

2 PROJECT DESCRIPTION AND ACTIVITIES

2.1 Site Location and Description

- 2.1.1 Telegraph Bay (Kong Sin Wan) is located on the western side of Hong Kong Island (Figure 2.1) and is to be developed with luxury housing which is compatible with existing private development in this area. This forms part of the Government's commitment regarding Flats Production Efforts, as well as the policy under the Territorial Development Strategy Review.
- 2.1.2 Telegraph Bay occupies a reclaimed bay with high landscape quality comprising wooded valleys slopes, streams and armoured sea frontage. The site consists of two areas. The larger northern section (proposals for 3 housing sites and 1GIC site) is located at the foot of the western slopes of Hong Kong Island, on the reclaimed site of Telegraph Bay. The southern section (1 housing site) occupies the prominent spur of headland between Waterfall Bay and Telegraph Bay.

2.2 Project Background

- 2.2.1 The Pok Fu Lam Moratorium (1972) which was implemented to control the amount of traffic generated within the area, prevented the modification of existing leases to allow more intensive development and the sale of new land of development.
- 2.2.2 Reviews of the moratorium (1977,1985) indicated that restrictions could be relaxed further to permit construction of Route 7 – a coastal road from Kennedy Town to Aberdeen and improvement works at identified junctions along Pok Fu Lam Road, respectively. The moratorium was relaxed in 1985 to permit construction of new public housing at Wah Kwai Estate since much of the traffic generated was respected to use the Aberdeen Tunnel.
- 2.2.3 Telegraph Bay was reclaimed in 1989 but development was delayed due to the lack of infrastructure (water supply, sewerage, drainage) and road access onto the site, as well as the moratorium. The Study Brief states that to enable early development of Telegraph Bay the moratorium should be lifted subject to a comprehensive study.

2.3 Construction Works

- 2.3.1 The proposed development includes site preparation and surcharging, the construction of District Distributor Roads D1 (which includes both the Northern and Southern Access Roads) and D2, three individual housing sites (covering approximately 13 Ha), one site for G/IC use (3.7 Ha) and a fourth housing site on a raised cut platform to the south of the site (3.5 Ha). Figure 2.2 details the development locations. The four housing sites are intended to provide approximately 2,600 flats of high class housing, with an average flat size of 200m².
- 2.3.2 Development proposals for the G/IC site include the provision of a school and a sewage treatment facility.

- 2.3.3 In summary the construction activities (not in order of occurrence) associated with the Telegraph Bay development are likely to comprise the following:
- mobilisation of equipment and labour;
 - site clearance and surcharging works followed by excavation and removal of excess surcharging material;
 - site excavation works;
 - construction of roundabout and slip road;
 - site road finishing/paving;
 - jetty construction;
 - realignment of stream;
 - foundation, pile cap and superstructure construction;
 - laying of drainage and utilities; and
 - landscaping and environmental abatement works.
- 2.3.4 The proposed layout area for the advance works, i.e. surcharging works, are detailed within Figures 2.3a and 2.3b. The advance works will comprise of pre-drill and installation of band drains and importation and disposal of surcharge material (sand and public fill). Areas where the main infrastructure and construction works will take place are presented within Figure 2.4.
- 2.3.5 The jetty / quay deck will be constructed first before the commencement of the major construction work in reclaimed land. It is intended to provide a barging point for the marine vessels during the main construction work phase. There is no planned future usage of the jetty /quay and hence they will be removed once the road access is available.
- 2.3.6 Prior to the completion of the road access, off-site works areas (OSWA) are required either for the materials transit (for TBD main construction) or as a temporary site office (during northern access road construction period). The provision of these areas enable the contractors involved in TBD works to store materials delivered by road for transit to Telegraph Bay. No construction work will be carried out at these areas. The proposed off-site works areas are as follows:
- WA1 – Area on seaward side of junction between Sandy Bay Road and Sha Wan Drive (Figure 2.5), for land access only; and
 - WA2 – Seafront area at Lee Nam Road between Ap Lei Chau Sewage Treatment Plant and Wang Kwong San & Quarry Ltd. (Figure 2.6) for marine and land access.
- 2.3.7 Subject to the objection from WSD and DLO/HKS, the use of the WA1 area will be limited to the provision of land access and temporary site office to the contractor for the Northern Access Road construction. The estimated vehicle movement will be approximately 18 trips/day.
- 2.3.8 WA2 site will be granted to the TBD infrastructure work contractor enabling him to gain marine access to the site. Materials delivered by road will be stored temporary in this area before onward delivery to Telegraph Bay by barges. No construction work is to be undertaken inside this area. The OSWA operation related vehicle movement along Lee Nam Road has been limited to 54 trips/day to avoid causing any problem to the local traffic.

2.4 Proposed Property Development

- 2.4.1 The property development layout utilized for this assessment is based on the preferred option as recommended in Working Paper LWP2 and endorsed at Engineering Working Group Meeting No. 3 in August 1998. The preferred option layout was refined utilizing a discussion paper on draft Master Layout Plan to produce the final Master Layout Plan which was endorsed at the 4th Steering Group Meeting in January 1999 (Figure 2.7). In order to arrive at this development layout, significant planning constraints had to be considered. These are highlighted by the statutory planning context for the Telegraph Bay Study Area as described in the Pok Fu Lam (HKPA 10) Outline Zoning Plan (S/H10/5) approved on 22 July 1994. Under the OZP each development site has a Maximum Plot Ratio, height restrictions with respect to building height (i.e., number of storeys) and a designated maximum site coverage. These are further exacerbated by the requirements of the land disposal programme for the residential sites which does not allow for the rezoning of any of the sites. In terms of population and flat number/size, the development must accommodate 2600 flats of an average size of 200 m². However, the requirement to integrate the district distributor roads (D1 & D2), as well as the landward shift of the conforming Route 7 alignment, makes the accommodation of 2600 flats of this size virtually impossible to achieve when meeting all other conditions. Given the limited options for building height, setback and orientation, coupled with the constraints imposed by the number and size of the flats and the alignment of the required roads, the resulting options were all very similar. Traffic noise contours, detailing free-field noise levels at differing elevations were produced for the conforming alignment of Route 7 and Roads D1 & D2 and provided to the urban design team. And although the preferred option was chosen based on its ability to respond to the significant planning requirements, building setback/orientation was adjusted as much as possible to respond to the potential traffic related noise/air quality impacts. In fact, the environmental and urban design teams continued to interface closely throughout this EIA and where detailed modelling indicated that changes in building positioning/orientation would result in reduced levels of impact, these were adopted.
- 2.4.2 The proposed property development occupies 4 sites (Site 1, Site 3, Site 4 & Site5). Site 1 has seven triaxially shaped towers ranging between 24 and 36 storeys and situation upon a 12m high podium. Site 3 has three 12 storey cruciform towers and four 12 storey triaxially shaped towers. These towers are not situated upon a podium. Site 4 has 3 cruciform blocks ranging between 18 to 32 storeys, and 7 triaxially shaped blocks which range between 30 and 40 storeys. All blocks are located upon a 12m high podium. Site 5 will have a curvilinear arrangement of five 14 storeys towers, as well as 6 triaxially shaped towers ranging between 16 and 40 storeys. All towers on Site 5 are situated upon 12m high podia.
- 2.4.3 Within the G/IC area at Telegraph Bay, it is initially proposed that the new Sewage Treatment Works (STW) is built with a CEPT facility to ensure that water quality associated with the temporary submarine outfall into Lamma Channel is to an acceptable standard. A new primary school is also proposed to be built in the G/IC area in parallel with the STW for use when the TBD housing development is occupied in 2004/5.
- 2.4.4 When the SSDS Stage III/IV project is completed and commissioned in 2006/7 then the discharge from the TBD STW will be diverted into the SSDS deep sewer and the CEPT part of the plant will be decommissioned and removed. The land regained after the removal of the CEPT facilities is proposed to be utilised along with other available land within the G/IC to provide a site for a second school, this being a private school. The proposed final layout of the G/IC area with two schools and a STW is shown on attached Figure 2.8.

2.5 Limit of the Study Area

- 2.5.1 The Study Area of the EIA Study includes the immediate site area and extends beyond the proposed works areas to include the assessment boundaries of 300 meters from the site for the noise assessment and 500 metres for air quality.
- 2.5.2 The ecological impact assessment considers off site and on site impacts, as appropriate, depending on the habitats. The water quality assessment considers specific downstream and marine environment. Where appropriate, indirect impacts have been considered on a regional basis.

2.6 Programming

- 2.6.1 The advance works at Telegraph Bay are anticipated to commence in October 1999 and the land available for the main construction works by July 2001. The infrastructural works are scheduled for completion within 4 years for the Telegraph Bay construction and within 4 years for the construction of Route 7. The infrastructural works are anticipated to commence in January 2001. Site works for Route 7 are expected to commence in August 2003. The proposed construction programme is presented in Appendix 2.1.

Figures



Telegraph Bay Development Area

EAST LAMMA CHANNEL

AGREEMENT NO. CE 9297 INFRASTRUCTURAL WORKS FOR HOUSING DEVELOPMENT AT TELEGRAPH BAY
 ENGINEERING FEASIBILITY STUDY

Site Location Plan

Rev.	Description	Approved	Date



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DEVELOPMENT
DEPARTMENT,
HONG KONG
HONG KONG ISLAND
AND ISLANDS
DEVELOPMENT OFFICE

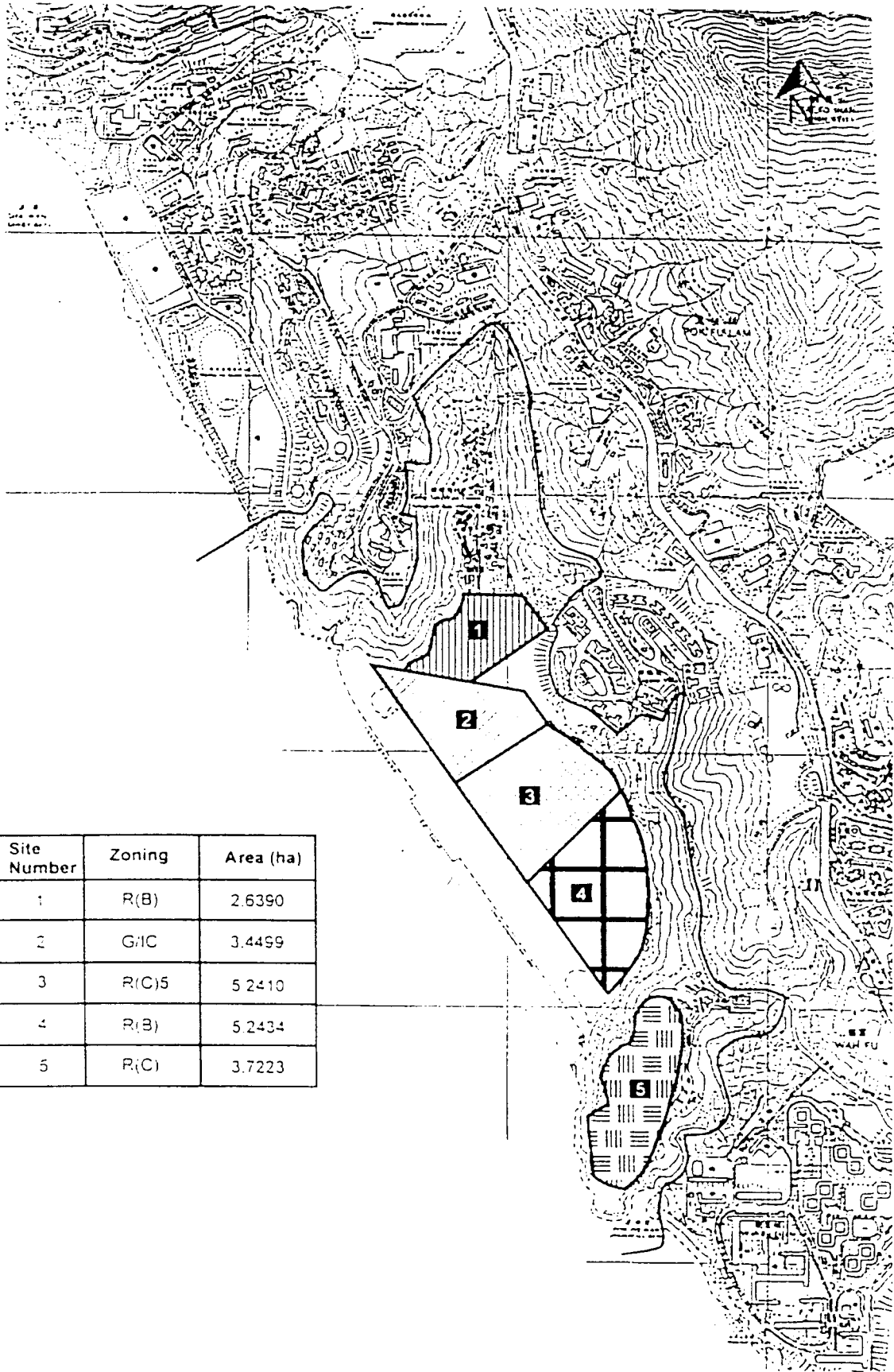


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Figure No. 2.1

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Site Number	Zoning	Area (ha)
1	R(B)	2.6390
2	G/IC	3.4499
3	R(C)5	5.2410
4	R(B)	5.2434
5	R(C)	3.7223

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Development Site Locations



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Figure No. 2.2

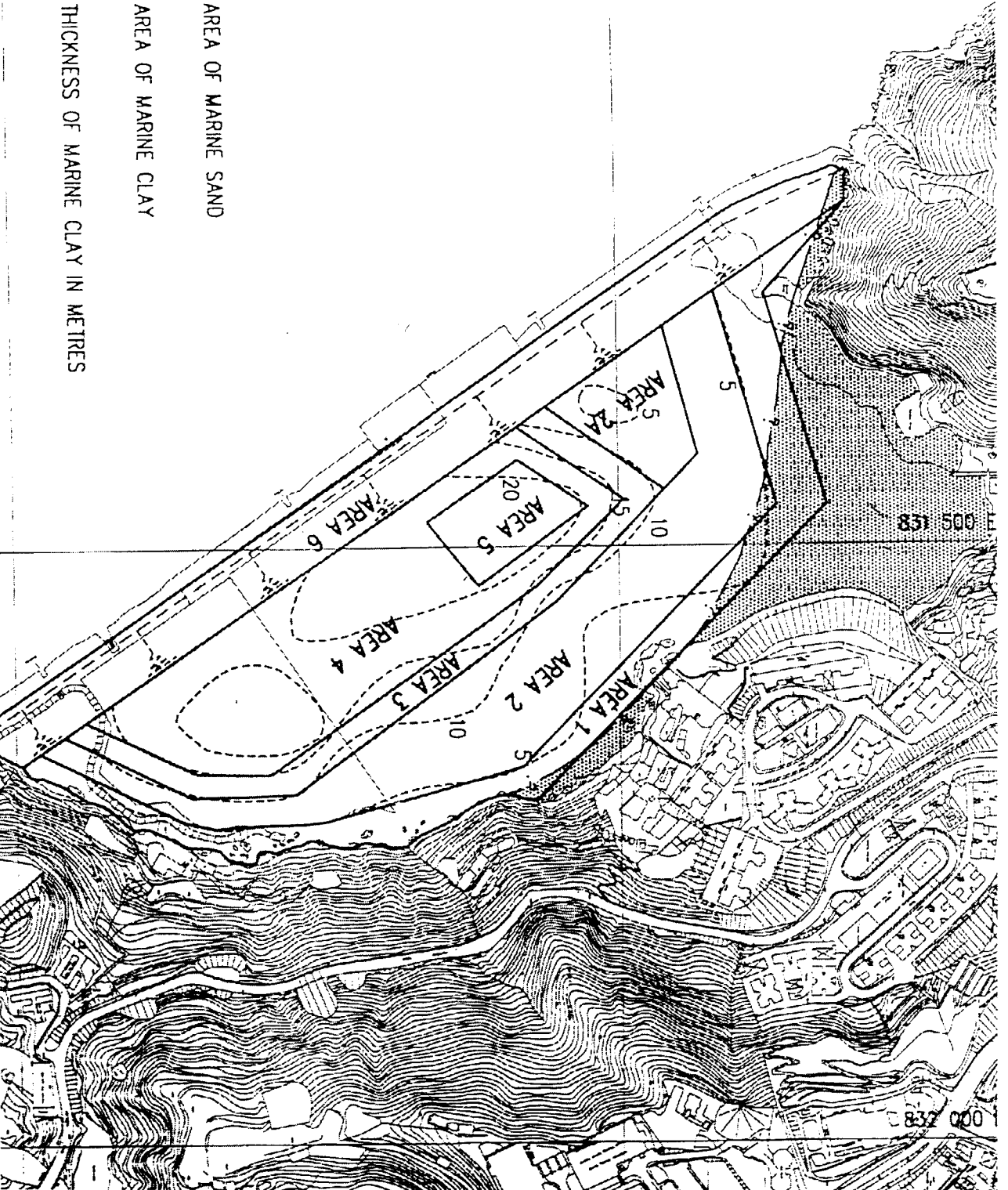
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Checked By _____ Date Jan 99

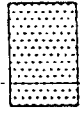

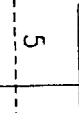


831 000 E

813 500 N



LEGEND

-  AREA OF MARINE SAND
-  AREA OF MARINE CLAY
-  THICKNESS OF MARINE CLAY IN METRES

813 000 N

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Sub-Areas of Reclamation

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Figure No. 2.3A

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Checked By

Date Feb 99

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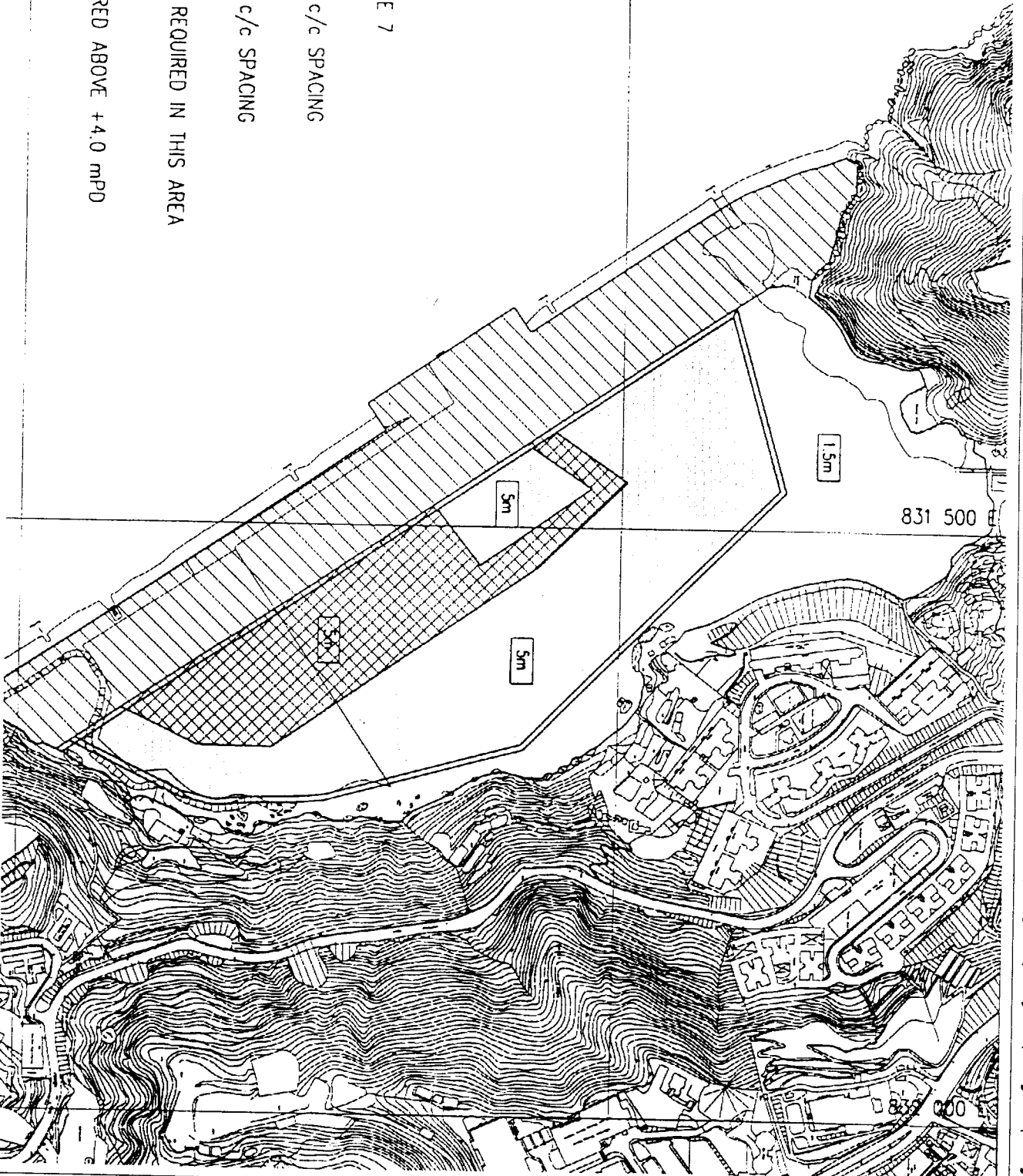
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
831 000 E

313 500 N

831 500 E



LEGEND

-  RESERVED AREA FOR ROUTE 7
-  VERTICAL DRAINS AT 1.7m c/c SPACING
-  VERTICAL DRAINS AT 2.0m c/c SPACING
-  VERTICAL DRAINS ARE NOT REQUIRED IN THIS AREA
-  5m SURCHARGE HEIGHT MEASURED ABOVE +4.0 mPD

313 000 N

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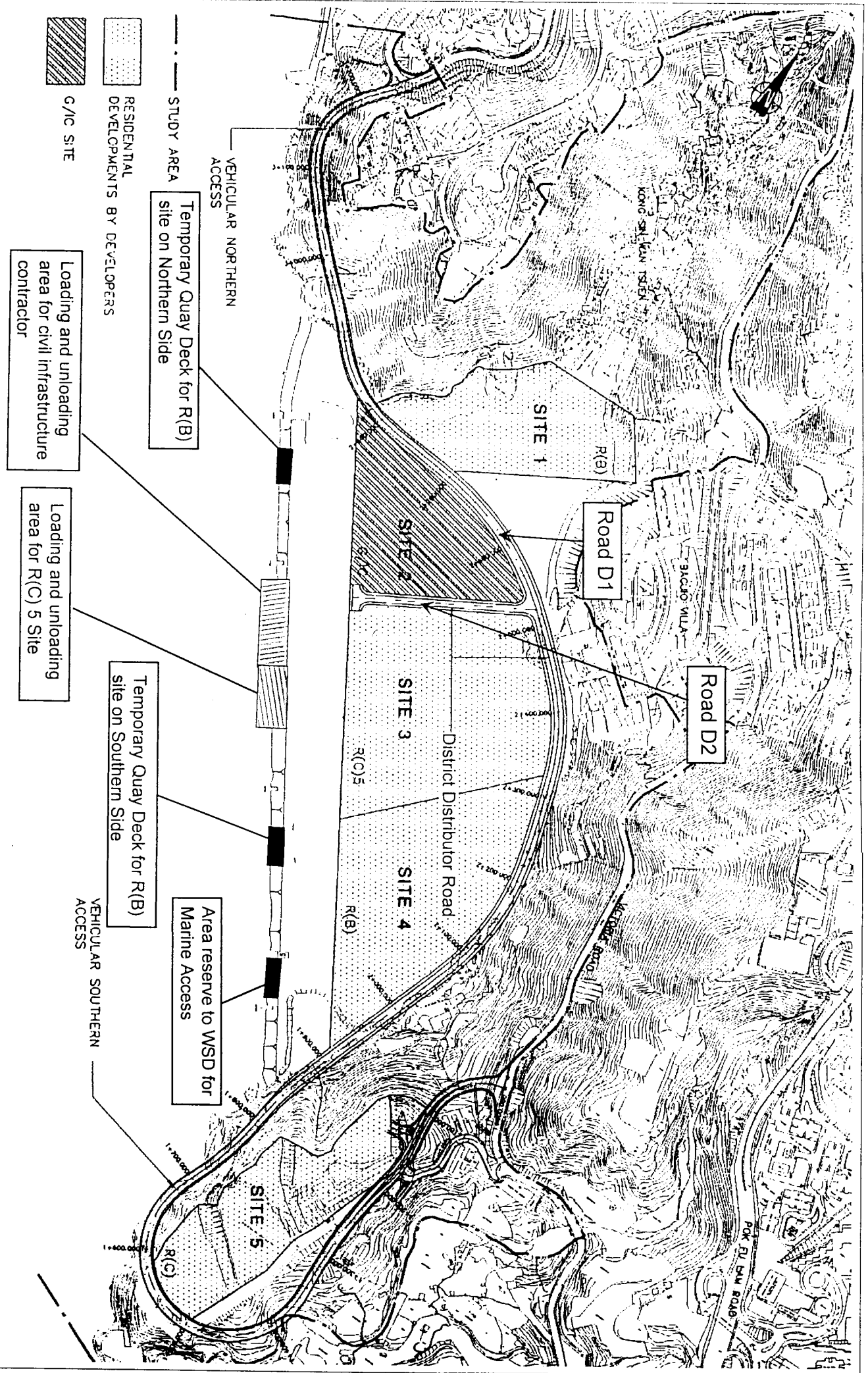
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- ENGINEERING FEASIBILITY STUDY

Layout Plan of Proposed Ground Treatment Works

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Figure No.	2.3b	Rev.	
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- STUDY AREA
- RESIDENTIAL DEVELOPMENTS BY DEVELOPERS
- G/IC SITE

Loading and unloading area for civil infrastructure contractor

Loading and unloading area for R(C) 5 Site

Temporary Quay Deck for R(B) site on Southern Side

Area reserve to WSD for Marine Access

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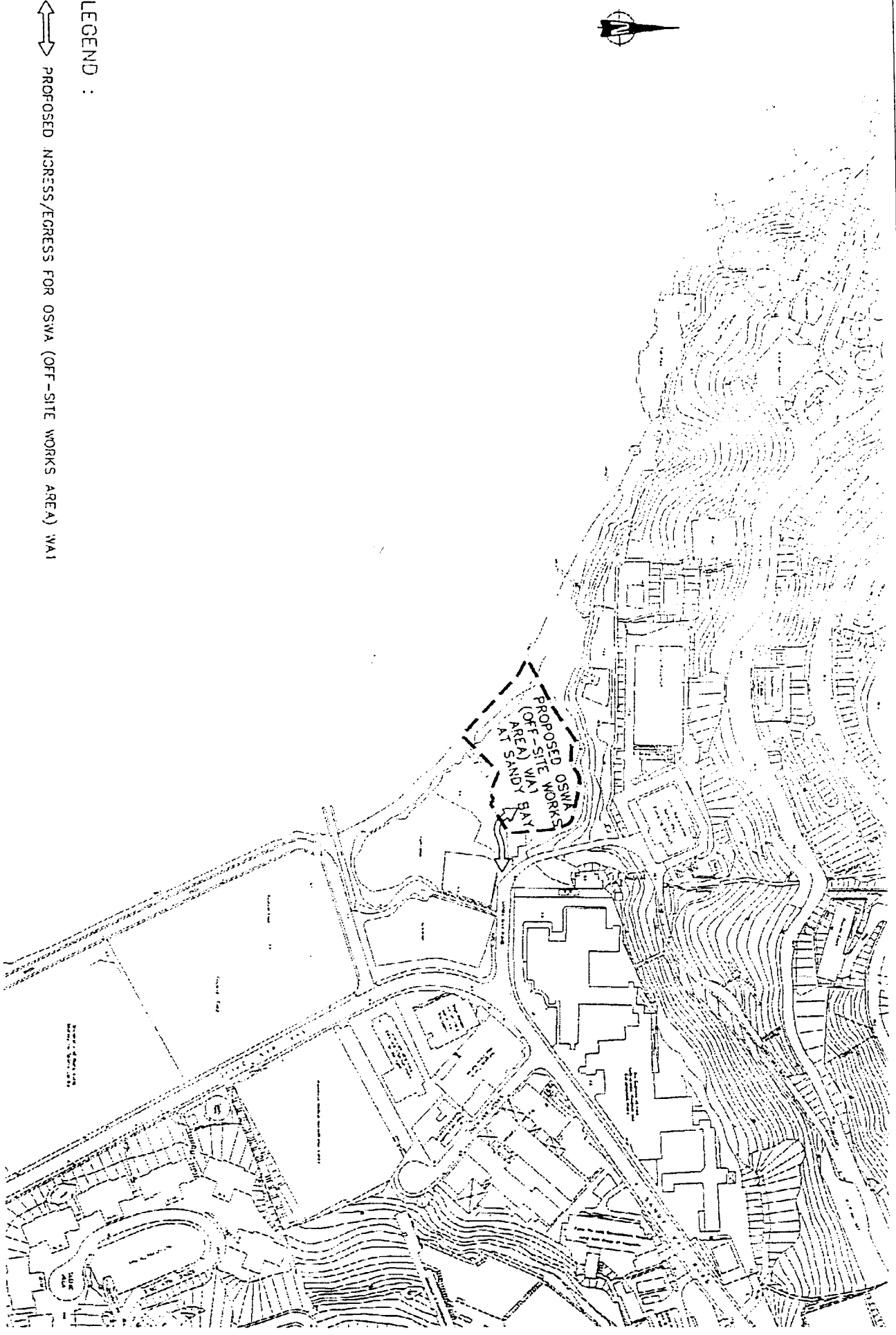
Main Infrastructure Works - Layout Plan

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Figure No.	2.4	Rev.	
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LEGEND :

↔ PROPOSED NGRESS/EGRESS FOR OSWA (OFF-SITE WORKS AREA) 'A1

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 ENGINEERING FEASIBILITY STUDY

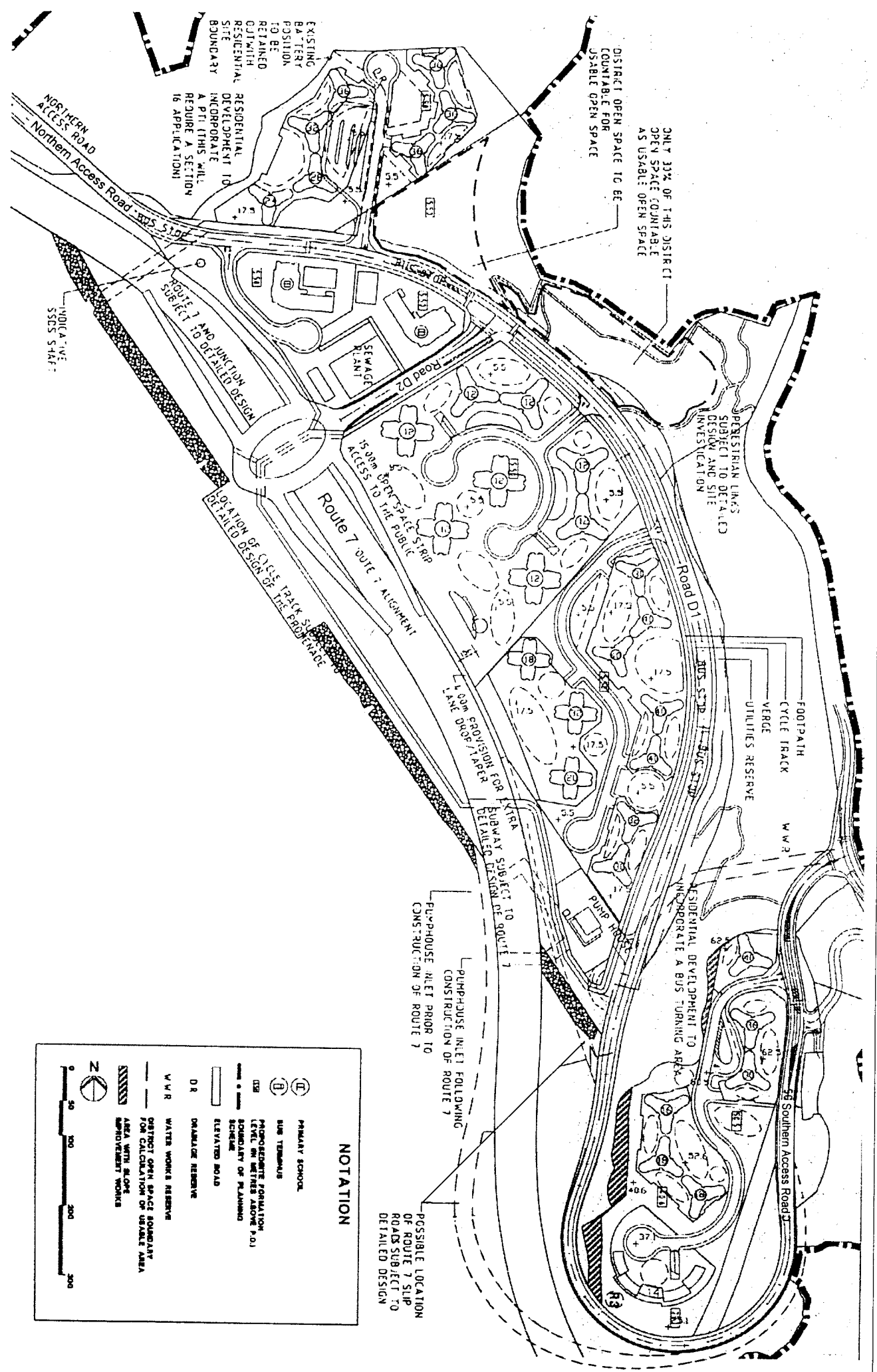
Off-Site Works Area W/1



Figure No. 2.5

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	Jan 99

Rev



NOTATION

- (I) PRIMARY SCHOOL
- (B) BUS TERMINUS
- (P) PROPOSED/EXISTING PAVEMENT LEVEL OR FINISH ABOVE P.O.I
- (---) BOUNDARY OF PLANNING SCHEME
- (=) ELEVATED ROAD
- (---) OR DRAINAGE RESERVE
- (---) WATER WORKS RESERVE
- (---) DISTRICT OPEN SPACE BOUNDARY FOR CALCULATION OF USABLE AREA
- (---) AREA WITH ALDORE APPROVED WORKS

Scale: 0 50 100 200 300

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Proposed Future Property Layout (2 Schools at G/I/C Site)

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