For discussion
on 19 January 2005

EC(2004-05)14

ITEM FOR ESTABLISHMENT SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 60 – HIGHWAYS DEPARTMENT

Subhead 000 Operational expenses

Members are invited to recommend to the Finance Committee the following proposals relating to the Highways Department with effect from 12 March 2005 –

(a) the creation of the following permanent post –

1 Chief Engineer
(D1) ($92,650 - $98,300)

(b) the retention of the following supernumerary posts –

1 Chief Engineer
(D1) ($92,650 - $98,300)

for a period of 27 months up to 11 June 2007

1 Government Engineer
(D2) ($110,000 - $116,800)

2 Chief Engineer
(D1) ($92,650 - $98,300)

for a period of 18 months up to 11 September 2006

/PROBLEM .....

PROBLEM

Five supernumerary posts in the Highways Department (HyD) will lapse on 12 March 2005 –

Railway Development Office (RDO)

Chief Engineer/Technical Services (Chief Engineer) (CE) (D1)
Chief Engineer/Railway (2) (CE) (D1)

Major Works Project Management Office (MWPMO)

Deputy Project Manager/Major Works (1) (Government Engineer) (GE) (D2)
Chief Engineer/Major Works 1-1 (CE) (D1)
Chief Engineer/Major Works 3-1 (CE) (D1)

The HyD would require the continued support of the above directorate posts for planning and implementing new railway projects, and managing major highway projects to support the economic development and population growth in Hong Kong and our growing links with the Mainland.

PROPOSAL

2. We propose to –

(a) create one permanent CE (D1) post in the RDO to continue to head the Technical Services Division;

(b) retain one supernumerary CE (D1) post in the RDO for a period of 27 months to continue to plan and implement the new railway projects; and

(c) retain one supernumerary GE (D2) and two supernumerary CE (D1) posts in the MWPMO for a period of 18 months to continue to manage major highway projects

with effect from 12 March 2005.

/**JUSTFICATION** .....

JUSTIFICATION

3. On 12 March 1999, the Finance Committee (FC) approved vide EC(98-99)26 and EC(98-99)27 the creation of the five supernumerary posts listed in paragraph 2 above in the HyD for a period of six years. In putting forward the above submissions to the Establishment Subcommittee (ESC) of FC, we indicated a need to review the continued requirement for the five posts before the end of the six-year period. Having critically reviewed the current and foreseeable workload, and the directorate structure and manpower resources of the HyD, we see a need to create one CE (D1) post on a permanent basis and retain the remaining four posts (one GE (D2) and three CE (D1)) on a time-limited basis.

Railway Development Office

4. The existing and proposed organisation chart of the RDO is at Enclosure 1. The RDO, headed by the Principal Government Engineer/Railway Development (Principal Government Engineer) (PGE) (D3), is responsible for planning and implementing the committed new railways, and planning for future railway development in Hong Kong. It consists of two groups, namely, the Railway Development Group (1) (RDG1) and Railway Development Group (2) (RDG2).

Encl. 1

5. RDG1 is responsible for handling the outstanding issues arising from the West Rail (WR), overseeing the implementation of the Disneyland Resort Line, co-ordinating improvement works to existing railways stations, and planning for and examining the Kowloon Southern Link (KSL), the Sha Tin to Central Link (SCL), the North Hong Kong Island Line (NIL), the West Hong Kong Island Line (WIL), the South Hong Kong Island Line (SIL) and the Port Rail Line projects.

6. RDG2 is responsible for overseeing the remaining work (e.g. finalisation of accounts) associated with the implementation of the Ma On Shan to Tai Wai Rail Link (MOS Rail) and Tsim Sha Tsui Extension (TST Extension), the implementation of the Sheung Shui to Lok Ma Chau Spur Line (Spur Line) projects, and planning for the Tseung Kwan O South Station, the Regional Express Line (REL) and the Northern Link (NOL) projects. It also undertakes transport model analyses to provide essential patronage and revenue forecasts for future railway planning. A plan showing the location of the railway projects is at Enclosure 2.

Encl. 2

7. The two supernumerary posts in question, viz., Chief Engineer/ Technical Services (CE/TS) and Chief Engineer/Railway (2) (CE/R(2)) were created in the RDO in 1999 upon FC's approval vide EC(98-99)26 for a period of

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six years for planning future railways, and planning and implementing new railway projects to support the population growth in and the continued economic development of Hong Kong as well as our growing links with the Mainland. Over the years, the duties and responsibilities of the two posts, as elaborated in paragraphs 8 and 15 below, have remained more or less the same. The above two supernumerary posts will lapse on 12 March 2005. We consider it necessary to make permanent the CE/TS post and retain the CE/R(2) post for 27 months as explained below. A list of projects handled by the RDO in 1999 and a list of projects included since 1999 are at Enclosure 3.

Encl. 3

Chief Engineer/Technical Services

8. CE/TS heads the Technical Services Division of the RDO that maintains a comprehensive database of transport statistics and collates key planning and land use information. The information provides essential input to the operation of the Railway Transport Model (the RDS Model) that forecasts rail patronage and revenue for different rail network configurations at different future years under different socio-economic assumptions. The model results provide essential information to enable us to formulate rail expansion plans, and update the Railway Development Strategy and, in a wider context, our transport policy.

9. The RDS Model is a highly complicated one that requires regular updating and recalibration to take account of changes in planning and socio-economic parameters, including passengers' behaviour and route choices as well as the community's aspirations. Furthermore, analysis and interpretation of model results together with the subsequent financial and economic evaluations on railway projects are a highly complex task that demands professional input at the directorate level.

10. Before the establishment of the CE/TS post in 1999, we had to employ consultants to vet submissions of new railway projects from the two railway corporations. Those submissions included forecasts on patronage and revenue together with financial and economic evaluations of the projects. The creation of the post and establishment of the fully computerised railway development model, vetting of consultants' proposals submitted by the two railway corporations (including the station to station travelling pattern and the associated infrastructure requirements) has since been carried out in-house within the RDO. In addition, CE/TS updates comprehensive railway planning for the whole territory and provides support to the Environment, Transport and Works Bureau (ETWB) on formulation of railway policies. The establishment of the CE/TS post has reduced our reliance on and expenditure for employing consultants for railway studies.

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11. When we made the submission to the ESC/FC in March 1999 for establishing the CE/TS post, we already saw the long term need for the post. However, in our submission EC(98-99)26, we proposed to create the post on a supernumerary basis for a period of six years in the first instance as we were mindful that we ought to take into account the experience to be gained in the six-year period and also explore other options including redeployment following the completion of new railway projects in the interim. The job description for CE/TS when approved in March 1999 is at Enclosure 4. Since then, we have published our policy statement "Hong Kong Moving Ahead – A Transport Strategy for the Future" in October 1999 and the Railway Development Strategy 2000 (RDS 2000) in May 2000 which reaffirmed the Government's transport policy to use railways as the backbone of Hong Kong's passenger transport. In particular, the RDS 2000 mapped out Hong Kong's $100-billion railway expansion plan. To facilitate proper planning and implementation of this policy, it is imperative to update regularly our railway development plans. The professional support from CE/TS is essential in this regard.

Encl. 4

12. We foresee that about six years from now, while we should have just completed the KSL, we would still be handling the other projects recommended in the RDS 2000, such as the SCL, WIL, SIL, NOL and REL. There are also a number of long term railway proposals in the RDS 2000, including the NIL, the Outer Western Corridor and the East-west Kowloon Link, some of which are still at the conceptual stage. All these projects require careful planning and proper co-ordination. The RDS Model therefore needs to be updated continuously to take into account changes in the transport and socio-economic environment of Hong Kong. The above long term planning work requires the professional input from CE/TS.

13. Taking into account the benefits of maintaining an in-house computerised railway development model as explained in paragraph 10 above, the on-going nature of the railway planning and development work, and the fact that other directorate officers in the HyD do not have spare capacity to take up the tasks (see paragraph 32 below), we consider that there is a genuine need for the CE/TS post in the long run. We therefore propose to make permanent the existing supernumerary post with effect from 12 March 2005.

Chief Engineer/Railway (2)

14. In order to address the environmental concerns, the original viaduct option for the Spur Line project was changed to a tunnel option in 2002. Due to this major change in scope, construction could only commence in late-2002, which was about two years behind the original programme. Coupled with the fact that

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construction of a tunnel would take about one more year than that of a viaduct, the target completion date of the Spur Line has been revised from 2004 to mid-2007.

15. But for the above major change in the project scope , the Spur Line and the associated works would have been completed in 2004 and the proposed retention of the CE/R(2) post would not have been required. However, owing to the revised programme for the Spur Line, it is necessary to retain the supernumerary CE/R(2) post for another 27 months such that the officer can continue to oversee the implementation of the $10-billion Spur Line project and the associated Essential Public Infrastructure Works[1] (EPIW) worth over $600 million. In particular, the EPIW project includes a pedestrian bridge that straddles across the boundary over Shenzhen River joining the Lok Ma Chau and Huanggang Terminals. We have entrusted the construction of the pedestrian bridge to the Shenzhen authority. As the construction of the cross-boundary pedestrian bridge needs to synchronise with that of the terminal construction, CE/R(2) has to liaise closely with the Shenzhen side on its implementation and to agree on the design, construction and commissioning aspects. CE/R(2) is also responsible for overseeing a $93-million public transport interchange at the Lok Ma Chau Terminus (to be entrusted to the Kowloon-Canton Railway Corporation) to tie in with the commissioning of the Spur Line.

16. In view of the progress of the Spur Line and the associated works and the level of responsibility of the post, we propose to retain the supernumerary post of CE/R(2) for 27 months up to 11 June 2007 to ensure the satisfactory completion of the Spur Line. We consider the retained period sufficient to enable CE/R(2) to see through the implementation of the Spur Line. We will **not** seek further retention of the post. We will review regularly the need of the post before the end of the 27-month period and will delete it in the unlikely event that it is no longer required before June 2007.

Encls. 5 - 6

17. The job descriptions for the CE/TS and CE/R(2) posts are at Enclosures 5 and 6 respectively.

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[1] The Essential Public Infrastructure Works (EPIW) are works, which are not railway works, but are necessary to enable a railway project to be opened for operation, such as access roads to railway stations, pedestrian subways/footbridges and public transport interchanges. Government is responsible for funding these items that are by nature public works. The associated EPIW for Spur Line include construction of the Hong Kong portion of the pedestrian bridge across Shenzhen River connecting the Lok Ma Chau Terminus with Huanggang, cross-boundary facilities at the Lok Ma Chau Terminus and widening of the access road to the Lok Ma Chau Terminus.

Major Works Project Management Office

18. The workload of the MWPMO would be at its peak up to the end of 2006 when the major projects, namely, the Hong Kong-Shenzhen Western Corridor (HK-SWC), the Deep Bay Link (DBL), the Widening of the Yuen Long Highway (YLH), Route 8 (previously known as Route 9) between Tsing Yi and Sha Tin, and the improvements to Castle Peak Road all reach their critical stage of construction. The MWPMO is tasked to manage an annual expenditure on highway infrastructure projects of around $7.0 billion in 2004-05, $6.0 billion in 2005-06 and $6.0 billion in 2006-07. The complexity of the projects and the level of responsibilities associated with their successful and timely completion and commissioning require the intensive management by the directorate professionals.

Encl. 7

19. The existing and proposed organisation chart of the MWPMO is at Enclosure 7. At present, the MWPMO is headed by the Project Manager/Major Works (PGE) (D3). The projects are being implemented through three major works project teams, each headed by a Deputy Project Manager/Major Works (DPM/MW) (GE) (D2). Each of the three DPM/MWs is supported by two or three CEs (D1), designated as Chief Engineer/Major Works (CE/MW). The workload of the project teams in the MWPMO is detailed below.

20. Team One (MW1) is responsible for implementing Route 8 between Tsing Yi and Sha Tin. This includes the Stonecutters Bridge which will be the world's longest span cable stayed bridge, three tunnels totalling 6.5 kilometres (km) in length and 9.5 km in length of high-level viaducts involving over 8 000 units of pre-cast concrete viaduct segments, some of which are to be put up over areas with heavy traffic. A sophisticated traffic control and surveillance system has to be implemented in a timely manner in conjunction with the civil contracts to ensure the staged, orderly commissioning of the Route 8 project between Cheung Sha Wan and Sha Tin by mid-2007, and between Tsing Yi and Cheung Sha Wan by mid-2008.

21. Apart from Route 8, MW1 is responsible for the Improvements to Tung Chung Road between Lung Tseng Tau and Cheung Sha, the construction of which has just commenced for completion in early-2007; the detailed planning for the Reconstruction and Improvement of Tuen Mun Road; and the planning for the Route 4 (previously known as Route 7) section between Kennedy Town and Aberdeen. In addition, DPM/MW(1) oversees the Project Technical Support Unit. The projects under MW1 have a total cost of over $19 billion. Because of their scales and complexities, the continued intensive input to the projects at the directorate level is essential to ensuring their successful implementation.

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22. Team Two (MW2) is responsible for managing the implementation of the Castle Peak Road improvement project which will be completed in phases between late-2005 and mid-2007, and the highly complex project of the Reconstruction of the Causeway Bay Flyover and the Widening of Victoria Park Road, both due for completion in mid-2007.

23. MW2 is also responsible for planning and designing the Central-Wan Chai Bypass and Island Eastern Corridor Link, Improvements to the Island Eastern Corridor Section between North Point and Causeway Bay, the Widening of the Tolo/Fanling Highway between Island House and Fanling; and the planning for the Central Kowloon Route and Gascoigne Road Flyover Widening. DPM/MW(2) also oversees the Programme, Planning and Control Unit. The projects under MW2 have a total cost of over $24 billion, and have to be implemented in environmentally and socially sensitive areas like all other projects. Their successful delivery would require extensive directorate level supervision.

24. Team Three (MW3) is responsible for implementing the HK-SWC and DBL among other projects. These cross-boundary road projects are being implemented under an exceptionally fast-track programme that demands the proactive involvement of directorate officers. The Government is fully committed to the timely delivery of these projects. The directorate officers also need to liaise closely with the Mainland authorities to ensure a good programme match with the Mainland side. They also need to liaise closely with various local community groups, and to arrange the necessary briefings and site visits to address public concerns. In due course, MW3 would have to prepare for the commissioning of the projects.

25. MW3 is also responsible for the Widening of the YLH, the New Boundary Bridge between Lok Ma Chau and Huanggang, and retrofitting of noise barriers on Fanling Highway near Choi Yuen Estate and Fanling Centre. DPM/MW(3) also oversees the Contract Advisory Unit and the Electrical and Mechanical Engineering Co-ordination Unit. The projects under MW3 have a total cost of about $10 billion and are all strategically important.

Encl. 8

26. A plan showing the location of the major highway projects is at Enclosure 8. The magnitude, complexity and tight construction programmes of each of the projects mentioned above create considerable inherent risks in project management, including project cost overruns and late completion. Only senior directorate professionals have the necessary experience and authority to deal proactively, at the highest levels of the contractors and consultants, with the many and varied issues that are bound to arise and which, if not managed well, might

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impact negatively on the costs and the timely delivery of the projects. The directorate officers would be required to interface proactively with all the contracting parties in respect of programme, cost and resource management to ensure that the projects would be completed on time, within budget and to a conforming standard of quality. In particular, the Government is now actively promoting partnering[2] with its contractors on all major projects. This new partnering approach requires regular meetings among all project stakeholders at the highest levels to deal with project matters and to resolve potential problems at the early stage. All these increase considerably the level of responsibility and accountability on the directorate staff since they have to be involved more intimately in every aspect of the projects. In sum, the directorate staff are required to manage the projects actively on a daily basis through attending progress meetings, participating in problem solving workshops, drawing up strategies to deal with delays and cost overruns, reviewing and approving contractors' alternative designs, and ensuring that the projects progress as smoothly as possible.

27. Three supernumerary posts, viz., the Government Engineer/Major Works (3) (GE) (D2), CE/WM2-3 (CE) (D1) and CE/MW3-3 (CE) (D1), were created in 1999 upon FC's approval vide EC(98-99)27 for a period of six years to strengthen the directorate support in the MWPMO in planning and implementing a number of strategic highway projects including the Route 8 project, the Widening of the YLH, the Tsing Yi North Coastal Road, the Widening of Tolo/Fanling Highway, Improvement to Fan Kam Road, the Kam Tin Bypass, etc. When seeking FC's approval for the creation of these posts in 1999, we were conscious of the need for adequate manpower support, including that at the directorate level, to take forward the implementation of the aforementioned mega highway projects. We therefore made an undertaking in our submission to FC that we would review the continued need for the above posts before the end of the six-year period. Over the past years, we have made diligent efforts in taking forward the projects and a number of them (e.g. Tsing Yi North Coastal Road and Kam Tin Bypass) have been completed. However, since then, new projects have been taken on board. These include the various cross-boundary highway infrastructure projects which have been identified in recent years for fast-track implementation in the light of the anticipated increase in cross-boundary traffic demand, e.g. the HK-SWC and the related DBL, and the New Boundary Bridge between Lok Ma Chau and Huanggang. The HK-SWC and the DBL, estimated to cost $7.8 billion, commenced construction in mid-2003 with a target completion date of end-2005.

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[2] In the past, for major projects under construction, the Government's main role was to oversee the consultants in the administration of the works contracts. Nowadays, the complexity and extensive interfaces amongst individual contracts demand more active involvement of the Government in contract matters in order to best protect the Government's interests. To this end, the Government (including HyD since 2003) has adopted a partnering approach on all major contracts. Partnering is a collaborative process between the Government and the contractors under a non-binding partnering charter signed between the parties. It focuses on early identification and co-operative solving of problems throughout the contract period.

The New Boundary Bridge, which commenced construction in November 2003, is targeted for commissioning in January 2005. In taking forward these new cross-boundary projects, we have absorbed the additional workload within the existing manpower resources and have not asked for additional manpower resources.

28. Apart from the above major projects, the MWPMO has to review regularly the list of potential highway projects in the light of changing planning parameters and circumstances, e.g. Route 10. As a result, the implementation programmes of a number of projects have been adjusted in the past years. A list of projects managed by the MWPMO in 1999 and a list of projects included since 1999 are at Enclosure 3.

29. In view of the above changes, the projects and workload, including the four supporting units, have been redistributed amongst the Office to utilise the resources more effectively. The opportunity has also been taken to re-title the Government Engineer/Major Works posts to DPM/MW to better reflect their role as project managers together with the re-designation of the other CE posts. Owing to the addition of new strategic cross-boundary road projects which require fast-track implementation over the years, the duties within the MWPMO were reshuffled and the three supernumerary posts created in 1999 were re-designated as DPM/MW(1), CE/MW1-1 and CE/MW3-1 respectively. The annual expenditure in respect of the highway projects undertaken by the MWPMO from 1999-2000 to 2003-04 ranged from $1 billion to $3.5 billion. The annual expenditure from 2004-05 to 2006-07 will range from $6 billion to $7 billion.

30. Having considered –

(a) the workload in the MWPMO which would remain high until the substantial completion of some of the mega projects in end-2006;

(b) the increasing involvement of directorate officers in project management with the adoption of the partnering approach since 2003; and

(c) the increasing level of public participation throughout the whole period of project implementation as well as increasing public expectation of active monitoring of government projects which involve huge sums of public funds;

the above three supernumerary posts would be required for another 18 months with effect from 12 March 2005. The job descriptions of DPM/MW(1), CE/MW1-1 and CE/MW3-1 are at Enclosures 9 to 11 respectively.

Encls. 9 - 11

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31. A number of on-going major contracts would still be in full swing in 2007-08, including the eight major contracts forming the Route 8 project, the Tung Chung Road improvement project and one contract under the Castle Peak Road improvement project. However, with the anticipated commissioning of the HK-SWC, DBL, YLH and most of the Castle Peak Road projects after the second quarter of 2006, the workload arising from these projects would diminish gradually, with the major part of the remaining work being the finalisation of accounts within 12 months after completion of works. In the light of the above, the three supernumerary posts of DPM/MW(1), CE/MW1-1 and CE/MW3-1 would no longer be required after 11 September 2006. We would redistribute the outstanding matters of the projects handled by the three posts to the permanent staff in the MWPMO. We will **not** seek further retention of the posts.

ALTERNATIVES CONSIDERED

32. When we made the submission for the establishment of the Hong Kong-Zhuhai-Macao Bridge (HZMB) Hong Kong Project Management Office vide EC(2004-05)4, which was endorsed by FC on 14 May 2004, we had completed a comprehensive review of the organisation and manpower deployment of the department. Our conclusions, which still stand, are that –

(a) the existing directorate staff in the RDO are fully engaged in the committed and new railway projects as described in paragraphs 5 to 6 above (we have taken into account the supernumerary Chief Engineer/West Rail (CE) (D1) post in the RDO which was created for the WR and lapsed on 1 May 2004 after the commissioning of the WR project);

(b) the directorate staff in the MWPMO are fully occupied in taking forward the major highway projects as described in paragraphs 18 to 31 above; and

(c) the Headquarters and the Regional Offices of the HyD were restructured in early 2004 to cope with the additional workload upon implementation of the Land (Miscellaneous Provisions) (Amendment) Ordinance and they have no capacity to take on more work (the details are set out in EC(2003-04)17 that was endorsed by FC on 27 February 2004).

In sum, the manpower in the department is already fully committed and there is no spare capacity for them to take up the work of the five directorate posts in the specific periods under the current proposal. There is a need for the permanent post of CE/TS and the retention of the four supernumerary posts for the respective periods as stated in paragraphs 2(b) and (c) above. We have reviewed critically the

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retention periods for the supernumerary posts and consider the need for the retention final. We will delete the posts when they expire. We will also review the need for the supernumerary posts during the retention periods and delete them should they become unnecessary in the interim.

FINANCIAL IMPLICATIONS

33. The proposed creation of one permanent directorate post and retention of four supernumerary directorate posts will bring about an additional notional annual salary cost at mid-point of $5,937,600 as follows -

	Notional annual salary cost at mid-point ($)	**No. of Post**
Creation of permanent post		
Chief Engineer (D1)	1,144,200	1
(a) Sub-total	*1,144,200*	*1*
Retention of supernumerary posts		
Government Engineer (D2)	1,360,800	1
Chief Engineer (D1)	3,432,600	3
(b) Sub-total	*4,793,400*	*4*
Total (a)+(b)	**5,937,600**	**5**

The additional cost expressed in terms of full annual average staff cost, including salaries and staff on-costs, amounts to $8,903,000. The additional resources required will be met by internal redeployment of existing resources within the ETWB.

BACKGROUND INFORMATION

34. The Government formulated the first Railway Development Strategy for Hong Kong in 1994 and accorded priority to the implementation of a number of railway projects, namely, the WR, Tseung Kwan O Extension (TKE), MOS Rail and TST Extension. The RDO, headed by a GE (D2), was set up in July 1995 to handle the planning and implementation of new railway projects and the planning

of future railways. In March 1998, the Government commissioned the Second Railway Development Study (RDS-2) to examine how best to expand further the rail network in Hong Kong in order to meet the rail transport needs arising from population growth and increase in cross-boundary activities for the next two decades. The RDO was strengthened by the addition of three supernumerary posts of one PGE (D3) for a period of two years and two CE (D1) for a period of six years in March 1999 as approved by FC vide EC(98-99)26 in view of five new railway projects proceeding to the detailed design and construction phases and the need to take forward the railway projects recommended in the RDS-2. The supernumerary PGE (D3) post was subsequently made permanent in January 2001 as approved by FC vide EC(2000-01)21. Under the current proposal, we propose to make permanent one of the two supernumerary CE (D1) posts and retain the other for a period of 27 months up to 11 June 2007.

35. In 1999, the Government decided to proceed with the implementation of the Spur Line for an additional rail passenger boundary crossing. The Government also decided in late 1999 that the Disneyland Resort Line should be built and completed in time for the opening of the Disney Theme Park. The WR, TKE, MOS Rail and TST Extension were completed between 2002 and 2004, whereas the Disneyland Resort Line and the Spur Line projects are scheduled for completion in 2005 and 2007 respectively.

36. The Chief Executive announced in his 1997 Policy Address the Government's commitment to implementing transport infrastructure projects to support and enhance the economic development, and land use and housing developments in Hong Kong. The MWPMO, headed by a PGE (D3), was then set up in April 1998 to handle the mega scale highway infrastructure projects. It was strengthened by the addition of the three supernumerary posts under the current proposal in March 1999 as approved by FC vide EC(98-99)27 when the projects progressed into the detailed design and construction stages. In June 1999, due to an upsurge in demand of cross-boundary traffic, the Government decided to advance the HK-SWC and DBL under a fast-track programme in addition to those already identified projects. The implementation of these two projects, from planning to design and subsequent construction stages, has been absorbed by redeploying the existing resources within the MWPMO despite its stretched manpower. Besides, the MWPMO has redeployed one CE (D1) post on a time-limited basis for a period of six years from 1 July 2004 to the HZMB Hong Kong Project Management Office as approved by FC vide EC(2004-05)4. Under the current proposal, we propose to retain the three supernumerary posts (one GE (D2) and two CE (D1)) for a period of 18 months up to 11 September 2006.

ESTABLISHMENT CHANGES

37. The establishment changes in the HyD for the last two years are as follows -

Establishment (Note)	Number of posts			
	Existing (as at 1 December 2004)	**As at 1 April 2004**	**As at 1 April 2003**	**As at 1 April 2002**
A	30+(7)#	30+(6)	30+(6)	30+(6)
B	442	442	439	435
C	1 491	1 504	1 511	1 523
Total	**1 963+(7)**	**1 976+(6)**	**1 980+(6)**	**1 988+(6)**

Note :
A – ranks in the directorate pay scale or equivalent
B – non-directorate ranks the maximum pay point of which is above MPS Point 33 or equivalent
C – non-directorate ranks the maximum pay point of which is at or below MPS Point 33 or equivalent
( ) - number of supernumerary directorate posts
as at 1 December 2004, there is no unfilled directorate post in HyD.

CONSULTATION WITH LEGISLATIVE COUNCIL PANEL

38. We consulted the Legislative Council Panel on Transport on the staffing proposal on 17 December 2004. Members requested the following supplementary information at the meeting –

(a) the need for the retention of the four supernumerary directorate posts as substantiated by a summary of the on-going projects and new projects implemented since the creation of the supernumerary posts in March 1999; and

(b) the need for the creation of the permanent post of CE/TS in the RDO with further elaboration on his work on railway modelling.

We issued an information paper to the Panel on 30 December 2004. The information sought has been incorporated in the preceding paragraphs.

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39. We are mindful of the need to contain and reduce the size of the directorate establishment. We have made a conscious effort to identify the scope for streamlining our organisation structure with a view to achieving greater efficiency and enhancing effective implementation of policies and delivery of services to the public. The amalgamation of the former Civil Engineering Department and Territory Development Department to form the new Civil Engineering and Development Department on 1 July 2004, which made possible a net reduction of nine permanent directorate and 57 non-directorate posts, was our first major step. As approved by FC on 17 December 2004, the merger of the Environment Branch (EB) of the ETWB with the Environmental Protection Department (EPD) will be implemented on 1 April 2005. The EB/EPD merger will release four permanent directorate posts, involving a total saving of $5,499,000 in terms of notional annual salary cost at mid-point or $8,552,000 in terms of full annual average staff cost. The saving will be more than enough to cover the requirements of the permanent CE (D1) post in the present proposal and the two permanent posts proposed for the EPD in the other ESC submission (EC(2004-05)13) due for consideration at the same ESC sitting on 19 January 2005, involving $3,868,800 in terms of notional annual salary cost at mid-point or $5,683,000 in terms of full annual average staff cost.

CIVIL SERVICE BUREAU COMMENTS

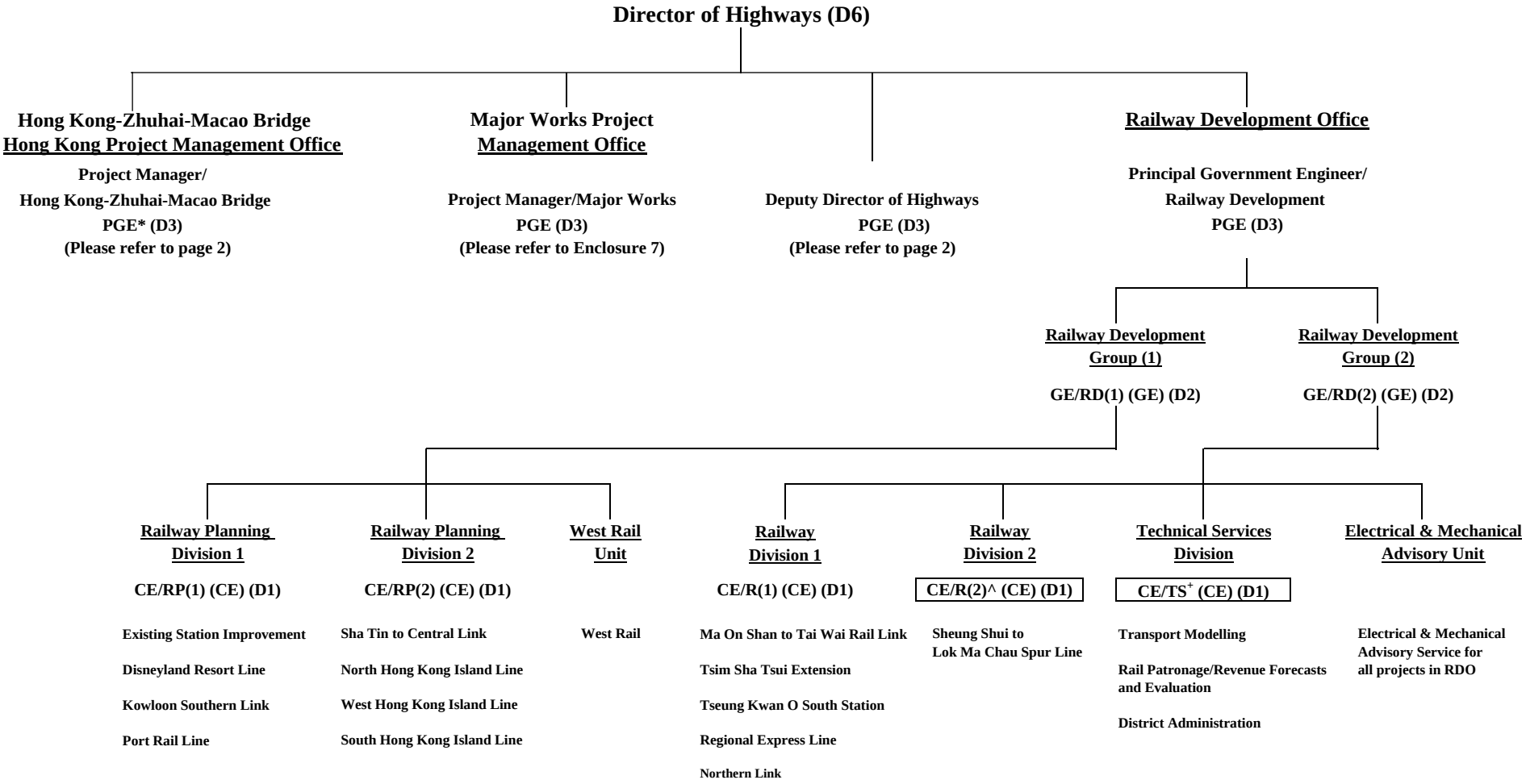
40. The Civil Service Bureau considers that the staffing proposals contained in this paper are functionally justified. The grading and ranking of the proposed posts are appropriate, having regard to the level and scope of responsibilities and the professional input required.

ADVICE OF THE STANDING COMMITTEE ON DIRECTORATE SALARIES AND CONDITIONS OF SERVICE

41. The Standing Committee on Directorate Salaries and Conditions of Service has advised that the grading proposed for the posts would be appropriate if the proposal were to be implemented.

Environment, Transport and Works Bureau
January 2005

Existing and Proposed Organisation Chart of Highways Department

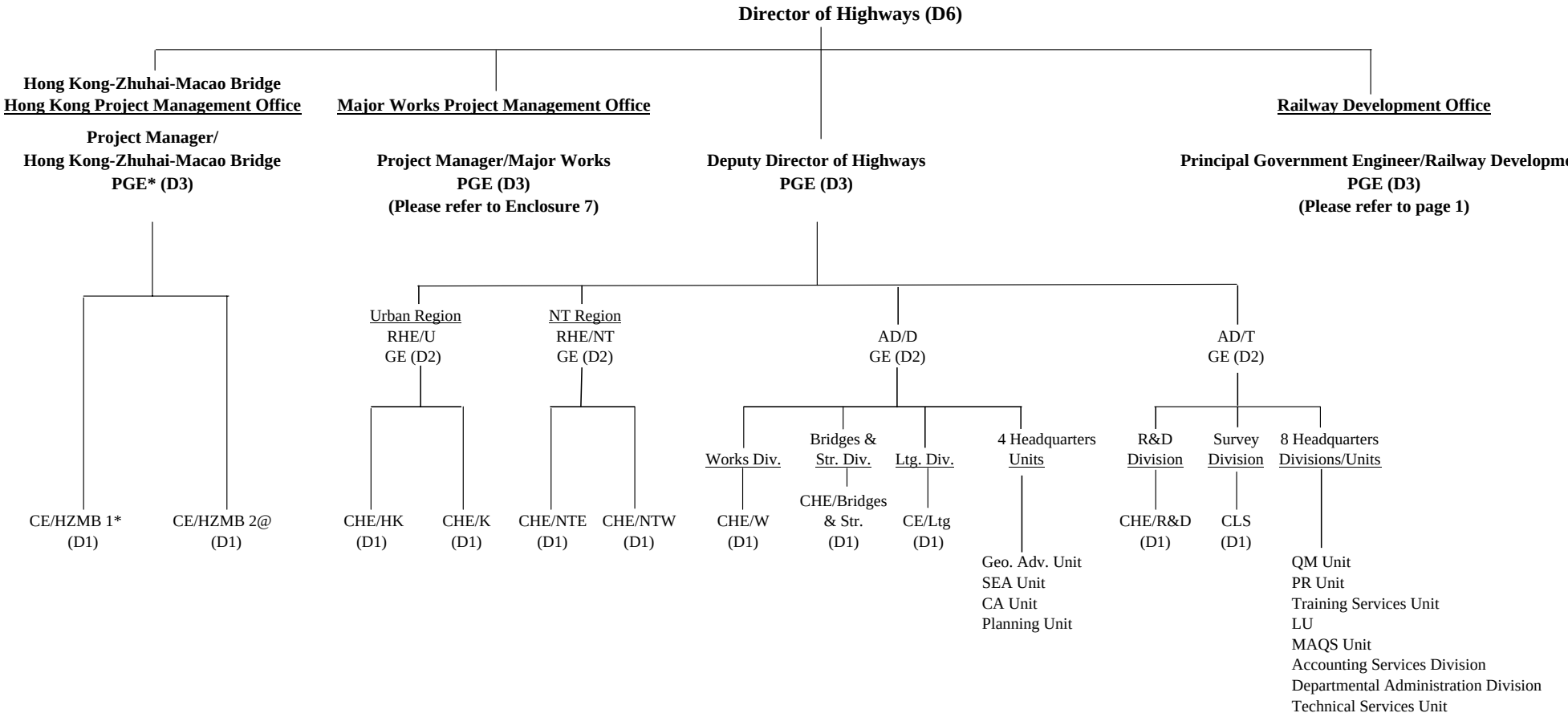


Legend

CE - Chief Engineer
GE - Government Engineer
PGE - Principal Government Engineer
R - Railway
RD - Railway Development
RP - Railway Planning
TS - Technical Services

[+] - Supernumerary post proposed for making permanent
[^] - Supernumerary post proposed to be retained up to 11 June 2007
* - Supernumerary post to lapse on 1 July 2010

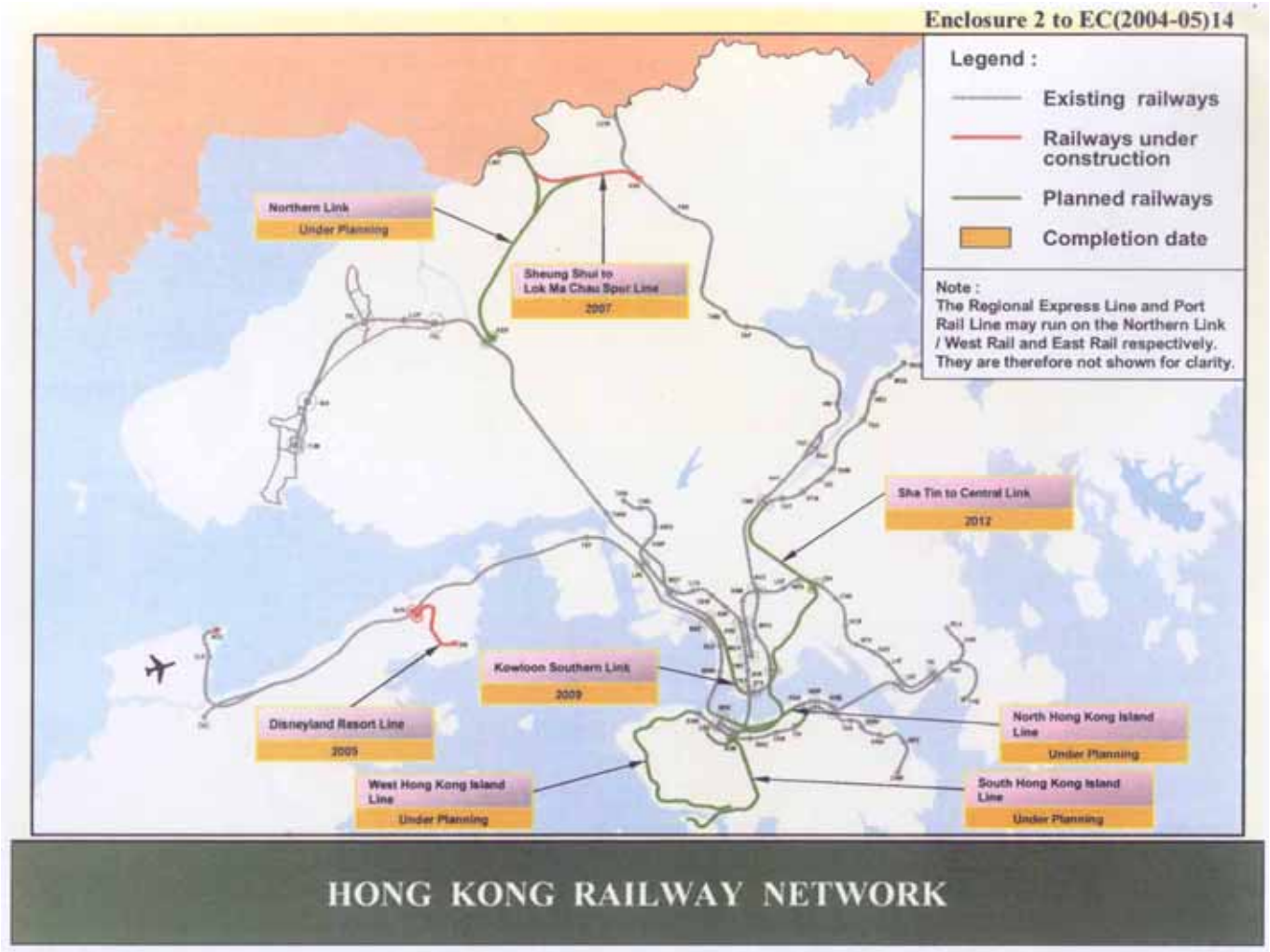
Existing and Proposed Organisation Chart of Highways Department



Legend

AD/D	- Assistant Director/Development	
AD/T	- Assistant Director/Technical	
CA	- Contract Advisory	
CE	- Chief Engineer	
CHE	- Chief Highway Engineer	
CLS	- Chief Land Surveyor	
Div.	- Division	
Geo. Adv.	- Geotechnical Advisory	
GE	- Government Engineer	
HK	- Hong Kong	
HZMB	- Hong Kong-Zhuhai-Macao Bridge	
K	- Kowloon	
Ltg.	- Lighting	
LU	- Landscape Unit	
MAQS	- Maintenance Accounts & Quantity Surveying	
NT	- New Territories	
NTE	- New Territories East	
NTW	- New Territories West	
PGE	- Principal Government Engineer	
PR	- Public Relations	
QM	- Quality Management	
R&D	- Research and Development	
RHE	- Regional Highway Engineer	
SEA	- Safety and Environmental Advisory	
Str.	- Structures	
U	- Urban	
W	- Works	
*	- Supernumerary posts of 1 PGE and 1 CE to lapse on 1 July 2010	
@	- 1 CE post redeployed from MWPMO to HZMB Hong Kong Project Management Office on a time-limited basis up to 30 June 2010	

Enclosure 2 to EC(2004-05)14



HONG KONG RAILWAY NETWORK

Enclosure 3 to EC(2004-05)14

Projects Managed by Highways Department

(I) Railway Projects handled by the RDO in 1999

1. West Rail
2. Tseung Kwan O Extension
3. Ma On Shan to Tai Wai Rail Link
4. Tsim Sha Tsui Extension
5. Sheung Shui to Lok Ma Chau Spur Line

(II) Railway Projects included since 1999

1. Disneyland Resort Line
2. Kowloon Southern Link
3. Sha Tin to Central Link
4. South Hong Kong Island Line
5. North Hong Kong Island Line
6. West Hong Kong Island Line
7. Northern Link
8. Regional Express Line
9. Port Rail Line

(III) Highway Projects managed by the MWPMO in 1999

(a) Under construction

1. Route 8 (known as Route 9 in 1999) between Tsing Yi and Cheung Sha Wan
2. Route 8 (known as Route 9 in 1999) between Cheung Sha Wan and Sha Tin
3. Widening of Yuen Long Highway
4. Improvements to Castle Peak Road

/(b) .....

(b) Under planning

5. Improvements to Tuen Mun Road (under current project title of Reconstruction and Improvement of Tuen Mun Road)
6. Widening of Tolo Highway and Fanling Highway (remaining section between Island House and Fanling)
7. Central-Wan Chai Bypass and Island Eastern Corridor Link
8. Central Kowloon Route
9. Gascoigne Road Flyover Widening
10. Route 4 (known as Route 7 in 1999) section between Kennedy Town and Aberdeen

(IV) Highway Projects included since 1999

(a) Under construction

1. Hong Kong – Shenzhen Western Corridor
2. Deep Bay Link
3. New Boundary Bridge between Lok Ma Chau and Huanggang
4. Retrofitting of Noise Barriers on Fanling Highway near Choi Yuen Estate and Fanling Centre
5. Reconstruction of Causeway Bay Flyover and Widening of Victoria Park Road
6. Improvements to Tung Chung Road between Lung Tseng Tau and Cheung Sha

(b) Under planning

7. Other Noise Mitigation Projects on Existing Roads
8. Improvements to Island Eastern Corridor section between Causeway Bay and North Point

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Job Description for
Chief Engineer/Technical Services
(as shown in Enclosure 8 to EC(98-99)26 and
approved by the Finance Committee in March 1999)

Rank **:** Chief Engineer (D1)

Responsible to **:** Project Manager/Railway Development

Overall Role and Objectives –

The Chief Engineer/Technical Services will head the Technical Services Division and be responsible for establishing a computerized railway planning tool and the necessary data base for the continuous planning and updating of the territory's rail network development.

Major Duties and Responsibilities –

1. Coordinating the compilation of statistical data on railway riderships covering line flows, station to station passenger movements and interchange flows.

2. Managing and compiling key planning data for use in various transportation studies on railway development.

3. Analyzing land-use and socio-economic data and converting information into the format of the railway model.

4. Maintaining and updating the databank for railway planning.

5. Setting up a four-stage (trip generation, distribution, model spilt and assignment) transport demand model for rail based mode of transport.

6. Maintaining, reviewing and refining the model elements to produce a reliable, efficient and responsive forecasting tool.

7. Reviewing and updating computer applications for railway development.

8. Producing forecasts for different network and land-use development scenarios.

9. Ensuring compatibility of planning assumptions and data input with other strategic transport studies.

10. Providing training on the model application and reviewing the hardware and software requirements.

/11. .....

11. Serving on the following committees –

    (a) Joint Department Meeting on Transport Data and Modelling (Chairman);

    (b) Working Group on computer applications for railway development (Chairman);

    (c) Working Group on Population Distribution (Member); and

    (d) Steering Group on Strategic Transport Studies (Member).

Enclosure 5 to EC(2004-05)14

Job Description for
Chief Engineer/Technical Services (CE/TS)

Rank **:** Chief Engineer (D1)

Responsible to **:** Government Engineer/Railway Development (2)

Overall Role and Objectives –

CE/TS heads the Technical Services Division of the Railway Development Office and is responsible for the upkeeping and operation of the Railway Transport Model (the RDS Model) and the necessary database for the continuous planning and updating of the territory's rail network development.

Major Duties and Responsibilities –

1. Co-ordinating the compilation of statistical data on railway riderships covering line flows, station to station passenger movements and interchange flows.

2. Analysing and compiling land use, demographic and socio-economic data in the format of the computerised transport model for use in various transportation studies on railway development.

3. Updating the databank for railway planning, maintaining and refining the model parameters of a four-stage (trip generation, distribution, model split and assignment) computerised transport model and validating its performance to produce a reliable, effective and responsive planning tool for rail-based transport.

4. Recalibrating the computerised transport model to the latest survey results on travel characteristics.

5. Reviewing and updating computer applications for railway development.

6. Ensuring compatibility on planning assumptions and data input with other strategic transport studies.

7. Producing and analysing forecasts on railway demands for different network, socio-economic assumptions and land use development scenarios.

8. Carrying out financial and economic evaluation of new railway proposals.

9. Handling railway district administration matters.

/10. .....

10. Serving on the following committees –

    (a) Working Group on the Hong Kong 2030 – Planning Vision and Strategy (Member); and

    (b) other steering/working groups on transport studies.

Enclosure 6 to EC(2004-05)14

Job Description for
Chief Engineer/Railway (2) (CE/R(2))

Rank **:** Chief Engineer (D1)

Responsible to **:** Government Engineer/Railway Development (2)

Overall Role and Objectives –

CE/R(2) heads the Railway Division 2 of the Railway Development Office and is responsible for overseeing the implementation of the Sheung Shui to Lok Ma Chau Spur Line (the Spur Line) project and the associated Essential Public Infrastructure Works (EPIW).

Major Duties and Responsibilities –

1. Vetting the technical proposals of the Kowloon-Canton Railway Corporation (KCRC) for the Spur Line, and assisting in negotiation with the Corporation.

2. Liaising with KCRC to ensure the adoption of appropriate strategy, procedures and programme in consultancies and contract management for the Spur Line.

3. Providing technical input to the financial and legal aspects of the Spur Line.

4. Monitoring the programme and progress of the Spur Line.

5. Co-ordinating with other government departments and parties, including the Shenzhen Authorities, to ensure the smooth progress of the Spur Line and the Huanggang-Lok Ma Chau Passenger Bridge.

6. Resolving interfacing matters arising from the Spur Line with other development projects.

7. Administering the Public Works Programme items on the EPIW for the Spur Line and the Public Transport Interchange at Lok Ma Chau Terminus (entrusted to KCRC).

8. Monitoring the expenditure and progress of the EPIW and the Public Transport Interchange at Lok Ma Chau Terminus.

9. Serving on the following committees for the Spur Line –

   (a) Site Liaison Group (Chairman); and

   (b) Huanggang-Lok Ma Chau Passenger Bridge Joint Working Group (Member).

Existing and Proposed Organisation Chart of Highways Department

Director of Highways (D6)

Hong Kong-Zhuhai-Macao Bridge
Hong Kong Project Management Office
Project Manager/
Hong Kong-Zhuhai-Macao Bridge
PGE* (D3)
(Please refer to page 2 of Enclosure 1)

Major Works Project Management Office

Project Manager/Major Works
PGE (D3)

Deputy Director of Highways
PGE (D3)
(Please refer to page 2 of Enclosure 1)

Railway Development Office

Principal Government Engineer/Railway Development
PGE (D3)
(Please refer to page 1 of Enclosure 1)

Major Works Office (1)

DPM/MW(1)^
GE (D2)

Division 1	Division 2	Division 3	PTS Unit
CE/MW1-1^ (CE) (D1)	CE/MW1-2 (CE) (D1)	CE/MW1-3 (CE) (D1)	
Route 8 (previously known as Route 9) between Cheung Sha Wan and Sha Tin including : •Lai Chi Kok Viaduct •Eagle's Nest Tunnel •Shatin Heights Tunnel and Approach Roads	Route 8 (previously known as Route 9) between Tsing Yi and Cheung Sha Wan including : •Ngong Shuen Chau Viaduct •Nam Wan Tunnel and West Tsing Yi Viaduct •Stonecutters Bridge and Look-out Point •East Tsing Yi Viaduct •TCSS	Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha Reconstruction and Improvement of Tuen Mun Road Route 4 (previously known as Route 7) section between Kennedy Town and Aberdeen	

Major Works Office (2)

DPM/MW(2)
GE (D2)

Division 1	Division 2	Programme, Planning and Control Unit
CE/MW2-1 (CE) (D1)	CE/MW2-2 (CE) (D1)	
Castle Peak Road Improvement between Area 2 and Ka Loon Tsuen (2 projects) Widening of Tolo/Fanling Highway between Island House and Fanling Central Kowloon Route Gascoigne Road Flyover Widening	Improvement to Castle Peak Road between Ka Loon Tsuen and Siu Lam Reconstruction of Causeway Bay Flyover and Widening of Victoria Park Road Central – Wan Chai Bypass and Island Eastern Corridor Link Improvements to Island Eastern Corridor Section between Causeway Bay and North Point	

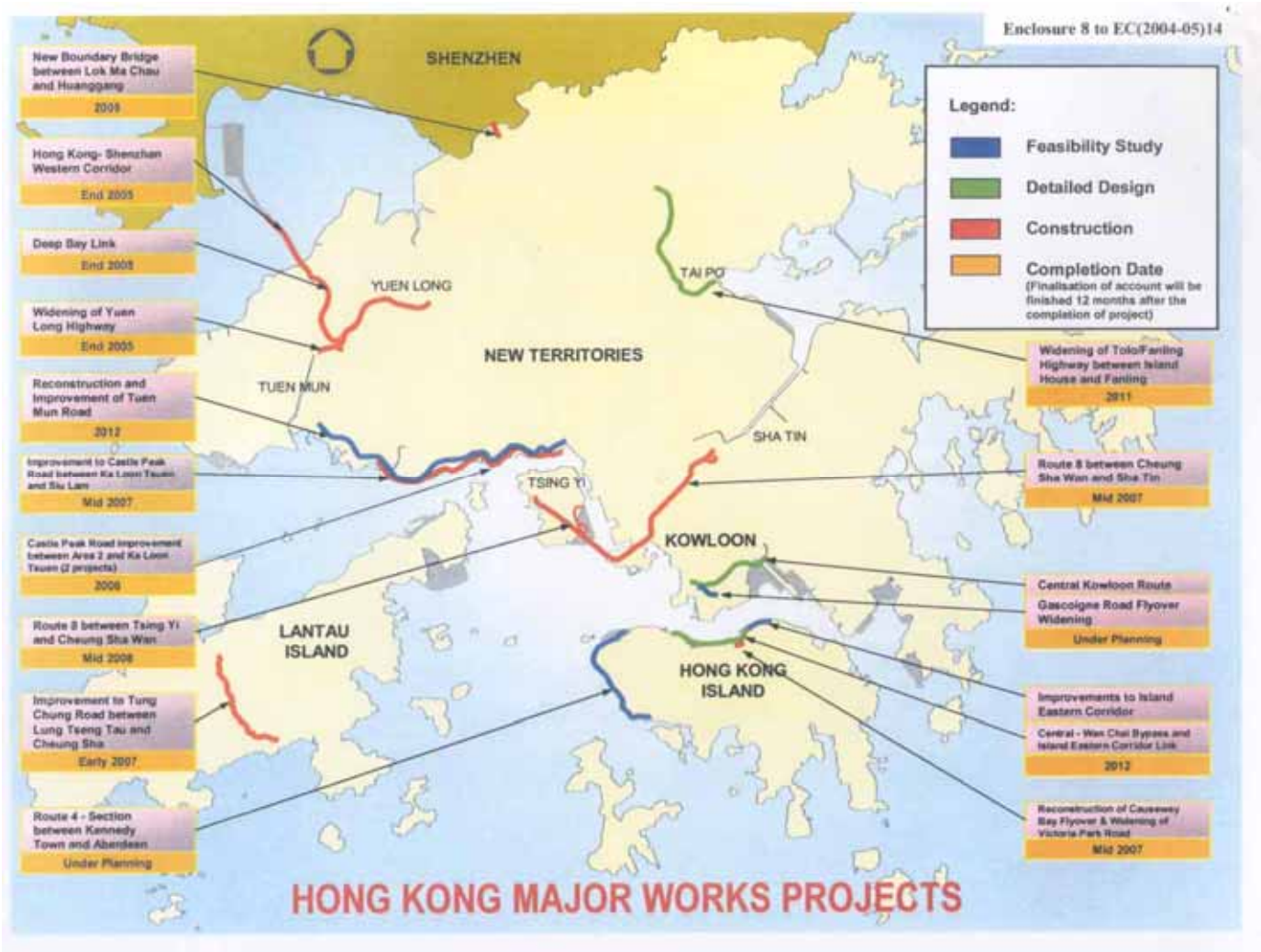
Major Works Office (3)

DPM/MW(3)
GE (D2)

Division 1	Division 2	CA Unit	E&M Engineering Co-ordination Unit
CE/MW3-1^ (CE) (D1)	CE/MW3-2 (CE) (D1)		
Deep Bay Link •north section •south section New Boundary Bridge between Lok Ma Chau and Huanggang Retrofitting of Noise Barriers on Fanling Highway near Choi Yuen Estate and Fanling Centre Other Noise Mitigation Projects on Existing Roads	Hong Kong-Shenzhen Western Corridor and TCSS Widening of Yuen Long Highway		

Legend

CA - Contract Advisory
CE - Chief Engineer
DPM - Deputy Project Manager
E&M - Electrical & Mechanical
GE - Government Engineer
MW - Major Works
PGE - Principal Government Engineer
PTS - Project Technical Support
TCSS - Traffic Control and Surveillance System
^ - Supernumerary posts proposed to be retained up to 11 September 2006
* - Supernumerary post to lapse on 1 July 2010


SHENZHEN
New Boundary Bridge between Lok Ma Chau and Huanggang
2009
Hong Kong- Shenzhan Western Corridor
End 2005
Deep Bay Link
End 2008
Widening of Yuen Long Highway
End 2005
Reconstruction and Improvement of Tuen Mun Road
2012
Improvement to Castle Peak Road between Ka Loon Tsuen and Siu Lam
Mid 2007
Castle Peak Road improvement between Area 2 and Ka Loon Tsuen (2 projects)
2008
Route 8 between Tsing Yi and Cheung Sha Wan
Mid 2008
Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha
Early 2007
Route 4 - Section between Kennedy Town and Aberdeen
Under Planning
YUEN LONG
TUEN MUN
NEW TERRITORIES
TAI PO
SHA TIN
TSING YI
KOWLOON
LANTAU ISLAND
HONG KONG ISLAND
Legend:
Feasibility Study
Detailed Design
Construction
Completion Date
(Finalisation of account will be finished 12 months after the completion of project)
Widening of Tolo/Fanling Highway between Island House and Fanling
2011
Route 8 between Cheung Sha Wan and Sha Tin
Mid 2007
Central Kowloon Route
Gascoigne Road Flyover Widening
Under Planning
Improvements to Island Eastern Corridor
Central - Wan Chai Bypass and Island Eastern Corridor Link
2012
Reconstruction of Causeway Bay Flyover & Widening of Victoria Park Road
Mid 2007
HONG KONG MAJOR WORKS PROJECTS

Enclosure 9 to EC(2004-05)14

Job Description for
Deputy Project Manager/Major Works (1) (DPM/MW(1))

Rank **:** Government Engineer (D2)

Responsible to **:** Project Manager/Major Works

Overall Role and Objectives :

DPM/MW(1) manages the day-to-day operations of the Divisions under his control. He provides professional, administrative and policy guidance, support and leadership to his subordinates who are responsible for planning and implementing strategic highway projects relating to Route 8 (previously known as Route 9) between Tsing Yi and Sha Tin, Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha, Reconstruction and Improvement of Tuen Mun Road and Route 4 (previously known as Route 7) section between Kennedy Town and Aberdeen. He also oversees the Project Technical Support Unit.

Major Duties and Responsibilities –

1. Executing strategies, policies and procedures to control project scope, cost and programme of major highway projects.

2. Managing, monitoring and co-ordinating the work of his Divisions and Units in implementing major highway projects with the best utilisation of resources.

3. Setting Divisional programmes and cost targets and monitoring performance against the set targets to ensure projects are completed on time and within budget.

4. Handling contractual disputes, and dealing with contractual issues from the Client's perspective.

5. Liaising with policy bureaux and other government departments on issues relating to the planning, design and implementation of projects.

6. Chairing assessment panels for consultants selection, negotiating and processing consultants agreements and presenting recommendations to the Consultants Selection Board, and supervising the management of consultants engaged in the major highway projects.

7. Preparing tender documents, chairing panels for the prequalification of tenderers and the assessment of tender proposals, and attending meetings of the Central Tender Board.

Enclosure 10 to EC(2004-05)14

Job Description for
Chief Engineer/Major Works 1-1 (CE/MW1-1)

Rank **:** Chief Engineer (D1)

Responsible to **:** Deputy Project Manager/Major Works (1)

Overall Role and Objectives :

CE/MW1-1 heads a Division and is responsible for the implementation of the highway projects under Route 8 between Cheung Sha Wan and Sha Tin including Lai Chi Kok Viaduct, Eagle's Nest Tunnel as well as Shatin Heights Tunnel and approach roads.

Major Duties and Responsibilities –

1. Assisting in the execution of strategies and procedures as formulated by his seniors in respect of major highway projects.

2. Leading and directing his subordinates in the planning, design and implementation of major highway projects.

3. Consulting and co-ordinating with the policy bureau and other departments in preparing briefings, information papers and situation reports.

4. Attending meetings of the District Councils and other meetings as and when required.

5. Procuring and administering consultancies.

6. Managing the performance of contractors engaged in construction contracts, overseeing construction progress and ensuring they are completed on time, within budget and in compliance with the approved schedules, government procedures and standards.

7. Handing over completed works to maintenance authorities and ensuring as-constructed records are accurate and complete.

8. Resolving claims and disputes raised by contractors.

Enclosure 11 to EC(2004-05)14

Job Description for
Chief Engineer/Major Works 3-1 (CE/MW3-1)

Rank **:** Chief Engineer (D1)

Responsible to **:** Deputy Project Manager/Major Works (3)

Overall Role and Objectives :

CE/MW3-1 heads a Division and is responsible for the implementation of a number of highway projects including Deep Bay Link, New Boundary Bridge between Lok Ma Chau and Huanggang, retrofitting of noise barriers on Fanling Highway near Choi Yuen Estate and Fanling Centre and other noise mitigation projects on existing roads.

Major Duties and Responsibilities –

1. Assisting in the execution of strategies and procedures as formulated by his seniors in respect of major highway projects.

2. Leading and directing his subordinates in the planning, design and implementation of major highway projects.

3. Consulting and co-ordinating with the policy bureau and other departments in preparing briefings, information papers and situation reports.

4. Attending meetings of the District Councils and other meetings as and when required.

5. Procuring and administering consultancies.

6. Managing the performance of contractors engaged in construction contracts, overseeing construction progress and ensuring they are completed on time, within budget and in compliance with the approved schedules, government procedures and standards.

7. Handing over completed works to maintenance authorities and ensuring as-constructed records are accurate and complete.

8. Resolving claims and disputes raised by contractors.
