# **Tung Chung Cable Car Project**

Landscape Plan

(Revision 1)

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Mott Connell Ltd 40th floor, Hopewell Centre 183 Queen's Road East Wanchai Hong Kong

Tel: 852 2828 5757

Fax: 852 2828 1823

Anne.Kerr@mottconnell.com.hk

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#### 1 INTRODUCTION

The purpose of the Landscape Plan is to provide sensitive detailed design of structures within the Country Park; measures to reduce landscape and visual impacts and to mitigate and compensate the impacts on flora and fauna species and habitats due to the Tung Chung Cable Car Project. The Plan establishes the requirements for chromatic treatments; landscaping and compensatory planting to be undertaken for the Project.

### 1.1 Objectives of the Landscape Plan

The general objective of the Landscape Plan is to mitigate and compensate landscape and visual and ecological impacts resulting from the construction of Nei Lak Shan Angle Station, towers, emergency rescue trail and helicopter touch down points in accordance with the requirements of the Tung Chung Cable Car Project Environmental Permit No. *EP-177/2003*. In particular, the proposal aims to:

- provide vegetation to form an attractive and functional landscape surrounding structures within the Country Park;
- provide information on transplantation of trees identified in the Tree Survey (Mott Connell, 2003) that are suitable for transplantation;
- provide about 2ha of suitable planting within the Lantau North Country Park or the proposed Lantau North (Extension) Country Park; and
- provide compensatory planting to eventually provide equivalent carrying capacity and ecological functions than existing habitats being replaced or disturbed.

# 1.2 Regulatory Compliance

The Qualified Ecologist shall obtain all approvals required for compensatory planting.

#### 2 METHODOLOGY

# 2.1 Desktop Assessment

A review of mitigation measures will be included into this Landscape Plan. The documents of particular importance include:

- Environmental Impact Assessment (EIA) report;
- Environmental Monitoring and Audit (EM&A)Manual;
- Master Landscape Plan; and
- Section 16 Application including the Tree Felling Application.

Reference is made to available maps and aerial photographs including habitat maps from the Tung Chung Cable Car EIA (Mott Connell, 2003) and topographical maps. The following features were identified:

- drainage lines (permanent, intermittent and dry valleys);
- potential erosion features such as rills, gullies and bank erosion etc.;
- existing vegetation cover;
- site characteristics (i.e. aspect, slope, erosion potential etc.) and
- soil type and depth.

## 2.2 Site Inspection

Site inspection was undertaken to verify the features identified in the desktop assessment and to add additional information on vegetation communities present, potential erosion sources, soil types etc. to determine the requirements for compensatory planting sites.

# 2.3 Technical Specification for Landscape and Compensatory Planting

Specification of compensatory planting from desktop assessment, site inspection and analysis of site conditions will be included to achieve the stated landscape and visual and compensatory planting objectives.

#### 3 REVIEW OF BASELINE INFORMATION

# 3.1 Proposed Mitigation Measures

The mitigation measures described below incorporate those landscape and visual mitigation measures already identified in the EIA report; EM&A Manual; Master Landscape Plan and Section 16 Application.

# 3.2 Mitigation Measures to be Implemented

# 3.2.1 Tree transplanting

The detailed tree survey did not identify any trees to be transplanted as part of the construction works within the Country Park.

## 3.2.2 Tree protection

Trees to be retained within or adjacent to works areas will be carefully protected by strong hoarding and if necessary additional protection to individual tree trunks to avoid damage by machinery. The hoarding will also prevent contractors compacting soil around tree roots or dumping materials.

# 3.2.3 Topsoil conservation

The topsoil layer on proposed development sites is a valuable resource. Any excavation must carefully save and store the topsoil to one side of the works area for reuse upon completion.

## 3.2.4 Replanting

The existing species mix colonising the proposed worksites have been recorded and it is proposed that a complementary mix of indigenous species is specified for replanting at similar densities. It is important that the species selected for replanting is hardy and commercially available.

### 3.2.5 Sensitive Design

Sensitive design of the structures within the Country Park is outlined as below. Details may be referred to the corresponding submissions, Supporting Towers Proposal, Nei Lak Shan Angle Station Proposal, Marker Cable System Proposal, Emergency Rescue Trail Proposal and Helicopter Touch Down Points Proposal.

Towers: The steel structure of the towers will have a hot-dipped galvanized coating. Its appearance will be similar to the existing CLP's overhead line towers. Reinstatement of the existing ground profile and vegetation beneath and around the towers is considered to be the best landscape mitigation in minimizing the potential visual impact. The areas around the tower footings will be properly landscaped. Hydroseeding will be carried out and native woodland species mix will be planted for screening the footings.

Nei Lak Shan Angle Station: The most significant surfaces of the angle station will adopt a palette of recessive 'camouflage' colours, which will allow it to better blend with the varying colours of Lantau hills – green in wet season and yellow-brown in dry season, in order to achieve visual integration with the surrounding terrain. The major objective of the landscape strategy is to retain as much of the existing vegetation as possible and reinstating disturbed areas caused by the construction. Replanting of native species will be carried out at the angle station. Climber will be added surrounding the supporting columns to visually soften the vertical concrete base of the structure.

*Marker cable anchor structures:* To minimize the visual impact, the anchors will be treated with visually recessive colour and all the temporary works areas will be reinstated to the original profile upon completion of the works. Replanting of native species will be carried out at both anchor locations.

Emergency rescue trail: The emergency rescue trail will include newly formed sections which traverse most length of the cableway and an upgraded country park trail between Ngong Ping and Tower 6. Generally speaking, boardwalk will be provided for trail sections with rock ground while stove paving will be applied to those with soil ground. CCA treated timber will be used for the construction of boardwalk. Excavated rocks and soil materials will be reused where possible to construct the stone paved trail to maximise the opportunity for materials reuse and thereby negate the disposal requirements. The planting strategy of the emergency rescue trail is to use native tree and shrub species and plant in irregular fashion along the alignment to help screen any visual impact the works may result.

Helicopter touch down points: The helicopter touch down points are to provide a safe landing surface for emergency rescue. The areas will be retained as grass surface as far as possible.

#### 4 PLANTING CONSIDERATIONS

# 4.1 Site Analysis

A number of factors were considered for analysis of compensatory planting sites:

Physiology: The influence of landform on vegetation growth potential.

Establishment of plants on steep slopes, spurs or ridges is considered more difficult. Any clearance of vegetation (i.e. grasses) may result in

soil erosion.

Soil Type: The soil type varies in areas of the Country Park:

• Alluvial Soils (medium to high fertility);

• Granitic Soils (low fertility, normally easily eroded particularly

on steep slopes);

• Volcanic Soils (low fertility with moderate to low erosion

potential).

Slope: Steep slopes are more quickly drained, easily eroded and more difficult

to plant.

Altitude: Sites of higher altitude are generally more exposed and therefore

vegetation is more difficult to establish.

Aspect: In Hong Kong, slopes with a northern aspect normally have a high

growth potential than those with a southern aspect.

Existing Vegetation: Planting should aim to provide suitable vegetation aimed at restoring

ecosystem function. Areas which are prone to fire damage should be supplemented with more fire-resistant shrubs and ground cover species.

Growth Potential: The vegetation growth potential of a site is dictated by a combination of

the factors outlined above.

# 4.2 Erosion and Vegetation Type

The role of vegetation in reducing erosion has been well documented. Vegetation cover helps to break the impact of falling rain drops and hence reduces the erosive force of the raindrops. The roots of trees also play an important role in reducing erosion and site stability by binding soil mantles to sub-soils or substrata thus contributing to the mechanical strength of the soil.

Erosion on slopes takes place when one or more of the following conditions exist:

- the slope length is long;
- the slope is steep,
- the soil is highly erodible; and
- the soil cover (vegetation) has been removed and will take some time to re-establish.

### 4.3 Wind Exposure

Growth retardation to plants on exposed ridgelines, hilltops and spurs which may lead to soil erosion. Soil erosion at some exposed sites occurs quicker than the plant establishment and it has been observed that only a few species establish with any degree of success.

#### 4.4 Hill Fires

A number of areas within the Lantau North Country Park and the proposed Lantau North (Extension) Country Park show signs of hill fire. Consideration of hill fires is important in planning of locations of compensatory planting and selection of species.

## 4.5 Flora Species

# 4.5.1 Selection of Plants

Native trees are important elements of the Hong Kong ecosystem. Compared with exotic species, native trees have significantly higher ecological value in providing food and shelter for local wildlife. The compensation planting will avoid monoculture plantation which may provide ineffective soil and water protection, poor in nutrient recycling and enrichment, low in biodiversity and susceptible to pest attack. Natives species are anticipated to require less care than non-native plants and will be suited to provide appropriate habitat for native wildlife.

A mixture of plants have been selected to provide more diverse habitat and a prolonged and varied leaf fall to meet the energy and pupation needs of aquatic insects. It will also help avoid trouble with pests that attack specific plants. Deciduous plants will be selected as the leaf litter is important for trapping nitrogen.

### 4.5.2 Multiple Value

Species will be selected for multiple use such as erosion control, attraction of fauna (i.e. nuts, fruit, browse, and nesting) and aesthetics including seasonal foliage color, flowers, fruits, and branching habit. Generally, native perennials provide blooms that attract butterflies while berry-bearing shrubs attract birds.

#### 4.5.3 Understand Natural Succession

Seedling performances are highly variable between species and sites. Hau B., So K., (2002) (Department of Ecology and Biodiversity, The University of Hong Kong, and the Kadoorie Farm and Botanic Garden) found that 'a higher number of the native tree species showing early successional characters performed better on the exposed and eroded hillsides, such as *Schefflera octophylla*, *Mallotus paniculatus*, and *Zanthoxylum avicennae*. While other early successional species performed badly, such as *Sapium discolor*. However, some late successional species also performed very well on the exposed hillsides, e.g. *Cyclobalanopsis neglecta*, *C. edithiae*, and *Syzygium hancei*. Other late successional species performed very badly, such as *Pygeum topengii*.

The preliminary results of planting trials have indicated that native shrubs are able to do very well even in very poor soil and on 55 degree cut slope surfaces. The succession pathway from

shrubland to forest should be given more consideration and the first step of forest restoration projects may start with shrubs, followed by reinforcement with trees at a later stage. Plant communities naturally change over time. Pioneer species adapted to bare soils and lots of light are gradually replaced by longer-lived species that can grow and reproduce under more shaded and protected conditions.

### 4.5.4 Avoidance of Invasive and Exotic Species

Exotic (and some invasive species) are commonly used in tree planting in Hong Kong, including species listed by the Invasive Species Specialist Group (ISSG) of IUCN (i.e. "One Hundred of the World's Worst Invasive Alien Species" identified by ISSG of IUCN (<a href="http://www.issg.org/database/welcome/">http://www.issg.org/database/welcome/</a>)). Potentially invasive species are not recommended.

# 4.6 Habitat Fragmentation/ Corridors

Fragment of habitat generally supports smaller populations of fauna and is a key factor in the loss of biodiversity. A technique to help increase connectivity for fragmented habitat includes creating corridors. A wildlife corridor is a continuous natural protected pathway along which native wildlife species can move in between natural habitat. The scientific literature suggests that corridors:

- recolonize isolated habitat areas;
- link smaller habitat areas to larger functional units that meet habitat needs which are not met by individual patches individually;
- facilitate migratory movement; and
- facilitate gene flow across the landscape.

Where possible compensatory planting will aim to reduce habitat fragmentation and incorporate corridors.

# 5 TECHNICAL SPECIFICATION FOR LANDSCAPE AND COMPENSATORY PLANTING

#### **5.1** Planting Locations

The location of the 2ha of compensatory planting within Lantau North Country Park is shown in **Figure 5.1**.

Landscape planting at Towers 3 to 7, Nei Lak Shan Angle Station, marker cable anchor structures, emergency rescue trail and helicopter touch down points is shown in **Drawing Nos. LP-T-04**, **LP-R-01** to **24**, **LP-R-29** to **30**, and, the plant schedule is listed in **Drawing No. LP-101**. Planting in the Country Park will be entirely native to keep with the local vegetation. The layout of plants will take into account surrounding environment and vegetation.

#### **5.2** Sources of Plant Materials

Plants will be planted from nursery-grown tube stock. Potted seedlings may be available from Kadoorie Farm, AFCD or from various nurseries in Hong Kong. Where possible local nursery grown tube stock should be used to prevent the spread of plant disease.

# **5.3** Planting Species

The plants selected for compensatory planting listed in **Table 5.1** are based on planting considered outlined in **Section 4** of this report.

## 5.3.1 Planting within the Country Park

Native tree and shrub species shall be planted on areas shown in **Figure 5.1**. The tree and shrub spacing recommended is approximately 1.5m apart, which will result in a dense buffer at maturity, assuming that all plants survive. The total number of trees required to be planting using this spacing will be approximately 9000 seedlings to be planted within the 2ha area.

**Table 5.1:** Compensatory Planting Species List (Revised)

Form	Species	Plant Size	Location
Tree	Schefflera heptaphylla	Seedling	Country Park
Tree	Mallotus paniculatus	Seedling	Country Park
Tree	Sapium discolor	Seedling	Country Park
Tree	Sapium sebiferum	Seedling	Country Park
Tree	Castanopsis fissa	Seedling	Country Park
Tree	Liquidambar formosana	Seedling	Country Park
Tree	Machilus chekiangensis	Seedling	Country Park
Tree	Sterculia lanceolata	Seedling	Country Park
Tree	Schima superba	Seedling	Country Park
Shrub or small tree	Gordonia axillaris	Seedling	Country Park

#### 5.3.2 Planting Techniques

The techniques for planting and technical specifications are provided in **Table 5.2** which shall apply to compensatory planting within the Lantau North Country Park.

# **Table 5.1:** Specification for Planting

#### **Earthworks and Soiling**

Materials

- 25.01 (d) Top soil, the fertile layer immediately below Top soil undisturbed vegetation, to be free draining material of a sandy loam character free from grass or weed growth of any kind, other foreign material or stoned exceeding 50mm diameter.
- 25.01 (e) Soil-mix shall consist of friable, completely Soil Mix decomposed granite and soil conditioner in the proportions 3:1 by volume. Soil-mix shall be free from grass or weed growth, sticky clays, slat, stones exceeding 50mm diameter ad other deleterious material.
- 25.01 (g) Soil conditioner to be properly composted organic Soil Conditioner material free from impurities and containing no substance harmful to plants and to be of a fine freely flowing consistency. pH factor to be 6.5-7.5, moisture content 30-70% with a carbon nitrogen ratio between 20-30.
- 25.02 (f) Preplanting / slow release fertiliser to be an approved granular slow release compound comprising Nitrogen (N) Phosphorus (P) and Potassium (K) and trace elements in the ratio 15:9:15:2

# Workmanship

25.04 (a) Clear away weeds, rubbish, litter and all deleterious Clearing Ground material from the surface of the ground.

# Planting - General

#### Materials

25.12 (a) All plants, seeds etc. shall be true to species; plants shall be healthy and with the habit and size of the plant as specified. Plants and seeds shell be free from pests, diseases, parasites, discoloration and damage. All plants shall be obtained from an approved cultivated source and not from the wild (unless translocation has been specified)..

- (b) All plants shall have a vigorous fibrous root system, Plant Habit and have a well developed shape for the species as specified.
- (c) In the event of there being a discrepancy between the botanical name, English common name, and the Chinese common names as specified, the botanical name shall prevail.

Plant name

25.13 Parasitic plants shall not be present in any form on any plant Parasitic Plants or soil brought to the Site. Plants and soil found to be affected by parasitic plants shall be removed from Site and destroyed.

25.14 Containers shall be rigid or semi-rigid receptacles with Containers drainage holes at the base in which plants are delivered and grown for not less than three months in the growing season before planting. All containerized plants shall not have pot bound roots.

- 25.15 Rootballs comprise the firmly bound fibrous root and soil of Rootballs a plant. At all times and in particular during delivery, the root balls shall be retained in tact.
- 25.16 Substitution of specified plants materials shall not be Substitution permitted except under special circumstances and with prior approval.
- 25.18 (a) Mulch shall be composed of an organic material such Mulch as leaf litter, tree bark, wood shavings, decomposed sawdust, chopped tree fern, with a nominal size of 2 – 20mm or other approved material.
- 25.26 Container grown and containerized stock shall be well Containerized watered before dispatch from the nursery and shall remain in plants the containers until required for transplanting.
- 25.27 Protect all plants from mechanical damage, excessive (a) transpiration and wilting during lifting, transportation and storage. Also protect all plants against excessive sunlight, wind and drought and in case of heavily foliaged plants, i.e. most shrubs and especially evergreens, prevent overheating with its resultant loss Replace any damaged plant material of foliage. rejected by the Supervising Officer (SO) or, with approval, carefully prune and dress wounds with an approved sealant.

Protection during transit

Stand upright on level ground those trees and shrubs (b) which are not immediately planted in their permanent positions or in an agreed position on site. Protect and maintain in good condition.

Storage of plant material on site

If trees and shrubs shall be delivered to the site with shoots and branches bundled, remove all tving materials immediately to prevent heating up and subsequent defoliation.

(c) Cut loose and remove all wrapping materials round Before planting roots and containers. Trim any broken roots with clean secateurs or sharp knife. Dress wounds with approved sealant.

25.28 (a) Plants shall be thoroughly soaked with water for Planting several hours before planting. The soil in the container or rootball shall be moist and cohesive. Containers or rootball wrapping shall not be removed until the time of planting and the rootball shall not be disturbed by loosening or breaking. Each plant shall be placed upright in the pit and set at the same level as planted in the nursery or container.

Fabricated soil mix as Clause 25.01(e), or topsoil as (b) Clause 25.01(d), shall be deposited and compacted in layers around the rootball until level with the surrounding ground in such a manner that the rootball is not disturbed. Plants shall be watered to soak the rootball and the fabricated soil mix or topsoil, immediately after planting.

Backfilling

Apply slow release fertiliser as Clause 25.02(f) to Fertiliser (c) plants with the fabricated soil mix or topsoil at the following rates:

200gm per heavy standard tree and large palm 100gm per standard tree, medium palm and conifer 50gm per seedling or whip tree, small palm and conifer, shrub, climbing plant and bamboo 25gm/m<sup>2</sup> for grass areas, ground covers and herbaceous plants

All plants shall be planted in their final position within After planting (d) two days of delivery to site to avoid wilting. Immediately after planting and before mulching, thoroughly water all plants to settle the soil around the Continue watering as necessary so as to roots. maintain a moist soil at all times during the Contract Period and Establishment Period.

- (e) After planting and watering, spread level and firm mulch 75 mm thick on areas where the gradient is less than  $10^{\circ}$  and within 72 hours after planting.
- (h) Pit plant seedlings, small shrubs and whips and herbaceous plants by excavating pits 100 mm larger all round than the root ball and 50 mm deeper than the rootball depth. When planting on a slope, measure the depth from the lowest adjacent ground level on the downward side of the pit. Prepare soil backfill material by adding and mixing in, pre-planting slowrelease fertilizer in the quantities as specified in Clause 25.28(c) and backfill into the pit to a level in order to maintain the original relationship between the root collar of the plant and the soil surface. Remove the plant from its container and set upright in the pit and backfill with fabricated soil mix, or topsoil, firming first with the knuckles and then finally with the feet. Remove surplus and unsuitable material from site.

Pit planting of seedlings, small shrubs, whips, climbers and herbaceous plants

Mulching

(k) Dig tree pits to size as specified below:

(a) Light standard, standard

small conifers, small palms

Type of Tree/Palm/Conifer	Size

750mm F x 600mm deep

(b) Heavy standard, large 900mm F x 750mm palms, large conifers deep

(c) Semi-mature trees 1500mm F x 900mm deep

Soak the rootball of the plant, and fork over the base of the tree pit to a depth of 150mm. Prepare backfill material by adding and mixing in fertilizer in the quantities as specified in Clause 25.28(c) with fabricated soil mix or topsoil. Backfill the base in layers and firm in, adjusting the planting depth so that the soil is level with the root collar of the plant. Remove the rootball covering, place the tree, adjust orientation of the crown and check planting depth, adjusting as necessary. Fix vertical stakes or guying stakes or as specified. Tie tree to stakes or secure trees with guys. Backfill in layers, firming in each layer with heel and water thoroughly. Adjust tree ties or guy wires as necessary. Mulch to a depth of 75 mm, water again and continue to water as required.

Pit planting of light standards, standard, heavy standard, semimature trees, conifers, palms (l) Pits excavated for planting on or adjacent to slopes Pit safety shall not be left open during wet weather.

# Planting – Trees, Seedlings, Whips

Materials

- 25.32 (a) Seedling trees shall be trees grown from seed and to Seedling trees have all the following characteristics:-
  - (i) aged between 1-2 years old;
  - (ii) a single slender stem;
  - (iii) a well developed vigorous root system;
  - (iv) a height over 200 mm and less than 600 mm;
  - (v) grown in a container not less than 75 mm diameter and 200 mm deep minimum
  - (b) Whips shall have all the following characteristics:- Whips
    - (i) aged between 2-3 years old;
    - (ii) a single central stem and elementary branch system;
    - (iii) a well developed vigorous root system;
    - (iv) a height over 600 mm and less than 1750 mm;
    - (v) grown in a container not less than 125 mm in diameter and 200 mm deep.
  - (c) Light standard trees shall have all the following Light standard characteristics:-
    - (i) a height over 1600 mm and less than 2000 mm from the root collar to the lowest branch;
    - (ii) total height above soil level: between 2400 mm 3000 mm;
    - (iii) a well developed vigorous root system;

- (iv) strong, upright and reasonably straight unpruned stems of diameter over 25 mm to 40 mm measured at a point one metre above the root collar, well furnished with side branches with good symmetry;
- (v) the diameter of the rootball shall be not less than 300 mm and with a depth not less than 300 mm;
- (vi) grown in a container not less than 350 mm in diameter and 400 mm deep.

# Planting – Ground cover, Shrubs, Climbers and Herbaceous Plants

#### Materials

- 25.34 (a) Ground cover plants shall have all the following Ground cover characteristics:-
  - (i) well developed vigorous shoots, no fewer in number than specified;
  - (ii) a well-developed vigorous root system;
  - (iii) minimum dimensions not less than those specified, with a tolerance which shall not deviate from the specified dimension by more than + 50mm;
  - (iv) grown in a container not less than 125 mm in diameter and 150 mm deep
  - (b) Small shrubs are seedlings or rooted cuttings and shall Small shrubs have all the following characteristics:-
    - (i) a minimum of three vigorous shoots with a well balanced shape, and bushy habit;
    - (ii) a well-developed vigorous root system;
    - (iii) minimum dimensions not less than those specified, with a tolerance which shall not deviate from the specified dimension by more than + 100mm;
    - (iv) grown in a container not less than 125 mm in diameter and 150 mm deep

- Large shrubs are transplanted seedlings or rooted Large shrubs (c) cuttings and shall have all the following characteristics:
  - a minimum of five vigorous shoots with a well balanced shape, and bushy habit, to produce a diameter 2/3 of the height;
  - (ii) a well-developed vigorous root system;
  - (iii) minimum dimensions not less than those specified, with a tolerance which shall not deviate from the specified dimension by more than + 200mm:
  - (iv) grown in a container not less than 200 mm in diameter and 250 mm deep
- (d) Climbers shall have all the following characteristics:-Climbers
  - a minimum of four vigorous, one year old shoots not less than 500 mm long except when specified otherwise;
  - (ii) a well-developed vigorous root system;
  - (iii) grown in a container not less than 125 mm in diameter and 150 mm deep

### Workmanship

25.36 Pit plant ground cover, small shrubs, climbers and Planting ground herbaceous plants in pits shall be 100 mm greater than the diameter of the rootball or root spread and 50 mm deeper than the rootball depth

cover, small shrubs, climbers and herbaceous plants

- 25.37 Pit plant large shrubs and bamboos in the pits shall be 150 mm greater than the diameter of the rootball and 50 mm deeper than the depth of the rootball.
- Planting large shrubs, and bamboos
- 25.39 Apply a 25 mm deep layer of mulch to the surface of (a) all ground cover areas, immediately after watering in.

Mulching to ground cover

Apply a 50 mm deep layer of mulch to the surface of (b) all shrub, climber and bamboo areas, immediately after watering in.

Mulching to shrubs, climber bamboos and palms

Adapted from General Specification for Building 1993: Section 25 Landscape

# 5.4 Implementation and Maintenance

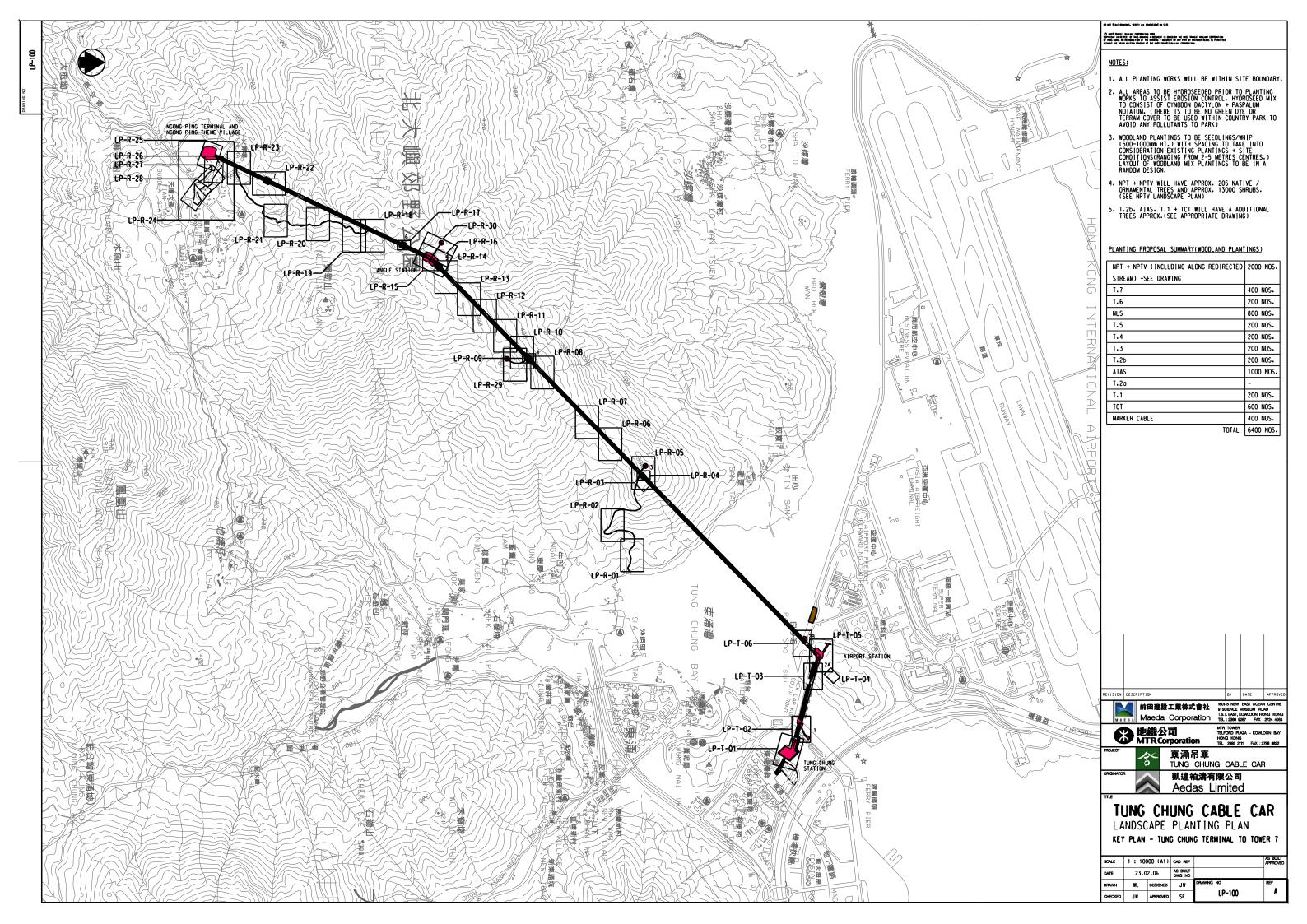
The landscape and compensatory planting within the Country Park will be carried out in rainy reason around May 2006.

Maintenance should include watering during dry periods and during the first two months after planting. Compensatory planting will be subject to a maintenance period of 12 months after completion.

The Qualified Ecologist should identify during maintenance the requirements on-site to ensure the establishment and survival of plants which may be necessary, for example, measures such as fencing should be applied if planted species are being destroyed by domestic stock. In addition to the regular watering requirement, the key anticipated maintenance works to be carried out, all as agreed with and instructed by the Qualified Ecologist, will include:

- Monthly inspection to establish the need for weeding, pruning, securing stakes and ties, replacing dead plants and treatment of insect or fungal infestations;
- Periodic inspection, as required, after heavy rain and/ or wind to firm up loosened plants;
- Monthly cutting of grass during the wet season and every other month during the dry season;
- Two applications of fertilizer, one during early spring and one during late summer;
- One operation before the end of the maintenance period to thin the plants to prevent overcrowding, aerate all shrub areas and, after weeding, top up mulch to all shrub areas.





#### Notes:

- All planting works to be laid out in a random design to complement surrounding enironment.
- Plant spacings will vary from 2-5 metres depending on species and existing habitat.
- Each planting area will be taken on its own merit to decide appropriate design with existing environmental conditions. ie. Rock outcrops. Streams. Slopes etc...
- 4. ALL AREAS TO BE HYDROSEEDED PRIOR TO PLANTING WORKS TO ASSIST EROSION CONTROL. HYDROSEED MIX TO CONSIST OF CYNODON DACTYLON + PASPALUM NOTATUM. (THERE IS TO BE NO GREEN DYE OR TERRAM COVER TO BE USED WITHIN COUNTRY PARK TO AVOID ANY POLLUTANTS TO PARK)

#### Plant schedule:

#### Woodland mix 'A'

Shrubs Botanical Name Size(mm)Ht		
Ga	Gordonia axillaris 500-1000m	
Scs	Schima Superba 500-1000mm	
R†	Rhodomyrtus tomentosa 500-1000m	
Ms	Melastoma sanguineum 500-1000m	
Bf	Baeckea frutescens	500-1000mm
Dp Dicranopteris pedata		500-1000mm

#### Woodland mix 'B'

Sd	Sapium discolor	500-1000mm
Rc	Rhus chinensis	500-1000mm
Ls	Litsea rotundifolia	500-1000mm
Mch	Machilus chinensis	500-1000mm

#### Woodland mix 'C'

Mc	Melastoma candidum	500-1000mm
Mpan	Microcos paniculata	500-1000mm
Ri	Rhaphiolepis indica	500-1000mm
Ss	Sapium sebiferum	500-1000mm
Sh	Schefflera heptaphylla	500-1000mm
Mp	Mallotus paniculatus	500-1000mm

Woodland plantings		Quantities
NPT + NPTV		2000 nos.
Tower-7		400 nos.
Tower-6		200 nos.
Nei Lak Shan-Angle Station		800 nos.
Tower-5		200 nos.
Tower-4		200 nos.
Tower-3		200 nos.
Tower-2b		200 nos.
Airport Island-Angle Station	1	1000 nos.
Tower-2a		-
Tower-1		200 nos.
Tung Chung Terminal		600 nos.
MARKER CABLE		400 nos.
	Total	6400 nos.

REVISION DESCRIPTION BY DATE APPROVED

O mest tamel i aujume constant par 1950 (principal in activit of the Sannier, edicated is doub or het mej, binejal danjum egotybalish or also alpe, ad defaulte life of het diamet - objected to me faul or makejo mens is planning under the region mixture cological of les mest beneght believe (expensalle).

> 凱達柏濤有限公司 Aedas Limited

TUNG CHUNG CABLE CAR

前田連設工業株式會社 9 solevic Museum ROAD T.S.T. East, KOMOON HONG KONG TEL: 2899 9287 FAX: 2724 4084

地鐵公司 MTRCorporation

LANDSCAPE PLANTING PLAN

東涌吊車

GENERAL NOTE

SCALE N.T.S.		CAD REF		AS BUILT APPROVED	
DATE	FEB. 2006		AS BUILT DWG NO		
DRAWN	WL	DESIGNED	JW	DRAWING NO LP-101	REV
CHECKED	JW	APPROVED	SF	[F-101	A

