

## ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

**HEAD 707 - NEW TOWNS AND URBAN AREA DEVELOPMENT**  
**Hong Kong Island and Islands Development**  
**Civil Engineering - Land development**  
**343CL - Central reclamation phase III - engineering works**

Members are invited to recommend to Finance Committee the upgrading of **343CL** to Category A at an estimated cost of \$3,561.5 million in money-of-the-day prices for implementation of the Central reclamation phase III.

### **PROBLEM**

We need to implement the proposed Central reclamation phase III (CRIII) to provide land for the construction of the much needed Central-Wan Chai Bypass (CWB), other infrastructural facilities, and a world-class waterfront promenade for public enjoyment.

### **PROPOSAL**

2. The Director of Territory Development (DTD), with the support of the Secretary for Planning and Lands and Secretary for Transport, proposes to upgrade **343CL** to Category A at an estimated cost of \$3,561.5 million in money-of-the-day (MOD) prices for reclamation of about 18 hectares (ha) of land and construction of the road network, drainage and sewerage systems together with other land and marine transport facilities for CRIII.

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**PROJECT SCOPE AND NATURE**

3. The scope of **343CL** comprises –
- (a) reclamation of about 18 ha of seabed from the “Star” Ferry Piers at Central to Lung King Street including construction of about 1.2 kilometres (km) of seawalls;
  - (b) construction of primary distributor Roads P1 and P2 of about 1.1 km in total length, including a 200-metre (m) depressed road/underpass, and other district distributor roads D5, D6, D7, D8, D9 and D11 of about 1.4 km in total length;
  - (c) construction of a network of emergency vehicular access (EVA) cum promenade of about 1.3 km in total length;
  - (d) construction of three at-grade public transport interchanges and drop-off facility;
  - (e) construction of a footbridge of about 300 m and an at-grade covered walkway of about 120 m;
  - (f) construction of associated footpaths and roadside amenities;
  - (g) construction of associated stormwater drainage and sewerage works;
  - (h) construction of stormwater box culverts of about 925 m in total length and hinterland drainage improvement works to cope with the proposed reclamation;
  - (i) construction of a berth of about 150 m and associated facilities for use by the Chinese People’s Liberation Army Forces Hong Kong;
  - (j) refurbishment of the existing Ferry Pier No. 7 and construction of a new Ferry Pier No. 8 and associated structures for reprovisioning of the “Star” Ferry Piers to be affected by the proposed reclamation;

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- (k) construction of two public piers No. 9 and 10 and associated facilities for reprovisioning the Queen's Pier and other public landing steps to be affected by the proposed reclamation;
- (l) construction of new waterfront pumping station structures to be reserved for the future cooling water pumping systems of planned developments at CRIII;
- (m) reprovisioning of the Government and private cooling water pumping systems to be affected by the proposed reclamation;
- (n) relocation of the Tamar government helipad to be affected by the proposed roads to Wan Chai Basin, and relocation of the Public Cargo Working Area (PCWA) at Wan Chai Basin to be affected by the proposed helipad relocation to Chai Wan Basin;
- (o) interim landscaping works to vacant development sites formed;
- (p) implementation of an environmental monitoring and audit (EM&A) programme for the works mentioned in items (a) to (o) above; and
- (q) employment of project-specific, temporary staff in the Territory Development Department (TDD) for the delivery of works in relation to CRIII.

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————— Details of the proposed works are at Enclosure 1 (extent of reclamation and underground facilities) and Enclosure 2 (roads and above-ground facilities).

## JUSTIFICATION

4. We need to implement the proposed CRIII to provide the necessary land for construction of the following transport infrastructure and development –

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- (a) Central-Wan Chai Bypass (CWB) under **579TH** “Central-Wan Chai Bypass and Island Eastern Corridor Link” to be implemented by Highways Department;
- (b) Hong Kong Station extended overrun tunnel (HOKEOT) of Mass Transit Railway Corporation Limited (MTRCL);
- (c) North Hong Kong Island Line (NIL) of MTRCL;
- (d) other supporting roads network under this project; and
- (e) a world-class waterfront promenade to be implemented under separate projects to be created.

5. CWB is a strategic road linking the Rumsey Street Flyover with the Island Eastern Corridor via the Island Eastern Corridor Link (IECL). CWB and IECL (both under **579TH**) will form a parallel and complementary route to existing network to relieve the traffic burden of Connaught Road Central/Harcourt Road/ Gloucester Road on Hong Kong Island. At present, there is regular traffic congestion along the north shore corridor during peak hours, with the volume to capacity (v/c) ratio<sup>1</sup> at Gloucester Road/Harcourt Road at about 1.1. We predict that without CWB and IECL, the v/c ratio on the most critical section of Gloucester Road during the peak hours would exceed 1.4 in 2011. With the completion of CWB and IECL, the v/c ratio on the most critical section of Gloucester Road could be reduced to 0.9 and traffic congestion could be relieved. To avoid future gridlock, the Director of Highways plans to complete CWB and IECL in 2012.

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<sup>1</sup> The v/c ratio is a performance indicator for a road link. A v/c ratio equals to or less than 1.0 means that the road has sufficient capacity to cope with the volume of vehicular traffic under consideration and the resultant traffic will flow smoothly. A v/c ratio above 1.0 indicates the onset of mild congestion; above 1.2 indicates more serious congestion with traffic speeds progressively deteriorating with further increase in traffic.

6. At present, both the MTRCL Tung Chung Line (TCL) and Airport Express Line (AEL) are running on seven-car trains. There is now only a short overrun tunnel of about 84 m in length at the Hong Kong Station to provide a buffer in case a train overruns the platform. This existing overrun tunnel can only suit the operation of seven-car trains at a service frequency of five minutes for TCL and 10 minutes for AEL. Since the TCL and AEL should in the long term run on eight-car and ten-car trains respectively for full operation, MTRCL needs to extend the existing overrun tunnel by about 500 m in order to accommodate full length trains and allow turn back of trains beyond the station. Upon completion of HOKEOT at the Hong Kong Station, full operation of the two rail lines can be achieved, with a service frequency of 2.25 minutes for TCL and 4.5 minutes for AEL. More details on the construction of HOKEOT are at Enclosure 3.

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7. The Railway Development Strategy 2000 promulgated in May 2000 recommends the implementation of NIL to relieve the existing Island Line and Tsuen Wan Line Nathan Road corridor. The new NIL will provide an alternative railway line along the north coast of Hong Kong Island and enable passengers to travel direct from Tung Chung to Chai Wan and from Tseung Kwan O to Sheung Wan. As this rail line is proposed to run along the northern coast of Hong Kong Island, we have to provide land for NIL to link up with the Hong Kong Station. More details on the construction of NIL protection work are at Enclosure 4.

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8. The new roads on CRIII will link up and enhance the existing road network in Central and Wan Chai as shown on the proposed CRIII road layout at Enclosure 2. Before the completion of CRIII, traffic generated from the completed Central Reclamation Phase I (CRI) and Central Reclamation Phase II (CRII) areas has to route through the existing already congested roads and junctions in Central. The existing reserve capacity<sup>2</sup> at the junction of Harcourt Road and Cotton Tree Drive is -11%. The road network in Central will be seriously overloaded when all the major developments on CRI are completed by 2006. The junctions along Man Yiu Street on CRI and Connaught Road Central will also be operating over their capacities. Traffic gridlock situations

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<sup>2</sup> "Reserve Capacity" (RC) is a performance indicator for a signalised road junction. A positive RC indicates that the road junction has sufficient capacity to cope with the volume of vehicular traffic under consideration and the resultant traffic will flow smoothly. A negative RC indicates that the junction is overloaded, thus resulting in traffic queues and delay.

will likely occur if there is any traffic accident, breakdown of vehicles or loss of critical road space due to road works. To alleviate congestion arising from developments on CRI and CRII, we need to construct the proposed new roads under this project on CRIII by 2007 to divert traffic away from those critical junctions so that the reserve capacity at the junction of Harcourt Road and Cotton Tree Drive can be improved<sup>3</sup> before the opening of CWB and IECL in 2012.

9. The proposed footbridge along Man Yiu Street and Road D5 will form the main access route to the future piers at the waterfront for the large volume of passengers. To ensure safety of pedestrians upon completion of the road works under CRIII in 2007, it is necessary to provide this footbridge to separate the passengers from the future Roads P1 and P2 which will have heavy traffic.

10. To meet the target of completing the CRIII new road network in 2007 and to facilitate early commencement of the construction of CWB, we need to commence the proposed works for CRIII in early December 2002 for completion in June 2007.

11. We plan to rejuvenate the existing waterfront area at Central and convert it into an interesting, vibrant promenade of international standard, along which there will be recreational, leisure elements and attractions, linking the existing and established districts with the harbour. The pedestrian networks linking the hinterland with the future waterfront are shown in the plan at Enclosure 5. We will form the required land under this project and then develop the promenade under separate projects in accordance with the requirements of the Outline Zoning Plan (OZP).

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<sup>3</sup> We predict that without implementation of the proposed roads on CRIII, the reserve capacity at the junction of Harcourt Road and Cotton Tree Drive would worsen to -20% by 2006. Upon completion of the proposed new roads on CRIII, we expect that the reserve capacity at this junction can be improved to -14%. The Government is currently looking into methods to further improve the future traffic conditions at this junction.

12. The 1994 Sino-British Defence Land Agreement<sup>4</sup> provides, inter alia, that “the Hong Kong Government will leave free 150 m of the eventual permanent waterfront in the plans for the Central and Wan Chai Reclamation at a place close to the Prince of Wales Barracks<sup>5</sup> for the construction of a military dock after 1997.” We intend to construct the committed berthing facilities for Chinese People’s Liberation Army Forces Hong Kong under this project. It is also our planning intention to make the military dock open for public access and as part of the future waterfront promenade when it is not in military use. The Hong Kong Garrison has already agreed in principle to this planning intention.

13. The reclamation works under CRIII will affect a range of existing waterfront facilities, including the “Star” Ferry Piers, the Queen’s Pier, a number of public landing steps, several groups of cooling water pumping stations serving different government and private buildings in the vicinity, and a government helipad. We have to re-provision these facilities, either within the CRIII area or off site, in order to maintain their respective operations. During the construction period, all these facilities will be maintained prior to completion of the re-provisioned facilities. We will also construct new waterfront pumping station structures for the future cooling water pumping systems of the planned developments.

14. The Queen’s Pier and several public landing steps will be re-provisioned at the proposed Piers 9 and 10 to be constructed under this project. We believe that Pier 9 has considerable development potential, and indeed we have already received a firm expression of interest from a commercial venture. In order to keep open various development options, we propose to construct the pier with extra provision to its pile foundation to permit subsequent double-decking. If further development of Pier 9 materialises in future, we will award the development rights after an open and competitive exercise.

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<sup>4</sup> The Finance Committee (FC) approved on 8 July 1994 a funding application for re-provisioning of certain defence facilities before 30 June 1997. A copy of the 1994 Sino-British Defence Agreement was attached to FC Paper FCR(94-95)51 and the then Secretary for Security had briefed Members on the Agreement.

<sup>5</sup> Now renamed Central Barracks.

15. We will implement an EM&A programme for the proposed construction works in accordance with the requirements set out in the approved Environmental Impact Assessment report for CRIII. We will establish an independent Environmental Monitoring Team to carry out the environmental monitoring works and to ensure compliance with environmental protection requirements. We will employ an Independent Environmental Checker to review and audit all aspects of the EM&A programme. In compliance with the condition specified by the Advisory Council on the Environment, we will upload the EM&A data collected and reports on a designated website for public information as soon as practicable.

16. The TDD staff responsible for the CRIII project are already fully committed in terms of workload. The workload will continue to build up when the proposed works progress to the construction stage. It is necessary to deploy additional, temporary staff resources to cope with the situation. In this regard, we propose to employ non-civil service contract (NCSC) staff for implementation of the project starting from December 2002. We are currently reviewing the need for additional staff resources for TDD for implementation of the CRIII project.

## FINANCIAL IMPLICATIONS

17. We estimate the capital cost of the project to be \$3,561.5 million in MOD prices (see paragraph 18 below), made up as follows –

	<b>\$ million</b>
(a) Reclamation	456
(b) Seawalls	444
(c) Road works	115
(d) Depressed road and underpass	149
(e) Public transport interchanges	32
(f) Footbridge and covered walkway	90
(g) Sewerage and drainage works in reclamation area	43

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(h)	Box culverts	254
(i)	Hinterland drainage improvement	32
(j)	PLA berth	39
(k)	Ferry piers and public piers	442
(l)	Waterfront pumping station structures for future developments	44
(m)	Reprovisioning of government cooling water pumping systems	271
(n)	Reprovisioning of private cooling water pumping systems <sup>6</sup>	348
(o)	Relocation of government helipad and PCWA	116
(p)	Landscaping works	56
(q)	EM&A programme	15
(r)	Consultants' fees for –	325
	(i) construction stage	44
	(ii) resident site staff	273
	(iii) Electrical and Mechanical Services Trading Fund (EMSTF) charges	8
(s)	Employment of NCSC staff	20

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<sup>6</sup> The estimate is for reprovisioning the affected cooling water systems of private building owners. The construction costs will be recovered from respective building owners who have agreed in principle with TDD the basis for their contribution. All receipts will revert to general revenue.

(t)	Contingencies		<u>329</u>
		Sub-total	3,620 (in September 2001 prices)
(u)	Provision for price adjustment		<u>(58.5)</u>
		Total	<u>3,561.5 (in MOD prices)</u>

Due to insufficient in-house resources, we propose to engage consultants to supervise the proposed works. A breakdown by man-months of the estimate for consultants' fees is at Enclosure 6.

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

Year	\$ million (Sept. 2001)	Price adjustment factor	\$ million (MOD)
2002 – 03	75.0	0.98625	74.0
2003 – 04	670.0	0.98378	659.1
2004 – 05	740.0	0.98378	728.0
2005 – 06	770.0	0.98378	757.5
2006 – 07	670.0	0.98378	659.1
2007 – 08	545.0	0.98378	536.2
2008 – 09	150.0	0.98378	147.6
	<u>3,620.0</u>		<u>3,561.5</u>

19. We have derived the MOD estimate on the basis of the Government's latest forecasts of trend labour and construction prices for the period 2002 to 2009. We will tender the core part of the proposed works (paragraphs 3(a) – (g), (h)(part), (i) – (m), (n)(part) and (o) above) at the main reclamation area under a standard remeasurement contract, because the proposed reclamation, piers, roads, footbridge and box culverts involve extensive earthworks and foundation works, the quantities of which may vary according to actual ground conditions. We will tender the hinterland drainage works (part of paragraph 3(h) above) and the marine works associated with the PCWA relocation (part of paragraph 3(n) above) under two standard remeasurement contracts respectively because the quantity of the works involved may vary depending on the actual ground conditions. The first two contracts will provide for price adjustments as the construction period of each will exceed 21 months, while the PCWA marine works contract will not provide for price adjustments as the construction period will not exceed 21 months.

20. We estimate the annual recurrent expenditure arising from the project to be \$11.4 million.

## **PUBLIC CONSULTATION**

21. We exhibited the draft Central District (Extension) Outline Zoning Plan (No. S/H24/1) for public inspection under the Town Planning Ordinance on 29 May 1998. During the two-month exhibition period, a total of 70 objections were received. Most of these objections were against the scale of the proposed reclamation. After giving consideration to the objections, the Town Planning Board (TPB) agreed to reconsider the reclamation proposal and requested the Government to undertake a study to determine the minimum practicable reclamation option.

22. Taking into account public views and the Administration's minimum reclamation proposal, the TPB decided to propose amendments to the draft OZP to meet the objections by reducing the extent of the proposed reclamation and to revise the land use zonings and layout of the area. We consulted the LegCo Planning, Lands and Works (PLW) Panel on 10 June 1999 and Members warmly received the revised proposal. We then exhibited on 16 July 1999 the amended

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draft Central District (Extension) OZP (No.S/H24/2) covering the CRIII minimum option for public inspection. Three objections were received but two of them were subsequently withdrawn. The remaining one was mainly concerned with the proposed relocation of the “Star” Ferry Piers. The Chief Executive in Council approved the amended draft OZP on 22 February 2000.

23. We consulted the TPB on the relocation of the “Star” Ferry piers in September 1999. The TPB recognised the historical significance and importance of the “Star” Ferry icon as one of the landmarks and major tourist attractions in Hong Kong and agreed that its identity should be recreated in the new Central waterfront. We had carefully reviewed the location and design of the new “Star” Ferry Piers in coordination with the “Star” Ferry Company Limited, and adopted a historical heritage approach as against a modern approach for the general layout and design of the external appearance of the new piers. The TPB approved the proposal on 4 January 2002. The OZP was gazetted on 22 February 2002 and no objection was received.

24. We consulted the Central and Western District Council and the Wan Chai District Council on 16 March 2000 and 21 March 2000 respectively on the proposed CRIII works. Members of both Councils had no adverse comments on the proposal.

25. We subsequently circulated an information note on the proposed works to Members of LegCo Panel on Planning, Lands and Works on 29 March 2000. No comments were received.

26. We gazetted the proposed reclamation works of the project under the Foreshore and Sea-bed (Reclamations) Ordinance (FSRO) and the proposed road works of the project under the Roads (Works, Use and Compensation) Ordinance (RO) both on 30 June 2000. We received three objections under FSRO and two objections under RO, which were all lodged by commercial firms. These objectors have some existing facilities in the vicinity of the reclamation area that

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will be affected by the proposed works, and they are concerned as to how their facilities would be reprovisioned. We had explained the reprovisioning arrangements to the objectors and had discussed with them arrangements that would minimise disruption of the operation of their facilities during the construction stage. Nevertheless, they maintained their objections. The Chief Executive in Council subsequently overruled all the objections in the public interest, and authorised without modification both the reclamation works and the road works on 18 December 2001.

27. On 1 March 2002, the LegCo Panel on Planning, Lands and Works discussed the proposed works. Members supported the project and asked the Government to expedite the works so as to alleviate the traffic congestion problem in the Central and Wan Chai Districts.

## **ENVIRONMENTAL IMPLICATIONS**

28. CRIII is designated under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance (Chapter 499) and an Environmental Permit is required for the construction and operation of the works. The consultants engaged by DTD completed the EIA for CRIII and concluded that the project would have no adverse long-term environmental implications. For short-term impacts during construction, we will control noise, dust, water quality and site run-off to within the established standards/guidelines through the implementation of appropriate monitoring and mitigation measures in the works contracts. We have included in the project estimate a sum of \$90 million for implementing the environmental mitigation measures and \$15 million for the EM&A programme.

29. The EIA reports for the three related projects CRIII, Wan Chai development phase II (WDII) and CWB/IECL were submitted in one go to the Environmental Protection Department under the EIA Ordinance on 8 June 2001 in order that the cumulative environmental impacts of these projects could be examined. The EIA report for CRIII was endorsed with condition (see paragraph 15 above) by the Advisory Council on the Environment on 27 August 2001 and was approved by the Director of Environmental Protection under the EIA Ordinance on 31 August 2001.

30. At the planning and design stages, we have designed the levels of road works and construction sequence to reduce the generation of construction and demolition (C&D) materials as far as possible. We estimate that about 12 000 cubic metres (m<sup>3</sup>) of C&D materials will be generated by the project. Of these, about 8 000 m<sup>3</sup> (67%) will be reused on site and 4 000 m<sup>3</sup> (33%) will be disposed of at landfills. The notional cost of accommodating C&D waste at landfill sites is estimated to be \$500,000 for this project (based on a notional unit cost<sup>7</sup> of \$125/m<sup>3</sup>). The C&D waste comprises putrescible materials such as wood which cannot be reused. We also estimate that the reclamation works can accept about 1.86 million m<sup>3</sup> of public fill.

31. We estimate that about 640 000 m<sup>3</sup> of dredged marine mud will be generated by construction of the seawalls and reclamation. We will deliver about 162 000 m<sup>3</sup> of un-contaminated mud to the marine dumping site at East Ninepin or South Cheung Chau. We will also deliver about 478 000 m<sup>3</sup> of contaminated mud to the contaminated mud disposal facility at East Sha Chau.

32. We will require the contractor to submit a waste management plan to the Engineer for approval. The waste management plan will include appropriate mitigation measures to avoid, reduce, reuse and recycle C&D materials, including the allocation of an area for waste segregation. We will require the contractor to ensure that the day-to-day operations on site comply with the approved waste management plan. To further minimise the generation of C&D materials, we will encourage the contractor to use non-timber formwork and recyclable materials for temporary works. We will also require the contractor to separate public fill from C&D waste for disposal at appropriate locations and sort the C&D materials by category on-site to facilitate reuse/recycling of paper/cardboard, timber and metal. We will control the disposal of C&D waste to designated landfills through a trip ticket system. We shall record the disposal, reuse and recycling of C&D materials for monitoring purposes.

## LAND ACQUISITION

33. The proposed works do not require any land acquisition.

**/BACKGROUND .....**

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<sup>7</sup> 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/m<sup>3</sup>), nor the cost to provide new landfills (which are likely to be higher) 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**

34. We upgraded **343CL** to Category B in 1990 for the engineering works for Central reclamation phases I, II and III, Wan Chai reclamation phase I and Wan Chai development phase II(WDII).

35. Finance Committee has approved the upgrading to Category A of most of the original works under **343CL**, as detailed below –

<b>Upgrade to Cat. A</b>	<b>Item No.</b>	<b>Project title (Approved project estimate)</b>
June 1990	<b>353CL</b>	Central and Wan Chai reclamation, package I, phase I – consultants' fees and site investigation (\$116 million)
December 1990	<b>170GG</b>	Reprovisioning of Tamar naval facilities to Stonecutters Island, phase I (\$358 million)
July 1993	<b>386CL</b>	Central reclamation phase I – engineering works (\$2,644 million)
July 1994	<b>444CL</b>	Central reclamation, phase II (Tamar basin reclamation) (\$325.3 million)
April 2000	<b>671CL</b>	Central reclamation phase III – consultants' fees and site investigation (\$35.7 million)

36. Wan Chai reclamation phase I was funded by an item "Capital Subvention to the Hong Kong Trade Development Council for constructing an extension to the Hong Kong Convention and Exhibition Centre" under **Head 708** approved by Finance Committee in February 1994.

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37. As we had not completed a preliminary project feasibility study (PPFS) for WDII to establish its feasibility, we retained only the engineering works for CRIII under **343CL** in Category B in July 1994, with the intention to create a separate Public Works Programme item later for WDII. After completion of the PPFS for WDII, a separate item **677CL** “Wan Chai development phase II, engineering works” was upgraded to Category B in September 2000.

38. We engaged consultants in February 1995 to undertake the study review, site investigation, design and construction services for the proposed CRIII works and charged the cost to block allocation **Subhead 7100CX** “New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme”. The consultants completed the site investigation and design for the original reclamation configuration in 1997.

39. In view of the large number of objections to the excessive scale of proposed reclamation in the OZP (see paragraph 21 above), we conducted a review study in July 1998 to determine the minimum practical reclamation option. The review recommended in November 1998 a minimum option to reduce the reclamation scale from 32 ha to about 18 ha, with due regard to the presumption against reclamation in the harbour required under the Protection of the Harbour Ordinance.

40. We then commenced a comprehensive feasibility study and site investigation in January 1999 to establish the engineering feasibility and to determine the land use for the CRIII minimum option and charged the cost to block allocation **Subhead 7100CX** “New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme”. The consultants completed the study in January 2000. As the reclamation configuration of CRIII together with the infrastructure thereon had changed significantly, we then started in July 2000 to conduct the necessary additional site investigation and to revise the detailed design to meet the changes under **671CL**.

41. We have substantially completed the detailed design and working drawings for the minimum option reclamation configuration, and plan to invite tenders for the three construction contracts between July to December 2002. We plan to start the construction works in stages commencing from early December 2002 and complete them in June 2007.



42. We estimate that the proposed works will create some 910 new jobs comprising 185 professional/technical staff and 725 labourers, totalling 39 600 man-months during the construction period.

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Planning and Lands Bureau  
May 2002

**343CL – Central reclamation phase III – engineering works**

**Construction of Hong Kong Station Extended Overrun Tunnel  
(HOKEOT)**

The current overrun tunnel of Airport Railway (AR) to the east of the Hong Kong Station is 84 metres (m) long, which was the maximum possible at the time of its construction. This will have to be extended by a total of 500 m for full operation of AR comprising the Airport Express Line (AEL) and the Tung Chung Line (TCL). About 40 m of the extension is required to enhance safety and another 460 m for turn back of trains in order to enable shorter headways and hence higher capacities to meet future demand. The 500 m of overrun tunnel to be extended, i.e., the HOKEOT, is within the CRIII area (as shown in the plan at **Annex A**).

2. If incorporated in the CRIII contract, the estimated cost of the first 40 m section of HOKEOT as described in paragraph 1 of this enclosure is \$62 million and that of the remaining 460 m section is \$710 million. MTRCL has agreed to fund the 40 m section required for safety reasons as part of the CRIII contract.

3. We have yet to reach agreement with MTRCL on the funding arrangement for the remaining 460 m section of HOKEOT. In order not to hold back CRIII, we have prepared the CRIII contract document in such a way that we may choose to include HOKEOT in or exclude it from the contract before a certain date within the contract period. To allow sufficient time for the contractor to phase HOKEOT with other contract works, we will have to make a decision by March 2003. This contract arrangement will give us several more months for negotiation with MTRCL on the funding arrangement for this 460 m section of tunnel.

4. We will continue to negotiate with MTRCL on the implementation and financial packaging arrangement.

## **343CL – Central reclamation phase III – engineering works**

### **Construction of North Hong Kong Island Line (NIL) Protection Work**

Island Line Extension (ILE), which comprises NIL and the West Hong Kong Island Line (WIL), is one of the six priority rail projects recommended in Railway Development Strategy 2000 (RDS-2000). NIL extends the Airport Railway Tung Chung Line along the north shore of Hong Kong Island to run through onto the eastern half of the existing Mass Transit Railway Island Line at the Fortress Hill Station. RDS-2000 has set the ILE's target completion between 2008 to 2012. Following the Executive Council's approval of 9 January 2001, we invited and MTR Corporation Limited (MTRCL) submitted its project proposal for ILE in July 2001. We are assessing the proposal at the moment.

2. A section of the NIL connecting to the future Tamar Station is within the CRIII area (as shown in the plan at **Annex A**). It is desirable to include in the CRIII contract some underground advance protection works, costing about \$140 million, at locations where the proposed NIL crosses Roads D8, D9 and D11 to avoid future disruption.

3. In order not to hold back CRIII, we have prepared the CRIII contract document in such a way that we may choose to include the NIL advance protection works in or exclude them from the contract before a certain date within the contract period. To allow sufficient time for the contractor to phase the NIL advance protection works with other contract works, we will have to make such a decision by March 2003. This contract arrangement will give us several more months for negotiation with MTRCL on the funding arrangement.

## Enclosure 6 to PWSC(2002-03)41

### 343CL – Central reclamation phase III - engineering works

#### Breakdown of the estimate for consultants' fees

<b>Consultants' staff costs</b>	<b>Estimated Man- months</b>	<b>Average MPS* salary point</b>	<b>Multiplier (Note 1)</b>	<b>Estimated fees (\$ million)</b>
(a) Consultants' fees for construction stage (Note 2)				
(i) contract administration	202	–	–	29.3
Professional	220	–	–	10.3
Technical				
(ii) preparation of as-built drawings	13	–	–	1.9
Professional	54	–	–	2.5
Technical				
(b) Resident site staff costs (Note 3)				
Professional	880	38	1.7	90.4
Technical	5506	14	1.7	182.6
			Sub-total	317.0
(c) EMSTF charges (Note 4)				8.0
			<b>Total consultants' staff costs</b>	<b>325.0</b>

\* MPS = Master Pay Scale

#### Notes

1. A multiplier of 1.7 is applied to the average MPS point to estimate the cost of resident site staff supplied by the consultants. (As at 1.4.2001, MPS pt. 38 = \$60,395 p.m. and MPS pt. 14 = \$19,510 p.m.)
2. The consultants' staff cost for construction stage (including contract administration and preparation of as-built drawings) is calculated in accordance with the existing consultancy agreement for investigation, design and supervision of construction works for CRIII.
3. The consultants' staff cost for site supervision is based on estimates prepared by the Director of Territory Development. We will only know the actual man-months and actual costs after completion of the construction works.

4. Since the establishment of the EMSTF on 1 August 1996 under the Trading Fund Ordinance, government departments are charged for design and technical consultancy services provided by Electrical and Mechanical Services Department. The services rendered for this project include checking consultants' submissions on all E&M installations and providing technical advice to Government on all E&M works and their impact on the project.