

FORM 5
ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE
(CHAPTER 499)
SECTION 13(1)

Application for Variation of an Environmental Permit

PART A PREVIOUS APPLICATIONS

No previous application for variation of an environmental permit.

The environmental permit was previously amended.

Application No. :

PART B DETAILS OF APPLICANT

B1. Name : (person or company)
Water Supplies Department

[Note : In accordance with section 13(1) of the Ordinance, the person holding an environmental permit or a person who assumes responsibility for the designated project may apply for variation of the environmental permit.]

B2. Business Registration No. :
(if applicable)

B3. Correspondence Address :

B4. Name of Contact Person : B5. Position of Contact Person :

B6. Telephone No. : B7. Fax No. :

B8. E-mail Address : (if any)

PART C DETAILS OF CURRENT ENVIRONMENTAL PERMIT

C1. Name of the Current Environmental Permit Holder :
Water Supplies Department

C2. Application No. of the Current Environmental Permit : AEP-503/2015

C3. The Current Environmental Permit was Issued in : month / year
1 2 | 2 0 1 5

Important Notes : Please submit the application together with
(a) 3 copies of this completed form; and
(b) appropriate fee as stipulated in the Environmental Impact Assessment (Fees) Regulation
to the Environmental Protection Department at the following address :
The EIA Ordinance Register Office,
27th floor, Southorn Centre, 130 Hennessy Road,
Wan Chai, Hong Kong.



Tick (✓) the appropriate box

PART D PROPOSED VARIATIONS TO THE CONDITIONS IN CURRENT ENVIRONMENTAL PERMIT

D1. Condition(s) in the Current Environmental Permit :	D2. Proposed Variation(s) :	D3. Reason for Variation(s) :	D4. Describe the environmental changes arising from the proposed variation(s) :	D5. Describe how the environment and the community might be affected by the proposed variation(s) :	D6. Describe how and to what extent the environmental performance requirements set out in the EIA report previously approved or project profile previously submitted for this project may be affected :	D7. Describe any additional measures proposed to eliminate, reduce or control any adverse environmental impact arising from the proposed variation(s) and to meet the requirements in the Technical Memorandum on Environmental Impact Assessment Process :
<p>Figure 1 – Project Location Plan</p> <p>Figure 2 – Layout Plan of the Project</p>	<p>Proposed variation (1) :</p> <p>Figure 1 is proposed to be amended with the revised boundary of the desalination plant site to reduce the site area from about 10 hectare (ha) under the original scheme in the approved EIA Report to about 8 ha within the original earmarked site.</p> <p>Proposed variation (2) :</p> <p>Figure 2 is proposed to be deleted from the Environmental Permit (EP).</p>	<p>Proposed variation (1) :</p> <p>The site area of the desalination plant is reduced to optimise the land footprint of the plant.</p> <p>Proposed variation (2) :</p> <p>On-site chlorine generation technology to generate chlorine gas will be adopted to provide a more reliable and secure supply of chlorine and replace the use of imported liquid chlorine for the disinfection of potable water. As a result, the locational constraint of the chlorine storage building within the layout of the desalination plant as illustrated in Figure 2 is no longer required. The requirement of the carbon dioxide storage is already stipulated in Condition 2.22 and Table 1 of the EP.</p>	<p>Proposed variation (1) :</p> <p>A more compact layout of plant facilities with increased maximum building height from 20m under the original scheme of the approved EIA Report to 35m is proposed. As compared to the prediction in the approved EIA Report, the potential environmental impact arising from the proposed variations will not induce adverse environmental impact at nearby sensitive receivers. The potential concern on landscape and visual impact due to the proposed variation is reviewed in Item D5.</p> <p>Proposed variation (2) :</p> <p>The proposed on-site chlorine generation technology will have an environmental benefit of eliminating the hazard due to transport (on-site and off-site), use and storage of liquid chlorine.</p>	<p>Proposed variation (1) :</p> <p>Under the revised design, the total number and type of Landscape Resources (LRs) and Landscape Character Areas (LCAs) to be affected will remain unchanged. Re-arrangement of building blocks and increase in building height within the earmarked site of the desalination plant will have no significant effect on other parameters such as compatibility with the surrounding landscape, duration of impact and reversibility of change. The magnitude of change to LR and LCAs as well as the landscape impact significance in the approved EIA Report will remain the same. All key landscape mitigation measures recommended in the EIA Report (such as green roof, roadside planting, aesthetic treatment of all structures, vertical greening, planting along plant site boundaries) have been reviewed to remain valid and applicable.</p>	<p>The environmental performance requirements set out in the approved EIA Report will be maintained under the revised design. The proposed variation does not change the extent of environmental impacts predicted in the approved EIA Report.</p>	<p>The mitigation measures recommended in the approved EIA Report have been reviewed to be adequate for the revised site boundary and layout. No additional mitigation measures are required for the proposed variations.</p>

PART D PROPOSED VARIATIONS TO THE CONDITIONS IN CURRENT ENVIRONMENTAL PERMIT (CONTINUED)

D1. Condition(s) in the Current Environmental Permit :	D2. Proposed Variation(s) :	D3. Reason for Variation(s) :	D4. Describe the environmental changes arising from the proposed variation(s) :	D5. Describe how the environment and the community might be affected by the proposed variation(s) :	D6. Describe how and to what extent the environmental performance requirements set out in the EIA report previously approved or project profile previously submitted for this project may be affected :	D7. Describe any additional measures proposed to eliminate, reduce or control any adverse environmental impact arising from the proposed variation(s) and to meet the requirements in the Technical Memorandum on Environmental Impact Assessment Process :
				<p>The waterfront location of the Project and the ridgeline along the Clear Water Bay Peninsula at the Project's backdrop has been taken into consideration in reviewing the visual impacts. The section of ridgeline running from High Junk Peak (344mPD) to Tin Ha Shan (273mPD) around Tin Ha Shan at the back of the proposed desalination plant is of average height ranging from 200m to 300m. With reference to the new proposed maximum building height of the desalination plant of 35m, there will be over 80% of buffer allowed to preserve views to the ridgeline. As illustrated in the photomontages, the increase in building height would cause minor change on the visual effect as comparing to the former scheme in the approved EIA Report. Overall the findings and conclusion on landscape and visual assessment of the approved EIA report would not be affected by the revised site boundary and new building height.</p>		

PART D PROPOSED VARIATIONS TO THE CONDITIONS IN CURRENT ENVIRONMENTAL PERMIT (CONTINUED)

D1. Condition(s) in the Current Environmental Permit :	D2. Proposed Variation(s) :	D3. Reason for Variation(s) :	D4. Describe the environmental changes arising from the proposed variation(s) :	D5. Describe how the environment and the community might be affected by the proposed variation(s) :	D6. Describe how and to what extent the environmental performance requirements set out in the EIA report previously approved or project profile previously submitted for this project may be affected :	D7. Describe any additional measures proposed to eliminate, reduce or control any adverse environmental impact arising from the proposed variation(s) and to meet the requirements in the Technical Memorandum on Environmental Impact Assessment Process :
				<p>Proposed variation (2) :</p> <p>The proposed on-site chlorine generation technology will eliminate the hazard due to transport (on-site and off-site), use and storage of liquid chlorine, and thus reduce the risk to human life and the development constraints in the vicinity.</p>		

PART E DECLARATION BY APPLICANT

E1. I hereby certify that the particulars given above are correct and true to the best of my knowledge and belief. I understand the environmental permit may be suspended, varied or cancelled if any information given above is false, misleading, wrong or incomplete.



Signature of Applicant



Full Name in Block Letters



Position

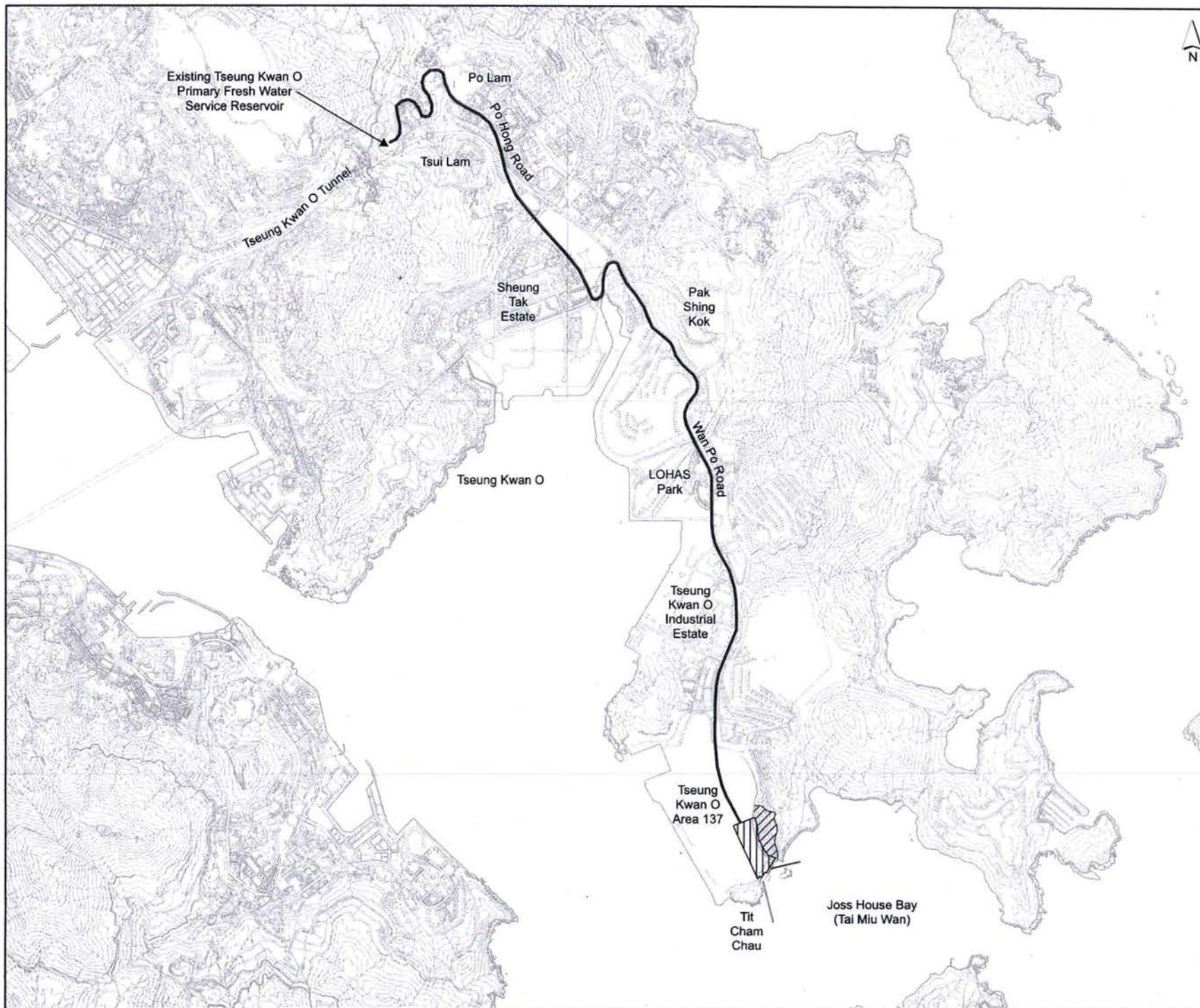
on behalf of Water Supplies Department
Company Name and Chop (as appropriate)

5/1/2018

Date

NOTES :

1. A person who constructs or operates a designated project in Part I of Schedule 2 of the Ordinance or decommissions a designated project listed in Part II of Schedule 2 of the Ordinance without an environmental permit or contrary to the permit conditions commits an offence under the Ordinance and is liable to a maximum fine of \$5,000,000 and to a maximum imprisonment for 2 years.
2. A person for whom a designated project is constructed, operated or decommissioned and who permits the carrying out of the designated project in contravention of the Ordinance commits an offence and is liable to a maximum fine of \$5,000,000 and to a maximum imprisonment for 2 years.



Legend

- Indicative location of seawater intake
- Indicative location of submarine outfall
- Proposed Fresh Water Main
- ▨ Desalination Plant
- Study area for slope mitigation works

Revision	Date	Description	Initial
		Designed	Checked
		Drawn	Checked
Initial			
Date			

Agreement No. CE 21/2012 (WS)

Contract title
**FIRST STAGE OF
 DESALINATION PLANT AT
 TSEUNG KWAN O - INVESTIGATION,
 DESIGN AND CONSTRUCTION**

Drawing title
PROJECT LOCATION PLAN

Drawing no. **FIGURE 1** Revision

Scale **1:30,000**



Annex A – Photomontages for the Revised Scheme

Definitions / Abbreviations

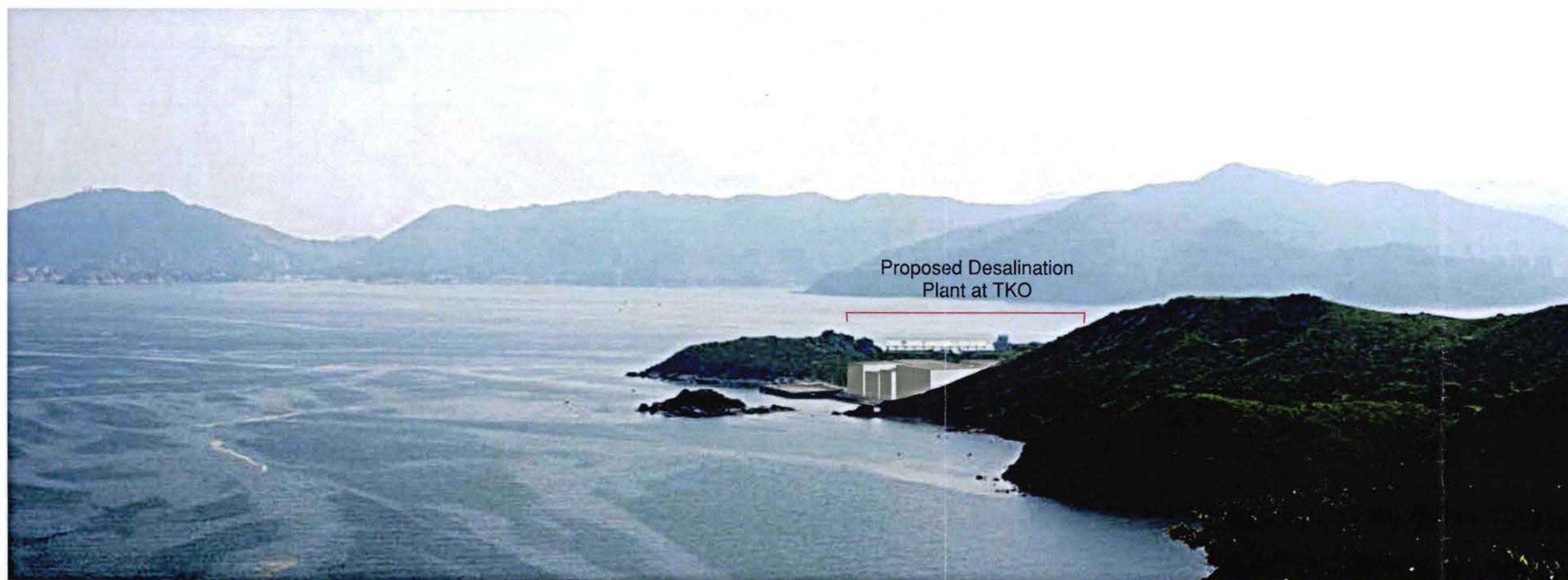
VP: Vantage Point

MM3: Landscape and visual mitigation measures including

- green roofs where practical
- roadside planting;
- aesthetic treatment of all structures;
- vertical greening;
- screen planting along application site; and
- landscape enhancement with amenity planting where practical, including planting along the edge (site boundary) fence with native shrubs where feasible, to reduce their visual impact and blend them into the surrounding landscape.



VP1 - Existing View from High Junk Peak in Clear Water Bay Country Park



VP1 - View from High Junk Peak in Clear Water Bay Country Park on day 1 operation (without mitigation)

Revision	Date	Description			Initial
		Designed	Checked	Drawn	
Initial					
Date					

Agreement No. CE 8/2015 (WS)

Contract title
FIRST STAGE OF
DESALINATION PLANT AT
TSEUNG KWAN O - INVESTIGATION,
DESIGN AND CONSTRUCTION

Drawing title
PHOTOMONTAGES FROM VP1 (HIGH JUNK
PEAK TRAIL) (SHEET 1 OF 2)

Drawing no. FIGURE 8.6a

Revision

Scale

 水務署
Water Supplies Department



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VP1 - View from High Junk Peak in Clear Water Bay Country Park on day 1 operation (with mitigation)



VP1 - View from High Junk Peak in Clear Water Bay Country Park at Year 10 (with mitigation)

Revision	Date	Description			Initial
		Designed	Checked	Drawn	
Initial					
Date					

Agreement No. CE 8/2015 (WS)

Contract title
FIRST STAGE OF DESALINATION PLANT AT TSEUNG KWAN O - INVESTIGATION, DESIGN AND CONSTRUCTION

Drawing title
PHOTOMONTAGES FROM VP1 (HIGH JUNK PEAK TRAIL) (SHEET 2 OF 2)

Drawing no. FIGURE 8.6b	Revision
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Scale



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VP2 - Existing View from Podium of Island Resort, Siu Sai Wan



VP2 - View from Podium of Island Resort, Siu Sai Wan on day 1 operation (without mitigation)

Revision	Date		Description		Initial	
	Designed	Checked	Drawn	Checked	Initial	Checked

Approved

Agreement No. CE 8/2015 (WS)

Contract Title
FIRST STAGE OF DESALINATION PLANT AT TSEUNG KWAN O - INVESTIGATION, DESIGN AND CONSTRUCTION

Drawing Title
PHOTOMONTAGES FROM VP2 (ISLAND RESORT)
(SHEET 1 OF 2)

Drawing No. FIGURE 8.7a
Revision -

Scale N.T.S.





VP2 - View from Podium of Island Resort, Siu Sai Wan on day 1 operation (with mitigation)



VP2 - View from Podium of Island Resort, Siu Sai Wan at Year 10 (with mitigation)

Revision	Date	Description			Initial
		Designed	Checked	Drawn	

Approved

Agreement No. CE 8/2015 (WS)

Contract Title
FIRST STAGE OF
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TSEUNG KWAN O - INVESTIGATION,
DESIGN AND CONSTRUCTION

Drawing Title
PHOTOMONTAGES FROM VP2
(ISLAND RESORT)
(SHEET 2 OF 2)

Drawing No. FIGURE 8.7b	Revision -
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Scale N.T.S.





VP3 - Existing View from Block 1 of LOHAS Park



VP3 - View from Block 1 of LOHAS Park on day 1 operation (without mitigation)

Revision	Date	Description			Initial
		Designed	Checked	Drawn	
Initial					
Date					

Agreement No.
CE 8/2015 (WS)

Contract title
FIRST STAGE OF
DESALINATION PLANT AT
TSEUNG KWAN O - INVESTIGATION,
DESIGN AND CONSTRUCTION

Drawing title
PHOTOMONTAGES FROM VP3
(LOHAS PARK) (SHEET 1 OF 2)

Drawing no.
FIGURE 8.8a

Revision

Scale



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VP3 - View from Block 1 of LOHAS Park on day 1 operation (with mitigation)



VP3 - View from Block 1 of LOHAS Park at Year 10 (with mitigation)

Revision	Date	Description			Initial
		Designed	Checked	Drawn	
Initial					
Date					

Agreement No.
CE 8/2015 (WS)

Contract title
FIRST STAGE OF
DESALINATION PLANT AT
TSEUNG KWAN O - INVESTIGATION,
DESIGN AND CONSTRUCTION

Drawing title
PHOTOMONTAGES FROM VP3
(LOHAS PARK) (SHEET 2 OF 2)

Drawing no. FIGURE 8.8b	Revision
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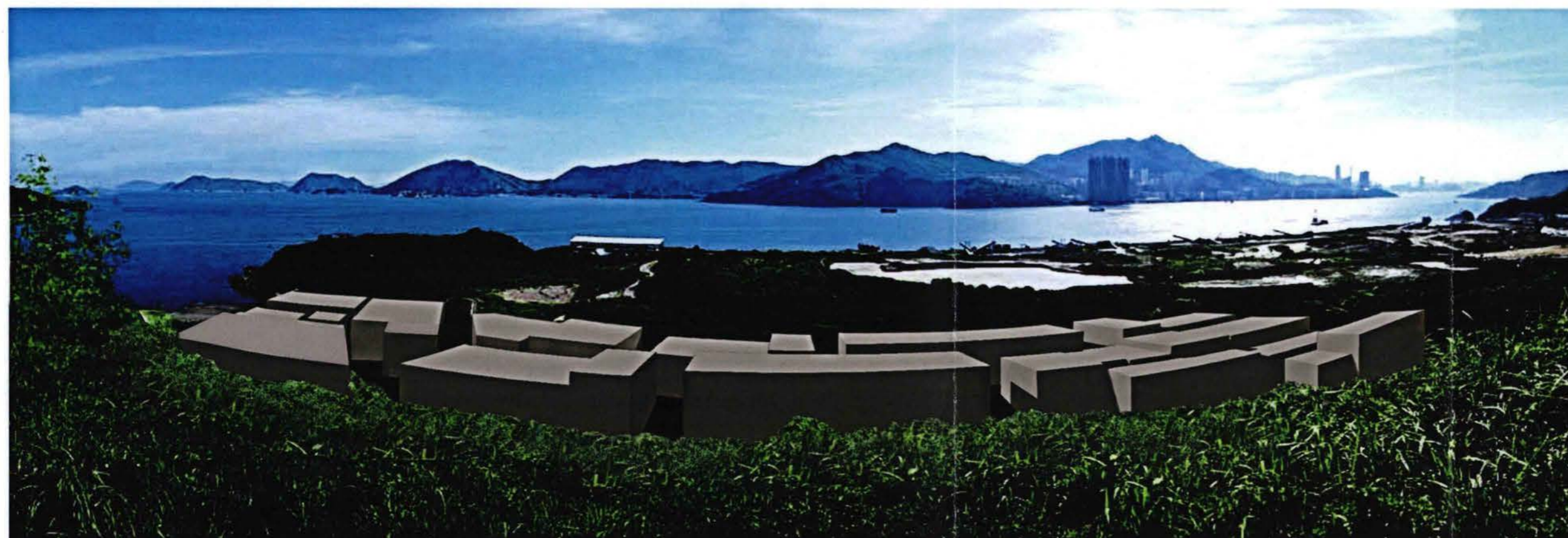
Scale



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VP4 - Existing View from Walking Trail on Knoll at East of the Site



VP4 - View from Walking Trail on Knoll at East of the Site on day 1 operation (without mitigation)

Revision	Date	Description			Initial
		Designed	Checked	Drawn	
Initial					
Date					

Agreement No.
CE 8/2015 (WS)

Contract title
FIRST STAGE OF
DESALINATION PLANT AT
TSEUNG KWAN O - INVESTIGATION,
DESIGN AND CONSTRUCTION

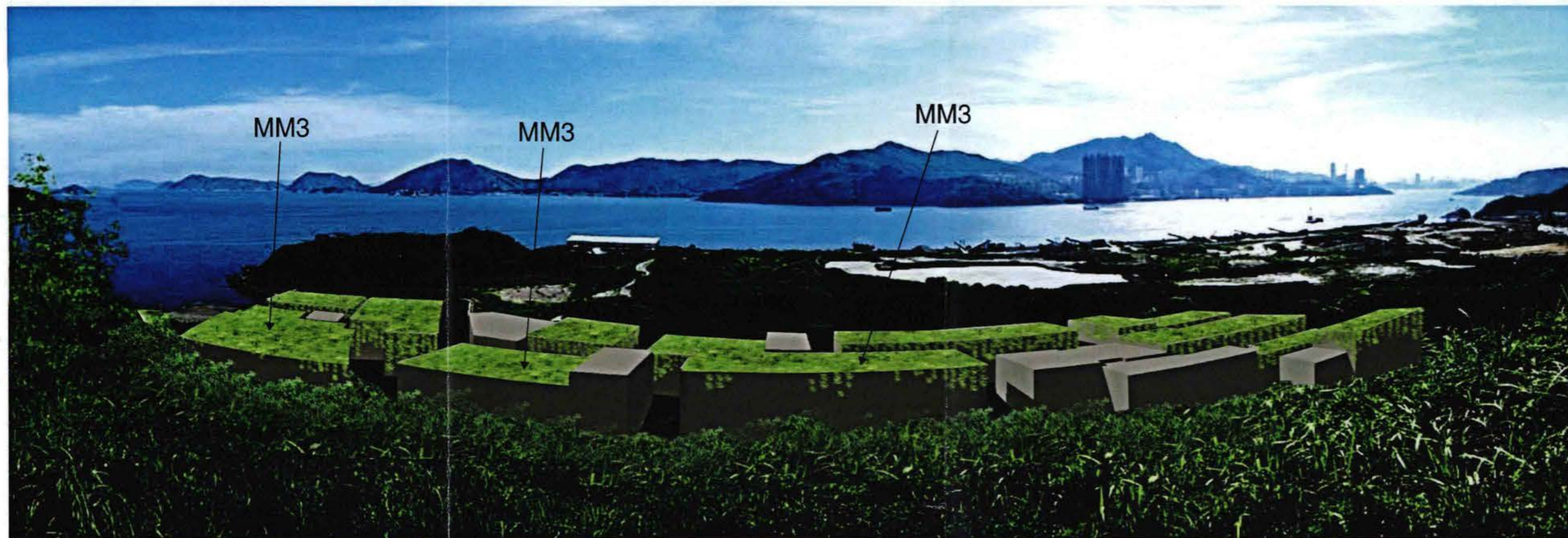
Drawing title
PHOTOMONTAGES FROM VP4
(ON KNOLL OF WALKING TRAIL AT
EAST OF THE SITE) (SHEET 1 OF 2)

Drawing no.	Revision
FIGURE 8.9a	

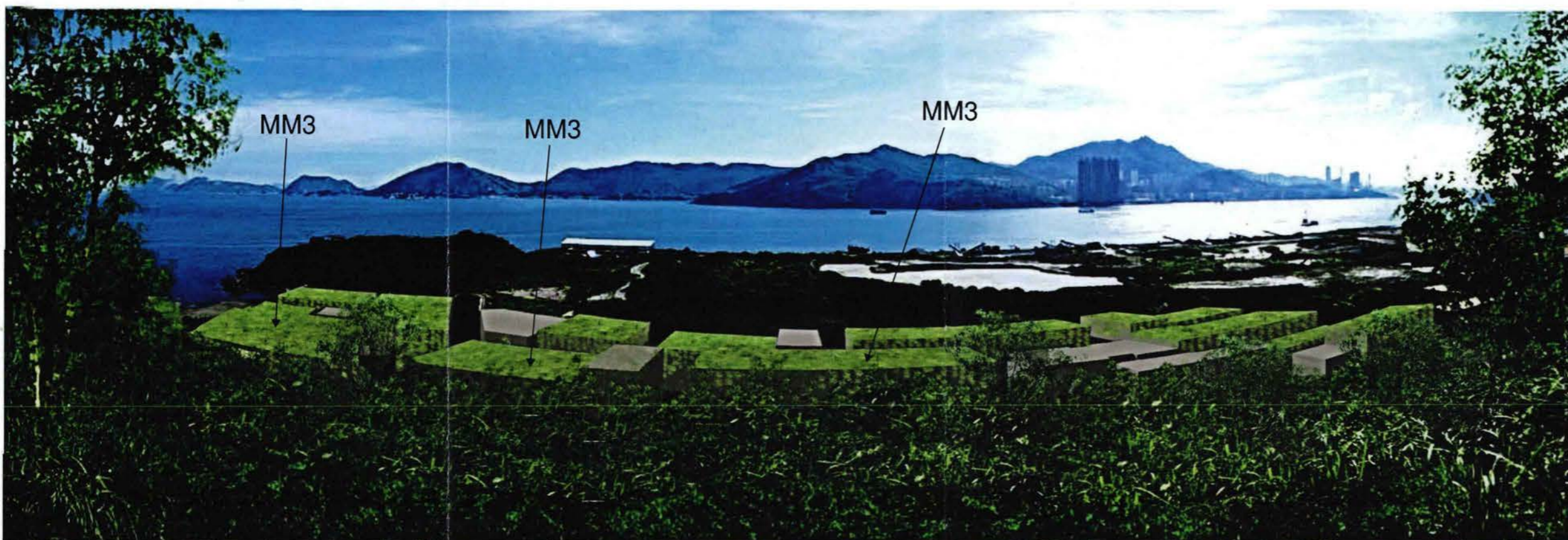
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VP4 - View from Walking Trail on Knoll at East of the Site on day 1 operation (with mitigation)



VP4 - View from Walking Trail on Knoll at East of the Site at Year 10 (with mitigation)

Revision	Date	Description			Initial
		Designed	Checked	Drawn	
Initial					
Date					

Agreement No.
CE 8/2015 (WS)

Contract title
FIRST STAGE OF
DESALINATION PLANT AT
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DESIGN AND CONSTRUCTION

Drawing title
PHOTOMONTAGES FROM VP4
(ON KNOLL OF WALKING TRAIL AT
EAST OF THE SITE) (SHEET 2 OF 2)

Drawing no. FIGURE 8.9b	Revision
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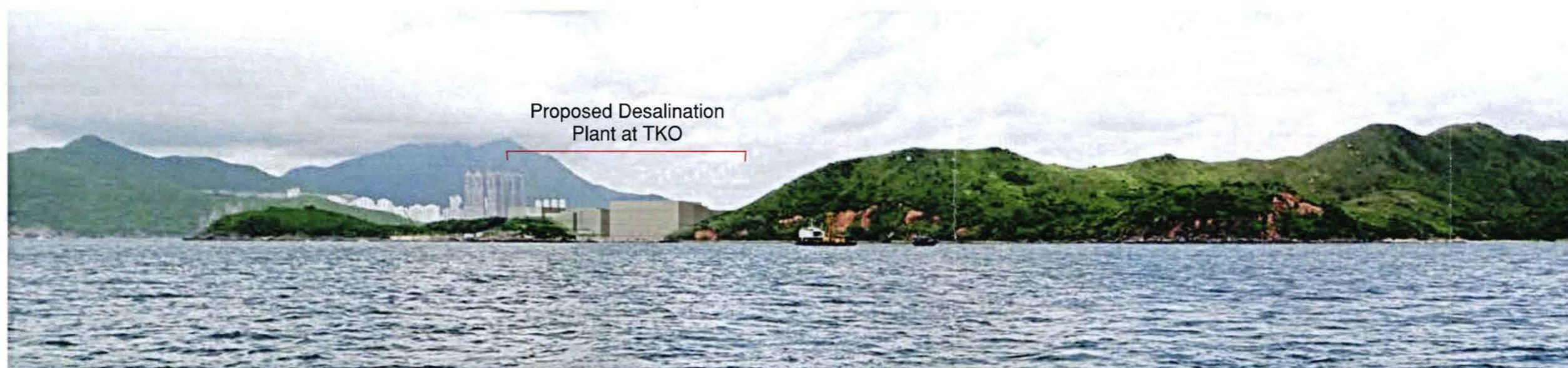
Scale



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VP5 - Existing View from the sea of Joss House Bay



VP5 - View from the sea of Joss House Bay on day 1 operation (without mitigation)

Revision	Date	Description			Initial
		Designed	Checked	Drawn	
Initial					
Date					

Agreement No. CE 8/2015 (WS)

Contract title
FIRST STAGE OF
DESALINATION PLANT AT
TSEUNG KWAN O - INVESTIGATION,
DESIGN AND CONSTRUCTION

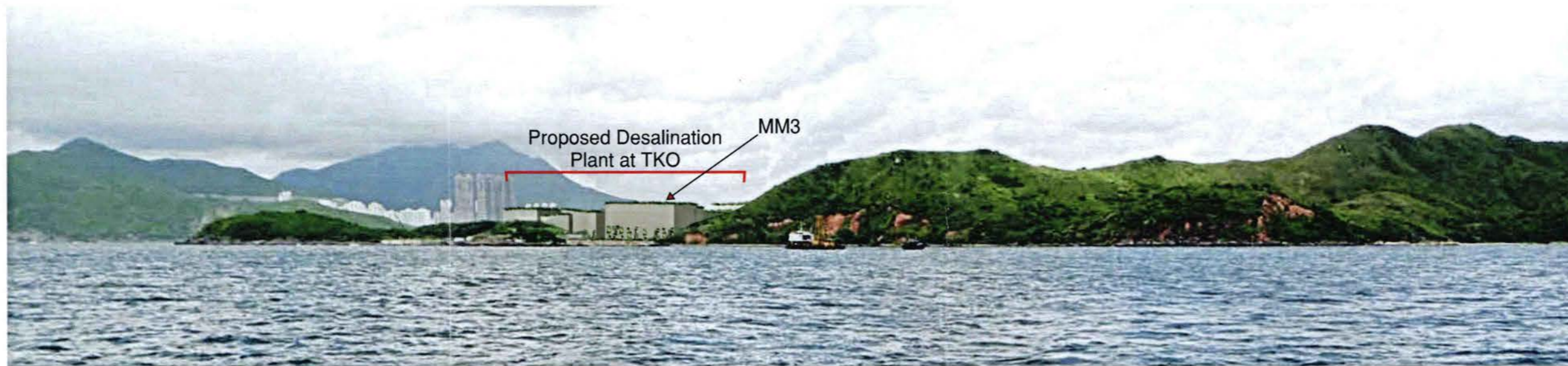
Drawing title
PHOTOMONTAGES FROM VP5
(JOSS HOUSE BAY) (SHEET 1 OF 2)

Drawing no. FIGURE 8.10a	Revision
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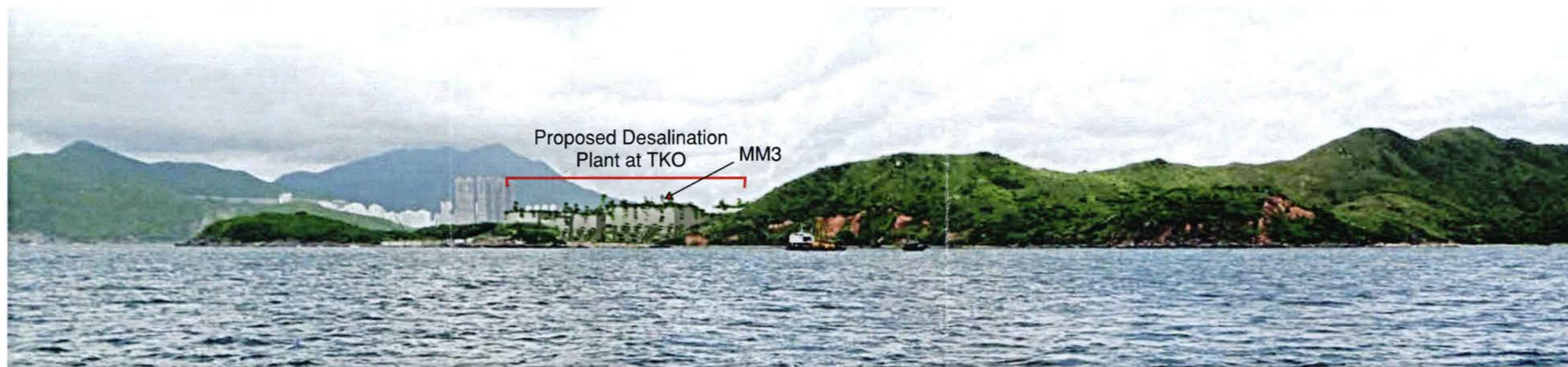
Scale



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VP5 -View from the sea of Joss House Bay on day 1 operation (with mitigation)



VP5 - View from the sea of Joss House Bay at Year 10 (with mitigation)

Revision	Date	Description			Initial
		Designed	Checked	Drawn	Checked
Initial					
Date					

Agreement No. CE 8/2015 (WS)

Contract title
FIRST STAGE OF
DESALINATION PLANT AT
TSEUNG KWAN O -INVESTIGATION,
DESIGN AND CONSTRUCTION

Drawing title
PHOTOMONTAGES FROM VP5
(JOSS HOUSE BAY) (SHEET 2 OF 2)

Drawing no. FIGURE 8.10b	Revision
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Scale



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