

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Recreation, Culture and Amenities – Open spaces

419RO – Aldrich Bay Park

Members are invited to recommend to Finance Committee an increase in the approved project estimate for **419RO** from \$115.6 million by \$19.6 million to \$135.2 million in money-of-the-day prices.

PROBLEM

The approved project estimate (APE) of **419RO** is not sufficient to cover the cost of works under the project.

PROPOSAL

2. The Director of Architectural Services (D Arch S), with the support of the Secretary for Home Affairs, proposes to increase the APE for **419RO** from \$115.6 million by \$19.6 million to \$135.2 million in money-of-the-day (MOD) prices to meet the increased cost of construction works.

PROJECT SCOPE AND NATURE

3. The approved scope of **419RO** comprises –
- (a) a leisure park with the theme of a traditional fishing village;
 - (b) a garden and other soft landscaped and sitting-out areas;

/(c)

- (c) a children's play area;
- (d) an open plaza;
- (e) a jogging trail equipped with fitness stations;
- (f) a fitness corner for elderly people;
- (g) rain shelters cum pavilions with garden benches; and
- (h) ancillary facilities including a toilet block, a horticultural store and a loading and unloading area.

We plan to commence construction works in May 2009 for completion in February 2011.

JUSTIFICATION

4. We invited tenders for construction of the project in September 2008. Upon closure of the tender period in November 2008, the recommended tender return was higher than the original estimate allowed in the APE. The increased construction cost is partly due to higher-than-expected tender rates submitted by the contractor arising from the unexpected drastic increase in prices of major construction materials from the date of the baseline project estimate of September 2007 to the date of tenders in November 2008, which exceeded the allowance that had been made to cater for the increase in the project estimate, and partly due to revisions in drainage layout and external works to match with the unexpected constraints found on site imposed by the existing drainage reserve. From the construction cost indices published by the Census and Statistics Department, the cost index for galvanized mild steel, steel reinforcement, sand and aggregate as at November 2008 had risen by 25%, 14%, 45% and 41% respectively compared to those in the baseline project estimate as at September 2007. The rapid rise in the cost of the above-mentioned raw materials, being the major elements of the project, drove up the tender price particularly.

5. We have reviewed the project in detail, and considered the option of re-tendering the contract with a view to securing a lower tender price. Additional consultancy fee would be incurred if we were to re-tender, and the project would be delayed by five to six months. The proposed contract for this project provides for a contract price fluctuation (CPF) system¹. Under this system, if the price of materials falls during the construction period, the Government will pay less to the contractor and the actual expenditure will be lower than the revised APE.

OVERALL REVIEW

6. After reviewing the project programme and financial implications, we consider it necessary to increase the APE of **419RO** from \$115.6 million by \$19.6 million to \$135.2 million in MOD prices to meet the cost of construction works. A breakdown for the proposed increase is as follows –

Factors	Proposed increase in MOD prices (\$ million)	% of the total increase
Additional costs associated with –		
(a) Higher-than-expected tender price and revision to match site constraints	17.6	89.8
(b) Provision for price adjustment	3.2	16.3
(c) <u>Partly offset by</u> Drawdown from contingencies	(1.2)	(6.1)
Total	19.6	100.0

A detailed comparison of the cost breakdowns of the APE and the proposed revised project estimate in MOD prices, together with an explanation of the discrepancies is at Enclosure 1.

/FINANCIAL

¹ The CPF system allows for upward/downward adjustment to contract payments in accordance with movements in the cost of labour and materials in Government civil engineering and building contracts.

FINANCIAL IMPLICATIONS

7. Subject to approval, we will phase the expenditure as follows –

Year	\$ million (MOD)
2009 – 2010	12.1
2010 – 2011	52.3
2011 – 2012	38.2
2012 – 2013	21.6
2013 – 2014	11.0
	<hr/> 135.2 <hr/>

8. The proposed increase in the APE will not give rise to additional recurrent expenditure.

PUBLIC CONSULTATION

9. We circulated an information paper on the present proposal to the Legislative Council Panel on Home Affairs on 11 February 2009. Members did not raise any objection to the proposal.

ENVIRONMENTAL IMPLICATIONS

10. The proposed increase in the APE will not give rise to any adverse environmental implications. There will not be any increase of construction waste generated.

HERITAGE IMPLICATIONS

11. The proposed increase in the APE does not have any heritage implications.

/LAND

LAND ACQUISITION

12. The proposed increase in the APE does not require any land acquisition.

BACKGROUND

13. The Public Works Subcommittee (PWSC) discussed **419RO** on 20 June 2008. In relation to the concerns raised during the meeting, we provided Members with further information on the design and facilities of the project on 27 June 2008. On 4 July 2008, the Finance Committee approved the upgrading of **419RO** to Category A at an estimated cost of \$115.6 million in MOD prices. As undertaken during the PWSC meeting, we consulted the local community and the Eastern District Council (EDC) on the design of the leisure park in July 2008 and December 2008 respectively. The finalised design as agreed by the EDC is at Enclosure 2 for Members' information.

14. The proposed increase in the APE will not involve any additional tree removal or planting proposals.

15. The proposed increase in the APE will not create additional jobs.

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A comparison of the APE and the latest project estimate in MOD prices is as follows –

	(A) Approved Estimate (\$million)	(B) Latest Estimate (\$million)	(B) – (A) Difference (\$million)
(a) Site works and site formation	8.5	7.9	(0.6)
(b) Building	4.3	5.5	1.2
(c) Building services	18.2	14.8	(3.4)
(d) Drainage	4.0	7.1	3.1
(e) External works	53.3	70.0	16.7
(f) Soft landscaping works	4.2	4.8	0.6
(g) Furniture and equipment	0.5	0.5	-
(h) Consultants' fees for quantity surveying services	1.0	1.0	-
(i) Contingencies	8.0	6.8	(1.2)
(j) Provision for price adjustment	13.6	16.8	3.2
Total	115.6	135.2	19.6

2. **As regards 1(a) (Site works and site formation)**, the net decrease of \$0.6 million is mainly due to competitive pricing of the site preparation works.

3. **As regards 1(b) (Building)**, the net increase of \$1.2 million is mainly due to higher-than-expected rates submitted by the contractor. The higher-than-expected rates are attributable to an increase in construction material prices from the date of the baseline project estimate to the date of return of tenders for the construction of project. The construction cost indices published by the Census and Statistics Department show that there was a substantial rise in the material costs for galvanised mild steel (25%), steel reinforcement (14%), sand (45%) and aggregate (41%) in the same period. These price rises have inflated the prices of the reinforced concrete structure, the piping works and metal works in building works.

4. **As regards 1(c) (Building services)**, the net decrease of \$3.4 million is mainly due to a reduction in landscape lighting and a decrease in the number of CCTV cameras and related equipment, in line with site conditions.

5. **As regards 1(d) (Drainage)**, the net increase of \$3.1 million is partly due to higher-than-expected rates submitted by the contractor, and partly due to a revision of the drainage layout to cater for unexpected site constraints imposed by an existing drainage reserve. The higher-than-expected rates are attributable to the increases in the material costs for galvanised mild steel, steel reinforcement, sand and aggregate, which have inflated the prices of the metal drain pipes and reinforced concrete base for the sub-soil drain pipes. The increased amount due to the revised drainage layout is about \$1.7 million. Having found unexpected additional desilting manholes and an exceptionally shallow drainage reserve on the site, it is necessary to revise the drainage layout to suit the actual site conditions in order to facilitate the future maintenance of the drainage reserve area.

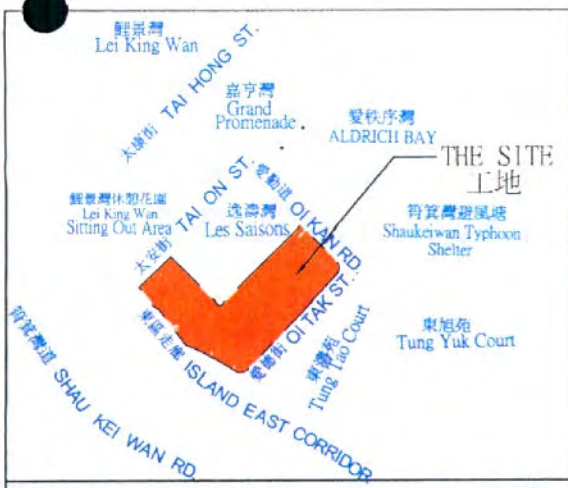
6. **As regards 1(e) (External works)**, the net increase of \$16.7 million is partly due to higher-than-expected rates submitted by the contractor and partly due to revisions in the external works. The higher-than-expected rates are attributable to the increases in the material costs for galvanised mild steel, steel reinforcement, sand and aggregate, which have inflated the prices of the metal entrance gate, fencing, matching covers and exhibition boat, reinforced concrete slabs at paving and pool areas and planter walls. The increase in cost is also due to the following revisions –

- (a) about \$2.2 million on revisions to accommodate the revised drainage layout, including additional pump rooms to suit the shallow drainage reserve area, additional matching covers and additional vehicular access to desilting manholes at the drainage reserve area; and
- (b) about \$4.5 million on revisions to accommodate site conditions, which include additional planters, improved water edge design and disabled access to the feature pool, and enlargement of the park entrance.

7. **As regards 1(f) (Soft landscaping works)**, the net increase of \$0.6 million is mainly due to higher-than-expected rates submitted by the contractor.

8. **As regards 1(i) (Contingencies)**, the net decrease of \$1.2 million is used to offset part of the increases in items 1(b) and 1(d) to 1(f).

9. **As regards 1(j) (Provision for price adjustment)**, the net increase of \$3.2 million is mainly due to the higher cost of all works based on the returned tender and also the revised price adjustment factor for 2008 of 8.0% being higher than the originally adopted factor of 2.5%. Detailed justification for the increase in the provision for price adjustment is given in Enclosure 3.



位置圖 LOCATION PLAN
比例 SCALE : 1:10000



嘉亨灣
Grand Promenade



愛秩序灣
ALDRICH BAY

鯉景灣休憩花園
Lei King Wan Sitting Out Area

鯉景灣
LEI KING WAN

逸濤灣
Les Saisons

灌木花槽
SHRUB PLANTER

港島民生書院
Munsang College (Hong Kong Island)

草坪
LAWN

太極場
TAI CHI COURT

入口
ENTRANCE

香味花園
SCENTED GARDEN

草坪
LAWN

東區走廊

興民街
HING MAN STREET

ISLAND EASTERN CORRIDOR

愛信道

OI SHUN ROAD

Aldrich Bay Promenade
愛勤道

緩跑徑
JOGGING TRAIL

主題水景
WATER FEATURE

愛秩序灣海濱花園
仿漁棚
FISHERMAN HUT PAVILION

兒童遊樂場
CHILDREN'S PLAY AREA

洗手間
TOILET BLOCK

服務大樓
SERVICE BUILDING

長者健體園地
ELDERLY FITNESS CORNER

露天廣場
OPEN PLAZA

東濤苑
Tung Tao Court

行人出入口
Pedestrian entrance

車輛出入口
Vehicular entrance

title
419RO
愛秩序灣公園
筲箕灣
ALDRICH BAY PARK
SHAUKEIWAN

drawn by 繪圖
K. H. CHAN

date 日期
03/09

approved 覆核
A. H. LEWIS

date 日期
03/09

office 辦事處
ARCHITECTURAL BRANCH 設計處

drawing no. 編號
AB/6539/XA00

scale 比例
1:2000



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署

419RO – Aldrich Bay Park

Table 1 - Cash Flow and Price Adjustment in Original PWSC Paper

Year	Original Project Estimate (\$ million, in Sept 2007 prices)	Original Price Adjustment Factor #	Approved Project Estimate (\$ million, in MOD prices)	Price Adjustment (\$ million)
	X	Y	Z	A=Z - X
2009 - 2010	12.0	1.06293	12.8	0.8
2010 - 2011	40.0	1.10545	44.2	4.2
2011 - 2012	30.0	1.14967	34.5	4.5
2012 - 2013	16.5	1.19566	19.7	3.2
2013 - 2014	3.5	1.24348	4.4	0.9
Total	102.0		115.6	13.6

Table 2- Revised Cash Flow and Provision for Price Adjustment due to Revised Project Estimate (PE) and Latest Adjustment Factor

Year	Revised PE (\$ million, in Sept 2007 prices)	Revised PE (\$ million, in Sept 2008 prices) *	Latest Price Adjustment Factor ***	Revised PE (\$ million, in MOD prices)	Revised Provision for Price Adjustment (\$ million)	Net Increase in Provision for Price Adjustment (\$ million)
	a	b	c	d	e	f
2009 - 2010	11.0	11.7	1.03500	12.1	e = d - a	f = (e - A)
2010 - 2011	46.4	49.5	1.05570	52.3		
2011 - 2012	33.3	35.5	1.07681	38.2		
2012 - 2013	18.5	19.7	1.09835	21.6		
2013 - 2014	9.2	9.8	1.12032	11.0		
Total	118.4			135.2	16.8	3.2

Note:

Price adjustment factors adopted in June 2008 are based on the projection of prices for public sector building and construction output to increase by 2.5% in 2008 and 4.0% per annum over the period from 2009 to 2014.

* Revised PE (in September 2007 price) is multiplied by 1.06725 to convert to September 2008 price.

*** The price adjustment factors adopted in April 2009 are based on the movement of prices for public sector building and construction output which increased by 8.0% in 2008 and is assumed to increase by 2.0% per annum over the period from 2009 to 2013 and by 3.0% per annum over the period from 2014 to 2019.