ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 705 – CIVIL ENGINEERING
Transport – Ferry Piers
51TF – Reconstruction of Pak Kok Pier on Lamma Island

Members are invited to recommend to the Finance Committee the upgrading of 51TF to Category A at an estimated cost of $72.4 million in money-of-the-day prices for the reconstruction of Pak Kok Pier on Lamma Island.

PROBLEM

We need to reconstruct the Pak Kok Pier on Lamma Island to improve the berthing condition.

PROPOSAL

2. The Director of Civil Engineering and Development (DCED), with the support of the Secretary for Transport and Housing, proposes to upgrade 51TF to Category A at an estimated cost of $72.4 million in money-of-the-day (MOD) prices for the reconstruction of the Pak Kok Pier.
PROJECT SCOPE AND NATURE

3. The scope of works under 51TF comprises –

(a) reconstruction of the existing pier (including provision of ancillary facilities such as roof cover, lighting system, benches, and solar panels, etc.); and

(b) environmental monitoring and mitigation measures for the proposed works.

A layout plan and photomontage showing the proposed works are at Enclosure 1 and Enclosure 2 respectively. Subject to funding approval by the Finance Committee, we plan to commence the construction works in the second half of 2019 for completion in the second half of 2021.

JUSTIFICATION

4. The existing Pak Kok Pier (“the Pier”) is located at the northern tip of Lamma Island. The Pier was first built by villagers and reconstructed in the 1970s and 1990s. The villagers of the Pak Kok Tsuen and Pak Kok San Tsuen mainly rely on the Pier to commute to urban areas. Tourists travelling to the Lamma Island also use the Pier. Currently, there is one licensed ferry service (the “Aberdeen – Pak Kok Tsuen – Yung Shue Wan” route) using the Pier for boarding and alighting. According to the Transport Department’s survey in 2018, around 21 vessels (around 370 to 415 passengers) used the Pier daily.

5. Due to the primitive design of the Pier and the occasional rough sea condition, the berthing condition of the Pier is unsatisfactory, causing inconvenience to passengers, especially for kids and the elderly, when boarding and alighting. Over the years, members of Legislative Council, Islands District Council and Lamma Island (North) Rural Committee, as well as Village Representatives have repeatedly asked for the reconstruction of the Pier. The Government considers there is a need to reconstruct the Pier to improve the berthing condition. A photo showing the condition of the existing pier is at Enclosure 3.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be $72.4 million in MOD prices, broken down as follows –

$/ million .....
## PWSC(2019-20)21

### Table: Breakdown of Estimates

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost (S million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Construction of a replacement pier</td>
<td>54.6</td>
</tr>
<tr>
<td>(b) Construction of a roof cover</td>
<td>8.7</td>
</tr>
<tr>
<td>(c) Modification of the existing pier</td>
<td>0.4</td>
</tr>
<tr>
<td>(d) Site safety and environmental mitigation measures and EM&amp;A programme</td>
<td>2.1</td>
</tr>
<tr>
<td>(e) Consultants’ fees for independent environmental checker services¹</td>
<td>0.3</td>
</tr>
<tr>
<td>(f) Contingencies</td>
<td>6.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>72.4</td>
</tr>
</tbody>
</table>

A breakdown of the estimates for consultants’ fees by man-month is at Enclosure 4.

7. The Civil Engineering and Development Department (CEDD) is the works agent of the project. The contract administration and site supervision of the project will be undertaken by in-house resources of the CEDD. The estimated cost for this project is comparable to that of similar projects implemented by the Government.

8. Subject to approval, we plan to phase the expenditure as follows –

/Year  

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¹ As part of the EM&A programme, we will commission consultants to provide independent environmental checker services to review and audit the environmental monitoring works and results for the proposed works.
<table>
<thead>
<tr>
<th>Year</th>
<th>$ million (MOD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 – 2020</td>
<td>3.4</td>
</tr>
<tr>
<td>2020 – 2021</td>
<td>33.0</td>
</tr>
<tr>
<td>2021 – 2022</td>
<td>24.4</td>
</tr>
<tr>
<td>2022 – 2023</td>
<td>11.6</td>
</tr>
<tr>
<td></td>
<td>72.4</td>
</tr>
</tbody>
</table>

9. We have derived the MOD estimates on the basis of the Government’s latest forecast of trend rate of change in the prices of public sector building and construction output for the period from 2019 to 2023. We will deliver the construction works in a remeasurement contract under New Engineering Contract (NEC) form\(^2\) because the quantities of works may vary depending on actual ground conditions. The contract will provide for price adjustments.

10. We estimate the annual recurrent expenditure arising from this project to be $260,000.

PUBLIC CONSULTATION

11. The Government consulted the Lamma Island (North) Rural Committee and Traffic and Transport Committee of Islands District Council on the proposed works on 8 and 23 July 2018 respectively and obtained their support.

12. We also consulted ferry operators, hiking groups, disabled communities and green groups during the period between September 2018 and March 2019. They supported the proposed works in general. Their advice and suggestions have been considered in the detailed design of the pier.

\(^2\) NEC is a suite of contracts developed by the Institution of Civil Engineers, United Kingdom. It is a contract form that emphasises cooperation, mutual trust and collaborative risk management between contracting parties.
13. The proposed reconstruction works were gazetted under the Foreshore and Seabed (Reclamations) Ordinance (Cap. 127) on 30 November and 7 December 2018. No objection was received during the objection period. The proposed reconstruction works were authorised under that Ordinance on 6 March 2019.

14. We consulted the Legislative Council Panel on Transport on 17 May 2019. Members supported submitting the funding proposal to the Public Works Subcommittee and raised certain suggestions. We will consider and suitably incorporate their advice and suggestions in the design.3

ENVIRONMENTAL IMPLICATIONS

15. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). To control the environmental impacts during the construction period, we will implement mitigation measures such as installing silt curtain to minimise the water quality impacts, and incorporating standard measures to control noise and dust.

16. At the planning and design stages, we have considered the design and construction sequence of the proposed works with a view to reducing the generation of construction waste where possible. In addition, we require the contractor to reuse the inert construction waste (e.g. excavated materials) on site or in other suitable construction sites as far as possible. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

3 For instance, in response to Members’ suggestions, we plan to provide parking area for bicycles, adopt glass materials of lower transparency for the roof cover, study the feasibility of providing a drinking fountain and set aside certain space for setting up kiosk(s) in future if needed.

/17. .....
17. At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. We will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

18. We estimate that the project will generate in total about 400 tonnes of construction waste. Of these, we will deliver 360 tonnes (90%) of the inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 40 tonnes (10%) non-inert construction waste at landfills. The total cost for disposal of construction waste at public fill reception facilities and landfill sites is estimated to be about $33,560 for this project (based on a unit charge rate of $71 per tonne for disposal at public fill reception facilities, and $200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

19. This project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

20. This project does not involve resumption of private land.

TRAFFIC IMPLICATIONS

21. The existing pier will maintain normal operation during the construction stage. Upon commissioning, the new pier will provide more berthing point.

/BACKGROUND .....

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Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap 354N). Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.
BACKGROUND INFORMATION

22. We upgraded 51TF to Category B in September 2016.

23. The 2017 Policy Address featured a new policy initiative, Pier Improvement Programme (PIP). The initiative seeks to improve a number of remote public piers to facilitate public access to outing destinations and natural heritage. It also responds to local requests to meet the basic needs of remote villagers who have to rely on marine transport or who engage in fishing operation. The first phase of the PIP covers 10 public piers in the New Territories and outlying islands. Pak Kok Pier on Lamma Island is one of the piers included in the first phase of PIP.

24. We engaged a consultant to undertake preliminary environmental review and a contractor to undertake ground investigation works, at a total cost of about $4.27 million, chargeable to Capital Works Reserve Fund block allocations Head 705 Subhead 5101CX “Civil engineering works, studies and investigations for items in Category D of the Public Works Programme”. Detailed design was undertaken by in-house resources of the CEDD.

25. The proposed works will not involve any tree removal or planting proposals.

26. We estimate that the proposed works will create about 30 jobs (25 for labourers and another 5 for professional or technical staff) providing a total employment of 650 man-months.

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Transport and Housing Bureau
June 2019
图例：
LEGEND:

现有北角碼頭
EXISTING PAK KOK PIER

擬建北角碼頭
PROPOSED PAK KOK PIER

基座
PROPOSED CATWALK

现有登岸梯級將於擬建北角碼頭
重建後拆除及換上新堤方塊
EXISTING LANDING STEPS TO BE
DEMOLED AND REPLACED BY
SEAWALL BLOCKS UPON COMPLETION
OF THE PROPOSED PAK KOK PIER

图例
KEY PLAN

比例
SCALE

1: 2000

1: 500

0 5 10 15 20 25 m

Project Title
工務工程計劃項目 0517F - 重建南丫島北角碼頭
WFP ITEM NO. 0517F - RECONSTRUCTION OF PAK KOK PIER ON LAMMA ISLAND

Layout Plan
平面圖

Scale
比例尺

1: 2000

1: 500
Breakdown of the estimates for consultants’ fees
(in September 2018 prices)

<table>
<thead>
<tr>
<th>Consultants’ fee for independent environmental checker services (Note 2)</th>
<th>Estimated man-months</th>
<th>Average MPS* salary point</th>
<th>Multiplier (Note 1)</th>
<th>Estimated fee ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>1</td>
<td>38</td>
<td>2.0</td>
<td>0.2</td>
</tr>
<tr>
<td>Technical</td>
<td>2</td>
<td>14</td>
<td>2.0</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>0.3#</strong></td>
</tr>
</tbody>
</table>

* MPS = Master Pay Scale

Notes

1. A multiplier of 2.0 is applied to the average MPS salary point to estimate the full staff cost for the staff employed in the consultants’ offices (including the consultants’ overheads and profit) (as at now, MPS salary point 38 = $81,975 per month and MPS salary point 14 = $28,725 per month).

2. The actual man-months and actual costs will only be known after selection of the consultants and completion of construction works.

Remarks

The figures in this Enclosure are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in money-of-the-day prices in paragraph 6 of the main paper.