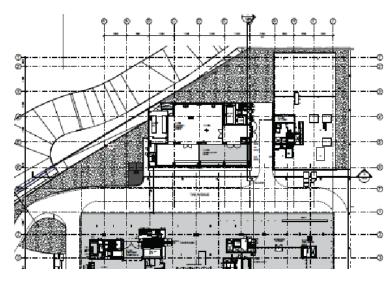


STRUCTURAL LEVEL CONSTRAINTS AT B1/F

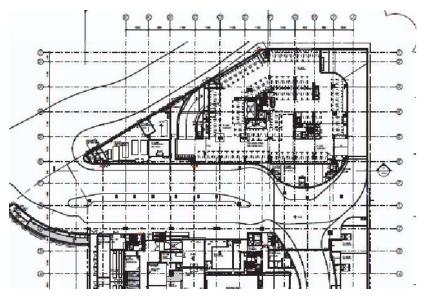


CARRIAGEWAY STRUCTURAL PLANS - SOUTH B1/F



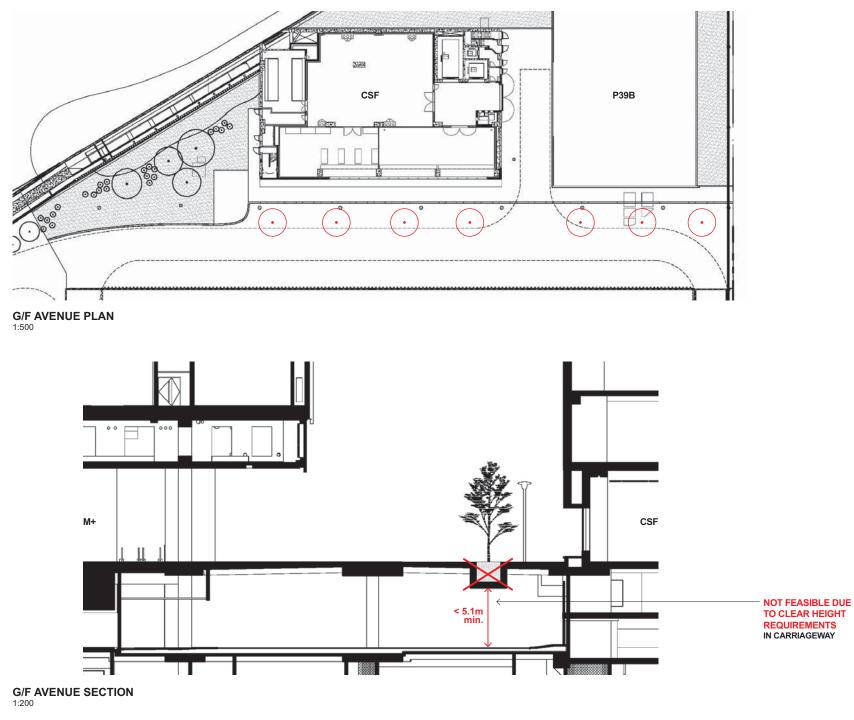


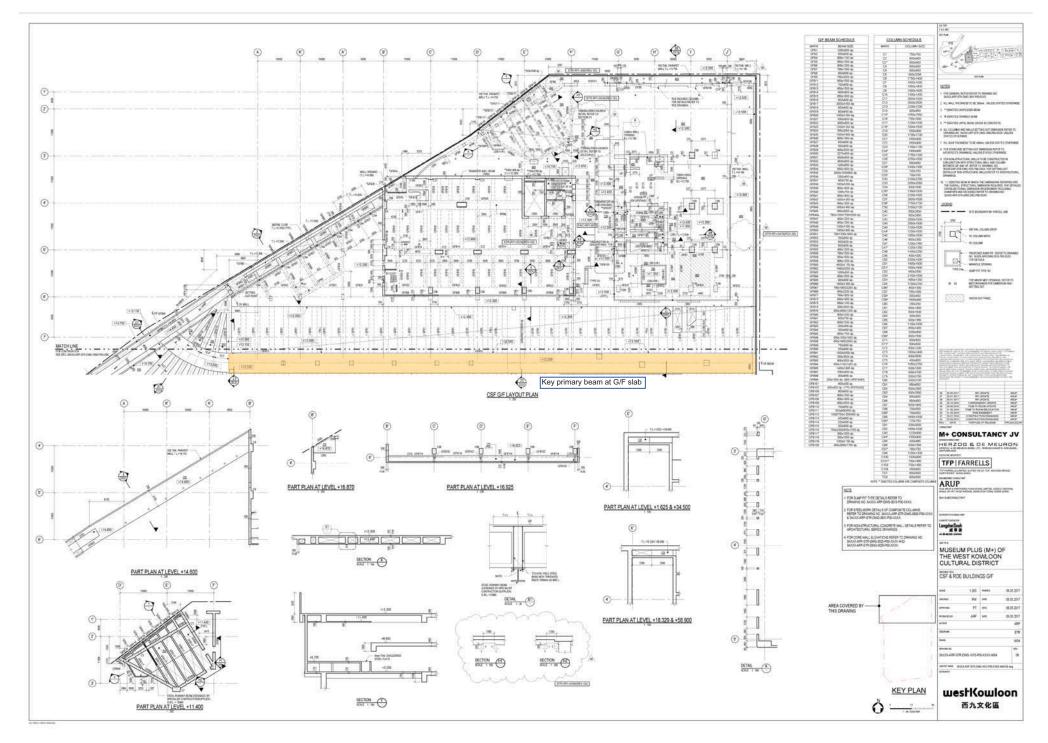
G/F AVENUE PLAN



B1 CARRIAGEWAY PLAN

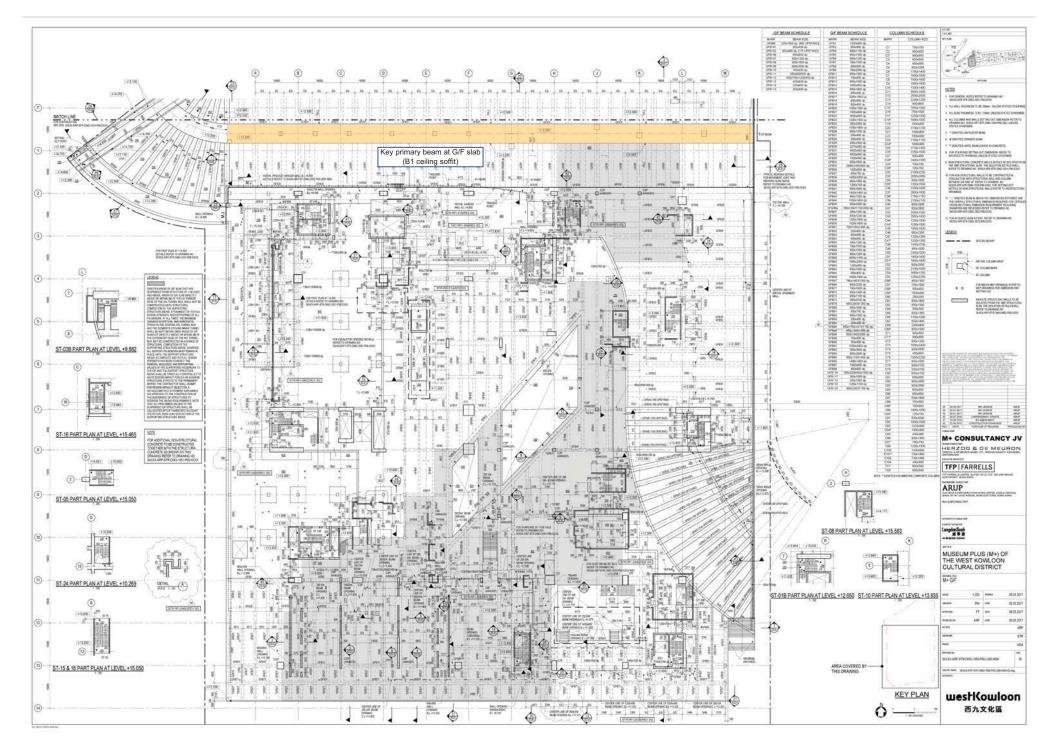
CARRIAGEWAY CLEAR HEIGHT REQUIREMENTS M+ LANDSCAPE



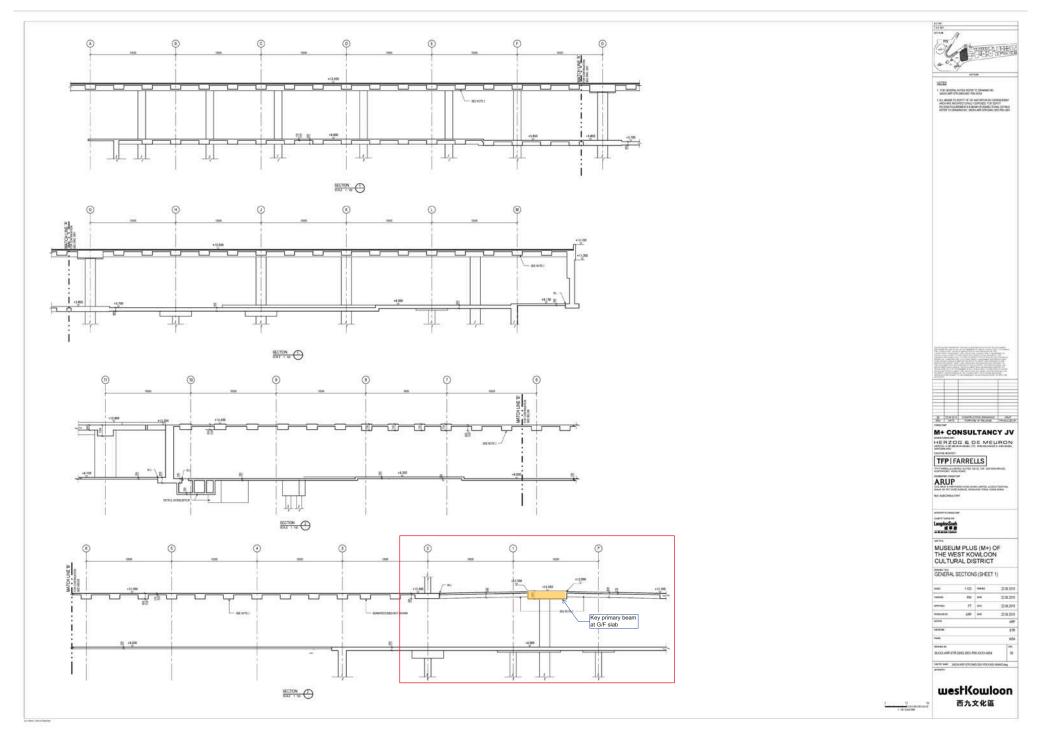


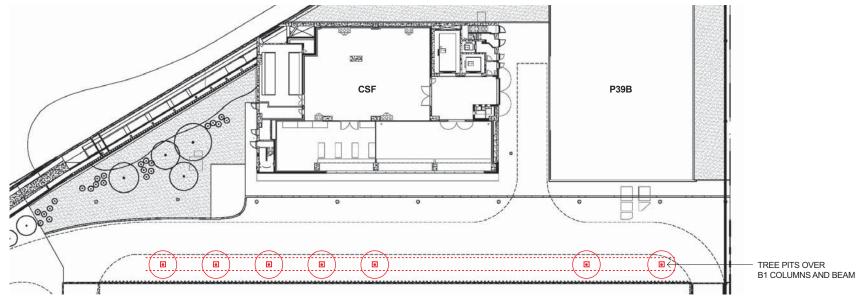
CARRIAGEWAY STRUCTURAL PLANS - NORTH G/F

M+ LANDSCAPE

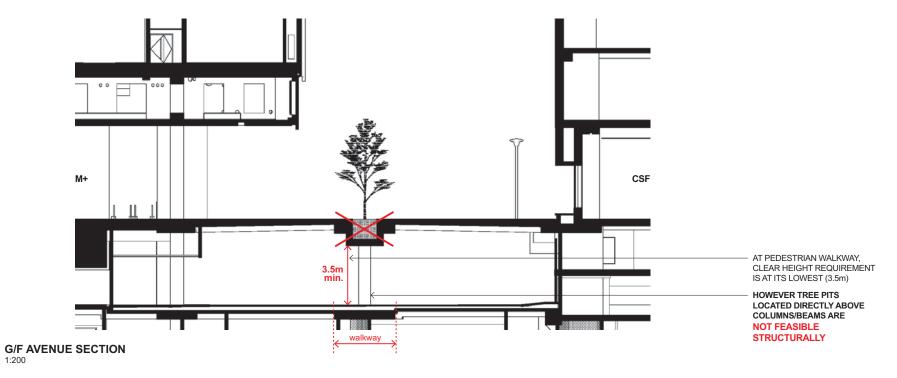


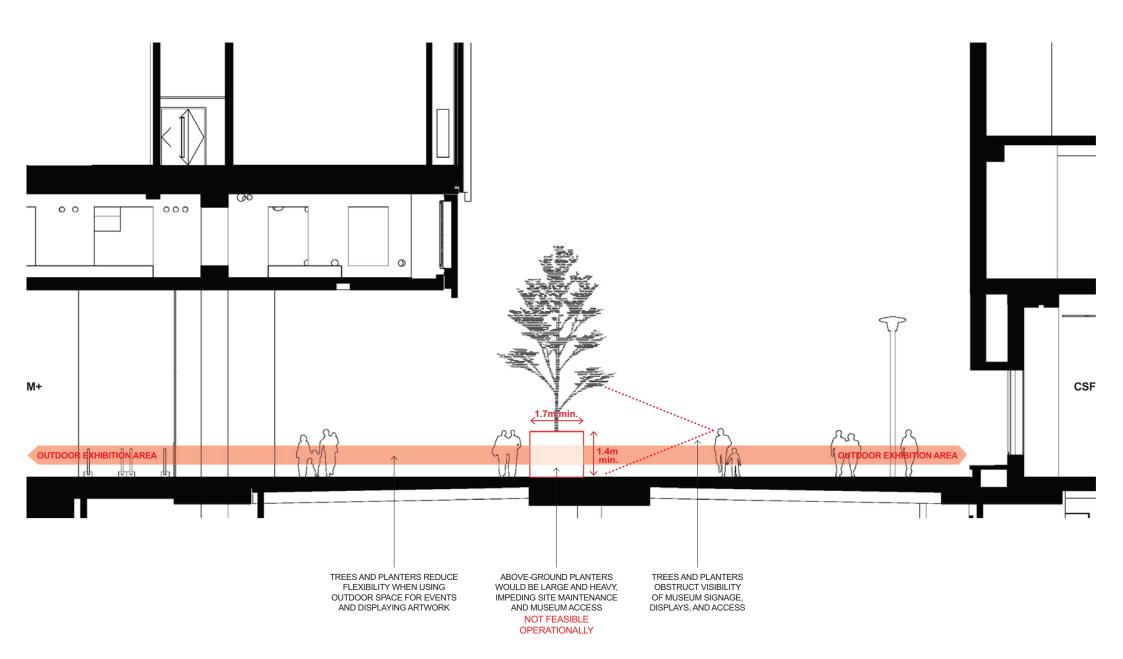
CARRIAGEWAY STRUCTURAL PLANS - SOUTH G/F

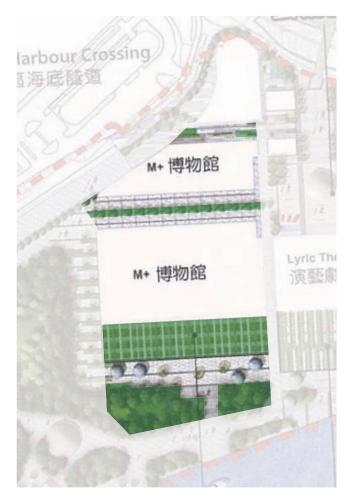




G/F AVENUE PLAN 1:500







M+ LANDSCAPE PER WKCD DEVELOPMENT PLAN



CURRENT M+ LANDSCAPE IMAGE CREDIT AND SOURCE: DLN/WEST8

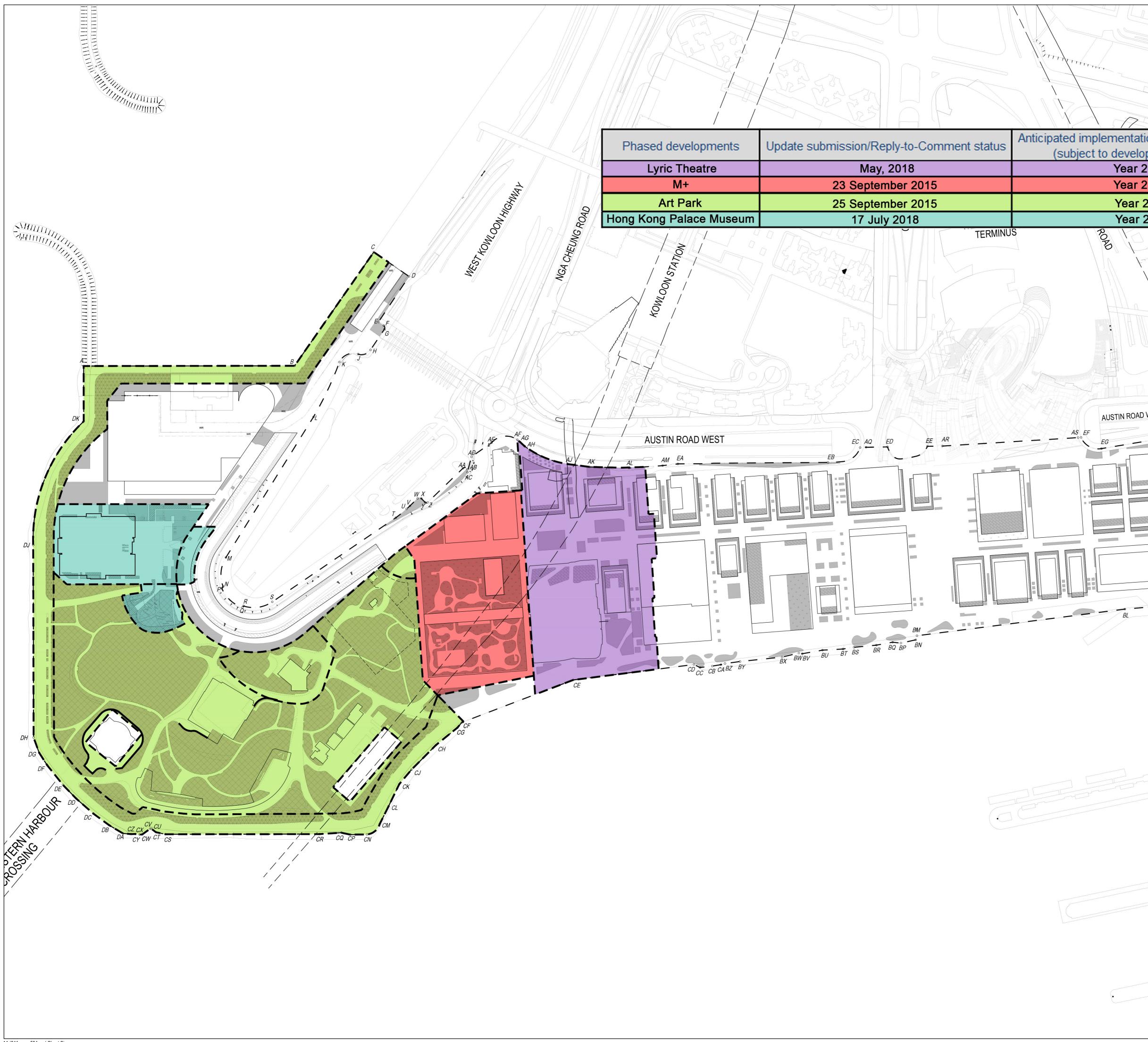
APPENDIX G: IMPLEMENTATION PROGRAMME

Drawing no:-

Description

XXXXX-AUT-LAN-DWG-2371-P00-XXXX-WSX

Tree and Turf Grass Planting and Landscape Plan Overall Master Plan



	B.D. REF: F.S.D. REF:						
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	LEGEND	<u>:</u>	KEY	PLAN			
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APPENDIX H: CONDITION OF APPROVAL UNDER SECTION 8 (3) OF THE EIA ORDINANCE

Attachment 1

Project Title: West Kowloom Cultural District

Reference of the Approved Environmental Impact Assessment (EIA) Report in the Register: AEIAR-178/2013 <u>Condition of Approval under Section 8(3) of the EIA Ordinance</u>

The EIA report as exhibited under Section 7(1) of the EIA Ordinance is approved by the Director of Environmental Protection with the following condition:

1. The Applicant shall submit tree and turf grass planting and landscape plans as well as a post-planting care plan, in consultation with the relevant authorities, including but not limited to the Planning Department, to the Director of Environmental Protection for approval before commencement of construction of the project. The tree planting plan shall set out details of the composition of the native tree species to be planted in the project site. The turf grass planting plan shall also set out details of the percentage of grass coverage with justifications and the grass species to be planted. Carpet Grass of the Axonopus genus including Axonopus compressus shall be avoided. The Applicant shall engage a certified arborist to advise on, monitor and ensure proper implementation of the tree and turf grass planting and landscape plans.

Environmental Protection Department November 2013