

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT
Kowloon Development
Civil Engineering – Land development
**465CL – South East Kowloon development – waterfront facilities and Kai
Tak Nullah/Kwun Tong typhoon shelter reclamation**

Members are invited to recommend to Finance
Committee –

- (a) the upgrading of part of **465CL**, entitled “South East Kowloon development – consultants’ fees and site investigation for waterfront facilities and Kwun Tong typhoon shelter reclamation”, to Category A at an estimated cost of \$81.2 million in money-of-the-day prices; and
- (b) the retention of the remainder of **465CL** in Category B.

PROBLEM

We need to carry out site investigation and detailed design for the planned waterfront facilities and reclamation at Kwun Tong typhoon shelter (KTTS) as part of the South East Kowloon Development (SEKD).

/PROPOSAL

PROPOSAL

2. The Director of Territory Development (DTD), with the support of the Secretary for Planning and Lands, proposes to upgrade part of **465CL** to Category A at an estimated cost of \$81.2 million in money-of-the-day (MOD) prices for site investigation and engagement of consultants to carry out detailed design for waterfront facilities and reclamation at KTTS.

PROJECT SCOPE AND NATURE

3. The scope of **465CL** comprises –

Kai Tak Approach Channel (KTAC)

- (a) treatment of the contaminated sediments (including pilot tests and post-treatment monitoring) in KTAC;
- (b) reclamation of about 28 hectares in KTAC;
- (c) construction of new drainage systems (including widening and extension of Kai Tak Nullah and Jordan Valley box culvert, advance work for future road tunnels underneath the box culverts) and improvements to existing drainage systems necessitated by the proposed reclamation in KTAC;
- (d) demolition of the existing airport taxiway bridge across KTAC;

Kwun Tong and Cha Kwo Ling

- (e) treatment of the contaminated sediments (including post-treatment monitoring) in KTTS;
- (f) reclamation of about 37 hectares in KTTS and Cha Kwo Ling and construction of associated seawalls;
- (g) construction of new drainage culverts and improvements to existing drainage systems necessitated by the proposed reclamation in KTTS and Cha Kwo Ling;

/(h)

- (h) demolition of Kwun Tong passenger ferry pier, and demolition and reprovisioning of waterfront marine facilities at Kwun Tong and Cha Kwo Ling including Kwun Tong vehicular ferry pier and public pier;
- (i) formation of land for refuse transfer station and public filling barging point;
- (j) construction of public transport facilities; and
- (k) construction of basic infrastructure to serve new marine facilities and reprovisioned piers.

4. Part of **465CL** was upgraded to Category A in November 2001 as **693CL** for site investigation and engagement of consultants to undertake detailed design for the works at KTAC described in paragraphs 3(a) – 3(d) above. The part of the project we now propose to upgrade to Category A comprises site investigation and engagement of consultants to carry out detailed design, Environmental Impact Assessment (EIA) study and preparation of tender documents for the works at KTTS and Cha Kwo Ling described in paragraphs 3(e) – 3(k) above including the necessary related environmental mitigation measures and implementation of an environmental monitoring and audit programme. A site plan showing details of the works is at Enclosure 1.

JUSTIFICATION

5. KTTS is at the downstream of KTAC. Similar to KTAC, although to a lesser extent, the water in KTTS has been heavily polluted by improper sewage and industrial discharges in the past. A large amount of sediments containing high concentrations of organic matter and heavy metals have been deposited on the seabed. This results in water pollution and the emission of obnoxious odour in KTTS, causing much environmental nuisance. For environmental reasons, there is a need to treat the contaminated sediments to permanently remove the bad odour. The treatment work will also eliminate potential risk of methane generation to the planned development on the KTTS reclamation.

6. Under the revised SEKD scheme, the proposed reclamation in KTTS and Cha Kwo Ling will provide about 37 hectares of land to accommodate facilities including housing development, hospital, schools, open space, waterfront promenade, which form an integral part of the SEKD scheme. We will construct the necessary engineering infrastructure to support the development on the KTTS reclamation and improve the existing sewerage system and drainage systems in the hinterland necessitated by the proposed reclamation.

7. The proposed reclamation at KTTS and Cha Kwo Ling will also provide land for the construction of a section of Trunk Road T2 which forms part of Route 11¹. To meet the planned completion of Route 11 by 2011, we need to commence construction of the section of Trunk Road T2 by 2007.

8. The proposed reclamation will affect a number of existing marine and waterfront facilities at KTTS. We will demolish the existing vehicular ferry pier, public pier and passenger ferry pier. We will re-provision the vehicular ferry pier and the public pier to the new waterfront. We have decided not to re-provision the passenger ferry pier due to low patronage forecast. We will reserve a continuous strip of new land formed along the waterfront to create an attractive promenade for public enjoyment. The promenade will connect to the tourism node at the tip of the former runway and be funded under a separate project.

9. To ensure timely delivery of the reclaimed land for the planned developments and for the construction of Trunk Road T2, we need to start the site investigation and detailed design in November 2002 for completion in May 2005. This will enable construction of the proposed works described in paragraphs 3(e) – 3(k) above to commence in phases from June 2005 for completion in stages from 2007 to 2015.

FINANCIAL IMPLICATIONS

10. We estimate the capital cost of the project to be \$81.2 million in MOD prices (see paragraph 11 below), made up as follows –

/(a)

¹ Route 11 is a strategic highway comprising Central Kowloon Route, Trunk Road T2 and Western Coast Road, linking West Kowloon and Tseung Kwan O.

	\$ million	
(a) Site investigation works	20.0	
(b) Consultants' fees for	55.0	
(i) supervision of site investigation works	2.0	
(ii) EIA study	7.4	
(iii) detailed design	42.0	
(iv) preparation of tender documents	3.6	
(c) Contingencies	7.5	
	<hr/>	
Sub-total	82.5	(in September 2001 prices)
(d) Provision for price adjustments	(1.3)	
	<hr/>	
Total	81.2	(in MOD prices)
	<hr/>	

Due to insufficient in-house resources, DTD proposes to engage consultants to supervise the site investigation works and to carry out EIA study, detailed design and prepare tender documents. A breakdown by man-months of the estimate for the consultants' fees is at Enclosure 2.

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

Year	\$ million (Sept 2001)	Price adjustment factor	\$ million (MOD)
2002 - 2003	4.0	0.98625	3.9

/2003 - 2004

2003 - 2004	40.0	0.98378	39.4
2004 - 2005	25.0	0.98378	24.6
2005 - 2006	<u>13.5</u>	0.98378	<u>13.3</u>
	<u>82.5</u>		<u>81.2</u>

12. We have derived the MOD estimate on the basis of the Government's latest forecast of trend labour and construction prices for the period 2002 to 2006. We will award the proposed consultancy on a lump sum basis with provision for price adjustments as the consultancy period will exceed 12 months. We will tender the site investigation works under a standard remeasurement contract because the amount of works involved may vary depending on actual ground conditions. The contract will not provide for price adjustments as the contract period will not exceed 21 months.

13. The proposed site investigation works and consultancy have no recurrent financial implications.

PUBLIC CONSULTATION

14. We consulted the Legislative Council Panel on Planning, Lands and Works (PLW) on 8 June 2000 in respect of the SEKD Preliminary Layout Plan. Members supported the plan in general.

15. We consulted the Kwun Tong, Wong Tai Sin and Kowloon City District Councils on 11 June 2001, 12 June 2001 and 14 June 2001 respectively. All the District Councils had no adverse comments on the SEKD scheme. In response to Members' request, we would report major progress of SEKD to the relevant District Councils and try to minimise the impact of construction activities on adjacent built up areas. We would also provide to Members further details of the development proposals when available.

16. We gazetted the amended draft Kai Tak (North) and Kai Tak (South) Outline Zoning Plans (OZPs) under the Town Planning Ordinance on 24 August 2001. We received 40 objections of which five were subsequently withdrawn. Most of the objectors were not against the overall SEKD scheme, but sought further deliberation on the detailed proposals set out in the OZPs. The Town Planning Board, after hearing the remaining objections in March 2002, decided to propose amendments to partially meet some of the objections. On 26 April 2002, we gazetted the amendments to the Kai Tak (South) OZP to allow more flexibility in developing the waterfront areas. We received 17 objections. After considering these objections, the Town Planning Board decided not to propose any amendments to the OZP. We will seek approval from the Chief Executive in Council on the OZP in late June 2002.

17. We circulated an information paper on the proposed site investigation and detailed design to the LegCo Panel on PLW on 12 June 2002.

ENVIRONMENTAL IMPLICATIONS

18. The proposed site investigation works and consultancy will not have environmental implications. We will implement standard environmental pollution control measures to control the environmental impacts of the associated site investigation works.

19. The EIA Report completed as part of the comprehensive feasibility study for the revised SEKD scheme under **440CL** “South East Kowloon development – comprehensive feasibility study” was presented to the EIA Subcommittee of the Advisory Council on the Environment (ACE) on 3 September 2001. It was endorsed by ACE without conditions on 17 September 2001 and approved by the Director of Environmental Protection under the EIA Ordinance on 25 September 2001. We will carry out a separate detailed EIA study of the proposed reclamation under Schedule 2 of the EIA Ordinance. We will incorporate all the mitigation measures recommended in the detailed EIA report into the detailed design and relevant works contracts. We will also obtain the necessary environmental permit before construction.

20. The proposed site investigation works and consultancy will only generate a minimal amount of construction and demolition (C&D) materials. We will require the consultants to fully consider measures to minimise the generation of C&D materials and to reuse/recycle them as much as possible during implementation of the construction works in future.

/LAND

LAND ACQUISITION

21. The proposed site investigation works and consultancy do not require any land acquisition.

BACKGROUND INFORMATION

22. We included **465CL** in Category B of the Public Works Programme in September 1996 for the engineering and re-provisioning works associated with the reclamation of KTAC and KTTS. The works form part of the SEKD scheme.

23. The SEKD feasibility consultancy study was completed in December 1998. In view of the large number of objections to the scale of the proposed reclamation, we had conducted a series of extensive public consultations to collect views on the SEKD scheme. We carried out a quick review under the same consultancy agreement in March 1999 to determine the minimum practicable reclamation option. The review recommended reducing the reclamation size for the development from 299 hectares to 161 hectares.

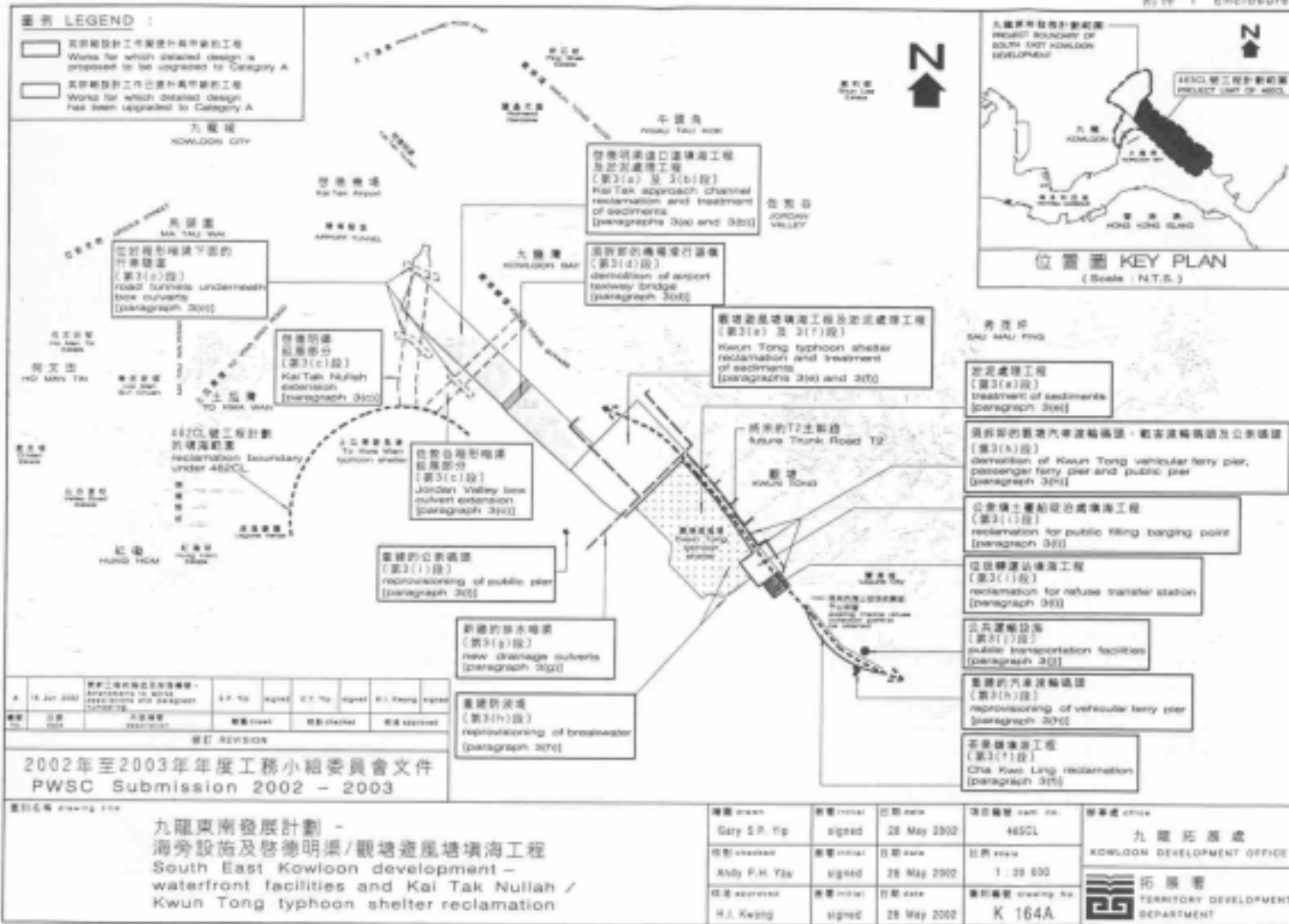
24. In November 1999, we commenced a separate consultancy to conduct the comprehensive feasibility study for the revised SEKD scheme, based on the smaller reclamation scenario. The study was completed in June 2001. We propose to further reduce the reclamation size from 161 hectares to 133 hectares.

25. On 23 November 2001, the Finance Committee approved the upgrading of part of **465CL** to Category A as **693CL** "South East Kowloon development - consultants' fees and site investigation for Kai Tak Approach Channel reclamation", at an estimated cost of \$63.8 million in MOD prices. We commenced works in January 2002 for completion in July 2003.

26. At the Public Works Subcommittee (PWSC) meeting held on 31 October 2001, some Members suggested and the Administration agreed to include information in future SEKD PWSC submissions on the progress, scope and approved project estimates of all the SEKD PWP items. The information was forwarded to Members along with the information note to LegCo PLW Panel on 12 June 2002. A copy of the information note is at Enclosure 3.

27. We estimate that the proposed site investigation and detailed design work will create some 38 jobs comprising 23 professional/technical staff and 15 labourers, totalling 890 man-months.

Planning and Lands Bureau
June 2002



圖例 LEGEND :

- 其詳細設計工作擬於中期前完成之工程
Works for which detailed design is proposed to be progressed to Category A
- 其詳細設計工作已獲評為中期前完成之工程
Works for which detailed design has been approved to Category A

位於現有橋樑下面的
行人隧道
(第3(c)段)
Road tunnels underneath
bridge structure
(Paragraph 300)

外港碼頭
北邊部分
(第3(c)段)
Kai Tak Nullah
extension
(Paragraph 300)

442公頃工程計劃
的填海範圍
Reclamation boundary
under 442CL

位於現有橋樑
橋基部分
(第3(c)段)
Jordan Valley low
culvert extension
(Paragraph 300)

重建的公眾碼頭
(第3(i)段)
Reconstruction of public pier
(Paragraph 300)

新建的排水暗渠
(第3(g)段)
New drainage culverts
(Paragraph 300)

重建的防洪
(第3(h)段)
Reconstruction of breakwater
(Paragraph 300)

葵德明渠進口填海工程
及淤泥處理工程
(第3(a)及3(b)段)
Kai Tak approach channel
reclamation and treatment
of sediments
(Paragraphs 300 and 300)

葵德明渠橋樑行車橋
(第3(d)段)
Demolition of airport
railway bridge
(Paragraph 300)

觀塘避風塘填海工程及淤泥處理工程
(第3(a)及3(f)段)
Kwun Tong typhoon shelter
reclamation and treatment
of sediments
(Paragraphs 300 and 300)

將來的T2主幹路
Avenue 2 Road T2

葵德
KWUN TONG

葵德碼頭
Kwun Tong
Wharf

葵德碼頭
Kwun Tong
Wharf



葵德碼頭
SAU SAMU WHARF

淤泥處理工程
(第3(e)段)
Treatment of sediments
(Paragraph 300)

葵德碼頭
SAU SAMU WHARF

葵德碼頭
SAU SAMU WHARF

葵德碼頭
SAU SAMU WHARF

編號	日期	修訂內容	修訂人	日期	修訂內容	修訂人	日期	修訂內容	修訂人
A	14 Jun 2002	修訂工程名稱及修訂範圍 - Amendments to title description and paragraph numbering	S.P. Yip	signed	C.T. Yip	signed	H.L. Kwong	signed	

2002年至2003年年度工務小組委員會文件
PWSC Submission 2002 - 2003

九龍東南發展計劃 -
海旁設施及葵德明渠/觀塘避風塘填海工程
South East Kowloon development -
waterfront facilities and Kai Tak Nullah /
Kwun Tong typhoon shelter reclamation

項目編號	項目名稱	簽署	日期	項目編號	項目名稱	簽署	日期
442CL	葵德碼頭	Gary S.P. Yip	signed 28 May 2002	K 164A	葵德碼頭	H.L. Kwong	signed 28 May 2002
1 : 20 000	葵德碼頭	Andy P.H. Yip	signed 28 May 2002				



**465CL – South East Kowloon development – waterfront facilities and
Kai Tak Nullah/Kwun Tong typhoon shelter reclamation**

Breakdown of the estimate for consultants' fees

Consultants' staff costs		Estimated man- months	Average MPS* salary point	Multiplier	Estimated fees (\$ million)
(a) Supervision of site investigation	Professional	9	38	1.7	0.9
	Technical	33	14	1.7	1.1
(b) EIA study	Professional	36	38	2.4	5.2
	Technical	47	14	2.4	2.2
(c) Detailed design	Professional	203	38	2.4	29.4
	Technical	269	14	2.4	12.6
(d) Preparation of tender documents	Professional	15	38	2.4	2.2
	Technical	30	14	2.4	1.4
Total consultants' staff costs					55.0

* MPS = Master Pay Scale

Notes

- (1) A multiplier of 2.4 is applied to the average MPS point to estimate the full staff costs including the consultants' overheads and profit, as the staff will be employed in the consultants' offices. A multiplier of 1.7 is applied in the case of site staff supplied by the consultants. (At 1.4.2001, MPS pt. 38 = \$60,395 per month and MPS pt. 14 = \$19,510 per month)
- (2) The figures given above are based on estimates prepared by the Director of Territory Development. We will only know the actual man-months and fees when we have selected the consultants through the usual competitive lump sum fee bid system.

For information

**LEGISLATIVE COUNCIL PANEL ON
PLANNING, LANDS & WORKS**

**Detailed Design for Further Works in
South East Kowloon Development (SEKD)**

PURPOSE

This paper informs Members of our proposal to commission detailed design and site investigation works for reclamation in Kowloon Bay area and Kwun Tong typhoon shelter.

BACKGROUND

2. With funding approval by the Finance Committee in January 2002, we started detailed design and site investigation works for reclamation at Kai Tak Approach Channel and planned infrastructures at the north apron of the former Kai Tak Airport. We are making good progress with the design works. A brief account of progress of works packages previously upgraded to Category A is at **Annex 1**.

DETAILED DESIGN FOR FURTHER WORKS IN SEKD

3. To tie in with the development programme, we plan to commence detailed design and site investigation of the works packages below in end 2002 for completion in end 2004/early 2005. The locations of the following two works packages are shown in **Annex 2**.

465CL/B: South East Kowloon Development – Waterfront Facilities and Kai Tak Nullah/Kwun Tong Typhoon Shelter Reclamation

We propose to carry out reclamation in the inner part of Kwun Tong typhoon shelter and Cha Kwo Ling to provide 37 hectares of land to accommodate Trunk Road T2¹ and other planned developments including a hospital, schools, open spaces, a waterfront promenade. In order to improve the water quality of Kwun Tong typhoon shelter, treatment of contaminated sediment will be carried out. The project also includes improvement works on the existing drainage system and reprovisioning of marine facilities affected by reclamation works.

482CL/B : Kowloon Bay Reclamation – Early Development Package

The works package of 482CL comprises reclamation and essential infrastructure works in Kowloon Bay area. The reclamation will provide 61 hectares of land for the future Central Kowloon Route (CKR), schools, a waterfront promenade, and a metropolitan park. The proposed contaminated sediment treatment works will not only permanently remove the bad odour caused by water pollution but also eliminate potential risk of methane generation to the planned development on the Kowloon Bay Reclamation area. The project also includes construction of new sewerage and drainage facilities for the proposed developments, along with improvement works on the existing sewerage and drainage systems. The proposed reclamation will be implemented with public fill materials, which will help mitigate the receptor site shortage problem.

¹ Trunk Road T2, which is part of the strategic highway Route 11, will link Central Kowloon Route from the west and Western Coast Road from the east. After completion, Route 11 will connect West Kowloon Reclamation Area to Tseung Kwan O.

4. While Trunk Road T2 will help meet the traffic demand of TKO area, the proposed CKR will relieve the traffic congestion problem in the existing east-west road network² in Central Kowloon. Since the Administration is considering advancing the completion date of Route 11, we need to start detailed design and site investigation for reclamation in Kowloon Bay area and Kwun Tong typhoon shelter as soon as possible, so as to ensure timely delivery of land for construction of the above trunk roads.

PUBLIC CONSULTATION

5. We have consulted the Kowloon City, Wong Tai Sin and Kwun Tong District Councils in mid-2001 on the development scheme for SEKD. The District Councils generally supported the SEKD scheme and urged the Government to expedite implementation of related works.

6. The proposed amendments on the draft Kai Tak (North) and Kai Tak (South) Outline Zoning Plans (OZPs) were gazetted on 26 April 2002. The Chief Executive in Council will consider the objections in June 2002.

WAY FORWARD

7. We plan to seek the Public Works Sub-committee's support to upgrade the detailed design and site investigation works for PWP items 465CL and 482CL mentioned in paragraph 3 above (at an estimated cost of \$94.1 million and \$106 million respectively in MOD prices) to Category A at its meeting on 26 June 2002.

² Critical road junctions in the east-west road network in Central Kowloon include Boundary Street, Argyle Street, Waterloo Road, Chatham Road and Gascogine Road Flyover.

8. We would be pleased to brief Members on the details of the project if necessary.

ATTACHMENTS

Annex 1 List of PWP items in Category A under SEKD projects

Annex 2 Locations of 465CL and 482CL Work Packages

Planning and Lands Bureau

June 2002

List of PWP items in Category A under SEKD projects

PWP Item No.	440CL
Project title:	South East Kowloon development – comprehensive feasibility study
Date of upgrading to Category A:	April 1995
Approved project estimate:	\$220 million
Project scope:	The project comprises a comprehensive feasibility study for the whole South East Kowloon area, as well as associated laboratory testing and site investigation works.
Brief account of progress:	<p>(a) The comprehensive feasibility study has been completed. The land use proposals recommended in the study have been translated onto the amended Kai Tak (North) and Kai Tak (South) Outline Zoning Plans which were gazetted in August 2001.</p> <p>(b) With a view to advancing the completion date, we are reviewing the implementation programme for the cruise terminal and tourism node. Findings are expected to be available in August 2002.</p>

PWP Item No. **494CL**

Project title: South East Kowloon development at Kai Tak Airport – decontamination and site preparation

Date of upgrading to Category A: February 1998

Approved project estimate: \$316.9 million

Project scope: (a) ground decontamination at the north apron of Kai Tak Airport (NAKTA);

(b) demolition of existing buildings and structures in the northern part of NAKTA; and

(c) breaking up of the existing apron slab and land formation at NAKTA for housing development.

Brief account of progress: The civil engineering contract covering the above works was substantially completed in April 2002. Part of the site has already been handed over to the Housing Department for public housing development.

PWP Item No. **693CL**

Project title: South East Kowloon development – consultants’ fees and site investigation for Kai Tak Approach Channel reclamation

Date of upgrading to Category A: November 2001

Approved project estimate: \$63.8 million

Project scope: Site investigation works and detailed design for –

(a) treatment of the contaminated sediments (including pilot tests and post-treatment monitoring) in Kai Tak Approach Channel (KTAC);

- (b) reclamation works in KTAC;
- (c) new drainage systems (including widening and extension of Kai Tak Nullah and Jordan Valley box culvert, advance work for future road tunnels underneath the box culverts) and improvements to existing drainage systems necessitated by the proposed reclamation in KTAC;
- (d) demolition of the existing airport taxiway bridge across KTAC; and
- (e) provision of necessary environmental mitigation measures and implementation of an EM&A programme.

Brief account of progress:

- (a) Detailed design started in January 2002.
- (b) Statutory procedures under the EIA Ordinance have been initiated. We have obtained a Schedule 2 EIA Study Brief from EPD. The study has just started.
- (c) We have circulated a consultation paper on the proposed reclamation works and roadworks to the Kwun Tong District Council. Members have no objection to the proposal.
- (d) Arrangements are being made to collect contaminated sediment samples for laboratory testing. The tests will be conducted by both local and overseas laboratories.

PWP Item No.	694CL
Project title:	South East Kowloon development at Kai Tak Airport – consultants’ fees and site investigation
Date of upgrading to Category A:	November 2001
Approved project estimate:	\$115.9 million
Project scope:	Site investigation works and detailed design for – <ul style="list-style-type: none"> (a) about 6 kilometres box culverts; (b) new roads including flyovers and pedestrian streets, and upgrading of existing roads and associated drainage, sewerage and watermains; (c) five sewage pumping stations and rising mains to convey sewage to the existing To Kwa Wan sewage treatment plant; (d) drainage maintenance depots along with provision of plant and equipment for servicing the mega sized drainage culverts in NAKTA; (e) open space development and landscaping works; (f) demolition of remaining ex-airport facilities, including Kai Tak Car-parking Building and Passenger Terminal Building; and (g) provision of necessary environmental mitigation measures and implementation of an EM&A programme.
Brief account of progress:	<ul style="list-style-type: none"> (a) Detailed design started in January 2002. (b) Statutory procedures under the EIA Ordinance have been initiated. We have applied a Schedule 2 EIA study brief from EPD.

