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Date 27 April 2004

Our Ref 020031/PSW/MF/J/02907

Assessment and Audit Group  
Environmental Protection Department  
27/F Southom Centre  
130 Hennessy Road  
Wanchai, Hong Kong

Attn.: Mr. Charles Pang

Dear Sirs,

**Agreement No. CE 93/2001 (GE)**  
**Proposed Landslide Mitigation Works at Pak Sha Wan**  
**Revised Landscape Proposal for Environmental Permit No. EP-183/2004**

We refer to our landscape proposal submitted on 2 April 2004 and your comment of 22 April 2004. Please find attached 3 hardcopies and one electronic copy of the revised landscape proposal, as required under the Special Conditions 2.2 of the Environmental Permit, for your approval.

**General Background**

Subsequent to the 1998 natural terrain landslide, the site area was covered with landslide debris. Currently, the site is partly chunamed and some of the areas still remain as disturbed terrain. Landscaping works proposed for the project aim to enhance the aesthetic aspect of the current site, harmonize the appearance of the proposed Containment Structure (CS) with the existing surrounding natural environment and to minimize the visual impact to receivers at visual sensitive locations as shown in the attached Figure 1.

**Long-Term Maintenance of Landscape Works**

- 1 The species in the revised planting schedule mainly comprise native species exist in the present hillside area in the vicinity of the site. Therefore, the plants should be largely self-supporting and would only require minimal maintenance after establishment period.
- 2 The completed works would be handed over to the maintenance department, Lands Department, who will carry out annual Routine Maintenance Inspection of the completed works. Routine maintenance of landscape softworks (e.g. plant cutting, watering) and hardworks (e.g. structural repair of planters, tree rings) would be carried out by LandsD if found necessary.

I. P.2

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ISO 9001 : 2000  
Certificate No: CC554

**A. External Appearance**

The following landscaping works will be applied to the side walls of the Containment Structure (CS):-

- (i) Open bottomed planters 0.5 m wide x 0.5 m deep and with stone pitching finishes will be constructed along the outer perimeter of the side walls of the CS and planted with groundcovers (*Lantana camara*) and climbers (*Ficus pumila* and *Lantana sellowiana*). The climbers will grow adhering to the side walls, hence shielding off the concrete structure and providing greening effect to the side walls;
- (ii) Heavy standard trees (*Delonix regia*) will be planted along the toe of the side walls of the CS.; and
- (iii) The side walls of the CS will be painted in lizard grey colour (BS Colour Code: 10B21) to tone with the existing rock.

Existing vegetated slope on the hillside of the CS would be reinstated with the following hydroseeding mix:-

Species	% by Rate
<i>Lantana camara</i>	35%
<i>Cynodon dactylon</i>	10%
<i>Paspalum notatum</i>	10%
<i>Axonopus Compressa</i>	5%
<i>Lolinm perenne</i>	5%
<i>Chloris gayana</i>	5%
<i>Eragrostis curruila</i>	5%
<i>Eremochloa ophuroides</i>	5%
<i>Eremochloa ciliaris</i>	5%
<i>Cenchrus ciliaris</i>	5%
<i>Digitaria barbata</i>	5%
<i>Zoysia matrella</i>	5%

As demonstrated in the attached sections (Sections 1-1, 2-2 and 3-3) and sketches of elevation view (Elevation View No. 1), visual impact to visual sensitive receivers from various locations at the downside of the CS (Figure 1) is minimized.

**B. Internal Appearance**

Uphill of the CS is a densely vegetated natural hillside and there are no walking trails in the nearby area above the CS. In addition, the internal appearance of the CS is not visible from any location from the downhill side of the CS. It is considered that the internal appearance of the CS, including the inner face of the side walls and the floor slab inside the CS, can only be visible from airplane in close range.

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The inner face of the side walls will be painted in lizard grey colour (BS Colour code : 10B21) and the floor slab of the CS will be covered with random patterned subangular to subrounded cobbles/boulders to minimize the visual impact.

We trust that the above proposal is acceptable to you and look forward to receiving your approval. Should you require further discussion on the issue, please contact our Ms Celia Choy on 2894-5858 or the undersigned at 2894-5755 / 9191-6011.

Yours faithfully,  
Fugro (Hong Kong) Limited

A handwritten signature in black ink, appearing to read "Stellan Sum".

Stellan Sum  
Project Co-ordinator

SS/SMC/syy

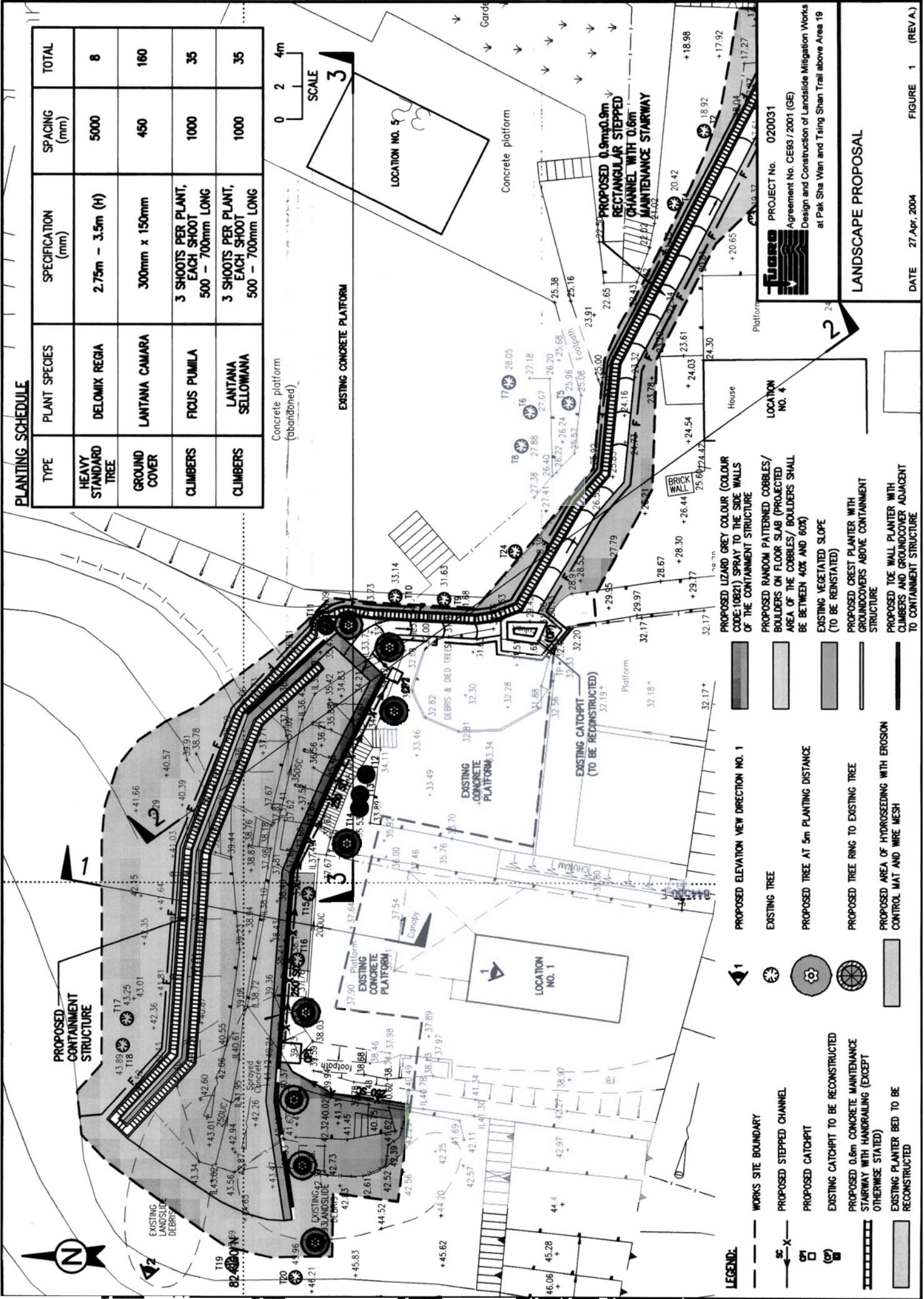
CGE/Planning - Ms Florence Ko (w/e)

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## FIGURES

**PLANTING SCHEDULE**

TYPE	PLANT SPECIES	SPECIFICATION (mm)	SPACING (mm)	TOTAL
HEAVY STANDARD TREE	DELOMIX REGIA	2.75m - 3.5m (H)	5000	8
GROUND COVER	LANTANA CAMARA	300mm x 150mm	450	160
CLIMBERS	FIGUS PUMILA	3 SHOOTS PER PLANT, EACH SHOOT 500 - 700mm LONG	1000	35
CLIMBERS	LANTANA SELLOWIANA	3 SHOOTS PER PLANT, EACH SHOOT 500 - 700mm LONG	1000	35



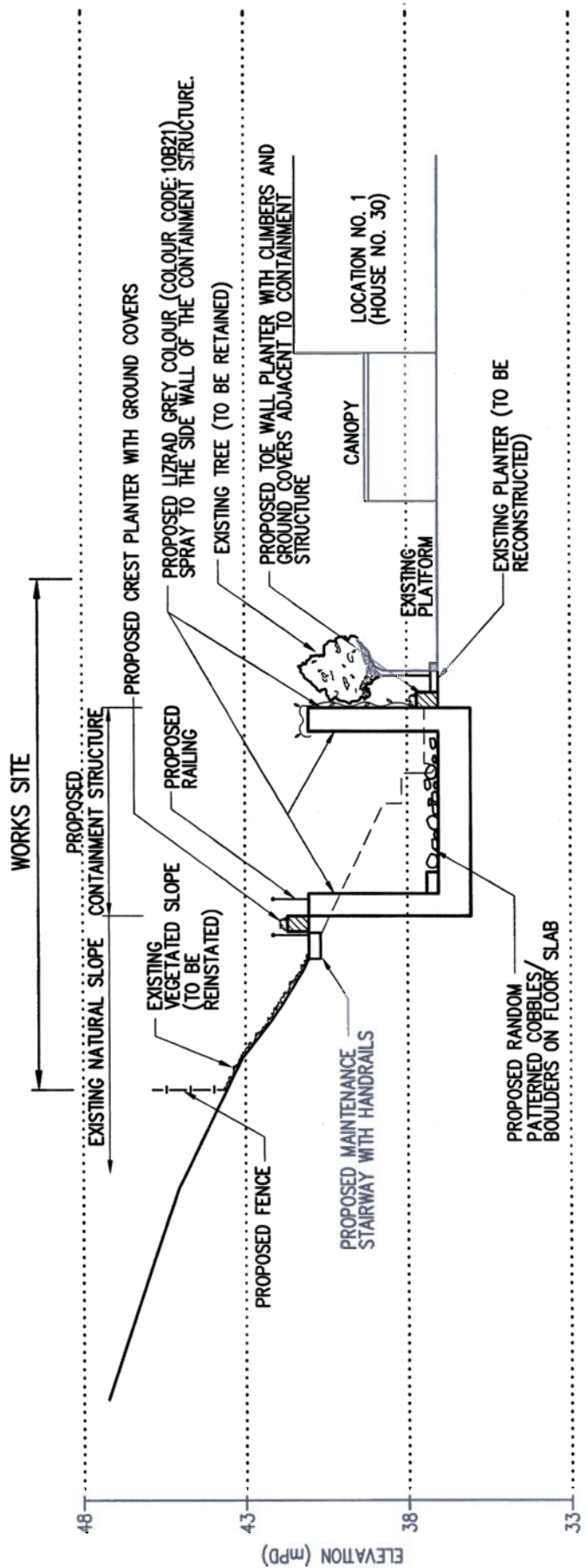
**PROJECT No. 020031**  
 Agreement No. CE83/2001 (GE)  
 Design and Construction of Landslide Mitigation Works  
 at Pak Sha Wan and Tsing Shan Trail above Area 19

**LANDSCAPE PROPOSAL**

DATE 27.Apr. 2004  
 FIGURE 1 (REV.A)

- LEGEND:**
- WORKS SITE BOUNDARY
  - PROPOSED STEPPED CHANNEL
  - PROPOSED CATCHPI
  - EXISTING CATCHPI TO BE RECONSTRUCTED
  - PROPOSED 0.6m CONCRETE MAINTENANCE STAIRWAY WITH HANDRAILING (EXCEPT OTHERWISE STATED)
  - EXISTING PLANTER BED TO BE RECONSTRUCTED
  - PROPOSED ELEVATION VIEW DIRECTION NO. 1
  - EXISTING TREE
  - PROPOSED TREE AT 5m PLANTING DISTANCE
  - PROPOSED TREE RING TO EXISTING TREE
  - PROPOSED AREA OF HYDROSEEDING WITH EROSION CONTROL MAT AND WIRE MESH
  - PROPOSED LIZARD GREY COLOUR (COLOUR CODE:10821) SPRAY TO THE SIDE WALLS OF THE CONTAINMENT STRUCTURE
  - PROPOSED RANDOM PATTERNED COBBLES/BOULDERS ON FLOOR SLAB (PROTECTED AREA OF THE COBBLES/BOULDERS SHALL BE BETWEEN 40% AND 60%)
  - EXISTING VEGETATED SLOPE (TO BE REINSTATED)
  - PROPOSED CREST PLANTER WITH GROUNDCOVERS ABOVE CONTAINMENT STRUCTURE
  - PROPOSED TOE WALL PLANTER WITH CLIMBERS AND GROUNDCOVER ADJACENT TO CONTAINMENT STRUCTURE





# SECTION 1 - 1

1 : 200



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## SECTION 1 - 1

DATE 27, Feb, 2004

FIGURE 2 (REV. A)

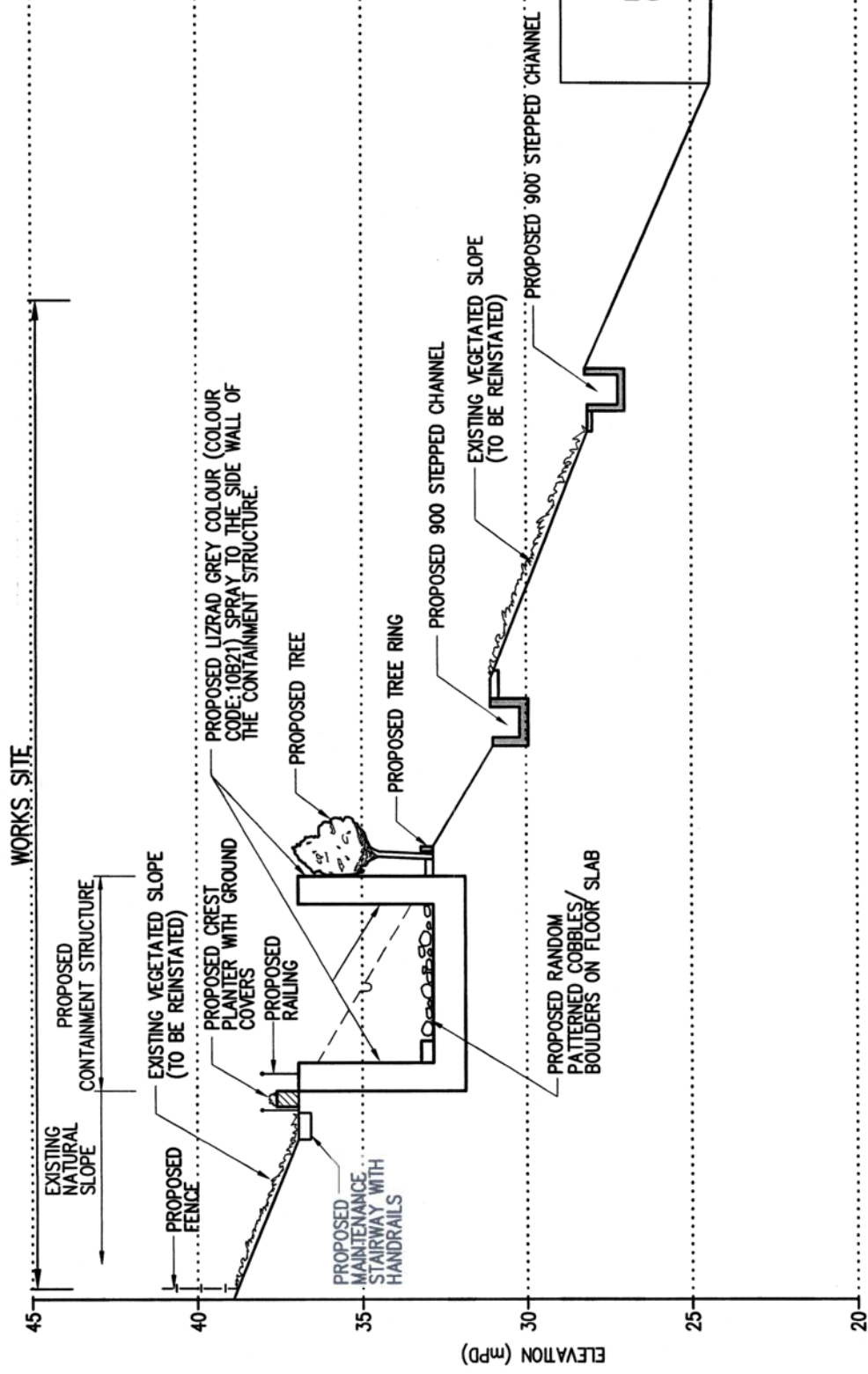
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PAJ FILE NO. : C:\geowork\020031 Pak Sha Wan\landscape\Proposals\2004-04\020031-FIG03 (P&H)LP-2004-001.dwg



# SECTION 2 - 2

1 : 200

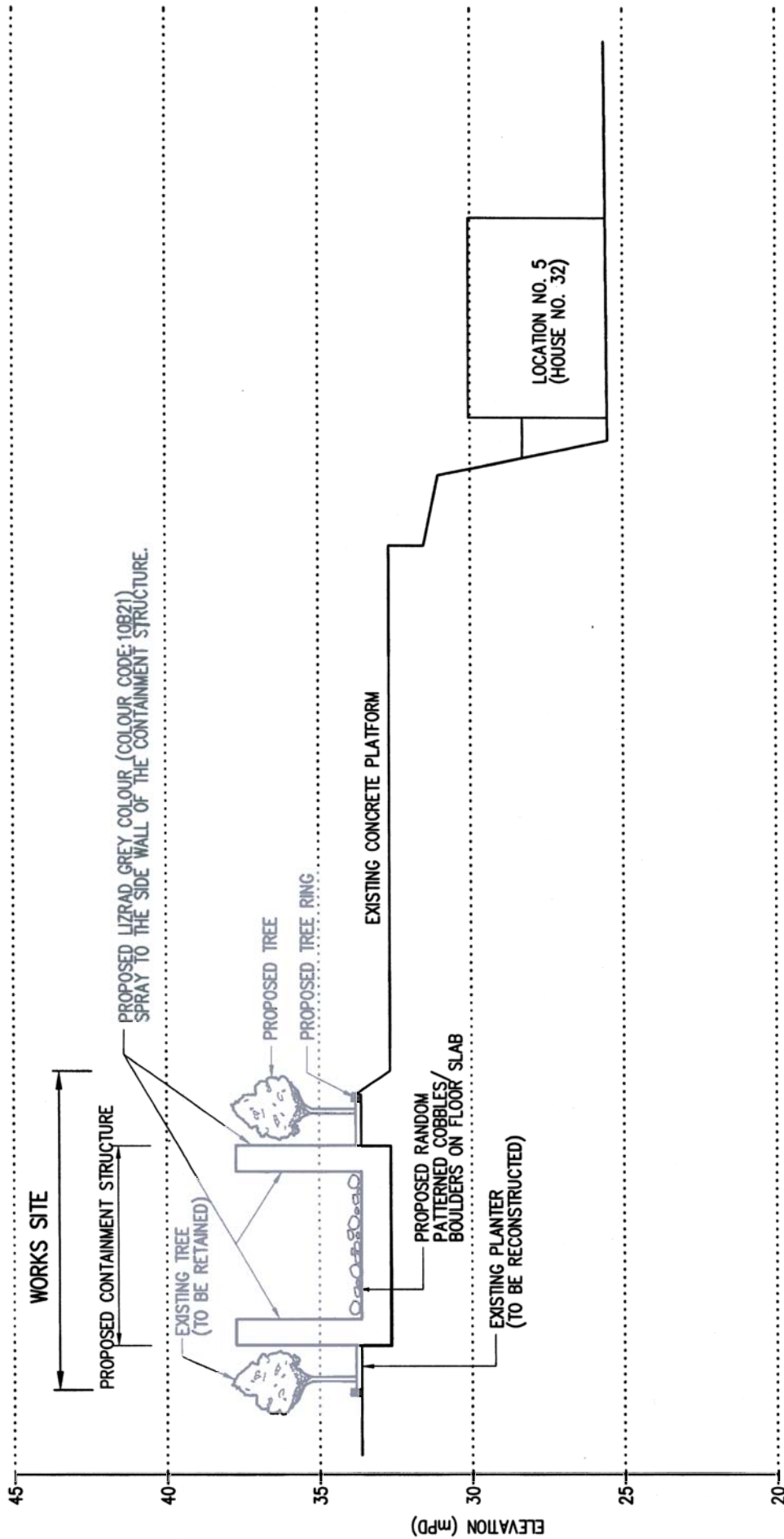


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## SECTION 2 - 2

DATE 27, Feb, 2004

FIGURE 3 (REV A)



**SECTION 3 - 3**  
1 : 200



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**SECTION 3 - 3**

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FIGL 4 (REV. A)



## ELEVATION VIEWS



PROPOSED HEAVY STANDARD TREES

TOP OF CONTAINMENT STRUCTURE

EXISTING TREES

EXISTING TREES



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**Elevation View No. 1**  
N.T.S.

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