Proposed Minor Relaxation of Building Height Restriction for the Permitted Social Welfare Facility (Redevelopment of The Salvation Army Lai King Home) at "Government, Institution or Community" Zone, Nos. 200 - 210 Lai King Hill Road, Kwai Chung, New Territories – S16 Planning Application

Appendix 2

Landscape Proposal and Tree Survey Report

Architectural and Associated Consultancy Services for Technical Feasibility Study (TFS)or the Redevelopment of The Salvation Army Lai King Home at Nos. 200-210 Lai King Hill Road, Kwai Chung, New Territories

Appendix 2 Landscape Proposal and Tree Preservation Report

DEC 2023

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description	
01	08/2022	K.Leung	P. Chan	P.Chan	Draft (Issue 3)	

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1 Landscape Proposal

1.1 **Landscape Design Statement**

- 1.1.1 The existing landscape area is in the Welfare Site of The Salvation Army Lai King Home, with several planters and one (1) mature tree located between three (3) SIMAR Slope, Nos. 11NW-A/FR23(3), 11NW-A/R116 and 11NW-A/F363. The proposed project is to demolish the existing $\frac{3/4}{4}$ – storey buildings and redevelop into two 7 storey buildings (excluding LG/F).
- The proposed development will comprise two blocks with a 2-phased development 1.1.2 plan which will provide with good visual effect and air ventilation.
- 1.1.3 The proposed landscape area will retain the main characteristics of the existing building and the landscape resources of the Site as well as enhancing and extending the open space.
- The landscape provisions for the development are mainly on first floor green deck and 1.1.4 the roof floor. The main elements and characteristics of the proposed landscape are described below.

1.2 **Ample Open Space with Greenery at Multi-Levels**

The landscape area will generally be enhanced by providing ample open space with greenery mainly proposed on G/F, 1/F and R/F. Additional green deck has also been introduced from the proposed building on 1st floor of the development which include a large open landscape area for recreational use by visitor and occupant with easily accessible from the reception of a public realm to encourage community engagement. Group of seating, planters and feature tree are proposed in the open landscape area. Terraced design is adopted for the typical dormitory floors for better air flow and permeability, more visible greenery at multi-levels and minimize the visual impact of the development for its neighbourhood and promotes a naturalistic setting, also create a strong identity for the Salvation Army Lai King Home.

1.3 Slope and mature tree

The existing site condition has been considered in the design process. The development includes three SIMAR Slopes (Feature Nos. 11NW-A/FR23(3), 11NW-A/R116 and 11NW-A/F363). In 11NW-A/FR23(3), a large tree is located in the middle of the slope and the crown spread may having direct conflict to the buildings. Cutting works and building setback have been designed around the tree protection zone to minimise impact to the tree.

The proposed building design provided terrace at different levels for better airflow and also 180 Degree panoramic green views towards SIMAR Slope 11NW-A/F363.

1.4 **Open Space and Greenery Area Provision**

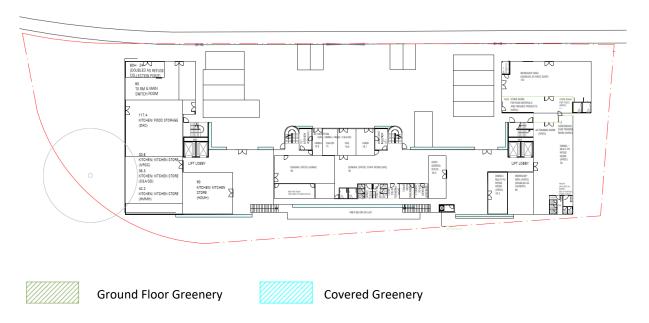
- 1.4.1 According to PNAP APP-152, site with areas of 1,000m² or more should be provided with greenery areas and overall site coverage of greenery not less than 20%.
- 1.4.2 All calculations, proposed greenery area satisfy the requirements and is provided in Table 1.1 below.

Table 1.1 Greenery Area Calculation Table

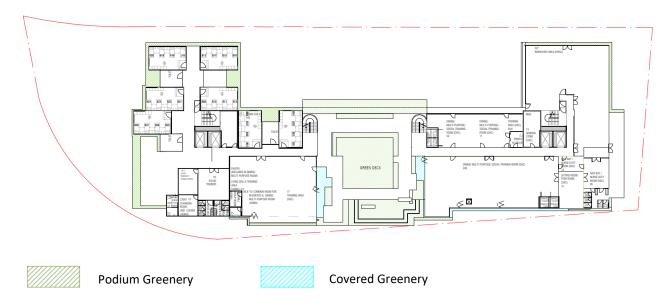
Calculation of Site Coverage of Greenery in accordance with PNAP APP 152

Site Area 3830.00 m² Site Coverage of Greenery Requirements (PNAP APP-152): (a) Minimum total Greenery Areas (i.e. 20% of Site Area): 766.00 (b) Minimum Primary zone Greenery Area (i.e. 10 % of Site Area): 383.00 (c) Total Permitted Green Features (i.e. 20% of Min. Total Greenery): 153.20

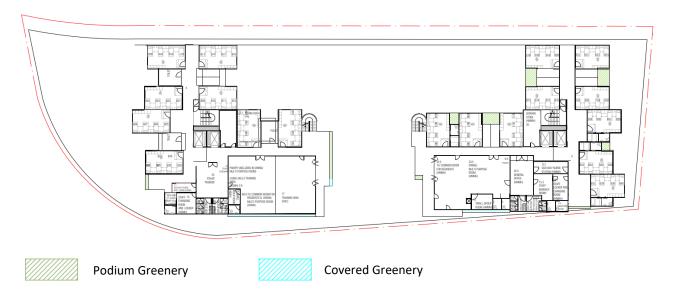
Types of Countable Greenery Areas	Greenery Areas (m2)	Reduction Factor (%)	Greenery Areas (m ²) contributing to Site Coverage of Greenery			
			Primary Zone	Other Areas		
Items <u>without</u> cap requirement						
Roof greening	640.8	n/a	0	640.8		
Podium greening / sky garden (Primary zone)	461.26	n/a	461.26	0		
Podium greening / sky garden (Other area)	114.19	n/a	0	114.19		
Greening on slopes < =45 degrees	0	n/a	0	0		
Ground floor Greenery	4.54	n/a	4.54	n/a		
	•	Sub-total (A)	465.8	754.99		
Other types of Greenery Areas with cap requirement		,				
Covered Greenery accessible	72	0.5	0.5 36			
Water Features	0	0.5	0	n/a		
Grass pavers	0	0.5	0	n/a		
Planters along the perimeter of an inaccessible roof	0	0.5	0	n/a		
Vertical greening	0	n/a	0	n/a		
Greening on slopes > 45 degrees	0	n/a	0	0		
	•	Sub-total (B)	36	0		
		•				
Exceeding the total / combined total	cap for other types of gree	enery areas? (229.80 m2)	N	0		
		Adjustment required	0	0		
		Adjustment sub-total (B)	36	0		
		Total (A) + (B)	501.8	754.99		
		•				
Attaining the	minimum Primary zone gr	reenery area (383.00 m2)	Yes	n/a		
Attai	ning the minimum total gr	reenery area (766.00 m2)	Υe	s		
		•				
Perce	ntage of countable green	ery area over the site (%)	13.10	19.71		
	Site	coverage of greenery (%)	32.	81		



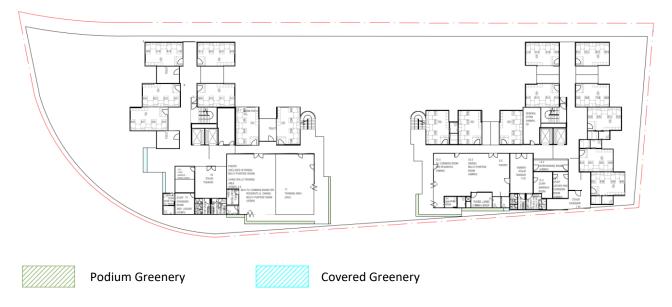
G/F Greenery provision: Ground Floor Greenery (4.54m²) and Covered Greenery (42.19m²)



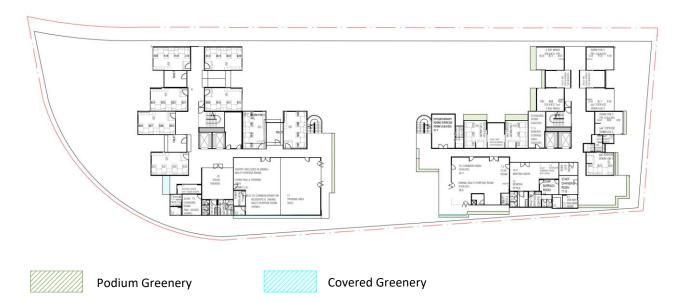
1/F Greenery provision: Podium Greenery (359.51m²) and Covered Greenery (39.45m²)



2/F Greenery provision: Podium Greenery (34.5m²) and Covered Greenery (13.09m²)



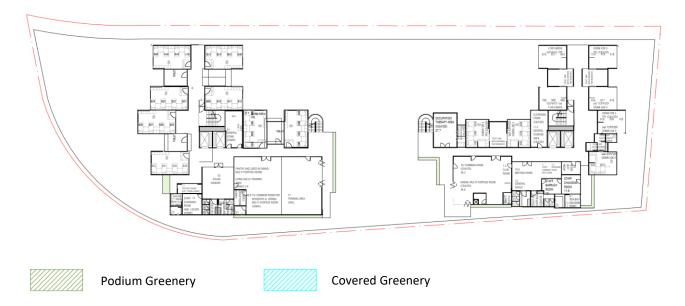
3/F Greenery provision: Podium Greenery (21.2m²) and Covered Greenery (5.97m²)



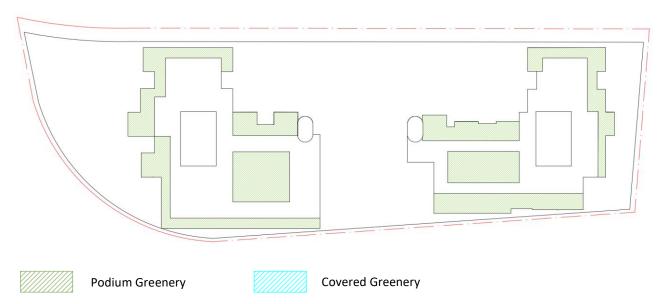
4/F Greenery provision: Podium Greenery (46.05m²) and Covered Greenery (13.49m²)



5/F Greenery provision: Podium Greenery (33.52m²)



6/F Greenery provision: Podium Greenery (28.16m²)



R/F Greenery provision: Roof Greenery (640.8m²)

1.5 Soil Depth

The proposed landscaped area of this application site will be designed with adequate soil depth and width for healthy plant growth. Sufficient soil depth and volume will be provided for all landscape planting at ground, intermediate and roof levels. Excluding drainage layer, minimum soil depths of 1200mm, 600mm and 300mm will be provided for tree, shrubs, grass/ground covers respectively.

1.6 Drainage

Adequate drainage in forms of soak away system, subsoil drains by pipes or miradrains will be provided for all planting areas to protect plants from waterlogging problems.

1.7 **Irrigation**

Adequate water points will be provided for general maintenance and watering of vegetation. To facilitate maintenance of soft landscape works, provision of water points located at a distance of maximum 40m centre to centre, which allows for 20m hose connection, for manual watering will be provided for irrigating all planting areas.

Maintenance and Accessibility 1.8

All landscaped areas will be provided with sufficient maintenance accesses.

2 **Tree Preservation**

2.1 **Findings of Tree Survey**

- 2.1.1 The location of each individual tree surveyed is shown on the Tree Survey Plan on Drawing No. TCA12_TSP_01 in **Annex II.** A total of four (4) nos. tree are recorded in this report. All 4 trees are located within site boundary. Their dimensions and an assessment of their condition are presented in the Tree Assessment Schedule in Annex III. The photographic record of individual existing trees are shown on the Photographic record of Tree survey in **Annex IV**.
- 2.1.2 Undersized trees (i.e., with a trunk diameter of less than 95mm measured at 1300mm height) are not included in this report.
- The tree survey area includes one registered SIMAR Slope within the site boundary 2.1.3 and two registered SIMAR Slopes immediately adjacent to the site boundary. The boundaries of these slopes are shown on the Tree Survey Plan (Drawing No. TCA12_TSP_01) in Annex II.
- 2.1.4 The surveyed SIMAR Slopes within the site boundary and immediately adjacent to the site boundary are listed in **Table 2.1** below.

Feature No.	Location	Responsible Lot/Party
11NW-A/FR23(3)	Partly within KCTL 354, partly on Government land adjoining Lai King Hill Road and partly within STT3884K&T(VO)	KCTL 354
11NW-A/F363	Partly within KCTL 354 and partly within government land to its south	KCTL 354
11NW-A/R116	Within Government land adjoining to KCTL 354 and Lai King Hill Road	Highways Department

- 2.1.5 The respective lot owner is the responsible party to maintain the above three SIMAR slopes.
- A total of three (3) trees were found on the SIMAR slopes. Tree T1, T2 and T3 are 2.1.6 located on SIMAR Slope Feature No. 11NW-A/FR23(3) within the Site Boundary. One tree T4 was found in the existing planter near entrance.
- 2.1.7 The surveyed trees comprise 4 different species and are summarised below in **Table 2.2** below.

Table 2.2 Summary of Existing Tree Surveyed

Botanical Name	Chinese Common Name	Original Location	Number
Ficus variegate (syn. Ficus variegate var. chlorocarpa)	青果榕	KCTL 354 / On slope No.11 NW-A/FR23(3)	1
Artocarpus heterophyllus (syn. Artocarpus macrocarpon)	菠蘿蜜	KCTL 354 / On slope No.11 NW-A/FR23(3)	1
Ficus elastica	印度榕	KCTL 354 / On slope No.11 NW-A/FR23(3)	1
Clausena lansium	黄皮	KCTL354	1

- 2.1.8 No trees surveyed are included in the Register of Old and Valuable Trees promulgated under DEVB TC(W) No. 5/2020. However, there is one (1) Mature Tree(T3) located on the SIMAR slope (No.11NW_A/FR23(3)) within the site boundary. According to Guidelines for Tree Risk Assessment and Management Arrangement 9th edition, Trees with trunk diameter equal to or exceeding 1.0m (measured at 1.3m above ground level), or with height/canopy spread equal to or exceeding 25m, T3 should be a potential Tree of Particular Interest.
- All recorded species are commonly found in Hong Kong. No rare or endangered tree 2.1.9 species or species protected by law (based on Forests and Countryside Ordinance Cap.96) were recorded.

2.2 **Tree Preservation and Felling Proposals**

- 2.2.1 4 existing trees within the site and 3 existing trees are not in direct conflict with the proposed works and are proposed to be retained in-situ.
- 1 existing tree within site will be affected by the demolition works of the existing 2.2.2 building and the proposed development works. The tree is proposed to be felled due to its low amenity value and/or unhealthy condition and/or low survival rate after transplanting. It would not be feasible or cost-effective to accommodate the tree within the design in its current locations or transplant it to other locations.
- 2.2.3 Recommendations for the treatment of the existing trees are shown in the Tree Assessment Schedule in **Annex III**. The aggregate DBH loss for 1 tree proposed to be felled is 102mm.

2.3 **Compensatory Tree Planting**

- 2.3.1 The compensatory tree planting requirement stipulated in LAO PN No.2/2020 for private land requires the compensation of felled trees in a ratio not less than 1:1 in terms of quantity and quality. A total of 1 tree with DBH 100 mm is proposed to be compensated on the First floor.
- A preliminary Compensatory Planting Plan is provided in **Annex VI** (Drawing No. 2.3.2 TCA12 CPP 01) showing the preliminary planting layout for compensatory trees. The compensatory planting is all proposed to be provided on the First Floor of the development as the ground floor does not allow sufficient space for any tree planting.
- 2.3.3 A minimum of 1200mm soil depth is proposed for the compensatory tree planting areas. A 500mm radius around the trunk of the trees shall remain clear of shrubs or groundcovers in accordance with the Guidelines promulgated by Development Bureau.
- A detailed compensatory planting plan with proposed planting schedule and relevant 2.3.4 information shall be submitted at a later design stage for formal Tree Preservation and Removal Proposal approval.

2.4 Summary

- Table 2.3 below summarises the Tree Recommendations within the survey boundary 2.4.1 and Table 2.4 summarizes the recommendations for existing trees.
- 2.4.2 A total of 1 tree is proposed to be felled and compensated.

Table 2.3 Summary of Tree Recommendations

Location	Trees to be Retained (Nos.)	Trees to be Transplanted (Nos.)	Tress to be Felled (Nos.)	Total Trees surveyed
Within Site	3	0	1	4
Total	3	0	1	4

Table 2.4 Summary of Compensatory Planting for Schematic Design

Trees Felled	Aggregate DBH loss within site	Compensatory Trees	Aggregate DBH of Proposed Compensatory Trees	Compensatory Planting Ratio	
1 102mm		1	100mm	1:1 by quantity and quality	

Landscape Master Plan Annex I

Annex II Tree survey plan

Tree Assessment Schedule Annex III -

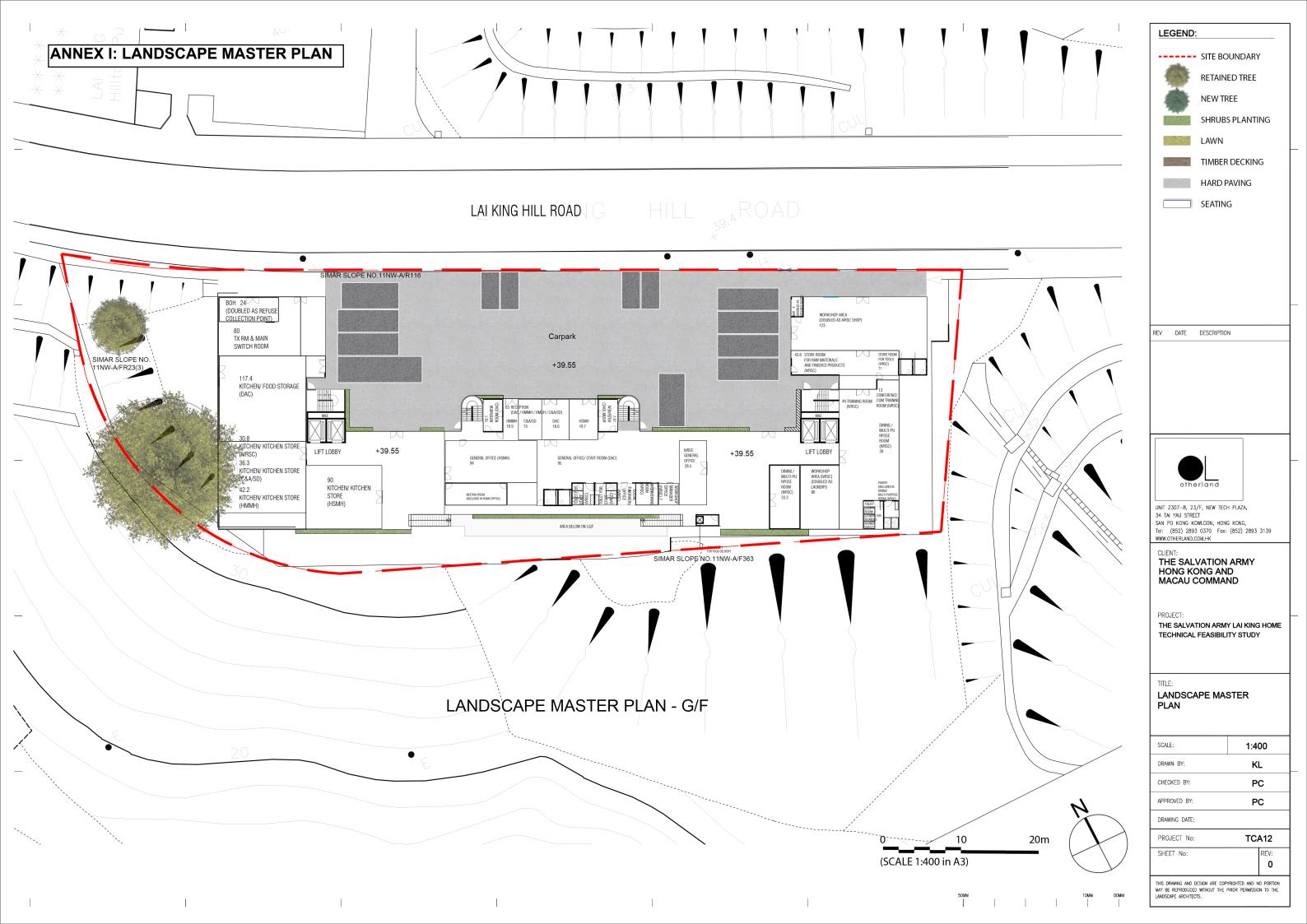
Photographic record of Tree survey Annex IV -

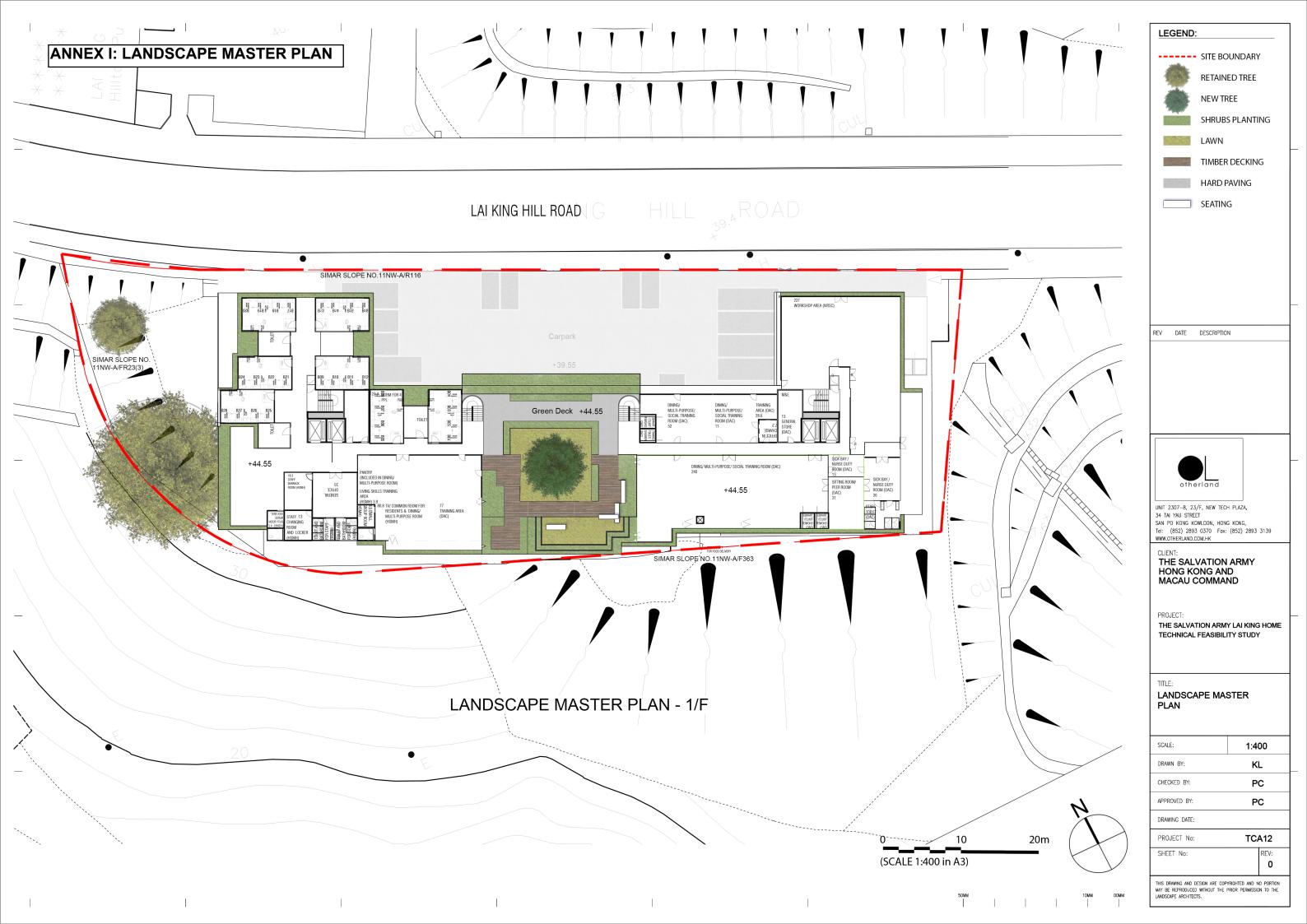
Annex V -**Tree Treatment Plan**

Compensatory Planting Plan Annex VI -

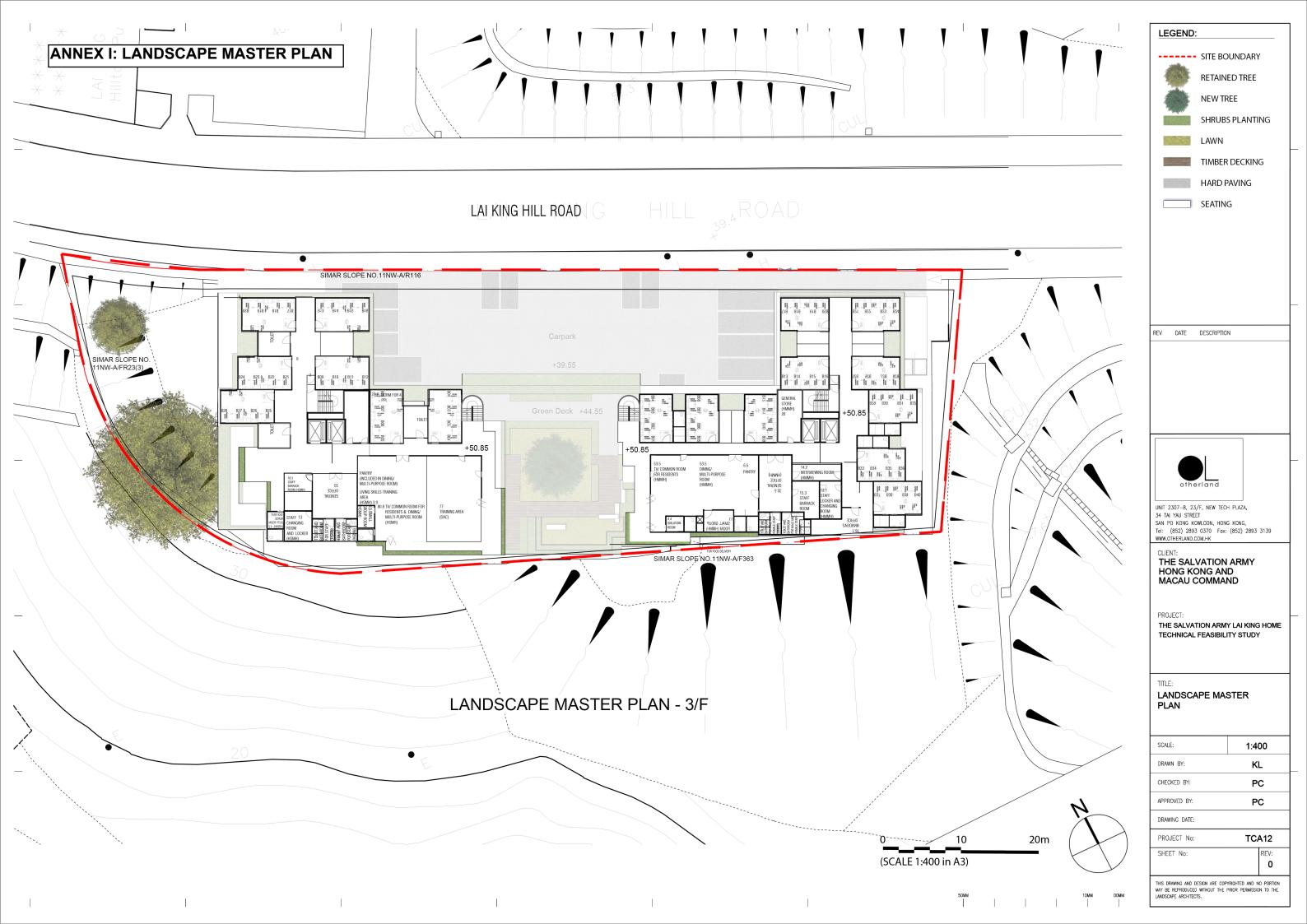
Tree Protection Plan Annex VII -

Annex VIII - Typical Planter Detail

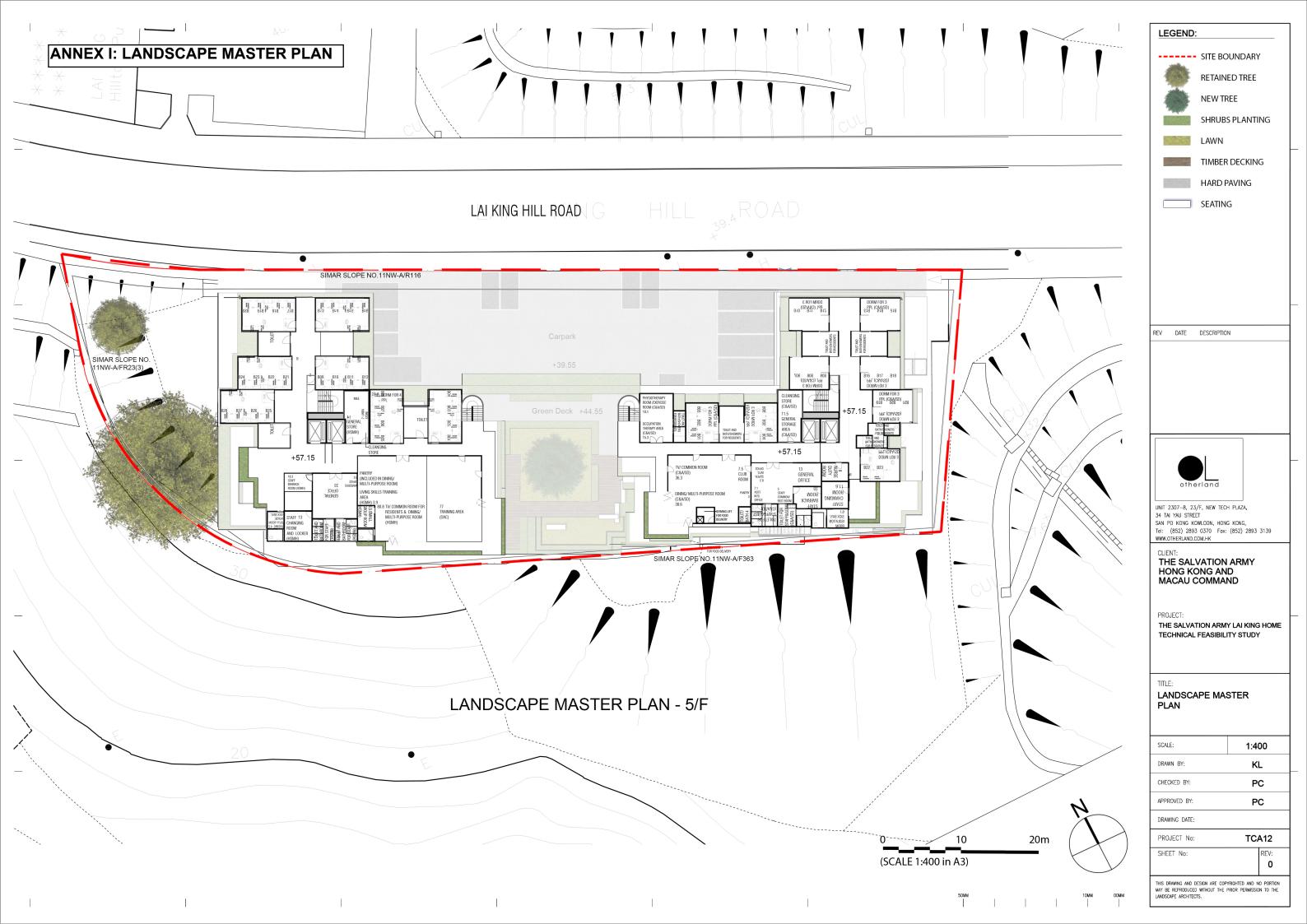


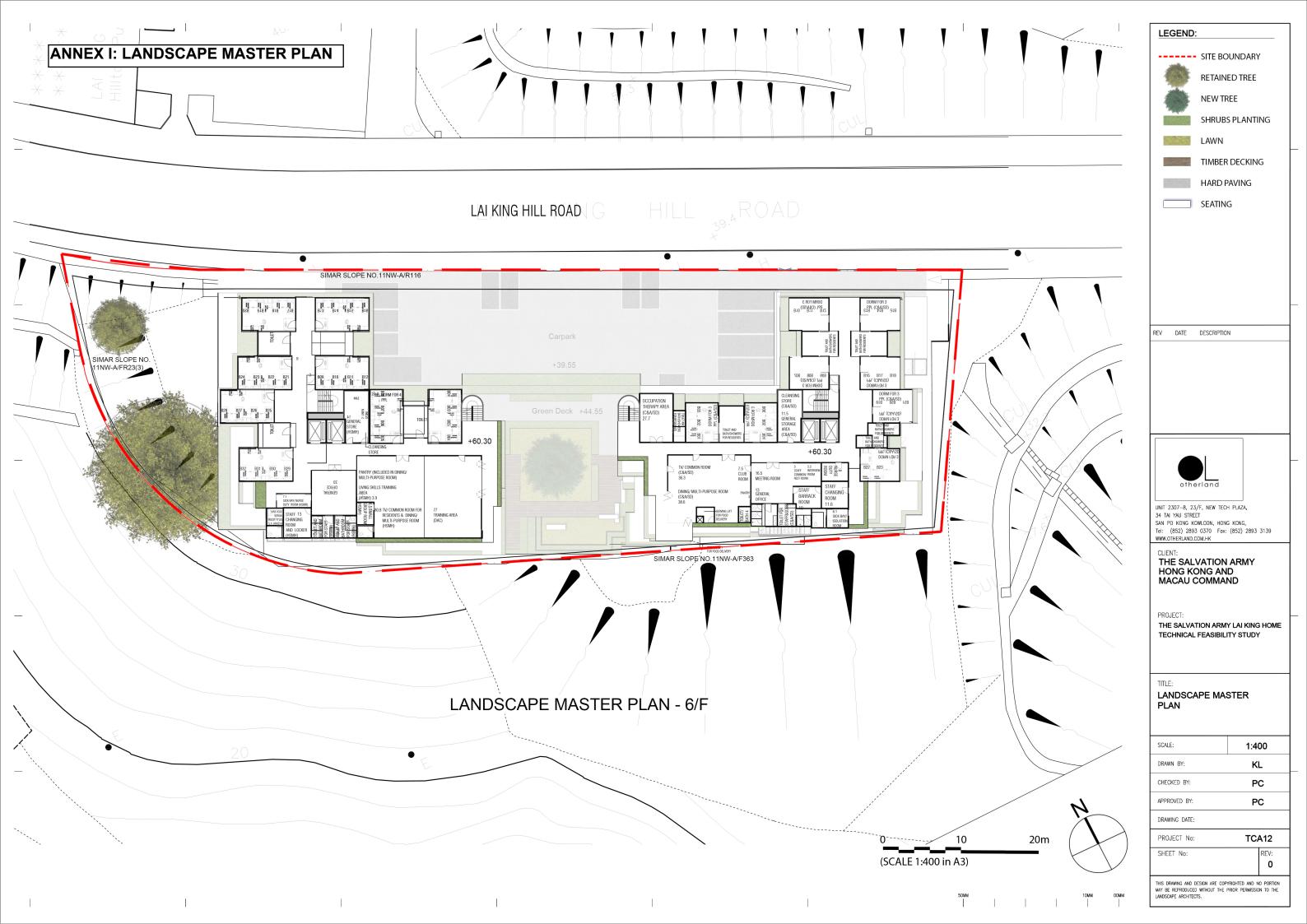


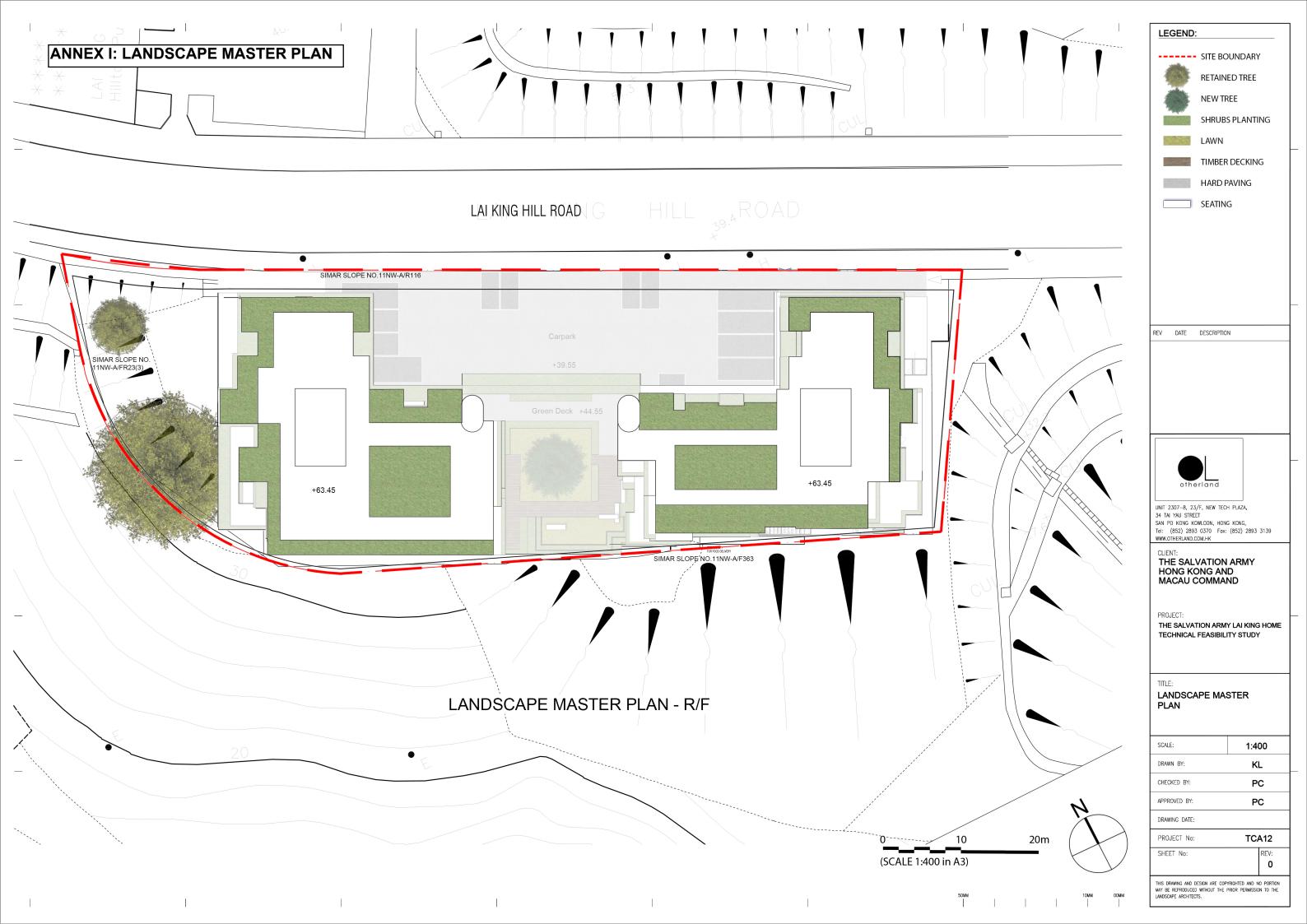


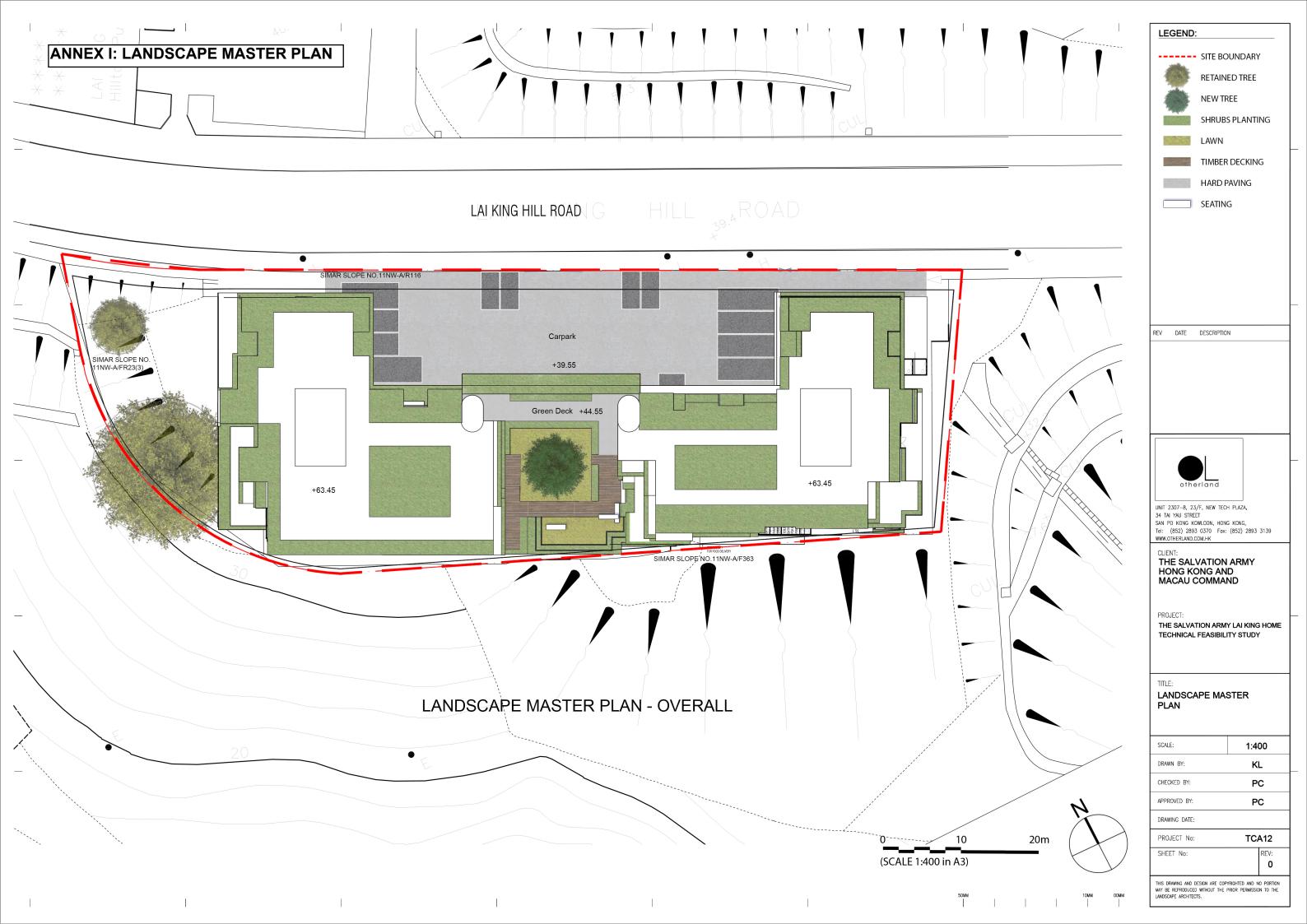


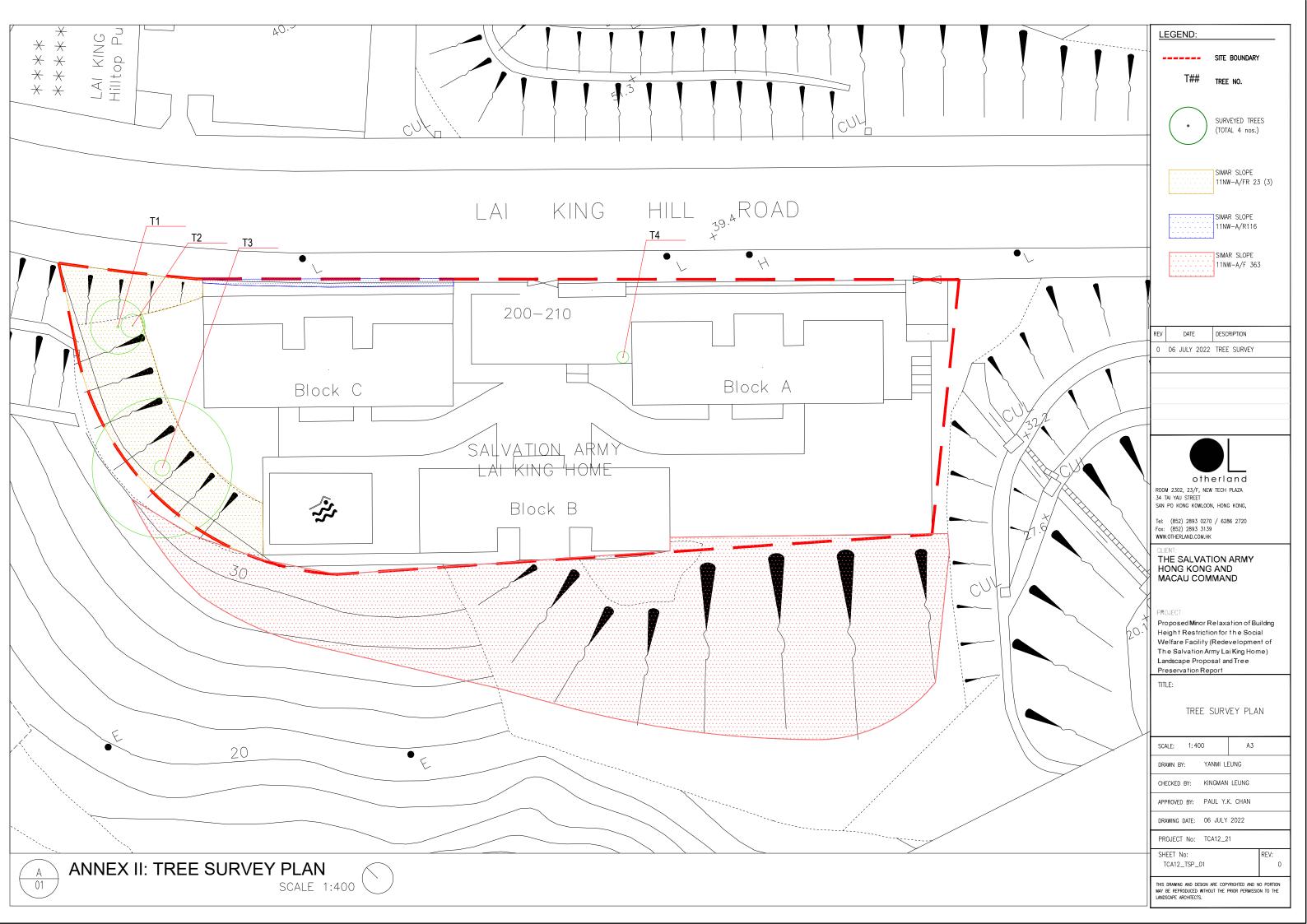












ANNEX III: TREE ASSESSMENT SCHEDULE

Address: Salvation Army Lai King Home at Nos. 200-210 Lai King Hill Road, Kwai Chung

Lot: K.C.T.L. 354

Prepared by Otto Yeung Ho Yin on 4th APRIL 2022

Field Survey was conducted/updated on 4th APRIL 2022

To be read in conjuction with drawing nos. TCA12_TSP_01 rev. 0 and TCA12_TTP_01_rev. 0

	Tree Species		Tree		Tree Size Fo		Form	Health condition	Structural condition	Anticipated Survival Rate		Proposed Treatment		
Tree No.	Scientific name	Chinese name	Original Location (Lot/GA/YA/GHBA, etc.)	Overall height (m)	DBH (mm)	Average crown spread		l (G) / Fair (F) / Poor (P))	after	Top of Soil Level above Root Collar	in initial / approved application	in this revision, if applicable	Additonal Remarks
 						(m)]		(Retain / Transplant / Fell)		
T1	Ficus variegata (syn. Ficus variegata var. chlorocarpa)	青果榕	KCTL354 / oOn Slope No.11NW-A/FR23(3)	7	300	7	F	F	F	L	N/A	Retain	-	Codominant leader, Die back
T2	Artocarpus heterophyllus (syn. Artocarpus macrocarpon)	菠蘿蜜	KCTL354 / oOn Slope No.11NW-A/FR23(3)	3	140	2	F	F	F	L	N/A	Retain	-	Codominant leader, Die back
Т3	Ficus elastica	印度橡樹	KCTL354 / oOn Slope No.11NW-A/FR23(3)	18	~2000	4	G	F	F	L	N/A	Retain	-	-
T4	Clausena lansium	黄皮	KCTL354	4	102	1.5	F	F	F	L	N/A	Fell	-	Irrecoverable form after transplanting, root ball can not be form

LEGEND



Remarks

Trees with the following features should not be considered suitable for transplanting:

- a) Poor amenity value
- b) Irrecoverable form after transplanting (e.g. if substantial crown and root pruning are necessary to facilitate the transplanting);
- c) Species with low survival rate after transplanting;
- d) Very large size (unless the feasibility to transplant has beem considered financially reasonable and technically feasible during the feasibility stage);
- e) With evidence of over-maturity and onset of senescence;
- f) With poor health, structure or form (e.g. imbalanced form, leaning, with major/cavity/cracks/splits); or
- g) Undesirable species (e.g. Leuceana leucocephala which is an invasive exotic tree).
- h) Low cost-effectiveness for transplant operation
- i) Located on Slope

Justification

- i) Affected by proposed work, impossible to retain in-situ
- ii) Poor form (e.g. canopy lopsided & unbalanced, tree trunk leaning dangerously, tree trunk crooked, with hazard-beam bending)
- iii) Poor health (e.g. tree severely stressed, diseased, insect-pest infected, thin foliage density cover, dieback of canopy)
- iv) Poor structure (e.g. tree trunk decayed, with decayed hollow cavity, dangerous biburcation codominant stems with included-bark likely to split apart)
- v) Root ball not extractable for transplant (e.g. trees grown on slope/masonry wall; trees with roots are tangled together with adjacent tree)
- vi) Ubiquitous species easily replaceable by new compensatory planting of better quality in term of ecological value
- vii) Undesirable Species : According to Para. 8 of DEVB TCW No. 4/2020
- viii) Oversized tree not feasible for transportable/ transplantable

TREE SURVEY REPORT

ANNEX IV: TREE PHOTOGRAPHIC RECORD





T1_Codominant leader, Die back







T2_Codominant leader, Die back



Tree No.: T3
Scientific Name: Ficus elastica
Proposed Tree Treatment: Retain



T3_Overview T3_Tree Tag

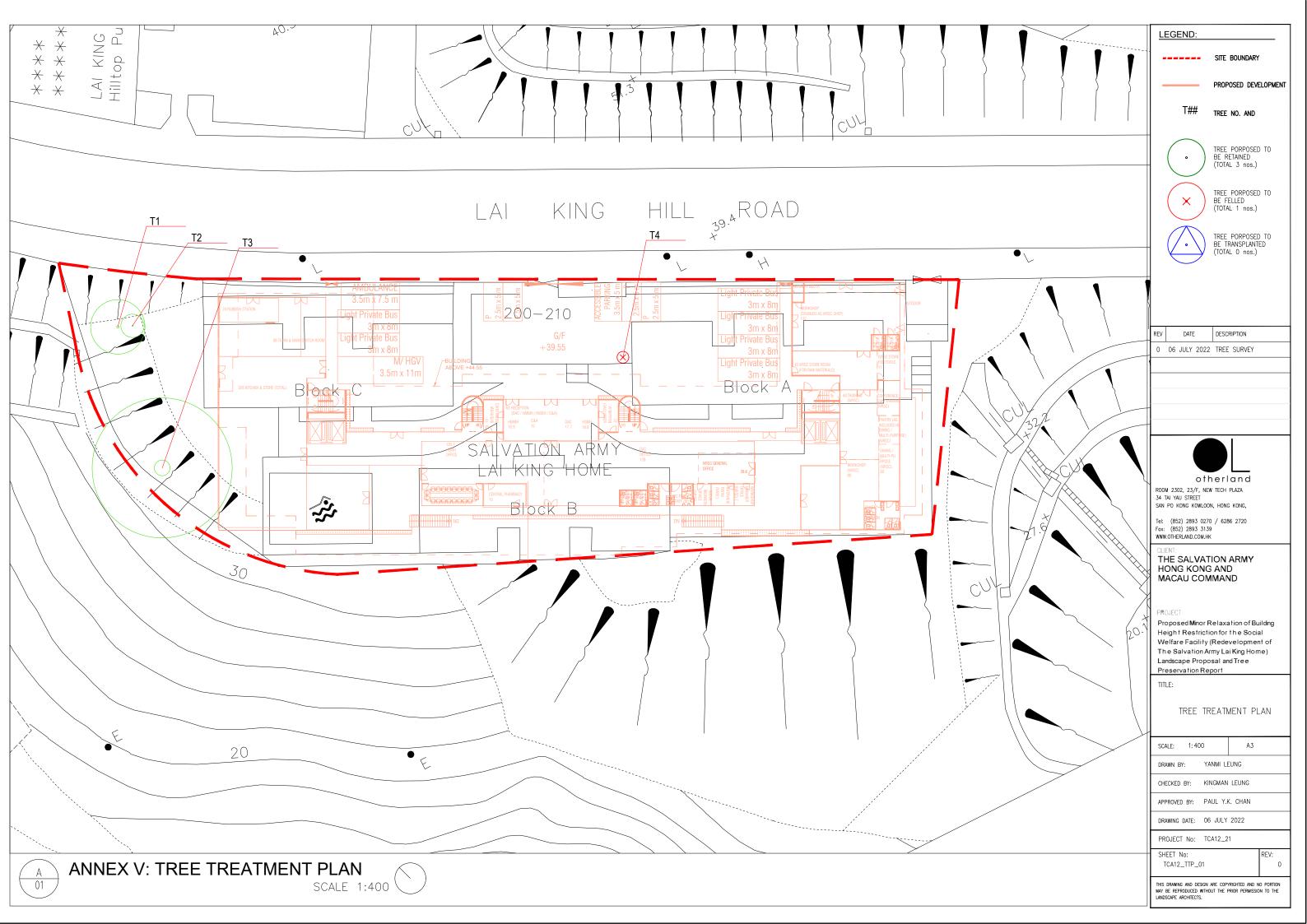


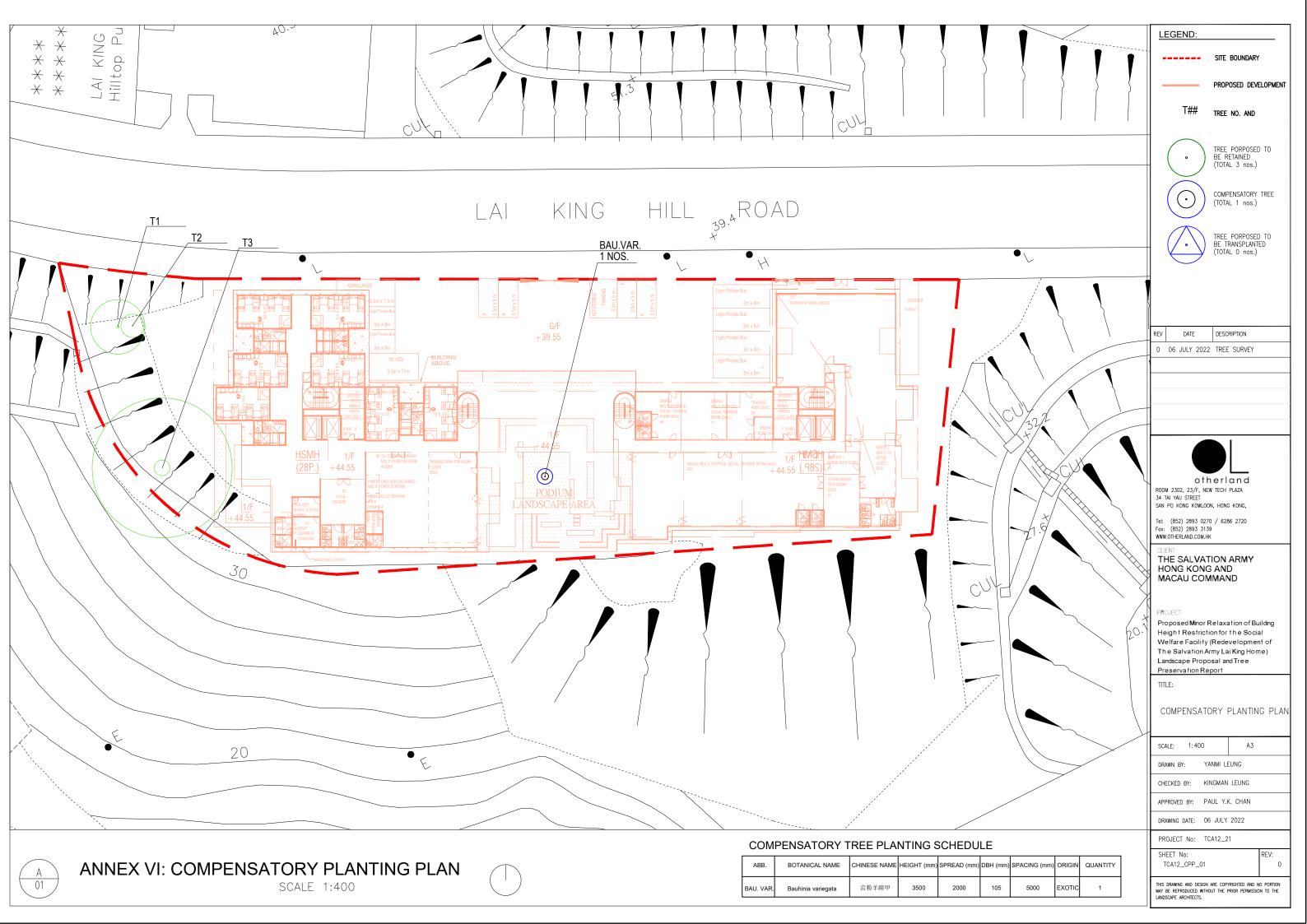


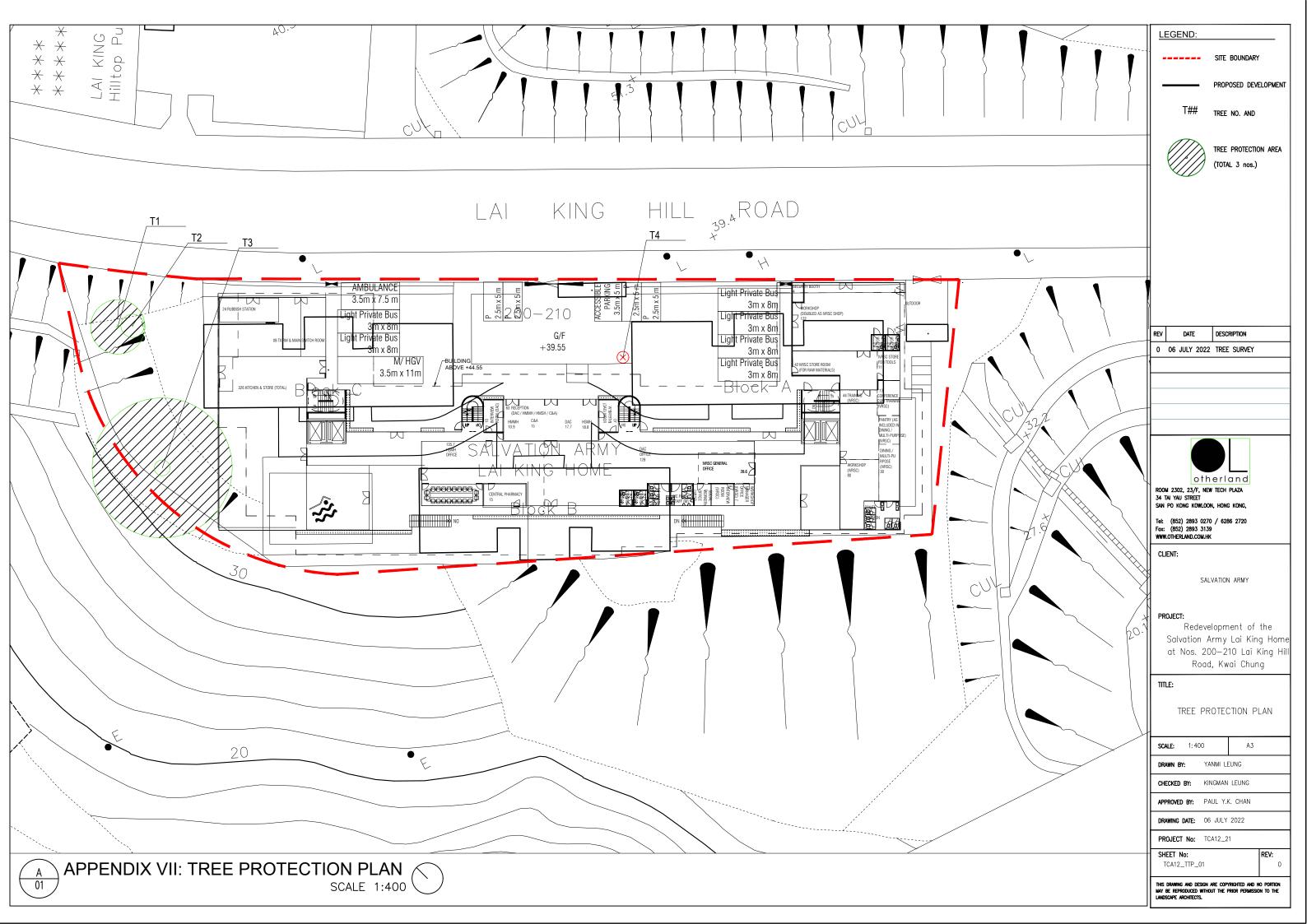




T4_ Irrecoverable form after transplanting, root ball cannot be form as existing planter restricted







ANNEX VIII: TYPICAL PLANTER DETAIL

