# ASSESSMENT OF LANDSCAPE AND VISUAL IMPACT

## *5.1 Introduction*

5.1.1 This annex presents the results of qualitative assessments of the landscape and visual impact associated with the construction and operation of the Project.

## *5.2 Identification of Environmental Impacts*

5.2.1 The major landscape impact is the disturbance of the vegetation (mainly shrubland/grassland and small/young trees) within the Project site while the major visual impact is the presence of the construction plants/materials entering and leaving the site and the structures being constructed.

## *5.3 Evaluation of Environmental Impacts*

Landscape Impact

5.3.1 The vegetations within the Project site are mainly shrubland/grassland and small/young trees (of diameter 0.1m to 0.32m). With the assistance of Landscape Unit of Highways Department, a tree survey was conducted in December 2004. It is found that there are 150 existing trees within the Project site, among which 101 trees would be affected by the Project.

5.3.2 A tree felling and compensatory planting proposal has been prepared with the assistance of Landscape Unit of Highways Department. Among the 150 trees, 49 trees are proposed to be retained while the remaining 101 trees are proposed to be felled. **Figure No. A5-1** shows the tree felling plan of the Project. Among the 49 trees to be retained, there are 36 *Leucaena leucocephala*, 10 *Celtis sinensis*, 1 *Bombax malabaricum*, 1 *Acacia confusa* and 1 *Macaranga tanarius*. All the remaining 101 trees to be felled are *Leucaena leucocephala* which are of low amenity value and their survival rate after transplanting is low. Appropriate mitigation measures including the compensatory planting proposal to minimize the disturbance are presented in the Section 5.4.

Visual Impact

5.3.3 The Project site is located at Chuk Wan Street of Shek Wu Hui adjacent to Sheung Shui Slaughter House. It is located partly within the existing SWHSTW compound and partly in a piece of vacant government land to the north of the existing SHWSTW boundary as shown in **Figure No. 1**. The nearest sensitive receivers are over 100m away from the works area. Due to the small scale of the Project, the amount of construction plants and materials likely to be deployed on site should not be substantial. Besides, visual impact resulted from the construction activities will be temporary. The visual impact during the construction period arising from the Project is considered negligible.

5.3.4 Due to the relative isolated location and the considerable distance between the Project area and the sensitive receivers, the Project should not cause significant adverse visual impact to the surroundings during the operation phase. Nevertheless,

the proposed treatment facilities will be in similar shape, size and appearance to the existing ones so that a tone of harmony and consistence can be achieved. Moreover, to further reduce the potential visual impact, trees will be planted where practicable along the perimeter of the works site to provide a shielding effect to the new facilities.

### *5.4 Mitigation of Adverse Environmental Impacts*

5.4.1 Mitigation of landscape and visual impact will be achieved by appropriate design, construction practice and surface treatment of the built elements and appropriate soft landscape treatment within available area of the Project.

5.4.2 The proposed structures will be designed to achieve the following landscape objectives:

- To establish a coherent language within the overall landscape charter and built elements;
- To visually screen the built elements; and
- To establish low maintenance planting areas through species selection.

5.4.3 In addition, the following landscape and visual mitigation measures would be implemented:

- Screening of construction works by use of hoarding.
- Retaining as many existing trees as possible and minimising damage to vegetation by maintaining clearance of at least 1m from the trees at the perimeter of the Site. Trees protective measures should be implemented to ensure trees identified as to be retained are satisfactorily protected during the construction phase. If any of the retained trees are prone to be disturbed by nearby construction works, protective fencings should be erected and positioned beyond dripline of the retained trees.
- 112 new trees (i.e. not less than that lost due to this Project) will be planted along the boundary of the Project site. The 112 new trees are comprised of 28 *Cassia surattensis*, 54 *Melaleuca quinquenervia* and 30 *Sterculia lanceolata.* The compensatory planting proposal is shown in **Figure No. A5-2**.
- No excavated material shall be staked directly against the trunk of any tree.
- If possible, advance planting should be carried out to provide screening effect at the earliest.
- Design the proposed treatment facilities in similar shape, size and appearance to the existing ones so that a tone of harmony and consistence can be achieved.

### *5.5 Conclusions*

5.5.1 With the implementation of the mitigation measures mentioned in Section 5.4 above, no significant landscape and visual impacts are expected.

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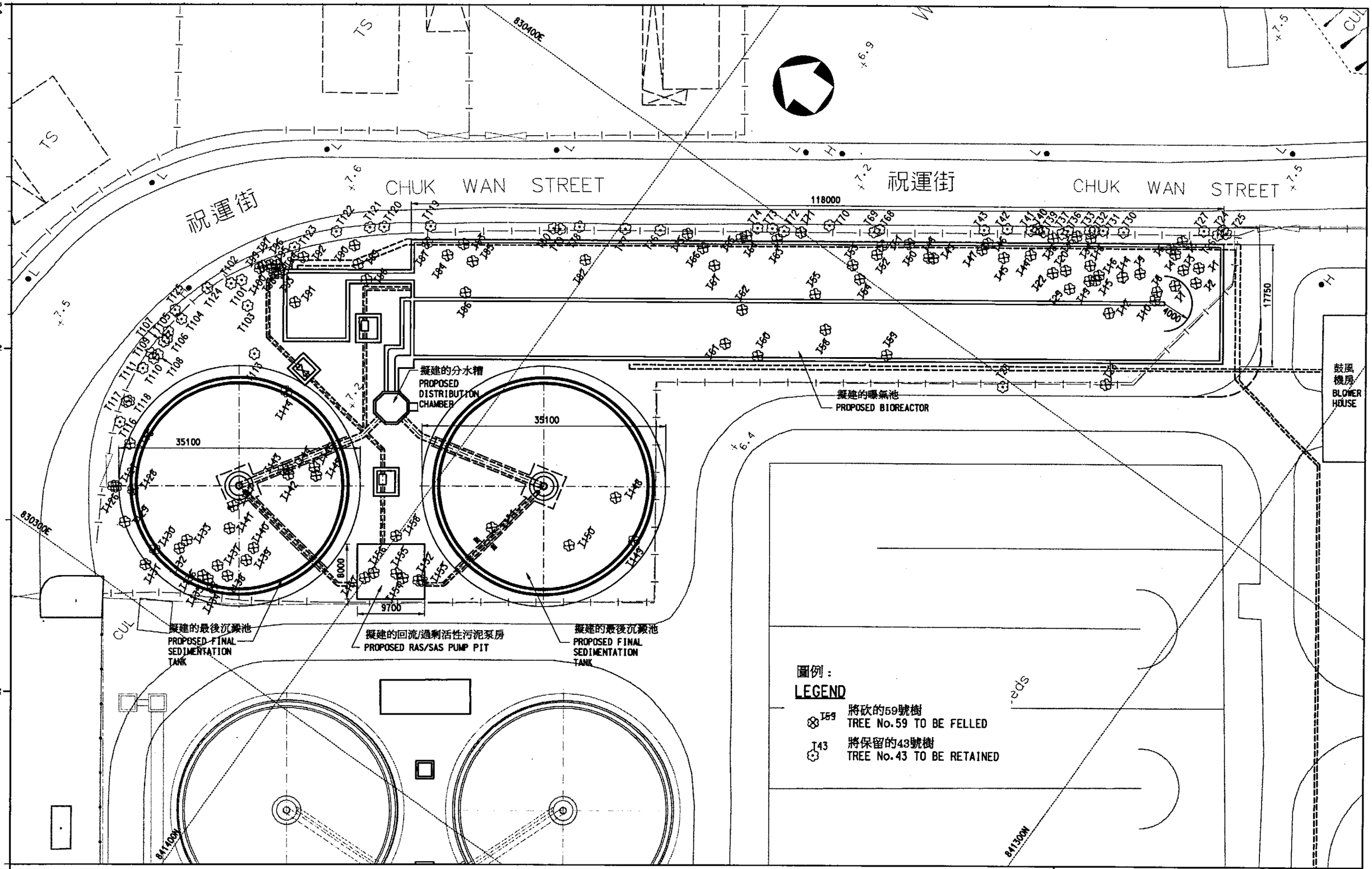


圖例：
LEGEND

- 將砍的59號樹 TREE No.59 TO BE FELLED
- 將保留的43號樹 TREE No.43 TO BE RETAINED

圖表名稱 Figure Title

石湖墟污水處理廠擴建工程 - 砍樹圖

EXPANSION OF SHEK WU HUI SEWAGE TREATMENT WORKS - TREE FELLING PLAN

| 圖表編號 Figure No. | 比例 Scale |
|---|---|
| A5 - 1 | 1 : 500 |



部門 Office 污水工程部 SEWERAGE PROJECTS DIVISION

香港特別行政區政府渠務署
DRAINAGE SERVICES DEPARTMENT
GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION

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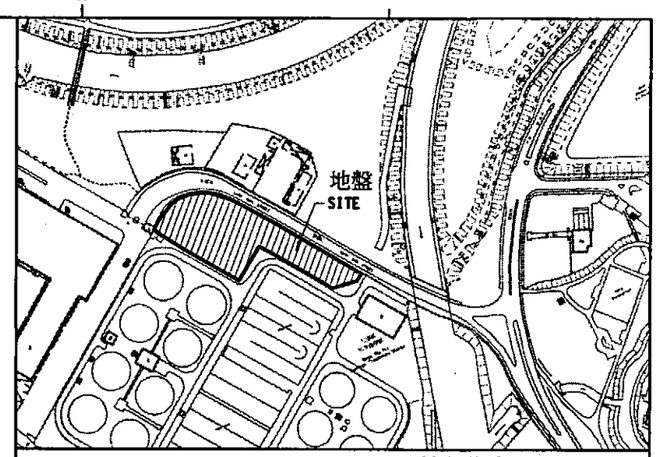
## 種植表
PLANTING SCHEDULE

| 代號 CODE | 學名 SCIENTIFIC NAME | 中文名 CHINESE NAME | 大小(mm高度) SIZE (mm HT) | 距離 SPACING (mm) | 數量 QUANTITIES |
|---|---|---|---|---|---|
| TREES 樹 | | | | | |
| CS | Cassia surattensis | 黃槐 | 重標準 HEAVY STANDARD | 圖示 AS SHOWN | 28 |
| MQ | Melaleuca quinquenervia | 白千層 | | | 54 |
| SL | Sterculia lanceolata | 假蘋婆 | | | 30 |

圖例：
LEGEND：

- 石湖墟污水廠的擬建範圍 PROPOSED AREA FOR SHEK WU HUI STW EXPANSION
- 擬建結構 PROPOSED STRUCTURES
- 將保留的現有樹 PROPOSED EXISTING TREES TO BE RETAINED
- 擬種的新樹 PROPOSED NEW TREES




LOCATION PLAN 位置圖
比例 SCALE 1 : 5000

CHUK WAN STREET
祝運街
CHUK WAN STREET
54 MQ
30 SL
6 CS
擬建的最後沉澱池
PROPOSED FINAL SEDIMENTATION TANKS
擬建的最後沉澱池
PROPOSED FINAL SEDIMENTATION TANKS
擬建的最後
沉澱池分水槽
PROPOSED FINAL SEDIMENTATION TANK DISTRIBUTION CHAMBER
擬建的曝氣池
PROPOSED BIOREACTOR
需作出修改的現有曝氣池
EXISTING BIOREACTORS TO BE MODIFIED
AERATION TANK NO. 12
AERATION TANK NO. 11
AERATION TANK NO. 10
LAWN
TANK
225UC
300UC
EP
TS

圖表名稱 Figure Title

# 石湖墟污水處理廠擴建工程 - 補償性種植圖

EXPANSION OF SHEK WU HUI SEWAGE TREATMENT WORKS - COMPENSATORY PLANTING PLAN

| 圖表編號 Figure No. | 比例 Scale |
|---|---|
| A5 - 2 | 1 : 500 |



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