

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 711 – HOUSING

Recreation, Culture and Amenities – Open spaces

437RO – District open space adjoining Lower Ngau Tau Kok public housing redevelopment

Members are invited to recommend to Finance Committee the upgrading of **437RO** to Category A at an estimated cost of \$125 million in money-of-the-day prices for the construction of a district open space adjoining Lower Ngau Tau Kok public housing redevelopment.

PROBLEM

We need to provide more recreational facilities in the Ngau Tau Kok district to meet the needs of the community.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Transport and Housing, proposes to upgrade **437RO** to Category A at an estimated cost of \$125 million in money-of-the-day (MOD) prices for the construction of a district open space (DOS) adjoining the Lower Ngau Tau Kok (LNTK) public housing redevelopment.

/PROJECT

PROJECT SCOPE AND NATURE

3. The project covers a site area of about 1.19 hectare (ha) adjoining the public housing redevelopment at LNTK Estate. The proposed scope of works under **437RO** includes –

- (a) a 7-a-side hard-surfaced mini-soccer pitch with a covered 200-seat spectator stand;
- (b) a children's play area;
- (c) a fitness corner;
- (d) a jogging track;
- (e) sitting-out areas with arbours;
- (f) soft landscaped areas; and
- (g) ancillary facilities including a management office, changing rooms, toilets, a baby care room, store rooms and plant rooms, etc.

————— A site plan showing the conceptual layout, an artist impression of the proposed development and a site plan showing barrier-free access are at Enclosures 1 to 3. Subject to the funding approval by the Finance Committee, we plan to commence construction in December 2012 for completion in April 2015 to tie in with the scheduled completion of the adjoining public housing redevelopment in mid-2015.

JUSTIFICATION

4. The existing Lower Ngau Tau Kok Estate Playground No. 8 will be demolished by December 2012 to make way for the adjoining LNTK public housing redevelopment. Considering that Ngau Tau Kok is a densely populated residential area surrounded by public and private residential developments, such as the Upper Ngau Tau Kok Estate, On Kei Court and Amoy Garden, and that the population will further increase upon completion of the public housing redevelopment at LNTK¹, we propose to re-provision the Playground by providing a new DOS adjoining the LNTK public housing redevelopment to meet the strong local demand for recreational facilities. The proposed project will provide an additional 1.19 ha of open space to the existing 150 ha of public open space in the Kwun Tong district.

/5.

¹ The public housing redevelopment at LNTK Estate Phase 1 and 2 will have a total population of 12 000, with population intake scheduled for mid-2012 and mid-2015 respectively.

5. Due to the limited vehicular access and congested works areas for both the DOS and the adjoining LNTK public housing redevelopment, we consider it desirable from both safety and environmental considerations² to entrust the design and construction of the DOS to the Hong Kong Housing Authority (HA) for implementation. This arrangement will also allow better co-ordination of the DOS project and the adjoining public housing redevelopment to ensure timely completion of the DOS for public use. Upon completion of the DOS, HA will hand over the facilities to the Leisure and Cultural Services Department for management and maintenance.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be \$125 million in MOD prices (please see paragraph 7 below) broken down as follows –

	\$ million
(a) Site works	4.5
(b) Building	14.8
(c) Building services	10.0
(d) Drainage	4.0
(e) External works	47.2
(f) Soft landscaping works	2.0
(g) Additional energy conservation measures	1.9
(h) Furniture and equipment ³	0.9
(i) On-cost payable to Housing Authority ⁴	10.6

/(j)

² If the works for the DOS and LNTK public housing redevelopment are carried out together, they can share the same construction vehicular access, thus minimising conflict in traffic management. With more organised site operations, the risk of site accidents can be better controlled. Also, by carrying out the works together, there will be more opportunities in sorting and re-use of construction waste within the site, thus bringing environmental benefits.

³ Based on the furniture and equipment provided in existing/planned facilities of similar scale (e.g. furniture, litter bins and portable signages, etc).

		\$ million	
(j)	Contingencies	9.4	
	Sub-total	105.3	(in September 2011 prices)
(k)	Provision for price adjustment	19.7	
	Total	125.0	(in MOD prices)

We consider the estimated project cost reasonable as compared with similar projects built by the Government.

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

Year	\$ million (Sept 2011)	Price adjustment factor	\$ million (MOD)
2012 – 13	2.0	1.05325	2.1
2013 – 14	30.0	1.11118	33.3
2014 – 15	40.0	1.17229	46.9
2015 – 16	16.0	1.23677	19.8
2016 – 17	13.0	1.30479	17.0
2017 – 18	4.3	1.37656	5.9
	105.3		125.0

8. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period 2012 to 2018. HA will deliver the construction works through a lump-sum contract which covers works for both the DOS and the public housing redevelopment Phase 2 because we can clearly define the scope of the works in advance. The contract will provide for price adjustments.

/9.

⁴ On-cost payable to HA for the entrusted works will be 12.5% of the estimated construction cost.

9. We estimate the annual recurrent expenditure arising from this project to be \$2.7 million.

PUBLIC CONSULTATION

10. We consulted the Kwun Tong District Council (KTDC) on the proposed redevelopment of LNTK Estate in November 2006. Members supported early implementation of the DOS to tie in with the completion of the adjoining public housing redevelopment.

11. We consulted the District Facilities Management Committee of the KTDC on 15 March 2012. The Committee supported the project.

12. We consulted the Legislative Council Panel on Housing on 17 April 2012. Members did not raise any objection to the project.

ENVIRONMENTAL IMPLICATIONS

13. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The project 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.

14. During construction, we shall ensure that mitigation measures will be included by HA in the contract to control noise, dust and site run-off nuisances to within established standards and guidelines. These include the use of silencers, mufflers, acoustic lining or shields and the building of barrier wall for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.

15. At the planning and design stages, we have required HA to consider measures (e.g. using metal site hoardings and signboards so that these materials can be recycled or reused in other projects) to reduce the generation of construction waste where possible. In addition, HA will require the contractor to reuse inert construction waste (e.g. use of excavated materials for filling within the site) on site or in other suitable construction sites as far as possible, in order to minimize the disposal of inert construction waste at public fill reception facilities⁵. HA will encourage the contractor to maximize the use of recycled / recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

16. At the construction stage, HA 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. HA will ensure that the day-to-day operations on site comply with the approved plan. HA will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. HA will also 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.

17. We estimate that the project will generate in total about 11 090 tonnes of construction waste. Of these, we will reuse about 4 100 tonnes (37%) of inert construction waste on site and deliver 6 700 tonnes (60.4%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 290 tonnes (2.6%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$0.2 million for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne⁶ at landfills).

/HERITAGE

⁵ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

⁶ 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 per m³), nor the cost to provide new landfills (which is likely to be more expensive), when the existing ones are filled.

HERITAGE IMPLICATIONS

18. This project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interests and Government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

19. The project does not require any land acquisition.

ENERGY CONSERVATION MEASURES

20. This project has adopted various forms of energy efficient features, including -

- (a) T5 energy efficient fluorescent tubes with electronic ballast and lighting control by occupancy sensors and daylight sensors; and
- (b) light-emitting diode (LED) type exit signs and feature lights.

21. For renewable energy technologies, we will adopt solar hot water system and solar park lighting for environmental benefits.

22. For greening features, we will provide greening on the appropriate roofs and facades of the building for environmental and amenity benefits.

23. For recycled features, we will adopt a rainwater recycling system for landscape irrigation.

24. The total estimated additional cost for adopting the above energy conservation measures is around \$1.9 million (including \$8,000 for energy efficient features), which has been included in the cost estimate of the project. The energy efficient features will achieve 1.2% energy savings in the annual energy consumption with a payback period of about 4.6 years.

/BACKGROUND

BACKGROUND INFORMATION

25. We upgraded **437RO** to Category B in September 2010. We engaged HA to carry out site investigation of the project in April 2012 at an estimated cost of \$0.593 million under the block allocation **Subhead B100HX** “Minor housing development related works, studies and investigations for items in Category D of the Public Works Programme”.

26. There is one existing tree within the project boundary which will be preserved. We will incorporate planting proposals as part of the project, including the planting of about 120 trees, 4 000 shrubs, 6 000 ground covers and 200 climbers.

27. We estimate that the proposed works will create about 57 jobs (52 for labourers and another 5 for professional/technical staff) providing a total employment of 1 220 man-months.

Transport and Housing Bureau
May 2012



PROJECT TITLE
437RO 毗鄰牛頭角下邨公共房屋重建的地區休憩用地
DISTRICT OPEN SPACE ADJOINING LOWER NGAU TAU KOK
PUBLIC HOUSING REDEVELOPMENT

DRAWING TITLE
規劃概念圖
CONCEPTUAL LAYOUT PLAN

DRAWING NO.
KL/49/6/SITE/A/LO-01/PWSC

SCALE
1:1000 (A4)

SOURCE
KL/49/6/SITE/A/LO-01



日期: 2012年5月30日



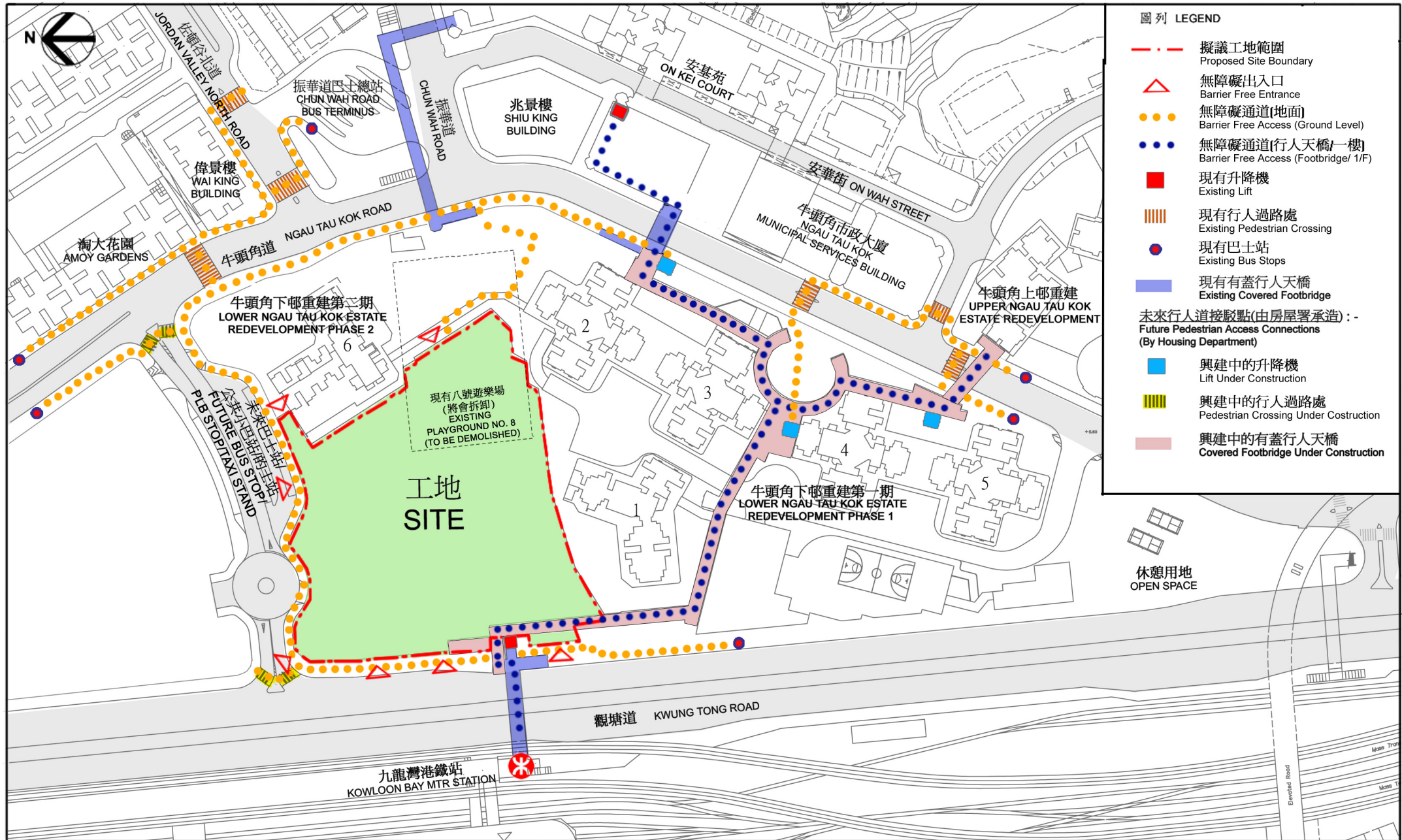
PROJECT TITLE
437RO 毗鄰牛頭角下邨公共房屋重建的地區休憩用地
DISTRICT OPEN SPACE ADJOINING LOWER NGAU TAU KOK
PUBLIC HOUSING REDEVELOPMENT

DRAWING TITLE
從東北面鳥瞰休憩用地構思圖
BIRD'S EYE VIEW OF THE OPEN SPACE
FROM NORTHEAST DIRECTION

DRAWING NO.
KL/49/6/SITE/A/LO-02/PWSC
SCALE
N/A
SOURCE
KL/49/6/SITE/A/LO-01

 房屋署
HOUSING DEPARTMENT
日期: 2012年5月30日

(備註: 只供討論及參考, 最終設計可能會因應需要而更改。) REMARKS: FOR REFERENCE ONLY AND SUBJECT TO CHANGE WHEN NECESSARY.



PROJECT TITLE
437RO 毗鄰牛頭角下邨公共房屋重建的地區休憩用地
DISTRICT OPEN SPACE ADJOINING LOWER NGAU TAU KOK
PUBLIC HOUSING REDEVELOPMENT

DRAWING TITLE
無障礙通道平面圖
LAYOUT OF
THE BARRIER FREE ACCESS

DRAWING NO.
KL/49/6/SITE/A/LO-03/PWSC
SCALE
1:2000(A4)
SOURCE
KL/49/6/SITE/A/LO-01

房屋署
HOUSING DEPARTMENT
日期: 2012年5月30日