

For discussion
on 9 April 2003

PWSC(2003-04)8

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Environmental Hygiene – Retail markets and cooked food centres

**24NM –Retro-fitting of air-conditioning to Bowrington Road Cooked Food
Centre, Wan Chai**

Members are invited to recommend to Finance Committee the upgrading of **24NM** to Category A at an estimated cost of \$24.2 million in money-of-the-day prices for retro-fitting the air-conditioning to the Bowrington Road Cooked Food Centre, Wan Chai.

PROBLEM

The mechanical ventilation system in the Bowrington Road Cooked Food Centre, Wan Chai needs upgrading to maintain the viability of the stalls therein.

PROPOSAL

2. The Director of Architectural Services (D Arch S), with the support of the Secretary for Health, Welfare and Food, proposes to upgrade **24NM** to Category A at an estimated cost of \$24.2 million in money-of-the-day (MOD) prices for retro-fitting the air-conditioning to the Bowrington Road Cooked Food Centre, Wan Chai.

/PROJECT

PROJECT SCOPE AND NATURE

3. The scope of **24NM** comprises –
- (a) provision of air-conditioning to the Bowrington Road Cooked Food Centre;
 - (b) upgrading of electrical works including the construction of new transformer rooms;
 - (c) upgrading of fire services installation to meet current statutory requirements;
 - (d) provision of barrier-free access to meet current statutory requirements; and
 - (e) upgrading of internal finishes and drainage works.

— A site plan is at Enclosure 1 and a three-dimensional perspective drawing of the
— proposed air-conditioned Bowrington Road Cooked Food Centre is at
Enclosure 2. We plan to start the proposed works in October 2003 for completion
in December 2004.

JUSTIFICATION

4. The Bowrington Road Cooked Food Centre was built in 1979 with 12 cooked food stalls. It is provided with simple mechanical ventilation devices including ceiling fans and oscillating fans. There are openings and louvres on the external walls and roof-top to facilitate natural ventilation. The design of the ventilation system was acceptable in the old days when the building density around the Centre was low.

5. The existing ventilation system is inadequate to cope with two developments over the past two decades. First, the cluster of high-rise buildings now surrounding the Bowrington Road Cooked Food Centre has substantially lowered the level of natural ventilation around the Centre. Second, the increase in road traffic and the waste heat dispersed from air-handling units of surrounding buildings have brought about a steady rise in outdoor temperature during summer.

/6.

6. The high temperature inside the Centre during summer months has led to a noticeable reduction in patronage compared to the cooler season. An air-conditioned Bowrington Road Cooked Food Centre will enhance the attractiveness and viability of the stalls therein and provide a more comfortable environment for the patrons.

FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the project to be \$24.2 million in MOD prices (see paragraph 8 below), made up as follows –

	\$ million	
(a) Building	8.2	
(b) Building services	12.6	
(c) Consultants' fees for construction stage	2.9	
(i) contract administration	1.1	
(ii) resident site staff costs	1.8	
(d) Contingencies	2.3	
Sub-total	26.0	(in September 2002 prices)
(e) Provision for price adjustment	(1.8)	
Total	24.2	(in MOD prices)

Due to insufficient in-house resources, D Arch S proposes to engage consultants to supervise the proposed works. A breakdown by man-months of the estimate for consultants' fees is at Enclosure 3. The total floor area to be air-conditioned is about 964 square metres. D Arch S has confirmed that the estimated cost (per unit area) of retro-fitting air-conditioning for this project is comparable to that of other similar projects implemented by the Government.

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

/2003 – 2004

Year	\$ million (Sept 2002)	Price adjustment factor	\$ million (MOD)
2003 – 04	3.3	0.94300	3.1
2004 – 05	17.0	0.93003	15.8
2005 – 06	3.0	0.93003	2.8
2006 – 07	2.7	0.93003	2.5
	26.0		24.2

9. We have derived the MOD estimates on the basis of the Government's latest forecast of trend labour and construction prices for the period 2003 to 2007. We will deliver the works through a fixed-price lump-sum contract because the contract period will be less than 21 months and we can clearly define the scope of works in advance.

10. We estimate the additional annual recurrent expenditure arising from this project to be \$0.94 million.

PUBLIC CONSULTATION

11. At a meeting of the Legislative Council "Subcommittee to follow up on the outstanding capital works projects of the former municipal councils" held on 19 February 2003, we briefed Members on our plan to proceed with the retrofitting of air-conditioning to the Bowrington Road Cooked Food Centre. The Sub-committee noted that this project was supported by 91.7% of the stall lessees in the Centre. We also consulted the Wanchai District Council on 26 February 2002, and Members showed strong support for the project.

/ENVIRONMENTAL

ENVIRONMENTAL IMPLICATIONS

12. The project is not designated under the Environmental Impact Assessment Ordinance. It will not cause long term environmental impact. We have included in the project estimates the cost to implement suitable mitigation measures to control short term environmental impacts. These include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, and frequent cleaning and watering of the site.

13. At the planning and design stage, we have considered measures to reduce the generation of construction and demolition (C&D) materials. D Arch S has introduced more prefabricated building elements into the project design to reduce temporary formwork and construction waste. These include dry-wall partitioning and proprietary fittings and fixtures. In addition, we will require the contractor to use metal site hoardings and signboards so that these materials can be recycled or reused in other projects.

14. D Arch S will require the contractor to submit a waste management plan (WMP) covering appropriate measures to avoid, reduce, reuse and recycle C&D materials and will ensure compliance with the approved WMP. The disposal of public fill and C&D waste to designated public filling facilities and landfills respectively will be controlled through a trip-ticket system. The contractor will be required to separate public fill from C&D waste for disposal at appropriate facilities. D Arch S will record the disposal, reuse and recycling of C&D materials for monitoring purposes. We estimate that the project will generate about 800 cubic metres (m³) of C&D materials. Of these, we will reuse about 680m³ (85%) as fill in public filling areas¹, and dispose of the remaining 120m³ (15%) at landfills. The notional cost of accommodating C&D waste at landfill sites is estimated to be \$15,000 for this project (based on a notional unit cost² of \$125/m³).

LAND ACQUISITION

15. The project does not require land acquisition.

/BACKGROUND

¹ A public filling area is a designated part of a development project that accepts public fill for reclamation purposes. Disposal of public fill in a public filling area requires a licence issued by the Director of Civil Engineering.

² This estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90/m³), nor the cost to provide new landfills (which are likely to be more expensive) when the existing ones are filled. The notional cost estimate is for reference only and does not form part of this project estimate.

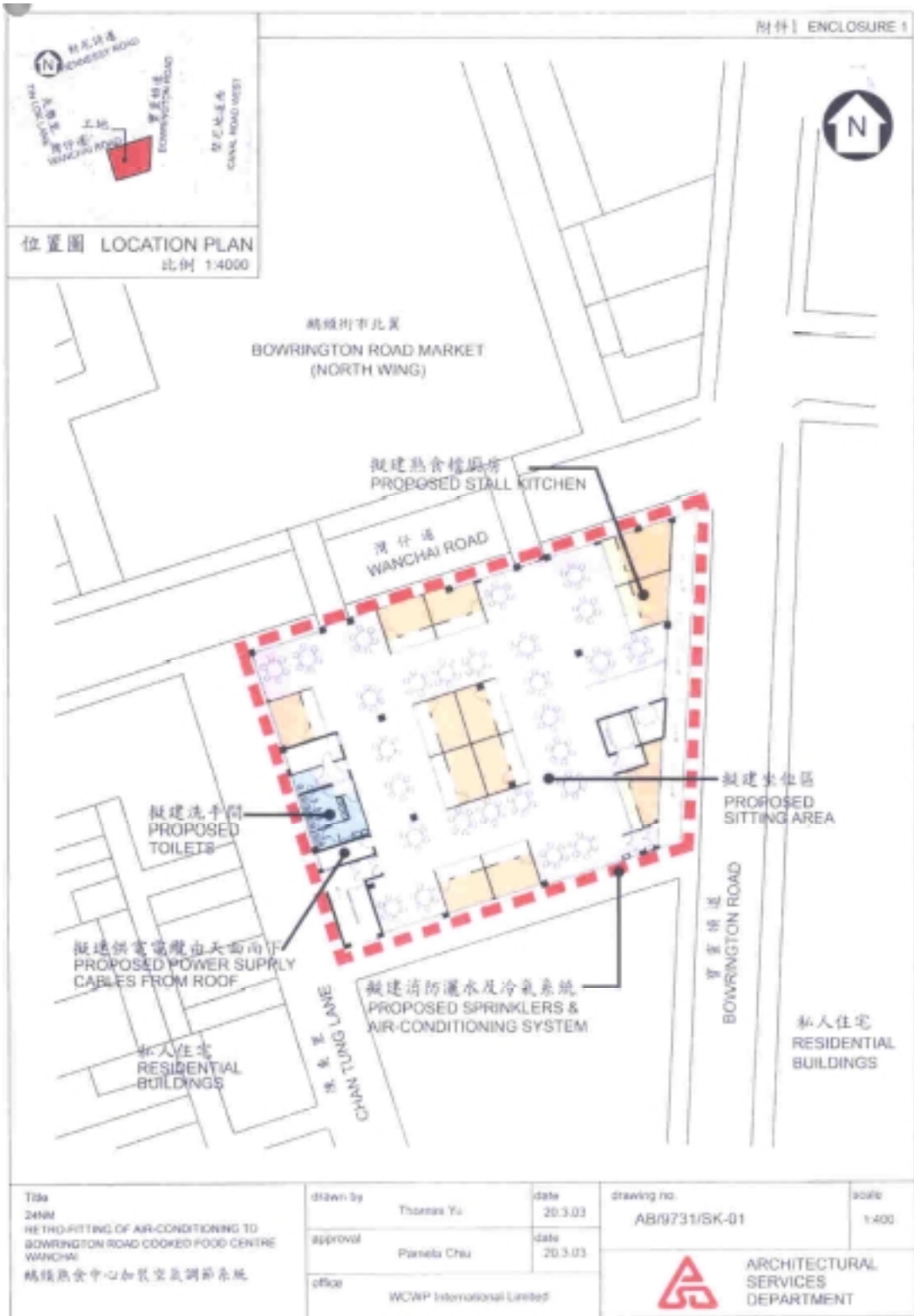
BACKGROUND INFORMATION

16. We upgraded **24NM** to Category B in October 2001. We engaged consultants to undertake detailed design and tender documentation at a total cost of \$1.32 million and charged the amount to block allocation **Subhead 3100GX** "Project feasibility studies, minor investigations and consultants' fees for items in Category D of the Public Works Programme". The consultants have completed the detailed design and tender documents.

17. At the Public Works Subcommittee and Finance Committee meetings on 8 December 1999 and 17 December 1999 respectively, the Administration agreed to review the ex-Provisional Municipal Councils' (ex-PMC) projects under planning and to proceed with the well justified ones. **24NM** is one of the ex-PMC projects recommended for implementation upon completion of the Administration's review.

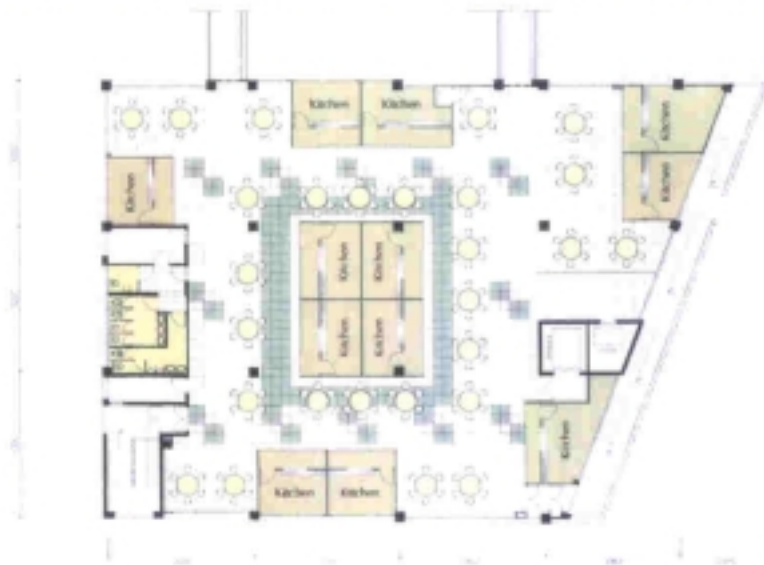
18. We estimate that the project will create some 40 jobs, comprising five professional/technical staff and 35 labourers, totalling 530 man-months.

Health, Welfare and Food Bureau
April 2003





橋頭熟食中心電腦效果圖 (南面)
COMPUTER RENDERING DRAWING OF BOWRINGTON ROAD COOKED FOOD CENTRE (SOUTHERN VIEW)



橋頭熟食中心地台磚花紋
FLOOR PATTERN OF BOWRINGTON ROAD COOKED FOOD CENTRE

Title RETRO-FITTING OF AIR-CONDITIONING TO BOWRINGTON ROAD COOKED FOOD CENTRE 橋頭熟食中心加装空调系统	drawn by Thomas Yu	date 01.4.03	drawing no. AB/9731/SK-01	scale N.T.S.
	approval Pamela Chiu	date 01.4.03	 ARCHITECTURAL SERVICES DEPARTMENT	
	office WCWP International Limited			

**24NM – Retro-fitting of air-conditioning to
Bowrington Road Cooked Food Centre, Chai Wan**

Breakdown of the estimate for consultants' fees

			Estimated	Average			Estimated
			man-	MPS*			fee
			months	salary	Multiplier	(Note 1)	(\$ million)
Consultants' staff costs							
(a)	Consultants' fees for construction stage						
(i)	Contract administration <small>(Note 2)</small>	Professional	-	-	-		0.6
		Technical	-	-	-		0.5
(ii)	Resident site staff costs <small>(Note 3)</small>	Technical	57.0	14	1.6		1.8
Total consultants' staff costs							2.9

*MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS point to estimate the cost of resident site staff supplied by the consultants. (At 1.10.2002, MPS pt. 14 = \$19,195 per month.)
2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreements for the provision of air-conditioning to existing public markets and cooked food centres. The assignment will only be executed subject to Finance Committee's approval to upgrade **24 NM** to Category A.
3. The consultants' staff cost for site supervision is based on estimates prepared by the Director of Architectural Services. We will only know the actual man-months and actual costs after completion of the construction works.