

Environmental Permit No. FEP-01/571/2019/A

Proposed Golf Course Development at Tai Po Lot No. 246 Shuen Wan

Environmental Team Leader Certification

Reference Document

Document to be Certified: Tree Preservation, Transplantation and Compensation Plan

Date of Report: February 2024

Date received by ETL: 21 February 2024

Reference EP Condition

Environmental Permit Condition: 2.14

The Permit Holder shall, no later than two months before the commencement of construction of the Project, submit 5 hard copies and 1 electronic copy of a Tree Preservation, Transplantation and Compensation Plan (TPTCP) to the Director for approval. The TPTCP shall be prepared making reference to the conceptual layout plan in Figure 1 of this Permit and based on the findings of the approved Tree Survey Report under Condition 2.13 of this Permit and shall provide details of measures for mitigation of the impact of the Project on night roosting of Collared Crow and Black Kite, including:

- (i) Preservation of no less than 6.1 ha of existing tree groups within the Project Site, including the 1.2 ha core roosting area as shown in Figure 1 of this Permit; and
- (ii) Compensatory planting of no less than 10 ha of new trees within the Project Site.

The TPTCP shall include the location and species of any individual trees that would be directly affected by the proposed works, recommending protective measures for identified individuals of each species where in situ preservation is feasible, in particular the two individuals of Aquilaria sinensis as shown in Figure 1 of this Permit, assessing the suitability and/or practicability of the transplantation of those individuals that would be directly affected, and the location and species of individual trees to be compensated for the loss of roosting sites.

The TPTCP shall be prepared by the Ecologist, certified by the ET Leader and verified by the IEC as conforming to the findings and recommendations of the approved EIA Report (Register No. AEIAR-221/2019) for approval of the Director.

Recommendations on tree preservation, transplantation and compensation in the approved TPTCP shall be fully implemented and maintained during construction and operation phases of the Project. No felling or pruning of trees in core roosting area at any time during construction and operation phases, except for those recommended in the approved TPTCP.

ETL Certification

I hereby certify that the above reference report complies with the above referenced condition of FEP-01/571/2019/A.



Mr. Wingo So
Environmental Team Leader

Date: 27 February 2024

Environmental Permit No. FEP-01/571/2019/A

Proposed Golf Course Development at Tai Po Lot No. 246 Shuen Wan

Independent Environmental Checker Verification

Reference Document

Document to be Verified:	Tree Preservation, Transplantation and Compensation Plan
Date of Report:	February 2024
Date received by IEC:	21 February 2024

Reference EP Condition

Environmental Permit Condition:	2.14
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IEC Verification

I hereby verify that the above reference report complies with the above referenced condition of FEP-01/571/2019/A.

Mr. Adi Lee
Independent Environmental Checker



Date: 27 February 2024

Environmental Permit No. FEP-01/571/2019/A

Proposed Golf Course Development at Tai Po Lot No. 246 Shuen Wan

Ecologist's Signature Page

Reference Document

Document Prepared: Tree Preservation, Transplantation and Compensation Plan

Date prepared by Ecologist: 20/02/2024

Reference EP Condition

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any time during construction and operation phases, except for those recommended in the approved TPTCP.

Ecologist's Signature

I hereby confirm that I have prepared the above reference report according to the above referenced condition of FEP-01/571/2019/A.

Mr. Klinsmann Cheung
Ecologist



Date: 20/02/2024

ARUP

Tai Po Golf Club Limited

Proposed Golf Course Development at Tai Po Lot No. 246 Shuen Wan

Tree Preservation, Transplantation and Compensation Plan

Reference: 289499-REP-020-02

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 289499

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Appendix

Appendix 1.1

Figure 1 of FEP-01/571/2019/A

Appendix 2.1

Approved Master Layout Plan

Appendix 4.1

Figure 10.9 of the Approved EIA Report (AEIAR-221/2019)

Appendix 4.2

Current Tree Preservation and Compensation Plan

Appendix 4.3

Details of the Individual Trees to be Compensated

1. Introduction

1.1 Project Background

- 1.1.1 In June 2017, the Chief Executive in Council has agreed in principle to the government proposal to grant a piece of land in Tai Po in exchange for its private land in Sha Lo Tung which has high ecological values. Under the non-in-situ land exchange proposal, the piece of land at the Shuen Wan Restored Landfill in Tai Po will be granted and the Sha Lo Tung site would be considered by government for active conservation management to avoid degradation and damage for long-term public enjoyment. This land exchange proposal is a unique, exceptional and isolated case, adding the idea is technically feasible as the private land ownership is largely unified under one entity and both Sha Lo Tung and the land at the landfill site, which has been planned for golf course development, are located in Tai Po, as shown in Figure 1 of FEP-01/571/2019/A (extracted as **Appendix 1.1**). The non-in-situ land exchange proposal has been completed in July 2022, and the Project Site has been handed over to the Project Proponent (PP).
- 1.1.2 The Project is a Designated Project (DP) under Environmental Impact Assessment Ordinance (EIAO), and an Environmental Impact Assessment (EIA) study was conducted in 2017. The *Shuen Wan Golf Course EIA Report* was approved by the Director of Environmental Protection (DEP) on 5 July 2019 (AEIAR-221/2019) (“the approved EIA Report”) with the Environmental Permit (EP, EP-571/2019) issued on 20 September 2019. An application of Further Environmental Permit (FEP) has been made by Tai Po Golf Club Limited (the PP) and FEP was issued on 29 November 2022 (FEP-01/571/2019). Besides, surrender of EP-571/2019 has been applied and approved on 9 December 2022. In addition, an application for variation of EP has been made on 16 May 2023 to amend FEP-01/571/2019, and the amended EP was issued on 6 June 2023 (FEP-01/571/2019/A).
- 1.1.3 As stipulated in Condition 2.14 of FEP-01/571/2019/A, the Permit Holder shall, no later than two months before the commencement of construction of the Project, submit 5 hard copies and 1 electronic copy of a Tree Preservation, Transplantation and Compensation Plan (TPTCP) to the DEP for approval. The TPTCP shall be prepared making reference to the conceptual layout plan in Figure 1 of FEP-01/571/2019/A (extracted as **Appendix 1.1**) and based on the findings of the Tree Survey Report under Condition 2.13 of FEP-01/571/2019/A and shall provide details of measures for mitigation of the impact of the Project on night roosting of Collared Crow (CC) and Black Kite (BK), including:
- (i) Preservation of no less than 6.1 ha of existing tree groups within the Project Site, including the 1.2 ha core roosting area as shown in Figure 1 of FEP-01/571/2019/A (extracted as **Appendix 1.1**); and
 - (ii) Compensatory planting of no less than 10 ha of new trees within the Project Site.

- 1.1.4 The TPTCP shall include the location and species of any individual trees that would be directly affected by the proposed works, recommending protective measures for identified individuals of each species where in situ preservation is feasible, in particular the two individuals of *Aquilaria sinensis* as shown in Figure 1 of FEP-01/571/2019/A (extracted as **Appendix 1.1**), assessing the suitability and/or practicability of the transplantation of those individuals that would be directly affected, and the location and species of individual trees to be compensated for the loss of roosting sites.
- 1.1.5 The TPTCP shall be prepared by the Ecologist, certified by the Environmental Team (ET) Leader and verified by the Independent Environmental Checker (IEC) as conforming to the findings and recommendations of the approved EIA Report for approval of DEP. Recommendations on tree preservation, transplantation and compensation in the approved TPTCP shall be fully implemented and maintained during construction and operation phases of the Project. No felling or pruning of trees in core roosting area at any time during construction and operation phases, except for those recommended in the approved TPTCP.
- 1.1.6 The TPTCP is prepared based on the findings of Tree Preservation and Removal Proposal (TPRP) and the Tree Survey Report under Condition 2.13 of FEP-01/571/2019/A, which is a document prepared for compliance with Special Condition (9) of the Proposed Golf Course Development at Tai Po Town Lot No. 246, Shuen Wan, Ting Kok, Tai Po and it is submitted to the Lands Department.

1.2 Purpose of the TPTCP

- 1.2.1 The TPTCP is prepared to comply with Condition 2.14 of FEP-01/571/2019/A. During detailed design stage, the design adopted in the approved EIA Report has been optimised, with the consideration of site constraints, to suit the operation need and address environmental concerns. This TPTCP contains details of measures for mitigation of the impact of the Project on night roosting of CC and BK, location and species of any individual trees that would be directly affected by the proposed works, and protective measures for identified individuals of each species where in situ preservation is feasible.

1.3 Structure of the TPTCP

- 1.3.1 The structure of the TPTCP is given below:

- Section 1** Introduces the project background and purposes of this TPTCP.
- Section 2** Describes the approved master layout plan.
- Section 3** Describes the existing trees within the Project Site.
- Section 4** Describes the proposed tree treatments, including tree preservation, compensation and transplantation.
- Section 5** Summarises and concludes the findings.

2. Master Layout plan

2.1 Optimization of Master Layout Plan

- 2.1.1 With the consideration of the site constraints (i.e. in particular the Project Site was a landfill) and retrieval of detailed information (e.g. geotechnical) of the Project Site after handed over from the government, the master layout plan (MLP) of the proposed golf course is revised accordingly and has been submitted to and approved by Lands Department. Taking this opportunity, elements of minimizing the potential impact to night roosting of CC and BK have also been added. The conceptual layout plan during the EIA stage can be referred to Figure 1 of FEP-01/571/2019/A (extracted as **Appendix 1.1**), while the approved master layout plan MLP proposed under the current stage is provided in **Appendix 2.1**.
- 2.1.2 The more disturbed driving range was originally deployed just next to the core roosting area in the conceptual layout plan during EIA stage, in order to allow golf players to enjoy the sea view while practicing. However, with the consideration of the sensitivity of the core roosting area, it is relocated about 100m away from the core roosting area, while the lighting will also be limited to the golf driving range to minimize the potential disturbance to roosting of CC and BK. Besides, the maintenance facilities building with relatively higher disturbance are relocated to the north of the golf driving range, this can further minimize the potential impacts such as noise to the core roosting area.
- 2.1.3 The location of the golf driving range and the maintenance facilities building under the current MLP is near the western boundary of the Project Site, which is near the Tai Po Sewage Treatment Works (TPSTW) outside the Project Site. Roof tops of buildings in the TPSTW (outside the Project Site) were considered as a major pre-roost site for CC and BK under the EIA stage. However, according to the latest approved EIA Report for “Upgrading of Tai Po Sewage Treatment Works” (AEIAR-244/2022), the TPSTW is no longer be a pre-roost site for CC and BK. Thus, the relocation of the two facilities with relatively more disturbance to area near TPSTW is not anticipated to have adverse effects on roosting of CC and BK.
- 2.1.4 Apart from the relocation of golf driving range and the maintenance facilities building, in contrary to typical golf course, the current design has turned the usual open carpark into an underground carpark, to minimize vehicle disturbance to the core roosting area.

3. Existing Trees within the Project Site

3.1 General

3.1.1 According to the Tree Survey Report under Condition 2.13 of FEP-01/571/2019/A, there are 12,663 individuals of trees belong to 78 species existing in the Project Site. The species and the location of the trees can be referred to the Tree Survey Report under Condition 2.13 of FEP-01/571/2019/A.

3.2 Species of conservation importance

- 3.2.1 Two individuals of *Aquilaria sinensis* were found within the Project Site. *Aquilaria sinensis* is common in the lowland forests and fung shui woods of Hong Kong (Corlett *et al.* 2000) and was included in the book “Rare and Precious Plants of Hong Kong” (Hu *et al.* 2003). In south China, particularly Hong Kong, it is threatened by illegal felling and over-exploitation and is listed in Appendix II of CITES (CITES 2023) and protected under Cap. 586 Protection of Endangered Species of Animals and Plants Ordinance in Hong Kong. Moreover, it is included Illustration of Rare & Endangered plant in Guangdong Province (Wu and Hu 1988), and wild individuals are listed in Category II of the List of Wild Plants under State Protection (State Forestry Administration & Ministry of Agriculture 2021). It is also categorized as “Vulnerable” in China Red Data Book (Fu and Chin 1992), the Threatened Species List of China's Higher Plants (Qin *et al.* 2017) and the IUCN Red List (IUCN 2023).
- 3.2.2 The two identified *Aquilaria sinensis* are named as TL-539 and TM-339 in the Tree Survey Report. The location of these individuals is also shown in the Tree Survey Report. TL-539 does not conflict with the approved MLP or site formation works, it will not be directly impacted, thus, it will be preserved in situ. TM-339 conflicts with the proposed layout and/or site formation works, it will be directly impacted and will be transplanted. To protect and guarantee the survival of the preserved *Aquilaria sinensis* TL-539, the protection measures stated in the coming section (**Section 4.2**, Tree Preservation) shall be strictly carried out for TL-539.
- 3.2.3 One individual of *Ailanthus fordii* (named as TD-1018 in the Tree Survey Report) is found within the Project Site. *Ailanthus fordii* is considered a rare tree species in forest of Hong Kong (Corlett *et al.* 2000). In addition, it is listed in the book Rare and Precious Plants of Hong Kong (Near Threatened in China). Although this species is protected under Cap. 96A, the individual within the Project Site is not covered by Cap. 96A, as this individual is “Plants grown outside Hong Kong or on any land held from the Government under a lease, license or permit or by virtue of an Ordinance”. According to the Tree Survey Report, as this individual conflicts with the proposed layout and/or site formation works, on site preservation is not possible, it will be directly impacted. When considering the site condition, this individual is located on slope that a balanced root ball cannot be obtained, thus, it has low suitability for transplantation and transplantation is not suggested. Thus, this individual of *Ailanthus fordii* will be inevitably felled. As *Ailanthus fordii* is commonly planted in Hong Kong, besides, the concerned individual TD-1018 is a young individual and exists as an isolated individual surrounded by plenty of exotic species such as *Leucaena leucocephala*, it is anticipated that the loss of this individual does not contribute to a significant ecological impact.

4. Tree Preservation, Tree Compensation and Tree Transplantation

4.1 Area and location for Tree Preservation and Tree Compensation

- 4.1.1 Tree preservation and compensation are proposed as mitigation measures for minimizing the potential adverse impacts on night roosting of CC and BK. A plan of tree preservation and compensation was developed during the EIA stage and consideration on minimizing the potential adverse impacts on night roosting of CC and BK. The tree preservation and compensation plan proposed during the EIA stage can be referred from Figure 10.9 of the approved EIA Report (extracted as **Appendix 4.1**).
- 4.1.2 The major principles related to area and location for tree preservation and tree compensation specified in the EIA and Condition 2.14 of FEP-01/571/2019/A for mitigation of the impact of the Project on night roosting of CC and BK are:
- a. Preservation of no less than 6.1 ha of existing tree groups within the Project Site, including the 1.2 ha core roosting area as shown in Figure 1 of FEP-01/571/2019/A (extracted as **Appendix 1.1**).
 - b. Compensatory planting of no less than 10 ha of new trees within the Project Site.
- 4.1.3 As mentioned in **Section 2.1.1**, since the MLP of the golf course has been revised, the tree preservation and compensation plan has to be revised accordingly. The current tree preservation and compensation plan is shown in **Appendix 4.2**.
- 4.1.4 Under the current preservation and compensation plan, about 6.1ha, including 1.2ha of the core roosting area, tree area is preserved. While about 10.1ha of compensatory planting area is provided. The plan has met the major principles of tree preservation and compensation stated under the approved EIA and the FEP-01/571/2019/A.
- 4.1.5 According to “Guideline Notes on Tree Preservation and Removal Proposal (TPRP) for Building Development in Private Projects – Compliance with Tree Preservation Clause under Lease of LAO Practice Note 6/2023, para (D) Compensatory Planting Proposal under Mandatory Information to be provided in the Submission of TPRP”, *Leucaena leucocephala* is considered as an undesirable species characterized by its aggressive and invasive growing habits and ability to prevent the natural succession of native species. Thus, all of the *Leucaena leucocephala* trees within the Project Site, except those within the core roosting area, will be removed. After removal of *Leucaena leucocephala*, planting space is available. Besides, some existing space within the tree retained area, including the core roosting area, is thinned and exposed as some trees were dead or collapsed due to recent bad weather, these spaces also provide planting opportunity. To maximize the opportunity for tree planting so that more roosting trees can be provided to CC and BK, planting will be carried out at these spaces. Since the core roosting area is sensitive to disturbance, all the planting works within the core roosting area will be restricted to at least 1 hour before sunset.

4.2 Tree Preservation

- 4.2.1.1 According to Condition 2.14 of FEP-01/571/2019/A, apart from the requirement on area and location for tree preservation and tree compensation, the TPTCP shall also recommend protective measures for identified individuals of each species where in situ preservation is feasible, in particular the two individuals of *Aquilaria sinensis*.
- 4.2.1.2 Among the total of 12,663 individuals of trees within the Project Site, 1,774 of them are proposed to be retained in situ. These 1,774 trees include the trees within the 1.2 ha core roosting area. The detail information, such as height, Diameter at Breast Height (DBH), health, form and structural conditions of these trees can be referred to the Tree Survey Report under Condition 2.13 of FEP-01/571/2019/A.
- 4.2.1.3 All the tree proposed to be retained in-situ should be properly preserved and protected during the construction works, including the preserved individual of *Aquilaria sinensis* TL-539, as mentioned in **Section 3.2.2**. Protective measures for these retained trees shall in general follow relevant guideline published by Greening, Landscape and Tree Management Section of Development Bureau, such as Guidelines on Tree Preservation during Development, Tree Management Practice Note No. 1 and Proper Planting Practices.
- 4.2.1.4 In particular, Tree Protection Zone (TPZ) shall be identified for retained trees with the provision of Tree Protection Fence (TPF) before construction stage, under general circumstances in Hong Kong, the ‘Dripline method’ is adopted. However, for narrow canopied trees, the ‘Tree height method’ would be appropriate. The ‘Trunk diameter’ method would be suitable for trees which are leaning or of irregular conformation. During construction, the TPF would help to withstand impacts from the construction activities including vehicles and machinery at the beginning of contract including site investigation works before the construction on site. The fences should be rigid and complete and its foundation should avoid contact with the structural roots.
- 4.2.1.5 Malpractice on trees shall also be avoided, such as
- Girdling a tree with wire;
 - Stockpiling around a tree;
 - Topping a tree;
 - Undertaking works within the tree protection zone;
 - Using trees as anchor;
 - Nailling anything into a tree;
 - Working with machines near a tree;
 - Severing the roots;
 - Pouring machine petroleum or chemical into the root zone; and
 - Pouring concrete into the root zone.
- 4.2.1.6 Maintenance care should be performed once trees damaged are identified during the construction. The maintenance care shall also follow relevant guideline published by Greening, Landscape and Tree Management Section of Development Bureau as mentioned in **Section 4.2.1.3**.

4.2.1.7 Site inspections shall be needed to maintain the integrity of the TPZ. The purpose is to verify that all tree measures are in place, followed and observed during the construction works. Trees shall also be inspected on a regular basis to watch for signs of stresses, such as dieback, leaf loss, or general decline in tree health or appearance and to look for and prevent tree damage with symptoms of construction injury.

4.3 Tree Compensation

4.3.1 To mitigate the loss of night roosting sites for CC and BK, in addition to preserving existing tree groups including core roosting area, tree planting during construction phase will provide new roosting sites in the Project Site.

4.3.2 The detail of the location and species of individual trees to be compensated can be referred to **Appendix 4.3**.

4.3.3 To minimize the potential impact to night roosting CC and BK and to maximize the ecological capacity of the Project Site, the following principles are followed when developing the tree compensation matrix:

- a) Inclusion of more large growth form and heavy standard trees. So that when the trees being planted during the construction phase, this can quickly provide established tree groups as potential night roosting sites for CC and BK.
- b) It was observed that *Casuarina equisetifolia* is the tree species most used for roosting on site during the EIA stage. Apart from intentional preservation of some existing *Casuarina equisetifolia* tree individuals inside the preserved tree groups, *Casuarina equisetifolia* is also included in the tree compensation plan (**Appendix 4.3**).
- c) In order to expand the preserved tree groups and to provide additional buffer for the preserved tree groups, consideration has been given to make priority on tree planting adjacent to the preserved trees.
- d) To maximize the ecological functions, the planting matrix has included a higher diversity, more native species and more species that could provide more resources for wildlife, such as nectar plants and species producing berries that can attract wildlife including birds, mammals, butterflies, and other insects.

4.3.4 Besides, the tree compensation matrix has also considered adding species that providing similar ecological value as *Ailanthus fordii*, in order to compensate for the loss of an individual of *Ailanthus fordii*, as mentioned in **Section 3.2.3**, such as inclusion of tree species providing nectar (e.g. *Bischofia javanica*, *Sapium sebiferum*, *Schefflera heptaphylla* and *Viburnum odoratissimum*).

4.4 Tree Transplantation

- 4.4.1.1 The suitability and/or practicability of the transplantation of those individuals that would be directly affected can be referred to the Tree Survey Report under Condition 2.13 of FEP-01/571/2019/A. In summary, among the individuals of trees that will be directly affected by the Project, there will be 91 number of trees are proposed to be transplanted, including the *Aquilaria sinensis* TM-339. In general, these trees are of reasonable health and form and are technically feasible by transporting within the Project Site without hard pruning. They are therefore proposed to be transplanted.

5. Conclusion

- 5.1.1 The proposed golf course layout plan has been optimized to include more elements of minimizing the potential impact to night roosting of CC and BK, the tree preservation and compensation plan is revised accordingly. The current plan has achieved the major principles for mitigation of the impact of the Project on night roosting of CC and BK, i.e.
- i. Preservation of no less than 6.1 ha of existing tree groups within the Project Site, including the 1.2 ha core roosting area as shown in Figure 1 of FEP-01/571/2019/A (extracted as **Appendix 1.1**)
 - ii. Compensatory planting of no less than 10 ha of new trees within the Project Site.
- 5.1.2 The current tree preservation and compensation plan has also maximized planting opportunities by provision of planting at location that is previously occupied by *Leucaena leucocephala* and thinned and exposed area within the tree retained area. Since the core roosting area is sensitive to disturbance, all the planting works within the core roosting area will be restricted to at least 1 hour before sunset.
- 5.1.3 Three individuals of species of conservation importance, including two individuals of *Aquilaria sinensis* and one individual of *Ailanthus fordii* are identified within the Project Site. The individuals of *Aquilaria sinensis* will be either retained in situ or transplanted, while the individual of *Ailanthus fordii* will be felled inevitably due to conflicts with the proposed layout and/or site formation works and with low suitability of transplantation due to site condition.
- 5.1.4 The tree compensation matrix has considered following principles in order to minimize the potential impact to night roosting CC and BK and to maximize the ecological capacity of the Project Site:
- a) Inclusion of more large growth form and heavy standard trees.
 - b) Inclusion of *Casuarina equisetifolia*.
 - c) Consideration has been given to make priority on tree planting adjacent to the preserved trees.
 - d) Inclusion of a higher diversity, more native species and more species that could provide more resources for wildlife.

6. References

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Appendix 1.1

Figure 1 of FEP-01/571/2019/A

Appendix 2.1

Approved Master Layout Plan

Appendix 4.1

Figure 10.9 of the Approved EIA Report (AEIAR-221/2019)

Appendix 4.2

Current Tree Preservation and Compensation Plan

Appendix 4.3

Details of the Individual Trees to be Compensated



Legend 圖例

Project Location
工程項目位置

1.2 ha Core Roosting Area
1.2 公頃核心夜間棲息地
Aquilaria sinensis
土沉香

Project Title
工程項目名稱

Shuen Wan Golf Course
船灣高爾夫球場

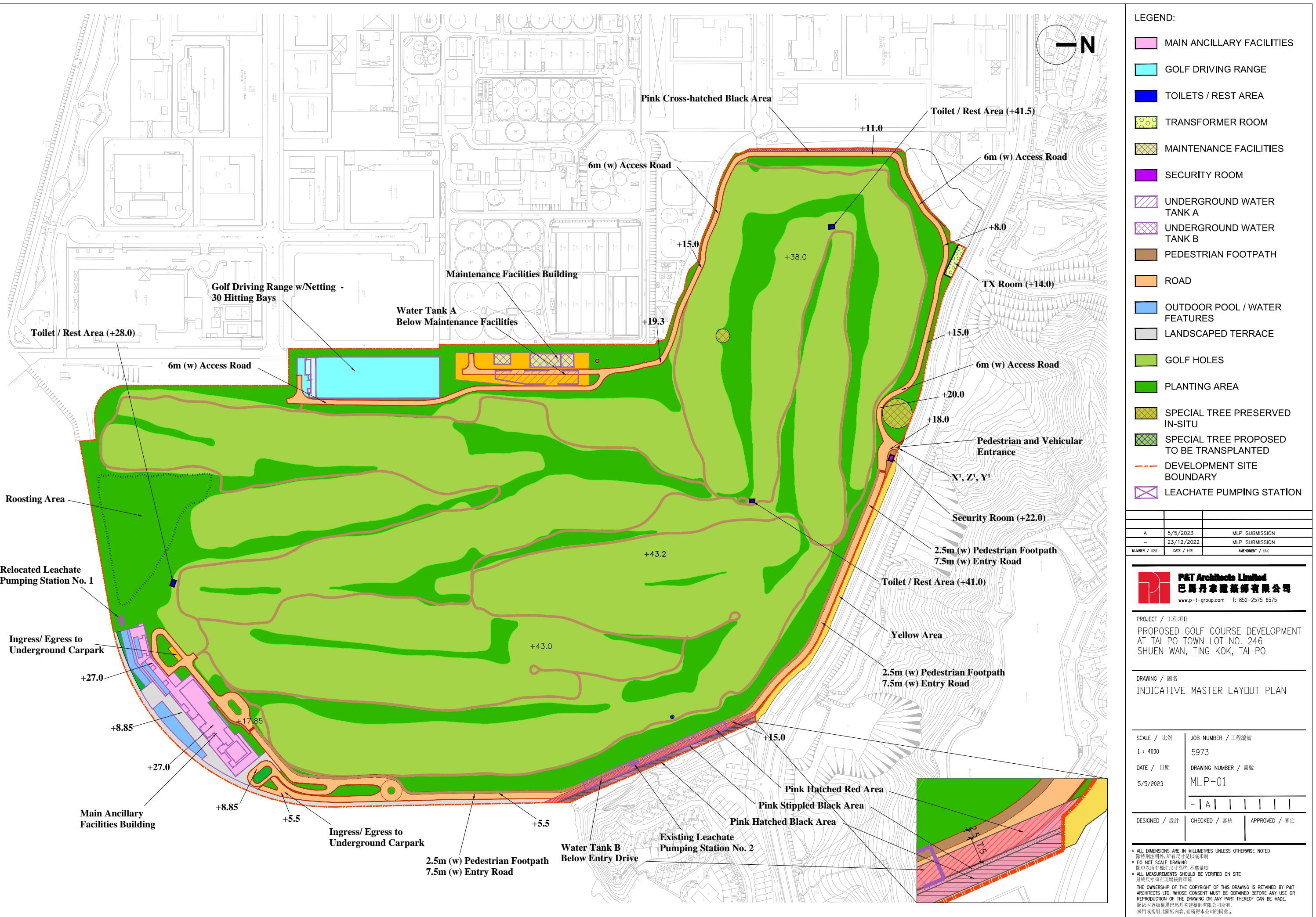
Figure 1
圖一

Project Location and Conceptual Layout Plan
工程項目位置及概念佈局圖

[This figure was prepared based on Figure 2.1 of EIA Report (Register No.: AEIAR-221/2019)]
[本圖是根據環境影響評估報告（登記冊編號: AEIAR-221/2019）圖 2.1 編制]

Environmental Permit No.:
環境許可證編號：
FEP-01/571/2019/A





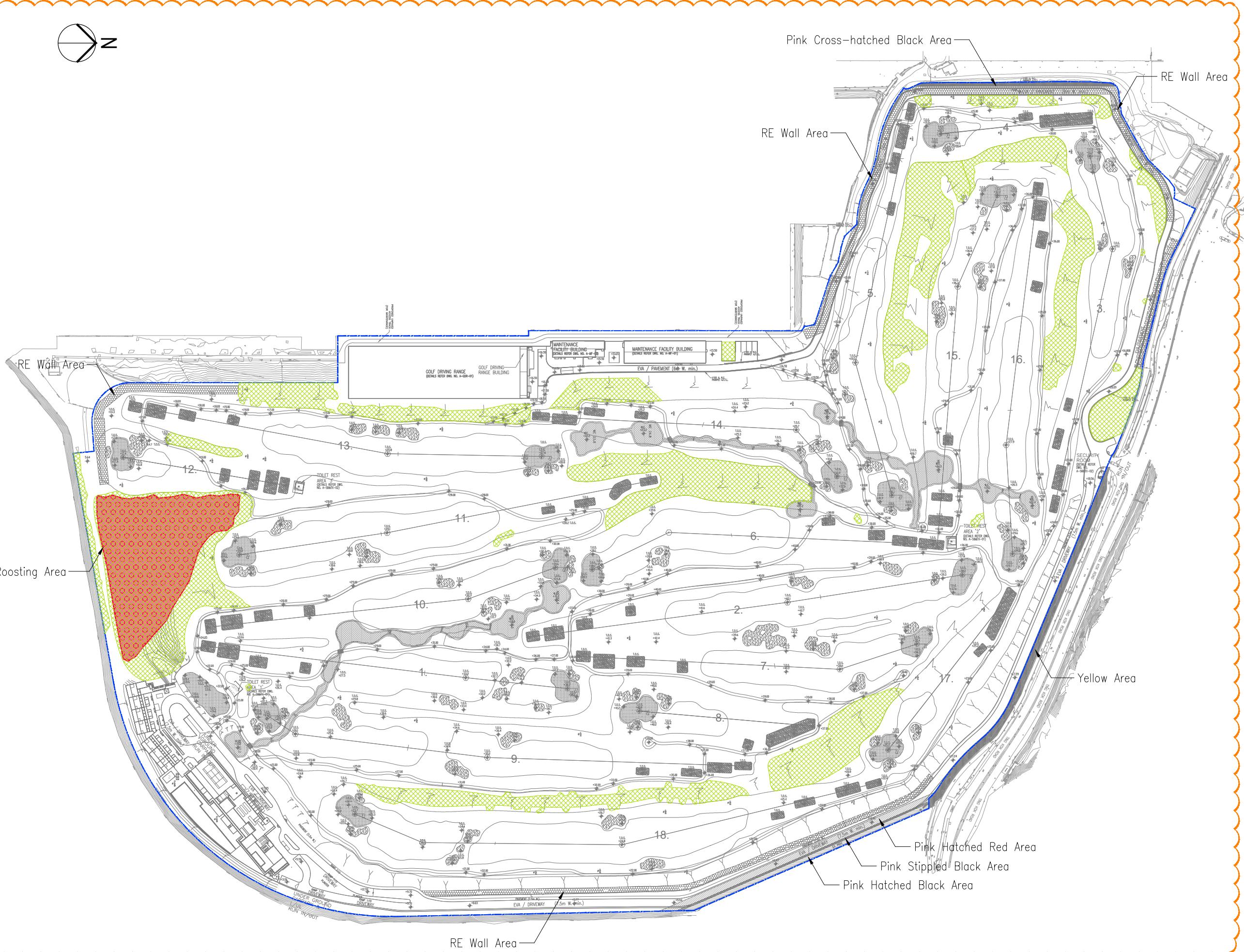
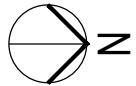
LEGEND
 PRESERVED PLANTATION
 NEW PLANTATION TREE GROUP
 TRANSPLANTED PLANTATION

NUMBER IN GRIDS:
 WHITE NUMBERS - CUMULATIVE FREQUENCY OF
 COLLARED CROWS NIGHT ROOSTING
 BLACK NUMBERS - CUMULATIVE FREQUENCY OF
 BLACK KITES NIGHT ROOSTING

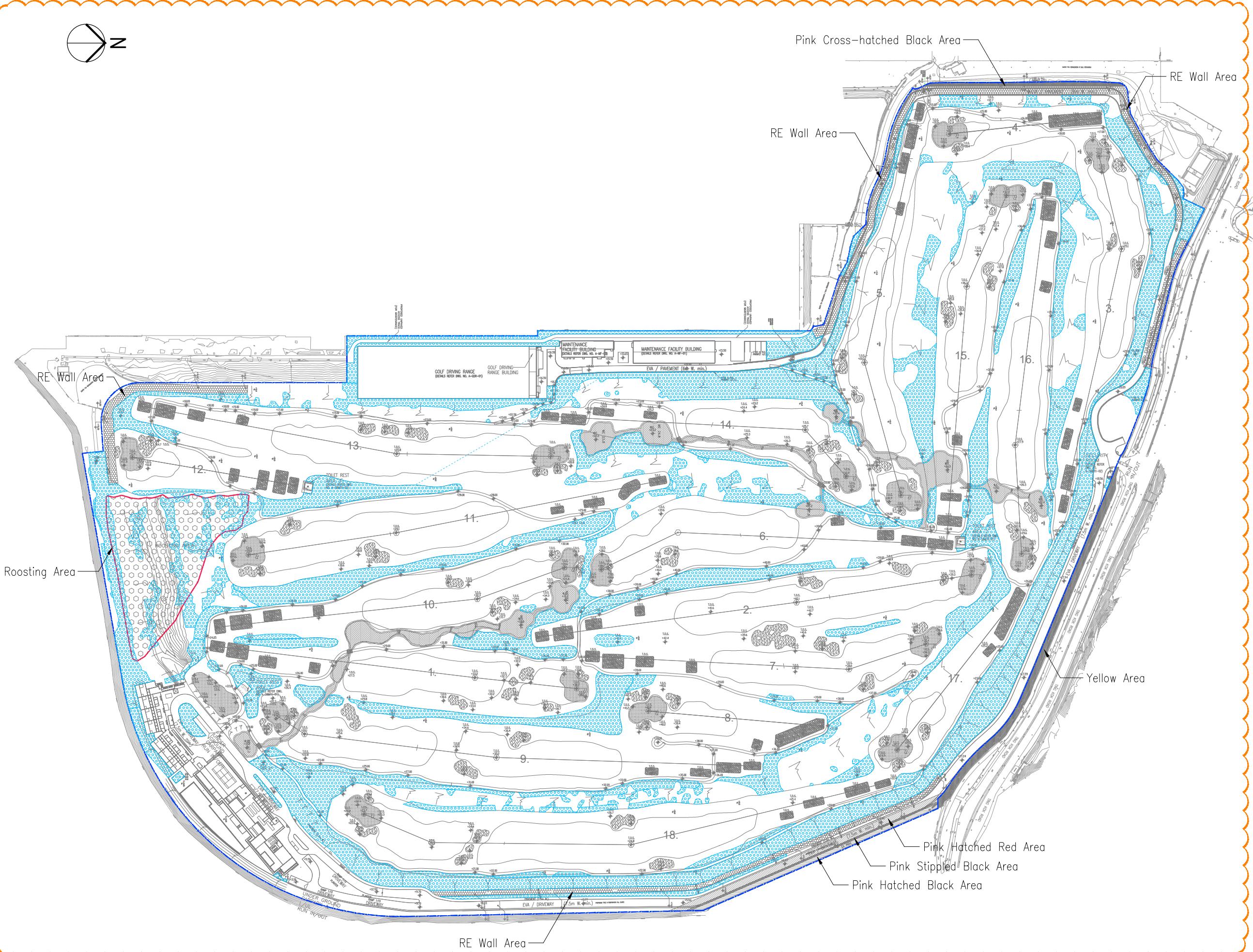
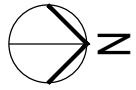


C	THIRD ISSUE	GL	03/19
B	SECOND ISSUE	GL	02/19
A	FIRST ISSUE	GL	01/19
Rev	Description	By	Date
Consultant			
ARUP			
Contract No. and Title			
SHUEN WAN GOLF COURSE			
Drawing title			
LOCATIONS OF PRESERVED PLANTATION AND NEW PLANTING TREE GROUPS			
Drawing no. FIGURE 10.9 Rev. C			
Drawn GL	Date 03/19	Checked EL	Approved FC
Scale N/A	Status PRELIMINARY		

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LEGEND:	
	SITE BOUNDARY
	BOUNDARY OF THE ROOSTING AREA
	PRESERVED TREE AREA = 6.1 ha (INCLUDED 1.2 ha ROOSTING AREA)
	ROOSTING AREA
	PUTTING GREEN
	TEES
	BUNKER
	WATER HAZARD
	EXISTING SLOPE
	PROPOSED MAX. 30° FILL SLOPE
	GENERAL REVISION
	REVISION IN REPLY TO COMMENTS FROM LAT DATE 11 DEC 2023 REF. NO.: (23) in LD/BP/LAT/TP/TPL 246
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H PLUS LIMITED	T: (852) 2143 6721 www.hplus.com.hk
PROJECT:	GOLF COURSE DEVELOPMENT AT TAI PO TOWN LOT NO. 246, SHUEN WAN, TAI PO
DRAWING TITLE:	TREE PRESERVATION AREA
Scale:	1:3500 (A3)
Date:	20 OCT 2023
Design:	SH
Drawn:	-
Checked:	SH
Project No:	2022318
TPC-01	Drawing No.: REV. A



LEGEND:

- SITE BOUNDARY
- BOUNDARY OF THE ROOSTING AREA
- COMPENSATED TREE AREA = 10.1 ha
- PUTTING GREEN
- TEES
- BUNKER
- WATER HAZARD
- EXISTING SLOPE
- PROPOSED MAX. 30° FILL SLOPE
- GENERAL REVISION
- REVISION IN REPLY TO COMMENTS FROM LAT DATE 11 DEC 2023 REF. NO.: (23) in LD/BP/LAT/TP/TPL 246

A	GENERAL REVISED	02/02/2024
NO.	DESCRIPTION	DATE

REVISION
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- report all discrepancies to the landscape architect and agree before proceeding
- determine location of all existing services prior to excavation

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29 Tai Yau St, San Po Kong,
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H PLUS LIMITED T: (852) 2143 6721
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PROJECT:
GOLF COURSE DEVELOPMENT
AT TAI PO TOWN LOT NO. 246,
SHUEN WAN, TAI PO

DRAWING TITLE:
COMPENSATION TREE AREA

Scale:	1:3500 (A3)	Drawing No.:
Date:	20 OCT 2023	
Design:	SH	
Drawn:	-	
Checked:	SH	
Project No:	2022318	

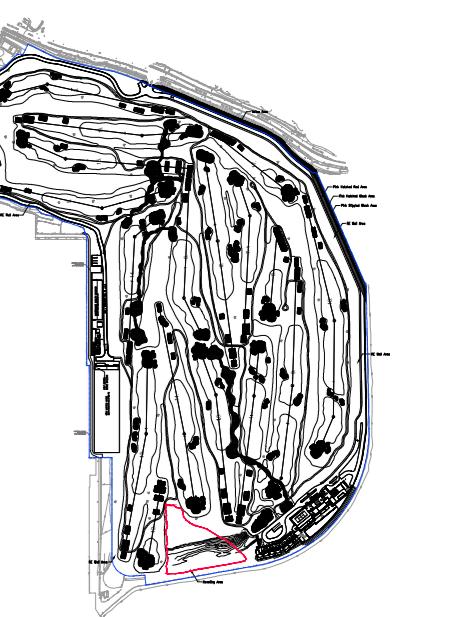
A COMPENSATION TREE AREA
SCALE 1:3500

TPC-02

REV.
A

A3 420 x 297

N



KEY LOCATION PLAN

LEGEND:

	SITE BOUNDARY
	BOUNDARY OF THE ROOSTING AREA
	1650 Nos. OF EXISTING TREE PROPOSED TO BE RETAINED
	40 Nos. OF EXISTING DEAD TREE WITHIN ROOSTING AREA TO BE RETAINED IN-SITU
	84 Nos. OF EXISTING TREE (<i>Leucaena leucocephala</i>) PROPOSED TO BE RETAINED
	4046 Nos. OF PROPOSED COMPENSATORY TREE
	5218 NOS. OF PROPOSED COMPENSATORY WHIPS TREE
	91 Nos. OF APPROVED TRANSPLANT TREE
	PUTTING GREEN
	TEES
	BUNKER
	WATER HAZARD
	EXISTING SLOPE
	PROPOSED MAX. 30° FILL SLOPE
	GENERAL REVISION
	REVISION IN REPLY TO COMMENTS FROM LAT DATE 11 DEC 2023 REF. NO.: (23) in LD/BP/LAT/TP/TPL 246

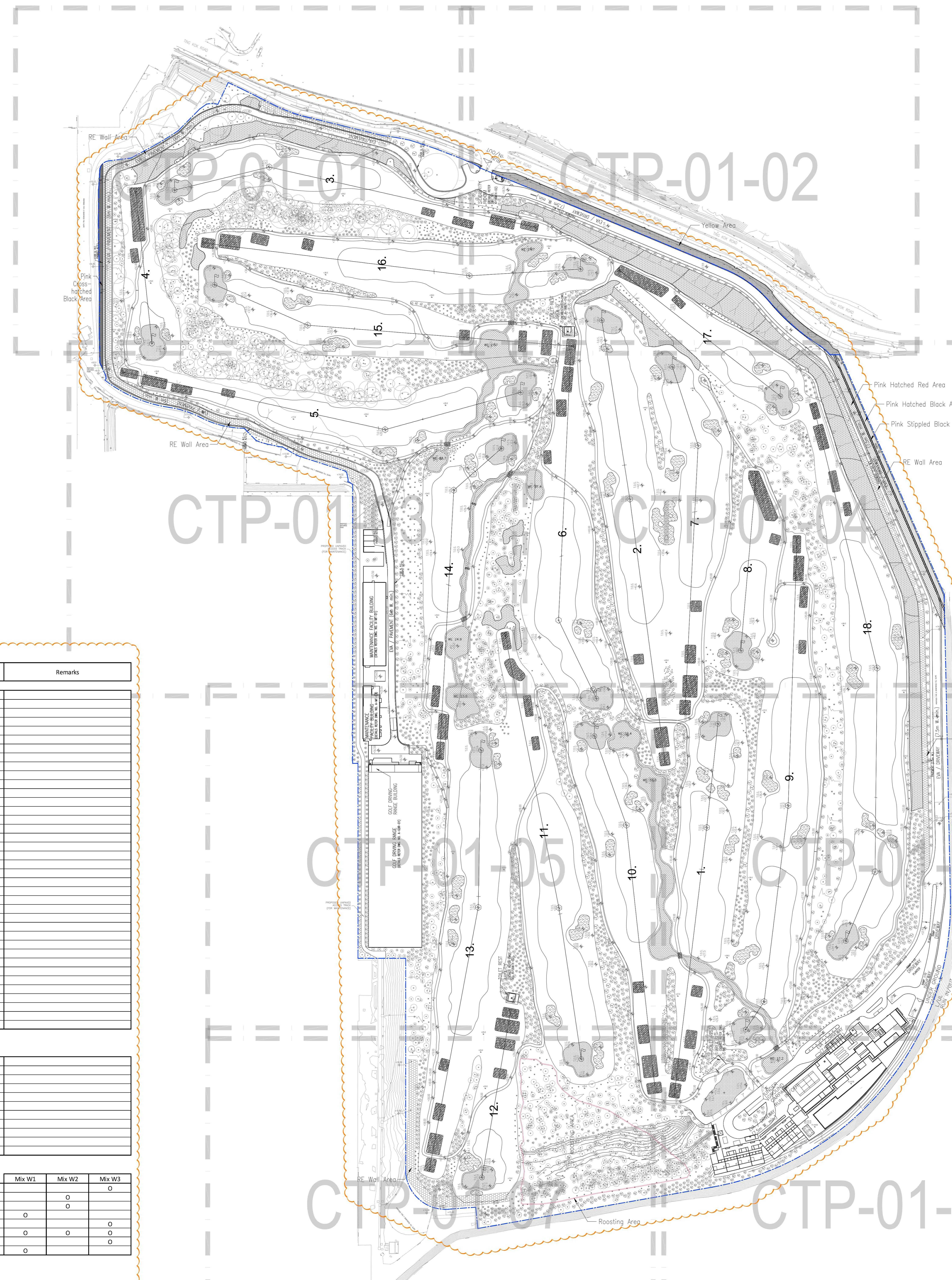
COMPENSATORY TREE PLANTING LIST

Item	Qty.	Botanical Name / Common Name	Chinese Name	Height (mm)	Spread (mm)	DBH (mm)	Remarks
TREE							
AH	163	<i>Araucaria heterophylla</i>	南洋杉	6500-8000	2000	100	
AS	86	<i>Alstonia scholaris</i>	黑板樹	6000	3000	110	
BI	39	<i>Bischofia javonica Blume*</i>	秋櫟	5000	3000	95	
CN	36	<i>Cassia nodosa</i> Buch.-Ham. ex Boiss.	粉花山扁豆	5000	3000	100	
CE1	310	<i>Casuarina equisetifolia</i>	木麻黃	5500	2500	100	
CE2	20	<i>Casuarina equisetifolia</i>	木麻黃	4500	2000	90	
CB	89	<i>Cinnamomum burmannii*</i>	陰香	6000	3000	100	
CC	61	<i>Cinnamomum camphora*</i>	樟樹	6000	3000	100	
CU	135	<i>Crataeva unilocularis</i>	魚木	6000	3000	100	
DR	46	<i>Delonix regia</i>	鳳凰木	6000	3000	100	
DD	58	<i>Dracontomelon drupaceum</i>	人面子	6000-8000	4000	110	
EA	15	<i>Elaeocarpus apiculatus</i>	尖葉杜英	5500	3000	95	
EH	145	<i>Eucalyptus citriodora</i> Hook.	檸檬桉	5000	3000	70	
FA1	2	<i>Ficus macrophylla</i>	澳洲大葉榕	5500	3500	100	
FA2	2	<i>Ficus macrophylla</i>	澳洲大葉榕	7000-8000	4000	180	
FM1	50	<i>Ficus microcarpa</i>	細葉榕	3000-5000	1500-2000	100	
FV	42	<i>Ficus variegata*</i>	青果榕	5500	3000	100	
FS	37	<i>Ficus vires</i> Vat. <i>sublanceolata*</i>	黃競樹	5000	3000	100	
GO1	23	<i>Garcinia oblongifolia*</i>	箇南山竹子	5500	3500	100	
GO2	33	<i>Garcinia oblongifolia*</i>	箇南山竹子	4000	3000	100	
GS	51	<i>Garcinia subelliptica</i>	福木	3000-4000	1000	90	
HT	428	<i>Hibiscus tiliaceus*</i>	黃槿	5500	3000	95	
JM	11	<i>Jacaranda mimosifolia</i>	藍花楹	6000	3500	100	
LE1	72	<i>Libidibia ferrea</i>	鐵架木	5000	2500	95	
LF	52	<i>Liquidambar formosana*</i>	楓香	6000	3000	100	
LC	28	<i>Lophopetalum coniferus</i>	紅膠木	4000	2000	100	
MC	191	<i>Melaleuca cajuputi</i> Roxb. subsp. <i>cumingiana</i> (Turcz.) Barlow	白千層	5000	3000	100	
PM1	40	<i>Podocarpus macrophyllus*</i>	羅漢松	6000	1200	95	
PM2	54	<i>Podocarpus macrophyllus*</i>	羅漢松	4000	1000	95	
PA	126	<i>Pinus massoniana*</i>	馬尾松	4500	2000	80	
SE	24	<i>Sapium sebiferum*</i>	烏柏	5000	3000	95	
SH1	149	<i>Schefflera heptaphylla*</i>	鵝掌木	7000	3000	100	
SL	68	<i>Sterculia lanceolata*</i>	假蘿婆	4000	3000	100	
SA	11	<i>Syzygium hirsutum</i>	韓氏楓櫟	5000	3000	95	
TC	17	<i>Tabebuia chrysantha</i>	黃花風鈴木	6000	3500	100	
TP	34	<i>Tabebuia pentaphylla</i>	紅花風鈴木	5000	3000	100	
TD	47	<i>Taxodium distichum</i>	落羽杉	5000	3000	100	
TM	161	<i>Terminalia mantaly</i>	小葉欒仁	8000	3000	100	
Sub-total	2956						

BR	19	<i>Barringtonia racemosa</i>	紅花玉蕊	3000	2500	75	
LI	36	<i>Lagerstroemia indica</i>	細葉紫薇	2500	2000	75	
LE2	26	<i>Libidibia ferrea</i>	鐵架木	3500	1500	75	
NN1	115	<i>Nageia nagi</i>	竹柏	2000	1500	70	
NN2	19	<i>Nageia nagi</i>	竹柏	3000	2000	75	
PR	13	<i>Plumeria rubra</i>	紅雞蛋花	2500	2000	75	
TT	168	<i>Terminalia mantaly</i> 'Tricolour'	錦葉欒仁	2000	1000	75	
VO	364	<i>Viburnum odoratissimum*</i>	珊瑚樹	1800	1000	60	
PX	16	<i>Polyosma axillaries*</i>	大頭茶	2500	1200	60	
XC	108	<i>Xanthostemon chrysanthus</i>	金蒲桃	2500	2000	75	
FC	206	<i>Ficus microcarpa</i> var. <i>crassifolia</i>	厚葉榕	1000	600	60	
Sub-total	1090						

CS	379	<i>Celtis sinensis*</i>		Mix W1	Mix W2	Mix W3	
IM	742	<i>Ilex rotunda</i> var. <i>microcarpa*</i>	小果鐵冬青	1500	400	-	O
LF	742	<i>Liquidambar formosana</i> *	楓香	1500	400	-	O
MP	492	<i>Mallotus paniculatus*</i>	白欖	1500	400	-	O
PA	379	<i>Polyosma axillaries*</i>	大頭茶	1000	350	-	O
SH2	1613	<i>Schefflera heptaphylla*</i>	鵝掌木	1000	350	-	O
SS	379	<i>Schima superba</i>	木荷	1000	350	-	O
VO	492	<i>Viburnum odoratissimum*</i>	珊瑚樹	1000	350	-	O
Sub-total	5218						

Remarks: * Native Tree Species

MASTER PLAN
SCALE 1:1500

REV. A

Drawing No.: CTP-01-00

Scale: 1:1500 (A0)

Date: 20 OCT 2023

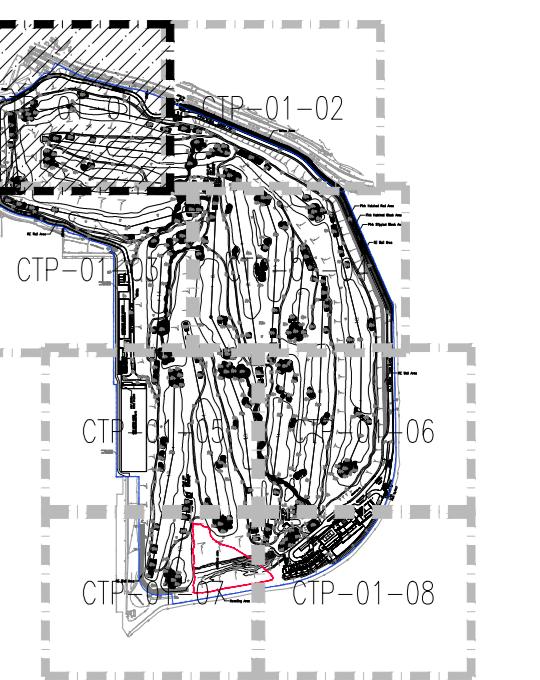
Design: SH

Drawn:

Checked: SH

Project No.: 2022318

AO 1189-844



LEGEND:

- SITE BOUNDARY (Blue dashed line)
- BOUNDARY OF THE ROOSTING AREA (Orange dashed line)
- 1650 Nos. OF EXISTING TREE PROPOSED TO BE RETAINED (Black dot)
- 40 Nos. OF EXISTING DEAD TREE WITHIN ROOSTING AREA TO BE RETAINED IN-SITU (Black square)
- 84 Nos. OF EXISTING TREE (*Leucaena leucocephala*) PROPOSED TO BE RETAINED (Black cross)
- 4046 Nos. OF PROPOSED COMPENSATORY TREE (Green circle)
- 5218 Nos. OF PROPOSED COMPENSATORY WHIPS TREE (Green hexagon)
- 91 Nos. OF APPROVED TRANSPLANT TREE (Purple triangle)
- PUTTING GREEN (Hatched area)
- TEES (Hatched area)
- BUNKER (Hatched area)
- WATER HAZARD (Hatched area)
- EXISTING SLOPE (Hatched area)
- PROPOSED MAX. 30° FILL SLOPE (Pink dashed line)
- GENERAL REVISION (Orange dashed line)
- REVISION IN REPLY TO COMMENTS FROM LAT DATE 11 DEC 2023 REF. NO.: (23) in LD/BP/LAT/TP/TPL 246 (Pink dashed line)

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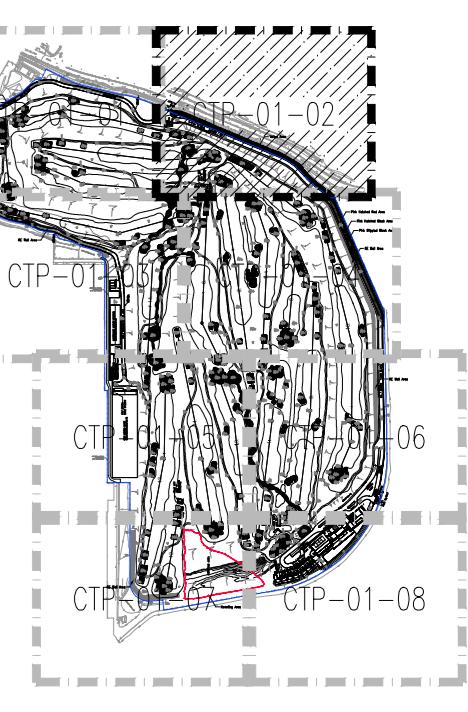
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PROJECT:
GOLF COURSE DEVELOPMENT
AT TAI PO TOWN LOT NO. 246,
SHUEN WAN, TAI PO

DRAWING TITLE:
COMPENSATORY TREE PLAN SHEET 01

Scale: 1:400 (A0) **Drawing No.:** CTP-01-01
Date: 20 OCT 2023 **Design:** SH
Drawn: - **Checked:** SH
Project No.: 2022318 **REV. A**



KEY LOCATION PLAN

LEGEND:

- SITE BOUNDARY
- BOUNDARY OF THE ROOSTING AREA
- 1650 Nos. OF EXISTING TREE PROPOSED TO BE RETAINED
- 40 Nos. OF EXISTING DEAD TREE WITHIN ROOSTING AREA TO BE RETAINED IN-SITU
- × 84 Nos. OF EXISTING TREE (*Leucaena leucocephala*) PROPOSED TO BE RETAINED
- 4046 Nos. OF PROPOSED COMPENSATORY TREE
- 5218 Nos. OF PROPOSED COMPENSATORY WHIPS TREE
- ▲ 91 Nos. OF APPROVED TRANSPLANT TREE
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
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
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
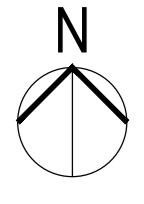
PROJECT:
GOLF COURSE DEVELOPMENT
AT TAI PO TOWN LOT NO. 246,
SHUEN WAN, TAI PO

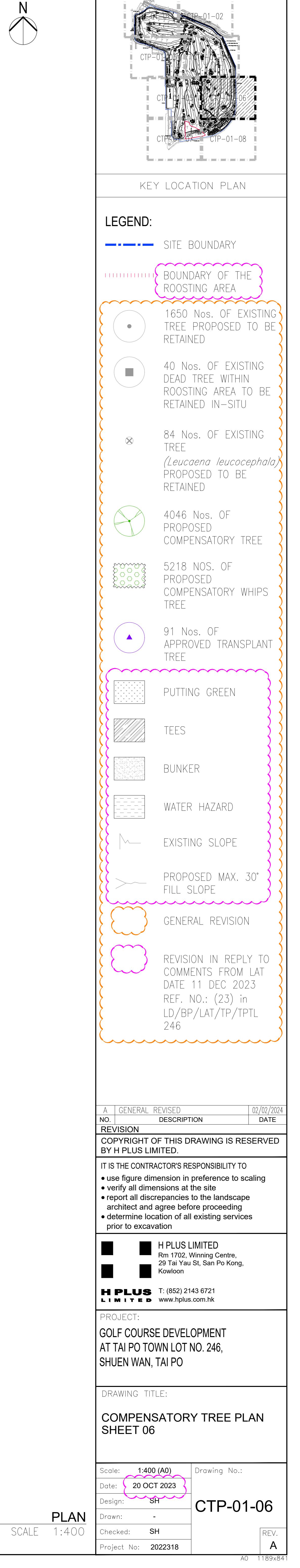
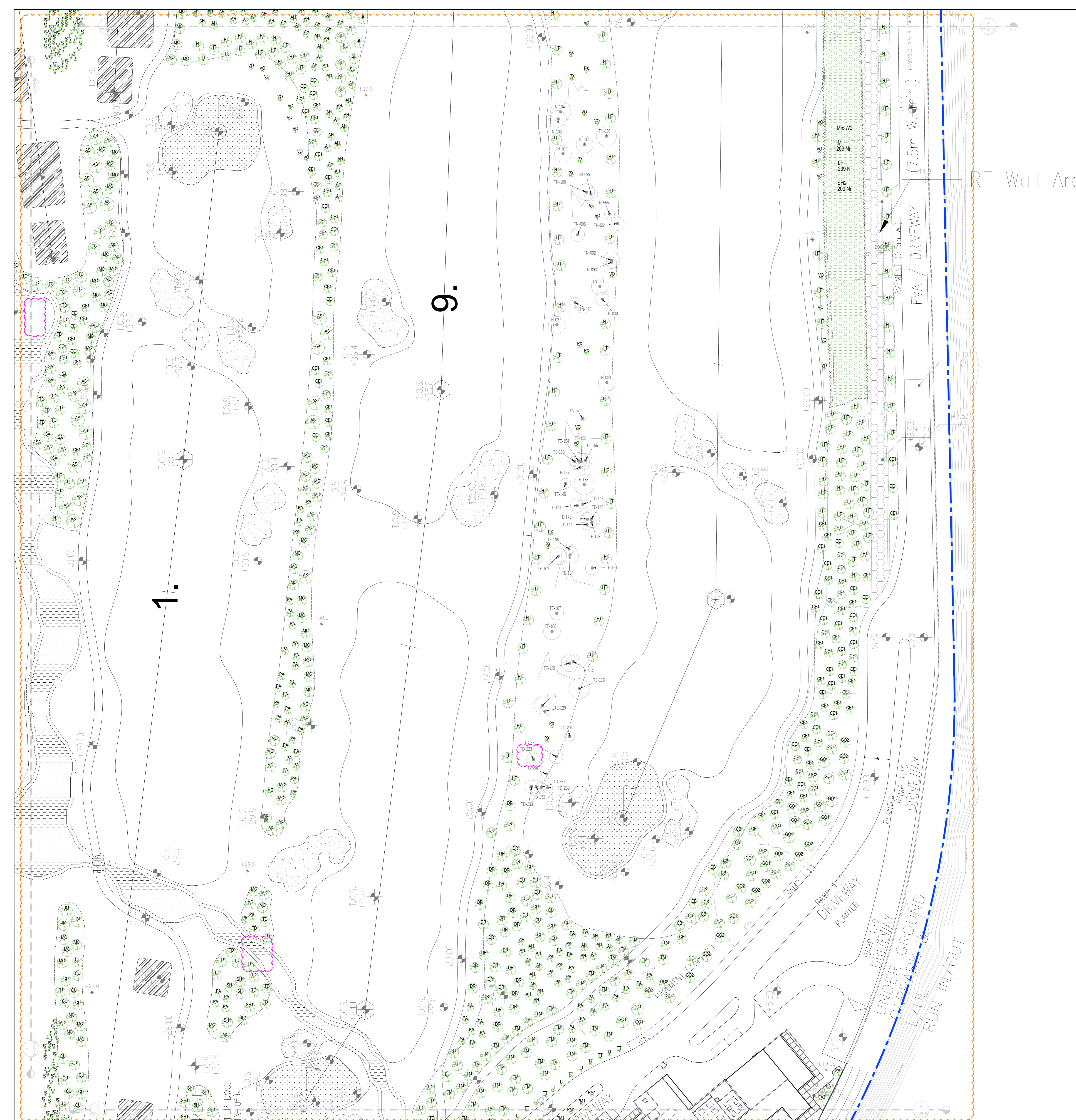
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COMPENSATORY TREE PLAN
SHEET 02

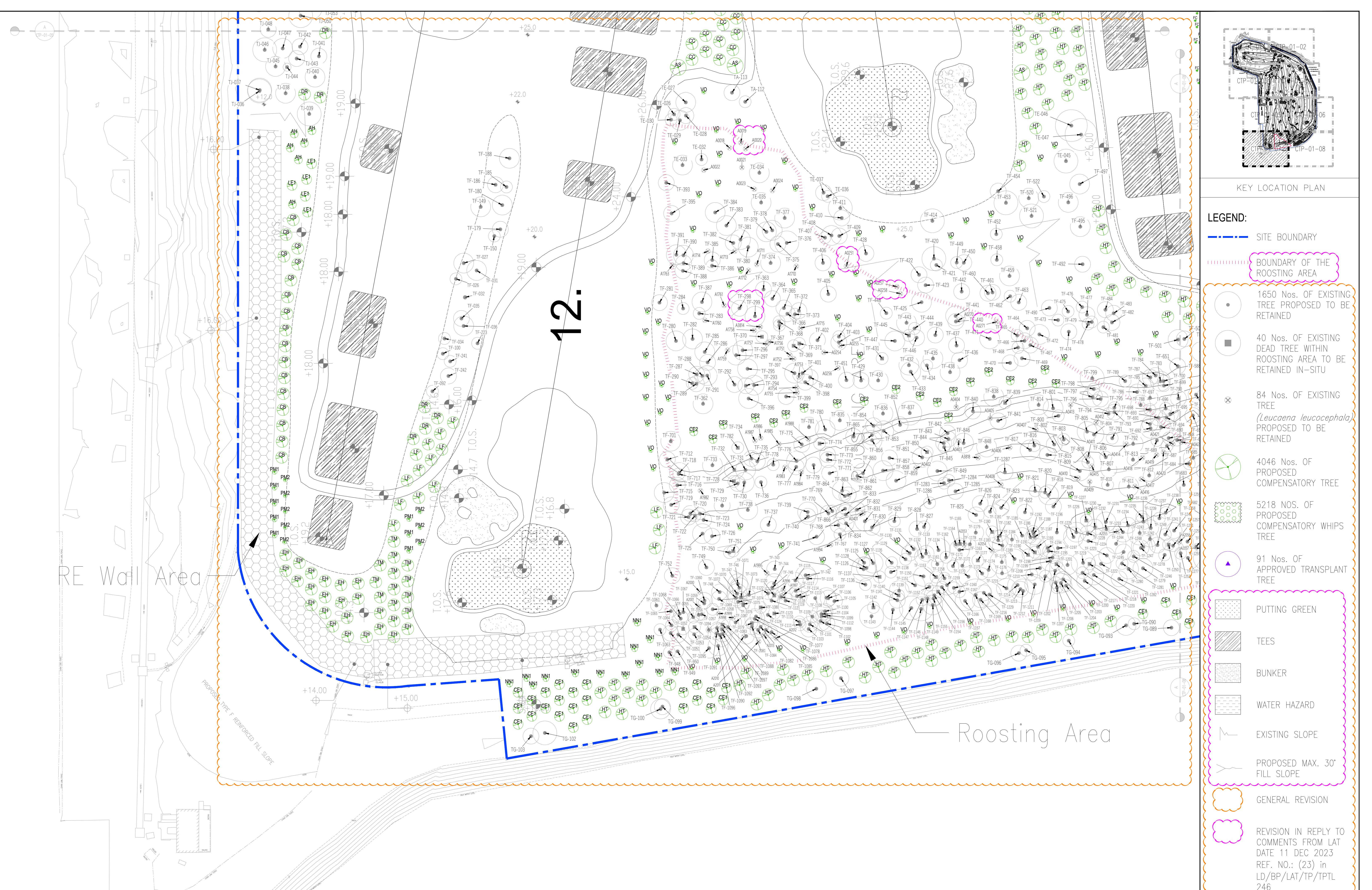
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Date: 20 OCT 2023
Design: SH
Drawn: -
Checked: SH
Project No.: 2022318
PLAN SCALE 1:400
REV. A
CTP-01-02











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 - Determine location of all existing services prior to excavation



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OBJECT: OLF COURSE DEVELOPMENT

TAI PO TOWN LOT NO. 246,
LIEN WAN, TAI PO

DRAWING TITLE:

COMPENSATORY TREE PLAN

HEET 07

MEET 07

Le: 1:400 (A0) Drawing No.:

e: 20 OCT 2023

ign: SH

checked: **SH** REV

REV. A

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