

**RURAL AND NEW TOWN PLANNING COMMITTEE
OF THE TOWN PLANNING BOARD**

RNTPC Paper No. 2/16

**for Consideration by
the Rural and New Town Planning Committee on 10.6.2016**

**PROPOSED AMENDMENTS TO
THE APPROVED TSEUNG KWAN O
OUTLINE ZONING PLAN NO. S/TKO/22**

**PROPOSED AMENDMENTS TO
THE APPROVED TSEUNG KWAN O OUTLINE ZONING PLAN NO. S/TKO/22**

1. Introduction

This paper is to seek Members' agreement that:

- (a) the proposed amendments to the approved Tseung Kwan O (TKO) Outline Zoning Plan (OZP) No. S/TKO/22 (**Appendix II**) and its Notes (**Appendix III**) are suitable for exhibition for public inspection under section 5 of the Town Planning Ordinance (the Ordinance); and
- (b) the revised Explanatory Statement (ES) of the OZP (**Appendix IV**) should be adopted as an expression of the Town Planning Board (the Board)'s planning intentions and objectives for the various land use zonings of the OZP and is suitable for exhibition together with the draft OZP.

2. Status of the Current OZP

- 2.1 On 1.12.2015, the Chief Executive in Council (CE in C) under section 9(1)(a) of the Ordinance, approved the draft TKO OZP, which was subsequently renumbered as S/TKO/22. On 11.12.2015, the approved TKO OZP No. S/TKO/22 (**Appendix I**) was exhibited for public inspection under section 9(5) of the Ordinance.
- 2.2 On 5.4.2016, the CE in C referred the approved TKO OZP No. S/TKO/22 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. On 15.4.2016, the reference back of the OZP was notified in the Gazette under section 12(2) of the Ordinance.

3. Background

- 3.1 TKO Area 137 covers a total area of about 100 ha (**Plan 1**). The north-eastern part of TKO Area 137 with an area of about 13 ha has already been zoned "Open Space (2)" since 2010 for the South East New Territories (SENT) Landfill Extension. The remaining portion of about 86 ha is currently zoned "Other Specified Uses" annotated "Deep Waterfront Industry" ("OU(Deep Waterfront Industry)")¹. To explore other source of water supply to meet our own needs, the Chief Executive announced in the 2011-12 Policy Address that a site has been reserved in TKO for the development of a

¹ The planning intention of the "OU (Deep Waterfront Industry)" zone is primarily for special industries which require marine access, access to deep water berths or water frontage.

medium-sized desalination plant. An area of about 10.8 ha earmarked for desalination plant development is located at the south-eastern part of TKO Area 137 (**Plans 1 & 2a**). For the remaining area in TKO Area 137, it is considered with potential for re-planning for other uses including residential developments. As announced in the 2016 Policy Address, a new planning and engineering study for the future development of TKO Area 137, including exploration of residential, commercial, other development purposes as well as the need for the originally reserved uses will be undertaken. The TKO OZP will be reviewed and amended to incorporate the findings of the study as appropriate in due course. This paper is to propose amendment to the TKO OZP to rezone the site in TKO Area 137 for desalination plant use to facilitate commissioning of the plant by 2020-2021 the earliest.

Desalination Plant

- 3.2 A reliable fresh water supply is important in sustaining Hong Kong's development and economic growth. There is a need to develop seawater desalination which is not susceptible to climate change to safeguard the security of fresh water resources in Hong Kong. Water Supplies Department (WSD) proposes to construct and operate a desalination plant by using Seawater Reserve Osmosis^{II} technology in TKO Area 137.
- 3.3 A planning and investigation study (P&I study) of the proposed desalination plant was conducted by WSD from 2012 to 2015. The P&I study confirms the technical feasibility including the environmental viability of the project and provides a preliminary design of the project. The preliminary layout of the plant is shown in **Appendix V**. The study also confirms that TKO Area 137 is a suitable location for siting the proposed desalination plant in terms of the quality of nearby seawater and its close proximity to a strategic water supply network. The plant which would have an initial water production capacity of 135,000m³ per day and upon expansion, the ultimate capacity would reach 270,000m³ per day. Its capacity would account for 5% (10% if expanded) of the total fresh water supply in Hong Kong. The fresh water would be transferred from the desalination plant to the existing TKO Primary Fresh Water Service Reservoir (**Plan 2a**). WSD has commenced the design of the plant for completion of its construction by end 2020 tentatively.
- 3.4 The proposed desalination plant is classified as a designated project pursuant to the Environmental Impact Assessment Ordinance (EIAO). The EIA report was approved by the Director of Environmental Protection (DEP) under EIAO on 4.11.2015. The Environmental Permit (EP) was granted with conditions under the EIAO on 4.12.2015.
- 3.5 On 6.1.2015, WSD consulted the Sai Kung District Council (SKDC) on the design and construction for desalination plant at TKO. The SKDC supports the development plan of desalination plant in principle. The relevant extract of the minutes of the SKDC meeting is at **Appendix VI**.

^{II} Seawater Reverse Osmosis is a process in which hydraulic pressure is used to separate relatively pure water from seawater through a semi-permeable membrane.

Incorporation of Road Scheme

- 3.6 Opportunity is taken to incorporate the proposed southern footbridge across Area 68 and Area 77 as described in the road scheme of the TKO further development infrastructure works for TKO Stage 1 Landfill Site as authorized by CE in C on 21 July 2015 under the Roads (Works, Use and Compensation) Ordinance (Chapter 370) onto the OZP (**Plans 5a and 5b**).

4. The Site and Surrounding Areas (Plans 1, 2a, 2b, 3, 4a and 4b)

- 4.1 TKO Area 137 is currently mainly occupied by various temporary uses such as fill bank, construction waste sorting facilities and magazine site and its works area for Shatin to Central Link. The Site (about 10.8 ha) for the proposed desalination plant is currently zoned “OU(Deep Waterfront Industry)” on the OZP and located at the south-eastern part of TKO Area 137. A small northern portion of the Site falls within the consultation zone of the SENT Landfill Extension (**Plan 2b**).
- 4.2 The SENT landfill and its extension is located to the north of the Site. To the further northwest of the Site is the TKO Industrial Estate (**Plans 2a and 4a**). To the immediate south of the Site is an existing pier currently used by the Mines Division of Civil Engineering and Development Department (CEDD) for the offloading of explosive materials for blasting operation (**Plan 2b**). To the east of the Site is vegetated slope covered by trees and shrubs of Clear Water Bay Country Park. To the west of the Site is currently used as temporary construction waste sorting facilities.

5. The Proposed Rezoning and Amendments to the Notes of the OZP

- 5.1 Rezoning of an area (about 10.8 ha) at south-eastern part of TKO Area 137 from “OU(Deep Waterfront Industry)” to “OU(Desalination Plant)”

To facilitate the development of desalination plant by WSD, the Site (about 10.8 ha) at TKO Area 137 is proposed to be rezoned from “OU(Deep Waterfront Industry)” to “OU(Desalination Plant)” on the approved TKO OZP (**Plan 1**) and the Notes of the OZP will be amended to incorporate “OU(Desalination Plant)” zone (**Appendix III**). The following factors have been taken into account in the proposed rezoning and amendments to the Notes of the OZP.

Planning Intention / Land Use Compatibility

- (a) The planning intention of the “OU(Desalination Plant)” zone is primarily for the development of a desalination plant to provide treated water serving the needs of the community.
- (b) The Site at TKO Area 137 is a suitable location for siting the proposed desalination plant in terms of its close proximity to a strategic water supply

network. It is considered compatible with the land uses of the surrounding area.

Environmental Impact Assessment (EIA)

- (c) Pursuant to EIAO (Cap.499), the construction and operation of the desalination plant is classified as a designated project. An EIA has been conducted to support the application for an EP in accordance with the requirements of the EIAO. The EIA covering the assessments of the potential impact on air quality, noise, water quality, waste management, land contamination, sewerage, ecology, fisheries, landscape and visual impact, landfill gas hazard, and hazard to life. Based on the assessment results and with implementation of recommended mitigation measures, no unacceptable adverse environmental impacts are anticipated. The Executive Summary of the EIA report for the proposed desalination plant is attached at **Appendix VII** for Members' information. ***A copy of full set of the EIA report is deposited at the meeting for Members' inspection and reference.***

Traffic Impact Assessment (TIA)

- (d) According to the TIA carried out in the P&I study, the traffic impact associated with the plant construction works and mainlaying works for the transfer of fresh water produced from the desalination plant to the existing TKO Primary Fresh Water Service Reservoir along Wan Po Road, Po Hong Road and Tsui Lam Road (**Plan 2a**) is considered acceptable. During the design stage, the result of traffic impact assessment and the access arrangement to the desalination plant will be further reviewed to the satisfaction of the Commissioner for Transport.

Marine Traffic Impact Assessment (MTIA)

- (e) A MTIA has been conducted on the feasibility of the desalination plant at TKO Area 137 and assessed that the proposed marine works including the intake and outfall structures could be implemented without imposing undue impacts on local marine activities. In consideration of the traffic pattern in proximity to the works site, it is not anticipated that the construction works will impose adverse impact on the relatively low volume of local marine traffic environment. Director of Marine (D of Marine) has no comment on the MTIA. The potential marine traffic impacts induced by the construction activities will be further reviewed to the satisfaction of D of Marine.

Drainage Impact Assessment (DIA)

- (f) A DIA has been conducted in P&I study to assess the potential drainage impact arising from the desalination plant at TKO Area 137. The DIA concludes that no adverse drainage impact on the surrounding drainage system arising from the proposed plant upon commissioning of the proposed drainage works would be resulted. During the design stage, the result of DIA will be further reviewed to the satisfaction of the Drainage Services Department.

Risk Hazard

- (g) The chlorine store in the proposed desalination plant is designed to store a maximum of 37 tonnes liquid chlorine contained in 1-tonne chlorine drums. It is classified as a Potentially Hazardous Installation (PHI) according to Hong Kong Planning Standards and Guidelines (HKPSG). WSD has conducted a Hazard Assessment (HA), Planning Study (PS) and Action Plan (AP) for storage, handling and transport of chlorine associated with the desalination plant. The overall risk lies within acceptable level. The HA, PS and AP were endorsed by the Coordinating Committee on Land Use Planning and Control relating to Potentially Hazardous Installations (CCPHI) on 26.5.2016.
- (h) An existing pier (**Plan 2b**) at the southern boundary of the proposed desalination plant is currently used by Mines Division of CEDD for the offloading of explosive materials for blasting operation. A quantitative risk assessment (QRA) on its impact on the desalination plant has been conducted in the P&I study. Public access will be restricted within the safety distances during the explosive off-loading operation and the proposed chlorine delivery for the desalination plant at the pier will be arranged to avoid overlapping with the explosive off-loading operation. The risk assessment concludes that overall risk level is acceptable even with the continued operation of this pier.

GIC Facilities and Open Space Provision

- (i) As shown in the summary on existing and planned provision of community facilities and open space in TKO in **Appendix VIII**, there is no apparent shortfall of G/IC facilities or district and local open space provision in TKO. The proposed rezoning for the desalination plant will not have any adverse impact on the site reservation for GIC facilities and open space provision in TKO.

5.2 Minor zoning boundary adjustment

Minor adjustment of the eastern zoning boundary of the “OU (Desalination Plant)” zone is made on the OZP (**Plan 1**) to tally with the boundary of the Clear Water Bay Country Park.

6. Proposed Amendments to Matters shown on the OZP

6.1 Amendment Item A (about 10.8 ha) (Plan 1)

Rezoning of an area at south-eastern part of TKO Area 137 from “OU(Deep Waterfront Industry)” to “OU(Desalination Plant)”.

6.2 Minor adjustment of the eastern zoning boundary of the “OU(Desalination Plant)” zone is made on the OZP to tally with the boundary of the Clear Water Bay Country Park (**Plan 1**).

7. Proposed Amendment to the Notes of the OZP

7.1 In relation to the **Amendment Item A** as mentioned in paragraph 6.1 above, the Notes of the OZP will be amended to incorporate the “OU(Desalination Plant)” zone.

7.2 The above proposed amendment has been incorporated in the draft Notes at **Appendix III** with addition in *bold and italic* and deletion in ~~single crossed out~~ for Members’ consideration.

8. Incorporation of Authorized Road Scheme of the proposed Southern Footbridge Across Area 68 and Area 77

Pursuant to section 13A of the Town Planning Ordinance, road scheme authorized by the Chief Executive in Council (CE in C) under the Roads (Works, Use and Compensation) Ordinance (Chapter 370) shall be deemed to be approved under the Ordinance. The proposed southern footbridge across Area 68 and Area 77 as described in the road scheme of the TKO further development infrastructure works for TKO Stage 1 Landfill Site authorized by the CE in C on 21 July 2015 is proposed to be incorporated into the OZP for public information (**Plan 5a**). The incorporation of the proposed footbridge as described in the authorized road scheme is not regarded as amendment item under the Ordinance and an annotation will be duly added on the OZP for information.

9. Revision to the Explanatory Statement of the OZP

9.1 The ES of the TKO OZP has been revised to reflect the above amendments and to update the general description of various land use zones where appropriate.

9.2 The updated ES (with additions in *bold and italics* and deletion in ~~single crossed-out~~) is attached at **Appendix IV** for Members’ consideration.

10. Plan Number

Upon gazette, the OZP will be renumbered as S/TKO/23.

11. Consultation

Departmental consultation

- 11.1 The rezoning proposal has been circulated to relevant bureaux/departments for comment. No objection or adverse comments have been received and their comments (if any) have been incorporated into the proposed amendments to the OZP as appropriate.

Public Consultation

- 11.2 The SKDC will be consulted during the exhibition period of the draft TKO OZP No. S/TKO/23 for public inspection under section 5 of the Ordinance.

12. Decision Sought

Members are invited to:

- (a) agree that the proposed amendments to the approved Tseung Kwan O OZP No. S/TKO/22 as shown on the draft Tseung Kwan O OZP No. S/TKO/22A at **Appendix II** (to be renumbered as S/TKO/23 upon exhibition) and the draft Notes at **Appendix III** are suitable for exhibition for public inspection under section 5 of the Ordinance; and
- (b) adopt the revised ES at **Appendix IV** for the draft Tseung Kwan O OZP No. S/TKO/22A (to be renumbered as S/TKO/23) as an expression of the planning intention and objectives of the Board for various land use zonings on the OZP and agree that the revised ES is suitable for exhibition together with the draft OZP.

13. Attachments

Appendix I	Approved Tseung Kwan O OZP No. S/TKO/22 (reduced scale)
Appendix II	Draft Tseung Kwan O OZP No. S/TKO/22A
Appendix III	Schedule of Amendments and revised Notes of Draft Tseung Kwan O OZP No. S/TKO/22A
Appendix IV	Revised Explanatory Statement of Draft Tseung Kwan O OZP No. S/TKO/22A
Appendix V	Preliminary layout plan of the proposed desalination plant
Appendix VI	Extract of the minutes of the SKDC meeting on 6.1.2015
Appendix VII	Executive Summary of the EIA Report of the proposed desalination plant

Appendix VIII	Provision of Major Community Facilities and Open Space in Tseung Kwan O
Plan 1	Proposed Amendments to the approved Tseung Kwan O OZP No. S/TKO/22
Plans 2a and 2b	Location plans
Plan 3	Aerial photo
Plans 4a and 4b	Site photos
Plans 5a and 5b	Location plan and aerial photo of the southern footbridge across the Area 68 and Area 77

**PLANNING DEPARTMENT
JUNE 2016**



圖例 NOTATION

ZONES		地帶
COMPREHENSIVE DEVELOPMENT AREA	CDA	綜合發展區
COMMERCIAL / RESIDENTIAL	CR	商業 / 住宅
RESIDENTIAL (GROUP A)	RA	住宅 (甲類)
RESIDENTIAL (GROUP B)	RB	住宅 (乙類)
RESIDENTIAL (GROUP C)	RC	住宅 (丙類)
RESIDENTIAL (GROUP E)	RE	住宅 (戊類)
VILLAGE TYPE DEVELOPMENT	V	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	GIC	政府、機構或社區
OPEN SPACE	O	休憩用地
RECREATION	REC	康樂
OTHER SPECIFIED USES	OU	其他指定用途
GREEN BELT	GB	綠化地帶
COMMUNICATIONS		
交通		
RAILWAY AND STATION		鐵路及車站
RAILWAY AND STATION (UNDERGROUND)		鐵路及車站 (地下)
MAJOR ROAD AND JUNCTION		主要道路及路口
ELEVATED ROAD		高架道路
MISCELLANEOUS		
其他		
BOUNDARY OF PLANNING SCHEME		規劃範圍界線
PLANNING AREA NUMBER	①	規劃區編號
BOUNDARY OF COUNTRY PARK		郊野公園界線
PETROL FILLING STATION	P F S	加油站

土地用途及面積一覽表 SCHEDULE OF USES AND AREAS

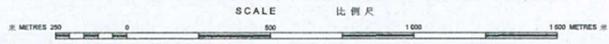
USES	大約面積及百分比 APPROXIMATE AREA & %	用途	
	公頃 HECTARES	% 百分比	
COMPREHENSIVE DEVELOPMENT AREA	38.72	2.25	綜合發展區
COMMERCIAL / RESIDENTIAL	20.07	1.17	商業 / 住宅
RESIDENTIAL (GROUP A)	144.97	8.44	住宅 (甲類)
RESIDENTIAL (GROUP B)	4.49	0.26	住宅 (乙類)
RESIDENTIAL (GROUP C)	0.05	0.04	住宅 (丙類)
RESIDENTIAL (GROUP E)	4.00	0.23	住宅 (戊類)
VILLAGE TYPE DEVELOPMENT	22.01	1.28	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	142.77	8.31	政府、機構或社區
OPEN SPACE	190.80	11.10	休憩用地
RECREATION	65.85	3.83	康樂
OTHER SPECIFIED USES	225.40	13.12	其他指定用途
GREEN BELT	760.13	44.24	綠化地帶
RAILWAY	4.87	0.28	鐵路
MAJOR ROAD ETC.	93.53	5.45	主要道路等
TOTAL PLANNING SCHEME AREA	1718.27	100.00	規劃範圍總面積

夾附的《註釋》屬這份圖則的一部分
THE ATTACHED NOTES ALSO FORM PART OF THIS PLAN

行政長官會同行政會議於2015年12月1日 根據城市規劃條例第9(1)(a)條核准的圖則
APPROVED BY THE CHIEF EXECUTIVE IN COUNCIL UNDER SECTION 9(1)(A) OF THE TOWN PLANNING ORDINANCE ON 1 DECEMBER 2015

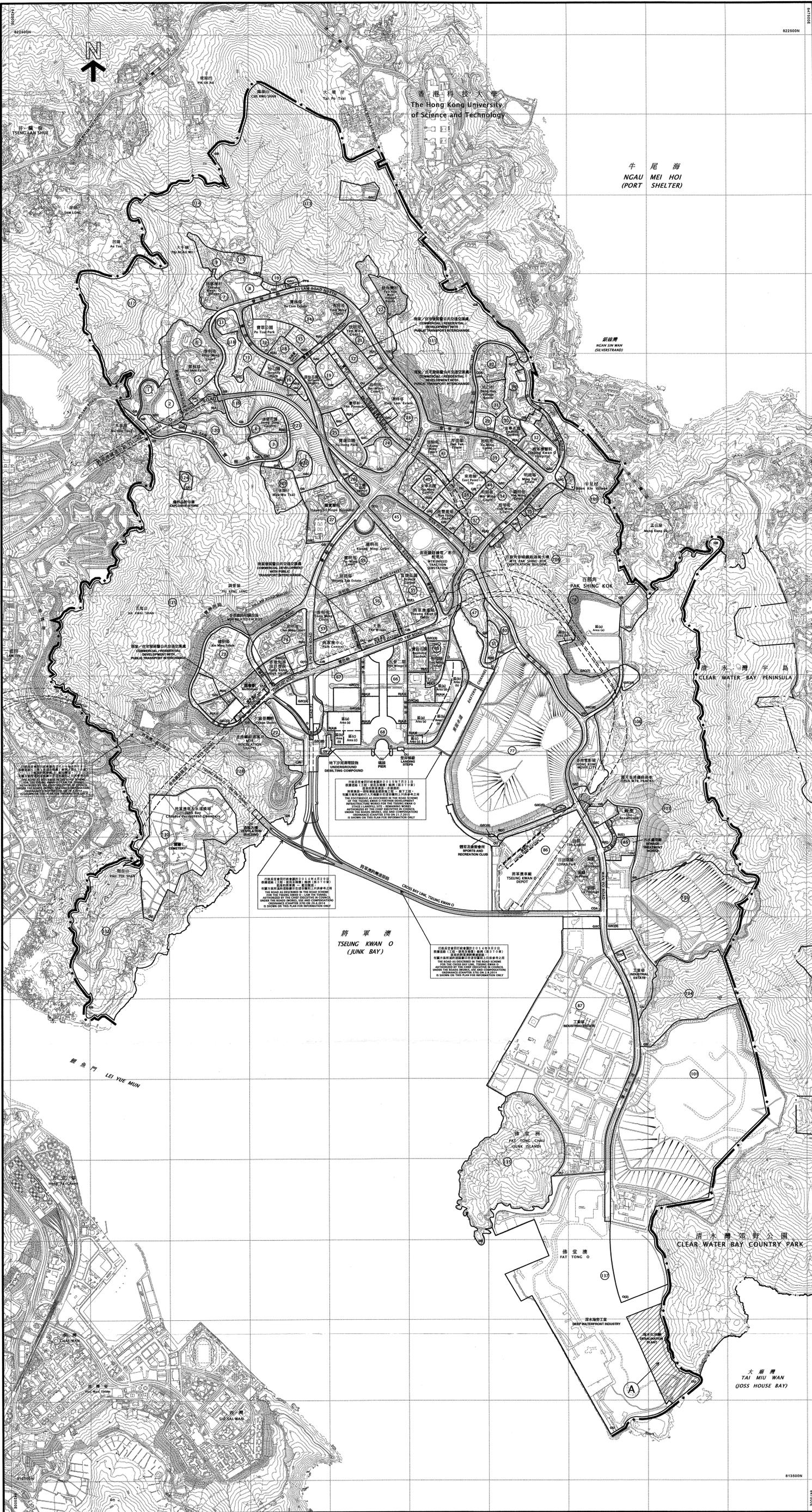
Ms Minnie WONG 黃潔怡女士
CLERK TO THE EXECUTIVE COUNCIL 行政會議秘書

香港城市規劃委員會依據城市規劃條例擬備的將軍澳分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
TSEUNG KWAN O - OUTLINE ZONING PLAN



規劃署遵照城市規劃委員會指示擬備
PREPARED BY THE PLANNING DEPARTMENT UNDER THE DIRECTION OF THE TOWN PLANNING BOARD

圖則編號 PLAN No. S/TKO/22



圖例 NOTATION

ZONES		地帶
COMPREHENSIVE DEVELOPMENT AREA	CDA	綜合發展區
COMMERCIAL / RESIDENTIAL	CR	商業 / 住宅
RESIDENTIAL (GROUP A)	R(A)	住宅 (甲類)
RESIDENTIAL (GROUP B)	R(B)	住宅 (乙類)
RESIDENTIAL (GROUP C)	R(C)	住宅 (丙類)
RESIDENTIAL (GROUP E)	R(E)	住宅 (戊類)
VILLAGE TYPE DEVELOPMENT	V	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	GIC	政府、機構或社區
OPEN SPACE	O	休憩用地
RECREATION	REC	康樂
OTHER SPECIFIED USES	OU	其他指定用途
GREEN BELT	GB	綠化地帶

COMMUNICATIONS		交通
RAILWAY AND STATION	RAILWAY STATION	鐵路及車站
RAILWAY AND STATION (UNDERGROUND)	RAILWAY STATION (UNDERGROUND)	鐵路及車站 (地下)
MAJOR ROAD AND JUNCTION	MAJOR ROAD AND JUNCTION	主要道路及路口
ELEVATED ROAD	ELEVATED ROAD	高架道路

MISCELLANEOUS		其他
BOUNDARY OF PLANNING SCHEME	BOUNDARY OF PLANNING SCHEME	規劃範圍界線
PLANNING AREA NUMBER	PLANNING AREA NUMBER	規劃區編號
BOUNDARY OF COUNTRY PARK	BOUNDARY OF COUNTRY PARK	郊野公園界線
PETROL FILLING STATION	P F S	加油站

土地用途及面積一覽表 SCHEDULE OF USES AND AREAS

USES	大約面積及百分比 公頃 HECTARES	% 百分比	用途
COMPREHENSIVE DEVELOPMENT AREA	38.72	2.25	綜合發展區
COMMERCIAL / RESIDENTIAL	20.07	1.17	商業 / 住宅
RESIDENTIAL (GROUP A)	144.97	8.44	住宅 (甲類)
RESIDENTIAL (GROUP B)	4.49	0.26	住宅 (乙類)
RESIDENTIAL (GROUP C)	0.86	0.04	住宅 (丙類)
RESIDENTIAL (GROUP E)	4.00	0.23	住宅 (戊類)
VILLAGE TYPE DEVELOPMENT	22.01	1.28	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	142.77	8.31	政府、機構或社區
OPEN SPACE	190.80	11.10	休憩用地
RECREATION	65.85	3.83	康樂
OTHER SPECIFIED USES	225.69	13.13	其他指定用途
GREEN BELT	760.13	44.23	綠化地帶
RAILWAY	4.87	0.28	鐵路
MAJOR ROAD ETC.	93.55	5.45	主要道路等
TOTAL PLANNING SCHEME AREA	1718.58	100.00	規劃範圍總面積

夾附的《註釋》屬這份圖則的一部分，
現經修訂並按照城市規劃條例第 5 條展示。
THE ATTACHED NOTES ALSO FORM PART OF THIS PLAN
AND HAVE BEEN AMENDED FOR EXHIBITION UNDER
SECTION 5 OF THE TOWN PLANNING ORDINANCE

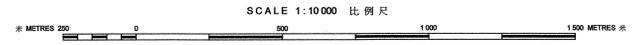
核准圖編號 S/TKO/22 的修訂 AMENDMENT TO APPROVED PLAN No. S/TKO/22

AMENDMENT EXHIBITED UNDER SECTION 5 OF THE TOWN PLANNING ORDINANCE 按照城市規劃條例第 5 條展示的修訂

AMENDMENT ITEM A	AMENDMENT ITEM A	修訂項目 A 項
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(參看附表) (SEE ATTACHED SCHEDULE)

香港城市規劃委員會依據城市規劃條例擬備的將軍澳分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
TSEUNG KWAN O - OUTLINE ZONING PLAN



規劃署遵照城市規劃委員會指示編備
PREPARED BY THE PLANNING DEPARTMENT UNDER
THE DIRECTION OF THE TOWN PLANNING BOARD

圖則編號 PLAN No. S/TKO/22A

**SCHEDULE OF AMENDMENTS TO
THE APPROVED TSEUNG KWAN O OUTLINE ZONING PLAN NO. S/TKO/22
MADE BY THE TOWN PLANNING BOARD
UNDER THE TOWN PLANNING ORDINANCE (Chapter 131)**

I. Amendment to Matters shown on the Plan

- Item A – Rezoning of an area at the south-eastern part of Tseung Kwan O Area 137 from “Other Specified Uses” annotated “Deep Waterfront Industry” to “Other Specified Uses” annotated “Desalination Plant” (“OU(Desalination Plant)”).

The footbridge as described in the road scheme of the Tseung Kwan O further development infrastructure works for Tseung Kwan O Stage 1 Landfill Site authorized by the Chief Executive in Council under the Roads (Works, Use and Compensation) Ordinance (Chapter 370) on 21 July 2015 is shown on the Plan for information. The authorized road schemes shall be deemed to be approved pursuant to section 13A of the Town Planning Ordinance.

II. Amendment to the Notes of the Plan

Incorporation of a set of Notes for the “OU(Desalination Plant)” zone.

APPROVED DRAFT TSEUNG KWAN O OUTLINE ZONING PLAN NO. S/TKO/22A

(Being *an Approved Plan a Draft Plan* for the Purposes of the Town Planning Ordinance)

NOTES

(N.B. These form part of the Plan)

- (1) These Notes show the uses or developments on land falling within the boundaries of the Plan which are always permitted and which may be permitted by the Town Planning Board, with or without conditions, on application. Where permission from the Town Planning Board for a use or development is required, the application for such permission should be made in a prescribed form. The application shall be addressed to the Secretary of the Town Planning Board, from whom the prescribed application form may be obtained.
- (2) Any use or development which is always permitted or may be permitted in accordance with these Notes must also conform to any other relevant legislation, the conditions of the Government lease concerned, and any other Government requirements, as may be applicable.
- (3)
 - (a) No action is required to make the existing use of any land or building conform to this Plan until there is a material change of use or the building is redeveloped.
 - (b) Any material change of use or any other development (except minor alteration and/or modification to the development of the land or building in respect of the existing use which is always permitted) or redevelopment must be always permitted in terms of the Plan or, if permission is required, in accordance with the permission granted by the Town Planning Board.
 - (c) For the purposes of subparagraph (a) above, “existing use of any land or building” means –
 - (i) before the publication in the Gazette of the notice of the first statutory plan covering the land or building (hereafter referred as ‘the first plan’),
 - a use in existence before the publication of the first plan which has continued since it came into existence; or
 - a use or a change of use approved under the Buildings Ordinance which relates to an existing building; and
 - (ii) after the publication of the first plan,
 - a use permitted under a plan which was effected during the effective period of that plan and has continued since it was effected; or
 - a use or a change of use approved under the Buildings Ordinance which relates to an existing building and permitted under a plan prevailing at the time when the use or change of use was approved.
- (4) Except as otherwise specified by the Town Planning Board, when a use or material change of use is effected or a development or redevelopment is undertaken, as always

permitted in terms of the Plan or in accordance with a permission granted by the Town Planning Board, all permissions granted by the Town Planning Board in respect of the site of the use or material change of use or development or redevelopment shall lapse.

- (5) Road junctions, alignments of roads and railway tracks, and boundaries between zones may be subject to minor adjustments as detailed planning proceeds.
- (6) Temporary uses (expected to be 5 years or less) of any land or building are always permitted as long as they comply with any other relevant legislation, the conditions of the Government lease concerned, and any other Government requirements, and there is no need for these to conform to the zoned use or these Notes. For temporary uses expected to be over 5 years, the uses must conform to the zoned use or these Notes.
- (7) The following uses or developments are always permitted on land falling within the boundaries of the Plan except where the uses or developments are specified in Column 2 of the Notes of individual zones:
 - (a) provision, maintenance or repair of plant nursery, amenity planting, open space, rain shelter, refreshment kiosk, road, bus/public light bus stop or lay-by, cycle track, taxi rank, nullah, public utility pipeline, electricity mast, lamp pole, telephone booth, telecommunications radio base station, automatic teller machine and shrine;
 - (b) geotechnical works, local public works, road works, sewerage works, drainage works, environmental improvement works, marine related facilities, waterworks (excluding works on service reservoir) and such other public works co-ordinated or implemented by Government; and
 - (c) maintenance or repair of watercourse and grave.
- (8) In any area shown as 'Road', all uses or developments except those specified in paragraph (7) above and those specified below require permission from the Town Planning Board:

toll plaza, on-street vehicle park and railway track.
- (9) Unless otherwise specified, all building, engineering and other operations incidental to and all uses directly related and ancillary to the permitted uses and developments within the same zone are always permitted and no separate planning permission is required.
- (10) In these Notes,

“existing building” means a building, including a structure, which is physically existing and is in compliance with any relevant legislation and the conditions of the Government lease concerned.

“New Territories Exempted House” means a domestic building other than a guesthouse or a hotel; or a building primarily used for habitation, other than a guesthouse or a hotel, the ground floor of which may be used as 'Shop and Services' or 'Eating Place', the building works in respect of which are exempted by a certificate of exemption under Part III of the Buildings Ordinance (Application to the New Territories) Ordinance (Cap. 121).

Schedule of Uses

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COMPREHENSIVE DEVELOPMENT AREA

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
	Ambulance Depot Commercial Bathhouse/Massage Establishment Eating Place Educational Institution Exhibition or Convention Hall Flat Government Refuse Collection Point Government Use (not elsewhere specified) Hospital Hotel House Information Technology and Telecommunications Industries Institutional Use (not elsewhere specified) Library Market Off-course Betting Centre Office Petrol Filling Station Pier Place of Entertainment Place of Recreation, Sports or Culture Private Club Public Clinic Public Convenience Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Recyclable Collection Centre Religious Institution Research, Design and Development Centre Residential Institution School Shop and Services Social Welfare Facility Training Centre Utility Installation for Private Project

(Please see next page)

COMPREHENSIVE DEVELOPMENT AREA (cont'd)

Planning Intention

This zone is intended for comprehensive development/redevelopment of the area for residential and/or commercial uses with the provision of open space and other supporting facilities. The zoning is to facilitate appropriate planning control over the development mix, scale, design and layout of development, taking account of various environmental, traffic, infrastructure and other constraints.

Remarks

- (a) Pursuant to section 4A(2) of the Town Planning Ordinance, and except as otherwise expressly provided that it is not required by the Town Planning Board, an applicant for permission for development on land designated "Comprehensive Development Area" shall prepare a Master Layout Plan for the approval of the Town Planning Board and include therein the following information:
- (i) the area of the proposed land uses, the nature, position, dimensions, and heights of all buildings to be erected in the area;
 - (ii) the proposed total site area and gross floor area for various uses, total number of flats and flat size, where applicable;
 - (iii) the details and extent of Government, institution or community (GIC) and recreational facilities, public transport and parking facilities, and open space to be provided within the area;
 - (iv) the alignment, widths and levels of any roads proposed to be constructed within the area;
 - (v) the landscape and urban design proposals within the area;
 - (vi) programmes of development in detail;
 - (vii) an environmental assessment report to examine any possible environmental problems that may be caused to or by the proposed development during and after construction and the proposed mitigation measures to tackle them;
 - (viii) a drainage and sewerage impact assessment report to examine any possible drainage and sewerage problems that may be caused by the proposed development and the proposed mitigation measures to tackle them;
 - (ix) a traffic impact assessment report to examine any possible traffic problems that may be caused by the proposed development and the proposed mitigation measures to tackle them; and
 - (x) such other information as may be required by the Town Planning Board.

(Please see next page)

COMPREHENSIVE DEVELOPMENT AREA (cont'd)

Remarks (cont'd)

- (b) The Master Layout Plan should be supported by an explanatory statement which contains an adequate explanation of the development proposal, including such information as land tenure, relevant lease conditions, existing conditions of the site, the character of the site in relation to the surrounding areas, principles of layout design, major development parameters, design population, types of GIC facilities, and recreational and open space facilities.
- (c) On land designated “Comprehensive Development Area” in Area 86, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum domestic gross floor area of 1,612,800m² and a maximum non-domestic gross floor area of 40,000m².
- (d) On land designated “Comprehensive Development Area” in Area 92, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum gross floor area of 15,700m² and a maximum building height of 6 storeys over one level of carport.
- (e) In determining the maximum gross floor area for the purposes of paragraph (c) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room, caretaker’s office and caretaker’s quarters, or recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded. Any floor space that is constructed or intended for use solely as public transport facilities or GIC facilities, as required by the Government, may also be disregarded.
- (f) In determining the maximum gross floor area for the purposes of paragraph (d) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room, caretaker’s office and caretaker’s quarters, or recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (g) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the gross floor area restrictions stated in paragraph (c) above and the gross floor area/building height restrictions stated in paragraph (d) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

COMMERCIAL / RESIDENTIAL

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Ambulance Depot Eating Place Educational Institution (in a commercial building or in the purpose-designed non-residential portion [@] of an existing building only) Exhibition or Convention Hall Flat Government Use (not elsewhere specified) Hotel House Information Technology and Telecommunications Industries Library Market Off-course Betting Centre Office Place of Entertainment Place of Recreation, Sports or Culture Private Club Public Clinic Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Residential Institution School (in free-standing purpose-designed school building, in a commercial building or in the purpose-designed non-residential portion [@] of an existing building only) Shop and Services (not elsewhere specified) Social Welfare Facility Training Centre Utility Installation for Private Project Wholesale Trade	Broadcasting, Television and/or Film Studio Commercial Bathhouse/Massage Establishment Educational Institution (not elsewhere specified) Government Refuse Collection Point Hospital Institutional Use (not elsewhere specified) Petrol Filling Station Public Convenience Recyclable Collection Centre Religious Institution School (not elsewhere specified) Shop and Services (Motor Vehicle Showroom only)

@ Excluding floors containing wholly or mainly car parking, loading/unloading bay and/or plant room

Planning Intention

This zone is intended primarily for commercial and/or residential development. Commercial, residential and mixed commercial/residential uses are always permitted.

RESIDENTIAL (GROUP A)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Ambulance Depot Flat Government Use (not elsewhere specified) House Library Market Place of Recreation, Sports or Culture Public Clinic Public Transport Terminus or Station (excluding open-air terminus or station) Residential Institution School (in free-standing purpose-designed building only) Social Welfare Facility Utility Installation for Private Project	Commercial Bathhouse/Massage Establishment Eating Place Educational Institution Exhibition or Convention Hall Government Refuse Collection Point Hospital Hotel Institutional Use (not elsewhere specified) Office Petrol Filling Station Place of Entertainment Private Club Public Convenience Public Transport Terminus or Station (not elsewhere specified) Public Utility Installation Public Vehicle Park (excluding container vehicle) Religious Institution School (not elsewhere specified) Shop and Services Training Centre

In addition, the following uses are always permitted (a) on the lowest three floors of a building, taken to include basements; or (b) in the purpose-designed non-residential portion of an existing building, both excluding floors containing wholly or mainly car parking, loading/unloading bays and/or plant room:

- Eating Place
- Educational Institution
- Institutional Use (not elsewhere specified)
- Off-course Betting Centre
- Office
- Place of Entertainment
- Private Club
- Public Convenience
- Recyclable Collection Centre
- School
- Shop and Services
- Training Centre

(Please see next page)

RESIDENTIAL (GROUP A) (cont'd)

Planning Intention

This zone is intended primarily for high-density residential developments. Commercial uses are always permitted on the lowest three floors of a building or in the purpose-designed non-residential portion of an existing building.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum plot ratio, site coverage and building height specified below, or the plot ratio, site coverage and height of the existing building, whichever is the greater:

<u>Sub-area</u>	<u>Maximum Domestic Plot Ratio</u>	<u>Maximum Non-Domestic Plot Ratio</u>	<u>Maximum Site Coverage</u> (excluding basement(s))	<u>Maximum Building Height</u> (metres above Principal Datum)	
R(A)1	5.5	0.5	-	138	
R(A)2	5	0.5	50%	100	
R(A)3	4	0.5	50%	100	
R(A)4	Area (a)	3	0.5	50%	65
	Area (b)	3	0.5	50%	35
R(A)5	3	0.5	50%	65	
R(A)6	Area (a)	2	0.5	50%	50
	Area (b)	2	0.5	50%	35
	Area (c)	2	0.5	50%	60

- (b) On land designated “R(A)3” in Area 65, a public open space of not less than 4,600m² shall be provided in the southern portion and at the street level.
- (c) In determining the maximum plot ratio for the purposes of paragraph (a) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room, caretaker’s office and caretaker’s quarters, or recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.

(Please see next page)

RESIDENTIAL (GROUP A) (cont'd)

Remarks (cont'd)

- (d) In determining the maximum site coverage for the purposes of paragraph (a) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room, caretaker's office and caretaker's quarters, or recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, shall be included for calculation.
- (e) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/site coverage/building height restrictions stated in paragraph (a) above and minor adjustment to the boundaries of Areas (a)/(b) of "R(A)4" and/or Areas (a)/(b)/(c) of "R(A)6" as shown on the Plan may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

RESIDENTIAL (GROUP B)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Flat Government Use (Police Reporting Centre, Post Office only) House Library Residential Institution School (in free-standing purpose- designed building only) Utility Installation for Private Project	Ambulance Depot Eating Place Educational Institution Government Refuse Collection Point Government Use (not elsewhere specified) Hospital Hotel Institutional Use (not elsewhere specified) Market Off-course Betting Centre Office Petrol Filling Station Place of Entertainment Place of Recreation, Sports or Culture Private Club Public Clinic Public Convenience Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Recyclable Collection Centre Religious Institution School (not elsewhere specified) Shop and Services Social Welfare Facility Training Centre

Planning Intention

This zone is intended primarily for medium-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Town Planning Board.

RESIDENTIAL (GROUP C)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Flat Government Use (Police Reporting Centre, Post Office only) House Utility Installation for Private Project	Ambulance Depot Eating Place Educational Institution Government Refuse Collection Point Government Use (not elsewhere specified) Hospital Hotel Institutional Use (not elsewhere specified) Library Petrol Filling Station Place of Recreation, Sports or Culture Private Club Public Clinic Public Convenience Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Recyclable Collection Centre Religious Institution Residential Institution School Shop and Services Social Welfare Facility Training Centre

Planning Intention

This zone is intended primarily for low-rise, low-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Town Planning Board.

(Please see next page)

RESIDENTIAL (GROUP C) (cont'd)

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum plot ratio, site coverage and building height specified below, or the plot ratio, site coverage and height of the existing building, whichever is the greater:

<u>Sub-area</u>	<u>Maximum Plot Ratio</u>	<u>Maximum Site Coverage</u>	<u>Maximum Building Height</u>
R(C)1	0.6	30%	2 storeys over one level of carport

- (b) In determining the maximum plot ratio and site coverage for the purposes of paragraph (a) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room, caretaker's office and caretaker's quarters, or recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/site coverage/building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

RESIDENTIAL (GROUP E)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
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**Schedule I : for open-air development or for building
other than industrial or industrial-office building[@]**

Ambulance Depot Government Use (not elsewhere specified) Public Transport Terminus or Station (excluding open-air terminus or station) Utility Installation for Private Project	Commercial Bathhouse/Massage Establishment Eating Place Educational Institution Exhibition or Convention Hall Flat Government Refuse Collection Point Hospital Hotel House Institutional Use (not elsewhere specified) Library Market Office Petrol Filling Station Place of Entertainment Place of Recreation, Sports or Culture Private Club Public Clinic Public Convenience Public Transport Terminus or Station (not elsewhere specified) Public Utility Installation Public Vehicle Park (excluding container vehicle) Religious Institution Residential Institution School Shop and Services Social Welfare Facility Training Centre
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(Please see next page)

RESIDENTIAL (GROUP E) (cont'd)

Column 1
Uses always permitted

Column 2
Uses that may be permitted with or
without conditions on application
to the Town Planning Board

In addition, the following uses are always permitted (a) on the lowest three floors of a building, taken to include basements; or (b) in the purpose-designed non-residential portion of an existing building, both excluding floors containing wholly or mainly car parking, loading/unloading bays and/or plant room:

Eating Place
Educational Institution
Institutional Use (not elsewhere specified)
Library
Off-course Betting Centre
Office
Place of Entertainment
Place of Recreation, Sports or Culture
Private Club
Public Clinic
Public Convenience
Recyclable Collection Centre
School
Shop and Services
Social Welfare Facility
Training Centre

(Please see next page)

RESIDENTIAL (GROUP E) (cont'd)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Schedule II : for existing industrial or industrial-office building[@]	
Ambulance Depot Cargo Handling and Forwarding Facility (not elsewhere specified) Eating Place (Canteen only) Government Refuse Collection Point Government Use (not elsewhere specified) Information Technology and Telecommunications Industries Non-polluting Industrial Use (excluding industrial undertakings involving the use/storage of Dangerous Goods ^Δ) Office (Audio-visual Recording Studio, Design and Media Production, Office Related to Industrial Use only) Public Convenience Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation Recyclable Collection Centre Research, Design and Development Centre Shop and Services (Motor Vehicle Showroom on ground floor, Service Trades only) Utility Installation for Private Project Warehouse (excluding Dangerous Goods Godown)	Cargo Handling and Forwarding Facility (Container Freight Station, free-standing purpose-designed Logistics Centre only) Industrial Use (not elsewhere specified) Off-course Betting Centre Office (not elsewhere specified) Petrol Filling Station Place of Recreation, Sports or Culture Private Club Shop and Services (not elsewhere specified) (ground floor only except Ancillary Showroom [#] which may be permitted on any floor) Vehicle Repair Workshop Wholesale Trade

(Please see next page)

RESIDENTIAL (GROUP E) (cont'd)

Column 1
Uses always permitted

Column 2
Uses that may be permitted with or without conditions on application to the Town Planning Board

In addition, the following uses are always permitted in the purpose-designed non-industrial portion on the lower floors (except basements and floors containing wholly or mainly car parking, loading/unloading bays and/or plant room) of an existing building, provided that the uses are separated from the industrial uses located above by a buffer floor or floors and no industrial uses are located within the non-industrial portion:

In addition, the following use may be permitted with or without conditions on application to the Town Planning Board in the purpose-designed non-industrial portion on the lower floors (except basements and floors containing wholly or mainly car parking, loading/unloading bays and/or plant room) of an existing building, provided that the use is separated from the industrial uses located above by a buffer floor or floors and no industrial uses are located within the non-industrial portion:

- Eating Place
- Educational Institution
- Exhibition or Convention Hall
- Institutional Use (not elsewhere specified)
- Library
- Off-course Betting Centre
- Office
- Place of Entertainment
- Place of Recreation, Sports or Culture
- Private Club
- Public Clinic
- Religious Institution
- School (excluding kindergarten)
- Shop and Services
- Training Centre

- Social Welfare Facility (excluding those involving residential care)

@ An industrial or industrial-office building means a building which is constructed for or intended to be used by industrial or industrial-office purpose respectively as approved by the Building Authority.

△ Dangerous Goods refer to substances classified as Dangerous Goods and requiring a licence for their use/storage under the Dangerous Goods Ordinance (Cap. 295).

Ancillary Showroom requiring planning permission refers to showroom use of greater than 20% of the total usable floor area of an industrial firm in the same premises or building.

(Please see next page)

RESIDENTIAL (GROUP E) (cont'd)

Planning Intention

This zone is intended primarily for phasing out of existing industrial uses through redevelopment (or conversion) for residential use on application to the Town Planning Board. Whilst existing industrial uses will be tolerated, new industrial developments are not permitted in order to avoid perpetuation of industrial/residential interface problem.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 5.0 and a maximum building height of 130m.
- (b) In determining the maximum plot ratio for the purposes of paragraph (a) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room, caretaker's office and caretaker's quarters, or recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded. Any floor space that is constructed or intended for use solely as public vehicle park and public transport facilities, as required by the Government, may also be disregarded.
- (c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restriction stated in paragraph (a) above may be considered by Town Planning Board on application under section 16 of the Town Planning Ordinance.

VILLAGE TYPE DEVELOPMENT

Column 1
Uses always permitted

Column 2
Uses that may be permitted with or
without conditions on application
to the Town Planning Board

Agricultural Use
Government Use (Police Reporting Centre,
Post Office only)
House (New Territories Exempted
House only)
On-Farm Domestic Structure
Religious Institution (Ancestral Hall only)
Rural Committee/Village Office

Eating Place
Government Refuse Collection Point
Government Use (not elsewhere specified)#
House (not elsewhere specified)
Institutional Use (not elsewhere specified)#
Market
Petrol Filling Station
Place of Recreation, Sports or Culture
Public Clinic
Public Convenience
Public Transport Terminus or Station
Public Utility Installation#
Public Vehicle Park (excluding container
vehicle)
Religious Institution (not elsewhere specified)#
Residential Institution#
School#
Shop and Services
Social Welfare Facility#
Utility Installation for Private Project

In addition, the following uses are always
permitted on the ground floor of a New
Territories Exempted House:

Eating Place
Library
School
Shop and Services

(Please see next page)

VILLAGE TYPE DEVELOPMENT (cont'd)

Planning Intention

The planning intention of this zone is to reflect existing recognized and other villages, and to provide land considered suitable for village expansion and reprovisioning of village houses affected by Government projects. Land within this zone is primarily intended for development of Small Houses by indigenous villagers. It is also intended to concentrate village type development within this zone for a more orderly development pattern, efficient use of land and provision of infrastructures and services. Selected commercial and community uses serving the needs of the villagers and in support of the village development are always permitted on the ground floor of a New Territories Exempted House. Other commercial, community and recreational uses may be permitted on application to the Town Planning Board.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building (except development or redevelopment to those annotated with #) shall result in a total development and/or redevelopment in excess of a maximum building height of 3 storeys (8.23m) or the height of the existing building, whichever is the greater.
- (b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restriction stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

GOVERNMENT, INSTITUTION OR COMMUNITY

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Ambulance Depot Animal Quarantine Centre (in Government building only) Broadcasting, Television and/or Film Studio Cable Car Route and Terminal Building Eating Place (Canteen, Cooked Food Centre only) Educational Institution Exhibition or Convention Hall Field Study/Education/Visitor Centre Government Refuse Collection Point Government Use (not elsewhere specified) Hospital Information Technology and Telecommunications Industries (within "G/IC(9)" only) Institutional Use (not elsewhere specified) Library Market Pier Place of Recreation, Sports or Culture Public Clinic Public Convenience Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Recyclable Collection Centre Religious Institution Research, Design and Development Centre Rural Committee/Village Office School Service Reservoir Social Welfare Facility Training Centre Wholesale Trade	Animal Boarding Establishment Animal Quarantine Centre (not elsewhere specified) Columbarium Correctional Institution Crematorium Driving School Eating Place (not elsewhere specified) Flat Funeral Facility Holiday Camp Hotel House Marine Fuelling Station Off-course Betting Centre Office Petrol Filling Station Place of Entertainment Private Club Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation Refuse Disposal Installation (Refuse Transfer Station only) Residential Institution Sewage Treatment/Screening Plant Shop and Services Utility Installation for Private Project Zoo

(Please see next page)

GOVERNMENT, INSTITUTION OR COMMUNITY (cont'd)

Planning Intention

This zone is intended primarily for the provision of Government, institution or community facilities serving the needs of the local residents and/or a wider district, region or the territory. It is also intended to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institutional establishments.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum building height specified below, or the height of the existing building, whichever is the greater:

<u>Sub-area</u>	<u>Maximum Building Height</u>
G/IC(1)	75m
G/IC(2)	55m
G/IC(3)	45m
G/IC(4)	40m
G/IC(5)	10m
G/IC(6)	5m
G/IC(7)	Area (a) 100mPD, except a fire services rescue training tower up to 114mPD
	Area (b) 120mPD
G/IC(8)	106mPD
G/IC(9)	60mPD, except a communications tower up to 76mPD

- (b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restriction stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

OPEN SPACE

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Aviary Barbecue Spot Field Study/Education/Visitor Centre Library (within "O(1)" only) Park and Garden Pavilion Pedestrian Area Place of Recreation, Sports or Culture (within "O(1)" only) Picnic Area Playground/Playing Field Promenade Public Convenience Sitting Out Area Zoo	Cable Car Route and Terminal Building Eating Place Government Refuse Collection Point Government Use (not elsewhere specified) Holiday Camp Pier Place of Entertainment Place of Recreation, Sports or Culture (not elsewhere specified) Private Club Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Religious Institution Service Reservoir Shop and Services Tent Camping Ground Utility Installation for Private Project

Planning Intention

This zone is intended primarily for the provision of outdoor open-air public space for active and/or passive recreational uses serving the needs of local residents as well as the general public.

OPEN SPACE (2)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Aviary	Cable Car Route and Terminal Building
Barbecue Spot	Eating Place
Field Study/Education/Visitor Centre	Government Refuse Collection Point
Landfill	Government Use (not elsewhere specified)
Park and Garden	Holiday Camp
Pavilion	Place of Entertainment
Pedestrian Area	Place of Recreation, Sports or Culture
Picnic Area	Private Club
Playground/Playing Field	Public Transport Terminus or Station
Promenade	Public Utility Installation
Public Convenience	Public Vehicle Park (excluding container vehicle)
Sitting Out Area	Religious Institution
Zoo	Service Reservoir
	Shop and Services
	Tent Camping Ground
	Utility Installation for Private Project

Planning Intention

This zone is intended primarily for the provision of outdoor open-air public space for active and/or passive recreational uses serving the needs of local residents as well as the general public after the decommissioning and restoration of the landfill site, while permitting landfill use in the interim.

RECREATION

Column 1
Uses always permitted

Column 2
Uses that may be permitted with or
without conditions on application
to the Town Planning Board

Agricultural Use	Animal Boarding Establishment
Field Study/Education/Visitor Centre	Broadcasting, Television and/or Film Studio
Government Use (Police Reporting Centre only)	Eating Place
Holiday Camp	Golf Course
Picnic Area	Government Refuse Collection Point
Place of Recreation, Sports or Culture	Government Use (not elsewhere specified)
Public Convenience	Marina
Tent Camping Ground	Pier
	Place of Entertainment
	Private Club
	Public Utility Installation
	Public Vehicle Park (excluding container vehicle)
	Residential Institution
	Shop and Services
	Theme Park
	Utility Installation for Private Project
	Zoo

Planning Intention

This zone is intended primarily for recreational developments for the use of the general public. It encourages the development of active and/or passive recreation and tourism/eco-tourism. Uses in support of the recreational developments may be permitted on application to the Town Planning Board.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 0.1 and a maximum building height of 1 storey, or the plot ratio and height of the existing building, whichever is the greater.
- (b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

OTHER SPECIFIED USES

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
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For “Commercial Development with Public Transport Interchange” Only

Ambulance Depot	Broadcasting, Television and/or Film Studio
Commercial Bathhouse/Massage Establishment	Flat
Eating Place	Government Refuse Collection Point
Educational Institution	Hospital
Exhibition or Convention Hall	Petrol Filling Station
Government Use (not elsewhere specified)	Residential Institution
Hotel	
Information Technology and Telecommunications Industries	
Institutional Use (not elsewhere specified)	
Library	
Off-course Betting Centre	
Office	
Place of Entertainment	
Place of Recreation, Sports or Culture	
Private Club	
Public Clinic	
Public Convenience	
Public Transport Terminus or Station	
Public Utility Installation	
Public Vehicle Park (excluding container vehicle)	
Recyclable Collection Centre	
Religious Institution	
School	
Shop and Services	
Social Welfare Facility	
Training Centre	
Utility Installation for Private Project	
Wholesale Trade	

Planning Intention

This zone is intended primarily for commercial developments, which may include uses such as office, shop and services, place of entertainment, eating place and hotel, with public transport interchange facilities serving as a major employment node and a commercial, retail and entertainment centre for the New Town as well as for Sai Kung hinterland.

(Please see next page)

OTHER SPECIFIED USES (cont'd)

Column 1
Uses always permitted

Column 2
Uses that may be permitted with or
without conditions on application
to the Town Planning Board

For “Commercial/Residential Development with Public Transport Interchange” Only

Ambulance Depot
 Eating Place
 Educational Institution
 (in a commercial building or in the
 purpose-designed non-residential portion[@]
 of an existing building only)
 Exhibition or Convention Hall
 Flat
 Government Use (not elsewhere specified)
 Hotel
 House
 Information Technology and
 Telecommunications Industries
 Library
 Market
 Off-course Betting Centre
 Office
 Place of Entertainment
 Place of Recreation, Sports or Culture
 Private Club
 Public Clinic
 Public Transport Terminus or Station
 Public Utility Installation
 Public Vehicle Park (excluding container
 vehicle)
 Residential Institution
 School (in free-standing purpose-designed
 school building, in a commercial building or
 in the purpose-designed non-residential
 portion[@] of an existing building only)
 Shop and Services (not elsewhere specified)
 Social Welfare Facility
 Training Centre
 Utility Installation for Private Project
 Wholesale Trade

Broadcasting, Television and/or Film Studio
 Commercial Bathhouse/Massage Establishment
 Educational Institution (not elsewhere specified)
 Government Refuse Collection Point
 Hospital
 Institutional Use (not elsewhere specified)
 Petrol Filling Station
 Public Convenience
 Recyclable Collection Centre
 Religious Institution
 School (not elsewhere specified)
 Shop and Services (Motor Vehicle Showroom
 only)

[@] Excluding floors containing wholly or mainly car parking, loading/unloading bay and/or plant room

OTHER SPECIFIED USES (cont'd)

For “Commercial/Residential Development with Public Transport Interchange” Only (cont'd)

Planning Intention

This zone is intended primarily for commercial and/or residential development with public transport interchange facilities. Commercial, residential and mixed commercial/residential uses are always permitted.

(Please see next page)

OTHER SPECIFIED USES (cont'd)

<p>Column 1 Uses always permitted</p>	<p>Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board</p>
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For "Sports and Recreation Club" Only

<p>Place of Recreation, Sports or Culture Private Club</p>	<p>Eating Place Government Refuse Collection Point Government Use (not elsewhere specified) Public Vehicle Park (excluding container vehicle) Shop and Services Social Welfare Facility Utility Installation for Private Project</p>
--	--

Planning Intention

This zone is intended primarily to reserve land for water sports and recreation facilities.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 0.5, a maximum site coverage of 50% and a maximum building height of 1 storey, or the plot ratio, site coverage and height of the existing building, whichever is the greater.
- (b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/site coverage/building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

(Please see next page)

OTHER SPECIFIED USES (cont'd)

Column 1
Uses always permitted

Column 2
Uses that may be permitted with or
without conditions on application
to the Town Planning Board

For "Industrial Estate" Only

Ambulance Depot	Electric Power Station
Broadcasting, Television and/or Film Studio	Off-course Betting Centre
Cargo Handling and Forwarding Facility	Offensive Trades
Dangerous Goods Godown	Oil Depot, Oil Refinery and Petro-chemical Plant
Eating Place	Place of Recreation, Sports or Culture
Gas Works	Service Industries (not elsewhere specified)
Government Refuse Collection Point	
Government Use (not elsewhere specified)	
Industrial Use	
Information Technology and Telecommunications Industries	
Marine Fuelling Station	
Office	
Petrol Filling Station	
Pier	
Private Club	
Public Convenience	
Public Transport Terminus or Station	
Public Utility Installation	
Public Vehicle Park (excluding container vehicle)	
Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation	
Refuse Disposal Installation	
Research, Design and Development Centre	
Shop and Services	
Social Welfare Facility (excluding those involving residential care)	
Training Centre	
Utility Installation for Private Project	
Warehouse (excluding Dangerous Goods Godown)	
Wholesale Trade	

Planning Intention

This zone is intended primarily to provide/reserve land for the development of an industrial estate for industries to be admitted by the Hong Kong Science and Technology Parks Corporation according to the criteria set by the Corporation. Industries to be included would normally not be accommodated in conventional industrial buildings because of their specific requirements.

(Please see next page)

OTHER SPECIFIED USES (cont'd)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
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For “Deep Waterfront Industry” Only

Ambulance Depot	Asphalt Plant/Concrete Batching Plant
Cargo Handling and Forwarding Facility	Container Storage/Repair Yard
Eating Place (Canteen, Cooked Food Centre only)	Container Vehicle Park/Container Vehicle Repair Yard
Government Refuse Collection Point	Dangerous Goods Godown
Government Use (not elsewhere specified)	Eating Place (not elsewhere specified)
Industrial Use (Motor-vehicle Assembly Plant, Paint Manufacturing, Service Trades, Steel Works only)	Electric Power Station
Information Technology and Telecommunications Industries	Gas Works
Marine Fuelling Station	Industrial Use (not elsewhere specified)
Open Storage of Construction Materials	Off-course Betting Centre
Open Storage of Cement/Sand	Office
Petrol Filling Station	Oil Depot, Oil Refinery and Petro-chemical Plant
Pier	Place of Recreation, Sports or Culture
Public Convenience	Private Club
Public Transport Terminus or Station	Shop and Services
Public Utility Installation	Social Welfare Facility
Public Vehicle Park (excluding container vehicle)	Training Centre
Recyclable Collection Centre	Wholesale Trade
Research, Design and Development Centre	
Refuse Disposal Installation	
Ship-building, Ship-breaking and Ship-repairing Yard	
Utility Installation for Private Project	
Warehouse (excluding Dangerous Goods Godown)	

Planning Intention

This zone is intended primarily for special industries which require marine access, access to deep water berths or water frontage. Industries to be accommodated within this zone are usually capital intensive, land-intensive and cannot be accommodated in conventional industrial buildings.

(Please see next page)

OTHER SPECIFIED USES (cont'd)

Column 1
Uses always permitted

Column 2
Uses that may be permitted with or
without conditions on application
to the Town Planning Board

For "Desalination Plant" Only

***Desalination Plant
Pier***

***Government Use
Utility Installation not ancillary to the
Specified Use***

Planning Intention

This zone is intended primarily for the development of a desalination plant to provide fresh water serving the needs of the community.

(please see next page)

OTHER SPECIFIED USES (cont'd)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
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For "Cemetery" Only

Columbarium	Place of Recreation, Sports or Culture
Crematorium	Public Transport Terminus or Station
Funeral Facility	Public Utility Installation
Government Use (not elsewhere specified)	Religious Institution
Grave	Shop and Services (Retail Shop only)
Public Convenience	Utility Installation for Private Project

Planning Intention

This zone is intended primarily for the provision of land for cemetery use serving the needs of the community.

For "Petrol Filling Station" Only

Petrol Filling Station	Government Use
	Public Utility Installation
	Workshop (Vehicle Repair Workshop only)

Planning Intention

This zone is intended primarily for the provision of petrol filling station serving the needs of the community.

(Please see next page)

OTHER SPECIFIED USES (cont'd)

Column 1
Uses always permitted

Column 2
Uses that may be permitted with or
without conditions on application
to the Town Planning Board

For "Pier" Only

Government Use
Pier

Eating Place
Marine Fuelling Station
Shop and Services
Utility Installation for Private Project

Planning Intention

This zone is primarily intended for the provision of pier for recreation and pleasure vessels and tourism to serve the needs of the community and to enhance the recreation and tourism potential of the area.

Remarks

Kiosks not greater than 10m² each in area and not more than 10 in number for uses as shop and services are considered as ancillary to "pier" use.

For "Ventilation Building" only

Ventilation Building

Government Use
Utility Installation not ancillary to the
Specified Use

Planning Intention

This zone is intended primarily for the development of ventilation building.

For All Other Sites (Not Listed Above)

As Specified on the Plan

Government Use
Utility Installation not ancillary to the
Specified Use

Planning Intention

These zones are intended primarily to provide land for the specified use serving the specific needs of the community.

GREEN BELT

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Agricultural Use Barbecue Spot Government Use (Police Reporting Centre only) Nature Reserve Nature Trail On-Farm Domestic Structure Picnic Area Public Convenience Tent Camping Ground Wild Animals Protection Area	Animal Boarding Establishment Broadcasting, Television and/or Film Studio Cable Car Route and Terminal Building Columbarium (within a Religious Institution or extension of existing Columbarium only) Crematorium (within a Religious Institution or extension of existing Crematorium only) Field Study/Education/Visitor Centre Flat Government Refuse Collection Point Government Use (not elsewhere specified) Helicopter Landing Pad Holiday Camp House Marine Fuelling Station Petrol Filling Station Pier Place of Recreation, Sports or Culture Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation Religious Institution Residential Institution Rural Committee/Village Office School Service Reservoir Social Welfare Facility Utility Installation for Private Project Zoo

Planning Intention

The planning intention of this zone is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as well as to provide passive recreational outlets. There is a general presumption against development within this zone.

DRAFT ~~APPROVED~~ TSEUNG KWAN O OUTLINE ZONING PLAN NO. S/TKO/22A

EXPLANATORY STATEMENT

EXPLANATORY STATEMENT

APPROVED DRAFT TSEUNG KWAN O OUTLINE ZONING PLAN NO. S/TKO/22A

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DRAFT APPROVED TSEUNG KWAN O OUTLINE ZONING PLAN NO. S/TKO/22A

(Being ~~an Approved~~ *a Draft* Plan for the Purposes of the Town Planning Ordinance)

EXPLANATORY STATEMENT

Note: For the purposes of the Town Planning Ordinance, this Statement shall not be deemed to constitute a part of the Plan.

1. **INTRODUCTION**

This Explanatory Statement is intended to assist an understanding of the **approved draft** Tseung Kwan O Outline Zoning Plan (OZP) No. S/TKO/22A. It reflects the planning intention and objectives of the Town Planning Board (the Board) for various land-use zonings of the Plan.

2. **AUTHORITY FOR THE PLAN AND PROCEDURE**

- 2.1 On 11 December 1992, the draft Tseung Kwan O OZP No. S/TKO/1, the first statutory plan covering the Tseung Kwan O area, was gazetted under section 5 of the Town Planning Ordinance (the Ordinance). The OZP was subsequently amended twice.
- 2.2 On 16 July 1996, the then Governor in Council, under section 9(1)(a) of the Ordinance, approved the draft Tseung Kwan O OZP, which was subsequently renumbered as S/TKO/4. On 4 November 1997, the Chief Executive in Council (CE in C) referred the approved OZP No. S/TKO/4 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The OZP was subsequently amended and exhibited for public inspection under section 5 of the Ordinance.
- 2.3 On 9 February 1999, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Tseung Kwan O OZP, which was subsequently renumbered as S/TKO/6. On 20 July 1999, the CE in C referred the approved OZP No. S/TKO/6 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The OZP was subsequently amended three times and exhibited for public inspection under section 7 or 12(3) of the Ordinance.
- 2.4 On 15 May 2001, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Tseung Kwan O OZP, which was subsequently renumbered as S/TKO/10. On 25 September 2001, the CE in C referred the approved OZP No. S/TKO/10 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The OZP was subsequently amended twice and exhibited for public inspection under section 5 or 7 of the Ordinance.
- 2.5 On 17 December 2002, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Tseung Kwan O OZP, which was subsequently renumbered as S/TKO/13. On 8 July 2003, the CE in C referred the approved OZP No. S/TKO/13 to the Board for amendment under section 12(1)(b)(ii) of the

Ordinance. The OZP was subsequently amended and exhibited for public inspection under section 5 of the Ordinance.

- 2.6 On 2 November 2004, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Tseung Kwan O OZP, which was subsequently renumbered as S/TKO/15. On 30 May 2006, the CE in C referred the approved OZP No. S/TKO/15 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The OZP was subsequently amended and exhibited for public inspection under section 5 of the Ordinance to reflect the relevant recommendations of the Feasibility Study for Further Development of Tseung Kwan O (the Study).
- 2.7 On 2 June 2009, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Tseung Kwan O OZP, which was subsequently renumbered as S/TKO/17. On 1 December 2009, the Secretary for Development (SDEV), under the delegated authority of the Chief Executive (CE), directed the Board under section 3(1)(a) of the Ordinance to extend the planning scheme boundary of the Tseung Kwan O OZP to cover a piece of land proposed to be excised from the Clear Water Bay Country Park (CWBCP) for the proposed South East New Territories Landfill Extension. On 2 February 2010, the CE in C referred the approved OZP No. S/TKO/17 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The OZP was subsequently amended twice, including the exclusion of about 5 ha of CWBCP land from the planning scheme boundary of the Tseung Kwan O OZP, and was exhibited for public inspection under section 5 or 7 of the Ordinance.
- 2.8 On 17 April 2012, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Tseung Kwan O OZP, which was subsequently renumbered as S/TKO/20. On 29 April 2014, the CE in C referred the approved Tseung Kwan O OZP No. S/TKO/20 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. On 16 May 2014, the reference was notified in the Gazette under section 12(2) of the Ordinance.
- 2.9 On 27 February 2015, the draft Tseung Kwan O OZP No. S/TKO/21 incorporating amendments mainly to rezone a site in Area 85 from “Other Specified Uses” annotated “Sewage Treatment Works” to “Government, Institution or Community (9)” to facilitate a proposed data centre development was exhibited for public inspection under section 5 of the Ordinance. In addition, the road schemes of the Tseung Kwan O – Lam Tin Tunnel and the Cross Bay Link, Tseung Kwan O authorized by the CE in C under the Roads (Works, Use and Compensation) Ordinance are shown on the Plan for information. During the exhibition period, a total of 385 representations were received. On 29 May 2015, the representations were published for three weeks for public comments and 9 comments were received. On 11 September 2015, the Board decided not to propose any amendment to the draft OZP to meet the representations under section 6(B)8 of the Ordinance.
- 2.10 On 1 December 2015, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Tseung Kwan O OZP, which was subsequently renumbered as S/TKO/22. On 11 December 2015, the approved Tseung Kwan O OZP No.

S/TKO/22 (~~the Plan~~) was exhibited for public inspection under section 9(5) of the Ordinance.

- 2.11** *On 5 April 2016, the CE in C referred the approved Tseung Kwan O OZP No. S/TKO/22 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The reference back of the OZP was notified in the Gazette on 15 April 2016 under section 12(2) of the Ordinance.*
- 2.12** *On _____ 2016, the draft Tseung Kwan O OZP No. S/TKO/23 (the Plan), incorporating amendments to rezone a site in the south-eastern part of Tseung Kwan O Area 137 for desalination plant use, was exhibited for public inspection under section 5 of the Ordinance. In addition, the footbridge as described in the road scheme of the Tseung Kwan O further development infrastructure works for Tseung Kwan O Stage 1 Landfill Site as authorized by the Chief Executive in Council (CE in C) under the Roads (Works, Use and Compensation) Ordinance are shown on the Plan for information.*

3. OBJECT OF THE PLAN

- 3.1 The object of the Plan is to indicate the broad land use zones and major transport networks for the Tseung Kwan O area so that development and redevelopment in the area can be subject to statutory planning control. Such control is necessary to develop Tseung Kwan O New Town into a balanced community.
- 3.2 The Plan is to illustrate the broad principles of development within the Planning Scheme Area. As it is a small-scale plan, the alignment of roads and the Mass Transit Railway (MTR) line as well as boundaries between the land use zones may be subject to minor alterations as detailed planning and development proceed.
- 3.3 Since the Plan is to show broad land use zonings, there would be situations in which small strips of land not intended for building development purposes and carry no development right under the lease, such as the areas restricted as non-building area or for garden, slope maintenance and access road purposes, are included in the zones. The general principle is that such areas should not be taken into account in plot ratio (PR) and site coverage (SC) calculation. Development within zones should be restricted to building lots carrying development right in order to maintain the character and amenity of the Tseung Kwan O area and not to overload the road network in this area.

4. NOTES OF THE PLAN

- 4.1 Attached to the Plan is a set of Notes which shows the types of uses or developments which are always permitted within the Planning Scheme Area and in particular zones and which may be permitted by the Board, with or without conditions, on application. The provision for application for planning

permission under section 16 of the Ordinance allows greater flexibility in land use planning and control of development to meet changing needs.

- 4.2 For the guidance of the general public, a set of definitions that explains some of the terms used in the Notes may be obtained from the Technical Services Division of the Planning Department and can be downloaded from the Board's website at <http://www.info.gov.hk/tpb>.

5. THE PLANNING SCHEME AREA

- 5.1 The Planning Scheme Area (the Area), which covers an area of about 1,718 hectares (ha), is located at the southern part of Sai Kung District in the South East New Territories. It is bounded by Clear Water Bay Peninsula to the east, Junk Bay to the south, Lam Tin and Sau Mau Ping areas to the west, and Tseng Lan Shue and the Hong Kong University of Science and Technology to the north. The Area is surrounded by steep sloping hills in the north, east and west, and is physically segregated from East Kowloon and Clear Water Bay Peninsula.
- 5.2 The boundary of the Area is shown in a heavy broken line on the Plan. For planning and reference purposes, the Area has been divided into a number of smaller planning areas as shown on the Plan.

6. POPULATION

According to the 2011 Population Census, the population of the Area was about 371,000 persons. It is estimated that the planned population of the Area would be about ~~445,000~~ **451,000** persons.

7. URBAN DESIGN FRAMEWORK

- 7.1 Tseung Kwan O is a third generation new town. Capitalizing on the enhanced accessibility brought about by Tseung Kwan O MTR Line, high-density developments are located close to MTR stations at Po Lam, Hang Hau, Tseung Kwan O, Tiu Keng Leng and Tseung Kwan O South, each forming a district centre with its own retail and supporting facilities. The southeastern part of the New Town is reserved for specific uses to meet territorial needs, such as Tseung Kwan O Industrial Estate in Area 87, deep waterfront industries *and a desalination plant* in Area 137, landfills and proposed landfill extension in Areas 77, 101, 105 and 137.
- 7.2 As recommended under the Study completed in 2005, an urban design framework has been formulated mainly for the new development areas in Town Centre South, Tiu Keng Leng and Pak Shing Kok areas to direct the development of a coherent and legible structure of land uses, urban form and open spaces that is appropriate to the unique development context of a waterfront and valley setting of the New Town.

- 7.3 The framework seeks to optimize opportunities afforded by the new development areas in Town Centre South to create a new and distinctive waterfront district that capitalizes on the dramatic visual and physical relationship of the natural landscape of the surrounding country parks and Junk Bay, with the objective of fostering a unique district identity. It also seeks to maximize the development potential of the existing Eastern Channel and Junk Bay by promoting water sports and recreation. The primary objective is to provide a high quality vibrant leisure and recreational area for the enjoyment of the Tseung Kwan O residents and visitors. The new development areas in the Town Centre South, Tiu Keng Leng and Pak Shing Kok areas are intended to be highly integrated with the hinterland through the provision of a comprehensive pedestrian circulation and open space framework and to incorporate architectural designs and landscape treatments that promote a positive public image of the New Town.
- 7.4 The key features of the new development areas proposed under the urban design framework include the following:
- (a) reduction in the population density within Town Centre South and Tiu Keng Leng from that formerly proposed for the area;
 - (b) diminution in building height towards the waterfront with modulation in building height at the waterfront to enhance variety in the height and massing of new development;
 - (c) elimination of waterfront roads to promote a more pedestrian friendly and attractive waterfront district;
 - (d) provision of a “Central Avenue” which is a landscaped pedestrian retail corridor in the form of open space that links the commercial and entertainment node adjacent to MTR Tseung Kwan O Station with the waterfront;
 - (e) provision of a high quality waterfront park and promenade with related leisure and commercial uses;
 - (f) provision of a new riverine park along a landscaped corridor adjacent to the Eastern Channel that provides connections to the waterfront and opportunities for active and passive recreation;
 - (g) provision for water sports activity and recreation in the Eastern Channel and Junk Bay;
 - (h) continual provision of a comprehensive breezeway system by suitably aligned open space, low-rise Government, institution or community (GIC) facilities and major road corridors to promote better ventilation within the New Town;
 - (i) provision of a signature Civic Node and GIC cluster at the western gateway to the New Town at the intersection of Po Yap Road and Road P2;

- (j) provision of ‘breathing spaces’ for the more densely populated areas such as Tiu Keng Leng, by the introduction of district parks and local open spaces;
- (k) provision of low-rise developments at Pak Shing Kok to maintain the existing ridgeline when viewed from Sai Kung;
- (l) promotion of lively streetscapes and activities and avoidance of podium developments which may create ‘dead’ development edges; and
- (m) development of Cross Bay Link in the form of a landmark feature bridge.

8. LAND USE ZONINGS

8.1 “Comprehensive Development Area” (“CDA”) : Total Area 38.72 ha

- 8.1.1 This zone is intended for comprehensive development/redevelopment of the area for residential and/or commercial uses with the provision of open space and other supporting facilities. It is to facilitate appropriate planning control over the development mix, scale, design and layout of development, taking into account of various environmental, traffic, infrastructure and other constraints. It is also intended for developing or redeveloping relatively large sites in a comprehensive manner and maintaining planning control within the zone through the submission of a Master Layout Plan (MLP). Developments within this zone are subject to gross floor area (GFA) and/or building height restrictions. To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of these restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.
- 8.1.2 The “CDA” site in Area 86 is intended to facilitate comprehensive development including a MTR depot, a MTR station, associated property development and supporting community facilities. Development/redevelopment within this “CDA” site is restricted to a maximum domestic GFA of 1,612,800m² and a maximum non-domestic GFA of 40,000m² (mainly for retail purpose).
- 8.1.3 The existing film studio site in Area 92 is within this zoning and is intended for comprehensive redevelopment for low-density residential use. Development or redevelopment within this “CDA” site is restricted to a maximum GFA of 15,700m² and a maximum building height of 6 storeys over one level of carport.
- 8.1.4 Pursuant to section 4A(1) of the Ordinance, any development proposal under this zoning will require the approval of the Board by way of a planning application under section 16 of the Ordinance. Unless otherwise specified, a MLP should be submitted together with environmental, traffic and other relevant assessment reports as well as other materials as specified in the Notes of the Plan for the approval of the Board under section 4A(2) of the Ordinance. A copy of the

approved MLP will be made available for public inspection pursuant to section 4A(3) of the Ordinance.

8.2 “Commercial/Residential” (“C/R”) : Total Area 20.07 ha

8.2.1 This zone is intended primarily for commercial and/or residential development. Commercial, residential and mixed commercial/residential uses are always permitted.

8.2.2 The areas within this zoning are primarily planned and concentrated in the town centre and district centres where accessibility is enhanced by MTR Tseung Kwan O Extension.

8.3 “Residential (Group A)” (“R(A)”) : Total Area 144.97 ha

8.3.1 This zone is intended primarily for high-density residential developments. Commercial uses are always permitted on the lowest three floors of a building or in the purpose-designed non-residential portion of an existing building.

8.3.2 This zoning constitutes the major type of residential land uses in the Area. It covers public rental housing (*PRH*) estates, Home Ownership Schemes (HOS), Private Sector Participation Schemes (PSPS), Sandwich Class Housing (SCH) and Flat for Sale Schemes (FFSS) as well as private residential developments. Commercial uses such as eating places, offices, shops and services are permitted as of right on the lowest three floors of the buildings, including basement(s), and in the purpose-designed non-residential portion of the existing buildings.

8.3.3 Existing ~~public rental housing~~ *PRH* estates include Tsui Lam Estate in Area 5, Po Lam Estate in Area 14, King Lam Estate in Area 23, Ming Tak Estate in Area 34, Hau Tak Estate in Areas 39 & 41, Sheung Tak Estate in Area 59, *Yee Ming Estate in Area 65*, Kin Ming Estate in Area 73 and part of Choi Ming Court in Area 74. In addition, thirteen HOS developments namely King Ming Court in Area 6, Ying Ming Court in Area 14, Yan Ming Court in Area 21, Ho Ming Court in Area 23, Hin Ming Court and Yuk Ming Court in Area 34, Yu Ming Court in Area 39, Chung Ming Court in Area 41, Wo Ming Court in Area 34/44, Tong Ming Court in Area 57, Kwong Ming Court and Po Ming Court in Area 59, and part of Choi Ming Court in Area 74, as well as four PSPS developments namely Fu Ning Garden in Area 30, On Ning Garden in Area 40, Beverly Garden in Area 55 and Bauhinia Garden in Area 65 have also been completed.

8.3.4 Existing SCH developments comprise Serenity Place in Area 13, Radiant Towers in Area 18 and The Pinnacle in Area 24. Verbena Heights in Area 19 is an existing mixed public rental and FFSS development developed by the Hong Kong Housing Society.

8.3.5 The ex-Tiu Keng Leng cottage area in Areas 73 and 74 has been cleared and planned primarily for the development of ~~public rental housing~~

PRH estates and private residential developments. **Some Most** of the residential developments within the area have been completed. **A number of proposed residential sites in the town centre are also within this zoning.**

8.3.6 There are six sub-areas within this zone, each with its own specific development restrictions:

(a) “Residential (Group A)1” (“R(A)1”) : 1.49 ha

A site to the southwest of Kin Ming Estate in Area 73 is zoned “R(A)1”. Development within this sub-area is restricted to a maximum domestic and non-domestic PRs of 5.5 and 0.5 respectively and a maximum building height of 138m above Principal Datum (mPD). A stepped building height profile should be adopted for developments within the site thereby reducing its visual impact on the surrounding low-rise GIC developments.

(b) “Residential (Group A)2” (“R(A)2”) : 6.60 ha

Two sites in Area 66 to the south of Po Yap Road are zoned “R(A)2”. Development within this sub-area is subject to a maximum domestic and non-domestic PRs of 5 and 0.5 respectively, a maximum SC of 50% and a maximum building height of 100mPD. Podium development within these sites should be avoided as far as possible, but may be used within these sites to act as noise mitigation measure against Po Yap Road. Besides, built form and heights should be articulated to create a varied and interesting built form and activity/development edge. Retail and commercial facilities should be promoted along the boundaries fronting directly onto the pedestrianized Central Avenue. *Whilst the Wings II has been completed, the other residential developments are currently in advanced construction stage.*

(c) “Residential (Group A)3” (“R(A)3”) : 3.04 ha

A site in Area 65 to the east of Bauhinia Garden is zoned “R(A)3”. Development within this sub-area is restricted to a maximum domestic and non-domestic PRs of 4 and 0.5 respectively, a maximum SC of 50% and a maximum building height of 100mPD. **The prospective developer is required to provide a** public open space with a **minimum** site area of 4,600m² at the southern portion of this sub-area *has been provided and* at street level to serve as a transitional buffer with the adjacent non-residential developments as well as serving the needs of the surrounding neighbourhoods. To be compatible with the overall urban design concept of the Town Centre South area, the use of podium and wall-like development within this sub-area should be avoided.

(d) “Residential (Group A)4” (“R(A)4”) : 3.54 ha

A site in Area 65 to the west of the Eastern Channel is zoned “R(A)4”. Development within this sub-area is restricted to a maximum domestic and non-domestic PRs of 3 and 0.5 respectively, and a maximum SC of 50%. To achieve a gradation in height towards the waterfront, this sub-area has different building height restrictions, i.e. 65mPD for Area (a) and 35mPD for Area (b). To create a varied and interesting activity edge along the waterfront promenade, publicly accessible outdoor spaces in the form of ‘urban courtyards’ are encouraged to be provided adjoining the promenade within the site. It is proposed that recreational and entertainment uses such as alfresco dining, sitting out areas, gardens could be provided within these outdoor spaces. *Apart from private residential developments, a subsidized sales flats to be developed by Housing Authority is included.*

(e) “Residential (Group A)5” (“R(A)5”) : 3.67 ha

Two sites in Area 66 abutting the town plaza and the waterfront park along Tong Chun Street and along Tong Yin Street respectively are zoned “R(A)5”. They are subject to a maximum domestic and non-domestic PRs of 3 and 0.5 respectively, a maximum SC of 50% and a maximum building height of 65mPD. Retail and commercial activities should be developed along the edge that fronts onto the town plaza and the waterfront park.

(f) “Residential (Group A)6” (“R(A)6”) : 9.36 ha

Two sites in Area 68, one along Tong Chun Street to the west of the Eastern Channel and one along Tong Yin Street to the south of the Civic Node are zoned “R(A)6”. They are subject to a maximum domestic and non-domestic PRs of 2 and 0.5 respectively, and a maximum SC of 50%. To achieve a gradation in height towards the waterfront, this sub-area also has different building height restrictions, i.e. 50mPD for Area (a), 35mPD for Area (b) and 60mPD for Area (c). The building height restriction for Area (c) of both sites is intended to allow the development of a feature tower to provide height variation at the waterfront. Similar to the “R(A)4” site, ‘urban courtyards’ are encouraged to be provided along the promenade.

8.3.7 The five sites in the “R(A)4”, “R(A)5” and “R(A)6” sub-areas are intended for the development of waterfront-related commercial and residential uses. These sites will provide a mix of high quality residential development with the provision of retail and other commercial, leisure and entertainment activities to enhance activity and to create a unique, interesting and vibrant waterfront for use by local residents and visitors. The different building height restrictions

within these sub-areas are intended to introduce a height variation for each site.

8.3.8 Land has been reserved in the “R(A)5” site at Tong Yin Street and two “R(A)6” sites adjacent to the waterfront promenade for the provision of 24 hour-dedicated pedestrian passageways. These are generally non-building areas which will follow the major pedestrian desire lines and guide pedestrians to the waterfront. The passageways would be landscaped to high quality and are planned to be consistent with the waterfront landscape treatments.

8.3.9 The use of podium and wall-like development within the “R(A)2”, “R(A)3”, “R(A)4”, “R(A)5” and “R(A)6” sub-areas should be avoided to ensure compatibility with the overall urban design concept of the Town Centre South area, particularly the promotion of lively streetscapes and activities. This objective would be attained by ensuring the inclusion of car parking facilities, loading/unloading facilities, plant room, caretaker’s office and quarters and recreational facilities in SC calculation, if provided above ground. Future developments are encouraged to adopt suitable design measures to minimize any possible adverse air ventilation impacts. These include lower podium height, greater permeability of podium, wider gap between buildings, non-building area to create air path for better ventilation and minimize the blocking of air flow through positioning of building towers and podiums to align with the prevailing wind directions, as appropriate.

8.3.10 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of PR/SC/building height restrictions of the sub-areas and/or minor adjustment to the boundaries of Areas (a)/(b) of “R(A)4” and/or Areas (a)/(b)/(c) of “R(A)6” may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.

8.4 “Residential (Group B)” (“R(B)”) : Total Area 4.49 ha

8.4.1 This zone is intended primarily for medium-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Board.

8.4.2 Two sites are under this zoning, one is Hong Sing Garden in Area 4 and the other is Oscar by the Sea (the ex-Hong Kong Oxygen site) in Area 51.

8.5 “Residential (Group C)” (“R(C)”) : Total Area 0.66 ha

8.5.1 This zone is intended primarily for high quality, low-rise residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Board.

- 8.5.2 Developments within this zone are subject to PR, SC and building height controls.

“Residential (Group C)1” (“R(C)1”) : 0.66 ha

- 8.5.3 Development within this sub-area is restricted to a maximum PR of 0.6, a maximum SC of 30%, and a maximum building height of 2 storeys over one level of carport, or the PR, SC and height of the existing building(s), whichever is the greater. These restrictions are to ensure that any development or redevelopment of this sub-area will be in line with the general character of the adjoining environment. Two sites in Areas 36 and 92 fall within this sub-area.

- 8.5.4 Application for minor relaxation of the PR/SC/building height restrictions may be considered by the Board under section 16 of the Ordinance. The purpose of this provision is to allow the Board to consider building layout and design proposals which, whilst not strictly complying with the stated restrictions, will meet the planning objectives for the area and provide some additional benefits, such as the conservation of environmentally important natural features or mature vegetation. Each application will be considered on its own merits.

8.6 “Residential (Group E)” (“R(E)”) : Total Area 4.00 ha

- 8.6.4 This zone is intended primarily for phasing out of existing industrial uses through redevelopment (or conversion) for residential use on application to the Board.

- 8.6.5 Two sites abutting Shek Kok Road in Area 85 are under this zoning. Development within the zone is subject to a maximum PR of 5 and a maximum building height of 130m. To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the building height restriction may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.

- 8.6.6 The developers will be required to submit adequate information to demonstrate that new residential developments will be environmentally acceptable, and suitable mitigation measures, if required, will be implemented to address the potential industrial/residential interface problems, the potential land contamination issue, and the noise impact of the MTR open track section nearby. One of the sites will also accommodate a public vehicle park comprising 21 private car and 26 lorry parking spaces for reprovisioning of a public vehicle park originally located at the northern end of Shek Kok Road. One footbridge across Wan Po Road and one across Shek Kok Road to link up the sites with the “CDA” in Area 86 are required in the new residential developments.

- 8.6.7 Under this zoning, existing industrial uses will be tolerated but new industrial development will not be permitted upon redevelopment in

order to avoid the perpetuation or aggravation of the industrial/residential interface problems with the new residential development during the redevelopment process. In existing industrial buildings, new developments involving offensive trades will not be permitted. Any modification of use from non-industrial to industrial uses (other than non-polluting industrial uses) within existing industrial buildings will require the permission of the Board. In addition, commercial uses, other than those permitted in the purpose-designed non-industrial portion of the existing industrial buildings, would require the permission of the Board. Upon redevelopment of the industrial buildings to non-industrial buildings, commercial uses will be permitted as of right on the lowest three floors, including basement(s), and in the purpose-designed non-residential portion of the existing buildings.

8.7 “Village Type Development” (“V”) : Total Area 22.01 ha

8.7.4 The planning intention of this zone is to reflect existing recognized and other villages, and to provide land considered suitable for village expansion and re-provisioning of village houses affected by government projects. Land within this zone is primarily intended for development of Small Houses by indigenous villagers. It is also intended to concentrate village type development within this zone for a more orderly development pattern, efficient use of land and provision of infrastructures and services. Selected commercial and community uses serving the needs of the villagers and in support of the village development are always permitted on the ground floor of a New Territories Exempted House. Other commercial, community and recreational uses may be permitted on application to the Board.

8.7.5 In order to retain the village character, any future development or redevelopment within this zone, except otherwise specified, is subject to a maximum building height of 3 storeys (8.23m) or the height of the existing building(s), whichever is the greater. To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the building height restriction may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.

8.7.6 This zoning covers the existing villages including Tseung Kwan O Village in Area 7, Mau Wu Tsai Village in Area 123 and Boon Kin Village in Area 109. It also includes the Yau Yue Wan Village resite area in Area 22, the Hang Hau Village resite area in Area 31, the Fat Tau Chau and Tin Ha Wan Village resite areas in Area 35. Besides, a site in Area 8 is reserved for the future expansion of Tseung Kwan O Village.

8.8 “Government, Institution or Community” (“G/IC”) : Total Area 142.77 ha

8.8.4 This zone is intended primarily for the provision of GIC facilities serving the needs of the local residents and/or a wider district, region or the territory. It is also intended to provide land for uses directly

related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institutional establishments.

8.8.5 There are a number of sub-areas under this zone, each with its own specific building height restriction to ensure that developments within these sub-areas are in line with the overall urban design concept of the New Town:

(a) “Government, Institution or Community (1)” (“G/IC(1)”): 5.16 ha

Development within this sub-area is restricted to a maximum building height of 75m. A piece of land in Area 67 which is reserved for the development of a Civic Node falls within this sub-area. The Civic Node will comprise a cultural complex/town hall, government offices, lorry park and public car parking facilities. Landmark buildings should be developed within this site to create a symbolic ‘gateway’ at this prominent location. This site, together with the proposed GIC cluster to the west of Road P2 in Area 72, will form the western gateway of the New Town.

(b) “Government, Institution or Community (2)” (“G/IC(2)”): 2.42 ha

Development within this sub-area is restricted to a maximum building height of 55m. The ~~existing Vocational Training Council campus of Hong Kong~~ Design Institute and Hong Kong Institute of Vocational Education (Lee Wai Lee) of ~~the Vocational Training Council Campus~~ to the south of Choi Ming Court in Area 74 falls within this sub-area.

(c) “Government, Institution or Community (3)” (“G/IC(3)”): 2.50 ha

Development within this sub-area is restricted to a maximum building height of 45m. Two sites are within this sub-area. A site located immediately to the northwest of MTR Tiu Keng Leng Station in Area 73 ~~is consists of two post-secondary colleges operated by Caritas Bianchi College of Careers and Caritas Institute of Higher Education as reserved for the development of two post-secondary colleges~~. Another site in Area 65 is reserved for the development of a government complex, possibly for recreational and other uses.

(d) “Government, Institution or Community (4)” (“G/IC(4)”): 8.08 ha

Development within this sub-area is restricted to a maximum building height of 40m. There are four sites within this sub-area. One of them is located to the west of Road P2 in Area 72, which is reserved for the development of a GIC cluster comprising a clinic, a police station, a fire station cum ambulance depot and a refuse collection point. The

architecture of buildings within this GIC cluster should be distinctive and compatible with the Civic Node in Area 67 to create a landmark gateway at this location. Another site, which is located in Area 106 and to the east of “G/IC(8)” sub-area in Area 78, is for the development of *departmental quarters for Fire Services Department* ~~government uses to meet future needs~~. The remaining two sites are located at Town Centre South comprising an existing primary school and a through-train primary cum secondary school in Area 65; *a planned international school and a planned secondary school in Area 67*.

(e) “Government, Institution or Community (5)” (“G/IC(5)”): 0.33 ha

Development within this sub-area is restricted to a maximum building height of 10m. A piece of land in Area 68, which is reserved for the development of a telephone exchange, is within this sub-area. Another site at the south-eastern portion of Area 77 is within this sub-area. It accommodates an existing gas and leachate management compound which serves to extract the gas and leachate in the Tseung Kwan O Stage I Landfill thereby keeping these substances down to acceptable levels.

(f) “Government, Institution or Community (6)” (“G/IC(6)”): 0.05 ha

Development within this sub-area is restricted to a maximum building height of 5m. A site in Area 77, which is reserved for the development of a sewage pumping station, is within this sub-area. This pumping station serves to convey the collected sewage from the Tseung Kwan O Stage I Landfill to the existing trunk sewer under Wan Po Road.

(g) “Government, Institution or Community (7)” (“G/IC(7)”): 16.11 ha

A site in Pak Shing Kok (Area 78) ~~reserved for occupied by the Fire and Ambulance Services Academy Training School cum Driving Training School~~ is within this sub-area. Development in Area (a) of this sub-area is restricted to a maximum building height of 100mPD, except a fire services rescue training tower up to 114mPD. Development in Area (b) of this sub-area is restricted to a maximum building height of 120mPD.

(h) “Government, Institution or Community (8)” (“G/IC(8)”): 6.05 ha

Development within this sub-area is restricted to a maximum building height of 106mPD. A site in Pak Shing Kok (Area 78) reserved for a ~~private hospital~~ *Chinese Medicine Hospital* and future GIC uses is within this sub-area.

(i) “Government, Institution or Community (9)” (“G/IC(9)”): 6.87 ha

Development within this sub-area is restricted to a maximum building height of 60mPD, except a communications tower up to 76mPD. A site in Area 85 reserved for a new Radio Television Hong Kong broadcasting house and future GIC uses is within this sub-area. To create a clustering effect of this sub-area with areas for broadcasting, innovation and technology industries in Tseung Kwan O, information technology and telecommunications related uses are permitted in this sub-area.

8.8.6 Specific building height restrictions for the “G/IC” sub-areas in terms of m or mPD, which mainly reflect the planned building heights of developments, have been incorporated into the Plan to provide visual and spatial relief to the Area.

8.8.7 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the building height restriction of the sub-areas may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.

8.8.8 Apart from the above, other major GIC facilities provided or planned in the Area include:

- (a) existing and proposed primary and secondary schools distributed in various areas;
- (b) a wide range of community facilities such as town hall, libraries, indoor recreation centres, community centres, care and attention homes and religious institutions in various areas;
- (c) hospitals in Areas 27 and 32;
- (d) clinics in Areas 22, 44, 56, and 72;
- (e) police stations in Areas 21 and 72;
- (f) fire stations and/or ambulance depots in Areas 10, 72 and 87;
- (g) government staff quarters in Area 22;
- (h) YMCA Youth Camp in Area 122;
- (i) electricity substations in Areas 11, 24, 39, 56 and 115;
- (j) telephone exchanges in Areas 26 and 68;
- (k) water pumping stations in Areas 5 and 120;
- (l) service reservoirs in various areas; and

(m) film studio in Area 106.

8.9 “Open Space” (“O”) : Total Area 190.80 ha

- 8.9.4 This zone is intended primarily for the provision of outdoor public open-air space for active and/or passive recreational uses serving the needs of local residents as well as the general public.
- 8.9.5 Two sites in Areas ~~72, 125 and 128~~ along Road P2 are proposed for the development of Tiu Keng Leng Park which includes two landscaped pedestrian decks spanning across the depressed Road P2. This open space will provide some visual relief to the adjacent high density developments and will link up with the waterfront park in Area 68 via a waterfront promenade.
- 8.9.6 The central part of Area 68 fronting Junk Bay is proposed for a waterfront park which will link up with a town plaza proposed to its north in Area 66. The proposed waterfront park is intended predominantly for passive recreation with a high quality landscaping design to promote a unique identity for the New Town. The town plaza is proposed to primarily serve as an urban civic space with provision for public gatherings and other activities.
- 8.9.7 A semi-circular area in Area 66 south of Po Yap Road and MTR Tseung Kwan O Station is proposed to be developed as an open/green plaza serving as a recreational space for nearby residents and visitors and a buffer between MTR Tseung Kwan O Station and the future residential developments in Area 66.
- 8.9.8 A Central Avenue at Area 66 is proposed between the open/green plaza south of Po Yap Road and the town plaza which will form a major linkage between Town Centre North and the waterfront area. The proposed Central Avenue is intended primarily for the provision of a landscaped corridor in the form of open space, which would be flanked by retail development edges on both sides of the adjacent R(A) zones and landscaped to a high quality. Shops and services, and eating places including alfresco dining may be considered by the Board through the planning permission system.
- 8.9.9 A riverine park is proposed along the Eastern Channel in Area 65 and a waterfront promenade is proposed along Junk Bay in Area 68. The sites will provide a range of water-related and passive recreational facilities and opportunities. Alfresco dining may be considered by the Board through the planning permission system. A boardwalk may be provided on the water's edge.
- 8.9.10 The landfill site in Area 105 has been decommissioned and restored. The landfill sites in Areas 101 and 137 will be developed into major open spaces upon completion of the landfill. However, any development proposals within the 250m Consultation Zone of these

landfills will need to include a Landfill Gas Hazard Assessment to the satisfaction of the Environmental Protection Department (EPD).

- 8.9.11 Other open spaces are also **planned provided** in Areas 12, 24, 25, 37, 40, ~~51~~, 73 and 74 **and another site in Area 51 is reserved** to provide recreational outlets for the nearby residential neighbourhood.

“Open Space (1)” (“O(1)”) : 16.79 ha

- 8.9.12 In “O(1)”, ‘Place of Recreation, Sports or Culture’ and ‘Library’ uses are always permitted. A town park in Area 45 provides a variety of active and passive recreational facilities, a sports ground and an indoor velodrome cum sports centre (IVSC). A sports centre together with a library (SCL) is provided in the open space in Area 74. The zoning of this sub-area allows locational and design flexibility for the provision of IVSC in Area 45 and SCL in Area 74. The building height of IVSC in Area 45 and SCL in Area 74 have not exceeded 30m above ground.

“Open Space (2)” (“O(2)”) : 100.54 ha

- 8.9.13 The landfill sites in Areas 101 and 137 fall within the “O(2)” sub-area. The “O(2)” zoning is to reflect the long-term planning intention of open space use of the landfill sites after the decommissioning and restoration of the landfill, while permitting landfill use in the interim.

- 8.9.14 Upon detailed planning, additional local open spaces will be provided in the residential zones. These open spaces are however not shown on this Plan.

8.10 “Recreation” (“REC”) : Total Area 65.85 ha

- 8.10.4 The planning intention of this zone is primarily for recreational developments for the use of the general public. It encourages the development of active and/or passive recreation and tourism/eco-tourism. Uses in support of the recreational developments may be permitted subject to planning permission. The Tseung Kwan O Stage I Landfill in Area 77 is within this zone.

- 8.10.5 Given the development constraints associated with landfill sites, development within this zone is restricted to a maximum PR of 0.1 and a maximum building height of 1 storey. To provide design flexibility, minor relaxation of the PR/building height restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits. Moreover, similar to other landfill sites, any development proposals within the 250m Consultation Zone of the landfill will need to include a Landfill Gas Hazard Assessment to the satisfaction of EPD.

8.11 “Other Specified Uses” (“OU”) : Total Area ~~225.40~~ 225.69 ha

This zone denotes land allocated or reserved for specific uses, including the following:

- (a) a waterfront site at the toe of the Tseung Kwan O Stage I Landfill in Area 77 is reserved for water sports and recreational facilities. Given the prominent location of this site and the constraints associated with landfill sites, development within this zone is restricted to a maximum PR of 0.5, a maximum SC of 50% and a maximum building height of 1 storey. To provide design flexibility, minor relaxation of the PR/SC/building height restrictions may be considered by the Board through the planning permission system;
- (b) a pair of finger piers at the waterfront of Area 68 is proposed to cater for the berthing of recreational/pleasure vessels and kaidos thereby serving the needs of the community and to enhance the water-borne recreation and tourism potential of Junk Bay as well as the New Town. Structures to be accommodated are intended for low-intensity low-rise developments generally of one storey high, depending on the design. Dining, including alfresco dining, and recreation and tourism related commercial facilities may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits. In addition, special and/or atypical design of these piers is encouraged to allow the creation of a place of attraction, resting and recreation and/or focal and vantage point for visitors;
- (c) a commercial development with public transport interchange in Area 56. This site is intended for an entertainment node within the New Town and ~~will~~ comprises a range of entertainment, leisure and commercial uses. Some residential elements within the site is allowed subject to planning permission from the Board;
- (d) commercial/residential developments with public transport interchange on sites in Areas 17, 38 and 73;
- (e) Tseung Kwan O Industrial Estate in Area 87, which enjoys the advantage of marine frontage as well as proximity to the Hong Kong University of Science and Technology;
- (f) the deep-waterfront industry in Area 137 for industries which require marine access;
- (g) *the proposed desalination plant in the southeastern part of Area 137 which is intended to provide fresh water serving the needs of the community;*
- (h) a bus depot in Area 26;
- (i) an explosive store in Area 124;

- (j) petrol filling stations in Areas 10 and 16 which may include vehicle repair workshops subject to planning permission from the Board;
- (k) the proposed landing steps in Area 68;
- (l) the sewage treatment works in Area 85;
- (m) a cemetery in Area 130 with access from Ko Chiu Road in East Kowloon;
- (n) an underground desilting compound in Area 68; and
- (o) the proposed ~~toll plaza~~, ventilation building ~~and associated facilities~~ for Tseung Kwan O – Lam Tin Tunnel in Area 128.

8.12 “Green Belt” (“GB”) : Total Area 760.13 ha

The planning intention of this zone is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as well as to provide passive recreational outlets. There is a general presumption against development within this zone. Development within this zone will be strictly controlled and development proposals will be considered on individual merits taking into account the relevant Town Planning Board Guidelines.

9. COMMUNICATIONS

9.5 Roads

- 9.5.4 Only major road networks, which comprise trunk roads, primary and district distributors, are shown on the Plan. As the Plan is drawn at a small scale, design details of major road junctions and local access roads are not indicated.
- 9.1.2 The road schemes of Tseung Kwan O – Lam Tin Tunnel and Cross Bay Link, Tseung Kwan O were authorized by the CE in C on 29 April 2014 and 2 September 2014 respectively. Pursuant to section 13A of the Ordinance, the road schemes authorized by the CE in C under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) shall deem to be approved under the Ordinance and the road schemes are shown on the Plan for information only.
- 9.1.3 External access to and from the Area will be mainly via Tseung Kwan O Tunnel and Tseung Kwan O – Lam Tin Tunnel, supplemented by Po Lam Road as well as Ying Yip Road and Hang Hau Road connecting to Clear Water Bay Road.
- 9.1.4 Within the Area, a number of primary and district distributors and local roads have been planned to provide access between the various planning areas as well as access to each locality. In particular, two new major

distributor roads, namely Cross Bay Link and Road P2 are proposed. Cross Bay Link will be designed as a feature bridge and will provide direct access from Tseung Kwan O – Lam Tin Tunnel to Area 86, Tseung Kwan O Industrial Estate in Area 87 and the special industrial area in Area 137. Road P2 will provide a link from Tseung Kwan O – Lam Tin Tunnel directly into the town centre. A section of Road P2 will be depressed to reduce its environmental impact as well as to allow the provision of an at-grade pedestrian crossing in the form of landscaped decks above the depressed Road P2, which facilitates pedestrian movement from the waterfront park to *the proposed* Tiu Keng Leng Park.

9.2 Mass Transit Railway

Apart from Tseung Kwan O Tunnel and Tseung Kwan O – Lam Tin Tunnel, external access is ~~complemented~~ *supported* by an extension of the MTR line from Lam Tin to Tseung Kwan O. Phase I of MTR Tseung Kwan O Extension project comprising four stations in Tseung Kwan O, namely Tiu Keng Leng, Tseung Kwan O, Hang Hau and Po Lam, commenced operation in August 2002. The MTR tracks are primarily underground, except for the section between Ho Ming Court and Po Shun Road, which are at grade and enclosed by structures with a landscaped bund on top to eliminate any noise impact caused by the MTR operation on the adjacent residential areas. Phase II of the project includes a spur line to Tseung Kwan O South with a depot and LOHAS Park Station in Area 86. The depot has been completed and the station commenced operation in July 2009. The railway scheme and its amendments have been authorized by the CE in C on 20 October 1998 and 14 September 1999 respectively and amended on 9 May 2005 by the then Secretary for Environment, Transport and Works.

9.3 Public Transport

Franchised buses, taxis, green mini-buses and ferries will be the main modes of public transport in addition to MTR. Public transport interchange facilities are/will be provided at strategic locations.

9.4 Pedestrian and Cycle Networks

The cycle track and pedestrian walkway networks will be designed to facilitate convenient cycle and pedestrian movements within the Area. Grade-separated pedestrian and cycle crossings will be provided at major pedestrian and cycle crossing points.

10. UTILITY SERVICES

10.1 Water Supply

10.1.1 A water supply and distribution system has been implemented to meet the demand arising from the development in Tseung Kwan O.

10.1.2 Apart from the existing fresh water service reservoirs in Areas 1, 2, 3, 106, 113 and 125, an extension of fresh water service reservoir is proposed in Area 113 to cater for further development of the Area. Moreover, there is an existing fresh water pumping station in Area 120.

10.1.3 Apart from the existing salt water service reservoirs in Areas 1 and 5 and the existing salt water pumping stations in Areas 5 and 86, additional salt water service reservoir and pumping station will be reserved to cater for supply of flushing water.

10.2 Drainage and Sewage Collection

Surface water will be channeled into two main culverts for discharge into the sea. An overland drainage and flood path system will cater for very heavy rain and possible blockage of culverts. Sewage will be conveyed via a network of sewers and a sewer tunnel through Areas 108 and 78 to the sewage treatment works in Area 85 for treatment before being discharged into the Harbour Area Treatment Scheme Stage I deep tunnel conveyance system. There will be sufficient capacity to serve the currently planned developments.

10.3 Electricity

10.3.1 Electricity will be supplied to the Area through a new distribution network. Sites in Areas 11, 24, 39, 56, 86, 87 and 115 have been developed into electricity substations. Adequate sites have been reserved in Areas 72 and 137 for future electricity substations to meet the demand in short and long terms.

10.3.2 The facility at the site in Area 115 is a 400kV electricity substation. Stringent pollution control measures have been imposed in order to ensure that the adjacent residential neighbourhood will not be adversely affected.

10.4 Town Gas

The network for supplying town gas to the developments in the Area has been extended from Kowloon via Po Lam Road North, Tseung Kwan O Tunnel and Clear Water Bay Road.

10.5 Telephone

Telephone service is available through the telephone exchanges in Areas 26 and 87. An additional telephone exchange is reserved in Area 68 to cater for future demand.

11. CULTURAL HERITAGE

11.1 Several buildings/structures which are of historical significance and archaeological interest are located within the Area. They include Site of the Chinese Customs Station on Fat Tau Chau (Junk Island) (Fat Tau Chau is now

known as Fat Tong Chau) in Area 135, which is a Declared Monument under the Antiquities and Monuments Ordinance, *Fat Tau Chau Site of Archaeological Interest* ~~Archaeological Site~~, Fat Tau Chau Qing Dynasty Grave Stone and Fat Tau Chau House Ruin also in Area 135, Yau Yue Wan Kiln in Area 22, Tin Hau Temple at Hang Hau in Area 35 which is a Grade 3 historic building, Observation Post at Mau Wu Shan in Area 125 which is a Grade 1 historic structure as well as Fortifications at Devil's Peak in Area 132 which is a Grade 2 historic structure.

- 11.2 On 19 March 2009, the Antiquities Advisory Board (AAB) released the list of 1,444 historic buildings, in which some buildings/structures within the Area have been accorded gradings. AAB also released a number of new items in addition to the list of 1,444 historic buildings. These items are subject to the grading assessment by AAB. Details of the list of 1,444 historic buildings and its new items have been uploaded onto the official website of AAB at <http://www.aab.gov.hk>.
- 11.3 Prior consultation with the Antiquities and Monuments Office (AMO) of the Leisure and Cultural Services Department should be made if any development, redevelopment or rezoning proposals that might affect the above sites of archaeological interest, graded/proposed graded historic buildings/structures, *declared monuments*, new items pending grading assessment and their immediate environs. If disturbance of the site of archaeological interest or other areas of archaeological potential is unavoidable, a detailed Archaeological Impact Assessment (AIA) conducted by a qualified archaeologist is required. The archaeologist shall apply for a licence to conduct AIA under the Antiquities and Monuments Ordinance (Cap. 53). A proposal for AIA shall be submitted to AMO for agreement prior to applying for a licence.

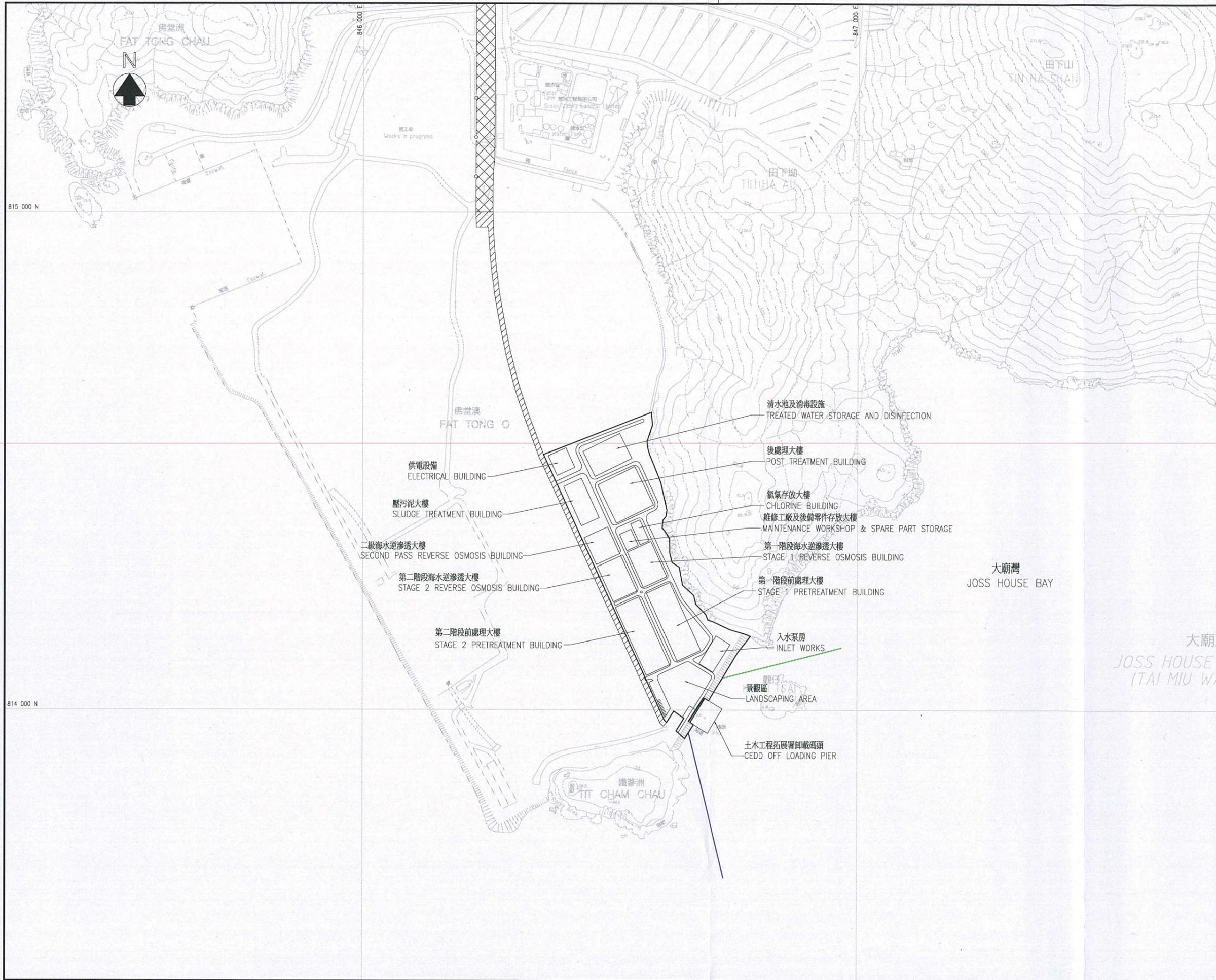
12. IMPLEMENTATION

- 12.1 Although existing uses non-conforming to the statutory zonings are tolerated, any material change of use and any other development/redevelopment must be always permitted in terms of the Plan or, if permission is required, in accordance with the permission granted by the Board. The Board has published a set of guidelines for the interpretation of existing use in the urban and new town areas. Any person who intends to claim an "existing use right" should refer to the guidelines and will need to provide sufficient evidence to support his claim. The enforcement of the zonings mainly rests with the Buildings Department, the Lands Department and the various licensing authorities.
- 12.2 The Plan provides a broad land use framework within which more detailed non-statutory plans for the Area are prepared by the Planning Department. These detailed plans are used as the basis for public works planning and site reservation within the Government. Disposal of sites is undertaken by the Lands Department. Public works projects are co-ordinated by the Civil Engineering and Development Department in conjunction with the client departments and the works departments, such as the Highways Department and the Architectural Services Department. Implementation of these public

works projects will be subject to the availability of resources. In the course of implementation of the Plan, the Sai Kung District Council will also be consulted as appropriate.

- 12.3 Planning applications to the Board will be assessed on individual merits. In general, the Board, in considering planning applications, will take into account all relevant planning considerations which may include the departmental outline development plans/layout plans and the Guidelines published by the Board. The outline development plans and the layout plans are available for public inspection at the Planning Department. Guidelines published by the Board are available from the Board's website, the Secretariat of the Board and the Planning Department. Application forms and Guidance Notes for planning applications can be downloaded from the Board's website and are available from the Secretariat of the Board, and the Technical Services Division and the relevant District Planning Office of the Planning Department. Applications should be supported by such materials as the Board thinks appropriate to enable it to consider the applications.

TOWN PLANNING BOARD
~~DECEMBER 2015~~ JUNE 2016



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LEGEND:

- 擬建海水化淡廠邊界
EARMARKED SITE FOR DESALINATION PLANT
- 入水管道
INDICATIVE LOCATION OF SEAWATER INTAKE
- 潛艇水排放管道
INDICATIVE LOCATION OF SUBMARINE OUTFALL
- 擬建海水化淡廠道路
PROPOSED ACCESS ROAD TO DESALINATION PLANT
- 擬建往新界東南堆填區 (擴展部分) 的道路 (由其他部門負責)
PROPOSED ACCESS ROAD TO SOUTH-EAST NEW TERRITORIES LANDFILL EXTENSION (BY OTHERS)

Revision	Date	Description		Initial
	Designed	Checked	Drawn	Checked
Initial	YLC	GC	SZ	CKH
Date	03/16	03/16	03/16	03/16

Approved

Agreement No. CE 21/2012 (WS)

Contract Title
將軍澳海水化淡廠- 可行性研究
DESALINATION PLANT AT TSEUNG KWAN O - FEASIBILITY STUDY

Drawing Title
初步平面圖
PRELIMINARY LAYOUT

Drawing No. 178901/B/INR/30002

Scale A1 1 : 3500
A3 1 : 7000



BLACK & VEATCH HONG KONG LIMITED
博威工程顧問有限公司

(獲通過的會議記錄)

西貢區議會
二〇一五年第一次會議記錄

日期：2015年1月6日（星期二）

時間：上午9時30分

地點：西貢區議會會議室

出席者	出席時間	離席時間
陳國旗先生，BBS（副主席）	上午九時三十分	下午二時五十九分
區能發先生，MH	上午九時三十分	下午二時五十九分
陳繼偉先生	上午九時三十分	下午二時五十九分
陳權軍先生，MH	上午九時三十分	下午二時五十九分
張國強先生	上午九時三十分	下午二時五十九分
莊元荃先生	上午九時三十分	下午二時五十九分
鍾錦麟先生	上午九時三十分	下午二時五十九分
范國威議員	上午九時三十分	下午二時五十九分
方國珊女士	上午九時三十分	下午二時五十九分
邱戊秀先生	上午九時三十分	下午二時五十九分
何觀順先生	上午九時三十分	下午二時五十九分
何民傑先生	上午九時四十七分	下午二時五十九分
簡兆祺先生	上午九時五十六分	下午二時五十九分
林少忠先生	上午九時三十分	下午二時二十五分
林咏然先生	上午九時三十分	下午二時五十九分
劉偉章先生，MH	上午九時三十分	下午二時五十九分
梁里先生	上午九時三十分	下午二時五十九分
李家良先生	上午九時三十分	下午二時五十九分
凌文海先生，BBS，MH	上午九時三十分	下午二時五十九分
駱水生先生，MH	上午九時三十分	下午一時八分
陸平才先生	上午九時三十分	下午十二時三十七分
吳雪山先生	上午九時三十分	下午二時五十九分
成漢強先生，BBS，MH	上午九時三十分	下午二時五十九分
譚領律先生	上午九時三十分	下午二時五十九分
溫悅昌先生，MH，JP	上午九時三十分	下午二時五十九分
邱玉麟先生	上午九時三十分	下午二時五十九分
劉丹女士	西貢民政事務處高級行政主任（區議會）	

列席者

蕭慕蓮女士，JP	西貢民政事務處民政事務專員
郭仲佳先生	西貢民政事務處民政事務助理專員(1)
尹尚謙先生	西貢民政事務處民政事務助理專員(2)
伍永強先生	西貢民政事務處高級聯絡主任(1)

林意麗女士	西貢民政事務處高級聯絡主任(2)
胡達志先生	西貢民政事務處一級行政主任(區議會)
蔣年達先生	土木工程拓展署總工程師/新界東1
謝勵志先生	食物環境衛生署西貢區環境衛生總監
陸慶全先生	房屋署物業管理總經理(大埔、北區、沙田及西貢)
管慶餘先生	西貢地政處高級產業測量師/將軍澳(西貢地政處)
駱潔霞女士	康樂及文化事務署總康樂事務經理(新界東)
馮嘉慧女士	康樂及文化事務署西貢區康樂事務經理
伍莉莉女士	社會福利署黃大仙及西貢區福利專員
崔振輝先生	運輸署總運輸主任/貨車事務
周楚基先生	香港警務處黃大仙區指揮官
史勿輝先生	香港警務處觀塘區指揮官
李雅麗女士	香港警務處觀塘區副指揮官
鍾文傑先生	規劃署西貢及離島規劃專員
鄺松錦先生	教育局高級學校發展主任
黃肇信先生	路政署高級工程師5/中環灣仔繞道
戴樂兒先生	邁進基建環保工程顧問有限公司項目經理
鍾達光先生	水務署總工程師/顧問工程管理
張業駒先生	水務署高級工程師/顧問工程管理(4)
黃以諾先生	水務署工程師/顧問工程管理(6)
劉昭華女士	水務署工程師/顧問工程管理(8)
楊紹良博士	博威工程顧問有限公司技術董事
高淑貞女士	博威工程顧問有限公司項目經理
黃梓維先生	博威工程顧問有限公司項目工程師
吳素珊博士	香港環境資源管理顧問有限公司首席顧問

副主席表示西貢區議會的法定人數已足夠，會議正式開始。由於主席吳仕福先生要處理家事，今天未能出席會議，故由他本人代為主持今日的會議。

2. 副主席歡迎所有出席或列席會議人士，特別是第一次出席本會會議的香港警務處觀塘區指揮官史勿輝先生(Mr. Barry John SMITH)；及西貢地政處高級產業測量/將軍澳(西貢地政處)管慶餘先生，管先生暫代西貢地政處地政專員黃善永先生出席是次會議。

3. 副主席表示，為了有效進行討論，每位議員在每個議題上可發言兩次，每次兩分鐘。請各位議員更嚴格遵守上述規則，以及不要濫用「跟進問題」作為發言多於兩次的原因。副主席並請各位議員在會議期間留在席上，如在討論某項動議或討論事項時，提出的議員不在席上，有關動議或討論事項將延至下次會議上才討論。

4. 副主席表示除吳仕福先生未能出席今天會議，周賢明先生及陳博智先生因為不在香港，亦未能出席今天會議，三人均已於事前按規定提交缺席會議通知書。由於沒有反對，副主席表示根據西貢區議會會議常規第 51(1)條，

批准有關缺席申請。副主席表示，任何議員如未能出席會議，必須在該次會議舉行前，通知秘書處缺席的原因，以便區議會考慮是否同意他們的缺席申請。

5. 陳繼偉先生表示，如果提出動議的議員不在席上，按一慣的做法，有關動議事項將延至下次會議上討論，不應因而譴責缺席的議員。他表示如果需要譴責缺席的議員，請在本年初修訂會議常規，資深的議員都知道沒有此規則。他指出較早前他因代表區議會另有公務，需在怡明邨作主禮嘉賓及在明愛開會，因而缺席會議，連午飯亦沒有吃，一直忙碌工作連續出席兩項公務。他表示對一些資深議員的言論及不遵守會議常規感到遺憾，另一些政黨不應打壓獨立議員。

6. 副主席澄清剛才並沒有譴責任何議員。

7. 方國珊女士表示，她較早前亦獲房屋署邀請出席擔任怡明邨開幕活動的主禮嘉賓，她認為應刪除或修正有關言論。

1. 通過西貢區議會二〇一四年十一月四日第六次會議記錄

8. 副主席表示，秘書處在會前並沒有收到修訂建議，由於會上沒有人提出修訂，故宣佈上述會議記錄獲得通過。

11. 將軍澳海水化淡廠及相關工程第一階段 - 設計及建造

9. 副主席歡迎 -

- 水務署總工程師/顧問工程管理鐘達光先生；
- 水務署高級工程師/顧問工程管理(4)張業駒先生；
- 水務署工程師/顧問工程管理(6)黃以諾先生；
- 水務署工程師/顧問工程管理(8)劉昭華女士；
- 博威工程顧問有限公司技術董事楊紹良先生；
- 博士博威工程顧問有限公司項目經理高淑貞女士；
- 博威工程顧問有限公司項目工程師黃梓維先生；以及
- 香港環境資源管理顧問有限公司首席顧問吳素珊博士。

10. 水務署代表輪流按所播放的簡報介紹將軍澳海水化淡廠及相關工程。

11. 溫悅昌先生表示支持興建海水化淡廠。他指出海水化淡廠的南面是柴灣，東面是鄉村，北面是日出康城，而附近亦有兩幅珍貴的土地，一幅是佛堂洲，其面積不少於日出康城，另一幅是 137 區，在之後的議程中亦會有動議要求在這兩幅土地上興建房屋，因此他詢問一旦設在海水化淡廠的化學品處理廠發生意外事故，對附近居民的影響範圍及程度。

12. 張國強先生詢問海水化淡廠何時可以提供全港百分之十的用水量，並且建議減少輸入東江水的比例。其次，他希望署方可提供整個計劃預計所需的公帑數字予議員參考。最後，他表示關注濃鹽水排放問題，希望濃鹽水不會對生態環境造成影響，他續詢問如果測試結果顯示濃鹽水有害，是否有跟進行動改善水質。

13. 何民傑先生詢問海水化淡廠是否只供將軍澳居民飲用，因海水化淡廠只連接將軍澳主配水庫。如是，則將軍澳居民既要聞垃圾異味、受隧道擠塞之苦，更要飲用海水。他表示水質的監管非常重要，但在研究報告內沒有顯示海水化淡後對健康的影響，因此他詢問如何確保水質安全。另外，他表示海水化淡會消耗大量化石能源，並詢問有關空氣污染情況。他續表示將軍澳海水化淡廠非常接近堆填區，而堆填區地下滲漏會直接影響海床。他詢問在環境評估研究報告中有否考慮這個獨特因素以及提早關閉堆積區會否改善水質。最後，他詢問海水化淡廠是由水務署還是外判有經驗的國際公司營運。

14. 范國威議員表示香港在水資源管理方面比其他國家落後，香港特區政府必須急起直追。他續表示新民主同盟今天亦有動議希望政府考慮修改東江水的協議。他指出香港人為購買東江水付出高昂代價，在過去十年間，已經浪費了大約 10 億立方米的東江水，相等於大約 50 億元公帑。他認為利用這筆公帑興建海水化淡廠相對地更為重要。另外，他表示政府基於經濟規模的原因，指海水化淡廠在短時間內不能取代東江水，但他指出，有專家認為儲水庫已能提供三成的用水量，加上逆滲透技術已經成熟，如果海水化淡廠能提供百分之十五的用水量，便能滿足香港的基本用水需求，並解決香港高度依賴東江水的問題。因此，他詢問在技術上有何考慮因素，導致海水化淡廠不能在早期的第一階段提供百分之十的用水量。

15. 陸平才先生表示，香港在開埠以來都非常缺乏水資源，在港英時期已經開始興建水庫及利用火力進行海水化淡，但成本高昂。時至今日，利用逆滲透技術能降低成本及減少污染，因此，他表示支持興建海水化淡廠。他亦表示擔心濃鹽水排放至海中會改變海水的鹽度，因此，他認為需要準確計算海水的流向和速度等。另外，他表示在不同的地理環境下，水文都會不一樣，故建議投放更多時間在環境評估上。最後，他詢問海水化淡廠建成後，將軍澳居民的水費會否有下調空間。

16. 鍾錦麟先生詢問在興建海水化淡廠過程中及營運時，工程車及特別車輛進出將軍澳對本區的交通及環保污染所造成的影響。他表示水務署正更換將軍澳北的食水管道，故詢問利用甚麼技術更換及鋪設食水管道，以及如何避免影響繁忙路段的交通情況。

17. 林咏然先生表示，海水化淡廠已經構思多時，以現時的科技，希望能確保水質的安全。他續表示因海水化淡廠與堆填區鄰近，水務署應評估海水化淡廠與堆填區能否並存，或是應在堆填區停止運作後，才啟用海水化淡廠。

他詢問海水化淡廠對附近居民的影響，並建議作出一個深入的評估。另外，他亦表示海水化淡後，會為將軍澳居民供應食水，故希望特別向將軍澳居民提供水費優惠。

18. 水務署總工程師／顧問工程管理鍾達光先生就議員的意見作以下綜合回應：

- 理解大部份議員關注經海水化淡廠處理的食水水質問題，但認為經處理的食水只供區內市民飲用的說法並不準確。事實上，經處理的食水會經由管道流往將軍澳主配水庫，而將軍澳主配水庫主要是供應食水予港島東、九龍東、將軍澳及西貢部分地區。他向議員保證，經海水化淡產生的食水和其他濾水廠所產生的食水並無分別，此外，署方會安排人手每天監察海水化淡廠的水質，請議員放心；
- 署方將會就海水化淡廠施工期間對區內交通的影響進行評估。在鋪設水管期間，署方會因應每段道路的交通情況訂立相應的設計和施工方式，例如在應付較繁忙的道路時，會考慮採用無坑挖掘，以減少對交通的影響。此外，署方在施工期間會因應實際交通情況與相關部門交流意見，務求訂立出不會影響交通的方案；
- 署方初步估計工程將耗資約 93 億，當中已包括顧問費用，以及鋪設水管和海水化淡廠的建造費用；
- 就海水化淡廠的管理方面，署方將於 2015 年年中聘請顧問公司進行設計和建造研究，而在研究過程中，顧問公司將會同時就海水化淡廠應由水務署或是承辦商負責運作的事宜進行研究，因此現時仍未有定案；
- 有議員對海水化淡廠所產生的濃鹽水問題表示擔心。事實上，澳洲和其他國家的海水化淡廠都會面對類似的問題，而有關當局會因應水流、水質和生態環境等因素適當地把濃鹽水排放到海中。現時排水口的選址為離岸約 250 米，署方相信濃鹽水會迅速地被水流稀釋化，因此不會對附近環境構成影響；
- 就堆填區對水質的影響，署方在過去一年開始監察選址附近的水質，發現堆填區對水質沒有影響。另外，有議員亦關心堆填區的泥土問題，因此署方會與土木工程拓展署作緊密聯繫，以配合海水化淡廠的施工進度，減少工程對附近水質的影響。

19. 溫悅昌先生查詢化學品倉庫對附近居民及環境的影響，這是議員是否支持興建海水化淡廠的關鍵。

20. 博威工程顧問有限公司技術董事楊紹良博士表示，海水化淡廠所使用的化學品與現時濾水廠的相若，而且使用量相比其他濾水廠為少，因此在運作時對附近環境的影響亦會較少。此外，一般情況下化學品會經由陸路運送，但由於計劃的選址附近設有碼頭，因此可經由水路運送化學品。

21. 劉偉章先生表示，現今的海水化淡技術比以往優勝，因此原則上支持有

關建議，但他仍就兩項問題有所顧慮。首先是濃鹽水的問題，如簡報中的圖片所顯示，排水口位處大廟灣附近，因此對水流是否能有效稀釋濃鹽水存有疑問。第二，署方指出海水化淡廠不會影響東龍洲的海洋生態，但由於東龍洲有居民從事魚排養殖，他擔心濃鹽水會因季節轉變而流往不同方向，因此查詢海水化淡廠抽水口和排水口的位置。另外，他和溫悅昌先生同樣關心化學品的運送問題，並認為若化學品和爆炸品一同經由陸路運送到第 137 區，將會對將軍澳和坑口的居民構成心理上的影響。

22. 何民傑先生表示，由於海水化淡廠所產生的食水將長遠供應給市民飲用，他希望更多了解水質監控的細節。有意見指出，雖然海水化淡採用逆滲透的技術進行，但有關技術仍有不少問題，例如會令水中的礦物質流失等。他舉例指出，海水化淡技術的應用以中東地區的規模最大，而中東曾出現有小童因長期飲用經由海水化淡產生的食水導致出現牙齒脫落的問題，當局發現其成因是小童在食水中能攝取的鈣質較其他地方的少，因此需要在水中加入適量鈣質，才能解決有關問題，他希望水務署就此作出相應安排。另外，他向水務署查詢，署方將來在營運上會擔當甚麼角色，以及會如何物色營運機構，以確保經海水化淡的食水可供市民安全飲用。

23. 簡兆祺先生對化學品的問題表示關注。由於海水化淡的過程涉及化學作用，擔心所產生的食水和一般食水的成份有異，從而引起不同病症。另外，他亦關心安全風險的問題，正如中國和日本興建的核發電廠都有潛在風險，他希望署方交代如何評估海水化淡廠於運作期間和運送化學品時的存在風險，讓議員能向市民交代。

24. 范國威議員表示，如署方將擬建的海水化淡廠的產量提升至最高，將可應付全港百分之十的食水用量，並可提升運作時的成本效益，因此再次查詢不把產量提升至最高的原因為政策考慮還是技術問題。

25. 水務署鍾達光先生就議員的意見作以下回應：

- 就海水化淡廠的產量，署方考慮到將軍澳海水化淡廠能為香港提供新水源，應付日後可能出現乾旱情況，以及本港雨水收集量和東江水供應受到考驗時使用，如海水化淡廠能於 2020 年提供全港百分之五的用水量，便可提升香港的供水穩定性達到可靠的程度，因此暫時未有需要將產量提升至最高的百分之十，但署方仍然會朝着提高產量的方向發展；
- 就水質方面，海水化淡的技術在先進國家和中東地區的發展已成熟，技術十分可靠，而全球現時已有上萬間海水化淡廠正在營運中，因此議員不必擔心經處理的食水會比現時的食水水質為差。此外，早期的海水化淡廠用電量較多，會增加食水的成本，但隨着海水化淡的技術不斷發展，運作時所需要的電量亦有所減少，現時海水化淡的成本價為每立方米約 12 至 13 港元，而東江水的成本價為每立方米八元，考慮到後者的價格會每年遞增，署方認為實行海水化淡

的做法可行；

- 署方將會邀請顧問公司就擬建海水化淡廠的營運模式進行研究，依照世界各地的做法，海水化淡廠的設計和建造一般交由承建商負責，而當中大部分亦會一併交由承建商負責日常操作；
- 署方在處理食水的過程中會加入適當的礦物質，正如現在亦會在水中加入氟；
- 海水化淡廠的進水口和排水口遠離岸邊，因此能減低對近岸海洋生態的影響，而且能確保水質不會受到堆填區或其他近岸設施所影響

26. 博威工程顧問有限公司楊紹良博士表示，雖然大家明白不同設施都會存在風險，但擬建海水化淡廠並不會使用新型的化學物質，而且現行的引指和環境評估機制均對設施的風險程度有所要求，經過評估後，擬建海水化淡廠的風險程度在可接受範圍以內。顧問公司日後會跟進風險評估和監管等工作。

27. 方國珊女士支持香港人自給自足，利用海水化淡技術減低香港缺乏食水供應的風險，惟市民極度關注食水的水質問題。擬建海水化淡廠的選址位於堆填區旁邊，而她過去極為關注堆填區的管理，並發現有不少空氣和水質方面的污染，因此水務署和顧問公司必須深化研究如何進行管理工作，以減少市民對於由鄰近堆填區的海水所產生的食水的疑慮，特別是重金屬和高氮磷素。她指出，她曾前往海灘收集海水樣本，發現水中含有很高的氮磷素和生長了大量紅藻，她已把樣本拿到大學實驗室作化驗。她關注堆填區令海水受到污染，從而繁殖大量藻類的問題，因此希望水務署保證所抽取的水質並不包含重金屬和氮磷素。她表示，由於水務署指出進水口並非設於岸邊，因此亦關注進水口附近的海域管制問題，另外，她希望顧問公司提供環保報告和六個月的基線調查報告；就無坑挖掘的問題，每個部門都承諾會減少對居民的滋擾，但作為區內最大型屋苑的民選議員，她發現在過去兩至三年內，位於環保大道附近的屋苑，包括康城、浚滢和清水灣半島的居民，以及工業邨的員工都飽受挖掘環保大道之苦。她曾參與水資源及供水水質事務諮詢委員會的工作，並獲悉無掘挖的工序會衍生一些問題；第三，就污染問題，例如濃鹽水、水質和水流等，她認為水務署只是聘用顧問公司，而欠缺了外界的監管，因此希望訂立長遠的溝通機制，並建議署方定期與地區人士和受影響的群組舉行會議，包括日出康城居民、工業邨員工和清水灣的鄉郊居民等，以釋除公眾的疑慮。她亦要求署方定期向議會交代水質報告。

28. 陳繼偉先生查詢，堆填區內有機會受影響的斜坡將由哪一方面負責管理，如出現倒塌的情況，將會由哪個部門負責維修；第二，他查詢移植珊瑚的方法，以及如何界定珊瑚的密度，因為環境評估指出日出康城至調景嶺的海中有不少地方有珊瑚存在；第三，他查詢脫水污泥會被運送到甚麼地方；第四，水中的懸浮粒子升高意味着海水水質會較為混濁，因此查詢有關情況會否再次令沖廁用水變得混濁，而渠務署和水務署將如何作出協調；第五，無論如何堆填區都存有污染物，因此查詢現時有否出現滲漏情況，而滲漏會否影響附近的水質，因現時有不少堆填區曾出現滲漏；第六，他請水務署不

要以政府工程的名義申請豁免權，而於假日或每日早上七時至晚上七時以外的時間進行工程；最後，市民對食水的成份及當中是否含有致癌物質極為關注，因此查詢將來會否出現相關問題。他指出，將軍澳屋苑的沖廁用水由附近海域中抽取，海水化淡廠輕則影響沖廁用水，重則影響食水供應。他表示原則上支持是項工程，但水務署必須先妥善處理技術上的問題，以免讓市民和議會擔憂。

29. 香港環境資源管理顧問有限公司首席顧問吳素珊博士就有關珊瑚和生態調查的問題作以下回應：

- 在署方的簡報中提到於擬建海水化淡廠的進水口和排水口附近發現珊瑚，有關方面進行基綫調查時會根據科學性的方法，而有關方法須經過與漁農自然護理署(下稱「漁護署」)商討後才被採納。現時的方法是利用潛水員潛到水底進行生態檢查，分析水域內存在的物種，並計算樣本中珊瑚所佔的百分比。根據初步的基綫調查，擬建進水口和排水口受影響範圍內的珊瑚密度分布為百分之五至十。她指出，在香港其他地方需要進行海洋生態調查時，都會以上述方法了解海中是否有珊瑚或其他特別的生態群落需要特別注意；
- 就移植珊瑚方面，該公司曾於啓德發展區進行移植珊瑚的工程，而是否可行則視乎珊瑚群組的生長情況，例如生長在巨石上的珊瑚難以被移植，如發現有較易移動及值得移植的珊瑚，該公司會向漁護署提交移植建議書。香港並非首次進行珊瑚移植，但仍需視乎現場情況和有沒有適合用作移植的地方。

30. 水務署鍾達光先生就議員的意見作以下回應：

- 署方將會以類似挖掘隧道的方式建造進水管道和排水管道，因此海事工程只會影響進水口和排水口附近的位置，其範圍不大；
- 就紅藻的問題，署方擬採用的前處理方法可以處理紅藻的問題；
- 就選址附近的斜坡問題，署方會預留經費對斜坡進行鞏固工程，由於有關斜坡位於郊野公園範圍，將來的維修責任並非由水務署負責。

31. 方國珊女士請署方考慮沼氣轉能的可行性，並請署方向議會提供六個月的環境影響評估報告和初步基綫報告。

32. 陳權軍先生支持興建海水化淡廠的計劃。他查詢世界上其他地方的海水化淡廠能否將濃鹽水轉化為鹽。

33. 水務署鍾達光先生表示，署方曾考慮把濃鹽水轉化為鹽的做法，惟有關建議需要大量土地，因此在考慮土地供應後認為有關做法並不可行。另外，署方會收集部分濃鹽水用作教育及推廣環保意識等用途。

34. 副主席總結表示，本會原則上支持興建海水化淡廠的計劃，但議員十分

關注剛才提出的問題，希望水務署考慮將議員提出的意見納入計劃之中。此外，由於議員非常關注有關計劃，他建議署方安排議員到選址進行實地視察，讓議員了解海水化淡廠的位置和周邊的設施。

[會後補註：水務署已於 2015 年 2 月 10 日安排議員到擬建海水化淡廠的選址進行實地視察，以了解將來的設施及位置，包括選址附近的設施，例如將與海水化淡廠共存的土木工程拓展署的爆破原料卸載碼頭和路政署的沙中線物料儲存處。水務署於實地視察期間展示的簡報已於 2015 年 2 月 11 日經電郵發送予全體議員。]

III. 西貢公路第一期改善工程

(上次會議記錄第 52 至第 65 段)

35. 副主席歡迎－

- 路政署高級工程師 5 / 中環灣仔繞道黃肇信先生
- 邁進基建環保工程顧問有限公司項目經理戴樂兒先生

36. 邁進基建環保工程顧問有限公司(下稱「邁進」)戴樂兒先生按所播放的簡報介紹西貢公路第一期改善工程的最新進展。

37. 邱戊秀先生希望西貢公路改善工程能盡快上馬。他本人和部分議員曾建議在南邊圍迴旋處增加一條行車線往南圍、窩尾和莫遮嶺等地方，他希望署方考慮將有關建議納入第二期改善工程中。

38. 方國珊女士表示，西貢公路改善工程專責小組已有十一個月沒有開會，但署方在是次會議只報告有關增加廁格的事宜。她表示，白沙灣和南邊圍的居民十分關注工程的接口位，因此希望路政署安排一次實地視察。此外，她請路政署提供相關的圖則，以了解道路的連接方法、受影響的居民和將來的過路配套。她從運輸署得知改善工程最新的圖則是於 2005 年時更新，她曾就此致函路政署提出要求，但仍然未能索取圖則。她希望就第一期改善工程中有關巴士站的改善建議進行實地視察。她在上一次會議中建議在西貢中心小學對出迴旋處的彎位擴闊一條慢線，其他議員卻表示大型工程不應被小工程拖慢進度，但當社區上提出訴求時卻趕不及納到工程計劃中。她續表示，白沙灣的交通擠塞問題嚴重，因此希望署方回應。

39. 陳權軍先生表示，他也是西貢公路改善工程專責小組的成員之一，雖然小組成員未曾召開所謂的「正式」會議，但其實小組已作了很多次與部門及居民一起的實地視察。方小姐剛提及的意見，早已向顧問公司反映過及考慮過，雙方現已就公路設計上達成共識。他續表示專責小組歡迎任何議員加入，但如果非小組內的成員對該項目持有任何意見，他希望議員能事先向小組提出及作討論。

Agreement No. CE 21/2012 (WS)

**Desalination Plant
at Tseung Kwan O -
Feasibility Study**

Executive Summary

8901/B&V/0057

Report Authorized For
Issue By:

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1 INTRODUCTION

1.1 Background

The Water Supplies Department (hereinafter referred to as WSD) is proposing the development of a medium-sized desalination plant in Hong Kong, at a site reserved in Tseung Kwan O (TKO Area 137). The proposed desalination plant will produce potable water with an initial capacity of 135 million liter per day (MLD), expandable to an ultimate capacity of 270Mld in the future to provide a secure and alternative fresh water resources complying with the World Health Organization (WHO) standards. This project is entitled "Desalination Plant at Tseung Kwan O" (hereinafter referred to the Project).

Under the Environmental Impact Assessment Ordinance (EIAO), an Environmental Permit (EP) will be required for the construction and operation of the proposed Project. In relation to this, WSD has prepared a Project Profile for application for an Environmental Impact Assessment (EIA) study brief under section 5(1) of the EIAO (No. PP-497/2013). The Project Profile was submitted to EPD on 5 December 2013. The EIA Study Brief (No. ESB-266/2013) was issued by EPD on 16 January 2014.

Black & Veatch Hong Kong Limited (B&V) was commissioned by WSD under Agreement No. CE 21/2012 (WS) to provide consultancy services to investigate and formulate a detailed proposal for the Project and conduct the EIA study.

The EIA Report addresses potential environmental impacts associated with the construction and operation of the Project. This *Executive Summary* summarises the key findings of the EIA.

1.2 Purpose & Nature of the Project

The proposed Project comprises the following:

- Construction of a new desalination plant in TKO Area 137 with a capacity of 135 Mld, expandable to 270 Mld in the future;
- Natural slope mitigation works consist of soil nailing, construction of flexible barriers and rock slope stabilization at the lower portion and toe of the natural slope within and in the close proximity of the Clear Water Bay Country Park (*Figure 1.1*), which overlooks the northeast boundary of the new desalination plant at TKO Area 137;
- Construction of a dedicated trunk feed system for the transfer of fresh water output from the desalination plant to the existing Tseung Kwan O Fresh Water Primary Service Reservoir (TKOFWPSR). The system consists of an about 9 km of 1200 mm diameter fresh water mains along Wan Po Road, Po Hong Road and Tsui Lam Road (fresh water main is indicated in *Figure 1.1*), the associated pipeworks and ancillary facilities including fittings/valves, leakage, flow and pressure monitoring facilities, and a new treated water pumping station and new treated water storage tank with estimated size about 22,500m³ located in the desalination plant; and,

- All the associated civil, structural, geotechnical, landscaping, electrical and mechanical works.

The location of the Project and the associated works are shown in **Figure 1.1**.

The following elements of the Project are classified as Designated Projects under the *Environmental Impact Assessment Ordinance (Cap. 499)* (EIAO) and are addressed in this EIA Report:

- Schedule 2, Part I, Item E.2 – Water treatment works with a capacity of more than 100,000 m³ per day.
- Schedule 2, Part I, Item K.13 – A dangerous goods godown with a storage capacity exceeding 500 tonnes.
- Schedule 2, Part I, Q.1 – Earthworks partly in an existing country park.

1.3 Purpose of this EIA Report

This EIA Report is prepared in accordance with the *EIA Study Brief (No. ESB-266/2013)* and the *Technical Memorandum of the Environmental Impact Assessment Process (EIAO-TM)*.

The purpose of this EIA Study is to provide information on the nature and extent of environmental impacts arising from the construction and operation of the Project and related activities that take place concurrently. This information will contribute to decision by the Director on:

- The acceptability of any adverse environmental consequences that are likely to arise as a result of the Project;
- The conditions and requirements for the design, construction and operation of the Project to mitigate against adverse environmental consequences; and
- The acceptability of residual impacts after the proposed mitigation measures is implemented.

The specific objectives of the EIA Study are described in *Clause 2* of the *EIA Study Brief*, and the detailed requirements of the EIA Study are set out in *Clause 3* of the *EIA Study Brief*. As specified in the *EIA Study Brief*, the EIA Study has addressed the key environmental issues associated with the construction and operation of the Project in Hong Kong waters and land.

1.4 Justification for the Need of the Desalination Plant

A secure water supply is of utmost importance in sustaining Hong Kong's development. Currently, under the Dongjiang Water Supply Agreement, the Government of Guangdong Province agrees to supply up to an ultimate annual quantity of 1,100 million m³ of freshwater to Hong Kong. However, when a severe drought happens, the whole region of Dongjiang River Basin will likely face water shortage. To better prepare Hong Kong for uncertainties such as acute climate changes and low rainfall, the Total Water Management (TWM) strategy has been promulgated by the Hong Kong SAR Government in 2008. To this end, the WSD has kept abreast of the latest developments in

desalination technology and prepared for the related planning and studies so that other water sources can be tapped in good time in case of water shortage. A Feasibility Study (CE 71/2000 (WS)) and a Pilot Plant Study (CE 97/2002 (WS)) on developing desalination facilities in Hong Kong have been conducted in 2002 and 2007 respectively. These studies confirmed the technical feasibility of using desalination technologies to produce potable water complying with the World Health Organisation (WHO) standards. WSD has assessed the feasibility and cost effectiveness of building a medium-sized desalination plant in Hong Kong, at a site reserved in Tseung Kwan O (Area 137) to cope with the projected water demand.

There are a number of benefits to develop the desalination plant for providing a secure and alternative fresh water resource, including:

- **Secure and alternative freshwater resources:** the proposed desalination plant will produce up to 135 Mld during initial commissioning, which is equivalent to 22% of the mean gross yield collected from water gathering grounds over the past decade. After the expansion of the desalination plant, it can produce 270 Mld, which is equivalent to 44% of mean gross yield collected from water gathering grounds over the past decades. The proposed desalination plant can provide approximate 5% and 10% of contribution to the total freshwater demand in Hong Kong.
- **Adequate freshwater resources available during climate change:** as a coastal and well-developed city with scarce freshwater resources, Hong Kong has unlimited supply of seawater from the ocean that is not affected by the acute climate changes. Thus, the proposed desalination plant would be an appropriate solution to provide potable water and to provide alternative of the freshwater resources.
- **Environmental Benefits:** the seawater reverse osmosis technology adopted in the desalination plant is one of the low energy consumption and cost effective way to produce freshwater without imposing adverse impact to the environment than other desalination technologies.

According to Hong Kong Observatory's study report, climate change will bring about more frequent extremely dry weather and increase the likelihood of the occurrence of consecutive droughts. This will not only affect the local yield collected in Hong Kong, but also impact on the water resources in Dongjiang which contributes 70 – 80% of the freshwater demand in Hong Kong. Without the proposed Project, Hong Kong lacks an alternative of freshwater resources and will be subjected to water shortage arising from severe droughts which impact the water supply reliability in Hong Kong. As such, the development of proposed desalination plant is essential to secure Hong Kong's freshwater supplies.

2 PROJECT DESCRIPTION

2.1 Project Components and Layout

Table 2.1 presents a summary of the project details. The footprint of the proposed desalination plant development at Tseung Kwan O Area 137 will be approximately 10 hectares (ha), with the trunk feed system consisting of a 9.5 km of 1,200 mm in diameter of fresh water rising main along Wan Po Road. A maximum total marine dredging volume of 6,330 m³ (in situ) of marine sediments will be generated from the two submarine utilities. Natural slope mitigation works will be undertaken within 0.49 ha of the Clear Water Bay Country Park.

The preliminary layout plan for this Project is presented in **Figure 2.1**.

Table 2.1 Summary of Project Description

Details	Preliminary Design Information
Submarine Utilities	
Area of seabed affected by pipeline footprint	
• Intake	0.045 ha
• Outfall	0.065 ha
Marine Dredging volume (<i>in situ</i> volume)	
• Intake	1,740 m ³
• Outfall	4,590 m ³
Rock fill volume (<i>in situ</i> volume)	
• Intake	905 m ³
• Outfall	4,320 m ³
Length of Submarine Utilities (m)	
• Intake	~ 200 to 250 m
• Outfall	~ 300 to 350 m
Diffuser	
• Number of discharge port	A total of 36 discharge ports with diameter of 150 mm
• Length of diffuser	152 m with port spacing of 4.2 m
• Configuration	alternating and inclined at 60° to horizontal
Desalination Plant	
Area of foundation occupied by the plant	10 ha
Building parameters	17 components with building height ranged between 2 m to 20 m
Trunk Feed System	
Area of land affected by the freshwater rising mains	1.14 ha
Excavation volume	42,733 m ³
Length of the freshwater rising main	9,500 m
Diameter of the freshwater rising main	1,200 mm
Natural Slope Mitigation Works	
Area of slope mitigation works	0.49 ha within the Clear Water Bay Country Park

2.2 Site Location & History

The proposed site for the desalination plant is located in Tseung Kwan O (TKO) Area 137 with a reserved site area of about 10 ha. TKO Area 137 is located to the south of the Southeast New Territories (SENT) Landfill and the Tseung Kwan O Industrial Estate. It

faces the Clearwater Bay Country Park to its east, the Joss House Bay to its south and the Tathong Channel to its west. The nearest residential area is the LOHAS Park which is located about 2.5 km from the site.

The site is on reclaimed land which was reclaimed between 1998 and 2000. The natural slope overlooking the northeast boundary of the new desalination plant at TKO Area 137 has a history of minor landslides and contains some potentially unstable boulders.

No permanent major infrastructure has been built in and around the proposed site. At present, three major facilities are located in the vicinity of the site, namely a temporary public fill bank, a temporary explosive magazine and an explosives off-loading barging pier.

2.3 Project Programme

The preliminary construction programme is provided in *Figure 2.2*.

The construction for the project will be separated into two major contracts. Package A is for plant and other ancillary facilities and Package B is for mainlaying of the trunk feed. The Package A contract is scheduled to commence in 3rd quarter of year 2017 for completion of the construction in 3rd quarter of year 2020. The Package B contract is scheduled to commence in 2nd quarter of year 2016 for completion of the construction in 4th quarter of year 2019. The major construction activities for the Project would comprise site clearance, excavation and backfilling, erection of formwork and reinforcement, concreting, fabrication of steelwork, and testing and commissioning.

2.4 Consideration of Alternative Sites, Development Options, Construction Methods & Sequences

An assessment was conducted to investigate the environmental considerations of alternative sites, development options, construction methods and sequences for this Project. Alternatives considered were as follows:

- Site selection: Comparing to the western waters in Hong Kong, the eastern waters in Hong Kong is oceanic in nature with less turbidity, lower SS levels and relatively consistent in quality with relatively less variation in salinity, which is beneficial to the operations of the desalination plant and should be put in a higher priority for the development of desalination plant.
- Desalination technology using multi-stage flash distillation (MSF) or seawater reverse osmosis (SWRO): Compared with MSF, SWRO technology has definite advantages of less energy consumption, no local emission of fossil fuel consumption and relatively economic viable. SWRO is thus adopted as the preferred method for desalination process.
- Construction of submarine pipeline by dredging or trenchless method: Comparing to dredging method, trenchless method with localized dredging will effectively reduce the dredging volume and greatly minimize the potential impacts on water quality, marine ecology and fisheries associated with dredging

activities. Therefore, trenchless method with localized dredging is the preferred option for the installation of submarine pipelines, intake and outfall.

- Alignment of freshwater rising main along Wan Po Road or via Junk Bay: Alignment of freshwater rising main along Wan Po Road is chosen as the preferred option for the trunk main due to the drawbacks on marine ecology and water quality from alignment of freshwater rising main via Junk Bay.
- Disinfection technologies using chlorination, ozonation or UV radiation: For ozonation and UV disinfection, they are not capable to provide residual disinfectant and chlorination, with lower dosage, is still be required. Thus chlorination is the preferred option for disinfection in the Plant.
- Slope mitigation by set back, passive protection, active protection or mixed protection: Slope mitigation by set back would result in an extensive loss of usable land for implementation of the project and is considered not viable. Slope mitigation by passive protection is not recommended due to the unacceptable residual risk on the desalination plant and its operators from major landslides and boulder fall hazards. For slope mitigation by active protection, extensive disturbance to natural habitat within Country Park would be unavoidable and thus this option is not considered due to the environmental drawback. Mixed protection such as localized stabilization works on the slope area will be optimized to avoid the impact to the existing vegetation and to minimize the impact to the Country Park as much as practicable. To achieve minimization of environmental disturbance, slope mitigation by mixed protection is recommended.
- Concurrent construction works or scheduled in multiple works package: Comparing to concurrent construction works, the construction duration for multiple works package will be shorter and hence reduce potential disturbance to the environment and the local public.

The preferred scenario of the proposed desalination plant development is presented in *Section 2.1* and *Figure 2.1*. The selection of the preferred alternative has brought about a series of environmental benefits to the Project, including:

- The provision of alternative potable water source and alleviate the shortage of freshwater resources due to climate change and subsequent adverse weather;
- The trunk feed system are proposed to be constructed underneath Wan Po Road to minimize disturbance to sensitive receivers and natural habitats;
- The use of localized soil nailing, localized rock stabilization and localized flexible barrier for slope mitigation has minimized the disturbance to the natural habitats at the Clear Water Bay Country Park;
- The alignment and length of submarine utilities require minimum submarine excavation works and thus the potential impacts on water quality, marine ecology and fisheries are reduced;
- The use of micro-tunnelling machine for construction of the proposed submarine utilities reduces the extent of seabed dredging and dredging volume, thereby reducing the marine footprint of this project and the potential impacts on water quality, marine ecology and fisheries; and,

- The recommended land-based construction methods are expected to avoid prolonged construction duration and hence reduce potential disturbance to the environment and the local public.

2.5 Environmental Friendly Design

In order to preserve the environment in the vicinity of the project, a review of the latest development of various desalination technologies, including seawater reverse osmosis (SWRO) and Multi-stage Flash Distillation (MSF), was conducted for recommendation of environmental friendly design. The results indicated that SWRO is more suitable to be adopted as the desalination technology of the proposed Project, taking into consideration the following advantages:

- No boiler is required, thus no generation of NOx and with least energy consumption
- Proven technology with the capacity to treat large amount of seawater
- Long track record of operation
- Less land requirement for the treatment units
- Less operation complexity
- Less capital and operating costs

3 ENVIRONMENTAL IMPACTS

The potential environmental impacts associated with the Project are summarised in the following sections.

3.1 Air Quality

The air quality impact assessment has examined construction and operation phase impacts of the Project in accordance with the criterial and guidelines stated in the *EIAO – TM Annex 4* and *Air Pollution Control Ordinance (APCO) (Cap. 311)*.

In accordance with the EIA Study Brief *Section 3.4.2.2* of the Project, the Study Area for the air quality impact assessment is generally defined by a distance of 500m from the boundary of the Project Site. A total of 20 ASRs were identified and illustrated in **Figure 4.1** of the EIA Report.

Potential dust nuisance from construction activities and gaseous emissions from plant have been evaluated. With the implementation of the recommended dust control measures and good construction site practices, it is not anticipated that the construction of the Project will cause adverse dust and air quality impacts.

By reviewing the process flow during the operation phase, unacceptable impacts due to gaseous emission from the standby generator within the desalination plant and odour nuisance from chemical sludge are not anticipated.

With the implementation of good management practices and proper odour control measures, no unacceptable residual impacts have been predicted to occur during the construction and operation phases. Regular site inspections and audits will be

undertaken during the construction phase to verify that proposed mitigation measures are being implemented.

3.2 Noise

The potential impacts of noise caused by construction and operation activities of this Project have been assessed in this EIA Report. The impacts have been identified and analysed to be in compliance with the criteria and guidelines stated in the *EIAO-TM Annexes 5 and 13* respectively.

In accordance with the EIA Study Brief *Section 3.4.3.2* of the Project, the Study Area for the noise assessment includes all areas within 300 m from the Project Boundary. A total of 36 NSRs were identified and illustrated in **Figure 5.3** of the EIA Report.

To minimize construction noise and disturbance to the local public and road users, the freshwater mains shall be constructed in multiple works packages with restricted 40m per workfront (not more than 4 concurrent workfronts).

Since the desalination plant is located distant from the representative noise sensitive receivers (NSRs), the predicted noise levels at the representative NSRs would comply with the stipulated construction noise criteria. For mainlaying works, the predicted unmitigated noise levels would range from 37 to 93 dB(A) at the representative NSRs. To mitigate the noise impact, construction noise control measures such as adopting quiet plant, use of movable noise barriers close to construction plants, noise insulation sheets, noise scheduling of construction activities and noise enclosure, have been recommended. Predicted mitigated noise levels at all NSRs are in the range of 38 to 75 dB(A) and 37 to 87 dB(A) at residential NSRs and educational NSRs, respectively. To further mitigate the residual noise impacts at the corresponding educational NSRs during construction phase, the construction work in the influence areas near the corresponding educational NSRs will be scheduled during long school holidays (e.g. summer holiday, Easter holiday or Christmas holiday, etc.) as far as practicable. No adverse noise impacts are anticipated with the implementation of the practical mitigation measures. Full compliance with the EIAO requirements is anticipated with proper implementation of the proposed mitigation measures. A systematic EM&A programme will be carried out to ensure proper implementation of both construction phase mitigation measures and the construction schedule of the works of freshwater rising mains.

All equipment within the desalination plant will be accommodated inside plant room and fully enclosed, thus no adverse noise impacts are expected during the operation phase of the Project.

3.3 Water Quality

The water quality impact assessment has examined construction and operation phase impacts of the Project in accordance with the criterial and guidelines stated in the *EIAO – TM Annexes 6 and 14*, and applicable assessment standards/ criteria. The assessment, utilising water quality and hydrodynamic computational models, has been examined the

potential impacts caused by marine works during construction phase and effluent discharge of reverse osmosis (RO) concentrates during operation phase.

Trenchless method with localised minor dredging will be adopted as the preferred option for the construction of the proposed submarine outfall to reduce potential impacts of the marine dredging works on water quality, marine ecology and fisheries of the Joss House Bay.

Computational modelling has been conducted to predict various potential water quality impacts from the proposed marine dredging for the construction of submarine pipelines, including sediment solids (SS) elevation, sedimentation, dissolved oxygen (DO) depletion, release of nutrient, heavy metal and trace organic pollutants. The estimated dredged volumes are about 1,740 m³ (seawater intake) and 4,590 m³ (submarine outfall). Working hours are assumed to be 12 hours per day with a maximum dredging rate of 3,500 m³/day (i.e. 0.081 m³/s). It is assumed that dredging for seawater intake and submarine outfall would not be conducted concurrently. Only one closed grab dredger would be working and spillage of mud from closed grab dredgers is assumed to take place uniformly over the water column. Under unmitigated scenario, full compliance is predicted at all identified water sensitive receivers, with the exception of exceedance in SS elevation predicted at four coral WSRs, including SR4 (Tai Miu Wan), SR16 (Fat Tong Chau), SR36 (Kwun Tsai) and SR37 (Tit Cham Chau). With the implementation of silt curtain during dredging works and reduced dredging rate at seawater intake, the predicted SS elevation at these WSRs would be in full compliance.

The discharge of RO concentrate from the desalination process is the main environmental concern for the Project operation. Results of the modelling works indicate that the effluent plume of RO concentrates would be highly localized and the elevation in salinity and other chemicals would be diluted soon after discharging from the submarine outfall. No observable mixing zone is predicted for most discharge scenarios for most chemicals constituents. Where mixing zone is predicted, it would be closely confined near the submarine outfall and would not encroach to any nearby WSRs. Thus, impacts on water quality and hydrodynamics are predicted to be within acceptable levels.

Water quality monitoring is recommended for the construction and operation phases. A silt curtain efficiency test for the combined use of floating silt curtain type and cage type silt curtain for dredging at seawater intake will also be completed prior to intake dredging works commencement to confirm the silt curtain reduction efficiency assumptions of the assessment. The specific monitoring requirements are detailed in the *Environmental Monitoring and Audit (EM&A) Manual* associated with the *EIA Report*.

3.4 Sewerage and Sewage Treatment Implication

The assessment of sewerage and sewage treatment implication is conducted in accordance with the *EIAO-TM Annex 14* and applicable assessment standards/ criteria.

Construction of the section of gravity sewer from the plant to connect with the existing public sewer would mainly involve conventional technology such as cut and cover excavation techniques.

The sewerage facilities provided as part of the proposed plant will be maintained by the government after completion. No specific maintenance operations are envisaged but it is considered desirable that the facilities will be inspected regularly to ensure that these sewers can function properly.

The detailed design of the proposed sewerage system will be circulated to DSD, EPD and other relevant parties for comment during planning and detailed design stage to ensure acceptance by relevant parties. Access for sewers, equipment and personnel for maintenance of the works would also be adequately provided. Therefore, no adverse residual impact on sewage treatment is anticipated.

3.5 Waste Management

The potential impacts to waste management caused by construction and operational activities of this Project have been assessed in this *EIA Report*. The impacts have been identified and analysed to be in compliance with the criteria and guidelines stated in the *EIAO-TM Annexes 7 and 15* respectively. Legislative requirements and assessment criteria relevant to the waste management assessment have also been presented.

The waste arisings during the construction and operation phases include excavated material, construction and demolition material, marine sediments from dredging works, general refuse from daily operations, chemical waste from maintenance of plant and equipment and sludge from the desalination plant. The quantity, quality and timing of these waste arisings have been identified. It is estimated that the quantities of excavated materials to be generated from the construction of the seawater intake and outfall, desalination plant and the mains laying are approximately 785 m³, 402 m³, 183,720 m³ and 42,733 m³, respectively. The construction of desalination plant shall involve slope mitigation works, which will also generate about 56 m³ of excavated materials. The total quantity of marine sediments generated will be approximately 7,346 m³. Approximately a total of 4,556 m³ of public fill and 1,139 m³ of construction waste will be generated from the construction of civil structures and buildings at the project site. With good site practices, the potential environmental impacts associated with the storage, handling, collection, transport and disposal of the identified waste arisings from the Project will be within acceptable limits set out in the *EIAO-TM*. No adverse waste management impacts are anticipated.

Regular site inspections and audits will be undertaken during the construction phase to verify that proposed mitigation measures are being implemented.

3.6 Land Contamination

The impacts of land contamination are assessed in accordance with the *EIAO-TM Annex 19* and applicable assessment standards/ criteria.

Based on the review of historical aerial photographs, the Temporary Magazine Storage Site (TMS) was once part of the sea prior to reclamation finished in 2000. After the completion of the reclamation work, the TMS was left vacant until the magazine storages and other associated facilities were constructed in 2012. Therefore the risk of potential land contamination due to land use prior to the 2012 is anticipated to be low.

Before the hand-over of the TMS Site to WSD for further development, the owner of TMS Site and its contractor shall ensure the TMS site is properly cleaned up before handover to CEDD. After the TMS Site is handed over to WSD and before the commencement of any construction work, the contractor of WSD shall prepare a Contamination Assessment Plan (CAP) for EPD endorsement prior to the commencement of site investigation. A Contamination Assessment Report (CAR) shall be prepared to summarise the results of the site investigation. If land contamination is identified, a Remediation Action Plan (RAP) shall be prepared to identify feasible remediation methods and a Remediation Report (RR) shall be prepared to demonstrate completion of remedial actions for EPD endorsement.

Regular site inspections and audits will be undertaken during the construction phase to verify that proposed mitigation measures are being implemented.

3.7 Ecology

The EIA has described the impacts on terrestrial and aquatic ecological resources associated with the construction and operation of the proposed submarine facilities and desalination plant. The purpose of the assessment was to evaluate the predicted impacts to ecological resources as per the criteria and guidelines stated in the *EIAO-TM Annexes 8 and 16* respectively.

A total of 11 habitat types were identified within the Study Area. They are terrestrial habitats (i.e. mixed woodland, plantation, shrubland-grassland, agricultural land, wasteland, watercourse and urbanised/disturbed area) and coastal habitats (i.e. rocky shore, sandy shore, subtidal hard and soft bottom habitats and artificial seawall habitat), all of the habitats are of very low or low ecological value, except for subtidal hard and soft bottom habitats, watercourse (natural section), mixed woodland and shrubland/grassland of low to moderate ecological value. Apart from this, the Clear Water Bay Country Park is the recognized ecologically important/ sensitive sites are located within the Study Area in which 0.49 ha of slope mitigation works will be carried out.

It is noted that a majority (~90%) of the Desalination Plant Site consists of man-made habitats with very low to low ecological values. The mixed woodland and shrubland/grassland habitats of the area for slope mitigation works were located at the edge of Clear Water Bay Country Park with relatively low abundance and diversity of fauna and the trees were mostly native and common species of fair condition, as a result they are considered to be of low to moderate ecological value. The watermain is located on existing roads which are of no particular ecological value, and the submarine facilities are located on the seabed with soft and hard bottom communities typical in other similar habitats of Hong Kong.

One flora (*Marsdenia lachnostoma*) and five birds (including Black Kite, Black-crowned Night Heron, White-throated Kingfisher, Collared Scops Owl and Lesser Coucal) species of conservation interest were recorded within the footprints of the desalination plant and slope mitigation works. Considering the mobility of bird species and the availability of similar habitats in the surrounding environment, the potential impact on fauna species of conservation concern is considered to be minimal. In addition, tree felling has been avoided for the selected slope mitigation works, such that habitats within slope mitigation works area remain to be available to fauna species. The construction of flexible barriers has the potential to directly affect the flora species of conservation interest *Marsdenia lachnostoma* recorded along the indicative alignment of the flexible barriers. All individuals of *Marsdenia lachnostoma* within the slope mitigation areas shall be retained in-situ, by positioning the alignment of flexible barriers at a minimum 1.5 m in a radius away from these individuals. No trees will be felled for the implementation of slope mitigation works. Temporary fencing will be installed to fence off *Marsdenia lachnostoma* specimens to prevent from being damaged and disturbed during construction.

Construction impacts to marine ecological resources have largely been avoided by optimizing the length and alignment of the submarine facilities to avoid key ecologically sensitive areas for coral communities, and by applying the trenchless method for installing submarine intake and outfall and through proper planning design and execution of the works (i.e. optimisation of project construction schedule/ sequence, using good engineering/ industry practice, timely completion of construction works to reduce impact duration, etc.).

During the construction phase, construction activities may cause direct ecological impacts including habitat loss and vegetation removal, whereas indirect impacts on wildlife include disturbances and changes in water quality. Potential impacts of increased human activities and other disturbances due to the Project construction would not be significant provided that regular checks on construction site practices and boundaries will be conducted. In addition, in the view of the availability of surrounding similar habitats, the potential impact on wildlife especially on the species of conservation interest as a result of habitat fragmentation and isolation is considered to be minimal.

The EIA sets out mitigation measures to reduce ecological impacts, such as regular checks in construction site practices and boundaries, which will reduce potential disturbance to the surrounding environment. With the implementation of the proposed mitigation measures, no adverse residual impact due to the land-based and marine-based construction of proposed desalination plant, slope mitigation works, freshwater rising main and submarine intake and outfall pipelines is anticipated.

3.8 Fisheries

The EIA has described the impacts to fisheries resources and fishing operations associated with the construction and operation of the Project. The purpose of the assessment was to evaluate the predicted impacts to fisheries resources and fishing

operations as per the criteria and guidelines stated in the *EIAO-TM Annexes 9 and 17* respectively.

Based on the desktop review of baseline conditions of commercial fisheries resources and fishing operations suggest that the surrounding waters of the Project, the potential fisheries sensitive receivers identified include spawning and nursery ground of commercial fisheries resources at Port Shelter, artificial reefs at Outer Port Shelter area and Fish Culture Zone at Tung Lung Chau. The potential fisheries sensitive receivers are located at least 1 km from the proposed submarine facilities of the Project. Results from the literature review indicate that fisheries importance of the Project Area and its vicinity is low when compared to other waters of Hong Kong.

Impacts to fisheries resources, habitats and fishing operations during construction and operation phase are considered to be within acceptable level. The permanent loss of 0.11 ha of seabed fisheries habitat for the installation of submarine utilities is considered to be of negligible significance and within acceptable level.

Monitoring activities designed to detect and mitigate any unacceptable impacts to water quality during construction phase are also expected to serve to protect against unacceptable impacts to fisheries. No fisheries-specific monitoring measures are required during construction or operation activities.

3.9 Landscape and Visual Impact

The EIA has described the landscape and visual impacts associated with the construction and operation of the Project as per the criteria and guidelines stated in the *EIAO-TM Annexes 10 and 18* respectively.

The majority of the Project Site falls within the existing fill bank at Fat Tong Chau which is currently landscape of low quality with little valuable vegetation or amenity value and therefore in general the Project at construction and operation is considered to have little landscape impact. Based on the broad brush tree survey, approximately 320 trees are located in the direct footprint of the slope mitigation works area, where careful design will seek to work around them and avoid any tree felling. However, approximately 200 trees, which are mainly native and common tree species, within the direct footprint of the desalination plant facilities will require felling. Considering the available space for tree planting within the project boundary, approximately a total of 300 nos. of heavy standard trees and light standard trees are proposed to be planted on-site at the desalination plant site to compensate for the tree to be felled. If needed, off-site compensatory planting at Siu Ho Wan water treatment works and other waterworks facilities maintained by WSD would be undertaken. It is considered that given the compensatory tree planting and the proposed careful greening of the Project Site landscape, the overall residual impact on existing trees and greenery would be reduced to an acceptable level.

The visual impact assessment confirms that overall the visual sensitive receivers (VSRs) will experience moderate to insignificant visual impacts due to the construction and operation of the Project without mitigation. With mitigation measures centred around

the principles of careful detailed design of the facilities to blend with the existing landscape, conserving existing greenery and providing some soft landscaping (e.g. roadside planting, etc), all visual impacts are considered to be slight or insignificant by year 10 of operation.

The landscape and visual impacts of the Project are thus considered acceptable with mitigation measures.

3.10 Landfill Gas Hazard

The potential hazards associated with sub-surface migration of landfill gas from the TKO Stage II/III Restored Landfill, TKO Stage I Restored Landfill, SENT Landfill and SENT Landfill Extension have been assessed in accordance with the *EIAO-TM Annexes 7 and 19*.

The qualitative risk assessment has concluded that the potential for landfill gas to affect the desalination plant and fresh water mains during the operational phase is low to medium. During the construction period, similar hazards may also arise related to the flammability or the potential asphyxiating properties of landfill gas and/ or the potentially toxic nature of leachate. Given the results of the qualitative risk assessment, it should be assumed that the risks due to the landfill gas or leachate during the construction are low to medium.

In general, underground rooms or voids should be avoided as far as practicable in the design of the infrastructure area of the Project. Other precautionary and protection measures during construction and operation phases of the Project have been recommended. It is expected that with the proposed precautionary measures in place, the potential risk of landfill gas migration to the respective targets will be minimal.

Monitoring of landfill gas shall be undertaken in all excavations, manholes, chambers and any confined spaces prior to the entry. Regular site inspections and audits will be undertaken during the construction phase to verify that proposed mitigation measures are being implemented.

3.11 Hazard to Life

A Hazard Assessment of the risks associated with the use, storage and transport of chlorine and dangerous goods (DGs) at the proposed Desalination Plant has been conducted for the operational phase (Year 2036) of the Project. The cumulative risk of the Project, through interaction or in combination with other existing, committed and planned developments involving DGs in the vicinity of the Project has also been assessed.

In all cases, the Individual Risk complies with the Hong Kong Risk Guidelines and the Societal Risk lies in the acceptable region. The societal risk expressed in the form of FN curves, lies in the acceptable region of the HKRG for the use, transport and storage of chlorine at the Desalination Plant.

Therefore, the operation of the Desalination Plant is acceptable in terms of both individual risk and societal risk as stipulated in *Annex 4* of the *EIAO-TM*. Safeguard measures are recommended to ensure the risk associated with the use, storage, and

transport of chlorine and DGs at the proposed Desalination Plant complies with the Hong Kong Risk Guidelines and stays in "Acceptable" region.

3.12 Environmental Monitoring and Audit

Environmental monitoring and audit requirements have been identified and recommended to ensure the effectiveness of the recommended mitigation measures. These requirements are specified in the *EM&A Manual*. The monitoring requirements cover the area of noise, water quality and landfill gas hazard. Regular site audits throughout the construction and operation of the Project have also been recommended.

4 OVERALL CONCLUSION

The environmental impact assessment (covering air quality, noise, water quality, waste management, land contamination, sewerage, ecology, fisheries, landscape and visual impact, landfill gas hazard, and hazard to life) has concluded that no unacceptable environmental impacts are envisaged as a result of the construction and operation of the Project, provided that the recommended mitigation measures are implemented.

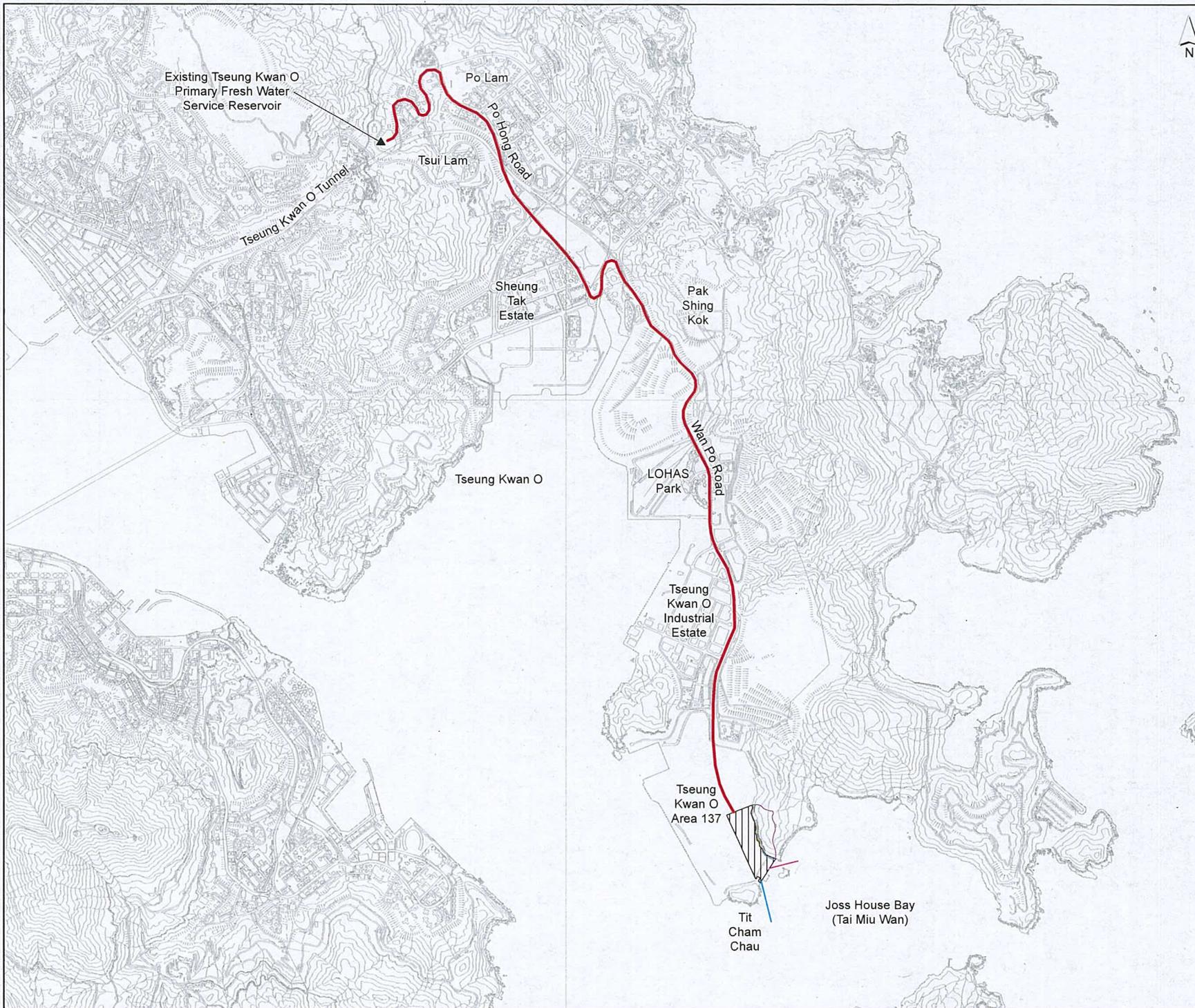
Recommendations for an environmental monitoring and audit programme have been prepared to ensure the effectiveness of the recommended mitigation measures.

Drawings



Legend

- Flexible Barrier
- Indicative location of seawater intake
- Indicative location of submarine outfall
- Proposed Fresh Water Main
- Earmarked Site for Desalination Plant
- Study area for slope mitigation works
- Soil Nailing Area
- Rock Slope Stabilization Area



Revision	Date	Description	Initial
	Designed	Checked	Drawn
Initial			
Date			

Agreement No. CE 21/2012 (WS)

Contract title
DESALINATION PLANT AT TSEUNG KWAN O - FEASIBILITY STUDY

Drawing title
LOCATION OF THE PROPOSED DESALINATION PLANT AT TSEUNG KWAN O

Drawing no. FIGURE 1.1
Revision

Scale 1:30,000



Legend

-  Flexible Barrier
-  Layout Plan
-  Indicative Location of Seawater Intake
-  Indicative Location of Submarine Outfall
-  Proposed Fresh Water Main*
-  Earmarked site for desalination plant
-  Study area for slope mitigation works
-  Soil Nailing Area
-  Rock Slope Stabilization Area

Revision	Date	Description			Initial
	Designed	Checked	Drawn	Checked	
Initial					
Date					

Agreement No.
CE 21/2012 (WS)

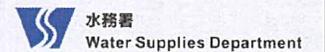
Contract title
DESALINATION PLANT AT
TSEUNG KWAN O -
FEASIBILITY STUDY

Drawing title
PLANT LAYOUT

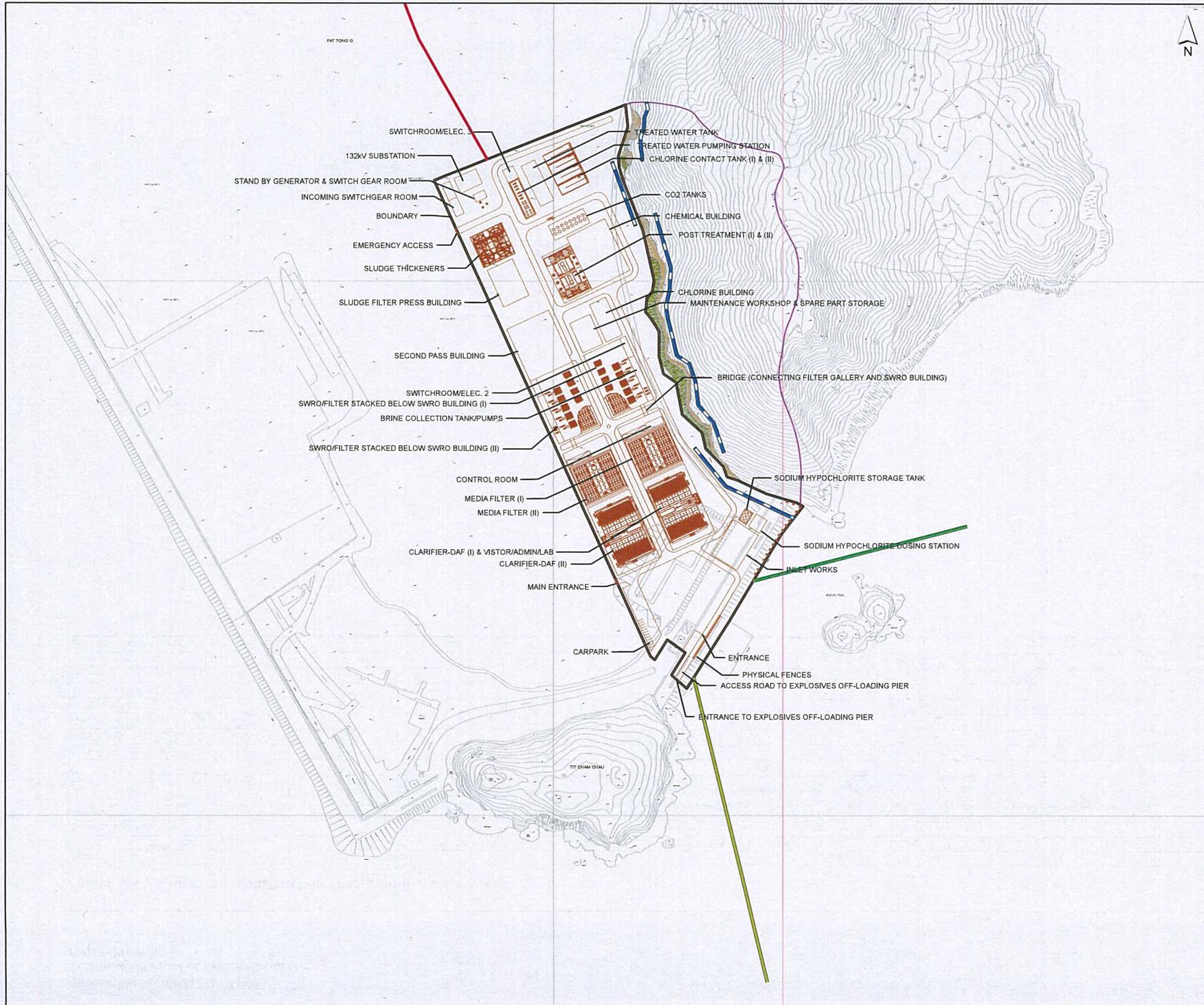
Drawing no.
Figure 2.1

Revision

Scale
1:4,000



BLACK & VEATCH HONG KONG LIMITED
博威工程顧問有限公司



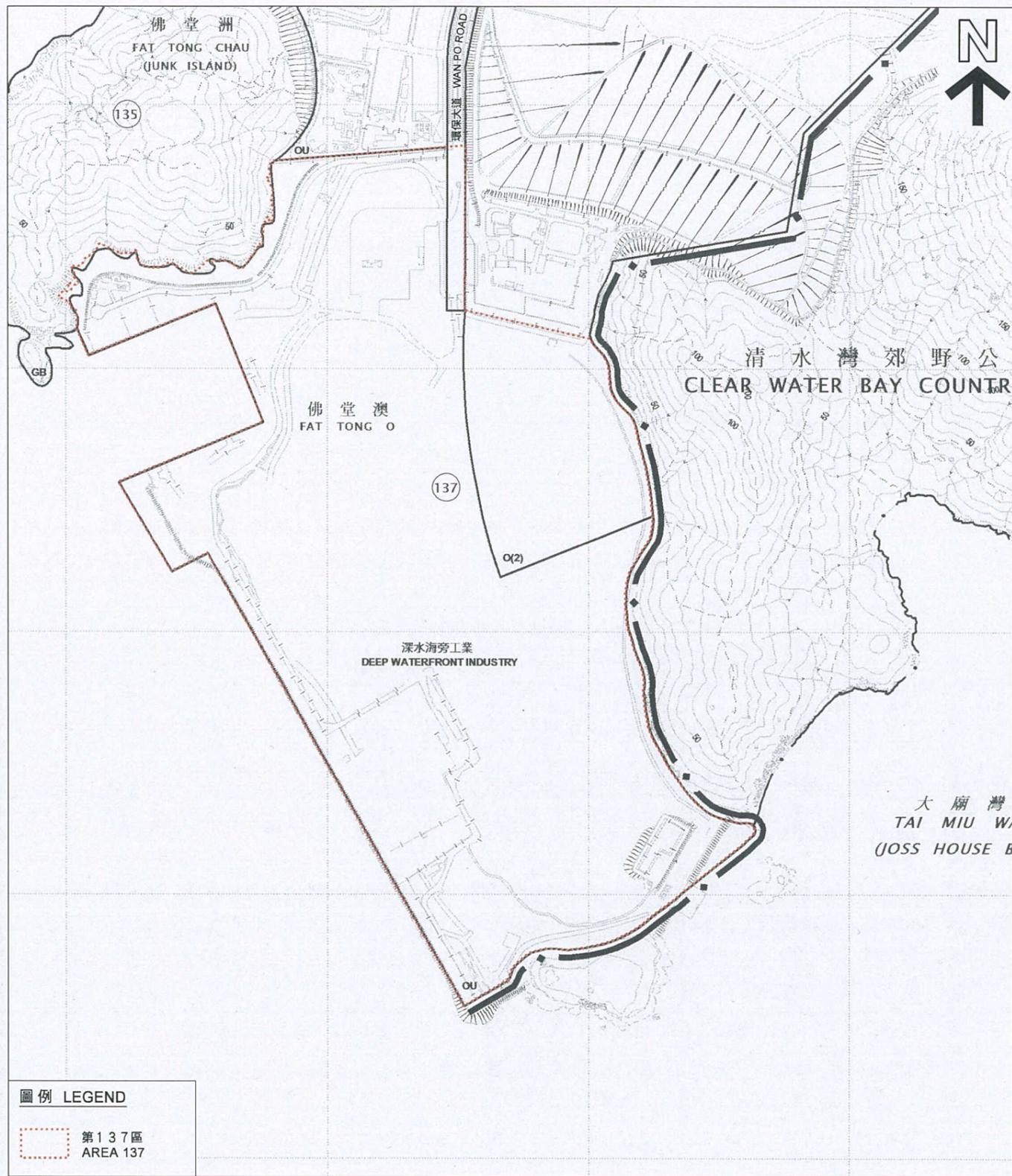
Provision of Major Community Facilities in Tseung Kwan O

Type of Facilities	Hong Kong Planning Standards and Guidelines (HKPSG)	HKPSG Requirement (based on planned population ¹)	Provision		Surplus / Shortfall (against planned provision)
			Existing Provision	Planned Provision	
District open space	10 ha per 100,000 persons	43.07ha	28.57 ha	47.46 ha	+4.39 ha
Local open space	10 ha per 100,000 persons	43.07 ha	60.81ha	72.62 ha	+29.55 ha
Secondary school	1 whole day classroom for 40 persons aged 12-17	524 classroom	713 classroom	803 classroom	+279 classroom
Primary school	1 whole day classroom for 25.5 persons aged 6-11	807 classroom	693 classroom	783 classroom	-24 ² classroom
Kindergarten/nursery	26 classrooms for 1,000 persons aged 3 to under 6	248 classroom	313 classroom	343 classroom	+95 classroom
District police station	1 per 200,000 to 500,000 persons	1	1	1	0
Divisional police station	1 per 100,000 to 200,000 persons	2	0	1	-1
Hospital	5.5 beds/1000 persons	2,480	1,084	1,244	-1,236 ³
Clinic/health centre	1 per 100,000 persons	5	2	4	-1
Magistracy (with 8 courtrooms)	1 per 660,000 persons	1	0	0	-1 ⁴
Integrated children and youth services centre	1 for 12,000 persons aged 6-24	6	10	10	+4

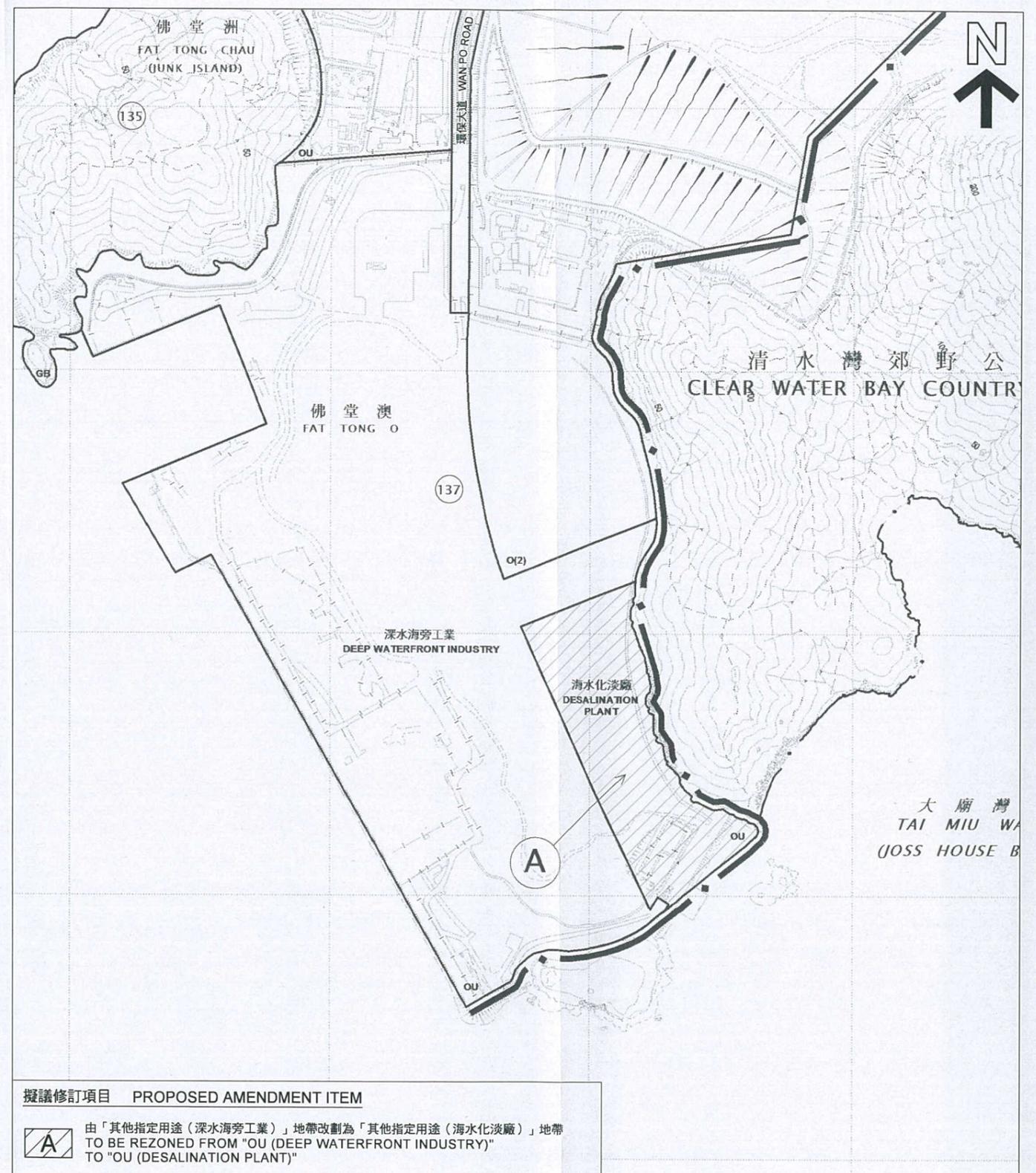
Type of Facilities	Hong Kong Planning Standards and Guidelines (HKPSG)	HKPSG Requirement (based on planned population ¹)	Provision		Surplus / Shortfall (against planned provision)
			Existing Provision	Planned Provision	
Integrated family services centre	1 for 100,000 to 150,000 persons	3	4	5	+2
Library	1 branch library for 200,000 persons	2	2	2	0
Sports centre	1 per 50,000 to 65,000 persons	7	6	7	0
Sports ground/sport complex	1 per 200,000 to 250,000 persons	2	1	1	-1
Swimming pool – standard	1 complex per 287,000 persons	2	1	1	-1 ⁵

Notes:

1. Depends on the nature of the community facilities, "Planned Population" may include Usual Residents and/or Mobile Residents and/or Transients.
2. As there is a surplus of secondary school classrooms, close liaison with the Education Bureau is being maintained to process proposals to convert school premises for post-secondary educational uses and address the deficit of primary school classrooms.
3. The Chief Executive announced in the 2014 Policy Address that the Government has reserved a site in Pak Shing Kok, Tseung Kwan O (i.e. TKO Area 78) to develop a Chinese medicine hospital.
4. According to email of 11.11.2015 from Judiciary, they have made no bid for a magistracy in TKO.
5. According to email of 24.3.2016 from LCSD, the leisure centre in Area 65B will provide swimming pool to meet the shortfall of facilities for swimming.



核准的將軍澳分區計劃大綱圖編號 S/TKO/22
 APPROVED TSEUNG KWAN O OUTLINE ZONING PLAN No. S/TKO/22

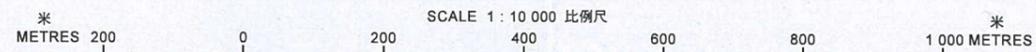


核准的將軍澳分區計劃大綱圖編號 S/TKO/22 的擬議修訂
 PROPOSED AMENDMENT TO THE APPROVED
 TSEUNG KWAN O OUTLINE ZONING PLAN No. S/TKO/22

本摘要圖於2016年5月4日擬備，所根據的資料為
 於2015年12月1日核准的分區計劃大綱圖編號S/TKO/22
 EXTRACT PLAN PREPARED ON 4.5.2016
 BASED ON OUTLINE ZONING PLAN
 No. S/TKO/22 APPROVED ON 1.12.2015

位置圖 LOCATION PLAN

已核准的將軍澳分區計劃大綱圖編號 S/TKO/22 的擬議修訂
 PROPOSED AMENDMENTS TO THE APPROVED
 TSEUNG KWAN O OUTLINE ZONING PLAN No. S/TKO/22



規劃署
 PLANNING
 DEPARTMENT

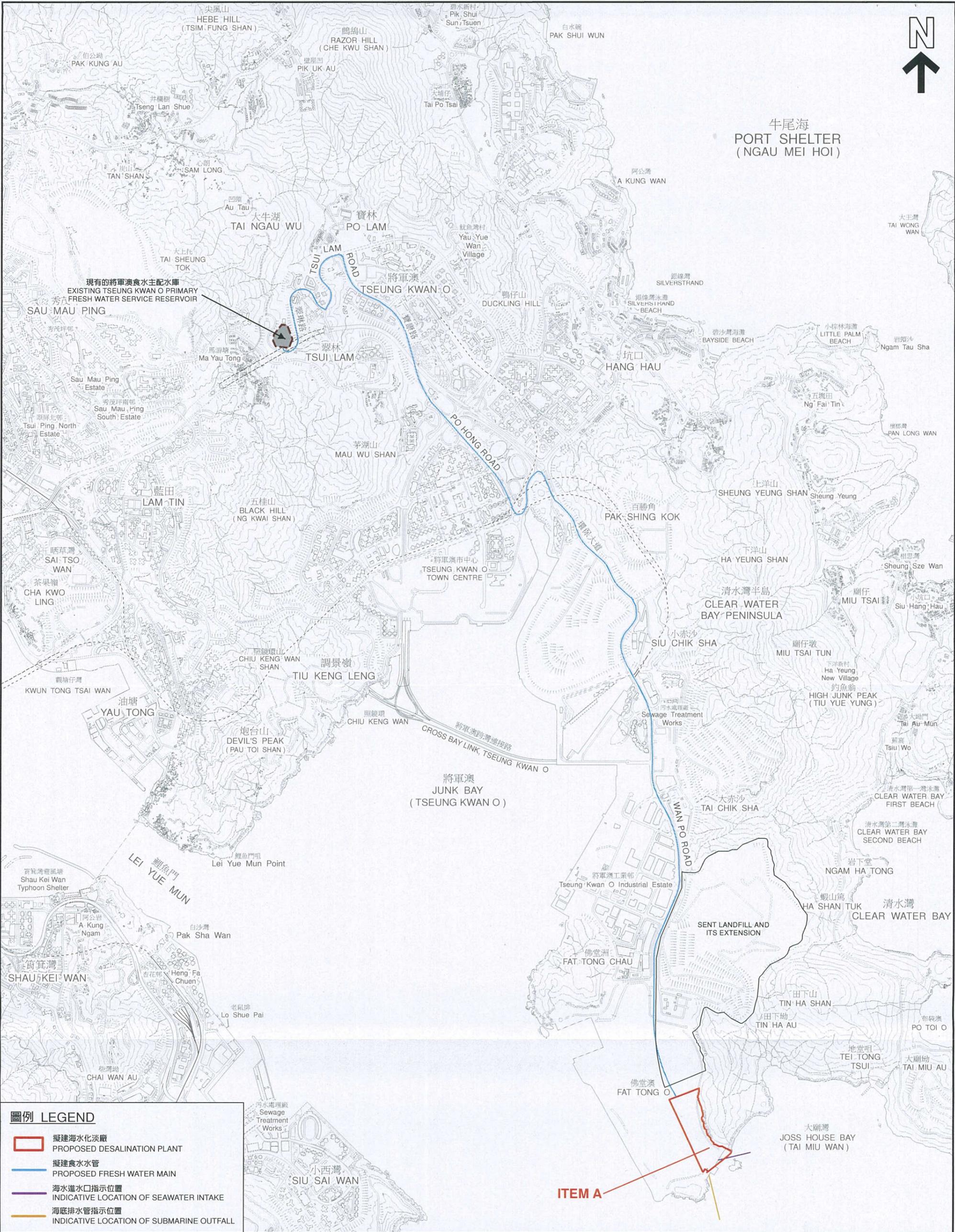


參考編號
 REFERENCE No.
 M/TKO/16/36

圖 PLAN
 1



牛尾海
PORT SHELTER
(NGAU MEI HOI)



圖例 LEGEND

- ▭ 擬建海水化淡廠
PROPOSED DESALINATION PLANT
- 擬建食水水管
PROPOSED FRESH WATER MAIN
- 海水進水口指示位置
INDICATIVE LOCATION OF SEAWATER INTAKE
- 海底排水管指示位置
INDICATIVE LOCATION OF SUBMARINE OUTFALL

位置圖 LOCATION PLAN

已核准的將軍澳分區計劃大綱圖
編號 S/TKO/22 的擬議修訂
PROPOSED AMENDMENTS TO
THE APPROVED TSEUNG KWAN O
OUTLINE ZONING PLAN No. S/TKO/22

SCALE 1 : 25000 比例尺



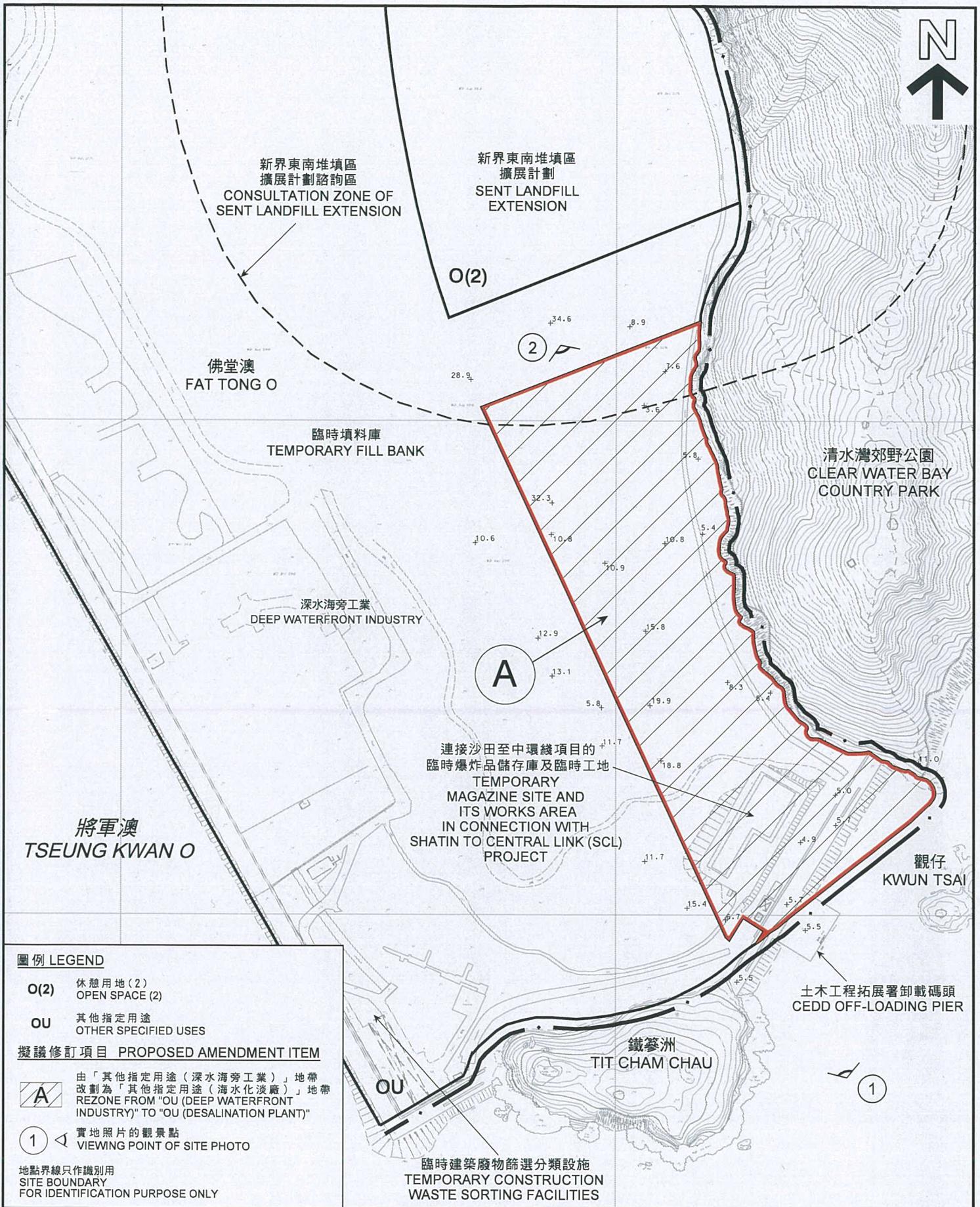
本摘要圖於2016年5月4日擬備，
所根據的資料為地形圖組別HM20C編號11及12
EXTRACT PLAN PREPARED ON 4.5.2016
BASED ON TOPOGRAPHIC MAP
SERIES HM20C SHEETS 11 & 12

規劃署
PLANNING
DEPARTMENT



參考編號
REFERENCE No.
M/TKO/16/36

圖 PLAN
2a



圖例 LEGEND

- O(2)** 休憩用地 (2)
OPEN SPACE (2)
- OU** 其他指定用途
OTHER SPECIFIED USES

擬議修訂項目 PROPOSED AMENDMENT ITEM

- A** 由「其他指定用途 (深水海旁工業)」地帶改劃為「其他指定用途 (海水化淡廠)」地帶
REZONE FROM "OU (DEEP WATERFRONT INDUSTRY)" TO "OU (DESALINATION PLANT)"
- 1** 實地照片的觀景點
VIEWING POINT OF SITE PHOTO

地點界線只作識別用
SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

本摘要圖於2016年5月4日擬備，
所根據的資料為測量圖編號
12-SW-11D、12C、16B、16D、17A和17C
EXTRACT PLAN PREPARED ON 4.5.2016
BASED ON SURVEY SHEETS No.
12-SW-11D, 12C, 16B, 16D, 17A & 17C

平面圖 SITE PLAN

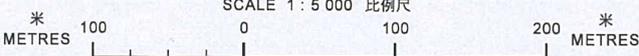
已核准的將軍澳分區計劃大綱圖
編號 S/TKO/22 的擬議修訂
**PROPOSED AMENDMENTS TO
THE APPROVED TSEUNG KWAN O
OUTLINE ZONING PLAN No. S/TKO/22**

SCALE 1 : 5 000 比例尺

**規劃署
PLANNING
DEPARTMENT**

參考編號
REFERENCE No.
M/TKO/16/36

圖 **PLAN
2b**





圖例 LEGEND

- O(2)** 休憩用地 (2)
OPEN SPACE (2)
- OU** 其他指定用途
OTHER SPECIFIED USES

擬議修訂項目 PROPOSED AMENDMENT ITEM



由「其他指定用途（深水海旁工業）」地帶改劃為「其他指定用途（海水化淡廠）」地帶
REZONE FROM "OU (DEEP WATERFRONT INDUSTRY)" TO "OU (DESALINATION PLANT)"

地點界線只作識別用
SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

航攝照片 AERIAL PHOTO

已核准的將軍澳分區計劃大綱圖
編號 S/TKO/22 的擬議修訂
PROPOSED AMENDMENTS TO
THE APPROVED TSEUNG KWAN O
OUTLINE ZONING PLAN No. S/TKO/22

規劃署
PLANNING
DEPARTMENT



參考編號
REFERENCE No.
M/TKO/16/36

圖 PLAN
3

本摘要圖於2016年5月4日擬備，
所根據的資料為地政總署
於2016年1月1日拍得的
航攝照片編號CS62411
EXTRACT PLAN PREPARED ON 4.5.2016
BASED ON AERIAL PHOTO No.
CS62411 TAKEN ON 1.1.2016
BY LANDS DEPARTMENT

1



臨時建築廢物篩選分類設施
TEMPORARY CONSTRUCTION
WASTE SORTING FACILITIES

臨時填料庫
TEMPORARY FILL BANK

佛堂洲
FAT TONG CHAU

將軍澳工業邨
TSEUNG KWAN O
INDUSTRIAL ESTATE

新界東南堆填區
擴展計劃
SENT LANDFILL
EXTENSION

清水灣郊野公園
CLEAR WATER BAY
COUNTRY PARK

A

連接沙田至中環綫項目的
臨時爆炸品儲存庫及臨時工地
TEMPORARY
MAGAZINE SITE AND
ITS WORKS AREA
IN CONNECTION WITH
SHATIN TO CENTRAL LINK (SCL)
PROJECT

土木工程拓展署卸載碼頭
CEDD OFF-LOADING PIER

地點界線只作識別用
SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

實地照片 SITE PHOTO

已核准的將軍澳分區計劃大綱圖編號 S/TKO/22 的擬議修訂
PROPOSED AMENDMENTS TO THE APPROVED
TSEUNG KWAN O OUTLINE ZONING PLAN No. S/TKO/22

規劃署
PLANNING
DEPARTMENT



參考編號
REFERENCE No.
M/TKO/16/36

圖 PLAN
4a

本圖於2016年5月4日擬備，所根據的
資料為水務署於2015年9月4日拍得的實地照片
PLAN PREPARED ON 4.5.2016
BASED ON SITE PHOTO TAKEN ON 4.9.2015
BY WATER SUPPLIES DEPARTMENT

2

清水灣郊野公園
CLEAR WATER BAY
COUNTRY PARK

觀仔
KWUN TSAI



地點界線只作識別用
SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

實地照片 SITE PHOTO

本圖於2016年5月4日擬備，所根據的資料為攝於2016年4月27日的實地照片
PLAN PREPARED ON 4.5.2016
BASED ON SITE PHOTO TAKEN ON 27.4.2016

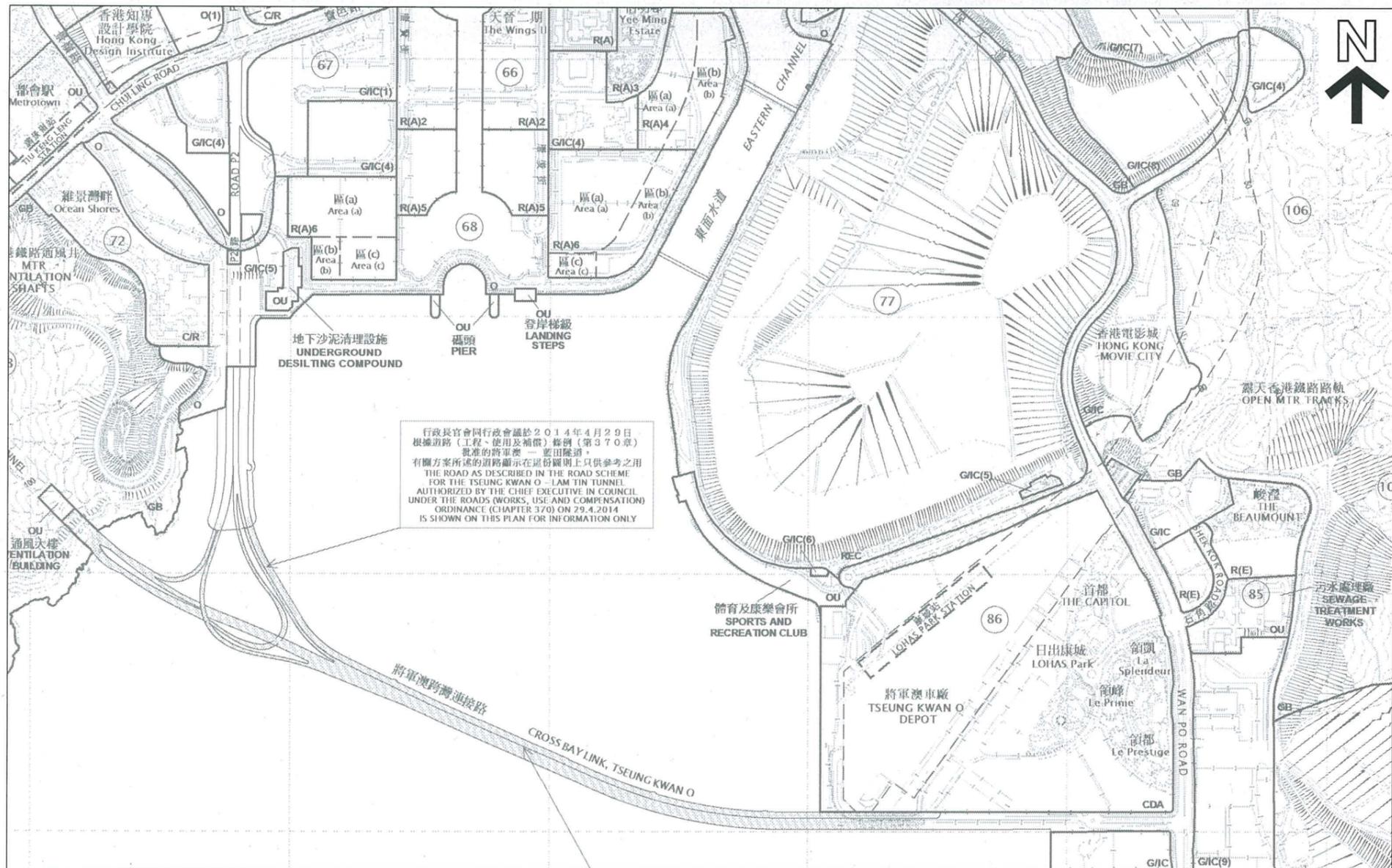
已核准的將軍澳分區計劃大綱圖編號 S/TKO/22 的擬議修訂
PROPOSED AMENDMENTS TO THE APPROVED
TSEUNG KWAN O OUTLINE ZONING PLAN No. S/TKO/22

規劃署
PLANNING
DEPARTMENT

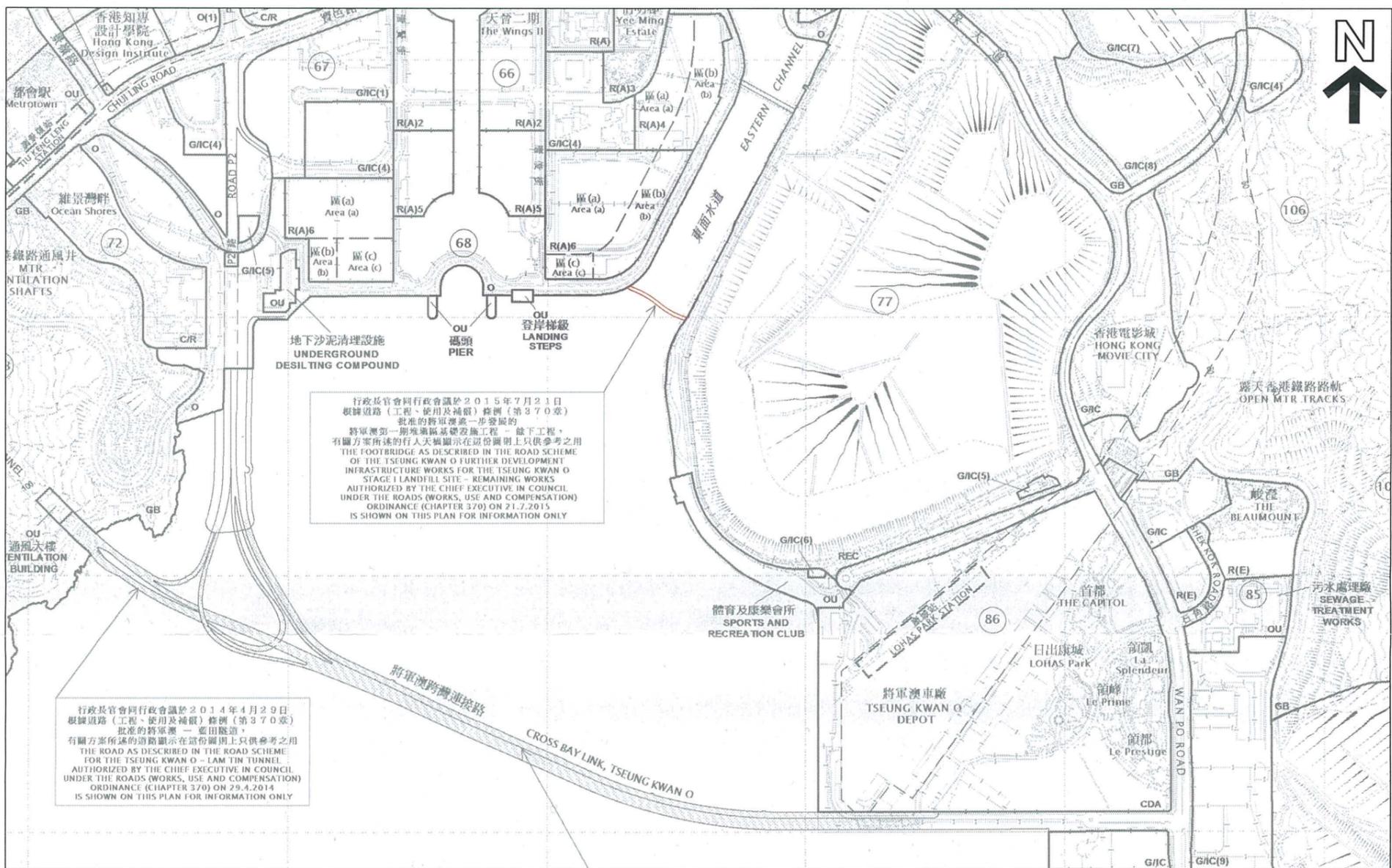


參考編號
REFERENCE No.
M/TKO/16/36

圖 PLAN
4b



核准的將軍澳分區計劃大綱圖編號 S/TKO/22 APPROVED TSEUNG KWAN O OUTLINE ZONING PLAN No. S/TKO/22



核准的將軍澳分區計劃大綱圖編號 S/TKO/22 的擬議修訂 PROPOSED AMENDMENT TO THE APPROVED TSEUNG KWAN O OUTLINE ZONING PLAN No. S/TKO/22 (INCLUSION OF AUTHORIZED ROAD SCHEME OF THE PROPOSED SOUTHERN FOOTBRIDGE ACROSS AREA 68 AND AREA 77)

位置圖 LOCATION PLAN

已核准的將軍澳分區計劃大綱圖編號 S/TKO/22 的擬議修訂
PROPOSED AMENDMENTS TO THE APPROVED
TSEUNG KWAN O OUTLINE ZONING PLAN No. S/TKO/22

規劃署
PLANNING
DEPARTMENT



本摘要圖於2016年5月4日擬備
所根據的資料為於2015年12月1日
核准的分區計劃大綱圖編號S/TKO/22
EXTRACT PLAN PREPARED ON 4.5.2016
BASED ON OUTLINE ZONING PLAN No.
S/TKO/22 APPROVED ON 1.12.2015

參考編號
REFERENCE No.
M/TKO/16/36

圖 PLAN
5a

SCALE 1: 10 000 比例尺
METRES 200 0 200 400 600 800 1000 METRES



行政長官會同行政會議於2015年7月21日
 根據道路(工程、使用及補償)條例(第370章)
 批准的將軍澳進一步發展的
 將軍澳第一期堆填區基礎設施工程 - 餘下工程,
 有關方案所述的行人天橋顯示在這份圖則上只供參考之用
 THE FOOTBRIDGE AS DESCRIBED IN THE ROAD SCHEME
 OF THE TSEUNG KWAN O FURTHER DEVELOPMENT
 INFRASTRUCTURE WORKS FOR THE TSEUNG KWAN O
 STAGE I LANDFILL SITE - REMAINING WORKS
 AUTHORIZED BY THE CHIEF EXECUTIVE IN COUNCIL
 UNDER THE ROADS (WORKS, USE AND COMPENSATION)
 ORDINANCE (CHAPTER 370) ON 21.7.2015
 IS SHOWN ON THIS PLAN FOR INFORMATION ONLY

將軍澳
 JUNK BAY
 (TSEUNG KWAN O)

圖例 LEGEND

 施工區界限
 LIMIT OF WORKS AREA

界線只作識別用
 BOUNDARY
 FOR IDENTIFICATION PURPOSE ONLY

本摘要圖於2016年5月4日擬備，
 所根據的資料為地政總署
 於2015年1月17日拍得的
 航攝照片編號CW113217
 EXTRACT PLAN PREPARED ON 4.5.2016
 BASED ON AERIAL PHOTO No.
 CW113217 TAKEN ON 17.1.2015
 BY LANDS DEPARTMENT

航攝照片 AERIAL PHOTO

已核准的將軍澳分區計劃大綱圖
 編號 S/TKO/22 的擬議修訂
 PROPOSED AMENDMENTS TO
 THE APPROVED TSEUNG KWAN O
 OUTLINE ZONING PLAN No. S/TKO/22

規劃署
 PLANNING
 DEPARTMENT 

參考編號
 REFERENCE No.
 M/TKO/16/36

圖 PLAN
 5b