

**Proposed Extension of Public Golf Course
at Kau Sai Chau, Sai Kung**

Project Profile

**Prepared in accordance with the
Environmental Impact Assessment Ordinance
(Cap 499)**

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1. BASIC INFORMATION

1.1 Project Title

The title of this Project is:

“Proposed Extension of Public Golf Course at Kau Sai Chau, Sai Kung.”
hereafter referred to as the “Project”.

1.2 Purpose and Nature of Project

In late 1995 the first 18-hole golf course on Kau Sai Chau was opened to the public followed one year later by the second 18-hole golf course, driving range and associated support facilities. Since its opening patronage of the golf courses has increased year on year. There is currently 100% utilisation of tee-times on weekends/public holidays and 85% on weekdays with good weather (average utilisation is 72% per year). The existing courses are reaching capacity while public demand continues to increase. The Project Proponent has therefore decided to make a proposal to enlarge the existing facility into an area that, like the original facility, is a site degraded by former use as an artillery firing range. The Project will provide additional golfing capacity for the existing public golf course on Kau Sai Chau and the opportunity will be taken to expand the public recreational uses on the island by adding opportunity for low intensity recreational activities. The Project comprises the following:

- Construction of a third 18 hole public golf course on the east side of the island, south of the existing golfing area;
- A new reservoir on the east side of the island to deliver a self contained supply of irrigation water for the new course; and
- Expansion of public recreational facilities to meet increasing demand, comprising:
 - Floodlighting of the first nine holes (the “front nine”) on the existing southern course;
 - Linkage and upgrading of hiking trails;
 - Recreational area adjacent to the ferry pier;
 - Hostel to accommodate “early bird” golfers.

1.3 Name of the Project Proponent

The Project Proponent is **The Hong Kong Jockey Club**. The Project will be operated by Jockey Club Kau Sai Chau Public Golf Course Limited who are responsible for the operation of existing courses.

1.4 Location and Scale of Project and History of Site

The location of the Project is Kau Sai Chau, Port Shelter, Northeast New Territories east of Sai Kung, shown in Figure 1.1. The Project is more closely defined as being on the east side of Kau Sai Chau immediately south of the existing public golf course.

The Project site is currently unzoned and comprises an approximately 300 m wide and 1.5 km strip of undulating scrubland. The site is bounded to the west by steep rugged uplands (upto 210 m) and incised valleys and to the south and east by steep rocky coastline. North of the site is the existing Kau Sai Chau Public Golf Course that occupies the northern half of the island.

To supply irrigation water to the Project it has been determined that additional storage capacity is required and a new reservoir will be needed on the inlet at the east side of the island.

A beachside recreation area is proposed on the west side of the island north of the ferry pier. The objective is to provide a recreation area for family members who are not playing golf. The site is not proposed as a bathing beach.

Historically Kau Sai Chau was used as a military firing range and on the Project site there is still visible evidence of this former activity where the thin scrubland cover has been exposed and there has been extensive washout.

The existing (36 hole) golf course was the subject of an Environmental Impact Assessment (EIA), although this was before the enactment of the EIAO and the project is classed as being “exempted” under the EIAO i.e. work carried out before the EIAO. The EIA identified environmental mitigation for incorporation into the design and operation phases of the project, including Environmental Monitoring and Audit (EM&A) requirements for construction and operation phases and a “Turf Grass Management Plan”. There has been ongoing EM&A since the course was opened to the public.

1.5 The Type of Designated Project Covered in the Profile

The Project is a Designated Project according to **Item O1** of Part I, Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO), since it is an **outdoor golf course**. The Project Profile is defined under Annex 2 of the Technical Memorandum of the EIAO (Project Profile for Material Change to a Designated Project). The extension of the existing 36 hole golf course on the east side of Kau Sai Chau can be considered as self contained for construction activity but cumulative impact of the three courses for turfgrass management and increased patronage must be considered for the operation phase.

Other features within the project that have Designated Projects status are:

- Item I1b – Modification of streams that discharge within 300 m of a sensitive site (in this case fish culture zone at Tin Cham Wan – currently abandoned).
- Item C6 – A dam more than 10 metres in height (20 m dam needed to provide irrigation water).
- Item 4 – Reuse of treated effluent from a treatment plant (capacity increased to 200 m³/day).

1.6 Name and Telephone Numbers of Contact Persons

Environmental Consultant	Project Proponent
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2. OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME

2.1 Planning and Implementation of the Project

The Hong Kong Jockey Club will develop the project and on completion hand over responsibility for its operation to the Jockey Club Kau Sai Chau Public Golf Course Limited. A consultancy team has been appointed to carry out a feasibility study and develop a detailed design. The consultancy team comprises architects, a specialist golf course designer, engineers, landscape architects and environmental consultants.

2.2 Project Time Table

A fundamental objective of the programme is to carry out bulk earthworks during the dry season. This approach will reduce the potential impact for bulk silty run off to enter marine waters on the east side of the island. The design will be finalised between January and May 2001. In order to carry out earthmoving activities in the dry season the project proponent proposes carrying out bulk earthworks in October to March. The golf course construction programme will last for approximately fifteen months, and the reservoir seventeen months.

2.3 Considerations on Programme Requirements and Interaction with Other Projects

The Project will be contained on the east side of the island of Kau Sai Chau. Certain elements of infrastructure support will be shared with the existing golf course facilities (administration, changing rooms, maintenance, water supply, treatment and disposal) and certain of these elements will be upgraded to provide additional capacity.

The golf course cannot proceed until an Environmental Permit is issued and the reservoir proposed on the east side of the Island will require gazettal under the Foreshore and Seabed Ordinance following the EIA process.

Artificial reef deployment sites are identified for Outer Port Shelter but are remote from the site.

The SENT strategy review has considered expansion of the recreation activities on Kau Sai Chau in the wider context of the SENT.

3. POSSIBLE IMPACT ON THE ENVIRONMENT

3.1 Overview of the Project

Based on experience gained during the construction and operation of the original course the current proposal includes measures in the design to avoid or minimise environmental impacts. Therefore, the Golf Course proposed differs from the existing courses in several fundamental areas:

- Following problems with silty water runoff during construction of the original golf course it is proposed that all bulk earthmoving works will be carried out in the dry season;
- To reduce the period when open earth is exposed, “turfgrass sods” will be used

during course establishment rather than growing from seed (the grass sods can be “rolled out” onto a prepared base);

- Movement of material will be contained in catchments. Wetland landscaping features (lakes / marshes) and the reservoir will be used as construction and operation run-off water retention and sediment settlement areas; and
- Players will use electric golf carts to move around the course (the provision of golf cart tracks rather than walking routes leads to reduced earthworks).

In considering potential impacts three principal elements are considered as illustrated in Figure 3.1. They are:

- Construction impacts of the Golf Course development
 - silty water run off to the marine environment; and
 - impact on habitat.
- Operation impacts of the Golf Course and associated development
 - Chemicals in run-off due to turfgrass management;
 - increased car parking in Sai Kung, vehicle and ferry usage;
 - increased use of existing infrastructure (solid and liquid waste);
 - new recreation area close to the pier; and
 - operation of floodlighting on nine holes of the existing course until 10.00pm.
- Construction and operation impact from the irrigation reservoir.

In the following sections the potential impacts are discussed under issue areas.

3.2 Fisheries

Construction phase impacts to fisheries could arise from silt-laden or contaminated runoff from works areas and reservoir construction.

Operation phase impacts to fisheries could arise from chemical-contaminated runoff from managed turfgrass areas and from increased ferry traffic.

3.3 Ecology

Construction phase impacts to ecology could arise from loss or disturbance of habitats and their associated flora and fauna; silt-laden or contaminated runoff from works areas; and disturbance to intact habitats from construction operations.

Operation phase impacts to ecology could arise from chemical-contaminated runoff from managed turfgrass areas; increased discharge of sewage effluent into waterbodies; increased ferry traffic; and disturbance to natural habitats from golf course users and turfgrass management.

3.4 Noise and Air Quality

Construction phase impacts could arise from the operation of construction plant, though it is noted that the golf course is remote from sensitive receivers and shielded by topography.

During earthworks blasting may be required to remove rock overburden. During the construction of the original course rock was removed by blasting, and mitigation measures were included to reduce noise and dust impacts.

Operation phase noise and air quality impacts are insignificant, confined to operation activities associated with turfgrass management (mowing, low intensity maintenance, etc.)

3.5 Contaminated Land

The site is undeveloped and there are no records that indicate that there is any source of contaminated material on the proposed site. The site is a former artillery range and development of the site will include removal of any unexploded shells.

3.6 Generation of Solid Waste

Current sources are packaging from the catering facilities and from maintenance activities at the existing course and occasional waste generated from building works. The current practices of collection, consolidation and removal to landfill will be followed. There will be a marginal increase in the generation of solid waste from the island.

3.7 Generation of Effluents

Effluent generated will be directed to the existing licensed Sewage Treatment Facility on the site. The facility will require extension to accommodate the additional flows. Treated effluent will be directed to the existing irrigation reservoir prior to use as irrigation water on the golf course.

3.8 Traffic Generation and Marine Traffic Movements

In relation to road traffic the issue is trip generation. The nature of golf course operation is to have a regular movement of users throughout the day; additional hourly trip generation will be minimal.

The existing ferry route will be maintained. The route has been revised over time, in consultation with Marine Department and concern groups (mariculture operators in the area).

3.9 Visual and Landscape Character

Kau Sai Chau is located within Port Shelter, and is thus a visually prominent feature of the local landscape, particularly from the eastern side of Clear Water Bay Peninsula northwards to the inlet for Hebe Haven, Sai Kung and Sai Kung East and West Country Parks.

Floodlighting of the first nine holes on the existing southern course has potential to adversely impact sensitive receivers within the visual envelope of Kau Sai Chau. The nine holes selected are on the east side of the island and there is topographic shielding between the illuminated area and sensitive receivers.

3.10 Cultural and Heritage Aspects

There are several identified heritage features on the island and most will not be impacted by the Project. The Project area on the east side of the island has not been the subject of any detailed archaeological survey although survey in the 1960s yielded stone artefacts.

3.11 Hazard to Life

The area proposed for the development is the site of a former artillery range. Since this activity ceased there has been no further survey and removal of unexploded material.

4. MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT

4.1 Existing and Planned Sensitive Receivers

Figures 4.1 and 4.2 give the locations of the sensitive receivers close to Kau Sai Chau and remote from the island.

Residential Development - On Kau Sai Chau itself the village of Kau Sai (south end of the island - Fig. 4.1) is shielded by topography from all project works and is over 1 km from the Project. The village on Yim Tin Tsai, north of the existing golf course is currently uninhabited (1.75 km Northwest of the Project Site) and screened from the Project by topography. Floodlighting is proposed on nine holes of the existing golf course. There is shielding topography to the south and south west but residents in an arc from Sai Kung (5 km to west) to the villages along the Tai Mong Tsai Road (2.5 km to north) could be affected (see Fig. 4.2).

Fisheries - There are four Fish Culture Zones (FCZs) around Kau Sai Chau (see Fig. 4.1). Two are close to the project site at Tai Tau Chau (F1) and Tiu Cham Wan (F2) (Tiu Cham Wan is currently abandoned but could be reactivated on application). The third at Kau Sai (F3) is remote from the project site (to the south west) and the fourth, Kai Lung Wan (F4) is on the west side of island but is susceptible to impact from ferry access and the proposed recreation area. Other fisheries resources that could be affected by project construction or operation include capture fisheries areas in Inner Port Shelter and gazetted Artificial Reef deployment sites in Outer Port Shelter.

Beaches - There are no gazetted beaches on Kau Sai Chau but several sandy beaches are popular at weekends (see Fig. 4.1). Only the beach at Kau Chung Wan (B1 - immediately south of the project site) is considered to be susceptible to impact from the project. Kau Sai Wan (B2 - south side of the island and west of Kau Sai Village), Pak Sha Tsui (B3 - west side of Kau Sai Chau) are remote to the project. There are gazetted beaches on the west side of Sharp Island (Kiu Tsui Chau) at Hap Mun and Kiu Tsui (see Fig. 4.2).

Cultural Heritage Sites There are five identified on the island (see Fig. 4.1). Rock carving on the headland north of the ferry pier (west side of the island) remote from Project (AF1). Two un-excavated Late Neolithic sites, one within the Project site on the east side of the island (AP2) and the second within the major valley on the west side of the island and remote from the Project (AP1). A Late Neolithic site behind the beach proposed for a recreation area, north of the existing ferry pier (AP3). The Hung Shing temple at Kau Sai village is physically separated from the project by topography (AF2).

4.2 Natural Environment

Kau Sai Chau is divided between the natural uplands of the southern half of the island and the modified landscape of the existing golf course in the north. The proposed development site will occupy a relatively flatter platform on the east side of the island. This area comprises the lower slopes of the steep upland and undulating / incised valleys characterised by naturally vegetated knolls.

The existing habitats of the Project area have been mapped from aerial photography validated by site visits undertaken in October and November 2000 and are shown on Figure 4.3. The island is steep and relatively dry. Outside the turfgrass and shrubland of the existing golf courses, the island is dominated by eroded badlands and scrub vegetation. Patches of shrubland occur where water is readily available, primarily along streams. Coastal waters near shore are generally degraded due to past erosion and possibly to Fish Culture Zone operation, but patches of coral persist in good condition at a few sites.

Ecological resources of interest on and around the site (see Fig. 4.1 and 4.3) include:

- a marsh/pond complex at the north edge of proposed golf course, which harbours dragonflies of conservation interest, waterbirds and amphibians (M);
- a well-vegetated stream catchment on western Kau Sai Chau, which supports dragonflies, amphibians, birds and freshwater fish (remote from site and not not impacted by development) (S1);
- streams on the central / southern section of the site; some are in poor condition due to erosion from firing range damage, but the structure of others is reasonably intact (S2 and S3);
- small patches of mangroves in inlets on the eastern side of the island, including two stands planted as compensation for mangrove loss during construction of the original golf courses (MG3);
- hard coral communities at Kap Lo Kok, east Kau Sai Chau (Figure 4.3); and
- protected plant species, including Bamboo Orchid *Arundina chinensis* and New Year Flower *Enkianthus quinqueflorus* found near ravines across the island's uplands not affected by development.

5. ENVIRONMENTAL PROTECTION MEASURES TO BE IMPLEMENTED

In planning of the golf course, lessons learned for the development of the earlier course have been incorporated (see Fig. 3.1).

5.1 Earthworks

During construction the main concern for fisheries and the marine environment is silty water run-off. The design proposes (1) dry season for earthworks (reduce silty run-off); (2) "turfgrass sods" rather than planting (silty run-off reduced by reducing period that

bare ground is exposed and construction period reduced); (3) containment of cut / fill within construction catchments and use of permanent wetland features (lakes, marsh and reservoir) as settlement areas; and (4) balance of cut/fill quantities to avoid the need for import/export of material.

The remoteness of the site will mitigate many of the potential noise impacts during construction. Dust will be generated during earthworks and standard mitigation methods will be employed (coverage, spraying, etc). The EIA will identify areas of potential impact identify mitigation and include this within an Environmental Monitoring and Audit Manual for the project.

5.2 Fisheries

In order to promote healthy plant growth and to limit the spread of invasive species chemical preparations will be used. On the existing course most runoff is directed to the reservoir and no build up of chemical residues has been detected. Ongoing EM&A has not detected chemicals attributable to golf course maintenance in receiving waters. In addition, the existing Kau Sai Chau golf courses management regime is to minimise chemical usage and this is enshrined in the “Turfgrass Management Plan”. Environmental Monitoring and Audit has detected no incidence of chemicals traceable to golf course operation in receiving waters. A new “Turfgrass Management Plan” will be produced for the new course.

5.3 Ecology

The golf course layout will avoid most identified sensitive areas such as intact stream and riparian zones and natural coasts. Buffer zones will be delineated to separate areas worthy of conservation from areas to be developed for golf.

During operation the golf course will build on the turfgrass management regime that is used on the existing golf facilities, which has proven successful in minimizing escape of turfgrass chemicals to the outside environment. This will safeguard ecological conditions in streams, constructed wetlands and coastal waters.

The proposed reservoir site at the eastern inlet will remove the transplanted mangrove area and the site will have to be relocated.

5.4 Traffic Generation and Marine Traffic Movements

Golf courses operate by having a regular movement of users throughout the day i.e. a finite number of players who can play at any one time¹. The current dedicated parking

¹ The interval between groups of players (The *Tee-time*) is currently set at 8 minutes. This allows almost 8

facility at Sai Kung comprises a covered and open deck. Only the lower deck is fully utilised at weekends i.e. there is sufficient capacity in the upper deck to satisfy increased usage. In relation to pressure on the existing traffic system in Sai Kung and environs, the additional hourly trip generation is minimal and will be spread through the day to suit the uniform tee-off programme rather than occurring during morning and evening peaks.

The existing ferry route will be maintained. The existing route satisfies the requirements of Marine Department and mariculture operators. The current route passes to the south of Sharp Island and speed limits are imposed close to the Kau Sai Chau jetty to minimise impact on the FCZ at Kai Lung Wan. Increased usage caused by the proposed development will be met, if found necessary, by using a larger boat size rather than increasing ferry frequency.

5.5 Solid Waste Management Measures

The existing arrangements of collection, consolidation, encapsulation and removal to landfill will be continued.

5.6 Effluents and Runoff Management

The capacity of the existing sewage treatment works will be increased to 200 m³/day. Effluent will continue to be directed to the reservoir on the existing course. Ongoing EM&A has not detected chemicals attributable to turfgrass management in receiving waters. The majority of runoff from the new course will pass to the proposed reservoir or wetland landscaping features for storage and use in the irrigation programme.

5.7 Landscape

The project provides opportunity to revegetate the large landslip areas, together with the areas outside the fairways and greens, and also regrade currently silted streams.

5.8 Visual

The site is located to the eastern part of the main ridgeline running north-south across the island. This ridgeline, which will not be disturbed during the construction, will screen the views of the proposed golf course from all areas to the west. There are no fixed sensitive receivers to the east.

During construction these views are likely to experience major impacts due to the earthworks and exposure of soils. On establishment of the course and revegetation of all areas, these impacts are likely to reduce significantly.

5.9 Cultural and Heritage

“starts” per hour. If four players are assumed this could generate upto 32 users /hour.

The potential Neolithic site within the project area will be the subject of survey in the spring dry season 2001. The recreation area proposed north of the existing ferry pier will include survey and salvage if required. A trail to the rock carving north of the ferry pier will be added to aid access.

6. USE OF PREVIOUSLY USED EIA REPORTS

6.1 Reports Issued

The Environmental Studies for the golf course constructed on the north end of the island were carried out before the implementation of the EIA Ordinance. However the studies were submitted to Government and discussed by the Advisory Committee on the Environment (ACE). The endorsed report was titled: Kau Sai Chau Development EIA (Final Report, March 1994) by AXIS Environmental Consultants Ltd. for the Royal Hong Kong Jockey Club. This EIA covered construction and operation of the existing public golf courses, driving range and ancillary facilities (e.g. administration building, maintenance facilities and ferry service).

An Additional Ecological Survey Report was submitted in July 1994 to provide further survey data and clarification on outstanding ecological issues.

An operations manual titled: Hong Kong Golf Course Handbook: Environmental Considerations for Design, Construction and Operation by AXIS Environmental Consultants Ltd. (July 1994) included the “turfgrass management plan”.

Construction and operation phase Environmental Monitoring and Audit (EM&A) has been carried out covering the period August 1994 to January 1999. The report documents are titled: Environmental Monitoring and Audit (EM&A) reports for Kau Sai Chau Development, by AXIS Environmental Consultants Ltd./Hyder Consulting for the Royal Hong Kong Jockey Club/Jockey Club Kau Sai Chau Public Golf Course Ltd.

The work to January 1999 completed the agreed EM&A requirement for the project. However, the Jockey Club Kau Sai Chau Public Golf Course Ltd. has continued monitoring of water quality and Ecology. The following report has been produced: Hong Kong Jockey Club Kau Sai Chau Public Golf Course - Ecological Monitoring Report. July 1999 to June 2000, by Ecosystems Ltd. for the Jockey Club Kau Sai Chau Public Golf Course Ltd.

6.2 Confirmation of Impacts Predicted, Public Consultation

The existing golf facility on the island has been in operation since 1996. An objective was to incorporate environmentally friendly design characteristics into the project and to operate with a minimum of environmental impacts. The design was adjusted to

incorporate protection of mangrove at Kwat Tau Tam and included mangrove replanting exercises to mitigate loss of habitat.

The sensitive marsh area in the east of the original course (northern end of the new proposal) was preserved and protected. The ponds that form an ornamental feature on the course have, over time, created new micro-habitats. Ongoing Environmental Monitoring and Audit indicates that the Turfgrass Management Plan has been successful in avoiding migration of suspended solids, pesticides and fungicides offsite during operation.

During the environmental impact assessment studies for the original golf course development the project proponent consulted with fisheries groups in the area, presented the project to the Advisory Council on the Environment and to LegCo. Since opening of the Golf course there has been ongoing informal consultation with local fisheries groups and the District Board.

The Project Proponent is already engaged in consultation and dialogue with Government Departments, local interest groups and Green conservation groups over the Project proposals.

6.3 Opportunities

Operation of the existing golfcourse has reduced the incidence and area of hill fire damage on the island. Irrigation drift and runoff have led to the development of a denser and taller shrub community edging the golf course compared with much of the island, where habitat succession is generally limited by freshwater availability and hillfire. This, together with the maintenance of existing lentic wetlands and creation of new ones (lakes, ponds and marsh), has enhanced the diversity of habitats and biota on the island.

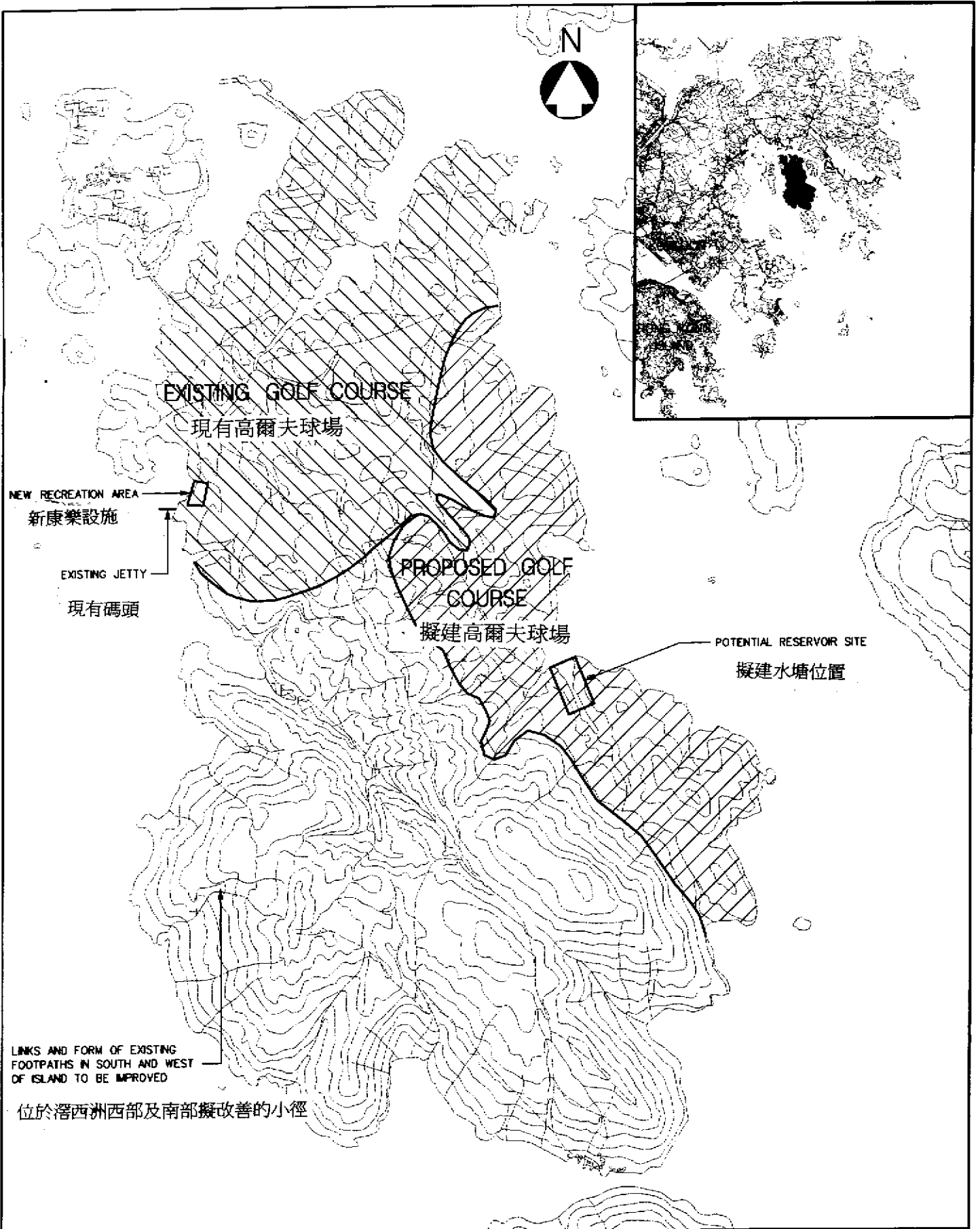
Development of the east side of the island will allow the deeply scarred areas of hillside (washouts) to be restored. This will directly enhance the value of these habitats. It will also reduce erosion and sedimentation from the site into streams and coastal waters over the long term, indirectly increasing the value of these habitats. Restoration of some currently degraded streams will also be possible during golf course design and construction.


The development, once completed, will preserve the coastline on the east side of the site in perpetuity.

The proposals to increase usage of the hiking trails will allow a wider section of the community to experience wild areas of Hong Kong and elements of Hong Kong's cultural heritage.

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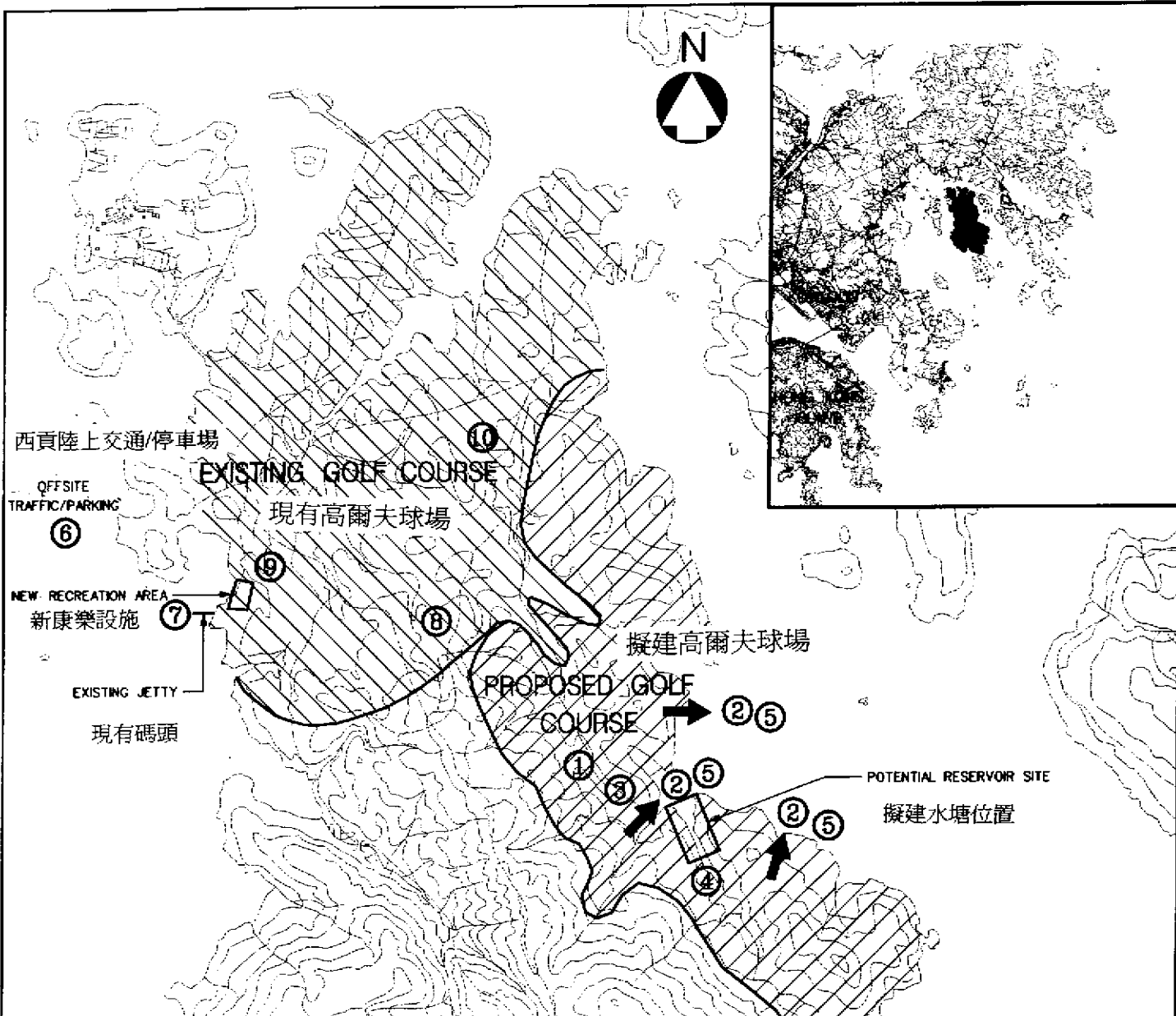
FIGURES



 <p>The Hong Kong Jockey Club</p>	<p>PROPOSED EXTENSION OF PUBLIC GOLF COURSE AT KAU SAI CHAU, SAI KUNG</p> <p>西貢滯西洲公眾高爾夫球場擬建擴建工程</p>		Figure No. 1.1	Revision -
	<p>PROJECT LOCATION AND KEY FEATURES</p> <p>工程位置圖</p>		Reference -	File Name 3822100201-1.DGN
			Prepared HH	Checked AJT
			Date DEC. 2000	Scale N.T.S.

& Binnie

Binnie Black & Veatch Hong Kong Limited
博威工程顧問有限公司
Engineers and Scientists





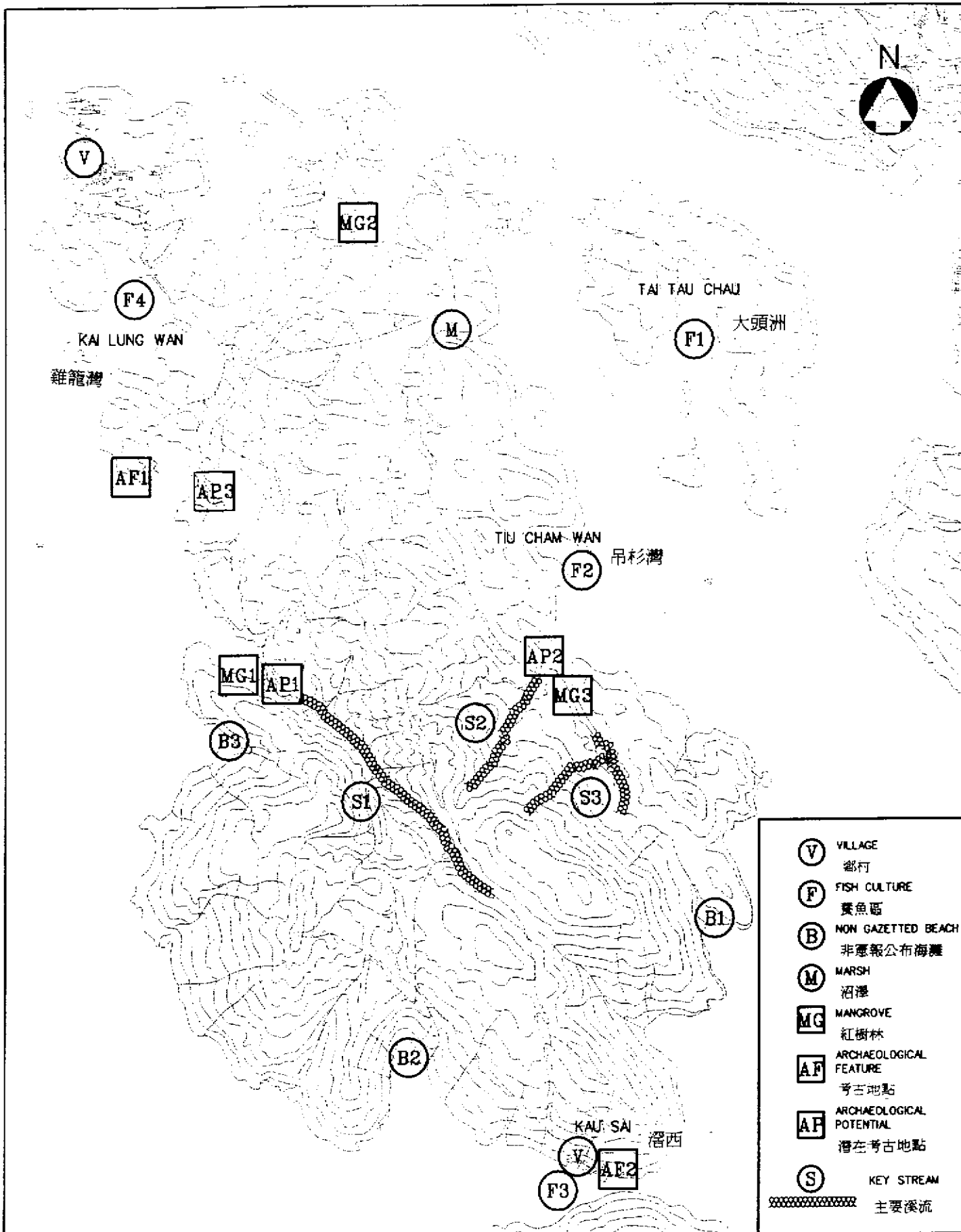
Construction 施工

Impact 影響	Mitigation 紓緩措施
1. Habitat loss 生境損失	Minimise footprint 盡量減少工程範圍
2. Silty runoff 含泥沙徑流	Dry season earthwork 旱季進行土方工程 Use settling ponds within site 工地內設沉澱池 Turfgrass sods 鋪設預先種植的草皮
3. Heritage sites 文化遺產地點	Survey and rescue works 調查及拯救工作
4. Noise and Air 噪音及空氣	EM&A 環境監測與審核

Operation 營運

5. Turfgrass chemicals 草地管理用化學品	Management plan 草地管理計劃
6. Parking traffic 停車場使用	Marginal increase 少量上升
7. Ferry 渡輪	No increase in frequency 班次不變
8. Infrastructure 基礎設施	Expand to accommodate 擴建以應付需求
9. Recreation Area 康樂設施	Minimise footprint 盡量減少工程範圍
10. Floodlighting 泛光照明	VIA needed 進行視覺影響評估

 The Hong Kong Jockey Club	PROPOSED EXTENSION OF PUBLIC GOLF COURSE AT KAU SAI CHAU, SAI KUNG 西貢滯西洲公眾高爾夫球場擬建擴建工程		Figure No. 3.1	Revision -
	POTENTIAL SOURCES OF IMPACT AND MITIGATION 潛在影響及緩解措施		Reference -	File Name 3822100201-4.DGN
	 Binnie Black & Veatch Hong Kong Limited 博威工程顧問有限公司 <i>Engineers and Architects</i>		Prepared HH	Checked AJT
			Date DEC. 2000	Scale N.T.S.



	VILLAGE 鄉村
	FISH CULTURE 養魚區
	NON GAZETTED BEACH 非憲報公布海灘
	MARSH 沼澤
	MANGROVE 紅樹林
	ARCHAEOLOGICAL FEATURE 考古地點
	ARCHAEOLOGICAL POTENTIAL 潛在考古地點
	KEY STREAM 主要溪流

The Hong Kong Jockey Club

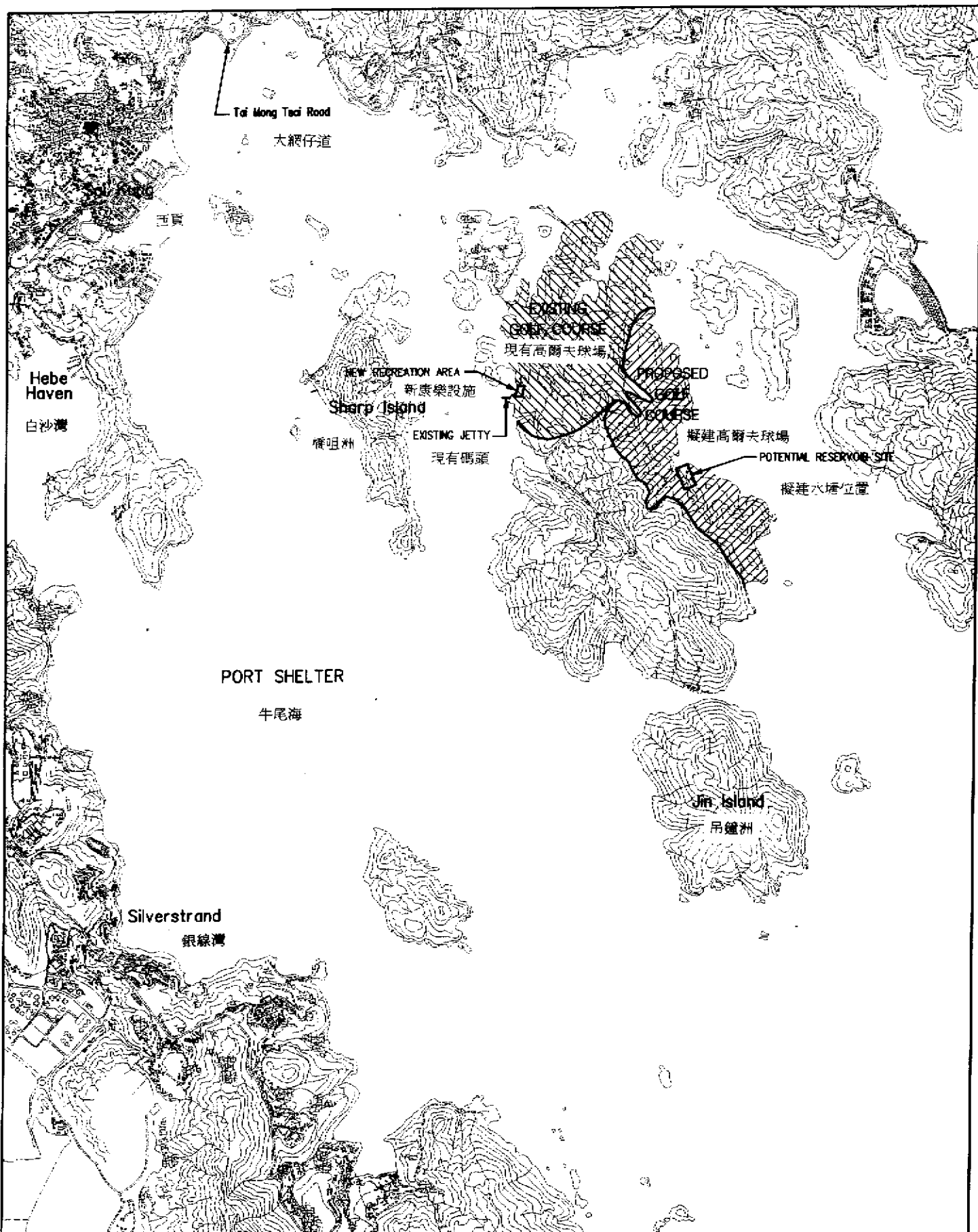
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PROPOSED EXTENSION OF PUBLIC GOLF COURSE AT KAU SAI CHAU, SAI KUNG
西貢窩西洲公眾高爾夫球場擬建擴建工程

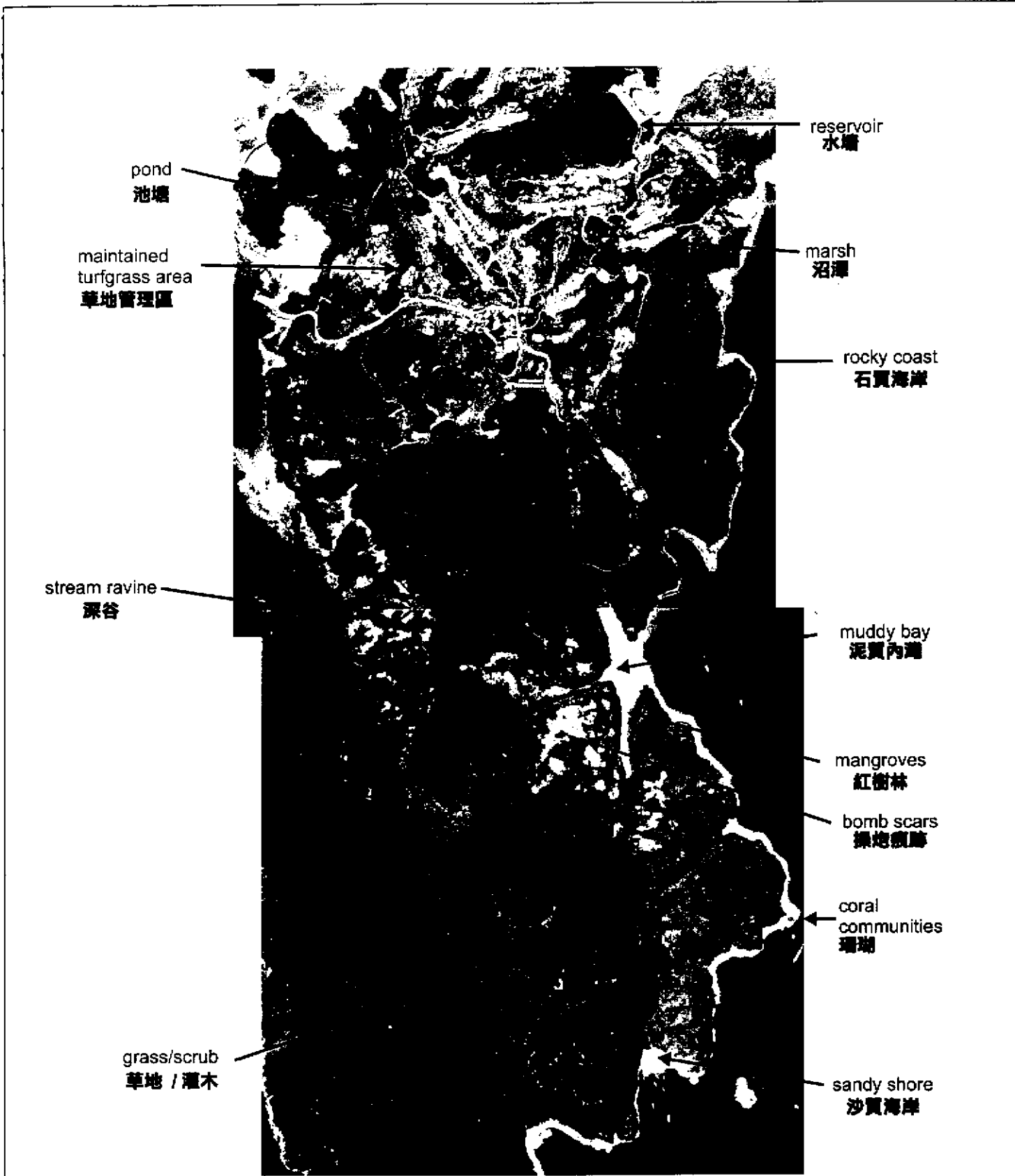
SENSITIVE RECEIVERS ON AND CLOSE KAU SAI CHAU
窩西洲及鄰近的敏感受體

Figure No. 4.1	Revision -
Reference -	File Name 3822100201-2.DGN
Prepared HH	Checked AJT
Date DEC. 2000	Scale N.T.S.





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	POTENTIAL OFFSITE SENSITIVE RECEIVERS 潛在工地外敏感受體		Reference -	File Name 3822100201-3.DGN
Prepared HH			Checked AJT	
Date DEC. 2000			Scale N.T.S.	


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Aerial photo of Kau Sai Chau, showing the range of habitats found on the island
 滯西洲高空照片，顯示島上的各種生境

 The Hong Kong Jockey Club	PROPOSED EXTENSION PUBLIC GOLF COURSE AT KAU SAI CHAU, SAI KUNG		Figure No .	Revision
	ECOLOGICAL HABITATS ON KAU SAI CHAU		4.3	
 Binnie Black & Veatch Hong Kong Limited 博威工程顧問有限公司 Engineer and Scientists	西貢滯西洲公眾高爾夫球場 擴建擴建工程 滯西洲的生態環境		Reference	File Name
			Prepared	Checked
			HH	AJT
		Date	DEC 2000	Scale
				N. T. S.