

Consultancy Agreement for Integrated Basement and Underground Road
in Zones 2A, 2B and 2C of the West Kowloon Cultural District

SUBMISSION OF TREE AND TURF GRASS PLANTING AND LANDSCAPE PLAN

Revision 02	
Client	West Kowloon Cultural District Authority (WKCDA)
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- D. LANDSCAPE MAINTENANCE SCHEDULE

1. INTRODUCTION

1.1 Background

The West Kowloon Cultural District (WKCD) is a world-class integrated arts, cultural, entertainment and commercial district. The Integrated Basement (IB) and Underground Road (UR) in Zone 2A, 2B and 2C are part of the WKCD project.

The whole IB/UR are divided into zones to facilitate development as per the consultancy brief intention. Figures 1.1 show the extent of Zone 2 of WKCD development.

The IB within Zone 2A, 2B and 2C consists of three levels of basement: B1/F, B2M/F and B2/F, while the UR solely refers to the carriageway at B1/F including associated pavement, means of escape (MoE), means of access (MoA) and plant rooms serving the UR only.

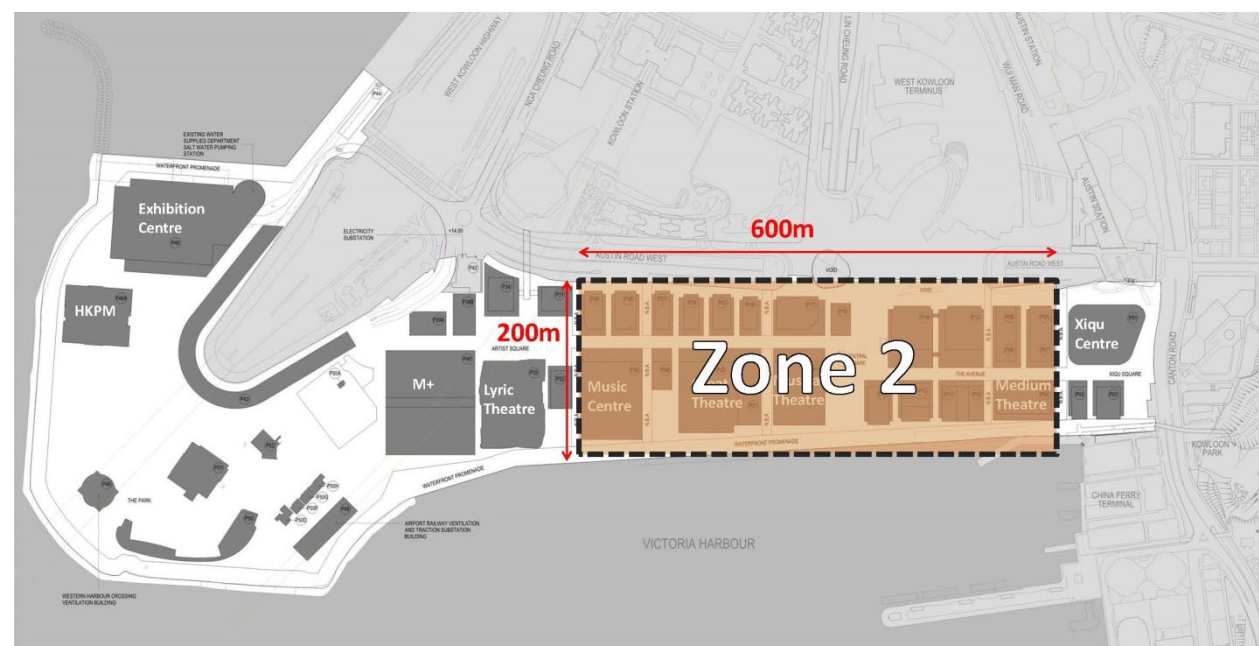


Figure 1.1 Overall Site Plan for Zone 2 (Zone 2A, 2B and 2C)

1.2 Submission of Tree and Turf Grass Planting and Landscape Plan

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:

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.

2. LANDSCAPE PLAN

Please refer to Appendix A for the Landscape Plan for Zone 2A, 2B and 2C for detail.

3. TREE PLANTING

3.1 Native Species

Total no. of proposed trees within Zone 2A, 2B & 2C is 286 nos. Among, no. of proposed native species trees is 135 nos., which is approximately 47% of overall proposed trees species.

Please refer to Appendix B Tree Planting Plan for detail.

4. TURF GRASS PLANTING

4.1 Percentage of Grass Coverage

According to the Condition of Approval under Section 8(3) of the EIA Ordinance for the Approved Environmental Impact Assessment (EIA) Report in the Register: AEIAR-178/2013, there is no Carpet Grass of the Axonopus genus including Axonopus compressus proposed within Zone 2A, 2B and 2C.

The proposed grass area is around 1190 m² and the percentage of grass coverage within Zone 2A, 2B and 2C is around 16% from the total G/F greenery (approx. 7450 m²) at Primary Zone within Zone 2A, 2B and 2C, and around 1% from the total site area of Zone 2 (approx. 12 ha).

$$\frac{\text{Total Grass Coverage}}{\text{Total G/F Greenery at Primary Zone}} \times 100\% = \frac{\sim 1190 \text{ m}^2}{\sim 7450 \text{ m}^2} \times 100\% = \sim 16\%$$

$$\frac{\text{Total Grass Coverage}}{\text{Total Site Area}} \times 100\% = \frac{\sim 1190 \text{ m}^2}{\sim 120000 \text{ m}^2} \times 100\% = \sim 1\%$$

Hybrid *Bermuda* is proposed as it is resistant to disease and drought tolerant. Also, it is with less cutting frequency is required for maintainance.

Please refer to Appendix C for the Turf Grass Planting Plan.

Please refer to Appendix D for the Landscape Maintenance Schedule.

5. POST PLANTING CARE

5.1 Landscape Maintenance Strategy

Maintenance of hard and soft landscape components will be carried out by a qualified Landscape Contractor for at least a period of 12 months after the completion of the construction works. Afterward, they will be managed by the West Kowloon Cultural District Authority, or its service agent. The landscape maintenance is to be carried out to a high standard. General maintenance shall be provided using the following criteria.

5.2 Soft Landscape Areas

General maintenance will include the following regular operations:-

- Watering,
- Weeding,
- Fertilizing,
- Firming up of plants,
- Pruning/thinning,
- Securing of protective fencing,
- Lawn cutting,
- Forking over,
- Applying insecticide/ fungicide,
- Replanting/ replacing of damaged/ dead plants,
- Aeration and
- Mulching.

5.3 Irrigation and Drainage

All planting areas will be provided with adequate manual water point supplies which are no more than 40m apart from each other. Also, planter drainage will be provided for all the planting areas.

6. CERTIFIED ARBORIST

WKCD A would engage a certified arborist to advise on, monitor and ensure proper implementation of the tree and turf grass planting and landscape plans within Zone 2A, 2B and 2C.

Certified Arborist's Name – Siu Ling LO

Certification No. – HK-0638A

A. LANDSCAPE PLAN



Legend

- Greenery Area Within Zone 2ABC
- Greenery Area Outside Site
- Tree
- Loose Furniture
- Zone 2 (Zone 2A, 2B & 2C) Boundary
- EVA



B. TREE PLANTING PLAN

Composition of the Native Tree Species

Total No. of Proposed Trees within Zone 2A, 2B & 2C = 286 nos.
No. of Proposed Native Species Trees = 135 nos. (Approx.~ 47% of overall proposed trees)



WKCD ZONE 2A,2B & 2C PROPOSED TREE SPECIES								
Species Name	Chinese Name	DBH (mm)	Spacing (m)	Crown Spread (m)	Height (m)	Quatity	Native	Location
<i>Tabebuia chrysantha</i>	黃鐘木	100	4	3	4	20	No	ARW
<i>Terminalia mantaly</i> 'Variegata'	花葉欖仁	100	4	3	5	7	No	ARW
<i>Xanthostemon chrysanthus</i>	金蒲桃	100	3	3	3	8	No	ARW
<i>Peltophorum tonkinense</i>	銀珠	100	4-5	4	4	23	No	Avenue
<i>Tabebuia rosea</i>	紅花風鈴木	100	3-4	3	4	21	No	Avenue
<i>Liquidambar formosana</i>	楓香	125	4	3	5	50	Yes	Avenue & Central Square
<i>Cinnamomum camphora</i>	樟樹	125	4-5	3-4	5	13	Yes	Central Sqaure
<i>Ilexrotunda</i> Thunb. var. <i>microcarpa</i>	小果鐵冬青	125	4	3	3	9	Yes	Central Sqaure
<i>Pongamia pinnata</i>	水黃皮	100	4	3	4	13	Yes	Central Square & Promenade

Native Tree Species

Species Name	Chinese Name	DBH (mm)	Spacing (m)	Crown Spread (m)	Height (m)	Quatity	Native	Location
<i>Sapium discolor</i>	山烏柏	100	3-4	3	3	19	Yes	Central Sqaure & Pocket Park
<i>Viburnum odoratissimum</i>	珊瑚樹	100	3	2	3	11	Yes	Central Sqaure
<i>Koelreuteria bipinnata</i>	複羽葉欖	100	4	4	4	21	No	Pocket Park & Promenade
<i>Magnolia grandiflora</i> (Pink)	荷花玉蘭	150	4	3	4	15	No	Pocket Park
<i>Cleistocalyx operculatus</i>	水翁	125	5	3	4	10	Yes	Promenade
<i>Ficus benjamina</i> 'Variegata'	花葉垂榕	125	5-6	4	5	13	No	Promenade
<i>Sterculia lanceolata</i>	假蘋婆	100	4	3	4	6	Yes	Promenade
<i>Thespesia populnea</i>	恒春黃槿	100	4	3	4	4	Yes	Promenade
<i>Terminalia catappa</i>	大葉欖仁	125	5	4	5	23	No	Promenade

C. TURF GRASS PLANTING PLAN

PERCENTAGE OF GRASS COVERAGE



Legend

- Shrub Planting Area Within Zone 2A, 2B & 2C
- Grass Planting Area Within Zone 2A, 2B & 2C

- Proposed Grass Species - Hybrid *Bermuda*
- Proposed Percentage of Grass Coverage - Approx. 16% of total G/F greenery at Primary Zone
- Approx. 1% of total site area

D. LANDSCAPE MAINTENANCE SCHEDULE

Landscape Maintenance Schedule

LANDSCAPE MAINTENANCE STRATEGY

Maintenance of hard and soft landscape components will be carried out by a qualified Landscape Contractor for at least a period of 12 months after the completion of the construction works. Afterward, they will be managed by the West Kowloon Cultural District Authority, or its service agent. The landscape maintenance is to be carried out to a high standard. General maintenance shall be provided using the following criteria.

Soft Landscape Areas

General maintenance will include the following regular operations:-

- o Watering,
- o Weeding,
- o Fertilizing,
- o Firming up of plants,
- o Pruning/thinning,
- o Securing of protective fencing,
- o Lawn cutting,
- o Forking over,
- o Applying insecticide/ fungicide,
- o Replanting/ replacing of damaged/ dead plants,
- o Aeration and
- o Mulching.

Irrigation and Drainage

All planting areas will be provided with adequate manual water point supplies which are no more than 40m apart from each other. Also, planter drainage will be provided for all the planting areas.

Suggested Frequency													
	ITEM	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
0	Record keeping	●	-	-	●	-	-	●	-	-	●	-	-
1	Leaf picking and ground cleaning	●	●	●	●	●	●	●	●	●	●	●	●
2	Watering	Anticipated daily		As required (At most daily except during heavy rainfall)								Anticipated daily	
3	Weeding	●	●	●	●	●	●	●	●	●	●	●	●
4	Fertilization	-	-	●	-	-	-	-	●	-	-	-	-
5	Soil amelioration	-	-	●	-	-	-	-	●	-	-	-	-
6	Checking tree stability	●	-	-	●	-	-	●	-	-	●	-	-
7	Staking & tie maintenancel	●	●	●	●	●	●	●	●	●	●	●	●
8	Lawn cutting	●	●	●	●	●	●	●	●	●	●	●	●
9	Shrub pruning	As necessary											
10	Tree pruning	As required											
11	Mulch maintenance	As requested											
12	Pest and disease control	●	●	●	●	●	●	●	●	●	●	●	●
13	Tree inspection following adverse weather events	As required											
14	Tree Risk Assessment	As appropriate											

Note:
All maintenance works listed should be carried out by experienced and qualified personnel having suitable training in arboricultural works.

Landscape Maintenance Schedule applies on a regular basis under normal circumstances. Events may occur such as inclement weather or change in the planting environment, micro-climate, and/or adjacent constructions which may require additional or ad hoc care. These changes should be monitored by experienced and qualified personnel to determine appropriate adjustments to the Landscape Maintenance Schedule.