

ANNEX 1A STAKEHOLDER ENGAGEMENT ACTIVITIES

1A.1 Objectives of Stakeholder Engagement

The objectives of the stakeholder engagement conducted for the Project include the following:

- To build an understanding of the need for the Project and explain the key elements of the Project to stakeholders, to actively seek their views and, address their concerns related to the future Project development and implementation; and
- To ensure transparent, responsive and responsible communications with stakeholders.

1A.2 Key Stakeholders

The engagement of key stakeholders were conducted throughout the EIA Study since 2021. A series of briefings and meeting have been arranged with stakeholders as listed below:

- Advisory and professional bodies
- Local communities
- Fishermen groups
- Green groups
- Legislative councillors

PowerPoint presentation and visuals (location plan / infographics) were used as tools to inform the stakeholders and enhance their understanding of the Project.

1A.3 Key Comments and Summary of Responses

This section provides a summary of the key comments and suggestions relating to the Project made by the stakeholders consulted.

1A3.1 Site Selection

Some stakeholders queried whether a feasibility study for locating the sediment disposal facility at West of Lamma Island was conducted and any alternative sites were considered.

The key views relating to site selection and responses are summarised in **Table 1A.1**.

Table 1A.1 Key Views and Responses Relating to Site Selection

Key Views	Responses
<ul style="list-style-type: none"> ■ Any alternative sites were identified? How was the location of the Project at West of Lamma Island selected? 	<ul style="list-style-type: none"> ■ Various sites were identified under the Study “<i>Strategic Assessment and Site Selection Study for Contaminated Mud Disposal</i>” in 1998. ■ A review of the early study findings has been conducted to confirm that: <ul style="list-style-type: none"> - the eastern Hong Kong waters are generally not suitable for the development of CAD facilities in view of the ecological sensitivities, seasonal monsoon, water depth and hydrodynamic conditions; - the remaining portion of western Hong Kong waters (excluding the existing CMPs at East of Sha Chau and South of The Brothers) are not suitable due to strong current flow from Pearl River Estuary; and

Key Views	Responses
	<ul style="list-style-type: none"> - the south-western Hong Kong waters are not suitable due to the ecological sensitivities and planning of marine parks. ■ Further review on development plans of Hong Kong (e.g. Hong Kong 2030 Planning Vision and Strategy) indicated that there is no other planned development within the portions of southern waters between Cheung Chau and Lamma Island. ■ The Project site at West of Lamma Island was further selected taking into accounts of the absolute and potential constraints. The Study Area has been selected to avoid key marine ecological habitats, including marine mammals (especially Finless Porpoise) and areas with high fisheries production.
<ul style="list-style-type: none"> ■ What are the key criteria / constraints for developing contaminated sediment disposal facility? 	<ul style="list-style-type: none"> ■ Some of the key criteria / constraints are water depths, proximity to fairways, infrastructure, utilities as well as water, marine ecology and fisheries sensitive receivers. The quality of the sediments is also one of the criteria for developing contaminated sediment disposal facility.

1A3.2 Project Design and Alternatives

Some stakeholders were concerned that construction of new contaminated sediment disposal facility in marine waters that may affect water quality and whether alternative design of upland disposal has been considered.

The key views relating to project design and alternatives and responses are summarised in **Table 1A.2**.

Table 1A.2 Key Views and Responses Relating to Project Design and Alternatives

Key Views	Responses
<ul style="list-style-type: none"> ■ Why contained aquatic disposal (CAD) is the preferred design for the Project? 	<ul style="list-style-type: none"> ■ Hong Kong's experience in handling contaminated materials using CAD is among the most extensive and well documented in the world, which provides a sound engineering and environmental basis for continuing with this option. ■ CAD facilities allow more planning flexibility as they can be developed in phases according to the disposal demand. ■ CAD facilities will only result in temporary loss of marine habitats and fishing ground, and benthic recolonisation is expected to take place after completion of capping.
<ul style="list-style-type: none"> ■ Why upland disposal is not considered? 	<ul style="list-style-type: none"> ■ There is limited land supply for disposal of large amount of contaminated sediments on land. Site selection is also constrained as such facility has to be kept away from the communities and areas of ecological importance. There is also possibility of contaminant leakage due to transportation of sediments to land and to the upland facility.
<ul style="list-style-type: none"> ■ Is it possible for sediment treatment? 	<ul style="list-style-type: none"> ■ Contaminated sediments in Hong Kong generally have low organic content but with high levels of inorganics (i.e.

Key Views	Responses
	metals). However, existing waste treatment facilities are not suitable for dealing with materials that are contaminated with high levels of inorganics. Although findings from previous studies indicated that the contaminated sediment could be reuse after treatment with certain binders (e.g. cement), only limited sediment samples had been tested and further studies have to be conducted to evaluate the cost effectiveness in large-scale application.
<ul style="list-style-type: none"> Can non-dredged method be used for all the Project such that no sediment has to be generated for disposal? 	<ul style="list-style-type: none"> To protect the marine environment and make the best use of the limited capacity of the disposal facilities, project proponents are required to avoid and / or reduce dredging where practicable, and to explore the feasibility of reusing the dredged / excavated sediment as fill material as far as possible. The Marine Fill Committee (MFC) will only consider granting allocation when the need for removal of sediment has been satisfactorily demonstrated. Although non-dredged methods are encouraged for construction of infrastructure projects in Hong Kong, dredging is necessary for essential maintenance works for harbours, fairways, anchorage or drainage channels.
<ul style="list-style-type: none"> Will the Project be expanded in the future? 	<ul style="list-style-type: none"> Based on the annual average disposal demand of 0.6 Mm³, each CMP of the proposed WL Facility is expected to provide disposal service for approximately 3 years. The proposed WL Facility is expected to have a service lifetime for up to 20 years. CEDD will continue to request project proponents to avoid and / or reduce dredging where practicable, and to explore the feasibility of reusing the dredged / excavated sediment as fill material as far as possible. In addition, further review on sediment disposal strategy and sediment treatment technology will be conducted to investigate if CAD will still be the preferred option in the future.

1A3.3 Water Quality

As sediments will be generated and disposed of at the WL Facility during construction and operation of the Project, some stakeholders were concerned about the potential impacts to water quality from the Project, and the cumulative impacts from concurrent projects.

The key views relating to water quality and responses are summarised in **Table 1A.3**.

Table 1A.3 Key Views and Responses Relating to Water Quality

Key Views	Responses
<ul style="list-style-type: none"> What are the contaminants in the marine sediments? 	<ul style="list-style-type: none"> Depending on the source of marine sediments, contaminants such as inorganics (e.g. metals, metalloid), and organics (e.g. polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCBs)) could be present in the marine sediments.
<ul style="list-style-type: none"> What parameters were analysed for determination of sediment quality? 	<ul style="list-style-type: none"> Sediment sampling and testing were conducted in accordance with the requirements as stated in the technical circular (<i>ETWB TCW No. 34/2002</i>) issued by the Environment, Transport and Works Bureau. The parameters

Key Views	Responses
	for chemical screening include metals, metalloid and organics (e.g. PAHs, PCBs).
<ul style="list-style-type: none"> The assessment area for water quality should cover a wider area (e.g. Sunshine Island, Hei Ling Chau, gazetted bathing beaches, etc). 	<ul style="list-style-type: none"> The Assessment Area for water quality impact assessment covers the Southern Water Control Zone (WCZ) and Western Buffer WCZ and the water quality sensitive receivers, such as coral communities, gazetted and non-gazetted bathing beaches, seawater intakes, typhoon shelters, fish culture zones (FCZs), Site of Special Scientific Interest (SSSI), Green Turtle nesting ground, secondary contact recreation subzones, habitat for FP, nursery area and spawning ground for commercial fisheries resources and proposed/ potential marine parks, have been considered in the impact assessment.
<ul style="list-style-type: none"> How were water quality impacts assessed for sediment disposal? 	<ul style="list-style-type: none"> Computational water quality modelling was conducted considering dredging, disposal and capping activities to be conducted in different CMPs concurrently. Other concurrent projects have also been considered to predict the worst-case water quality impacts to sensitive receivers.
<ul style="list-style-type: none"> How will the sediments be dispersed at the Project site? 	<ul style="list-style-type: none"> Based on the results of the computational water quality modelling, the prevailing flow direction are north-south direction depending on the tidal effects. Water quality impacts due to sediment dispersion would be temporary and confined close to the works area.

1A3.4 Marine Ecology

Some stakeholders expressed their interest to marine ecological resources around the Project. The key views relating to marine ecology and responses are summarised in **Table 1A.4**.

Table 1A.4 Key Views and Responses Relating to Marine Ecology

Key Views	Responses
<ul style="list-style-type: none"> The impact assessment for marine ecology should cover the potential impacts to green sea turtle at Sham Wan Site of Special Scientific Interest (SSSI) and potential marine park at the southern coast of Lamma Island. 	<ul style="list-style-type: none"> These have been considered and assessed in the EIA.
<ul style="list-style-type: none"> The assessment for Finless Porpoises should cover potential impacts on deteriorated water quality, increased level of marine traffic and underwater noise as well as cumulative impacts from concurrent projects. 	<ul style="list-style-type: none"> These have been considered and assessed in the EIA. Mitigation measures have been recommended in the EIA as appropriate.

Key Views	Responses
<ul style="list-style-type: none"> ■ Apart from the AFCD long term marine mammal monitoring data, it was suggested to include any other recent local studies on marine mammals in the literature review. 	<ul style="list-style-type: none"> ■ The literature review has considered publicly available information, including AFCD long term marine mammal monitoring and other recent local studies on marine mammals in the vicinity of the Study Area.
<ul style="list-style-type: none"> ■ Is the marine mammal monitoring data collected in the EIA Study sufficient? 	<ul style="list-style-type: none"> ■ Marine mammal surveys were conducted for 6 months between March and August 2021 under this EIA study. The data obtained were to verify with the long term marine mammal monitoring to ascertain the distribution of marine mammals within and in the vicinity of the Study Area. The survey results showed that the area within and in the vicinity of the Study Area is not a key occurrence habitat for Finless Porpoise.
<ul style="list-style-type: none"> ■ To further minimise impacts to finless porpoise due to Project works, it is suggested implementing mitigation measures, such as marine mammal exclusion zone monitoring (visual and acoustic monitoring), implementation restriction during finless porpoise peak occurrence season and acoustic monitoring. 	<ul style="list-style-type: none"> ■ Based on literature review and the field survey findings, the area within and in the vicinity of the Study Area is not a key occurrence habitat for Finless Porpoise. The Project will use a few slow-moving works vessels and it is expected that the impacts to Finless Porpoise due to the Project would be minor. The use of predefined and regular routes and make use of designated fairways to access the CMPs will be implemented as one of the mitigation measures to minimise disturbance to Finless Porpoise due to vessel movements.
<ul style="list-style-type: none"> ■ Will coral translocation be recommended for the Project? 	<ul style="list-style-type: none"> ■ Based on literature review and field survey findings, only soft-bottom habitats were found and extensive coral habitats are not expected in the Study Area. As such, it is not expected to have direct impacts to coral communities due to the Project and coral translocation is not considered necessary.

1A3.5 Fisheries and Hazard to Health

As the Project will result in disturbance to fisheries habitat and fishing ground as well as potential bioaccumulation of contaminants due to contaminated sediment disposal, some stakeholders were concerned on the change in fisheries resources and the impacts to fisheries and hazard to health. The key views relating to fisheries and responses are summarised in **Table 1A.5**.

Table 1A.5 Key Views and Responses Relating to Fisheries and Hazard to Health

Key Views	Responses
<ul style="list-style-type: none"> ■ The fisheries surveys lasted for 4 months. How were the results used to draw the conclusion of no unacceptable impact to fisheries? 	<ul style="list-style-type: none"> ■ Apart from the fisheries surveys conducted between February and May 2021, a literature review was conducted to investigate the data of fisheries production and fishing operation in the Assessment Area. The data include the previous fisheries surveys conducted in the Assessment Area as well as the latest set of Port Survey data collected by AFCD in 2016-17 on information on fishing operations

Key Views	Responses
	and fisheries production in Hong Kong waters. All the data were considered to evaluate fisheries impacts in accordance to the criteria described in Annex 9 of the EIAO-TM.
<ul style="list-style-type: none"> ■ It was suggested to quantify the impacts to fisheries. 	<ul style="list-style-type: none"> ■ The fisheries impact assessment was conducted in accordance with the requirements as stated in the EIAO-TM. Annex 17 of the EIAO-TM prescribes the general approach and methodology for assessing fisheries impacts caused by a project or proposal, to allow a complete and objective identification, prediction and evaluation of the potential impacts. EIAO-TM Annex 9 recommends the criteria that are to be used for evaluation of fisheries impacts.
<ul style="list-style-type: none"> ■ Why trawling was not conducted for the Project to assess the existing condition of demersal fisheries resources? 	<ul style="list-style-type: none"> ■ The trawl ban came into effect on 31 December 2012. While research fishing permit could be applied to conduct trawl surveys, it is considered that trawling would damage the seabed that will affect fisheries resources. As such, gill-netting, which is also a commonly used local fishing method for catching demersal fisheries resources, was adopted in the fisheries survey.
<ul style="list-style-type: none"> ■ Will the facility have impact on nearby fish culture zones? Any assessment was conducted? 	<ul style="list-style-type: none"> ■ The impact assessment has considered the nearby fish culture zones in the Assessment Area. Water quality of the nearby fish culture zones has been assessed in the EIA and the impacts to fish culture zones are considered to be of minor significance.
<ul style="list-style-type: none"> ■ It was suggested carrying out fisheries resources monitoring and bioaccumulation monitoring during the Project. 	<ul style="list-style-type: none"> ■ Fisheries resources monitoring and bioaccumulation monitoring are proposed in the EM&A programme for the Project.

1A3.6 Other Comments

Some stakeholders were also concerned about other aspects of the Project such as the mechanism of tackling illegal sediment disposal activities, compensation related to the fisheries sector, etc. which are not directly related to the environmental impacts of the Project and thus these will not be included in the EIA Report. Responses were made to the stakeholders separately.