本署檔號

OUR REF: () in EP2/G/A/180

來函檔號

YOUR REF: (EA3P) in HYD RDO/16-3/28

電話

TEL. NO.: 2835 1105

圖文傳真

FAX NO: 2591 0558

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HOMEPAGE: http://www.epd.gov.hk

Environmental Protection Department Branch Office

28th Floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong.



環境保護署分處 香港灣仔 軒尼詩道 一百三十號 修頓中心廿八樓

23 August 2024

By Registered Post & Fax

Highways Department

Environmental Impact Assessment (EIA) Ordinance, Cap.499 Application for EIA Study Brief

Project Title: Smart and Green Mass Transit System in East Kowloon (Application No. ESB-370/2024)

I refer to your above application received on 22 July 2024 for an EIA Study Brief under Section 5(1)(a) of the EIA Ordinance.

In accordance with Section 5(7)(a) of the EIA Ordinance and after public inspection of the project profile, I issue the attached EIA Study Brief (No. ESB-370/2024) for your preparation of an EIA report.

Under Section 15 of the EIA Ordinance, the EIA Study Brief will be placed on the EIA Ordinance Register. It will also be placed on the EIA Ordinance website (http://www.epd.gov.hk/eia/).

You may submit an application for approval of the EIA report in accordance with Section 6(2) of the EIA Ordinance after its completion. Upon receipt of your application, this department will decide under Section 6(3) of the EIA Ordinance whether the EIA report meets the requirements of the EIA Study Brief and Technical Memorandum on EIA Process, and accordingly advise you under Section 6(4) of the EIA Ordinance whether a submission to the Advisory Council on the Environment (ACE) or its subcommittee is required. In this connection, you are required to provide a set of soft copy of the Executive Summary of the EIA report to the Secretariat of the EIA Subcommittee of the Council by email at accescretariat@eeb.gov.hk for selection for submission when you submit the EIA report to this department for approval. Should you have questions on the submission, please contact Executive Officer (Cross-Boundary & International Division) 1 of the Secretariat of the EIA Subcommittee of the ACE at 2594 6324.

If the EIA report is selected by ACE for submission and presentation, you are expected to provide ACE with an account of the environmental issues arising from the project, major conclusions and recommendations of the EIA study. In particular, the main environmental concerns of the general public and interest groups who may be affected by the Project should be identified and addressed in the EIA study. As such, you are strongly advised to engage the public and interest groups during the course of the EIA study. Please find attached a copy of the "Guidance Note on Advertisement and Public Inspection of Documents" and "Modus Operandi of the EIA Subcommittee of the Advisory Council on the Environment" for your reference.

Please note that if you are aggrieved by any of the content of this EIA Study Brief, you may appeal under Section 17 of the EIA Ordinance within 30 days of receipt of this EIA Study Brief.

Should you have any queries on the above application, please contact my colleague Mr. Leo LUK at 2835 1155.

Yours sincerely,

(Queenie Y.C. NG)

Acting Principal Environmental Protection Officer for Director of Environmental Protection

Encl.

c.c. (w/o encl.)

ACE EIA Subcommittee Secretariat

(Attn.: EO(CBD)1

Fax: 2872 0603)

ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE (CAP. 499)

GUIDANCE NOTE ON ADVERTISEMENT AND PUBLIC INSPECTION OF DOCUMENTS

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ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE (CAP.499)

GUIDANCE NOTE ON ADVERTISEMENT AND PUBLIC INSPECTION OF DOCUMENTS

1. Purpose

This guidance note sets out the advertisement requirements and the arrangement for public inspection of a project profile or an environmental impact assessment (EIA) report submitted under the Environmental Impact Assessment (EIA) Ordinance (the Ordinance).

This guidance note should be read in conjunction with "A Guide to the EIA Ordinance" which can be obtained from the EIA Ordinance Register Office at 27/F, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong or downloaded from the EIA Ordinance website (https://www.epd.gov.hk/eia).

2. Advertising the Availability of Project Profile and the Arrangement for its Public Inspection

The Requirement

Under the Ordinance, an applicant should advertise, at his or her own expense, the availability of a project profile for the following applications:

- (i) an application for EIA study brief under section 5.(1)(a) of the Ordinance; or
- (ii) an application for permission to apply directly for environmental permit under section 5.(1)(b) of the Ordinance.

Timing and Frequency of Advertisement

An applicant should advertise the availability of the project profile on the day following the submission of the application form and the project profile to the Director of Environmental Protection (the Director).

The applicant would only need to make one advertisement in a Chinese newspaper and an English newspaper, unless further information relating to the project profile is required and the applicant has been advised by the Director to advertise the availability of the additional information.

The Format and Size of Advertisement

For a project profile submitted for an application for EIA study brief, the format of advertisement should follow Appendix 1.

For a project profile submitted for an application for permission to apply directly for environmental permit, the format of advertisement should follow Appendix 2. The applicant should state clearly whether the application is pursuant to section 5.(9), 5.(10) or 5.(11) of the Ordinance.

Advertising the Availability of Additional Information

If the Director requires further information concerning the project profile, the applicant may have to advertise the availability of the additional information. The Director will advise the applicant the details of such an advertisement.

Period and Place of Public Inspection of Project Profile

The Director will place the project profile at the following locations for the public to inspect for 14 days from the day of the advertisement:

- (a) The EIA Ordinance Register Office, Environmental Protection Department, 27th floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong (Opening hours: Monday to Friday 0900 to 1700, closed on Saturday, Sunday and Public Holidays);
- (b) Wan Chai Environmental Resource Centre, 221 Queen's Road East, Wan Chai, Hong Kong (Opening hours: Monday, Wednesday to Sunday Friday 1000 to 1700, closed on Tuesday, Saturday, Sunday and Public Holidays) [Note: Temporarily closed due to renovation.]; and
- (c) the relevant District Offices in those districts where the designated project will be located (Opening hours: normal office hours of District Offices).

The Director will also upload the project profile to the EIA Ordinance website (https://www.epd.gov.hk/eia).

Before the public inspection period expires, the public may forward written comments to the Director by post or fax or email to the EIA Ordinance Register Office at the following address:

The EIA Ordinance Register Office Environmental Protection Department 27th floor, Southorn Centre, 130 Hennessy Road, Wanchai, Hong Kong Fax. no.: 2147 0894 Email address: eiaocomment@epd.gov.hk

3. Advertising the Availability of EIA Report and the Arrangement for its Public Inspection

The Requirement

Under the Ordinance, an applicant should advertise the availability of the EIA report when the report is considered by the Director as meeting the requirements of the EIA study brief and the Technical Memorandum on EIA Process.

Delivery of EIA Reports

The applicant should notify EPD of date of advertisement at least two full working days before the day of first advertisement and submit (no. of EIA report specified in the EIA study brief) with electronic copy to the EIA Ordinance Register Office on the 27th Floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong. If EPD find the electronic copy differs from the hard copy substantially, the applicant would be required to defer the date of advertisement until the defect is rectified.

Timing and Frequency of Advertisement

The applicant should advertise the availability of the EIA report once every 10 days of the 30 days public inspection period. The arrangement should be as follows:

- (a) the first advertisement to be placed on the same day of the placing of the report at locations required by the Director;
- (b) the second advertisement to be placed 10 days after the first advertisement; and
- (c) the third advertisement to be placed 10 days after the second advertisement.

The Format and Size of Advertisement

The format of the advertisement should follow Appendix 3. If the Director requires any other information relating to the project to be set out in the advertisement, the applicant will be informed of the requirements.

Re-advertisement

If the applicant fails to comply with the requirements for advertising the availability of the EIA report, the Director may require the applicant to re-advertise or extend the period of public inspection for up to another 30 days.

Period and Place of Public Inspection of EIA Report

The applicant should make available at least two copies of the EIA report at a location in his or her office that is accessible to the public during normal office hours. The advertisement notice should be attached to the EIA report so that the public can know the duration of the public inspection period and the address to which his or her written comments can be sent.

The applicant should provide sufficient copies of the EIA report for the Director to place them at the following locations for the public to inspect for 30 days:

(a) The EIA Ordinance Register Office, Environmental Protection Department, 27th

floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong (Opening hours: Monday to Friday 0900 to 1700, closed on Saturday, Sunday and Public Holidays);

- (b) Wan Chai Environmental Resource Centre, 221 Queen's Road East, Wan Chai, Hong Kong (Opening hours: Monday, Wednesday to Sunday Friday 1000 to 1700, closed on Tuesday, Saturday, Sunday and Public Holidays) [Note: Temporarily closed due to renovation.]; and
- (c) the relevant District Offices in those districts where the designated project will be located (Opening hours: normal office hours of District Offices).

The Director will also upload the EIA report to the EIA Ordinance website (https://www/epd.gov.hk/eia).

Before the public inspection period expires, the public may forward written comments to the Director by post or fax or email to the EIA Ordinance Register Office at the address given in this guidance note.

4. Confirmation of Advertisement

The applicant should confirm that the advertisement have been placed as required by filling in Appendix 4 or 5 and faxing it back on the day of the advertisement to the EIA Ordinance Register Office at fax. no. 21470894, together with copies of the advertisements.

5. Further Enquiries

Any further enquiries could be made to the EIA Ordinance Register Office.

END

Appendix 1 - Format of Advertisement for Application for EIA Study Brief

ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE (CHAPTER 499) Application for Environmental Impact Assessment Study Brief under Section 5.(1)(a)

An application for environmental impact assessment (EIA) study brief to proceed with EIA study for << title of the proposed designated project >> has been submitted by << name of the applicant >> to the Director of Environmental Protection under section 5.(l)(a) of the EIA Ordinance.

The project profile prepared by the applicant is now available for inspection from << date of this advertisement >> to << date of this advertisement + 13 calendar days >> at the following locations:

- i. The EIA Ordinance Register Office, Environmental Protection Department, 27th floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong (Opening hours: Monday to Friday 0900 to 1700, closed on Saturday, Sunday and Public Holidays); and
- ii. << relevant District Office(s) >> during normal office hours.

The project profile will also be uploaded to the EIA Ordinance website (https://www.epd.gov.hk/eia).

The public may forward written comments on the project profile to the Director of Environmental Protection on environmental issues covered by the Technical Memorandum on EIA Process within 14 days of this advertisement. The Technical Memorandum can be obtained from the EIA Ordinance Register Office or the EIA Ordinance website. The comments from the public may be forwarded to any relevant parties in processing of the application. Any written comments should be sent to the following address by post or fax or email:

The EIA Ordinance Register Office Environmental Protection Department 27th floor, Southorn Centre, 130 Hennessy Road, Wanchai, Hong Kong.

Fax. no.: 2147 0894

Email address: eiaocomment@epd.gov.hk

<< Date of advertisement >>

Appendix 2 - Format of Advertisement for Application for Permission to Apply Directly for Environmental Permit

ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE (CHAPTER 499)

Application for Permission to Apply Directly for Environmental Permit under Section 5.(1)(b) and << either Section 5.(9), 5.(10) or 5.(11), use one number only in this box >>

• An application for permission to apply directly for environmental permit has been submitted by << name of the applicant >> for the << title of the proposed designated project >> to the Director of Environmental Protection under section 5.(1)(b) and << section 5.(9), 5.(10) or 5.(11), fill in one section number only in this box >> of the Environmental Impact Assessment (EIA) Ordinance.

The project profile prepared by the applicant is now available for inspection from << date of this advertisement >> to << the date of this advertisement + 13 calendar days>> at the following locations:

- The EIA Ordinance Register Office, Environmental Protection Department, 27th floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong (Opening hours: Monday to Friday 0900 to 1700, closed on Saturday, Sunday and Public Holidays); and
- ii. << relevant District Office(s) >> during normal office hours.

The project profile will also be uploaded to the EIA Ordinance website (https://www.epd.gov.hk/eia).

The public may forward written comments on the project profile to the Director of Environmental Protection on environmental issues covered by the Technical Memorandum on EIA Process within 14 days of this advertisement. The Technical Memorandum can be obtained from the EIA Ordinance Register office or the EIA Ordinance website. The comments from the public may be forwarded to any relevant parties in processing of the application. Any written comments should be sent to the following address by post or fax or email:

The EIA Ordinance Register Office Environmental Protection Department 27th floor, Southorn Centre, 130 Hennessy Road, Wanchai, Hong Kong

Fax. no.: 2147 0894

Email address: eiaocomment@epd.gov.hk

<< Date of advertisement >>

Appendix 3 - Format of Advertisement for Application for Approval of EIA Report

ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE (CHAPTER 499)

Public Inspection of Environmental Impact Assessment Report under Section 7.(1)

An application for approval of environmental impact assessment (EIA) report for the << title of the proposed designated project >> has been submitted by << name of the applicant >> to the Director of Environmental Protection under section 6.(2) of the EIA Ordinance.

The EIA report prepared by the applicant is now available for the public to inspect under section 7.(1) of the Ordinance from << date of the first advertisement>>to<< date of the first advertisement + 29 calendar days>> at the following locations:

- The EIA Ordinance Register Office, Environmental Protection Department, 27th floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong (Opening hours: Monday to Friday 0900 to 1700, closed on Saturday, Sunday and Public Holidays);
- ii. << the applicant's office address and opening hours >>; and
- iii. << relevant District Office(s) >> during normal office hours.

The EIA report will also be uploaded to the EIA Ordinance website (https://www.epd.gov.hk/eia).

The public may seek clarification or assistance in understanding the EIA report from the << name of the applicant>> at << telephone numbers>> during office hours << the applicant's office opening hours>>. The public may forward written comments on the EIA report to the Director of Environmental Protection on environmental issues covered by the Technical Memorandum on EIA Process before the public inspection period expires. The Technical Memorandum can be obtained from the EIA Ordinance Register office or the EIA Ordinance website. The comments from the public may be forwarded to the applicant or any relevant parties in processing of the application. Any written comments should be sent to the following address by post or fax or email:

The EIA Ordinance Register Office Environmental Protection Department 27th floor, Southorn Centre, 130 Hennessy Road, Wanchai, Hong Kong.

Fax. no.: 2147 0894

Email address: eiaocomment@epd.gov.hk

Date of the first advertisement: << Date of the first advertisement >> Date of this advertisement >>

Environmental Impact Assessment Ordinance Confirmation of Advertisement for the Availability of Project Profile

From:	To: EIA Ordinance Register Office (Fax. no.: 2147 0894)
Date:	
Tel. no.:	
Please co	omplete the following and return it by fax to 21470894, with a copy of the advertisements I in the newspapers, on the day the advertisement has been made.
1.	Title of the Designated Project:
2.	Reference No. of Application:
3.	The Name of the Chinese Newspaper and the Date of Advertisement:
4.	The Name of the English Newspaper and the Date of Advertisement:
5.	Number of pages faxed:

Environmental Impact Assessment Ordinance

Confirmation of Advertisement for the Availability of Environmental Impact Assessment Report

From:	To: EIA Ordinance Register Office (Fax. no.: 2147 0894)
Date:	
Tel. no	o.:
Pleas	se complete the following and return it by fax to 21470894, with a copy of the extisements appeared in the newspapers, on the day the advertisement has been made.
1.	Title of the Designated Project:
2.	Reference No. of Application:
·	
3.	Please tick one of the following:
	the first advertisement during the public inspection period
	the second advertisement during the public inspection period
	the third advertisement during the public inspection period
4.	The Name of the Chinese Newspaper and the Date of Advertisement:
5.	The Name of the English Newspaper and the Date of Advertisement:
6.	Number of pages faxed:

MODUS OPERANDI OF THE ENVIRONMENTAL IMPACT ASSESSMENT SUBCOMMITTEE OF THE ADVISORY COUNCIL ON THE ENVIRONMENT

Purpose

This paper sets out the *modus operandi* of the Environmental Impact Assessment (EIA) Subcommittee of the Advisory Council on the Environment (ACE) so as to facilitate smooth proceedings of subcommittee meetings. The current *modus operandi* was last updated and endorsed by ACE in July 2009.

Background

- 2. ACE is the Government's principal advisory body on matters relating to environmental protection and nature conservation. The terms of reference of ACE are
 - (a) to keep under review the state of the environment in Hong Kong; and
 - (b) to advise the Government, through the Secretary for Environment and Ecology, on appropriate measures which might be taken to combat pollution of all kinds, and to protect and sustain the environment.
- 3. The EIA Subcommittee is set up under ACE to study EIA reports of major development projects. It also comments on strategic environmental assessment reports of major planning projects. The terms of reference of the EIA Subcommittee are
 - (a) to receive and study EIA reports of major development projects; and
 - (b) to report on its deliberations and findings and make recommendations to ACE.

EIA Process

4. ACE and the EIA Subcommittee are involved in three main stages of the EIA process, namely commenting on the project profiles for designated projects, selection of EIA reports for submission to ACE and commenting on selected EIA reports. In accordance with ETWB Technical Circular (Works) No. 13/2003, the statutory gazetting of a project under the relevant ordinances can be done in parallel with the EIA process. Separately, consultation with District Councils and other relevant parties may proceed in advance of or in parallel with the submission of EIA reports to the EIA Subcommittee.

Project Profiles

5. Under section 5 of the EIA Ordinance, ACE and members of the public may comment on the project profile of a designated project within 14 days of it being advertised. It is hence not necessary for the EIA Subcommittee to present to the Director of Environmental Protection (DEP) the collective view of the EIA Subcommittee on project profiles. To ensure that comments on project profiles, if any, are given to DEP within the statutory time limit, individual ACE Members would write to DEP directly. Where necessary, the ACE Member may copy his/her comments to the Chairman and Members for information.

Selection of EIA Reports

- 6. Project proponents of designated projects will have to present their EIA reports to ACE if they are required to submit the reports to the Council. Members of the EIA Subcommittee will be asked to select those projects which they consider should require a presentation to the EIA Subcommittee by the project proponent. The selection outcome is for internal planning of the schedule of the EIA Subcommittee and will not be divulged to the project proponent. Only those projects selected by half or more of EIA Subcommittee Members will be selected. The project proponent concerned will be notified of the selection outcome only after DEP has decided that the EIA report is ready for public inspection and submission to ACE for advice.
- 7. During the project selection process, if individual EIA Subcommittee Member has special concerns/comments on a certain project, he/she could draw the EIA Subcommittee Chairman's attention to his/her concerns/comments and the Chairman would consider the need to review the decision on selection of the EIA report for submission to ACE.

8. For projects not selected, the project proponent will be required to send the Executive Summary of the EIA report to the EIA Subcommittee. Members would pass their comments, if any, to DEP directly within the prescribed public inspection period and if necessary, copy his/her comments to the Chairman and Members of the EIA Subcommittee for information. At the ACE meeting immediately following the issue of the Executive Summaries of the EIA reports, the EIA Subcommittee Chairman will report to ACE about the submission of these Executive Summaries for information of Members and record as projects not selected for discussion.

Meeting Arrangements

- 9. The EIA Subcommittee will basically meet on a monthly basis. Meetings will be held when there is submission of EIA report(s) or issue(s) to be discussed.
- 10. To facilitate focused discussion, the EIA Subcommittee will generally consider no more than two EIA reports in each meeting. EPD will prepare a paper on each EIA report to be submitted to the EIA Subcommittee highlighting the key environmental issues and major findings of the EIA study. Upon expiry of the report inspection period by the general public, EPD will summarize all public comments received during the period for consideration of the EIA Subcommittee. The project proponent, where applicable, will provide the EIA Subcommittee with a report on the site selection process of the project, setting out the alternative sites that have been considered and the reasons of the selection of the particular site when such information is not provided in the EIA report. The paper, the EIA report and the site report, if any, will normally be issued to EIA Subcommittee Members two weeks before the scheduled meeting. summary of public comments will also be given to Members before the meeting. Members will be asked to indicate whether it is necessary for the project proponent to attend the meeting or the report could be considered by circulation. Project proponents will be informed accordingly before the scheduled meeting.
- 11. Summary of the public comments will also be provided to non-EIA Subcommittee Members for reference to facilitate their discussion of the EIA Subcommittee's recommendations at the next ACE meeting before the Council tenders its comments to DEP on the EIA report as provided for under the EIA Ordinance.
- 12. Members of the EIA Subcommittee may raise questions in writing on an EIA report before the scheduled meeting and the project proponent should provide written response to the Secretariat at least three working days before the meeting.

- 13. Each discussion item on an EIA report would include a Presentation Session by the project proponent, a Question-and-Answer Session and Internal Discussion Sessions. The Presentation Session and the Question-and-Answer Session are open up for broadcasting and members of the public can view the sessions real time in the public viewing room. The EIA Subcommittee would allocate as much time to the Question-and-Answer Session as possible.
- 14. The presentation by the project proponent should cover, inter alia, the major conclusions and recommendations of the EIA study. In addition, the project proponent should provide a concise and objective account of the main concerns of the general public and interest groups made known during the EIA study and the public inspection stages, and explain how these concerns are addressed in the EIA study.

Criteria for Assessing EIA Reports

15. EIA reports will be assessed by the EIA Subcommittee according to the requirements of the Technical Memorandum on the EIA Process and the study brief of the individual projects issued by DEP.

Recommendations to the Full Council

- 16. The EIA Subcommittee can make one of the following recommendations to the full Council
 - (i) endorse the EIA report without condition; or
 - (ii) endorse the EIA report with condition(s); or
 - (iii) reject the EIA report and inform the proponent the right to go to the full Council.
- 17. If the EIA Subcommittee cannot reach a consensus (i.e. if two or more Members do not agree with the conclusion of the EIA Subcommittee) during the meeting, it may
 - (i) ask for a second submission to the EIA Subcommittee; or
 - (ii) defer the decision to the full Council and highlight issues or reasons for not reaching a consensus for the full Council's deliberation.
- 18. Other than the scenario in paragraph 17 above or the EIA Subcommittee Chairman considers it appropriate, the recommendations of the EIA Subcommittee will not be discussed in detail in the full Council.

Other Rules that apply to EIA Subcommittee Meetings

- 19. Apart from the procedures mentioned above, the following rules also apply to EIA Subcommittee meetings
 - (i) the quorum for EIA Subcommittee meetings should be <u>half</u> of the number of EIA Subcommittee Members, including the Chairman;
 - (ii) ACE Members who are not EIA Subcommittee Members may attend EIA Subcommittee meetings and participate in the discussion of the meetings but they shall not vote when votes are taken;
 - (iii) Council Members and EIA Subcommittee Members should declare direct and indirect interest before deliberating on agenda items so that the EIA Subcommittee Chairman could decide whether they should take part in the discussion or in the case of EIA Subcommittee Members to vote;
 - (iv) the confirmed minutes of the EIA Subcommittee (with Members' names deleted) are uploaded on the ACE's website for public inspection;
 - (v) the Presentation Session and Question-and-Answer Session of a discussion item on an EIA report at the EIA Subcommittee meeting requiring the attendance of the project proponent team will be opened to the public. The opening up of these sessions is an administrative arrangement only. The open meeting arrangements are not applicable to internal discussion sessions of a discussion item on an EIA report and all other sessions of the meetings of the EIA Subcommittee:
 - (vi) special meetings may be called to consider urgent items. The EIA Subcommittee will consider each case individually should there be requests for direct submissions to the full Council;
 - (vii) there will not be a limit on the number of professionals/experts to be invited to each EIA Subcommittee meeting for items requiring their assistance. In these cases and where votes are taken, these professionals/experts shall not vote; and
 - (viii) to facilitate effective deliberation at meetings of the EIA Subcommittee, the EIA Subcommittee may appoint Members to

advise the EIA Subcommittee on specific subject areas of EIA reports. The appointed Members would consider the assigned subjects of an EIA report, and seek advice from the relevant authorities designated under the EIAO as necessary before EIA Subcommittee meetings.

20. The revised *modus operandi* of the EIA Subcommittee has taken effect in April 2013 upon endorsement of ACE.

[Note: Government official title in paragraph 2 is updated as a result of the organisational changes in the Government with effect from 1 July 2022.]

EIA Subcommittee Secretariat April 2013

Environmental Impact Assessment Ordinance (Cap. 499), Section 5 (7)

Environmental Impact Assessment Study Brief No. ESB-370/2024

Project Title: <u>Smart and Green Mass Transit System in East Kowloon</u> (hereinafter known as the "Project")

Name of Applicant: <u>Highways Department</u> (hereinafter known as the "Applicant")

1. BACKGROUND

- An application (No. ESB-370/2024) for an Environmental Impact Assessment (EIA) study brief under section 5(1)(a) of the Environmental Impact Assessment Ordinance (EIAO) was submitted by the captioned Applicant on 22 July 2024 with a project profile (No. PP-672/2024).
- 1.2 The Chief Executive's 2023 Policy Address announced to implement a Smart and Green Mass Transit System in East Kowloon (EKGTS) (hereinafter known as the "Project") with an aim to improving the overall transportation of East Kowloon and unleashing development potential. The Project comprises an electrically powered transit system operating on a dedicated corridor from Choi Hung East to Yau Tong East to improve the transport efficiency, safety and convenience. Subject to the findings of the investigation study and design to be conducted by the Applicant, the scope of the Project mainly comprises a smart and green mass transit system of approximately 7 km long (including viaducts of about 6 km long, tunnel of about 1 km long and 8 stations), a depot, and pedestrian linkage facilities connecting the stations and nearby residential areas. The indicative location of the Project is shown in Appendix A. The mode of transit system (e.g. road-based and/or rail-based systems) to be adopted in the Project is subject to the findings of the investigation study and design.
- 1.3 Based on the information provided in the Project Profile (No. PP-672/2024), the Project constitutes designated projects (DPs) in Part I, Schedule 2 of the EIAO as set out below.
 - (i) Item A.2 "A railway and its associated stations":
 - (ii) Item A.4 "A railway siding, depot, maintenance workshop, marshalling yard or goods yard" or Item A.6 "A transport depot located less than 100m from the nearest boundary of an existing or planned (a) residential area"; and
 - (iii) Item A.7 "A road or railway tunnel more than 800 m in length between portals".
- Pursuant to section 5(7)(a) of the EIAO, the Director of Environmental Protection (the Director) issues this EIA study brief to the Applicant to carry out an EIA study.
- 1.5 The purpose of the EIA study is to provide information on the nature and extent of environmental impacts arising from the construction and operation of the Project and associated works that will take place concurrently. This information will contribute to decisions by the Director on:
 - (i) the overall acceptability of any adverse environmental consequences that are likely to arise as a result of the Project;

- (ii) the conditions and requirements for the detailed design, construction and operation of the Project to mitigate against adverse environmental consequences wherever practicable; and
- (iii) the acceptability of residual impacts after the proposed mitigation measures are implemented.

2. OBJECTIVES OF THE EIA STUDY

- 2.1 The objectives of the EIA study are as follows:
 - (i) to describe the Project and associated works together with the requirements and environmental benefits for carrying out the Project;
 - (ii) to identify and describe the elements of the community and environment likely to be affected by the Project and/or likely to cause adverse impacts to the Project, including both the natural and man-made environment and the associated environmental constraints;
 - (iii) to identify and quantify emission sources and determine the significance of impacts on sensitive receivers and potential affected uses, and to propose measures to mitigate these impacts;
 - (iv) to identify, evaluate and address any potential ecological impacts arising from the Project and to propose measures to mitigate these impacts;
 - (v) to identify any negative impacts on cultural heritage and to propose measures to mitigate these impacts;
 - (vi) to identify and quantify potential waste management issues and impacts and to propose measures to mitigate these impacts;
 - (vii) to identify and quantify potential contaminated land within the Project area, and to propose measures to avoid disposal in the first instance;
 - (viii) to identify any potential landscape and visual impacts and to propose measures to mitigate these impacts;
 - (ix) to identify any potential hazard to life impacts and to propose mitigation measures to mitigate these impacts;
 - (x) to identify any potential impacts from landfill gas hazard and to propose measures to mitigate these impacts;
 - (xi) to propose the provision of infrastructure or mitigation measures so as to minimise pollution, environmental disturbance and nuisance during construction and operation of the Project;
 - (xii) to investigate the feasibility, practicability, effectiveness and implications of the proposed mitigation measures;

- (xiii) to identify, predict and evaluate the residual environmental impacts (i.e. after practicable mitigation) and the cumulative effects expected to arise during the construction and operation phases of the Project in relation to the sensitive receivers and potential affected uses;
- (xiv) to identify, assesses and specify methods, measures and standards, to be included in the detailed design, construction and operation phases of the Project which are necessary to mitigate these residual environmental impacts and cumulative effects and reduce them to acceptable levels;
- (xv) to investigate the extent of the secondary environmental impacts that may arise from the proposed mitigation measures and to identify constraints associated with the mitigation measures recommended in the EIA study, as well as the provision of any necessary modification;
- (xvi) to design and specify the environmental monitoring and audit requirements; and
- (xvii) to identify any additional studies necessary to implement the mitigation measures of monitoring and proposals recommended in the EIA report.

3. DETAILED REQUIREMENTS OF THE EIA STUDY

3.1 The Purpose

3.1.1 The purpose of this EIA study brief is to set out the purposes and objectives of the EIA study, the scope of environmental issues which shall be addressed, the requirements that the EIA study shall need to fulfil, and the necessary procedural and reporting requirements. The Applicant shall demonstrate in the EIA report whether the criteria in the relevant sections of the Technical Memorandum on the Environmental Impact Assessment Process of the Environmental Impact Assessment Ordinance (hereinafter referred to as "the TM"), are fully complied with.

3.2 The Scope

- 3.2.1 The scope of the EIA study shall cover the Project and associated works mentioned in section 1.2 of this EIA study brief. For the purpose of assessing whether the environmental impacts shall comply with the criteria of the TM, the EIA study shall address the key issues described below, together with any other key issues identified during the course of the EIA study:
 - (i) potential air quality impacts on existing and planned air sensitive receivers (ASRs) due to the construction of the Project;
 - (ii) potential noise impacts on existing and planned noise sensitive receivers (NSRs) due to the construction and operation of the Project;
 - (iii) potential water quality impacts on water sensitive receivers (WSRs) and relevant water system(s) in the vicinity due to construction and operation of the Project;
 - (iv) potential waste management implications arising from the construction and operation of the Project;

- (v) potential land contamination within the Project area;
- (vi) potential terrestrial ecological impacts arising from the construction and operation of the Project;
- (vii) potential landscape impacts due to the construction and operation of the Project;
- (viii) potential visual impacts due to the operation of the Project;
- (ix) potential hazard to life impact during the construction of the Project;
- (x) potential landfill gas hazard due to construction and operation of the Project;
- (xi) potential cultural heritage impacts due to the construction and operation of the Project; and
- (xii) potential cumulative environmental impacts of the Project, through interaction or in combination with other existing, committed and planned projects that may have a bearing on the environmental acceptability of the Project. Such assessment shall be based on the best available information to which the Applicant is able to access at the time of the assessment.

3.3 Description of the Project

3.3.1 Purpose(s) and Objectives of the Project

The Applicant shall provide information on the purposes and objectives of the Project, and describe the environmental benefits of the Project and scenarios with and without the Project.

3.3.2 Details of the Project

The Applicant shall indicate the nature and status of Project decision(s) for which the EIA study is undertaken. The Applicant shall describe the proposed alignment, mode of transit system, siting, scale/size, layout design, construction methods, sequence of construction works and other major activities involved in the construction and operation of the Project, using diagrams, plans and/or maps as necessary. The estimated duration of the construction phase and operation phase of the Project together with the programme within these phases shall be given. The areas to be taken by the Project, construction sites and any associated access arrangements, ancillary facilities and landscaping areas shall be shown on a scaled map.

3.3.3 Background and History of the Project

The Applicant shall provide information on the site location and site history of the Project, interactions with other projects, and the consideration of different development options, taking into account the principles of avoidance, minimising and control of adverse environmental impacts. The options might include alignment, mode of transit system, siting, scale/size, layout design, construction methods and sequence of construction works for the Project. The key reasons for selecting the preferred development option(s) and the part environmental factors played in the selection shall be described. The main environmental impacts of the different development option(s) shall

be compared with those of the Project and with the likely future environmental conditions in the absence of the Project.

3.4 Technical Requirements

- 3.4.1 The Applicant shall conduct the EIA study to address the environmental aspects of the activities as described in the scope as set out above. The assessment shall be based on the best and latest information available during the course of the EIA study.
- 3.4.2 The Applicant shall include in the EIA report details of the construction programme and methodologies. The Applicant shall clearly state in the EIA report the time frame, and work programmes of the Project, associated works and other concurrent projects, and assess the cumulative environmental impacts from the Project and the interacting projects as identified in the EIA study. The EIA study shall follow the technical requirements specified below and in the Appendices of this EIA study brief.

3.4.3 Air Quality Impact

- 3.4.3.1 The Applicant shall follow the criteria and guidelines for evaluating and assessing air quality impact as stated in Section 1 of Annex 4 and Annex 12 of the TM respectively.
- 3.4.3.2 The assessment area for air quality impact assessment shall be defined by a distance of 500 metres from the boundary of the Project site and any associated works of the Project as identified in the EIA study, which shall be extended to include major existing, committed and planned air pollutant emission sources identified to have a bearing on the environmental acceptability of the Project. The assessment shall include the existing, committed and planned air sensitive receivers within the assessment area as well as any proposed air sensitive receivers within the proposed development as identified in the EIA study and areas where air quality may be potentially affected by the Project. The assessment shall be based on the best available information at the time of the assessment. The assessment shall also take into account the impacts of emission sources from nearby concurrent projects, if any.
- 3.4.3.3 The assessment of air quality impact arising from the construction of the Project shall follow the detailed technical requirements given in **Appendix B** of this EIA study brief.

3.4.4 Noise Impact

- 3.4.4.1 The Applicant shall follow the criteria and guidelines for evaluating and assessing noise impact as stated in Annexes 5 and 13 of the TM respectively.
- 3.4.4.2 The assessment shall cover the potential noise impacts due to the construction and operation of the Project, including but not limited to construction noise, transit system noise, and fixed noise sources on the existing, committed and planned NSRs reflected on the relevant Outline Zoning Plans, Development Permission Area Plans, Outline Development Plans, Layout Plans and other relevant published land use plans, including plans and drawings published by the Lands Department and any land use and development applications approved by the Town Planning Board, in the vicinity of the Project as well as any proposed noise sensitive receivers within the proposed development of the Project as identified in the EIA study.

3.4.4.3 The noise impact assessment for the construction and operation of the Project shall follow the detailed technical requirements given in **Appendix C** of this EIA study brief.

3.4.5 Water Quality Impact

- 3.4.5.1 The Applicant shall follow the criteria and guidelines for evaluating and assessing water pollution as stated in Annexes 6 and 14 of the TM respectively.
- 3.4.5.2 The assessment area for water quality impact assessment shall include areas within 500 metres from the boundary of the Project and shall cover Victoria Harbour (Phase One) Water Control Zone, Junk Bay Water Control Zone and other affected Water Control Zones as designated under the Water Pollution Control Ordinance (Cap. 358) and WSRs and water systems including stream courses, existing and new drainage systems and other water system(s) in the vicinity of the Project. The assessment area shall be extended to include other areas if they are found also being affected by the Project during the course of the EIA study and have a bearing on the environmental acceptability of the Project.
- 3.4.5.3 The water quality impact assessment for the construction and operation of the Project shall follow the detailed technical requirements given in **Appendix D** of this EIA study brief.

3.4.6 Waste Management Implications

- 3.4.6.1 The Applicant shall follow the criteria and guidelines for evaluating and assessing waste management implications as stated in Annexes 7 and 15 of the TM respectively.
- 3.4.6.2 The assessment of waste management implications arising from construction and operation of the Project shall follow the detailed technical requirements given in **Appendix E** of this EIA study brief.

3.4.7 Land Contamination

- 3.4.7.1 The Applicant shall follow the guidelines for evaluating and assessing potential land contamination issues as stated in Sections 3.1 and 3.2 of Annex 19 of the TM.
- 3.4.7.2 The assessment of the potential land contamination issues shall follow the detailed technical requirements given in $\underline{\mathbf{Appendix}}\ \mathbf{F}$ of this EIA study brief.

3.4.8 Ecological Impact (Terrestrial)

- 3.4.8.1 The Applicant shall follow the criteria and guidelines for evaluating and assessing ecological impact as stated in Annexes 8 and 16 of the TM respectively.
- 3.4.8.2 The assessment area for the purpose of terrestrial ecological impact assessment shall include areas within 500 metres from the boundary of the Project and the works of the Project as identified in the EIA study as well as any other areas likely to be impacted by the Project.
- 3.4.8.3 The ecological impact assessment for construction and operation of the Project shall follow the detailed technical requirements given in **Appendix G** of this EIA study brief.

3.4.9 Landscape and Visual Impact

- 3.4.9.1 The Applicant shall follow the criteria and guidelines for evaluating and assessing landscape and visual impacts as stated in Section 1 of Annex 10 and Annex 18 of the TM respectively, and the latest version of the EIAO Guidance Note "Preparation of Landscape and Visual Impact Assessment under the EIAO" published on the website of the Environmental Protection Department, unless otherwise agreed by the Director.
- 3.4.9.2 The assessment area for the landscape impact assessment shall include areas within 100 metres from the boundary of the proposed development and works of the Project as identified in the EIA study, while the assessment area for the visual impact assessment shall be defined by the visual envelope of the Project. The extent of the defined visual envelope shall be shown on a plan and documented in the EIA report.
- 3.4.9.3 The landscape impact assessment for the construction and operation phases of the Project and the visual impact assessment for the operation phase of the Project shall follow the detailed technical requirements given in **Appendix H** of this EIA study brief.

3.4.10 Impact on Cultural Heritage

- 3.4.10.1 The Applicant shall follow the criteria and guidelines for evaluating and assessing the cultural heritage impact as stated in Section 2 of Annex 10 and Section 2 of Annex 19 of the TM respectively.
- 3.4.10.2 The assessment area for the cultural heritage impact assessment (CHIA) shall be defined by a distance of 300 metres from the boundary of the proposed development and works of the Project as identified in the EIA. The CHIA shall cover items on:
 - (a) List of Declared Monuments and Proposed Monuments;
 - (b) List of Graded Historic Buildings:
 - (c) List of New Items for Grading Assessment:
 - (d) List of Sites of Archaeological Interest in Hong Kong; and
 - (e) List of Government Historic Sites Identified by Antiquities and Monuments Office

as published in the website of Antiquities and Monuments Office (AMO) (www.amo.gov.hk) and are within the assessment area for the CHIA. The CHIA shall also include an Archaeological Impact Assessment (AIA) covering the area(s) which may be affected by the works associated with the Project.

3.4.10.3 The CHIA for the construction and operation of the Project shall follow the detailed technical requirements given in **Appendix I** of this EIA study brief.

3.4.11 Hazard to Life

- 3.4.11.1 The Applicant shall follow the criteria for evaluating hazard to life as stated in Section 2 of Annex 4 of the TM.
- 3.4.11.2 The Applicant shall conduct a review of the risks from the use, transport and overnight storage (if any) of explosives during construction of the Project, and assess if risk to life is a key issue with respect to Risk Guidelines given in Annex 4 of the TM. If affirmative, a hazard assessment for the use, transport and overnight storage (if any) of explosives

for the Project shall be conducted following the requirements in section 12.1 of TM and the detailed technical requirements of the hazard assessment shall follow $\underline{\mathbf{Appendix}} \ \mathbf{J}$ of this EIA study brief.

3.4.12 Landfill Gas Hazard

- 3.4.12.1 If any development is proposed within the consultation zone of the closed landfills such as Ngau Chi Wan Landfill, Jordan Valley Landfill and Ma Yau Tong Central Landfill, the Applicant shall follow the criteria and guidelines for evaluating and assessing landfill gas hazards as stated in Annexes 7 and 19 of the TM respectively. In particular, the landfill gas hazard assessment shall be carried out in accordance with the latest version of "Landfill Gas Hazard Assessment Guidance Note" issued by the Director and shall entail two main components, which are qualitative risk assessment and landfill gas precautionary/protection design.
- 3.4.12.2 The landfill gas hazard assessment for construction and operation of the Project shall follow the detailed technical requirements given in **Appendix K** of this EIA study brief.

3.5 Environmental Monitoring and Audit (EM&A) Requirements

- 3.5.1 The Applicant shall identify and justify in the EIA study whether there is any need for EM&A activities during the construction and operation phases of the Project and, if affirmative, to define the scope of the EM&A requirements for the Project in the EIA study.
- 3.5.2 Subject to the confirmation of the EIA study findings, the Applicant shall comply with the requirements as stipulated in Annex 21 of the TM.
- 3.5.3 The Applicant shall prepare a project implementation schedule (in the form of a checklist as shown in <u>Appendix L</u>) containing all the EIA study recommendations and mitigation measures with reference to the implementation programme.

3.6 Presentation of Summary Information

3.6.1 Summary of Environmental Outcomes

The EIA report shall contain a summary of key environmental outcomes arising from the EIA study, including estimated population protected from various environmental impacts, environmentally sensitive areas protected, environmentally friendly options considered and incorporated in the preferred option, environmental designs recommended, key environmental problems avoided, compensation areas included and the environmental benefits of environmental protection measures recommended.

3.6.2 <u>Summary of Environmental Impacts</u>

To facilitate effective retrieval of pertinent key information, the EIA report shall contain a summary table of environmental impacts showing the assessment points, results of impact predictions, relevant standards or criteria, extents of exceedances predicted, impact avoidance measures considered, mitigation measures proposed and residual impacts (after mitigation). This summary shall cover each individual impact and shall also form an essential part of the executive summary of the EIA report.

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3.6.3 <u>Documentation of Key Assessment Assumptions, Limitation of Assessment Methodologies and related Prior Agreement(s) with the Director</u>

The EIA report shall contain a summary including the assessment methodologies and key assessment assumptions adopted in the EIA study, the limitations of these assessment(s) methodologies/assumptions, if any, plus relevant prior agreement(s) with the Director or other Authorities on individual environmental media assessment components. The proposed use of any alternative assessment tool(s) or assumption(s) have to be justified by the Applicant, with supporting documents based on cogent, scientific and objectively derived reason(s) before seeking the Director's agreement. The supporting documents shall be provided in the EIA report.

3.6.4 <u>Summary of Alternative Mitigation Measures</u>

The EIA report shall contain a summary of alternative mitigation measures considered during the course of EIA study, including alignment, mode of transit system, siting, scale/size, layout design, construction methods and sequence of construction works for the Project, with a view to avoiding, minimising and mitigating adverse environmental impacts. A comparison of the environmental benefits and dis-benefits of applying different mitigation measures shall be made. This summary shall cover the key impacts and shall also form an essential part of the executive summary of the EIA report.

3.6.5 Documentation of Public Concerns

The EIA report shall contain a summary of the main concerns of the general public, special interest groups and the relevant statutory or advisory bodies received and identified by the Applicant during the course of the EIA study, and describe how the relevant concerns have been taken into account.

4. **DURATION OF VALIDITY**

4.1 The Applicant shall notify the Director of the commencement of the EIA study. If the EIA study does not commence within 36 months after the date of issue of this EIA study brief, the Applicant shall apply to the Director for a fresh EIA study brief before commencement of the EIA study.

5. REPORTING REQUIREMENTS

- In preparing the EIA report, the Applicant shall refer to Annex 11 of the TM for the contents of an EIA report. The Applicant shall also refer to Annex 20 of the TM, which stipulates the guidelines for the review of an EIA report. When submitting the EIA report to the Director, the Applicant shall provide a summary, pointing out where in the EIA report the respective requirements of this EIA study brief and the TM (in particular Annexes 11 and 20) have been addressed and fulfilled.
- 5.2 To facilitate the updating of the ecological information of the Centralised Environmental Database, the Applicant shall provide the raw data of the ecological habitat maps including the project location and boundary, types and locations of habitats, findings of ecological field surveys and species of conservation interest in the assessment area in shapefile or GeoJSON or other format as agreed with the Director. The data shall be submitted in 3 copies of CD-ROM, DVD±R or other suitable means as agreed with the Director.

- The Applicant shall supply the Director with hard and electronic copies of the EIA report and the executive summary in accordance with the requirements given in **Appendix M** of this EIA study brief. The Applicant shall, upon request, make additional copies of the above documents available to the public, subject to payment by the interested parties of full costs of printing.
- To facilitate enhanced public engagement in the EIA process, the Applicant shall produce 3-dimensional electronic visualisations of the findings of the EIA report, including baseline environmental information, the environmental situations with or without the Project, associated works, supporting facilities and essential infrastructures, key mitigated and unmitigated environmental impacts, and key recommended environmental mitigation measures so that the public can better understand the Project and the associated environmental issues. The visualisations shall be based on the EIA report findings and shall be developed and constructed such that they can be accessed and viewed by the public through an internet browser and/or other tools of 3-dimensional electronic visualisations (i.e. Virtual Reality, Augmented Reality, Mixed Reality) at a reasonable speed and without the need for software license requirement at the user's end. The visualisations and the corresponding raw data with necessary setting(s) that enable full migration into EPD's platform shall be submitted in 10 copies of CD-ROM, DVD±R or other suitable means as agreed with the Director.

6. OTHER PROCEDURAL REQUIREMENTS

- 6.1 If there is any change in the name of the Applicant for this EIA study brief during the course of EIA study, the Applicant must notify the Director immediately.
- 6.2 If there is any key change in the scope of the Project mentioned in Section 1.2 of this EIA study brief and in Project Profile (No. PP-672/2024), the Applicant must seek confirmation from the Director in writing on whether or not the scope of issues covered by this EIA study brief can still cover the key changes, and the additional issues, if any, that the EIA study must also address. If the changes to the Project fundamentally alter the key scope of this EIA study brief, the Applicant shall apply to the Director for a fresh EIA study brief.

7. LIST OF APPENDICES

7.1 This EIA study brief includes the following appendices:

Appendix A – Location Plan of the Project

Appendix B – Requirements for Air Quality Impact Assessment

Appendix C - Requirements for Noise Impact Assessment

Appendix D – Requirements for Water Quality Impact Assessment

Appendix E – Requirements for Assessment of Waste Management Implications

Appendix F - Requirements for Land Contamination Assessment

Appendix G - Requirements for Ecological Impact Assessment

Appendix H – Requirements for Landscape and Visual Impact Assessment

Appendix I – Requirements for Cultural Heritage Impact Assessment

Appendix J – Requirements for Hazard to Life Assessment

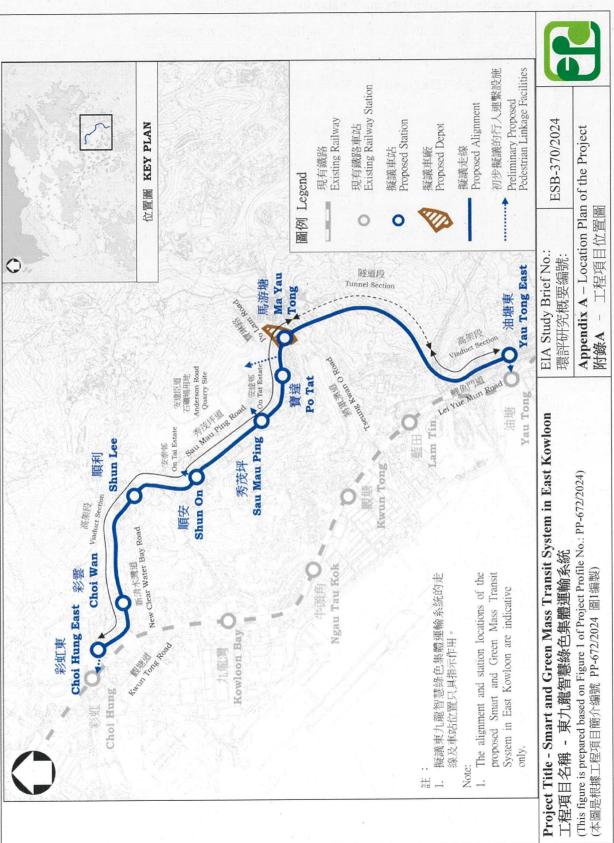
Appendix K – Requirements for Landfill Gas Hazard Assessment

Appendix L – Implementation Schedule of Recommended Mitigation Measures

Appendix M – Requirements for EIA Report Documents

-- END of EIA STUDY BRIEF -

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Appendix B

Requirements for Air Quality Impact Assessment

The air quality impact assessment shall include the following:

1. Background and Analysis of Activities

- (i) Provision of background information relating to air quality issues relevant to the Project, e.g. description of the types of activities of the Project that may affect air quality during construction phases.
- (ii) Provision of an account, where appropriate, of the considerations/measures that have been taken into consideration in the planning of the Project to avoid and minimise the air pollution impact. The Applicant shall consider alternative construction methods and phasing programmes to minimise the air quality impact during construction phase of the Project.
- (iii) Provision of the background air quality levels in the assessment area. Projection of future year background air quality shall be based on the "Pollutants in the Atmosphere and their Transport over Hong Kong" (PATH) model released by the Director with necessary modification according to the emission scenario(s) of the assessment years(s). If a modification to the emission sources is to be adopted in the PATH model to update the projection of future year background air quality, details of the emission sources adopted in the modification should be clearly presented.

2. <u>Identification of Air Sensitive Receivers (ASRs) and Examination of Emission / Dispersion Characteristics</u>

- (i) Identification and description of existing, committed and planned ASRs that would likely be affected by the Project, including those earmarked on the relevant Outline Zoning Plans, Development Permission Area Plans, Outline Development Plans and Layout Plans and other relevant published land use plans, including plans and drawings published by the Lands Department and any land use and development applications approved by the Town Planning Board. The Applicant shall select the assessment points of the identified ASRs that represent the worst impact point of these ASRs. A map clearly showing the location and description such as name of buildings, their uses and height of the selected assessment points shall be given. The separation distances of these ASRs from the nearest emission sources shall also be given.
- (ii) Provision of a list of air pollution emission sources, including any nearby emission sources which are likely to have impact related to the Project based on the analysis of the construction activities in section 1 above. Examples of construction phase emission sources include dust emissions from site formation, tunnel construction, excavation works, backfilling, stockpiling, material handling, exposed earth; exhaust emissions from construction plant and equipment, vehicular movements, etc. Confirmation regarding the validity of assumptions adopted and the magnitude of the activities (e.g. volume of construction material to be handled, number of construction trucks and machinery to be operated on-site, etc.) shall be obtained from the relevant government departments / authorities, where applicable, and documented in the EIA report.

(iii) The emissions from any concurrent projects identified as relevant during the course of the EIA study shall be taken into account. The impact at the existing, committed and planned ASRs within the assessment area shall be assessed, based on the best information available at the time of assessment.

3. Construction Phase Air Quality Impact

- (i) The Applicant shall follow the requirements stipulated under the Air Pollution Control (Construction Dust) Regulation to ensure that construction dust impacts are effectively controlled. Construction dust assessment within the assessment area should be conducted qualitatively to ensure that the Air Pollution Control (Construction Dust) Regulation is complied with.
- (ii) The Applicant shall consider and evaluate direct mitigation measures, including but not limited to water-spraying, re-scheduling construction programme, limiting the maximum active works areas, providing sufficient separation between two concurrent works area, etc. to minimise concurrent impact arising from different construction sites, for fugitive dust control. The Applicant shall also consider connecting construction plant and equipment to mains electricity supply and avoid use of diesel generators and diesel-powered equipment as far as practicable to minimise air quality impact arising from the construction machinery. Zero emission or clean fuels and minimization of number of trips and routings for construction trucks shall be considered as far as practicable for transportation activities. The Applicant shall describe the means of transportation and their trips and routings involved, with a view to addressing potential air quality impact caused by transportation activities. The feasibility, practicability, programming and effectiveness of the recommended mitigation measures shall be assessed and documented in the EIA report. Specific reasons for not adopting certain workable mitigation measures to reduce the air quality to a level meeting the criteria in the TM or to maximise the protection of the ASRs as far as possible should be clearly substantiated and documented in the EIA report.
- (iii) A monitoring and audit programme for the construction phase of the Project shall be devised to verify the effectiveness of the proposed control measures so as to ensure proper control of emissions.

Appendix C

Requirements for Noise Impact Assessment

The noise impact assessment shall include the following:

1. Description of the Noise Environment

- 1.1 The Applicant shall describe the prevailing noise environment in the EIA report.
- 1.2 The Applicant shall conduct prevailing background noise surveys to determine the standards for evaluating noise impact from fixed noise sources. The respective noise environment shall be documented in the EIA report.

2. Construction Noise Impact Assessment

- 2.1 <u>Construction Noise Impact Assessment Methodology</u>
- 2.1.1 The Applicant shall carry out construction noise impact assessment (excluding percussive piling) of the Project during daytime, i.e. 7am to 7pm, on weekdays other than general holidays in accordance with methodology in sections 5.3 and 5.4 of Annex 13 of the TM.
- 2.1.2 The Applicant shall conduct a qualitative assessment in the EIA to demonstrate no adverse construction noise impact would be associated with the Project by adopting quieter construction method and equipment during the construction phase. The Applicant shall firstly identify the major noise sources/activities, then propose the corresponding quiet construction methods and noise mitigation measures, and commit to submitting a Construction Noise Management Plan (CNMP) to the Director.

2.2 Identification of Construction Noise Impact

2.2.1 Identification of Assessment Area and NSRs

- (a) The Applicant shall propose the assessment area for agreement of the Director before commencing the assessment. The assessment area for the demolition and construction noise impact assessment shall generally include areas within 300 metres from the boundary of the Project and the works of the Project as identified in the EIA.
- (b) The Applicant shall identify existing, committed and planned NSRs in the assessment area and select assessment points to represent identified NSRs for carrying out construction noise impact assessment.
- (c) The assessment points shall be confirmed with the Director before commencing the assessment and may be varied subject to the best and latest information available during the course of the EIA study.
- (d) A map showing the location and description such as name of building, use, and floor of each and every selected assessment point shall be given. Photographs of existing NSRs shall be appended to the EIA report.

2.2.2 Inventory of Noise Sources

The Applicant shall identify an inventory of noise sources for representative construction equipment for the purpose of construction noise impact assessment. Validity of the inventory shall be confirmed with the relevant government departments, authorities or the Applicant's construction professionals and documented in the EIA report.

2.3 Mitigation of Construction Noise Impact

2.3.1 The Applicant shall consider and evaluate the application of direct mitigation measures including but not limited to, quieter construction method and equipment, barrier, enclosures, etc. The feasibility, practicability, programming and effectiveness of the recommended mitigation measures shall be qualitatively assessed. Any direct mitigation measures recommended shall be well documented in the report. Specific reasons for not adopting certain direct mitigation measures to maximise the protection for the NSRs as far as possible shall be clearly substantiated and documented in the EIA report.

2.4 Construction Noise Management Plan (CNMP)

- 2.4.1 The Applicant shall propose to submit a CNMP to the Director. The CNMP shall contain the quantitative construction noise impact assessment, the adopted quieter construction method and equipment, noise mitigation measures and the construction noise impact monitoring and audit programme, with reference to the updated and identified noise mitigation measures once available and in any case before the tender invitation if there is any change to the construction noise mitigation measures recommended in the EIA report and before the commencement of construction of the Project. Any technical constraint that would hinder the use of the quieter construction method and equipment shall be evaluated and clearly recorded in the assessment.
- 2.4.2 The CNMP shall include an implementation schedule clearly listing out the mitigation measures, the implementation party, location and timing of implementation. Mitigation measures recommended and requirements specified in the CNMP shall be fully implemented.

3. Transit System Noise Impact Assessment

3.1 The Applicant shall carry out transit system noise impact assessment in respect of air-borne and ground-borne noise arising from the planned transit system lines within the assessment area in the course of the EIA study, with respect to the noise standards contained in Table 1A in Annex 5 of the TM. The Applicant shall propose assessment area, methodology and computational model for agreement of the Director, with reference to Section 4.4.2 of the TM, prior to the commencement of the assessment.

3.2 <u>Identification of Transit System Noise Impact</u>

- (a) The Applicant shall identify all existing, committed and planned NSRs in the assessment area and select assessment points to represent identified NSRs for carrying out the transit system noise impact assessment.
- (b) The Applicant shall identify and quantify as far as practicable an inventory of noise sources taking into consideration transit system traffic data, transit system design, type of rolling stock, and allow for deterioration in transit system and

- rolling stock condition from brand new to an operating level, the reasonable worst case scenario and any other planned noise sources.
- (c) The Applicant shall present the potential noise impact in Leq(30min) during the day and at night at the NSRs at various representative floor levels (in m P.D.) on tables and plans of suitable scale.

3.3 <u>Mitigation of Transit System Noise Impact</u>

3.3.1 Based on the above noise assessment result, the Applicant shall define the constraints including assumed configuration of the transit system (e.g. underground, viaduct or at grade), and make recommendations for noise amelioration / direct mitigation measures for any existing, committed and planned NSR which would be subject to predicted noise level in excess of the relevant noise standards in the appropriate design year.

4. <u>Fixed Noise Sources Impact Assessment (excluding Transit System Noise)</u>

- 4.1 <u>Fixed Noise Sources Impact Assessment Methodology</u>
- 4.1.1 The Applicant shall carry out fixed noise sources impact assessment from the Project in accordance with methodology in Section 5.2 of Annex 13 of the TM.
- 4.1.2 For fixed noise sources other than the operation phase transit system noise, the Applicant shall conduct a qualitative assessment to demonstrate no adverse fixed noise sources impact would be associated with the Project by committing to adopt appropriate noise mitigation measures during the operation periods. The Applicant shall identify the major noise sources/activities, and commit to submitting a Fixed Noise Source Management Plan (FNMP) to the Director. If there is any identified planned NSRs within the project boundary, the Applicant shall conduct a quantitative assessment to demonstrate no adverse fixed noise impact from existing fixed noise sources.

4.2 Identification of Fixed Noise Sources Impact

4.2.1 Identification of Assessment Area and NSRs

- (a) The Applicant shall propose the assessment area for agreement of the Director before commencing the assessment. The assessment area for the fixed noise sources impact shall generally include areas within 300 metres the boundary of the proposed development and works of the Project as identified in the EIA.
- (b) The Applicant shall identify the existing, committed and planned NSRs in the assessment area and select assessment points to represent identified NSRs for carrying out the fixed noise sources impact assessment described below.
- (c) The assessment points shall be confirmed with the Director prior to the commencement of the fixed noise sources impact assessment and may be varied subject to the best and latest information available during the course of the EIA study.
- (d) A map showing the location and description such as name of building, use, and floor of each and every selected assessment point shall be given. Photographs of existing NSRs shall be appended to the EIA report.

(e) For planned noise sensitive land uses without committed site layouts, the Applicant shall use the relevant land use and planning parameters and conditions to work out representative site layouts for fixed noise sources impact assessment purpose. However, such parameters and conditions together with representative site layouts and any constraints identified shall be confirmed with the relevant responsible parties including Planning Department and Lands Department.

4.2.2 Inventory of Noise Sources

- (a) The Applicant shall identify and quantify an inventory of noise sources for fixed noise sources impact assessment. The inventory of noise sources shall include, but not limited to noise associated with electrical and mechanical equipment to be provided at stations, ventilation buildings and depot, etc.
- (b) The Applicant shall provide document or certificate, where applicable, accepted by recognised national/international organisation, for the sound power level of each type of fixed noise sources.
- (c) Validity of the inventory shall be confirmed with the relevant government departments/authorities where applicable and documented in the EIA report.

4.3 Mitigation of Fixed Noise Sources Impact

4.3.1 The Applicant shall consider and evaluate the application of direct mitigation measures including but not limited to quieter equipment, silencer, barrier, enclosures, screening by noise tolerant building, etc. The feasibility, practicability, programming and effectiveness of the recommended mitigation measures shall be qualitatively assessed. Any direct mitigation measures recommended should be well documented in the report. Specific reasons for not adopting certain direct mitigation measures to maximise the protection for the NSRs as far as possible should be clearly substantiated and documented in the EIA report.

4.4 Fixed Noise Source Management Plan (FNMP)

- 4.4.1 The Applicant shall propose to submit a FNMP to the Director. The FNMP will contain the quantitative fixed noise source impact assessment, covering planned and existing fixed noise sources, noise mitigation measures and the fixed noise source impact monitoring and audit programme, with reference to the updated and identified inventories once available and in any case before commencement of construction of the Project.
- 4.4.2 The FNMP shall include an implementation schedule clearly listing out the mitigation measures, the implementation party, location and timing of implementation. Mitigation measures recommended and requirements specified in the FNMP shall be fully implemented.

5 <u>Submission of Noise Calculation Details and Model Files</u>

5.1 All input and output file(s) of model run(s) shall be submitted to the Director in electronic format together with the submission of the EIA report.

Appendix D

Requirements for Water Quality Impact Assessment

- 1. The Applicant shall identify and analyse physical, chemical and biological disruptions of the water system(s) arising from the construction and operation of the Project.
- 2. The Applicant shall predict and assess any water quality impacts arising from the construction and operation of the Project. Should quantitative assessment by mathematical modelling is necessary, the proposed modelling shall be approved by the Director before proceeding to modelling assessment.
- 3. The assessment shall include, but not limited to the following:
 - (i) the water quality impacts of the site run-off generated during the construction phase such as the effluents generated from dewatering associated with piling activities, grouting and concrete washing and those specified in the Professional Persons Environmental Consultative Committee Practice Note 2/23 on "Construction Site Drainage";
 - (ii) the water quality impacts of the road runoff containing oil/grease and suspended solids during the operation phase; and
 - (iii) the water quality impacts on typhoon shelter, seawater intake points, watercourses, drainages and other water sensitive receivers which may be affected by the Project.
- 4. The Applicant shall address water quality impacts due to the construction phase and operation phase of the Project. Essentially, the assessment shall address the following during construction and operation phases of the Project:
 - (i) collect and review background information on affected existing and planned water systems, their respective catchments and sensitive receivers which might be affected by the Project;
 - (ii) characterise water quality of the water systems and sensitive receivers, which might be affected by the Project based on existing best available information and through appropriate site survey and tests when existing data are insufficient;
 - (iii) identify and analyse relevant existing and planned future activities, beneficial uses and water sensitive receivers related to the affected water system(s). The Applicant shall refer to, *inter alia*, those developments and uses earmarked on the relevant Outline Zoning Plans, Development Permission Area Plans, Outline Development Plans and Layout Plans, and any other relevant published land use plans;
 - (iv) identify pertinent water quality objectives and establish other appropriate water quality criteria or standards for the water system(s) and the sensitive receivers identified in (i), (ii) & (iii) above;
 - (v) review the specific construction methods and configurations, and operation of the Project to identify and predict the likely water quality impacts arising from the Project;

- (vi) identify any alteration of any watercourses, natural streams, ponds, wetlands, change of water holding/flow regimes of water bodies, change of catchment types or areas, erosion or sedimentation due to the Project and any other hydrological changes in the assessment area;
- (vii) identify and quantify existing and likely future water pollution sources, including point discharges and sewage from workforce and wastewater generated from the construction and operation of the Project;
- (viii)identify existing and likely future non-point pollution sources generated from the construction and operation of the Project, and quantify where necessary the pollution levels;
- (ix) provide an emission inventory on the quantities and characteristics of those existing and future pollution sources in the assessment area. Field investigation and laboratory test, shall be conducted as appropriate to fill relevant information gaps;
- (x) predict and quantify the impacts on the water system(s) and its/their sensitive receivers due to those alterations and changes identified in (vi) above, and the pollution sources identified in (vii) and where necessary (viii) above. The prediction shall consider both construction and operation aspects of the Project;
- (xi) assess the cumulative impacts due to other related concurrent and planned projects, activities or pollution sources within the assessment area that may have a bearing on the environmental acceptability of the Project;
- (xii) analyse the provision and adequacy of existing and planned future facilities to reduce pollution arising from the point and non-point sources identified in (vii) & (viii) above;
- (xiii)develop effective infrastructure upgrading or provision, contingency plan, water pollution prevention and mitigation measures to be implemented during construction and operation phases so as to reduce the water quality impacts to within standards. Requirements to be incorporated in the Project contract document shall also be proposed;
- (xiv)investigate and develop best management practices to reduce storm water and non-point source pollution as appropriate; and
- (xv) evaluate and quantify residual impacts on water system(s) and the sensitive receivers with regard to the appropriate water quality objectives, criteria, standards or guidelines. If the mitigated water quality impact still exceeds the relevant criteria in Annex 6 of the TM, the Applicant shall identify, predict and evaluate the residual water quality impact in accordance with Section 4.4.3 of the TM and estimate the significance of the residual impact to the water system(s) and the water sensitive receivers.

Appendix E

Requirements for Assessment of Waste Management Implications

The assessment of waste management implications shall cover the following:

1. Analysis of Activities and Waste Generation

- (i) The Applicant shall identify the quantity, quality and timing of the waste arising as a result of the construction and operation activities of the Project, based on the sequence and duration of these activities, e.g. construction and demolition (C&D) materials and other wastes which would be generated during construction and operation phases.
- (ii) The Applicant shall adopt appropriate design, general layout, construction methods and programme to minimise the generation of public fill/inert C&D materials and maximise the use of public fill/inert C&D materials for other construction works.

2. Proposal for Waste Management

- (i) Prior to considering the disposal options for various types of wastes, opportunities for reducing waste generation, on-site or off-site re-use and recycling shall be fully evaluated. Measures that can be taken in the planning and design stages e.g. by modifying the design approach and in the construction phase for maximizing waste reduction shall be separately considered;
- (ii) After considering the opportunities for reducing waste generation and maximizing re-use, the types and quantities of the wastes required to be disposed of as a consequence shall be estimated and the disposal methods/options for each type of waste shall be described in detail. The disposal methods/options recommended for each type of wastes shall take into account the result of the assessment in (iv) below;
- (iii) The EIA report shall also state clearly the transportation routings and the frequency of the trucks/vessels involved, any barging point or conveyor system to be used, the stockpiling areas and the disposal outlets for the waste identified; and
- (iv) The impact caused by handling (including stockpiling, labelling, packaging and storage), collection, transportation and re-use/disposal of wastes shall be addressed in detail and appropriate mitigation measures shall be proposed.
- (v) In addition to the above, the EIA report shall also identify practicable means of avoiding illegal dumping and landfilling, particularly on ecological sensitive areas in the vicinity of the Project.

Appendix F

Requirements for Land Contamination Assessment

- 1. The Applicant shall identify the potential land contamination site(s) within the scope of the Project site and, if any, within the boundaries of associated areas (e.g. work areas) of the Project.
- 2. The Applicant shall provide a clear and detailed account of the present land use (including description of the activities, chemicals and hazardous substances handled, with clear indication of their storage and location, by reference to a site layout plan) and a complete past land uses history, in chronological order, in relation to possible land contamination (including accident records and change of land use(s) and the like).
- 3. If any contaminated land uses as stated in Sections 3.1 and 3.2 of Annex 19 in the TM are identified, the Applicant shall carry out the land contamination assessment as detailed from sub-sections (i) to (iii) below and propose measure(s) to avoid disposal:
 - (i) The Applicant shall conduct a site appraisal to identify the potential contamination sources that may have impacted the Project Site.
 - (ii) If potential land contamination sources are identified within the boundary of the proposed development and works of the Project, the Applicant shall conduct a land contamination impact assessment and submit a Contamination Assessment Report (CAR) to the Director for endorsement. If land contamination is confirmed, a Remediation Action Plan (RAP) to formulate viable remedial measures with supporting documents, such as agreement by the relevant facilities management authorities, shall be submitted to the Director for approval. The Applicant shall then clean up the contaminated land or site(s) according to the approved RAP, and a Remediation Report (RR) to demonstrate adequate clean-up should be prepared and submitted to the Director for endorsement prior to the commencement of any development or redevelopment works within the Project Area. The CAR and RAP shall be documented in the EIA report.
 - (iii) If there are potential contaminated sites which are inaccessible for conducting sampling and analysis during the course of the EIA study, e.g. due to site access problem, the Applicant's site appraisal shall include:
 - (a) a review of the available and relevant information;
 - (b) an initial contamination evaluation of these sites and possible remediation methods:
 - (c) a confirmation of whether the contamination problem at these sites would be surmountable;
 - (d) a sampling and analysis proposal which shall aim at determining the nature and the extent of the contamination of these sites; and
 - (e) where appropriate, a schedule of submission of revised or supplementary site appraisal, CAR, RAP and RR as soon as these sites become accessible.

Appendix G

Requirements for Ecological Impact Assessment (Terrestrial)

The ecological impact assessment shall include the following:

- 1. The Applicant shall examine the flora, fauna and other components of the ecological habitats within the assessment area. The aim shall be to protect, maintain or rehabilitate the natural environment. In particular, the Project shall avoid or minimise impacts on recognised sites of conservation importance, conservation areas, other ecological sensitive areas and species of conservation importance. The assessment shall identify and quantify as far as possible the potential ecological impacts arising from the construction and operation of the Project and associated works, both directly by habitat loss and indirectly by potential impacts such as disturbance, change of water quality and hydrodynamic regime to the natural environment and the associated wildlife groups and habitats/species.
- 2. The assessment shall include the following major tasks:
 - (i) review of the findings of relevant studies/surveys and collate the available information regarding the ecological characters of the assessment area;
 - (ii) evaluation of information collected and identification of any information gap relating to the assessment of potential ecological impacts to terrestrial environment, and determine the ecological field surveys and investigations that are needed for an impact assessment as required in the following sub-sections;
 - (iii) carry out necessary ecological field surveys with a duration of at least 6 months covering both wet and dry season, and investigation to verify the information collected, fill the information gaps as identified in sub-section (ii) above, and to fulfil the objectives of the EIA study. The field surveys shall cover flora, fauna and any other habitats/species of conservation importance;
 - (iv) establishment of the general ecological profile of the assessment area based on information collected in the tasks mentioned in sub-sections (i) to (iii) above, and describe the characteristics of each habitat found, the data set should be comprehensive and representative, and is up to date and valid for the purpose of this assessment. Major information to be provided shall include:
 - (a) description of the physical environment, including all recognised sites of conservation importance and other ecological sensitive areas, and assessment of whether these sites/areas will be affected by the Project or not;
 - (b) habitat maps of suitable scale (1:1000 to 1:5000) showing the types and locations of habitats and species of conservation interest in the assessment area;
 - (c) ecological characteristics of each habitat type such as size, vegetation and/or substrate type, species present, dominant species found, species richness and abundance of major taxa groups, community structure, seasonal patterns, ecological value and inter-dependence of the habitats and species, and presence of any features of ecological importance;

- (d) representative colour photographs of each habitat type and any important ecological features identified; and
- (e) species found that are rare, endangered and/or listed under local legislation, international conventions for conservation of wildlife/ habitats or Red Data Books.
- (v) investigation and description of the existing wildlife uses of the various habitats with special attention to those wildlife groups and habitats with conservation interests, including but not limited to the following:
 - (a) woodlands;
 - (b) natural streams and associated riparian habitats;
 - (c) vertebrates including avifauna, mammals, freshwater fish and herpetofauna (e.g. Five-striped Blue-tailed Skink);
 - (d) macroinvertebrates including butterflies, odonates and fireflies;
 - (e) any other habitats / species identified as having special conservation interest by the EIA study.
- (vi) describe recognised site of conservation importance, conservation areas and other ecological sensitive areas in the assessment area and assess whether these sites will be affected by the Project or not;
- (vii) using suitable methodology and considering also any other works activities from other projects reasonably likely to occur at the same time, identify and quantify as far as possible any direct(e.g. loss of habitats, physical disturbance, etc.), indirect (e.g. light, changes in water qualities, noise and other disturbance generated by the construction activity, etc.), on-site, off-site, primary, secondary and cumulative ecological impacts on the wildlife groups and habitats identified such as destruction of habitats, potential diversion or modification of watercourses, disturbance to wildlife, reduction of species abundance/diversity, loss of feeding and breeding grounds, reduction of ecological carrying capacity and habitat fragmentation and any other possible disturbance caused by the Project.
- (viii) evaluate ecological impact based on the best and latest information available during the course of the EIA study, using quantitative approach as far as practicable and covering construction and operation phases of the Project as well as the subsequent management and maintenance requirement of the Project;
- (ix) recommend possible and practicable mitigation measures to avoid, minimise and/or compensate for the adverse ecological impacts identified during the construction, and operation of the Project;
- (x) evaluate feasibility and effectiveness of the recommended mitigation measures and define the scope, type, location, implementation arrangement, resources requirement, subsequent management and maintenance of such measures;
- (xi) determine and quantify as far as possible the residual ecological impacts after

implementation of the proposed mitigation measures;

(xii) evaluate the significance and acceptability of the residual ecological impacts using well-defined criteria in Annex 8 of the TM and determine if off-site mitigation measures are necessary to mitigate the residual impacts and if affirmative, guidelines and requirements laid down in Annex 16 of the TM should be followed; and

(xiii) review the need for and recommend any ecological monitoring programme required.

Appendix H

Requirements for Landscape and Visual Impact Assessment

- 1. A system shall be derived for judging the landscape and visual impact significance as required under the Annexes 10 and 18 of the TM and the latest version of the EIAO Guidance Note "Preparation of Landscape and Visual Impact Assessment under the EIAO" published on the website of the Environmental Protection Department, unless otherwise agreed by the Director. Landscape impact during construction and operation phase, and visual impact due to the Project during operation phase within the assessment area shall be assessed. Cumulative landscape impacts of the Project with other existing, committed and planned developments in the assessment area shall be assessed.
- The Applicant shall describe, appraise, analyse and evaluate the existing and planned 2. landscape resources and characters of the assessment area including those landscape design proposed under the Project. Annotated oblique aerial photographs and plans of suitable scale showing the baseline landscape resources and landscape character areas and mapping of impact assessment shall be used to present the findings of impact assessment. Descriptive text shall provide a concise and reasoned judgment from a landscape point of view. The assessment shall be particularly focused on the sensitivity of the landscape character areas and resources and its ability to accommodate change. The Applicant shall identify the degree of compatibility of the Project with the existing and planned landscape setting and scenic spot. The landscape impact assessment shall qualify and quantify as far as possible potential landscape impact, so as to illustrate the significance of such impact arising from the Project. Broad brush tree/vegetation survey including distinctive landscape resources within the assessment area shall be carried out and the impacts on them shall also be addressed. Cumulative landscape impacts of the Project with other committed and planned developments shall be assessed.
- 3. The Applicant shall assess the visual impact due to the Project during operation phase. Clear illustrations including mapping of visual impact is required. The Visual Impact Assessment should take into account existing/planned/approved land uses as the baseline conditions. All direct impacts on existing/planned/approved land uses, and on future outlook of the area should be discussed. The assessment shall include the following:
 - (i) identification and plotting of visual envelope of the Project;
 - (ii) appraisal of existing visual resources and characters as well as future outlook of the visual system of the assessment area;
 - (iii) identification and justification of the key public viewing points within the visual envelope and their views, and clearly indicate the key public viewing points on a plan of appropriate scale. Prior to the Visual Impact Assessment (VIA), the selection of representative public viewing points shall be agreed with Planning Department and the Director;
 - evaluation of the magnitude of change in terms of visual composition, visual obstruction and visual change of the Project with the existing and planned visual context, and sensitivity of viewers in terms of types of viewers and value of existing views;

- (v) the visual impact of the Project with and without mitigation measures during operation phase shall be included and illustrated so as to demonstrate the effectiveness of the proposed mitigation measures; and
- (vi) evaluation and explanation with supportive arguments of factors considered in arriving the significance thresholds of visual impact. The visual impacts should include presentation of an evaluation matrix derived for judging impact significance.
- 4. The Applicant shall evaluate the merits of preservation in totality, in parts or total destruction of existing landscape and the establishment of a new landscape character area. In addition, alternative location, layout, development options, alignment, design and construction methods that would avoid or reduce the identified impacts on landscape, and/or visual amenity shall be thoroughly examined before adopting other mitigation or compensatory measures to alleviate the impacts. The applicant shall recommend mitigation measures which shall not only focus on damage reduction but also potential enhancement of existing landscape and visual quality of the area. The recommendations shall also be illustrated in landscape design and landscape/visual impact mitigation measure plan.
- 5. The mitigation measures shall include preservation of vegetation and natural landscape resources (e.g. transplanting of trees in good condition and value), provision of buffer planting, re-vegetation of disturbed area, woodland restoration, compensatory planting, erection of decorative screen hoarding compatible with surrounding provisioning/re-provisioning of amenity areas and open spaces, design and layout of structures, façade treatment, creation of interesting landscape or visual features, vertical and rooftop greening and planting and any measures to mitigate the impact on existing and planned land uses and viewers. Parties shall be identified for the ongoing management and maintenance of the proposed mitigation works to ensure their effectiveness throughout the implementation of the Project. Agreement from relevant authorities responsible for funding. implementation, management and maintenance of proposed mitigation measures have to be obtained before including into the LVIA. A practical programme for the implementation of the recommended measures shall be provided. If any noise barriers/enclosures are proposed, the choice of their colours, design and materials should be compatible with the surrounding buildings and development context and their aesthetic designs should be considered.
- 6. Annotated illustration materials such as coloured perspective drawings, plans and section, oblique aerial photographs, photographs taken at key public viewing points, and computer-generated photomontage shall be adopted to fully illustrate the landscape and visual impacts of the Project. In order to illustrate the landscape and visual impacts and to demonstrate the effectiveness of the proposed landscape and visual mitigation measures, photomontages at selected representative public viewing points shall be prepared to illustrate existing conditions and proposed development with and without mitigation measures at the operation phase, unless otherwise agreed by the Director. Computer graphics shall be in a common format compatible with desktop computers. The Applicant shall record the technical details in preparing the illustrations, which may need to be submitted for verification of the accuracy of the illustrations.

Appendix I

Requirements for Cultural Heritage Impact Assessment

1. Cultural Heritage Impact Assessment (CHIA)

- The Applicant shall conduct a cultural heritage impact assessment (CHIA) on (i) items as listed in paragraph 3.4.10.2 in the EIA study brief within the assessment area, to determine whether the Project will result in possible direct and indirect impacts on those items. The Applicant shall propose the scope and methodology of the CHIA for agreement of the Antiquities and Monuments Office (AMO) and the Director prior to the commencement of the assessment. The Applicant shall demonstrate that reasonable efforts have been made to avoid or keep the adverse impacts on the items as listed in paragraph 3.4.10.2 in the EIA study brief to the Applicant shall recommend appropriate The minimum. protective/monitoring/mitigation measures in accordance with the assessment results and agreed by AMO and the Director.
- (ii) A checklist including the affected items, impacts identified, recommended mitigation measures as well as the implementation agent and period shall also be included in the EIA report.

2. Archaeological Impact Assessment (AIA)

- (i) The Applicant shall engage qualified archaeologist(s) to conduct an archaeological impact assessment (AIA), taking the results of previous studies and other background of the site into account, to evaluate the archaeological impact imposed by the Project and its associated works. The scope of the AIA shall be submitted to AMO and the Director prior to the commencement of the assessment for consideration.
- (ii) In case the existing information is inadequate or where the assessment area has not been adequately studied before, the archaeologists shall conduct archaeological investigations to assemble data. The archaeologists shall obtain licences from the Antiquities Authority under the Antiquities and Monuments Ordinance (Cap. 53) prior to the commencement of archaeological investigations. The licence applicant(s) shall propose respective programmes of investigations, including the scope of works, methodology and time schedules, etc. for agreement with the Director and AMO.
- (iii) Based on existing and collected data, the Applicant shall evaluate whether the proposed developments and works associated with the Project are acceptable from archaeological preservation point of view. In case adverse impact on archaeological heritage cannot be avoided, appropriate mitigation ensures should be designed and recommended in the EIA report in agreement and consideration with AMO, and implemented to the satisfaction of AMO.
- (iv) If archaeological investigation is required, it shall follow detailed technical requirement to be given by AMO and the Director on archaeological survey, archaeological report and handling of archaeological finds and archives. The assessment area shall include all areas to be affected by the Project.

Appendix J

Requirements for Hazard to Life Assessment

- 1. The Applicant shall investigate alternative method to avoid/minimise the use of explosives. The Applicant shall carry out hazard assessment as follows:
 - (i) Identify hazardous scenarios associated with the use, transport and overnight storage (if any) of the explosives during construction of the Project with a view to determining a set of relevant scenarios to be included in a Quantitative Risk Assessment (QRA);
 - (ii) Execute a QRA of the set of hazardous scenarios determined in 1(i), expressing population risks in both individual and societal terms;
 - (iii) Compare individual and societal risks with the criteria for evaluating hazard to life stipulated in Annex 4 of the TM; and
 - (iv) Identify and assess practicable and cost-effective risk mitigation measures to demonstrate the compliance with the Risk Guidelines.
- 2. The hazard assessment shall also include a cumulative risk assessment of the Project, through interaction or in combination with other existing, committed and planned developments involving hazardous facilities in the vicinity of the Project.
- 3. The methodology to be used in the hazard assessment should be consistent with previous studies having similar issues.

Appendix K

Requirements for Landfill Gas Hazard Assessment

- 1. If a landfill gas hazard assessment is required, the assessment shall include, but not limited to, the following key technical tasks:
 - (i) review of background information (including landfill gas monitoring data) and studies related to the relevant closed landfills such as Ngau Chi Wan Landfill, Jordan Valley Landfill and Ma Yau Tong Central Landfill;
 - (ii) identification of the nature and extent of the sources, including the likely concentrations and/or amounts of hazardous emissions which might have the potential for impacts on the Project and impacts from the Project to the potential receivers;
 - (iii) identification of the possible pathways through the ground, underground cavities, utilities or ground water, and the nature of these pathways through which the hazardous emissions must traverse if they were to reach the Project;
 - (iv) identification of the potential receivers associated with the Project which are sensitive to the impacts of the hazardous emissions;
 - (v) qualitative assessment on the degree of risk which the hazardous emissions may impose on the receivers for each of the source-pathway-receiver combinations;
 - (vi) design and implementation of suitable level of precautionary / protection measures and contingency plan for the Project and the potential receivers, if needed, in rendering the proposed development as safe as reasonably practicable; and
 - (vii) establishment and implementation of a maintenance and monitoring programme for ensuring the continued performance of the implemented precautionary / protection measures.

Appendix L

<u>Implementation Schedule of Recommended Mitigation Measures</u>

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measures & Main Concerns to Address	Who to Implement the Measure?	Location of the Measure	When to Implement the Measure?	What Standards or Requirements for the Measure to Achieve?
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Appendix M

Requirements for EIA Report Documents

- 1. The Applicant shall supply the Director with the following number of copies of the EIA report and the executive summary:
 - (i) 30 copies of the EIA report and 30 copies of the executive summary (each bilingual in both English and Chinese) as required under section 6(2) of the EIAO to be supplied at the time of application for approval of the EIA report.
 - (ii) When necessary, addendum to the EIA report and the executive summary submitted in item (i) above as required under section 7(1) of the EIAO, to be supplied upon advice by the Director for public inspection.
 - (iii) 20 copies of the EIA report and 50 copies of the executive summary (each bilingual in both English and Chinese) with or without Addendum as required under section 7(5) of the EIAO, to be supplied upon advice by the Director for consultation with the Advisory Council on the Environment.
- In addition, to facilitate public inspection of EIA report via EIAO Internet Website, the Applicant shall provide electronic copies of both the EIA report and executive summary prepared in Hyper Text Markup Language (HTML) and in Portable Document Format (PDF), unless otherwise agreed by the Director. For both of the HTML and PDF versions, a content page capable of providing hyperlink to each section and sub-section of the EIA report and executive summary shall be included in the beginning of the document. Hyperlinks to figures, drawings and tables in the EIA report and executive summary shall be provided in the main text from where respective references are made. The EIA report, including drawings, tables, figures and appendices shall be viewable by common web browsers including the latest version of Microsoft Edge, Mozilla Firefox, Safari, Google Chrome or any web browsers as agreed by the Director, and support languages including Traditional Chinese, Simplified Chinese and English.
- 3. The electronic copies of the EIA report and the executive summary shall be submitted to the Director at the time of application for approval of the EIA report.
- 4. When the EIA report and the executive summary are made available for public inspection under section 7(1) of the EIAO, the content of the electronic copies of the EIA report and the executive summary must be the same as the hard copies and the Director shall be provided with the most updated electronic copies.
- 5. To promote environmentally friendly and efficient dissemination of information, both hardcopies and electronic copies of future EM&A reports recommended by the EIA study shall be required and their format shall be agreed by the Director.