

**For Discussion
on 8 December 2003**

**Paper for Joint Meeting of the Panel on
Planning, Lands and Works and the Panel on Environmental Affairs**

**The Administration's Response to Views Expressed by the
Deputations at the Public Hearing on 27 November 2003**

Purpose

The Panel on Planning, Lands and Works and the Panel on Environmental Affairs held a joint meeting on 27 November 2003 to listen to the views of the community on the Central Reclamation Phase III (CRIII) and the Wan Chai Development II (WDII). Representatives from 20 deputations attended the meeting and gave their views, mainly on CRIII. As the views expressed were rather diverse, we have summarised these under a number of key areas for the purpose of providing a consolidated response. A separate paper will deal with the more specific concerns relating to the Central – Wan Chai Bypass (CWB).

(1) Engaging the Public in Proposed Harbour Reclamations

2. Several deputations have expressed the view that a partnership and collaboration approach should be adopted by the Government in any planning process and that the Government should effectively explain to the community the need for any reclamation.

3. As we have pointed out in previous submissions on the chronology of events relating to CRIII and WDII, there are elaborate statutory processes in place ensuring public input to planning and development proposals. In the case of CRIII, the community input has resulted in a significant reduction in the size of reclamation and the

drawing up of a minimum reclamation option that was then considered acceptable by most objectors. That said, we recognise the importance of sharing with the community information on harbour reclamation to facilitate a rational debate and to build a greater consensus.

4. To reflect Government's commitment to protect and preserve the Harbour, the Secretary for Planning, Environment and Lands has repeatedly made known in public that the three reclamation projects in Central, Wan Chai North and South East Kowloon are the last reclamation projects in the Victoria Harbour. The Government has already dropped earlier proposals of reclamation in Kowloon Point and Tsim Sha Tsui East and will take action to amend the relevant Outline Zoning Plans (OZPs) to remove the proposed reclamations in Tsuen Wan Bay and off Green Island. In respect of the Wan Chai North and South East Kowloon proposals, these are subject to a comprehensive review to ensure full compliance with the law. These high level statements have been re-assuring to the public. This assurance is also reiterated in the leaflet produced by the Housing, Planning and Lands Bureau entitled "Our Harbour -- Past, Present, Future" (copy at **Annex A**), which is now widely circulated to various organisations and schools and distributed to members of the public. Relevant information may also be obtained through the website www.hplb.gov.hk/eng/new/central.htm.

5. The Government welcomes similar initiatives from community groups to engage the public in debate on planning matters. However, we are concerned about the accuracy of data and information contained in some of those publications. For example, at the public hearing meeting on 27 November, a booklet entitled "*The Harbour Primer – What you need to know about harbour reclamation*" published by Friends of the Harbour was tabled by the deputation from the Society for the Protection of the Harbour (SPH). As this publication may form one of the submissions to be considered by the Panels, we wish to point out some of the inaccurate information contained therein. For example --

- a. allegation that the Government has plans to reclaim 636 hectares from Victoria Harbour by reference to a 1994 Town Planning Board paper which both the Board and the Government have refuted in the past months. The fact is many of the ideas of

reclamation then floated have never been incorporated into any statutory outline zoning plans;

- b. allegation that dredging works releases contaminants into the seawater and dumping of mud creates unacceptable pollution. This has totally ignored the close environmental monitoring and auditing that CRIII works are being subject to under the relevant environmental protection legislation;
- c. allegation that the Government permits change of land use at will quoting inaccurate cases including that the City Hall and Gardens may be re-zoned for commercial development. The City Hall Complex is zoned "Government, Institute or Community (1)" on the approved Central District (Extension) Outline Zoning Plan (OZP). There is no plan for rezoning the City Hall for commercial development. Indeed, taking into account the concern to preserve the city hall complex as a classic architecture of the 1960s, the publication of the Central (Extension) OZP No. S/H24/5 on 2 February 2002 proposed a revised local road layout so as to allow the whole complex to remain intact. The existing memorial garden will be retained.

6. A more detailed response of the Administration to views expressed in the booklet is set out at **Annex B**.

(2) Traffic justifications for the CWB

7. Some deputations continued to query the need for the essential transport infrastructure for which land is to be formed under CRIII, including the CWB and Road P2 network. They requested the Government to provide more robust transport justifications for the project, and to consider other traffic management measures as a long-term measure to tackle the traffic problems in Central and Wan Chai. Prior to the public hearing on 27 November 2003, the Environment, Transport and Works Bureau (ETWB) has already provided Members with a paper on Traffic and Transport Justification for the CWB. We wish to highlight that the transport case for these essential roads is re-confirmed by a re-run of the Third Comprehensive Transport Study model using the

latest data on population growth, economic growth, planned developments, vehicle size, traffic volume, etc. For details, Members are requested to refer to the paper by the ETWB.

8. As regards adopting other traffic management measures in lieu of building roads, we have pointed out in our response to “the Harbour Primer” booklet at Annex B that various alternative options have been considered but concluded that these alone cannot help tackle the increasing traffic congestion problem. Such alternatives considered include full utilisation of Western Harbour Crossing, constructing the MTR western extension from Sheung Wan to Kennedy Town, provision of bus-bus interchanges at fringe areas of Central, restricting loading/unloading times in Central and Electronic Road Pricing. Moreover, it would not be easy at all to achieve a community consensus on some of these measures.

9. One deputation has specifically queried about the cost-effectiveness of CWB. The Administration’s response to this and other elaboration on the traffic justification for CRIII are contained in a separate paper by ETWB.

(3) The Impact of the WDII Judgment on CRIII and Future Reclamations

10. A few deputations have expressed concern about the difficulty of applying the three tests as laid down in the High Court Judgment on WDII, namely “(i) compelling, overriding and present need, (ii) no viable alternative” and (iii) minimum impairment”. As Members are aware, the Town Planning Board has lodged an appeal against the Judgment which will be heard in the Court of Final Appeal from 9 to 16 December 2003. In its written submission to the Panels, the Board explained that the Board has appealed not that it wishes to pursue its original proposal for a Harbour Park in the WDII reclamation which the Board has in fact dropped, but because it wishes to seek a clarification of the legal principles behind the Protection of the Harbour Ordinance (PHO) in view of the High Court’s restrictive interpretation which could have far reaching implications on future planning and development of the harbourfront areas.

11. As regards the SPH's claim that the effect of the High Court's Judgment is that all previous decisions made by the Town Planning Board and the Government were wrong as a matter of law, such decisions were in contravention of the PHO and that all the plans including CRIII were unlawful and in breach of PHO, this is legally unsound. We have clear legal advice from both Department of Justice and outside Counsel that the CRIII remains lawful and valid until it is set aside by court. As a matter of fact, CRIII has gone through a due process of statutory town planning procedures and wide consultation, including Members of the Legislative Council (LegCo) resulting in LegCo's approval of funding for both the detailed design and construction works of CRIII in 2000 and 2002 respectively. The CRIII contract was awarded on 10 February 2003 and the works commenced on site on 28 February 2003. It has a value of \$3,790 million and involves a total of some 1 100 jobs over the next four to five years. Against this background, it would not be responsible for the Government to accede to SPH's request for a "time-out" of the CRIII project such that the community could re-consider the whole project from a clean drawing board.

(4) Extent of Reclamation under CRIII

12. It appears that amongst those deputations that support the CWB and related road network, there is no particular query on the extent of reclamation needed to provide land for the roads. CRIII is the outcome of a comprehensive study undertaken in 1999-2000 to determine a minimum reclamation option. Many objectors to the original CRIII with a total reclamation of 38 hectares considered the minimum reclamation option of 23 hectares acceptable. At the PWSC meeting on 12 April 2000 to consider the funding application for CRIII detailed design works, the Chairman of the LegCo Panel on Planning, Lands and Works reported that Members at large were agreeable to the revised scale of reclamation.

13. Despite the legitimacy of CRIII and its being a minimum reclamation option, the Administration has initiated and completed a Review on CRIII based on the "three tests". The Review examines the purpose and extent of the individual components of the CRIII reclamation and concludes that the CRIII works meet the three tests. The Review's main findings are summarized as follows -

(a) Compelling, Overriding and Present Need

The CRIII is needed to provide land for essential transport infrastructure including the CWB and roads connecting CRI and II (the Road P2 network).

At present, the Corridor is operating over its capacity and there is regular traffic congestion during the peak hours. CWB is a strategic road linking the Rumsey Street Flyover with the Island Eastern Corridor via the Island Eastern Corridor Link. In a recent re-run of the Third Comprehensive Transport Study transport model completed in 2003, the results indicate that the demand for the CWB remains firm, despite updates in land use planning assumptions and the reduced population projections of the territory. The Road P2 network is also fully justified to cope with the growing traffic within the completed CRI and II. The Review has re-confirmed that there is a compelling, overriding and present need to build CWB and related roads in order to bring urgent relief to the traffic congestion in Central and Wan Chai. The traffic problem will deteriorate if the roads are not ready in time to meet the demand as well as the needs arising from new development in Central's waterfront area.

The North Island Line (NIL), which overlaps in horizontal alignment with the overrun tunnel for the Airport Railway and Tung Chung Line, will require some reclamation south of the CWB. Although it was decided in early 2003 that the implementation of the NIL will be deferred, land has to be reserved for agreed alignment of NIL in constructing the CWB, otherwise, implementation of the NIL at a later stage will be jeopardized. Other supporting roads such as the Road P2 network at the south of CWB and the waterfront promenade could be built on land so formed and no extra reclamation is needed for these roads.

(b) No Viable Alternative

the Territory Development Department has explored various alternatives such as building the CWB in the form of an elevated structure, an at-grade road, or a bored or submerged tube tunnel to avoid reclamation. None of them are considered viable, owing to various technical reasons (e.g. the presence of existing developments and existing underground facilities or adverse impact on existing traffic network) as well as concerns over the adverse impacts on the environment and urban planning arising from these alternatives (e.g. air pollutants, noise and visual impact in the case of the at-grade or elevated options). It is concluded that building CWB beyond the current Central shoreline through reclamation is considered the only viable option.

As reclamation is the only viable option, the existing piers and sea-water cooling water pumping stations along the current shoreline will need to be reprovisioned along the new harbour-front. Otherwise, the ferry services will have to be terminated and the buildings currently served by the pumping stations will have to be modified in order to be served by other cooling facilities or otherwise will have no cooling facilities. However, none of the alternatives for the sea water cooling system are considered viable at this stage because no extra space is available within the existing buildings to house new system and some of the alternative system is environmentally unfriendly. Also, as CRIII will produce the eventual permanent waterfront in Central, we have to provide a People's Liberation Army berth pursuant to the 1994 Sino-British Defense Land Agreement.

(c) Minimum Impairment to the Harbour

The Review concludes that the existing CRIII project has already kept impairment to the Harbour to the minimum. The shoreline will move slightly northward as a result of the construction of CWB. The Star Ferry piers, Queen's Pier,

various public landing steps and the groups of cooling water pumping stations serving major offices and commercial buildings in Central have to be reprovioned along the future Central shoreline. After extensive discussion and consultation with the parties concerned, we have come up with the current configuration which is acceptable to all and which would cause the minimum impairment to the Harbour.

14. The Review findings have been endorsed by Professor Y S Li, the Head of Department of Civil and Structural Engineering, and the Chair Professor of Coastal and Environmental Engineering at the Hong Kong Polytechnic University. Professor Li confirmed that in his view, the analysis as presented in the Review Report has convincingly demonstrated that the CRIII reclamation can comply with the three tests laid down in Madam Justice Chu's Judgment. Professor Li also confirms that CRIII is a necessary continuation of the early and completed phases of the Central and Wan Chai reclamations, namely the CRI, CRII and Wan Chai Reclamation I, and that apart from the proposed construction of the key infrastructure in Central, namely the CWB, Airport Railway Extended Overrun Tunnel and Road P2 network, the CRIII reclamation can enhance the tidal flow and water quality in the Victoria Harbour by eliminating a zone of rather stagnant water.

15. A copy of the Review Report in two volumes is at **Annex C** for Members' information. We plan to upload the Report to the HPLB website to keep the community better informed of the CRIII project.

16. At the meeting on 27 November, SPH tabled two conceptual diagrams on its idea of a "minimum reclamation" option, claimed to be half the size of CRIII, and an alternative "zero reclamation" option. Both proposals are short of details to enable a reasonable assessment of their feasibility. Our initial view is that the no-reclamation proposal seems to rely on traffic management measures and a new surface road cutting through the open space strip between existing Star Ferry and Queen's Piers and City Hall while the "minimum reclamation" option portrays only the CWB alignment with no provision or regard for essential support such as the seawall; the reprovioning of cooling water pumping stations affected by the reclamation; the impact on marine

traffic; the construction staging and work sequence to ensure all existing facilities could continue to function properly during the construction.

(5) Environmental impact of CRIII

17. One deputation has expressed concern on the environmental impact of dredging works under CRIII. We wish to point out that the CRIII project has gone through the statutory Environmental Impact Assessment (EIA) process under the EIA Ordinance. Its EIA report was published for public inspection in 2001. It was endorsed by the Advisory Council on the Environment (ACE) and approved by the Director of Environmental Protection in August 2001. The ACE re-affirmed that the EIA report remains valid at its meeting on 13 October 2003. The results of the current environmental monitoring and audit programme required under the Environmental Permit issued by DEP for the CRIII project have not shown any adverse environmental impacts arising from the works.

(6) Public participation in the use of reclaimed land and design of the waterfront

18. A concern of SPH and some deputations is that once reclaimed, the land concerned will no longer be subject to the PHO and any proposed change of use to say, commercial use, would be readily approved. We wish to point out that preparation of plans and subsequent zoning amendments are subject to a due process as set out under the Town Planning Ordinance. We note the concerns of the community over the possible use of reclaimed land for commercial and other non-essential purposes. To address the concerns, the Government would consider ways and means within the town planning process to ensure newly reclaimed land will be used for their intended purpose, e.g. by incorporating such designated use of the reclaimed land and planning intention in statutory notes to OZP. We are committed to rejuvenating 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. We would consider ways to better involve the public in the planning and design of these waterfront

developments.

(7) Summary of views

19. The Clerk to the Panels has compiled a table recording the views of the deputations made at the meeting on 27 November. As the content of the table overlaps much of the information provided in this paper and ETWB's paper, we have filed a brief response at **Annex D** for Members' reference.

Housing, Planning and Lands Bureau
5 December 2003

Our Harbour— Past, Present and Future



Past

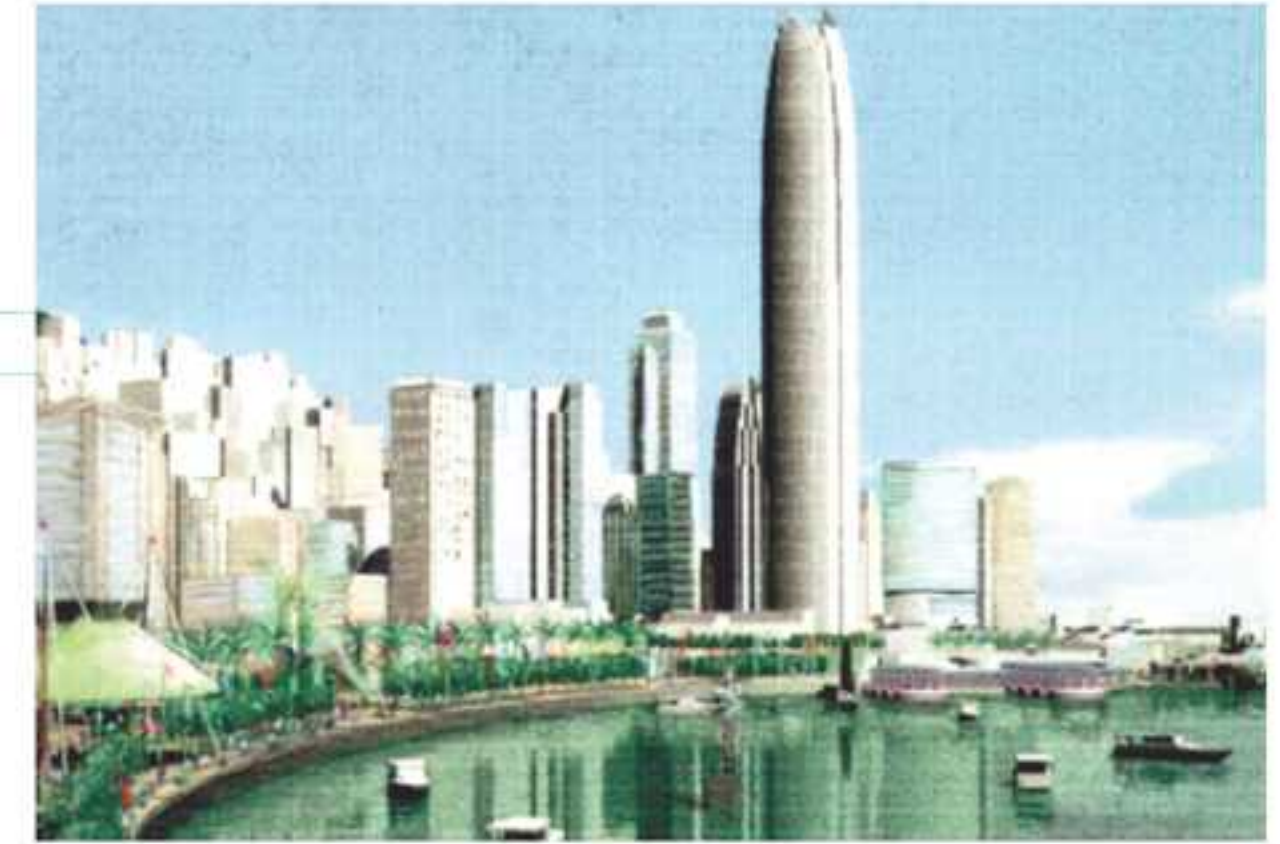


- Ever since the mid 19th Century, we have been obtaining land from leveling hills and reclamation for economic development that has greatly raised our living standard.
- Today, Hong Kong is an international financial centre. The Airport Railway and its Hong Kong Station at the heart of Central, as well as the Hong Kong Convention and Exhibition Centre, are all located on reclaimed land.

Present



- In recent years, there have been strong calls from professional bodies, green groups and the general public for the Harbour to be protected.
- The Government agrees that the Harbour, being the Hong Kong people's special natural asset, should be protected and preserved.
- We want our Harbour to be a harbour for the people and a harbour of life so that people can easily come near the waterfront and enjoy it.
- The Government will ensure that any reclamation plans are in line with the principle of protecting the Harbour.



In this connection,

- we have abandoned the proposals of reclamation at Kowloon Point and Tsim Sha Tsui East;
- we will amend the relevant outline zoning plans to eliminate the reclamation plans for Tsuen Wan and the Western District;
- we have started a comprehensive planning review for Wan Chai Development Phase II (i.e. Wan Chai North) and Southeast Kowloon (i.e. the site of the former Kai Tak Airport) in an effort to work out a minimum reclamation option that meets the requirements of the law.



Aerial photo of Victoria Harbour after the completion of Central Reclamation Phase III





- The Central Reclamation Phase III project was approved after extensive public consultation. It enables the essential road networks that include surface roads and the Central-Wan Chai Bypass to relieve traffic congestions in Central. Besides, we will also develop a vibrant waterfront promenade on the land reclaimed for these infrastructural projects for the enjoyment of the public.



Alignment of the proposed Central - Wan Chai Bypass

Future

- The Government will continue to listen to views of the public and hold discussions with different sectors of the community on the task of protecting and preserving the Harbour.
- You are welcome to give us your views. Please contact us –
Website: www.hplb.gov.hk/eng/new/central.htm
Email: enquiry@hplb.gov.hk
Address: Planning and Lands Branch,
Housing, Planning and Lands Bureau,
9/F, Murray Building, Garden Road,
Hong Kong.

Government's Response on "The Harbour Primer" Booklet

published by Friends of the Harbour

The Government recognizes the importance of sharing with the community information on harbour reclamation to facilitate a rational discussion. The Housing, Planning and Lands Bureau has produced a leaflet entitled "Our Harbour – Past, Present and Future" which is widely circulated to various organizations and schools and distributed to members of the public. Relevant information is also available on the bureau's website. Similar initiatives of community groups are welcome.

At the joint meeting of the Panel on Environmental Affairs and Panel on Planning, Lands and Works held on 27 November 2003, a booklet entitled "The Harbour Primer" was tabled apparently by deputation from the Society for Protection of the Harbour Limited (SPH). We notice that the booklet contains some outdated and inaccurate information. The Administration's detailed response, organized according to the sequence and headings in that booklet, is set out below.

"Why the fuss about Victoria Harbour"

- Para. 5 - The SPH's claim that the Government has been proposing to reclaim from the Harbour the remaining 636 ha is wrong. In supporting its claim, SPH was referring to a 1994 Town Planning Board (the Board) paper on "Reclamation in the Victoria Harbour". As categorically pointed out in the Board's letters to the SPH on 18.8.2003 and 9.9.2003, the subject paper was an internal paper to illustrate to Members the total effect of the reclamations contemplated in the Victoria Harbour at that time. Many of these ideas have never been formally pursued thereafter and the 1994 paper has no particular policy or statutory status of its own.
- The fact is no reclamation proposals at Kowloon Point, Tsim Sha Tsui East and Green Island have ever been agreed by the Board for incorporation into the OZPs. The reclamation proposals in the OZP for the Central District (Extension), covering the Central

Reclamation Phase III (CRIII) now in progress, has been significantly scaled down in the process of the Board's consideration from 38 ha to 23 ha. Similarly, the South East Kowloon Reclamation relating to the former Kai Tak Airport site has been reduced from 299 ha to 133 ha. The reclamation extent for Wan Chai North has also been reduced to 26 ha before incorporation in the draft OZP. Hence, the extent of these three reclamations as reflected in the latest approved or draft plans is only about 182 ha. Moreover, the Board has already decided to delete the 2 ha Harbour Park and to review the OZP for Wan Chai North. The extent of reclamation at South East Kowloon Development will also be reviewed.

- In his open letter of 30.9.2003, statements made at different public occasions, and statements at various sessions with the Legislative Council panels on 13.10.2003 and 27.11.2003, the Secretary of Housing, Planning and Lands announced that other than the proposed reclamation at Central, Wan Chai and South East Kowloon, there would not be any more reclamation within the Harbour. He also reiterated that the Government would not proceed with any reclamation at Tsim Sha Tsui East, Kowloon Point, Tsuen Wan Bay and Green Island. This message is reiterated in the booklet on "Hong Kong 2030" Study.

"Victoria Harbour and Hong Kong's Development"

- Para. 6 – The statement made that the Harbour "has been decimated by poor planning and zoning" is unsubstantiated. A lot of planning efforts have been put to improve our Harbourfront, and public views received in the process have been duly taken into account.

"Impacts of Reclamation"

Strategic Planning

- Development in Hong Kong in the past few decades has all along been based on a balanced approach, emphasizing on parallel developments in the urban areas and new towns in the New Territories. Also, the relationship between developments in Hong Kong and the Pearl River Delta hinterland has been thoroughly

examined in various planning studies since the 1990's, e.g. Territorial Development Strategy Review and Hong Kong 2030 Study.

Urban Renewal

- There are numerous practical problems involved in the implementation of urban renewal strategy and individual renewal schemes that have to be addressed. Again, it is unfair to put the blame on planners and relate the problems to “lazy planning”.
- The responsibility for the proper upkeep of buildings rests firmly with the owners. It would neither be realistic nor appropriate to expect the Government and the Urban Renewal Authority (URA) to resolve the entire urban decay problem.
- This said, the Government has formulated an urban renewal programme that is primarily aimed at addressing problems of dilapidated areas which have land assembly difficulties and are socially deserving having regard to a host of factors such as the lack of basic sanitary facilities and community benefits to be brought about by the projects. The URA's comprehensive urban renewal approach comprises not only redevelopment, but rehabilitation, revitalisation and preservation.
- The Government has put in place a package of financial support measures to facilitate the implementation of the urban renewal programme, including an equity injection of \$10 billion into the URA over five years and land grants at nominal premium for urban renewal sites.

Harbour Safety

- Harbour safety will not be impaired by the reclamation work for two main reasons : (a) The reclamation will not reduce the width of fairway for navigation. (b) Wave absorbing seawall will be constructed to reduce the wave reflection.

Traffic Management

It is not fair to say that “alternatives to the simple addition of more roads have not been fully explored.” We have considered various alternative options but find that they alone cannot help tackle the increasing traffic congestion problem.

Full utilization of Western Harbour Crossing (WHC)

- Adopting an equal toll for Cross Harbour Tunnel (CHT) and WHC is not expected to have any significant relieving effects.
- According to the result of our traffic model, it is predicted that the possible relieving effect on Gloucester Road (GR) would be less than 2%. This is because the diversion of traffic from CHT to WHC is likely to result in a corresponding increase in traffic volume along Connaught Road Central (CRC), adding to the traffic congestion thereat. Therefore, the overall traffic condition of the GR/HR/CRC Corridor is not expected to improve under such a hypothetical toll regime.
- This could be attributable to the fact that some additional traffic in the east would be attracted to use WHC via the GR/HR/CRC Corridor. Similarly for cross-harbour traffic from the Southern district via the Aberdeen Tunnel, they would have to travel along the Corridor before they can use WHC to take advantage of the lower toll. On the other hand, traffic from the Central district originally destined to use CHT would be removed away from the Gloucester Road/Harcourt Road but part of it would add back to the Connaught Road Central if they are diverted to use WHC under a cheaper toll. For the cross-harbour traffic from Wanchai diverted from CHT to WHC, the reduction in traffic in the eastern part of Gloucester Road will result in increase in traffic in the western part of Gloucester Road and HR/CRC Corridor. There would hence be a balancing out effect overall. Furthermore, the amount of cross harbour traffic is relatively minor when compared to the bulk of the non-cross harbour traffic using the Corridor, the volume of which is not at all affected by the toll levels of the cross harbour tunnels.
- When the toll levels of WHC and CHT becomes the same, some

CHT traffic would shift to use WHC while some Eastern Harbour Crossing (EHC) traffic would shift to use CHT to take advantage of the relief of traffic congestion of CHT. This will result in a slight increase in traffic demand on the section of Gloucester Road east of CHT (near Excelsior) aggravating the congestion thereat.

- Therefore, the “equal toll” option does not provide an effective solution to congestion along the Corridor.

Constructing the MTR western extension from Sheung Wan to Kennedy Town

- Extending the MTR to Kennedy Town will not help relieve congestion in the CRC / HR / GR Corridor. Most of the bus routes run along the inner roads like Des Voeux Road and Queen’s Road. The reduction in bus service as a result of shifting to MTR would be limited and it would at most bring slight relief to the already congested inner roads. In fact we have assumed in our traffic model that there would be WIL extending to Belcher by 2011.

Provision of Bus-Bus Interchanges (BBIs) at Fringe Areas of Central

- Through rationalization and restructuring of bus routes, we have succeeded in reducing the number of bus trips through Central by more than 10% in the last five years. We are now examining a proposal on several potential BBIs in the Central Business District. We consider that the scope for further reduction is not of a significant scale.

Restricting Loading/Unloading Times in Central

- Confining the loading/unloading activities to night time could adversely affect the commercial activities in the district. We need to balance the interest of businesses and other trades. Currently, the loading/unloading facilities are already provided on a restrictive basis taking into account the need to minimise any adverse impact on traffic.

Electronic Road Pricing (ERP)

- A Feasibility Study on ERP (the Study) was completed in April 2001 to examine the practicability of implementing an ERP system in Hong Kong and the need for such a system to meet transport objectives. While the Study concluded that the implementation of an ERP system in Hong Kong is feasible from the technical point of view, it also considered that given that peak hour travel speed in urban areas is forecast to remain above 20 km/hour, drastic restraint measures such as ERP were not warranted on traffic management grounds before 2006 for Hong Kong Island and 2011 for Kowloon at the earliest if the growth of the private vehicle fleet is no more than 3% per year. The Study also pointed out that ERP could only work where there was a high level of consensus in the community. After considering all the relevant factors with reference to the above conclusions, the Administration decided that ERP should not be pursued at that time.
- The availability of a reasonable alternative route is key to obtaining community support for the implementation of any such scheme. The magnitude of the forecast growth in traffic demands infrastructure improvement in addition to traffic management measures. The provision of an alternative east-west corridor in the form of CWB is hence crucial in any proposal to address the congestion of CBD.
- The By-pass serves to segregate through traffic from local and its completion will provide a more efficient transport network to sustain the long-term growth of Hong Kong. On the other hand, ERP is a traffic management measure for the management of traffic demand in a specific area and cannot serve as a replacement of the by-pass. The By-pass would still be necessary to provide an alternative route for the through traffic.
- Considering that our predicted traffic volume during the peak hours in 2011 on critical sections of the Corridor will exceed their capacities by 30%, traffic management measures alone will not be adequate, new infrastructure namely the CWB is needed to address the serious traffic congestion envisaged.

Landscape Destruction

- Harbour reclamation does not necessarily result in permanent destruction of the harbour. Under the CRIII project, a sum of \$56 million has been included for extensive landscaping works for the development sites formed. The Government will also invite expression of interests to solicit a conceptual design for the development of the Central Waterfront promenade to be implemented under a separate project.

Air Pollution

- The CRIII has already gone through the statutory EIA process under the EIA Ordinance. The air quality modeling results indicate that vehicular emissions from the proposed primary distributor and the associated road network and emissions from the Central-Wan Chai Bypass ventilation buildings will comply with Air Quality Objectives (in respect of SO₂, TSP, RSP, NO₂, CO, O₃ and Pb) within the CRIII area.

Contamination Mud & Dumping

- On “Contaminated Mud” under “Impacts of Reclamation”, the Primer states that dredging releases contaminants into the seawater. This is not true. CRIII project has already gone through the statutory EIA process under the EIA Ordinance. Its EIA report was published for public inspection in 2001. It was endorsed by the Advisory Council on the Environment and approved by the Director of Environmental Protection in August 2001.
- The CRIII EIA Report identified sensitive receivers in the vicinity of the project works, which included seawater intake pumping stations situated within the project area. No ecological sensitive receivers were identified in the area, however, control of the dredging works has been specified in the Project EIA and EM&A Manual to reduce impacts to Victoria Harbour and ensure that any sediment plumes associated with the project works are localised to the immediate area of the site works. The results of the current environmental monitoring and audit programme required under the Environmental Permit issued by DEP for the CRIII project have so far not shown any adverse environmental impacts arising from the works.

- A sediment quality investigation was undertaken for the CRIII study area prior to the commencement of construction works. Contaminated sediments will be taken to the East Sha Chau disposal site. Non contaminated seabed sediments will be taken to other managed open disposal sites in Hong Kong. As regards the dumping of mud, it is controlled by the Dumping at Sea Ordinance. Rigorous control is maintained during the collection, transport and disposal of contaminated sediments to avoid impacts to the marine environment. The vessels are inspected by site staff to ensure that overflow does not occur, there is an automatic monitoring system on board to ensure that the dumping vessels indeed dispose of the mud at the designated sites. The Contractor is required to strictly comply with the terms and conditions of the Dumping Permit.
- The contaminated disposal site at East of Sha Chau has undergone extensive Environmental Review. An EIA was undertaken to assess the suitability of these sites and to identify potential migration of contaminants. The EIA found that the sites were acceptable for disposal of this material. Effectively the dredged sediments are disposed by bottom dumping barges into excavated mud pits then covered with sand material for containment. These sites, since establishment, have had an extensive environmental monitoring programme in place to detect the possible impacts arising from the disposal of contaminated mud. The monitoring programme includes the monitoring of sediment, water quality, ecological community structure, fishery resources and biotic tissue contamination. Based on the information collected, the Government conducts ecotoxicology and risk assessments for both human beings and dolphins.

Loss of Habitat

- An ecological review indicated that poor water and sediment conditions and a lack of natural coastline in Victoria Harbour have led to ecologically degraded habitats that support only those species which are adapted to polluted conditions and can colonise unnatural substrata such as wharf piles, concrete walls and embankments. Field surveys showed that within the proposed reclamation area the soft seabed was anoxic and supported no macrofauna. The reclamation area is not considered an important habitat for these

birds.

- As the reclamation area covered by CRIII holds no unique habitats or ecological resources of conservation value or interest, impacts which would require migration are not anticipated to result from the CRIII project.

Governance and Good Faith

- On “Governance and Good Faith” under “Impacts of Reclamation”, the Primer states that the rushed award of the CRIII works contract raised doubts about whether the hurry was related to SPH’s application for a JR on TPB’s approval of WDII. This is chronologically incorrect. We have pointed out repeatedly that the tendering for CRIII commenced in August 2002 upon funding approval by LegCo’s Finance Committee and the CRIII contract was awarded on 10 February 2003 as scheduled. SPH’s application of a JR against TPB’s decisions in relation to the draft Wan Chai North OZP was filed at the court registry on 27 February 2003.

Rule of Law

- On the “Rule of Law” under “Impacts of Reclamation”, the Primer states that SPH’s successful judicial review against TPB’s approved plan for WDII in effect required CE in C to refer CRIII back to TPB for review and that the Government’s unwillingness to do so to date raises questions about its commitment to due process and the rule of law. This is legally unsound. The High Court judgment of 8 July 2003 does not require CE in C to refer the OZP covering the CRIII project, i.e. Central District (Extension) OZP, to TPB for review or says anything to that effect. It is WDII and not CRIII that is the subject of the judgment.
- CRIII has gone through a due process of statutory town planning procedures and public consultation. We have clear advice from the Department of Justice and outside Counsel that the Central District (Extension) OZP remains lawful and effective until and unless it is set aside by the court.

“However, even the law is insufficient to protect Victoria harbour”

Many of the examples quoted under this section are inaccurate. These include –

- Para. 3(a) on West Kowloon Reclamation – It is not true to say that the once promised public park, being the main justification for the West Kowloon Reclamation has been rezoned for commercial and cultural development. Of the 340 ha of reclaimed land, only 40 ha of land (about 22.5 ha of which was previously zoned “Open Space”) has been rezoned for “Arts, Cultural, Commercial and Entertainment Uses”. As stipulated in the ‘Invitation for Proposals’ for the development of West Kowloon Cultural District (WKCD), the total amount of open space for public use to be provided in the WKCD should not be less than 20 ha. Also, at least 4 distinct piazza areas of 3 ha should be provided. Upon completion of the WKCD, the amount of open space would not be less than that originally planned.
- Para. 3(b) on Central Reclamation –The former Central Bus Terminal and Yaumatei Ferry Concourse were rezoned to cater for the development of Airport Railway Hong Kong Station. They were not rezoned simply for commercial development.
- Para. 3(c) on City Hall and Gardens and the Star Ferry Concourse – The City Hall Complex is zoned “Government, Institute or Community (1)” on the approved Central District (Extension) OZP. There is no plan for rezoning the City Hall for commercial development. Indeed, taking into account the concern to preserve the city hall complex as a classic architecture of the 1960s, the publication of the Central (Extension) OZP No. S/H24/5 on 2.2.2002 has proposed a revised local road layout so as to allow the whole complex to remain intact. The existing memorial garden will be retained.
- Para 3(d) on Central Reclamation Phase II (Tamar) – The site was zoned “C” on the draft Central District OZP in 1994. It was subsequently planned for the new Government Headquarters, Legislative Council Building and Exhibition Gallery. The site was rezoned to “Government, Institution or Community (4)” on the OZP in 1998. There has been no change in zoning since then.
- Para 3(e) on North Point –The rezoning is a site swapping exercise. While a site at Man Hong Street is rezoned from “O” to “G/IC” for

the ICAC Headquarters building to overcome local citizens' concern to the original site earmarked for the project, another site in the same locality in North Point was rezoned from "G/IC" to "O" as a replacement.

- Para. 3(f) on Chater Garden – This was not a rezoning proposal. It was a planning application already rejected by the Town Planning Board back in February 1995. The zoning of Chater Garden remains "O" on the current OZP.

**Housing, Planning and Lands Bureau,
Environment, Transport and Works Bureau,
Transport Department,
Territory Development Department,
Planning Department,
Environmental Protection Department
5 December 2003**

**CENTRAL RECLAMATION PHASE III (CRIII) –
ENGINEERING WORKS**

REPORT

on

**Review of CRIII Reclamation and the Essential
Infrastructure thereon by applying the Three Tests laid down in the
Judgment by Madam Justice Chu in connection with the Draft Wan
Chai North District Outline Zoning Plan**

Volume 1 - Text

28 November 2003

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Annex 1 Chronological Events Relating to CRIII

Annex 2 Chronological Events on Relocation of Star Ferry Piers

Glossary

Atrium Link	An elevated enclosed pedestrian deck connecting the Hong Kong Convention and Exhibition Centre and its Extension across the Convention Avenue and the water channel at Wan Chai North.
Bentonite slurry	A thin mixture of a liquid, especially water, with the absorbent aluminum silicate clay which is formed from volcanic ash.
Central Reclamation Phase III (CRIII) project	Reclamation of about 18 ha of land of the seabed in front of the Star Ferry Pier from Central reclamation phase I to Lung King Street which is part of the 23 ha of reclaimed land under the approved OZP No. S/H24/6 for Central District (Extension). The scope also includes construction of seawalls; roadworks; culvert extensions; drainage; sewer and service systems; cooling water pumping stations for future developments; reprovisioning of ferry pier, landing steps, cooling water pumping systems, public cargo working area and Government helipad; hinterland drainage improvement works and landscaping works at roadside amenity.
Cope line	A cope line is a reference vertical line along the outermost top corner of the coping of a seawall. The coping is the uppermost in-situ concrete portion of a vertical seawall.
Diaphragm wall (D-wall)	Diaphragm wall is a widely employed technique whereby reinforced concrete retaining walls are cast in-situ from existing ground down to the required depth. A trench or panel is excavated using special equipment and remains open in a stable condition due to the fact that it is kept full of benetonite slurry. Reinforcement cages are lowered into the trench, after which concrete is introduced at the base by a tremie tube and the bentonite slurry is progressively displaced and drawn off. By constructing a series of panels, a continuous wall is achieved.
Dual-2 carriageway	A dual carriageway road with 2 traffic lanes in each side of the carriageway.
Dual-3 carriageway	A dual carriageway road with 3 traffic lanes in each side of the carriageway.
Environmental Impact Assessment (EIA)	The EIA refers to the Environmental Impact Assessment process under the Environmental Impact Assessment Ordinance, Cap.499 (EIAO). The purpose of the EIAO is to avoid, minimise and control the adverse impact on the environment of designated projects through the

environmental impact assessment process and the environmental permit.

The EIAO comes into operation on 1 April 1998. Designated projects specified under Schedule 2 of the EIAO, unless exempted, must follow the statutory environmental impact assessment (EIA) process and require environmental permits for their construction and operation (if applicable, and decommissioning). Designated projects specified under Schedule 3 of the EIAO require approved environmental impact assessment reports but will not require environmental permit.

mPD

Metre above Principal Datum. Principal Datum is the reference datum generally used through out Hong Kong and is 1.23 metres below the Mean Sea Level.

Volume to capacity (v/c) ratio

A v/c ratio is an indicator which reflects the performance of a road. A v/c ratio equal to or less than 1.0 means that a 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 congestion. A v/c ratio above 1.2 indicates more serious congestion with traffic speeds deteriorating progressively with further increase in traffic.

Abbreviation

AEL	MTRCL Airport Express Line
AREOT	Overrun tunnel for the Airport Railway and Tung Chung Line
CBD	Central Business District
CRI	Central Reclamation Phase I
CRII	Central Reclamation Phase II
CRIII	Central Reclamation Phase III
CRC	Connaught Road Central
CTS	Comprehensive Transport Study
CTS-3	The Third Comprehensive Transport Study
CWB	Central – Wanchai Bypass
CWPS	Cooling water pumping station
EMSD	Electrical and Mechanical Services Department
GR	Goucester Road
HKCEC	Hong Kong Convention and Exhibition Centre
HR	Harcourt Road
IECL	Island eastern Corridor Link
IRAE	Initial Reclamation Area East in the construction sequence of CRIII
IRAW	Initial Reclamation Area West in the construction sequence of CRIII
ISL	MTRCL Island Line
MD	Marine Department
NIL	North Hong Kong Island Line
OZP	Outline Zoning Plan
PLA	People’s Liberation Army
RDS-2	Second Railway Development Study
RDS-2000	Railway Development Strategy 2000
TCL	MTRCL Tung Chung Line
TD	Transport Department

TDD	Territory Development Department
TWL	MTRCL Tsuen Wan Line
v/c ratio	volume to capacity ratio
WDII	Wan Chai Development Phase II

Introduction

- 1.1 This report is compiled by the Territory Development Department, in consultation with its Consultant, Atkins China Limited, the Transport Department, the Highways Department and the Marine Department.

- 1.2 Central Reclamation Phase III (CRIII) arose from a number of planning studies commissioned by the Government first dated back to the early 1980s. The chronological events related to CRIII is attached at **Annex A**. As illustrated in this chronology, the CRIII has gone through a due process of statutory town planning procedures and public consultation, in which there had been thorough public discussion on matters including the scale of reclamation and the usage of the land to be made available by the project.

- 1.3 The need for the Central and Wanchai Reclamation was first identified in the strategic study on “Harbour Reclamation and Urban Growth” undertaken between March 1982 and October 1983. The need was further confirmed in various planning studies, including the Territorial Development Strategy of 1984 and the Territorial Development Strategy Review of 1996. The whole Central and Wanchai Reclamation project forms land for the construction of, among other things, strategic transport links, associated surface road networks, the Airport Railway and its Hong Kong Station and the Hong Kong Convention and Exhibition Centre Extension. The Central Reclamation Phases I, II and the Wanchai Reclamation Phase I were completed in 1997 to 1998. CRIII is the fourth of the five phases of the Central and Wan Chai Reclamation. A plan showing the five phases of the Central and Wan Chai

Reclamation is shown at Appendix 1.1.

- 1.4 CRIII is needed to provide land for essential transport infrastructure including the Central-Wanchai Bypass (“CWB”) and Road P2 network. The need for the CWB was reconfirmed in the Comprehensive Transport Study (CTS-3 completed in 1999. In a recent rerun of the CTS-3 transport model, the results indicated that the demand for CWB remained firm. The CRIII also needs to re-provision existing waterfront facilities (e.g. pumping stations providing cooling water for buildings in Central, Star Ferry piers and Queen’s Pier).
- 1.5 Also accommodated in the CRIII will be –
- ◆ a military berth for the People’s Liberation Army (PLA) as agreed under the 1994 Sino-British Defence Land Agreement; and
 - ◆ an overrun tunnel for the Airport Railway and Tung Chung Line (AREOT) to allow them to operate at their full capacity; and
 - ◆ the future North Hong Kong Island Line (NIL).
- 1.6 The land made available for the above items will also provide an opportunity for a vibrant waterfront promenade for the access and enjoyment by the community. Although some of the reclaimed land of 4.9 hectares is reserved for commercial uses, stringent height restrictions are stipulated on the OZP so that only low rise developments will be allowed on the waterfront. The commercial sites along the promenade are meant for waterfront related commercial and leisure uses such as low rise retail shops and cafes/restaurants to complement the function of the promenade as an attraction to our citizens and tourists.

- 1.7 The Legislative Council, relevant District Councils (including Central & Western and Wan Chai District Councils), professional bodies (including Hong Kong Institution of Engineers, Hong Kong Institute of Planners, Hong Kong Institution of Architect, Hong Kong Institution of Surveyors, Hong Kong Institution of Landscape Architect and the Real Estates Developers Association of Hong Kong) and the general public have all been consulted on CRIII, and have given support for the amended Central District (Extension) OZP as well as the project.
- 1.8 On 27 February 2003 the Society for Protection of the Harbour Limited commenced legal proceedings and applied for judicial review of the decisions of the Town Planning Board made in connection with the Draft Wan Chai North District Outline Zoning Plan No. S/H25/1. (Case no. A) – The case does not affect CRIII works.
- 1.9 Winston Chu’s own evidence submitted in Case No. A revealed his agreement to the construction of the CWB. Madam Justice Chu also agreed to the need of the CWB. Madam Justice Chu handed down the judgment (the Judgment) on 8 July 2003 in respect of the judicial review. In the Judgment, the following three tests were laid down: -
- “...the purpose and extent of each proposed reclamation ought to be individually assessed by reference to the three tests of
- (i) Compelling, overriding and present need,
 - (ii) no viable alternative and
 - (iii) minimum impairment”

1.9 In view of the above Judgment, the Administration has initiated a review of the reclamation extent of CRIII with the essential infrastructure thereon by applying the three tests set out above.

1.10 It will be demonstrated in the following chapters that the extent of reclamation is required for the essential transport infrastructure, including the CWB, and for the reprovisioning of the existing facilities along the waterfront affected by the reclamation, including the Star Ferry piers, the Queen's Pier, public landing steps and cooling water pumping stations. We need also to build a PLA berthing space. The NIL, which overlaps in horizontal alignment with the AREOT, will require some reclamation south of CWB. Although it was decided in early 2003 that the implementation of the NIL will be deferred, land has to be reserved for agreed alignment of NIL in constructing the CWB, otherwise, implementation of the NIL at a later stage will be jeopardized. Other supporting roads such as the Road P2 network at the south of CWB and the waterfront promenade could be built on land so formed and no extra reclamation is needed.

The details of these essential infrastructures are shown in the Appendix 1.2.

Central-Wan Chai Bypass

2.1 Background

- 2.1.1 Transport Department (TD) conducted periodic Comprehensive Transport Studies (CTS) which confirmed the need to provide the CWB, preferably by the end of the Millennium. The study forecasts predicted that, without the CWB, the critical sections of the Connaught Road Central (CRC) / Harcourt Road (HR) / Gloucester Road (GR) corridor, being the east-west strategic route in Central and Wan Chai, would be overloaded beyond their practical capacities during the peak hours by 2011. This would result in long traffic queues along the main corridor and the local roads in the areas. Moreover, any incident on this strategic route would cause serious congestion in the Central Business District (CBD).
- 2.1.2 In a recent review of the CTS in 2003, the results reaffirmed the need for the CWB, despite changes in land use planning assumption and a decrease in population projection. The study model predicted that the traffic volume during the peak hours in 2011 on the critical sections of the CRC/HR/GR corridor would exceed their capacities by 30% if the CWB could not be built in time.
- 2.1.3 The CWB will link the Rumsey Street Flyover at the west and via the Island Eastern Corridor Link (IEL) with the Island Eastern Corridor at the east to form a relief route to CRC/HR/GR on Hong Kong Island. The section of CWB within CRIII is a dual-3 carriageway trunk road constructed in the form of a tunnel. The number of lanes required is determined by the traffic forecast in CTS-3, updated in 2003. The critical v/c ratio of a dual-3 CWB by 2011 is

0.7. If the configuration of CWB is reduced to dual-2, the v/c ratio will increase to 1.05. This means, if a dual-2 CWB were to be provided instead, it will be operating at capacity at the time of opening and there would not be any spare capacity to cater for future growth in the medium to long term.

2.2 Review

2.2.1 At present, CRC, HR and GR are operating beyond their capacities with the v/c ratio above 1.0, with the v/c ratio at HR/GR at about 1.1. Congestion along these roads is not limited to the normal a.m. and p.m. peak hours. Regular traffic congestion can be observed throughout the weekdays between 8 a.m. and 7 p.m. It is not uncommon to find east-bound traffic heading to the CBD queuing back to the Western Harbour Tunnel approach along the Rumsey Street Flyover and traffic west-bound to the CBD tailing back to the Wan Chai Sports Ground along GR. In the morning peak hour between 8 a.m. and 9 a.m., drivers need more than 5 minutes to pass through a short 0.7km section of eastbound CRC between Rumsey Street and Pedder Street. This represents a travelling speed of just over 7 km/hr whereas the allowable travelling speed is 50 km/hr. If the roads were not congested, it would take less than one minute to complete the same journey. The CTS-3 updated in 2003 predicts that the traffic volume during the peak hours in 2011 on the critical sections of CRC, HR and GR would exceed their capacities by 30%. The latest traffic forecast in Central is shown in Appendix 2.1. It can be expected that if CWB is not available by 2011, traffic conditions along CRC/HR/GR corridor will deteriorate to a speed of 5 km/hr and it would take about 45 minutes for drivers to travel from Rumsey Street to Causeway Bay for the 4 km long CRC/HR/GR corridor.

Other east-west secondary corridor, such as Hennessy Road and Queensway would also be heavily congested by that time as the capacity of these roads would be constrained by the traffic signals and kerbside loading / unloading activities of buses; taxis and goods vehicles. The vehicles will have to wait for more than one traffic light cycle before it can pass through the junction. The traffic on the CRC/HR/GR corridor will in turn cause congestions in the neighboring roads in Central and Wan Chai and creating gridlock. There is therefore a compelling, overriding and present need to provide a relieve route to existing network to relieve the traffic burden on CRC/HR/GR on Hong Kong Island. With the completion of this strategic road linking the Rumsey Street Flyover with the Island Eastern Corridor via the IECL in 2012, the v/c ratio on the most critical section of CRC/HR/GR corridor could be reduced to 0.8 to 0.9 and traffic congestions could be relieved. The predicted v/c ratio at various locations are summarized below:

Location	Without CWB & P2		With CWB & P2	
	2011	2016	2011	2016
Connaught Road Central	1.3	1.3	0.8	0.9
Harcourt Road	1.3	1.3	0.8	0.9
Gloucester Road	1.3	1.3	0.9	0.9
CWB	-	-	0.7	0.7

There is an urgent need to complete this strategic route by 2012, even if Wan Chai Development Phase II (WDII) is not going ahead, because the CWB and IECL are used to serve the through traffic from west (Sheung Wan) to east (North Point) bypassing the Central Business District. The WDII will mainly be served by the other at-grade roads to be built on the new reclamation area.

To achieve this target, the land to be provided for this essential infrastructure at CRIII should be available by 2008 at the latest.

2.2.2 The Final Study Report for Central-Wan Chai Bypass Tunnel Review under the Comprehensive Feasibility Study for CRIII Minimum Option in 1999 identify the following constraints on the alignment of the CWB. These are marked on a sketch shown on Appendix 2.2:

- (a) The Rumsey Street Flyover (the western end of the CWB) where provision has already been built for the future extension.
- (b) The existing developments and on-going developments including Harbour Building, Exchange Square, One and Two International Finance Centre, Four Seasons Hotel, Hong Kong Convention and Exhibition Centre, its Extension and the Atrium Link between them, Wan Chai Towers and Central Plaza;
- (c) Existing Roads including Connaught Road Central, Harcourt Road, Gloucester Road, Man Cheung Street;
- (d) Existing underground structures including existing MTR Tsuen Wan Line and Airport Railway;
- (e) The existing MTR Cross Harbour Tunnel (Tsuen Wan Line) including the joints of the tunnel tube;
- (f) The Cross Harbour Tunnel in Causeway Bay; and
- (g) Existing Island Eastern Corridor (the eastern end of the CWB).

In view of these control points, the horizontal alignment of the CWB cannot be shifted further southward/landward.

Horizontal Alignment Options

2.2.3 Section between Rumsey Street Flyover and Man Yiu Street (i.e. within CRI area built in 1998) – The followings are the horizontal alignment options for the section of CWB between Rumsey Street Flyover and Man Yiu Street (i.e. the western edge of CRIII): -

- (a) Along Connaught Road Central – To construct the CWB along Connaught Road Central will occupy some of the existing road space which is already saturated. It will defeat the purpose of providing a complementary route to Connaught Road Central.
- (b) Between Connaught Road Central and Man Cheung Street – To run the CWB between Connaught Road Central and Man Cheung Street will require the demolition of Harbour Building and either Exchange Square or One International Finance Centre which are among the most prestigious commercial/financial buildings in the Central Business District, and therefore is not acceptable.
- (c) Along Man Cheung Street – The Airport Railway has been constructed in the form of a tunnel underneath Man Cheung Street. No additional loading is allowed to be imposed on this existing tunnel for safety reasons. Therefore no support can be provided for the construction of CWB along Man Cheung Street. This option is not feasible.
- (d) North of Man Cheung Street – To run through the Two International Finance Centre and Four Seasons Hotel is again not acceptable as these buildings have to be demolished before there are spaces available for the construction of the CWB and the only possible and acceptable route is to run through the road reserve between the Two International Finance

Centre and Man Kwong Street at CRI area as shown in the attached Figure and photos. (Appendix 2.3)

2.2.4 At the eastern end of CRIII – Similarly, the alignment cannot pass through Gloucester Road, Wan Chai Towers, Central Plaza and Hong Kong Convention and Exhibition Centre, its Extension and their atrium link which is at +41.40mPD. The only possible route is to go through the existing sea channel between the Hong Kong Convention and Exhibition Centre and its Extension. This becomes the eastern most control point for the section of CWB in CRIII area. Other control points for the alignment of CWB are those joints between the tunnel tubes of the existing MTR Cross Harbour Tunnel (Tsuen Wan Line). According to the maintenance requirement stipulated by MTRCL, those joints cannot be obstructed by the CWB so as not to impede the regular inspection and necessary repair works.

2.2.5 Horizontal Alignment within CRIII Area – As stated in the above paragraphs, the current horizontal alignment of the CWB is fixed at its western end by the existing and committed infrastructure and developments (Rumsey Street Flyover, at-grade roads and the Two International Finance Centre) and at the eastern end by the gap between the Hong Kong Convention and Exhibition Centre and its Extension. Given these constraints, the horizontal alignment of the CWB has gone through a number of revisions for minimizing the area of the reclamation as the alignment of CWB is the main element which controls the limits of the reclamation. Previously under the Streamline Option, the horizontal alignment of the CWB commenced with a straight line at the

western limit followed by a composite curve of radii 2,000m and 2,450m and then a further straight line at the eastern end. As requested by TPB, the possibility of extending the straights in the horizontal alignment at each end of the tunnel and joining them by a curve of smaller radius to shift the alignment generally southwards toward the existing seawall was investigated in 1999. By extending the two straight lines and by substituting the composite curve by a single curve of radius 1,250m, the CWB was shifted southwards by about 50m. This radius is the minimum radius for which no widening of the tunnel is necessary to compensate for loss of adequate sightline. At this position, the CWB tunnel will stand close to the AREOT and NIL. This alignment is adopted in the Minimum Option of the CRIII.

As part of this Review, replacement of the 1,250m radius curve by sharper curves have been explored. The exercise revealed that the CWB can be brought further south to a point that the southern wall of the CWB clashes with the existing seawall with a curve of 1,013.5m, under which this section of CWB can be moved southwards by 8m at the most. With a corresponding adjustment of the shoreline, the reclamation area could be reduced by about 0.28ha. This alternative however will result in a compromise of the safety and comfort of driving within the trunk road tunnel as the minimum sight distance within the tunnel will be reduced from 151m to 136m. The clashing of the southern wall of the CWB with the existing seawall will impose construction risks. The construction risks for the future NIL will also be increased as the two tunnels come closer as illustrated by the cross-sectional diagram at Appendix 2.4.

Vertical Alignment Options

2.2.6 Vertical Alignment of CWB within the CRIII Area – The followings are the vertical control points for this section of CWB: -

- (a) The Rumsey Street Flyover;
- (b) The MTR Cross Harbour Tunnel (Tsuen Wan Line); and
- (c) The atrium link between the Hong Kong Convention and Exhibition Centre and its Extension.

Taking note of these control points, the elevated, at-grade and tunnel options of the CWB within the CRIII area are accounted for as follows: -

2.2.6.1 Elevated Option – Technical Papers T12, T20 and T35 of Central and Wan Chai Reclamation Feasibility Study concluded that for reasons of visual impact, air quality, noise, land value and urban planning, the elevated option was not preferred. To construct a flyover above the atrium link connecting the Hong Kong Convention and Exhibition Centre and its Extension is extremely difficult if not impossible as the top of the atrium link is +41.40mPD (i.e. over 10-storey high). This high level bridge will become visually intrusive to the existing developments as well as from the harbour. The criteria laid down for Visual Impact Assessment under the Environmental Impact Assessment Ordinance stated that visual impact is not acceptable if the assessment indicates that there will be significant visual effects caused by the appearance of the project, or interference with key views. The “Elevated Option” would not pass this criterion. To

construct a flyover north of the Hong Kong Convention and Exhibition Centre Extension will not only encroach further upon the harbour, but also become a visual hindrance to this prestigious building and could not pass the criteria laid down for Visual Impact Assessment under the Environmental Impact Assessment Ordinance.

If the vertical alignment of the whole section of CWB within CRIII area is elevated, the effect will be similar to that of the Island Eastern Corridor, leaving little space underneath for any open space for public enjoyment.

In addition, when the EIA Reports for CRIII, WDII and CWB were discussed at the EIA Subcommittee of the Advisory Council on the Environment on 4 August 2001, the Chairman summarized the discussion and said that the Subcommittee was pleased to note that the projects i.e. CRIII, WDII and CWB had gone through public consultations both statutory required or non-statutory and the comments had been incorporated into the EIA studies. The Subcommittee also appreciated that a considerable section of CWB would be constructed in the form of a tunnel to minimize environmental impacts. The EIA report was endorsed by the Advisory Council on the Environment at its meeting held on 27 August 2001.

- 2.2.6.2 At-grade Option – Apart from the air quality, noise and visual impacts, the at-grade option will increase the total reclamation area when compared to the tunnel option which allows the P2 road network to be built partly over the CWB tunnel. It is therefore not acceptable.
- 2.2.6.3 Immersed Tube Option above seabed level – The existing seabed level between Central Reclamation Phase I (CRI) and the Hong Kong Convention and Exhibition Centre Extension is about –12mPD. If an immersed tube of a total height of about 10m is going to be placed above seabed level, the remaining navigational depth available will be about 2m which is clearly not adequate. Under such circumstances, all marine traffic including Star Ferry Piers and Queen’s Pier will need to be reprovioned north of the CWB. In addition, water between the existing shoreline and the CWB will become a zone of stagnant water which will result in localised adverse water quality. Reclamation is still required for the protection of the CWB and for the reprovided facilities.
- 2.2.6.4 Bored Tunnel Option below Existing Seabed Level – Under this option, the CWB tunnel will have to be built wholly within rock to avoid any adverse effect on the TWL tunnel. The rock head level within CRIII varies from –35mPD to –65mPD. Road level inside the bored tunnel will be in the range of –65mPD to –80mPD. The road level at Wan Chai North and CRI is about +5mPD whereas

that at the existing Rumsey Street Flyover is about +17mPD. With such a deep tunnel, it is impossible to make connections with the road networks at Wan Chai North and CRI, and also the Rumsey Street Flyover as the road gradients will be too steep to comply with the current design standards. Therefore, this option is not viable.

2.2.7 In view of the above, the most reasonable, practical, environmentally acceptable and optimal option is to construct the CWB within CRIII area in the form of a tunnel through CRIII reclamation along the alignment as shown on the figure in Appendix 2.5.

Road P2 Network

3.1 Background

3.1.1 Road P2 network is required to connect the existing roads built under CRI to CR II area. The road network is shown on the figure in Appendix 3.1.

3.2 Review

3.2.1 At present, traffic generated from the completed Central Reclamation area north of Exchange Square (CRI) has to route through some already congested roads and junctions in Central such as Man Po Street, Man Yiu Street and Man Cheung Street/Man Yiu Street junction as indicated in the drawing shown in Appendix 3.1. Traffic along Man Yiu Street and Connaught Place, which is the main east-bound outlet, has to wait for several traffic light cycles before joining CRC. There is high potential of a gridlock in the CRI area as traffic is unable to exit onto CRC, seriously affecting the operation of the Exchange Square, Airport Railway Station, One and Two International Finance Centre, the hotel development, the ferry piers and other commercial developments in the same area. The gridlock will in turn cause traffic to pile up along routes carrying incoming traffic to CRI including CRC, Pedder Street and Queen's Road Central. It is therefore necessary to reclaim land in CR III project to build a new surface road network, i.e. Road P2 network with a view to relieving these traffic problems. These are the findings of the Strategic Traffic Review for the Business District completed in 2003 by consultants engaged by TD.

- 3.2.2 By year 2006, traffic along this main east-bound outlet is forecast to double its current volume. The findings in the Review engaged by TD revealed that by 2006, many critical junctions in CBD, such as Connaught Road Central / Connaught Place, Connaught Road Central / Pedder Street, Connaught Place / Harbour View street and Man Yiu Street / Man Cheung Street will have negative reserve capacity.
- 3.2.3 According to the construction programme of the CRIII contract, Road P2 network will be completed by March 2007. Hence, any delay to the construction of Road P2 network system would aggravate the traffic condition. The problem will be exacerbated by the continual growth of the large volume of east-bound traffic along CRC which is predicted to become saturated by 2011. To tackle this congestion problem, both the CWB and Road P2 network are required.
- 3.2.4 There is an urgent need to complete the Road P2 network before 2006. Without a Road P2 network, traffic will queue up to about 850m along the full carriageway width of Connaught Place / Man Yiu Street / Man Cheung Street around the Airport Railway Station and International Finance Centre.

Cooling Water Pumping Station

4.1 Background

4.1.1 The purpose of the cooling water pumping stations is to extract seawater for the water-cooled air conditioning systems of the buildings in the vicinity. The reclamation works under CRIII will affect several groups of cooling water pumping stations (CWPS) serving various buildings (including Central Government Offices, Queensway Government Offices, High Court, Murray Building, LegCo Building, City Hall, Police Headquarters, Hongkong and Shanghai Bank Main Building, Pacific Place, Admiralty Centre, and Prince's Building Group) in the vicinity. All the above Government offices and private buildings cannot properly function and operate without reprovisioning of their seawater intakes and discharge outlets for central air-conditioning systems. All the existing pumping stations have to be maintained prior to completion of the reprovisioned facilities in order to maintain the habitability of these buildings. From the engineering perspective, it is not feasible to reprovision these pumping stations outside Central.

4.2 Review

4.2.1 There are both Government and private CWPS affected by CRIII. For private buildings, the respective private owners are required to pay for the reprovisioning costs in accordance with existing Government procedures. As such, they were consulted on the detailed design of their CWPS. After extensive discussion and consultation with Electrical and Mechanical Services Department (EMSD) and the respective owners (including Hongkong and

Shanghai Banking Corporation Ltd, Hongkong Land Ltd, Swire Properties Management Ltd and MTRCL), the consultants came up with the existing design of the CWPS which is acceptable to all parties concerned. As the seawater supply to the buildings has to be maintained at all times for air cooling purpose, the reprovisioned pumphouse facilities must be operative before reclamation proceeds in the vicinity of the existing seawater intakes and outlets. As such, the location of these new CWPS is dictated by the sequence of reclamation works. The reclamation sequence is shown in Appendix 4.1. There are no viable alternative locations for the CWPS other than the first reclamation areas, i.e. the IRAW and IRAE. The locations have been agreed by the affected private owners.

4.2.2 CWPS foundation - The seawall and pumphouse resting on a rubble mound (with marine mud removed) is a proven safe design worldwide. There are other structural forms for the CWPS foundation such as driven pile, bored pile and mat foundation. However, these alternatives could cost as much as a hundred-fold and are not viable alternatives in view of the disproportionate costs involved. Typical cross-sections of the three alternatives and the respective cost estimates and reduction in reclamation limit (by approximately 6 metres) are included in Appendix 4.2 to 4.5. Moreover, the driven pile, bored pile and mat foundation all require maintenance. On the other hand, the rubble mound foundation is virtually maintenance-free. Hence, the adoption of any other alternatives is considered disproportionate to the benefit of reducing approximately six metres of reclamation extent.

4.2.3 CWPS size - The size of the CWPS in CRI has been criticized by both the owners and the public. The former complained about the operational difficulties and maintenance drawbacks inside the small pumphouse compartment, whilst the latter complained of the obstruction and nuisance resulting from the frequent cleaning and maintenance of pumping equipment on the promenade which is a place for enjoyment by the public at large. In the current CRIII case, the CWPS, which is larger than that in CRI, has been designed to overcome the shortcomings in the CRI experience and is based on practical and safe requirements necessary for routine maintenance and cleaning to be carried out inside the pumphouse compartment. The present design would hence provide a safe working environment to the maintenance personnel and will eliminate inconvenience to the public. The 5m wide base heel at the base of the CWPS is required to attain sufficient soil dead load to achieve the adequate factors of safety against sliding and overturning. The current size of the CWPS is therefore essential. Furthermore in CRIII, the enlarged pumphouse has been delicately designed to blend in with the two-level promenade. Steps are included to connect the two levels so that people can enjoy the harbour without the disturbance due to the existence of CWPS.

4.2.4 Distance between CWPS and CWB – The rubble mound foundation of the CWPS will have to be set at a distance of about 2m from the CWB tunnel Diaphragm wall (D wall). If the rubble mound is in contact with the D wall, the following problems may occur:

- (a) overbreak in the D wall construction;
- (b) leaking of bentonite slurry through the rubble layer of the foundation

(as the particle size of the rubble is large) and contaminating the underground water and the harbour;

- (c) collapse of the D wall trench due to undermining or decrease of stability;
- (d) increase in construction cost; and
- (e) increase in construction time.

4.2.5 The variability of the fill material properties and the level of groundwater and tide conditions prevailing during construction will all have an impact on whether there will be tendency for the D wall excavation to collapse or the fresh concrete (bentonite slurry) to be washed away. Further reduction in the distance between the D wall and the rockfill will:

- (a) increase the risk to an unacceptable level of excavation collapse and damage to the fresh concrete;
- (b) require additional mitigation measures and remedial works;
- (c) increase risk of damage to the new, and operational CWPS pipes that could arise from constructing the D wall. The CRIII contractor has already expressed concerns that he considers that it may prove impossible because of the liability involved.

4.2.6 The results of the recent site investigation (SI) to confirm the design assumptions completed by the CRIII contractor indicate that the dredge level in the vicinity of the CWPS to the east of the PLA Berth is -19.5mPD and the seabed level is -12.0mPD . Referring to Appendix 2.4 and 2.5, it can be seen that the distance from copeline to the tip of rubble mound foundation at such

dredged level (-19.5mPD) is 58.7m according to the current design and the updated SI result. It tallies approximately with the planned distance between the cope line and the northern D wall of the CWB, i.e. 60m.

4.2.7 CWPS Configuration - The positioning of the inlet pipe of the CWPS is governed by a number of factors. The inlet pipe must be positioned between the sea level (0mPD) and the existing seabed (-12mPD). It must be a few metres below sea level so that there is sufficient water head to convey sea water to feed the pumps. This requirement is to prevent the burning out of the pumps. The temperature of the intake water is also important to the effective performance of the cooling water system. If there is adjacent heated water discharge, the separation between the discharge and the intake pipe becomes a crucial factor. Previous water quality sampling and mathematical modeling had shown that a plume of heated water quickly spreads along the line of the seawall under the influence of tidal currents. During summer the heated water stays within a relatively shallow surface layer of less than 2m thick. Vertical separation is therefore much more important than horizontal separation, and all intake should be at least 2m below low tide level, i.e. below -2.0mPD. The intake has also to be below floating or near surface debris, and well below normal wave action. Nevertheless, if the inlet is near the seabed, the inlet might be easily blocked by the gradually increasing thickness of the sediment in the seabed. So, the inlet has to be positioned at about -2 ~ -9mPD.

4.2.8 The alternative of moving the CWPS to the south of the CWB in order to reduce the reclamation extent has been considered under this Review. Referring to Appendix 4.6, the bottom of the CWB is at about -12mPD and the top at about 0mPD. As the level of the inlet is about -2mPD (from last paragraph), therefore, the inlet pipe has to be bent to cross above or below the CWB.

(a) If the inlet pipe is to cross above the CWB, additional pumping facilities will be required to be constructed to the north of CWB and this will defeat the purpose of constructing the CWPS south of CWB to avoid locating the pumphouse to the north of CWB. This scenario is therefore not effective in reducing the reclamation extent.

(b) If the inlet pipe crosses the CWB at the bottom, a section of pipe cannot be inspected or maintained underneath the CWB as shown in Appendix 4.6. One of the drawbacks for deeply embedded pipes is that it is extremely difficult if not impossible to remove siltation inside the pipe as it is fully submerged under water.

4.2.9 Furthermore, there will be no space to build the CWPS south of CWB at the IRAE area because of the Road P2 and NIL alignment.

4.2.10 Other Concepts of Cooling Systems - Discussion with pumphouse owners affected by our project indicated that other concepts of cooling systems would not be considered. Air-cooled system is not recommended as it is environmentally unfriendly. It is less energy efficient than water-cooled systems. Substantial extra space is required but unlikely to be available

within the existing building to house the new system. Even if space is available, the cost incurred by the owners for modifying the existing system will be very high. The other concepts of water-cooled air conditioning systems such as Centralized Piped Supply System for Condenser Cooling, Centralized Piped Supply System for Cooling Towers and District Cooling Scheme have also been suggested. As there are institutional and legal issues such as identification of a service provider, liabilities in case of breakdown and property rights of the pumphouse site and the associated facilities to be resolved, Centralised Piped Supply System for Condenser Cooling can only be adopted for Government buildings affected by CRIII area. For the Centralised Piped Supply System for the Cooling Towers, the health impacts from the wider use of fresh water cooling towers and the environmental impacts from the discharge are of concern. This option will also require additional floor in the building to install the evaporative cooling tower. Again, this option is less energy efficient than seawater cooling systems and should be discarded if seawater is available. Furthermore, centralized systems would involve complex development, operations and maintenance liabilities, property rights, financing, private sector investment and customer faith issues. There is no viable alternative.

Ferry Piers

5.1 Background

5.1.1 CRIII will change the current shoreline and thus the Star Ferry Edinburgh Piers (for “Central – Tsim Sha Tsui” and “Central – Hung Hom” services) and its adjacent landing pontoon (for “Central – Tsim Sha Tsui East” service) will have to be reprovisioned. During the construction of CRIII works, the existing Pier No. 7 will be refurbished and allocated to the Star Ferry “Central – Tsim Sha Tsui” service and a new Pier No. 8 will be built at the new waterfront for the “Central – Hung Hom” and “Central – Tsim Sha Tsui East” services. The “Central – Tsim Sha Tsui” ferry services has been in operation since 1888. The Tsim Sha Tsui (East) and the Hung Hom ferry services are existing passengers’ services which have been operating since 1986 and 1965 respectively.

5.2 Review

5.2.1 At present, the existing Pier No. 1 is used by Government vessels and fireboats. It is not feasible for the pier to accommodate additional services. Recently, TD has reviewed the utilization of the Piers No. 2 to 7 to investigate into the possible sparing of Piers No. 6 and 7 for the permanent reprovisioning of Star Ferry piers and thus avoid the need for Pier No. 8. The findings are set out in the following paragraphs.

5.2.2 Pier No. 2 - At present, the western berth of Pier No. 2 is used for the “Central – Ma Wan” service and is fully utilized. The eastern berth, now vacant, is earmarked for possible ferry service to Penny’s Bay when Disneyland starts to

operate by late 2005. The berth, in theory, can be released for temporary use for ferry service for about 1.5 years until mid 2005. From the marine safety perspective, however, it is potentially dangerous to allow the “Central – Hung Hom” and “Central – Tsim Sha Tsui East” services to use the eastern berth of Pier No. 2 even on a temporary or transitional basis because the eastbound sailings to Hung Hom and Tsim Sha Tsui East will create heavy cross marine traffic with the westbound sailings to outlying islands. This will also cause delays to the ferry services which will likely be objected by the ferry operators. Marine Department has the same observation.

5.2.3 Pier No. 3 - At present, Pier No. 3 is used for the “Central – Discovery Bay” service. The pier is fully utilized and cannot accommodate additional services.

5.2.4 Pier No. 4 - At present, Pier No. 4 is used for the “Central – Sok Kwu Wan” and “Central – Yung Shue Wan” services and it is fully utilized during peak periods. It cannot accommodate additional services.

5.2.5 Piers No. 5 and 6 - At present, these 2 piers are used for the “Central – Cheung Chau”, “Central – Peng Chau” and “Central – Mui Wo” services. A detailed survey was conducted on 7 October 2003 to ascertain the berthing utilization. The survey examined the feasibility of using only 3 berths of the two piers for the above 3 services but it is found out that such a proposal is not feasible because –

- (i) any slight delay of one sailing will affect the timetable of all the services;
- (ii) any delay due to high wind or bad weather will have a knock-on effect due to its extremely tight utilization and may easily affect the service level; and

- (iii) no allowance has been made for vessels to berth at the piers for purposes other than loading and unloading. Hence, vessels have to frequently move in and out of the piers to make way for vessels engaging in active loading and unloading causing operational inefficiency. Furthermore, idle berthing needs to be arranged elsewhere or has to stay in the fairway which may cause congestion to the marine traffic.

5.2.6 It is concluded from the above that 4 berths are needed for the 3 outlying ferry services mentioned above.

5.2.7 Pier No. 7 - This pier is earmarked for the permanent reprovisioning of Star Ferry's "Central – Tsim Sha Tsui" service after refurbishment in 2005. Its 2 berths will be fully utilized.

5.2.8 It is concluded that only Pier No. 7 can be spared for the permanent reprovisioning of Star Ferry piers and, as a result, the reprovisioning of the remaining existing services viz "Central-Hung Hom" and "Central-Tsim Sha Tsiu East" services would require a new pier, i.e. Pier No. 8.

5.2.9 The above findings, which are reconfirmed, can be summarized as follow and shown in Appendix 5.1

Central Pier	Berth	Route	Remarks
1	East & West	---	For Government vessels and fireboats only. Not feasible to accommodate additional services.
2	East	---	<ul style="list-style-type: none"> • Vacant at present • Earmarked for Disneyland service in late 2005
	West	Central - Ma Wan	Fully utilized
3	East & West	Central - Discovery Bay	Fully utilized
4	East	Central - Yung Shue Wan	Fully utilized
	West	Central - Sok Kwu Wan & Central - Yung Shue Wan	Fully utilized
5	East	Central - Cheung Chau	A detailed survey was conducted on 7 October 2003 to ascertain the berthing utilization. The survey examined the feasibility of using 3 berths for the concerned 3 outlying ferry services but it is found out that such a proposal is not feasible because:
	West	Central - Cheung Chau	
6	East	Central - Mui Wo	<ul style="list-style-type: none"> i) any slight delay of one sailing will affect the timetable of all the services; ii) any delay due to high wind or bad weather will have a knock-on effect due to its extremely tight utilization and may easily affect the service level; and iii) no allowance has been made for vessels to berth at the piers for purposes other than loading and unloading. Hence, vessels have to frequently move in and out of the piers to make way for vessels engaging in
	West	Central – Peng Chau	

Central Pier	Berth	Route	Remarks
			active loading and unloading causing operational inefficiency. Furthermore, idle berthing needs to be arranged elsewhere or has to stay in the fairway which may cause congestion to the marine traffic. It is concluded from the above that 4 berths are needed for these 3 outlying ferry services mentioned.
7	East & West	Central - Tsim Sha Tsui	Fully utilized after refurbishment works to be completed in 2005
8	East	Central - Tsim Sha Tsui (East)	To be constructed under CRIII contract
	West	Central - Hung Hom	

5.2.10 Pontoons - MD commented that it may be possible to moor a pontoon at the tip of Pier No. 7 to create an extra berth for temporary reprovisioning of Star Ferry's "Central – Hung Hom" service. However, judging from experience in Central Reclamation Phase I where the ferries using a pontoon for temporary berthing were the small hover craft which was small and highly maneuverable as compared with the Star Ferry, it is doubtful that Star Ferry will accept such a proposal is practical to suit its operation in terms of the safety of its passengers as well as the smooth running of its schedules and the maintenance of the Star Ferry icon.

5.2.11 In order to ensure that the Star Ferry services will not be interrupted during the implementation stage of CRIII, a small piece of land called Initial Reclamation Area West ("IRAW") will have to be constructed at the beginning to provide

land for the construction of Pier No. 8 and associated passenger and traffic circulation facilities. The temporary shorelines on the south and south east of IRAW have been designed to maintain a maximum width of navigation channel to ensure that the construction activities for IRAW will not affect the operation of the existing Star Ferry services. After the construction of IRAW and Pier No. 8 and the refurbishment of Pier No. 7, the existing ferry services will be moved to Piers No. 7 and 8.

5.2.12 In re-providing the SF piers, the Government has agreed with Star Ferry to recreate the 1912 SF icon which would become a new landmark in Central and a major tourist attraction in the territory. This is endorsed by Town Planning Board. The Chronological Events on Relocations of Star Ferry Piers is attached at Annex B. This will enhance the enjoyment of the waterfront and the harbour. To do so, Pier 8 has to be parallel to Pier 7. As such, the CRIII shoreline will start at the northeast corner of CRI reclamation and extend eastwards to Pier 8 following the direction of the CRI shoreline so that the alignment of Pier 8 will follow that of Pier 7.

Public Landing Steps

6.1 Background

6.1.1 CRIII will change the current shoreline and thus the existing 15 sets of public landing steps at Queen's Pier and the original Central waterfront area will be affected as shown in the Appendix 6.1. Queen's Pier is the most popular and busiest public pier in Central. There is a heavy demand from vessels engaged in port operations, harbour tours and other recreational activities. Marine Department's record shows that more than 50 vessels use the pier per hour during the peak period.

6.2 Review

6.2.1 Queen's Pier cannot be closed during the implementation stage of CRIII. The public pier at Tsim Sha Tsui is fully utilized during Saturday, Sunday and Public Holidays and has no reserve capacity. Besides, its location cannot substitute the Queen's Pier and other public landing steps located in Central.

6.2.2 The two public piers Nos. 9 & 10, which have a total of 12 sets of landing steps, are required to replace the existing 15 sets of landing steps at the Queen's Pier and the Central Waterfront. The location of Piers 9 and 10 has been chosen after taking the following factors into consideration:

- (a) The landing facilities should be located to the east of ferry piers;
- (b) Site should be located in an embayment of water away from fairways to provide buffer for layby and waiting vessels;
- (c) Adequate road transport infrastructure including public transport

interchange, layby for cars and car parks etc. should be available near the landing facilities; and

(d) The acceptability of the community and users.

6.2.3 At the southeast corner of Pier 8, CRIII shoreline will turn clockwise by 45° and connect to the shoreline which is offset at an average of 60m northwards from the edge of CWB. Piers 9 and 10 are located on this section of shoreline. By turning the direction of the shoreline 45° clockwise, the layout of Piers 9 and 10 has been designed such that on one hand there is a sheltered berthing area from the waves generated from the ferry vessels, and on the other hand, vessels using these piers will not interfere with the operation of the PLA berth on the east.

6.2.4 The orientation of this section of shoreline will also avoid the creation of a dead corner and a zone of stagnant water which is likely to result in localised adverse water quality if the shoreline is turned 90° clockwise forming a sharp corner.

PLA berth

7.1 Background

7.1.1 PLA Berth – The 1994 Sino-British Defence Land Agreement provides, inter alia, that “the Hong Kong Government will leave free 150m 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 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 CRIII contract. Discussion with PLA indicated that the PLA berth must be located in front of the Central Barracks. Apart from the 150m long berth, two 75m long and straight approaches must also be reserved at both ends of the berth for the safe maneuvering of the necessary warships during berthing. The agreed PLA berth layout was based on a planning intention to visually integrate the proposed military dock with the promenade along the waterfront of Central and Wan Chai Reclamation, and that the dock area would be open to public access when it is not in military use.

7.2 Review

7.2.1 The shoreline in front of the Central Barracks is constrained by Piers 9 and 10 on the west and the cooling water pumping stations on the east. The details are shown in Appendix 7.1. It cannot be shifted further south, otherwise, the berthing requirements stated in para. 7.1.1 cannot be met.

AREOT and NIL

8.1 Background

8.1.1 AREOT - 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 84m in length at the Hong Kong Station to provide a buffer in case a train overruns the platform. This 84m overrun was the maximum overrun that could be constructed at the time of construction of Hong Kong Station due to lack of land. About 40m of the extension is required as soon as possible to enhance safety and another 460m for turn back of trains in order to enable shorter headways and hence higher capacities to meet future demand (Appendix 8.1 and 8.2). Moreover, the existing overrun tunnel can only suit the operation of seven-car trains at a service frequency of 5 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 at a service frequency of 2.25 minutes for TCL and 4.5 minutes for AEL, MTRCL needs to extend the existing overrun tunnel by about 500m (40m to be built under CRIII contract and 460m to be built at a later stage at the land formed under CRIII Contract to meet ultimate demand) in order to accommodate full length trains and allow turn back of trains beyond the station. Upon completion of AREOT at Hong Kong Station in around 2014, full operation frequency of the two rail lines can be achieved. In view of the above, there is a compelling, overriding and present need to form land for the construction of a 500m long overrun tunnel for the Hong Kong Station and to extend the overrun tunnel for Hong Kong station by some 40m.

8.1.2 NIL - The Railway Development Strategy 2000 (RDS-2000) published in May 2000 provides the planning framework for the expansion of Hong Kong's railway network up to 2016. The RDS-2000 recommends the implementation of the NIL to relieve the existing Island Line (ISL) and Tsuen Wan Line (TWL) Nathan Road corridor. The NIL is an extension of the existing MTR TCL along the north shore of Hong Kong Island to run from Hong Kong Station through onto the eastern half of the existing MTR ISL at Fortress Hill. The RDS-2000 recommends that the target completion window for the NIL would be between 2008-2012 (Appendix 8.3). In late 2002, Government, in view of the reduction in forecast employment and changes in land use assumptions since the Second Railway Development Study (RDS-2), reviewed the need for the NIL. The assessment is that there is no strong need to implement the NIL, within the window of 2008 to 2012 as set out in the RDS-2000. Upon review, the completion of the NIL is to be deferred to beyond 2016, but the alignment for the NIL should be protected administratively to ensure the future construction of the NIL would not be jeopardized.

8.2 Review

8.2.1 The AREOT will accommodate two scissor-type crossovers and stabling facilities for both the AEL and TCL. The full overrun tunnel for the TCL will also give opportunities for extensions into the eastern part of Hong Kong Island as part of the NIL proposed by RDS-2.

- 8.2.2 The alignment of the AREOT is constrained by two elements. At the western starting point, the AREOT is the extension of the existing 84m overrun tunnel. At the other end, the AREOT has to join the NIL, which is also constrained by the water channel of the Hong Kong Convention and Exhibition Centre (HKCEC). It appears that its current alignment cannot be modified in any way.
- 8.2.3 The NIL serves to join the TCL at AREOT at the western end and at the eastern end with the existing station at Fortress Hill and with stations at Tamar and Wan Chai North. In between the said two ends, the NIL has to run along the corridor along the water channel of the HKCEC as the columns and foundation of the HKCEC at this water channel was specifically designed for this purpose. Any shifting of the NIL alignment outside and inland of this water channel will affect the foundation of the HKCEC.
- 8.2.4 Between HKCEC and the end of the AREOT, the alignment of the NIL is already tucked as closely to the existing shoreline as possible and is on the landward side of the CWB. Shifting the alignment further south will affect the existing road network as well as foundation of the Central Barracks.
- 8.2.5 The AREOT and NIL will travel eastwards across the CRIII reclamation area towards WDII. In order to check whether it is feasible to reduce the CRIII reclamation area further. Under the present review, we need to investigate whether the horizontal alignment of these transport infrastructures can be shifted further south. Part of the AR Overrun Tunnel has been built at the western end of the site as mentioned earlier in para. 8.1.1.1 and the alignment of the NIL is

constrained at the eastern end by the water channel between the Hong Kong Convention and Exhibition Centre and its extension. The central portion of the AREOT tunnel alignment as well as the NIL alignment is constrained by an existing 1800mm diameter trunk sewer tunnel laid underneath Lung Wui Road and Edinburgh Place shown in Appendix 2.4 and 2.5. A separation of a few meters is required to avoid damaging the existing trunk sewer during the future construction of AREOT and NIL tunnel. As such, the alignment of the AREOT and NIL tunnels cannot be shifted further south.

Area between the essential transport infrastructure and the existing shoreline

9.1 Background

9.1.1 The areas are shown red in Appendix 9.1. They will be bounded by the hinterland and all these transport infrastructures and the reprovided facilities mentioned above without any connection with the harbour.

9.2 Review

9.2.1 By leaving these areas unfilled, the quality of the water therein will deteriorate and become a nuisance to the public. Sooner or later, these water ponds will dry up and end up turning into large pits which again will be a nuisance to the public. In any case, these areas are no longer part of the harbour and should be reclaimed to avoid subsequent deterioration.

Conclusion

10.1 **Conclusion**

- 10.1.1 The above analysis and arguments demonstrated that the CRIII reclamation can comply with the three tests laid down in the Judgment.

HKI&IDevO, TDD

November 2003

***Chronological Events Relating to
Central Reclamation Phase III (“CRIII”)***

Date	Description of Event
Mar 1982 – Oct 1983	The need for reclamation in Central and Wanchai was first identified in a strategic planning study entitled “Study on Harbour Reclamation and Urban Growth”.
1984	The need was reconfirmed in various major planning development studies, including the Territorial Development Strategy.
1987 – 1989	The Central and Wan Chai Reclamation Feasibility Study was carried out.
Sep 1991	ExCo endorsed the Metroplan Selected Strategy, which recommended various reclamation projects in the Harbour areas.
1993 – 1998	Reclamation works for Central Reclamation Phases I and II and Wan Chai Reclamation Phase I were completed.
1996	The need for reclamation in Central and Wanchai was reconfirmed in the Territorial Development Strategy Review.
30 Jun 1997	The Protection of the Harbour Ordinance (“PHO”) was enacted.
29 May 1998	The draft Central District (Extension) OZP No. S/H24/1 covering 38 hectares of reclamation was gazetted.
29 Jul 1998	By end of the 2-month exhibition period, 70 valid objections including one from the Society for Protection of the Harbour Limited (“SPH”) were received.
23 Oct 1998	Town Planning Board (“TPB”) gave preliminary consideration to the objections and agreed to request the Government to undertake a further study to determine the minimum reclamation option.
Oct 1998 – Mar 1999	The Government drew up the minimum reclamation option, which proposed to reduce the reclamation area to 23 hectares.
5 Mar 1999	TPB considered the minimum reclamation option.
30 Mar 1999	TPB heard the objections at its meeting of 30 March 1999, although SPH did not withdraw their objection to the OZP, they together with other objectors on the scene agreed that the minimum reclamation option could

Date	Description of Event
	be used as a blue print for CRIII works.
23 Apr 1999	TPB gave deliberation to the objections and decided to propose amendments to the draft Central District (Extension) OZP No. S/H24/1 to meet/partially meet the objections by reducing the extent of the proposed reclamation to 23 hectares.
10 Jun 1999	The minimum reclamation option was presented to the LegCo Panel on Planning, Lands and Works and was generally accepted. The majority of the comments were concerned with land use, traffic, the design of roads and waterfront promenade. After considering Members' comments, TPB gazetted the amended Central District (Extension) OZP that covered the minimum reclamation option on 16 July 1999.
16 Jul 1999	The amended Central District (Extension) OZP No. O/S/H24/1-A covering the minimum reclamation option of 23 hectares was gazetted. 18 original objections were subsequently withdrawn.
Mid 1999	The Government presented the amended minimum reclamation option to the then Central and Western District Board and various professional bodies (e.g. Hong Kong Institute of Engineers, Hong Kong Institute of Planners, Hong Kong Institute of Architect, Hong Kong Institute of Surveyors ("HKIS"), Hong Kong Institute of Landscape Architect ("HKILA"), and Real Estate Developers Association of Hong Kong). They generally supported the revised reclamation scheme.
1 Sep 1999	TPB considered the further objection and decided to propose further amendments to the draft Central District (Extension) OZP to partially meet the further objection.
22 Feb 2000	The amended Central District (Extension) OZP No. S/H24/2 was approved by CE in C.
3 Mar 2000	The approved OZP was gazetted for public inspection.
Mid 2000	The feasibility of the minimum reclamation option was further confirmed by the Comprehensive Feasibility Study for the Minimum Reclamation.
16, 21 Mar 2000	The Central and Western and Wan Chai District Councils were consulted on the proposed CRIII works and there were no adverse comments.
28 Apr 2000	Finance Committee (FC) of LegCo approved funding for the detailed design of CRIII.
30 Jun 2000	CRIII reclamation and road works were gazetted under the Foreshore and Sea-bed (Reclamations) Ordinance and the Roads (Works, Use and Compensation) Ordinance respectively. They received 3 and 2

Date	Description of Event
	objections respectively and SPH was not an objector under either Ordinance.
Jul 2000 – late 2002	CRIII's detailed design stage completed.
27 Aug 2001	CRIII's EIA report was endorsed by the Advisory Council on the Environment.
31 Aug 2001	CRIII's EIA report was approved by DEP under the EIA Ordinance.
18 Dec 2001	CE in C authorized CRIII's reclamation and road works.
Jan 2002	The Government presented to LegCo a brief informing LegCo of the authorization of CRIII's reclamation and road works and of the objections received.
1 Mar 2002	LegCo Panel on Housing, Planning and Lands was briefed on the CRIII engineering works.
7 Mar 2002	EPD issued the Environment Permit for the construction of works.
21 Jun 2002	FC approved funding for the construction of CRIII under the minimum reclamation option.
12 Aug 2002	Tenders were invited.
22 Nov 2002	Tender invitation exercise closed.
10 Feb 2003	CRIII's contract was awarded to Leighton-China State-Van Oord Joint Venture. TDD issued the Letter of Acceptance.
27 Feb 2003	SPH initiated judicial review (JR) proceedings against TPB's decision in respect of another OZP, i.e. the draft Wan Chai North OZP No. S/H25/1.
28 Feb 2003	CRIII's works commenced. The works require reclaiming land of 18 hectares.
28 Feb 2003	The High Court granted leave to SPH's application for JR.
14 Mar 2003	The High Court ordered the submission of the draft Wan Chai North OZP to CE in C be stayed.
7 Apr 2003	The High Court's hearing of the JR case commenced.
8 Jul 2003	The High Court delivered its judgment on the JR case.
19 Jul 2003	TPB announced that it had decided to lodge an appeal against the High Court judgment.

Date	Description of Event
26 Aug 2003	D of J applied to Court of Final Appeal for leave for the appeal case.
17 Sep 2003	SPH wrote to the Administration asking for suspension of the reclamation works for CRIII.
25 Sep 2003	SPH applied to the High Court for an interim injunction over CRIII works.
27 Sep 2003	The Government announced to temporarily suspend all marine works under CRIII until a decision of the High Court is given on the interim injunction case.
29 Sep 2003	The Court of Final Appeal (“CFA”) granted leave for TPB to appeal against the High Court ruling on the draft Wan Chai North OZP. CFA proceedings have been scheduled for 9-16 December 2003.
3 Oct 2003	The High Court heard SPH’s application for an interim injunction over CRIII works.
6 Oct 2003	The High Court handed down its judgment over the interim injunction case, allowing the Government to continue with the CRIII works.

Chronological Events on Relocation of Star Ferry (SF) Piers

Date	Events
29.5.1998	<ul style="list-style-type: none"> • Draft Central District (Extension) OZP No.S/H24/1 gazetted [reclamation area: 38 ha] - 70 objections received, 18 of which subsequently withdrawn. • OZP included 2 proposed piers (Piers 8 & 9) to the east of Pier 7
16.7.1999	<ul style="list-style-type: none"> • Proposed amendments shown on OZP No. O/S/H24/1-A [minimum reclamation option: 23 ha and with the 2 proposed piers deleted] gazetted under s.6(7) of the Town Planning Ordinance (TPO) - 3 further objections received, 2 of which subsequently withdrawn. • Remaining further objection lodged by SF Co. Ltd. and Hong Kong Tramways Co. Ltd. was against the proposed relocation of the Star Ferry Pier to Pier 7 in CRI and the lack of a tramway reserve on OZP.
19.8.1999	<p>Inter-departmental meeting (TB, DPO/HK, MD, TD, PM/HKI&I) agreed, inter alia, the following reprovisioning of SF ferry services:</p> <ul style="list-style-type: none"> • Central to Tsim Sha Tsui – Pier 7; • Central to Hung Hom – western berth of Pier 8; and • TDD to instruct their consultants to prepare proposals based on the agreed arrangements.
1.9.1999	<p>TPB heard SF's further objection. TPB was presented with 2 conceptual options worked out by concerned Government departments for the reprovisioning of SF piers. TPB agreed the following:</p> <ul style="list-style-type: none"> • SF icon was one of the landmarks and major tourist attractions in the territory and its identity should be recreated on the new Central Waterfront. • Option 1, under which Pier 7 and one berth of the new pier would be dedicated for SF pier redevelopment, was a possible direction. The scheme could integrate the new pier with the existing piers, the “groundscraper”, open space pedestrian deck and existing CBD. • The exact location and design of SF piers should be subject to further study. • Proposed further amendments to OZP to partially meet SF's further objection.
17.9.1999	<p>TPB confirmed proposed further amendments to OZP by indicating the approximate locations of the reprovisioned SF piers and public piers, and waterfront related commercial and leisure uses by a dotted circle on OZP. The extent of reclamation remained unchanged.</p>
27.9.1999	<ul style="list-style-type: none"> • Inter-departmental meeting (TB, DPO/HK, MD, TD, PM/HKI&I) reconfirmed previously agreed reprovisioning arrangements. It also agreed to discuss with SF on the pier design, development programme,

Date	Events
	financial arrangement and land administration matters. <ul style="list-style-type: none"> • S for T's clearance on the proposed pier relocation arrangements would be sought. • Meeting also preferred a simultaneous gazettal of OZP and the CRIII project under FSRO.
27.10.1999	Meeting with SF (DPO/HK, PM/HKI&I, TD): <ul style="list-style-type: none"> • SF accepted the proposed relocation to Pier 7 but had concerns on the programme and distribution of retail concession area; and • further meeting involving PLB, TB, TD, MD, GPA, LandsD, and Tourism Commission was required.
18.12.1999	SPL gave policy support for the commercial concession: <ul style="list-style-type: none"> • no more than 5,200 sq. ft. within/on top of Pier 7 for retail/ commercial purpose; and • the strip of land to be rezoned to "OU" for the relocation of the clock tower.
16.2.2000	<ul style="list-style-type: none"> • Meeting with SF (PLB, TB, Tourism Commission, PM/HKI&I, LandsD, MD, TD, Wharf, DPO/HK) on the preliminary layout of new SF piers prepared by TDD's Consultants. • SF was not satisfied with the proposal in terms of the pier design, retail provision, access arrangement, ventilation and management right (SF's written reply of 24.2.2000).
22.2.2000	OZP No.S/H24/2 approved by CE in C
22.3.2000	S for T's memo in response to SF's letter of 24.2.2000 confirming: <ul style="list-style-type: none"> • Supported SF's proposals for a double-deck Pier 8 and equal area reprovisioning of retail area; • SF's proposed single access control point to Piers 7 & 8 desirable in operational terms but not an essential requirement; • no objection to SF's proposal to take over management of both Piers 7 & 8; • proposed covered canopy between Piers 7 & 8 supported; and • not an opportune time to proceed with air-conditioning of pier waiting concourse.
30.6.2000	CRIII project gazetted under FSRO and R(WUC)O
9.8.2000	SF lodged objections to CRIII under FSRO and R(WUC)O
8/2000 to 11/2001	<ul style="list-style-type: none"> • SF submitted 3 design proposals during this period, and a number of inter-departmental meetings (some involving SF) were held to discuss SF's objections under FSRO & R(WUC)O, pier design, retail provision, management right, SF's proposals for common entry and air-conditioning, and implementation programme. • It was agreed that Piers 7 and 8, the 20m-wide elevated walkway and

Date	Events
	clock tower be zoned “OU(Pier and Associated Facilities)” and be developed as an integrated project.
7.9.2001	SF agreed to withdraw its objections to CRIII project under FSRO & R(WUC)O subject to the outcome of further discussions on retail provision, management right and arrangement for TPB submission of the agreed scheme.
18.12.2001	CE in C authorised CRIII reclamation and road works.
20.12.2001	CPLD agreed to select the heritage design approach for SF piers.
4.1.2002	TPB agreed proposed amendments to OZP No.S/H24/4. SF piers, clock tower and proposed elevated walkway were proposed to be zoned “OU(Pier and Associated Facilities)” based on the design concept of heritage design approach.
22.2.2002	Draft OZP No.S/H24/5 gazetted under s.7 of TPO. The extent of reclamation, other than the proposed piers, remained unchanged. No objection was received.
17.12.2002	OZP No. S/H24/6 approved by CE in C.

**Panel on Environmental Affairs
Panel on Planning, Lands and Works**

Central Reclamation Phase III and Wanchai Development Phase II

Summary of deputations' views
(Position as at 27 November 2003)

Issue	Organization	Major views	Administration's response
1. General comments	The Hong Kong Urban Design Alliance	<p>The need for reclamation must not only be proven, but its emphasis must be on works that enhance the overall environment of the waterfront, and return it to the people by developing a continuous pedestrian environment and a range of leisure, recreational, and well designed and integrated commercially operated attractions.</p> <p>There is a need for a greater degree of collaboration between all parties and interests in evolving comprehensive proposals for a harbourfront that reflects sustainable priorities.</p>	<p>Agreed. CRIII provides an excellent opportunity to rejuvenate the waterfront area at Central and achieve our vision for the Harbour. We intend to involve the community in coming up with attractive and innovative designs for the promenade.</p>

Issue	Organization	Major views	Administration's response
	Save Our Shorelines	<p>Greater access for a wider variety of people is needed to enrich and animate the shorelines.</p> <p>The integrity of our island geography needs to be respected.</p> <p>Future coastal planning must begin with the premise that the shoreline itself is sacrosanct and must be protected.</p> <p>The terms of the current Protection of the Harbour Ordinance (Cap. 531) (PHO) could not be clearer on this point. Reclaim only where this is essential, unavoidable, and even then reclaim only to the minimum degree.</p>	<p>This will be achieved through the CRIII project which involves a vibrant and accessible waterfront promenade and envisages a continuous pedestrian walkway between the Central District and the new waterfront.</p> <p>Neither the Protection of the Harbour Ordinance nor the High Court judgment of 8 July 2003 prohibits reclamation <i>per se</i>.</p> <p>In considering the reclamation proposals, the public officers have taken into account considerations from all fronts to balance the community aspirations and needs on the one hand and the need to protect the Harbour on the other hand.</p>
1. General comments (Cont.)	The Hong Kong Institute of Engineers	<p>Members of the Institute are generally in support of the Central and Wanchai Reclamation on account of the development of and information on the reclamation projects presented and noting the due process of discussion and consultation, as well as the professional work done over the years.</p> <p>The projects could help improve the traffic congestion problem, provide amenity in the seafront area for public enjoyment and development of tourism.</p>	<p>Noted.</p> <p>Noted.</p>

Issue	Organization	Major views	Administration's response
	Town Planning Board	<p>The Board always recognises that the Harbour is a special public asset of Hong Kong, and shares the community's desire to protect and preserve the Harbour. In its Statement of Intent on Reclamation, the Board has stated clearly that reclamation in the Harbour should only be carried out to meet essential community needs and public aspirations. It has to be environmentally acceptable and compatible with the principle of sustainable development and the principle of presumption against reclamation in the Harbour.</p> <p>The Board believes that the current state of the harbourfront is unsatisfactory, and the best way to protect the Harbour is to have a well-planned, vibrant and accessible harbourfront which people and tourists alike can enjoy. It is the Board's vision to make Victoria Harbour "a harbour for the people and a harbour of life".</p>	<p>Noted.</p> <p>This will be achieved through the CRIII project which involves a vibrant and accessible waterfront promenade.</p>

Issue	Organization	Major views	Administration's response
<p>1. General comments (Cont.)</p>	<p>New Century Forum</p>	<p>The Forum objects to reclamation at the Harbour if such reclamation is to provide land for commercial uses or other unnecessary uses.</p> <p>Where reclamation is necessary to enable the construction of necessary road infrastructure, the reclaimed land should be used for public leisure facilities and only complementary facilities such as cafes or souvenir kiosks should be provided.</p> <p>A certain extent of reclamation at Central is necessary to straighten the existing shoreline to improve water movement and to avoid environmental nuisances.</p> <p><i>(In the submission, the Forum provides the results of a survey conducted among 3636 members of the public to gauge their views on Central Reclamation Phase III (CRIII) and related issues.)</i></p>	<p>Noted. CRIII is a minimum reclamation option providing land for essential transport infrastructure.</p> <p>Noted.</p> <p>Noted.</p>
	<p>Urban Watch</p>	<p>Whether further reclamation is pursued or not, Government's priority task is to provide an accessible and nice harbour waterfront for the public and tourists.</p> <p>There is a need to overhaul and streamline the current organizational structure of Government departments for handling planning, urban renewal, environmental protection and public works matters.</p> <p>In the Central District OZP, there is an area of several hectares zoned for waterfront-related commercial and leisure uses. The propriety of inclusion of this area in the reclamation area should be reviewed.</p>	<p>This will be achieved through the CRIII project which involves a vibrant and accessible waterfront promenade.</p> <p>Noted. there are standing forums and mechanisms for concerned departments to work together on these issues.</p> <p>The commercial sites along the promenade under CRIII are meant for waterfront related commercial and leisure uses such as retail shops and cafes/ restaurants to complement the function of the promenade as an attraction to our citizens and tourists.</p>

Issue	Organization	Major views	Administration's response
<p>1. General comments (Cont.)</p>	<p>Hong Kong Institute of Surveyors</p>	<p>The current reclamation plan has gone through due process in respect of statutory procedures and public consultation. However, in light of the High Court's judgement and strong views from the community, Government should review the plan and encourage public participation in the review process.</p> <p>The extent and planning design of the reclamation can be determined on the basis of the Government's data. Government should plan carefully the financial and other development arrangements to ensure effective implementation of an approved Outline Zoning Plan.</p>	<p>Noted. In light of the High Court judgment of 8 July 2003, we have initiated and completed a review on CRIII and concluded that it meets the three tests. We have engaged the community through leaflets, attendance at public forums, interviews by media, etc. We will continue these efforts.</p> <p>Noted.</p>
<p>2. The High Court judgement delivered on 8 July 2003</p>	<p>The Hong Kong Urban Design Alliance</p>	<p>The problem with the 'tests' is that they are very difficult to apply, too difficult to evaluate in terms of 'quality', and lean towards projects that are infrastructure led. Thus, instead of providing meaningful guidance on the legal status of harbour reclamation the court decision has created further confusion which needs clarification in the forthcoming judgement by the Court of Final Appeal (CFA).</p>	<p>Noted. The Court of Final Appeal will hear an appeal case lodged by the Town Planning Board on 9-16 December 2003 and the interpretation of the PHO will be the subject of the hearing.</p>

Issue	Organization	Major views	Administration's response
	<p>The Society for the Protection of the Harbour Limited</p>	<p>In its submission entitled "Practical Impact of High Court Judgment", the Society delineates the practical consequences of the High Court's judgement delivered on 8 July 2003, and states that the effect of the judgment is that all the previous decisions made by the Town Planning Board and the Government were wrong as a matter of law and such decisions were in contravention of the PHO. Therefore all the plans including the Central Reclamation Plan put forward by the Government to LegCo were unlawful and in breach of the PHO.</p> <p>Criticisms on the Government's approach contained in the judgement are cited in the Society's submission.</p>	<p>In dismissing SPH's application for interim injunction over the CR III works, Judge Hartmann is satisfied that the Central District (Extension) OZP is a legal plan and it will remain so until set aside by court.</p> <p>The information presented in the concept plans of SPH and the booklet on 'harbour primer' are either inadequate or inaccurate. Please refer to paragraph 5 and Annex B in HPLB's paper on Government's response.</p>
<p>2. The High Court judgement delivered on 8 July 2003 (Cont.)</p>		<p>The Society states that in obedience to the Rule of Law, the Government must abide by the decision of the CFA, which is expected to be delivered in mid January 2004, and apply the PHO both to the Central Reclamation and the Wanchai Reclamation in accordance with the interpretation of the Ordinance that the CFA will prescribe.</p> <p>Two public statements made by the Secretary for Housing, Planning and Lands and the Chief Executive on 1 October 2003 and 17 October 2003 respectively regarding the Government's position on further reclamation in Central and Wanchai in the light of the High Court judgement are cited in the submission.</p>	<p>The Government, as always, is law abiding and will abide by the CFA's decision.</p> <p>Noted.</p>

Issue	Organization	Major views	Administration's response
	The Hong Kong Institute of Engineers	The Institute is concerned about the implications of the High Court judgement on future reclamation projects. The Court's interpretation of the PHO may prevent efforts to improve the much-polluted channel along the Kai Tak runway.	Noted. The Court of Final Appeal will hear an appeal case lodged by the Town Planning Board on 9-16 December 2003 and the interpretation of the PHO will be the subject of the hearing.
	New Century Forum	Government should review the PHO and other related legislation to see if there are areas of ambiguities. If so, remedial measures should be taken, such as drawing up a technical memorandum to stipulate the appropriate planning and public consultation procedures to obviate unnecessary disputes in future.	The Court of Final Appeal will hear an appeal case lodged by the Town Planning Board on 9-16 December 2003 and the interpretation of the PHO will be the subject of the hearing.
2. The High Court judgement delivered on 8 July 2003 (Cont.)	The Hong Kong Institute of Planners	<p>The Institute is concerned about the ramifications of the High Court judgement on the future planning of the harbour front. It will be easier for roads, utilities etc. to be justified by quantifiable data, to satisfy the three tests. On the other hand, good planning intention, good urban design and good-quality public space to cater for activities that are conducive to fostering the vibrancy of the waterfront are inherently subjective and "unquantifiable". They would hence be extremely difficult to pass the tests. However, they are of utmost importance to the well-being of the community.</p> <p>The Institute believes that general public views would be an appropriate test on the "need".</p>	<p>Noted. The Court of Final Appeal will hear an appeal case lodged by the Town Planning Board on 9-16 December 2003 and the interpretation of the PHO will be the subject of the hearing.</p> <p>Noted. Town Planning Board accords importance to essential need and community aspirations in considering reclamation proposals.</p>

Issue	Organization	Major views	Administration's response
	Town Planning Board	<p>The Board's decisions on the draft Wan Chai North OZP were based on an interpretation of the PHO which is different from that laid down in the High Court judgment. The rationale behind the Board's appeal against the judgment is not that the Board wishes to save the Wan Chai North reclamation plan in total (it has already decided not to pursue the Harbour Park), but to seek a clarification of the legal principles behind the PHO in view of the Court's restrictive interpretation which could have far-reaching implications on future planning and development of the harbourfront areas.</p>	Noted.

Issue	Organization	Major views	Administration's response
<p>3. Town Planning Board's position on reclamation plans</p>	<p>Town Planning Board</p>	<p>No reclamation proposals at Kowloon Point, Tsim Sha Tsui East and Green Island have ever been agreed by the Board for incorporation into the OZPs.</p> <p>The reclamation proposals in the Central District (Extension) OZP, covering CRIII, has been significantly scaled down from 38 ha to 23 ha in the process of the Board's consideration.</p> <p>The South East Kowloon Reclamation relating to the former Kai Tak Airport site has been reduced from 299 ha to 133 ha. The Administration is undertaking a comprehensive review of the plan.</p> <p>As regards Wan Chai North, which is a draft plan, the Board on 31 October 2003 has requested the Administration to conduct a comprehensive planning and engineering review before reconsideration of the Plan.</p> <p>Noting the Government's stated intention that the Central, Wan Chai North and South East Kowloon will be the last reclamations in the Victoria Harbour, the Board is taking action to amend the Tsuen Wan OZP to delete the Tsuen Wan Bay Further Reclamation.</p> <p>CRIII is covered by the approved Central District (Extension) OZP. Extensive public consultation exercises were carried out and a due process of statutory and funding procedures have been gone through in respect of the OZP. Consultees generally supported the minimum reclamation option prior to its incorporation in the amended Central District (Extension) OZP. The chronology of events in respect of CRIII demonstrates that the Board has dutifully discharged its functions in balancing the essential transport needs with the aspiration to minimise harbour reclamation.</p>	<p>Noted.</p> <p>Noted.</p> <p>Noted.</p> <p>We have started preparatory work for the comprehensive planning and engineering review over the WDII reclamation.</p> <p>Noted.</p> <p>Noted.</p>

Issue	Organization	Major views	Administration's response
4. Alternative proposals to further reclamation in Central and Wanchai	The Society for the Protection of the Harbour Limited	<p>The Society has submitted its proposal with two options, namely, <i>An alternative harbour front for Central, Wan Chai and Causeway Bay : Option 1 – including the Central –Wanchai Bypass, and Option 2 – excluding the Central – Wanchai Bypass.</i></p> <p>The assumptions and proposals on various land uses/facilities under the respective options are detailed in the submission. The respective layout plans were provided to Members at the meeting.</p>	SPH's proposal is just a concept plan without any details demonstrating its feasibility. The feasibility of SPH's proposal is yet to be demonstrated. Please refer to paragraph 16 in HPLB's paper for more detailed response.
	Conservancy Association	The existing promenade, which stretches from the piers on Central Reclamation Phase II to Star Ferry Pier, Queen's Pier, Tamar and Golden Bauhinia Square outside the Hong Kong Convention and Exhibition Centre should be substantially upgraded instead of being replaced.	The existing promenade will be replaced as a result of the CRIII reclamation to provide land for the essential transport infrastructure.

Issue	Organization	Major views	Administration's response
5. How to tackle the traffic congestion problem	Save the Shorelines	<p>It appears that the figures used to justify the CWB are based on data from many years ago. It is quite possible that no reclamation for roads will be needed at all.</p> <p>The Transport, Environmental Protection and Health Departments should jointly put together a demand-management traffic scheme that at the same time minimizes air pollution. User-Pays traffic schemes should be fully explored.</p> <p>It is questionable whether the impact of potential rail extensions to Western and Southern Districts and the likely reductions in demand on road transport has been included in the Administration's traffic calculations.</p>	<p>The result of a recent rerun of the Third Comprehensive Transport Study (CTS-3) model completed in 2003 indicated that the demand for the CWB remained firm. Please refer to ETWB's paper for more details.</p> <p>The extension of the West Hong Kong Island Line to Belcher by 2011 was adopted as an assumption in our rerun of the traffic model in 2003. The result showed that extending the MTR to Kennedy Town will not help relieve congestion in the Corridor. This is because most bus routes run along the inner roads including Des Voeux Road and Queen's Road. Any reduction in bus service as a result of diversion of passengers to the MTR will be limited and will at most provide slight relief to the already congested inner roads.</p>
5. How to tackle the traffic congestion problem (Cont.)		<p>The 'predict and provide' strategy is unsustainable. Government should consider a "predict and <i>prevent</i>" approach to roads instead. <i>(SOS has cited overseas examples of cities which built urban highways, then later came to a realisation that their road-building had been a mistake.)</i></p>	Noted.

Issue	Organization	Major views	Administration's response
	Hong Kong Automobile Association	<p>Being a representative body of road users, the Association welcomes the construction of the CWB. However, the pre-requisites are minimum reclamation and minimal impact on marine environment.</p> <p>Before a solution acceptable to the community at large is ironed out, Government should explore other options to alleviate the traffic congestion problem. Possible options are effective utilization of the three cross harbour tunnels, construction of road tunnels under existing roads with heavy traffic, and construction of elevated road structures along the waterfront to link up the three tunnels.</p>	<p>Noted. CRIII is a minimum reclamation option and CRIII works are subject to environmental monitoring.</p> <p>Please refer to Annex B in HPLB's paper and ETWB's paper for more detailed response.</p>
	Hong Kong and Kowloon Taxi Merchants' Joint Committee	<p>As early as 1980s, consultants engaged by the Government had pointed out the need to construct the CWB to address the traffic congestion in Central. The Joint Committee supports conservation of the environment, in particular the Harbour, but recognizes that construction of the CWB is necessary and beneficial to Hong Kong's economic development.</p>	<p>Noted.</p>
	New Century Forum	<p>It is necessary to construct the Bypass to ease the traffic congestion along the Connaught Road Central - Harcourt Road - Gloucester Road corridor. Construction of the Bypass should not be further delayed or the congestion problem would further deteriorate.</p>	<p>Noted.</p>
5. How to tackle the traffic congestion problem (Cont.)	G.M.B. Maxicab Operators General Association Ltd	<p>Support reclamation for the provision of essential road networks, including the Central-Wanchai Bypass (CWB), to relieve traffic congestion in Central. This will facilitate the operation of the G.M.B. Maxicab lines running between Central and Wanchai.</p>	<p>Noted.</p>

Issue	Organization	Major views	Administration's response
	HK, KLN & NT Grab-mounted Lorries Association Ltd	Support the provision of additional road networks for the convenience of road users but this should not be done at the expense of the environment.	Noted.
	Rights of Taxi Owner & Driver Association	Object to reclamation for the construction of CWB as this will bring about irreparable environmental damage to the Harbour.	We have explored various alternatives but none are considered viable. Building CWB beyond the current Central shoreline through reclamation is considered the only viable option. Please refer to ETWB's paper for more details.
	中重型貨車關注組	<p>Support the construction of CWB to relieve traffic congestion in Central and Wanchai, but opined that if reclamation is necessary for the construction of the Bypass, the extent of reclamation should be minimized.</p> <p>The suggested traffic restraint measures set out in the Administration's paper would impose additional restriction and add to the burden of transport operators and road users.</p>	<p>Noted.</p> <p>Noted.</p>

Issue	Organization	Major views	Administration's response
6. The proposed Central-Wanchai Bypass (CWB)	The Society for the Protection of the Harbour Limited	The Society has provided a "Preliminary Note on the Need for Central-Wanchai Bypass". Perceived traffic problems in Central and Wanchai are delineated in the Note. There is no conclusion on whether the CWB should be constructed, but it is recommended that if the CWB is to be constructed, it should carry with it a package of measures designed to lock in the benefits of the Bypass arising from the reductions of traffic flow in Central and Wanchai. There are also suggestions on the functional requirements of the CWB and surface roads.	The result of a recent rerun of the Third Comprehensive Transport Study (CTS-3) model completed in 2003 indicated that the demand for the CWB remained firm. Please refer to ETWB's paper for more details.
	Town Planning Board	The main purpose of the currently planned reclamation in Central and Wan Chai is to provide for essential transport infrastructure, in particular the CWB. In making plans to provide for the Bypass, the Board has to act on the basis of information provided by the Government's transport planners/engineers. The Board's role and functions are limited to the land-use planning aspect and the Board does not undertake transport planning by itself.	Noted.
	Conservancy Association	<p>There have been a number of major changes since the Hong Kong Third Comprehensive Transport Study (CTS3), such as the Green Island Reclamation and Route 10 which have now been shelved.</p> <p>Based on the information on the web sites of Civil Engineering Department and Highways Department, the construction cost of the Bypass is HK\$15.235 billion and the construction cost per kilometre is \$3.81 billion.</p> <p>Taking the CTS projection of traffic flow of 112,000 passenger car units per day, the cumulative benefit for travel time saving is estimated to be around HK\$ 0.17 billion per year, which means the cost return period of minimum 22 years. This level of return is normally unacceptable for highway projects.</p>	<p>The result of a recent rerun of the Third Comprehensive Transport Study (CTS-3) model completed in 2003 indicated that the demand for the CWB remained firm.</p> <p>The EIRR for the CWB is about 28%. According to the Environment, Transport and Works Bureau, an EIRR of 28% is considered as generally cost effective. For reference, the EIRR generated by Route 9 is around 18% to 20%.</p> <p>Please refer to ETWB's paper for more details.</p>

Issue	Organization	Major views	Administration's response
<p>6. The proposed Central-Wanchai Bypass (CWB) (Cont.)</p>		<p>It is questionable whether the Administration's current estimates of the construction cost of the CWB has taken into account the costs for the required reclamation/site formation for the CWB.</p> <p>The CWB would only help the through traffic which does not enter Central. It does very little help to local traffic which requires getting into the narrow streets of Central. If road frontage activities persist, congestion will persist along these roads.</p>	<p>Please refer to ETWB's paper for more details.</p> <p>Central's traffic will be improved with the completion of the Road P2 network.</p>
	<p>Urban Watch</p>	<p>Whether the current design of the CWB can ease the traffic congestion in Central is questionable.</p>	<p>The CWB is needed to relieve congestion along the Connaught Road Central/Harcourt Road/Gloucester Road Corridor (the Corridor) that is operating beyond its capacity currently. The result of a recent rerun of the Third Comprehensive Transport Study (CTS-3) model completed in 2003 indicated that the demand for the CWB remained firm.</p>

Issue	Organization	Major views	Administration's response
7. Alternatives to the proposed Central-Wanchai Bypass	Conservancy Association	<p>To actively consider electronic road pricing, which is now being implemented in Singapore and London.</p> <p>To fully utilize the Western Harbour Crossing.</p> <p>To construct the MTR western extension from Sheung Wan to Kennedy Town.</p> <p>To construct the recommended hillside escalators from Central to Mid-levels.</p> <p>To construct large bus-bus interchanges at the fringe areas of Central. This will help consolidate the bus routes getting into and through Central and thus reducing the traffic load</p> <p>To restrict the load/unloading times in Central.</p>	Please refer to ETWB's paper for more details.
7. Alternatives to the proposed Central-Wanchai Bypass (Cont.)	Urban Watch	<p>There are other alternatives to construction of additional roads, such as provision of more pedestrian facilities, hillside escalators, mass transit transport modes, better management of franchised buses etc.</p> <p>The main problem is eastbound traffic from the International Finance Centre (IFC), causing a bottleneck at Connaught Road in front of the City Hall. A feasible solution is to construct a road from Connaught Place, via the area in front of Star Ferry Pier and Queen's Pier, to reach Lung Wui Road. The opportunity can be taken to demolish the existing multi-storey carpark in front of Star Ferry and replace it with a pedestrian podium to be connected to the existing elevated pedestrian walkway system in Central.</p>	<p>Please refer to Annex B in HPLB's paper for more details.</p> <p>Central's traffic will be improved with the completion of the Road P2 network. Please refer to the Review Report in Annex C of HPLB's paper for more details.</p> <p>The proposal to use the open space between the Piers and City Hall for building a road is highly controversial. It will further deny people's access to the waterfront.</p>

Issue	Organization	Major views	Administration's response
	中重型貨車關注組	<p>Feasibility of alternative options for provision of additional road networks, such as construction of flyover at Connaught Road Central, should also be explored.</p> <p>The great difference in toll charges among the three cross harbour tunnels contribute to the existing traffic congestion problem. Government can accurately estimate the “true” demand of road users for the tunnels through a trial scheme of toll-free days during different weekdays for all tunnels so as to provide the basis for determining the suitable toll levels.</p>	Please refer to Annex B in HPLB's paper for more details.

Issue	Organization	Major views	Administration's response
<p>7. Alternatives to the proposed Central-Wanchai Bypass (Cont.)</p>	<p>Rights of Taxi Owner & Driver Association</p>	<p>Government should consider alternative options other than CWB to relieve the traffic congestion in Central. These alternatives include: reducing the number of bus stops along the main roads and restricting vehicles with certain registration numbers on designated days of the week.</p> <p>Object to the proposal of imposing taxi surcharge as one of the traffic restraint measures. Such a proposal is unfair to taxi operators as they have already paid a high licence fee.</p>	<p>Please refer to Annex B in HPLB's paper.</p> <p>Noted.</p>
<p>8. Environmental impacts of reclamation at the Harbour</p>	<p>Greenpeace</p>	<p>CRIII and WDII together require dredging and disposal of approximately 1 million cubic metre seriously contaminated sediments at sea. The level of toxic substances in the sediments is exceedingly high. Greenpeace believes that as soon as the seabed of the Victoria Harbour is disturbed, the contaminants in the sediment are released into the wider marine environment, either via suspension or by disturbance as a result of dredging activities, or depositing of fill materials.</p>	<p>Please refer to our comments under Environmental Impact of CRIII in HPLB's paper and Annex B.</p>

Issue	Organization	Major views	Administration's response
<p>8. Environmental impacts of reclamation at the Harbour (Cont.)</p>		<p>In addition, the Green Island and Junk Bay coral communities, which are ecological sensitive receivers, are potentially impacted during the construction of WDII due to the sedimentation of the suspended solids in the water column. This is admitted in the relevant environmental impact assessment reports.</p> <p>The disposal facility at East Sha Chau is in proximity to the nursery of the endangered Chinese White Dolphins and the artificial reef complex. Greenpeace believes that the disposal of the seriously contaminated sediment dredged from the harbour at East Sha Chau poses a serious risk to this vulnerable species, and via the food chain, poses a risk to human health.</p> <p>Sediments containing as little as 5% dredge spoils have a marked effect on the host defence capability in the common shrimp <i>C. crangon</i>. The dumping of contaminated dredge spoils at sea will have serious implications on the immune capability and clotting in animals exposed to harbour dredge spoils.</p> <p>It is blatantly obvious that the CRIII and WDII reclamation projects do not adhere to the spirit of the London Convention. No amount of mitigation measures will prevent toxic sediments from disposing into the harbour and the wider marine environment, including East Sha Chau, during the dredging and dumping operation.</p> <p>Greenpeace urges the Hong Kong government to fulfil its responsibilities under the London Convention and to further enhance the current legislation by adopting a more precautionary approach in protecting the environment. The government should take action to protect and clean up our fragile marine environment before it is too late, and to stop the CRIII and WDII Reclamation Projects immediately.</p>	<p>Please refer to our comments under the section on Environmental Impact of CRIII and Annex B in HPLB's paper.</p>

Issue	Organization	Major views	Administration's response
<p>9. Mechanism for town planning and urban design</p>	<p>Save the Shorelines</p>	<p>The process of public consultation has not been satisfactory.</p> <p>Future consultations would have greater value if the Public and Environmental Groups – who have extensive expertise to offer – were involved in the initial planning and discussions.</p> <p>A single coherent and comprehensive policy needs to be set in place, focusing on shoreline issues generally – not just in the central Harbour areas but around all of Hong Kong. Such policies should be governed by laws similar to the Harbour Protection Act and administered by a single, coherent body – a Shoreline Authority - working with residents, developers, businesses and with the appropriate government Departments.</p>	<p>CRIII has gone through very extensive public consultation. Please refer to paragraphs 11 and 18 in HPLB's paper for detailed response.</p>
	<p>The Hong Kong Urban Design Alliance</p>	<p>There is a need to consider some new form of control for harbour development, possibly a Harbour Authority similar to that operating in Sydney, that can control overall design and implementation, and ensure that public values are not overwhelmed by pro-development and expedient policies.</p> <p>There is a need for Government to commit itself to a comprehensive harbour policy – to produce plans and proposals that are in line with its 'world city' objectives. The public should be given the widest possible opportunity to participate.</p> <p>There is a need for more responsive planning and urban design mechanisms that can properly convey wide design and environmental dimensions so that their full potential can be recognised and understood by everyone.</p>	<p>Please refer to paragraph 18 in HPLB's paper for more detailed response.</p>

Issue	Organization	Major views	Administration's response
<p>9. Mechanism for town planning and urban design <i>(Cont.)</i></p>	<p>Citizen Envisioning @ Harbour</p>	<p>Hong Kong people have said clearly and loudly that they do not wish to leave important decisions concerning their urban space entirely in the hands of government bureaucrats. A partnership approach engaging the private sector and civil society groups is regarded as the only realistic choice for sustainable development.</p> <p>There are successful overseas examples of public participation, such as the establishment of the Harbour Authority last year to own and manage assets of the harbour on Vancouver Island.</p> <p>It is important that all planning constraints and potential opportunities are laid out for the public in a clear and coherent manner. Civil society has taken a lead to facilitate this process but Government should play a constructive role by providing detailed information and participating in the process. The active engagement of LegCo Members is also called for.</p> <p>A community planning approach with broad-based participation has a much higher chance of success in building a consensus for the way forward than the existing town planning process. A successful consensus-building process will benefit everyone, including those for and against reclamation.</p> <p><i>(Citizen Envisioning @ Harbour has also provided in its submission a theoretical base for public participation and information on its activities and campaign "Our Victoria Harbour Stories".)</i></p>	<p>In the process of preparing the OZPs, the Town Planning Board has gone through a due process of public consultation and statutory planning procedures in accordance with the Town Planning Ordinance.</p>

Issue	Organization	Major views	Administration's response
9. Mechanism for town planning and urban design <i>(Cont.)</i>	New Century Forum	<p>The current controversy reflects that Government had not been able to communicate effectively the rationale and justifications of the proposed reclamation projects to the public.</p> <p>The Forum suggests that Government should place layout plans and models in the City Hall or the Cultural Centre etc. to disseminate information on the projects and to collect views from the public.</p>	<p>An OZP involving reclamation in the Harbour, like all other OZPs, will go through a due process of public consultation and statutory planning procedures in accordance with the Town Planning Ordinance.</p> <p>To keep public better informed, we are in the process of preparing posters displaying the future Central waterfront. The public are also welcome to visit the model on CRIII and WDII at TDD's office at 12/F, North Point Government Office.</p>
	The Hong Kong Institute of Planners	<p>If the public are able to submit positive representations on new planning proposals in addition to lodging objections, the Town Planning Board would be in a better position to judge whether the proposed harbour reclamation is indeed meeting the community's aspiration. In giving precedence to PHO, the Town Planning Board should abandon any proposed harbour reclamation if there are substantial objections relative to support.</p>	<p>Noted. We have forwarded the proposal for TPB's consideration.</p>
	HK, KLN & NT Grab-mounted Lorries Association Ltd	<p>Government should conduct wider public consultation and provide more information to the public during the process of policy formulation and development planning, to facilitate public consensus building and achieve win-win solutions for its development proposals.</p>	<p>In the process of preparing the OZPs, the Town Planning Board has gone through a due process of public consultation and statutory planning procedures in accordance with the Town Planning Ordinance.</p>

***CENTRAL RECLAMATION PHASE III (CRIII) –
ENGINEERING WORKS***

REPORT

on

Review of CRIII Reclamation and the Essential Infrastructure thereon

by applying the Three Tests laid down in the Judgment by Madam Justice Chu in connection with the Draft Wan Chai North District Outline Zoning Plan

Volume 2 - Appendix

By

Territory Development Department

In Consultation with

Atkins China Ltd,

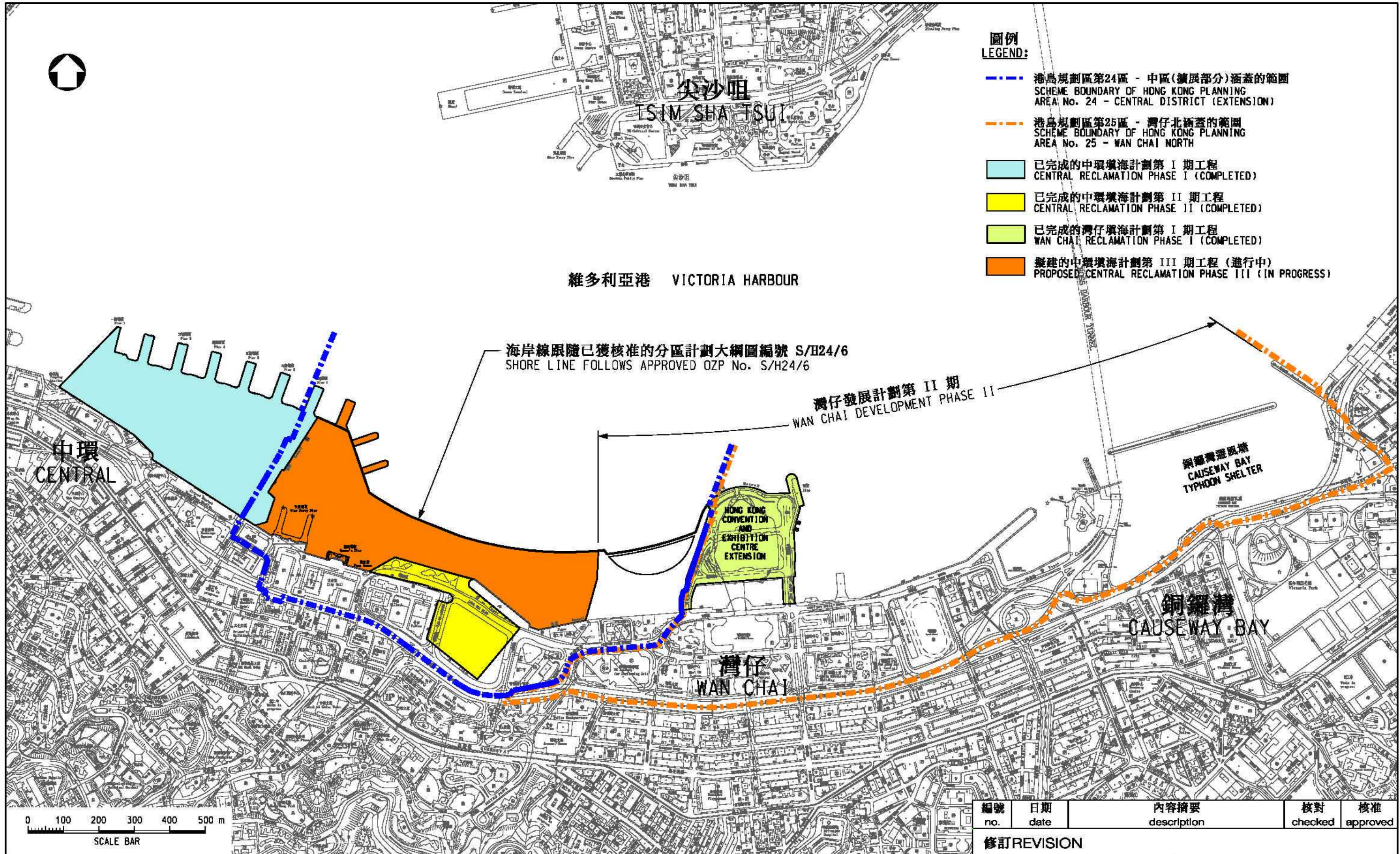
Transport Department,


Highways Department and

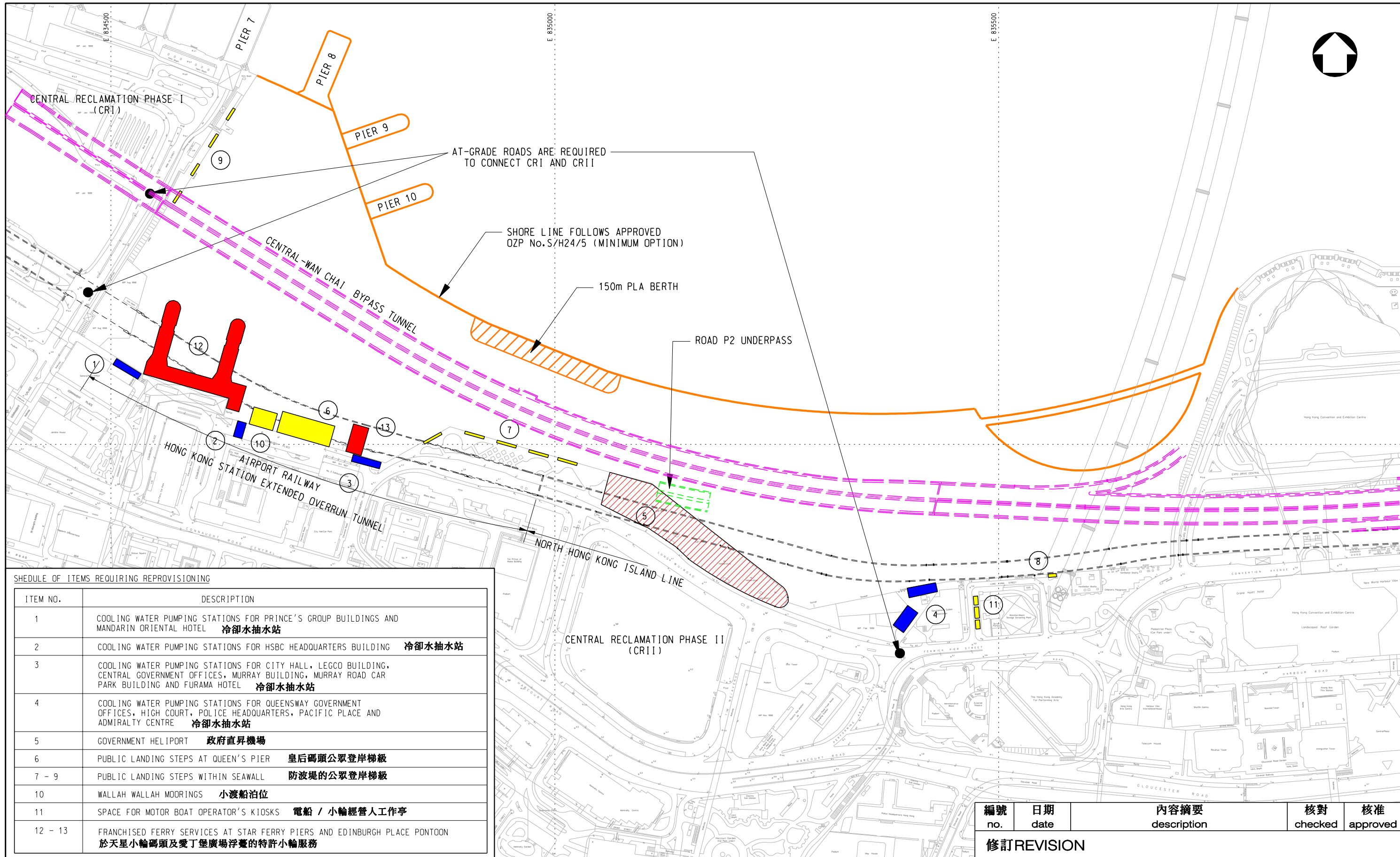
Marine Department

CONTENT

Appendix No.	Description
1.1	Central and Wan Chai Reclamation
1.2	Central Reclamation Phase III Minimum Option – Essential Infrastructure
2.1	Traffic Forecast in Central Business District
2.2	Proposed Central-Wan Chai Bypass from Rumsey Street Flyover to Causeway Bay
2.3	Horizontal Alignment Options for the Section of CWB between Rumsey Street Flyover and Man Yiu Street
2.4	Central Reclamation Phase III – Typical Cross-section across Current Minimum Option
2.5	Central Reclamation Phase III – Reclamation Extent for Minimum Option
2.6	Vertical Profile of the Central-Wan Chai Bypass Tunnel within CRIII
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4.1	Reclamation Sequence
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8.1	MTRCL's letter C/DM/5018/C500 dated 18 Dec 2000 enclosing a paper regarding the Hong Kong Station extended overrun tunnel.
8.2	MTRCL's letter PJD/LAR/125 dated 21 Feb 2002 regarding implementation of 40m and the remaining 460m EOT.
8.3	Railway Development Strategy 2000
9.1	Works Area for the Essential Infrastructure



圖則名稱 drawing title		繪圖 drawn		簽署 initial		日期 date		項目編號 item no.		辦事處 office	
中環及灣仔填海計劃 CENTRAL AND WAN CHAI RECLAMATION		W L LAM		SIGNED		07-10-03		項目編號 item no.		港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE	
		核對 checked		簽署 initial		日期 date		比例 scale		 拓展署 TERRITORY DEVELOPMENT DEPARTMENT	
		S K KEUNG		SIGNED		07-10-03		AS SHOWN			
		核准 approved		簽署 initial		日期 date		圖則編號 drawing no.			
		H H YEUNG		SIGNED		07-10-03		HKI-Z560			



SCHEDULE OF ITEMS REQUIRING REPROVISIONING

ITEM NO.	DESCRIPTION
1	COOLING WATER PUMPING STATIONS FOR PRINCE'S GROUP BUILDINGS AND MANDARIN ORIENTAL HOTEL 冷卻水抽水站
2	COOLING WATER PUMPING STATIONS FOR HSBC HEADQUARTERS BUILDING 冷卻水抽水站
3	COOLING WATER PUMPING STATIONS FOR CITY HALL, LEGCO BUILDING, CENTRAL GOVERNMENT OFFICES, MURRAY BUILDING, MURRAY ROAD CAR PARK BUILDING AND FURAMA HOTEL 冷卻水抽水站
4	COOLING WATER PUMPING STATIONS FOR QUEENSWAY GOVERNMENT OFFICES, HIGH COURT, POLICE HEADQUARTERS, PACIFIC PLACE AND ADMIRALTY CENTRE 冷卻水抽水站
5	GOVERNMENT HELIPORT 政府直昇機場
6	PUBLIC LANDING STEPS AT QUEEN'S PIER 皇后碼頭公眾登岸梯級
7 - 9	PUBLIC LANDING STEPS WITHIN SEAWALL 防波堤的公眾登岸梯級
10	WALLAH WALLAH MOORINGS 小渡船泊位
11	SPACE FOR MOTOR BOAT OPERATOR'S KIOSKS 電船 / 小輪經營人工作亭
12 - 13	FRANCHISED FERRY SERVICES AT STAR FERRY PIERS AND EDINBURGH PLACE PONTOON 於天星小輪碼頭及愛丁堡廣場浮臺的特許小輪服務

圖則名稱 drawing title

CENTRAL RECLAMATION PHASE III MINIMUM OPTION
ESSENTIAL INFRASTRUCTURES

繪圖 drawn	簽署 initial	日期 date
W L LAM	SIGNED	17.9.2003
核對 checked	簽署 initial	日期 date
S K KEUNG	SIGNED	17.9.2003
核准 approved	簽署 initial	日期 date
K F TANG	SIGNED	17.9.2003

編號 no.	日期 date	內容摘要 description	核對 checked	核准 approved
修訂 REVISION				

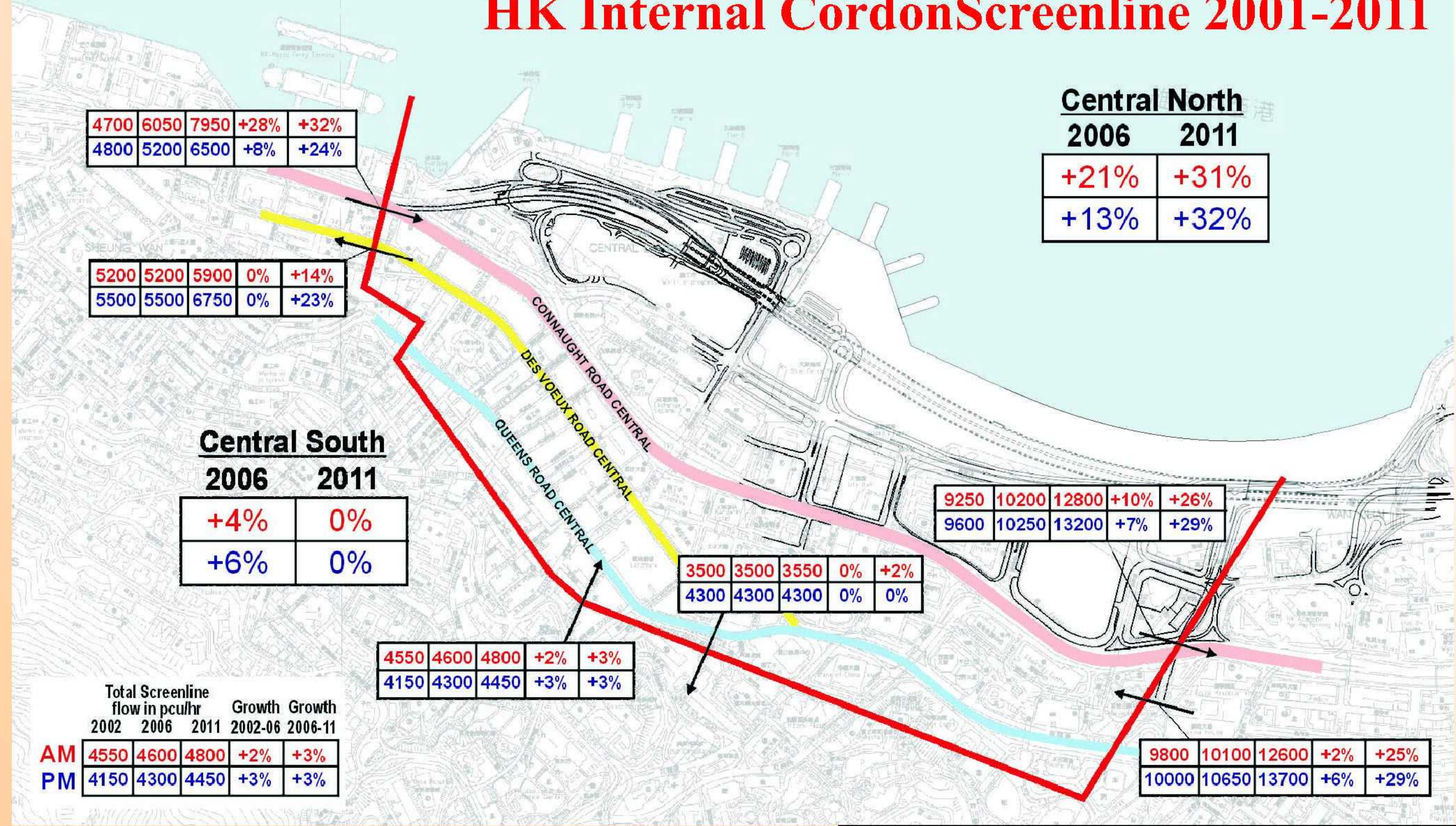
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HK I-Z542	

辦事處 office
港島及離島拓展處
 HONG KONG ISLAND AND ISLANDS
 DEVELOPMENT OFFICE



拓展署
 TERRITORY
 DEVELOPMENT
 DEPARTMENT

Traffic Growth Across HK Internal Cordon Screenline 2001-2011



Note: Central-Wan Chai Bypass is assumed to be in use by 2011 in the traffic forecast

繪圖 drawn	日期 date	內容摘要 Description	核對 checked	核准 approved
修訂 REVISION				

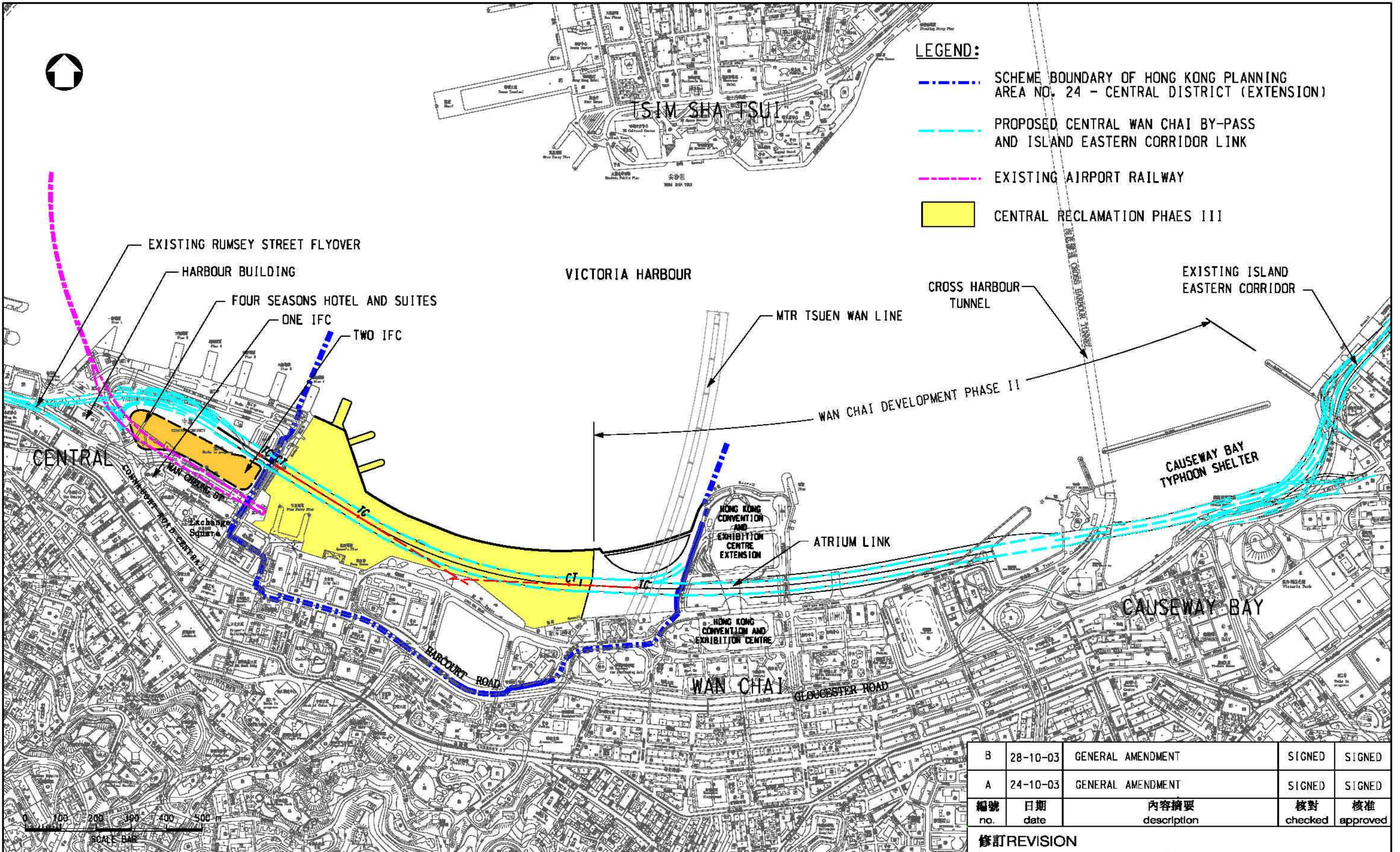
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核對 checked	簽署 initial	日期 date	比例 scale
S K KEUNG	SIGNED	31-10-03	Not to scale
核准 approved	簽署 initial	日期 date	圖則編號 drawing no.
H H YEUNG	SIGNED	31-10-03	HKI-Z608

辦事處 office
 港島及離島拓展處
 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE




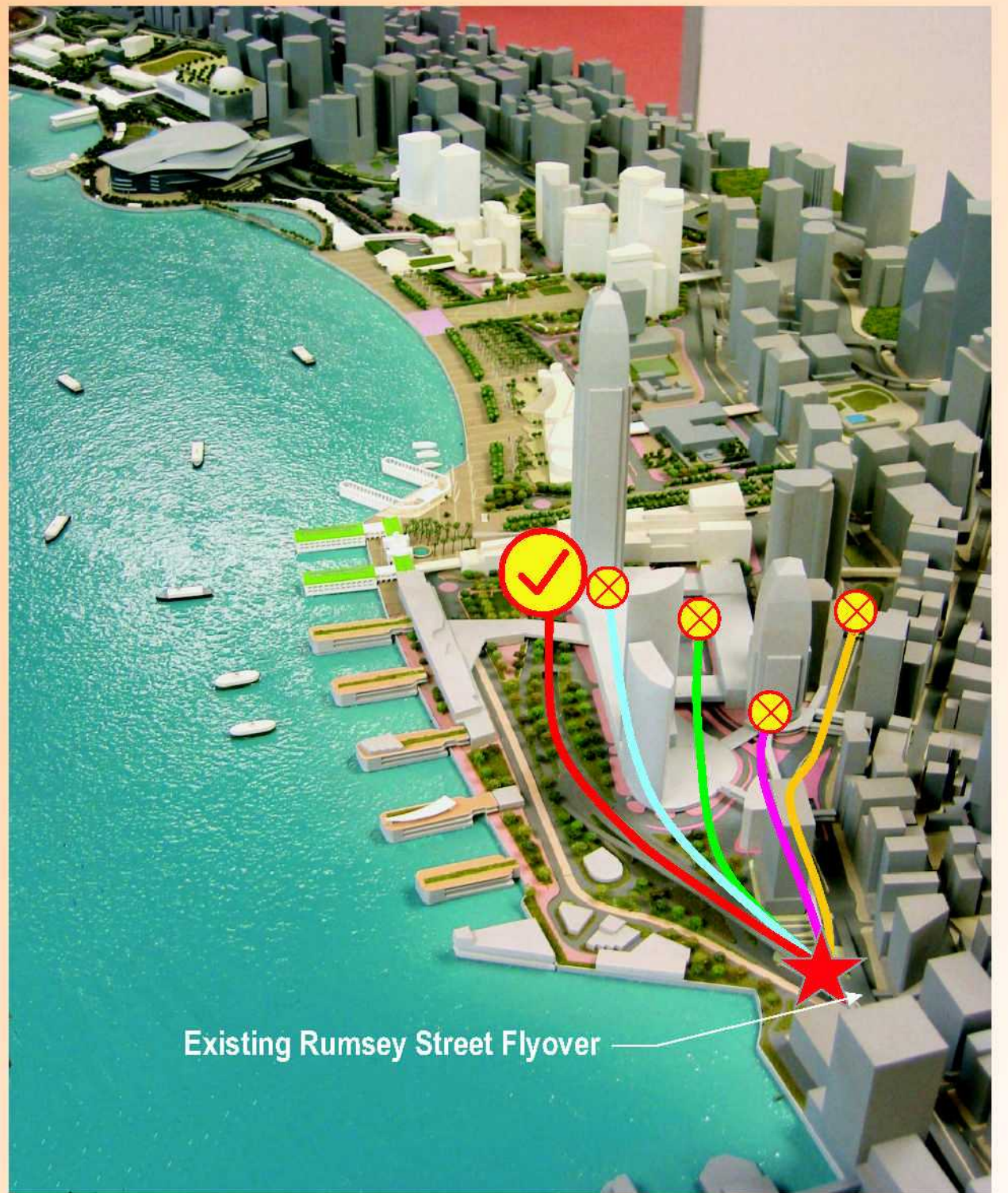
拓展署
 TERRITORY DEVELOPMENT DEPARTMENT



B	28-10-03	GENERAL AMENDMENT	SIGNED	SIGNED
A	24-10-03	GENERAL AMENDMENT	SIGNED	SIGNED
編號 no.	日期 date	內容摘要 description	核對 checked	核准 approved

修訂REVISION




圖則名稱 drawing title		繪圖 drawn	簽署 initial	日期 date	項目編號 item no.	辦事處 office 港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE  拓展署 TERRITORY DEVELOPMENT DEPARTMENT
PROPOSED CENTRAL - WAN CHAI BYPASS FROM RUMSEY STREET FLYOVER TO CAUSEWAY BAY		W H CHEUNG	SIGNED	30-09-03	比例 scale	
		核對 checked	簽署 initial	日期 date	AS SHOWN	
		核對 checked	S K KEUNG	SIGNED	30-09-03	
		核對 checked	H H YEUNG	SIGNED	30-09-03	
		核准 approved	H H YEUNG	SIGNED	30-09-03	圖則編號 drawing no. HK I-2561B



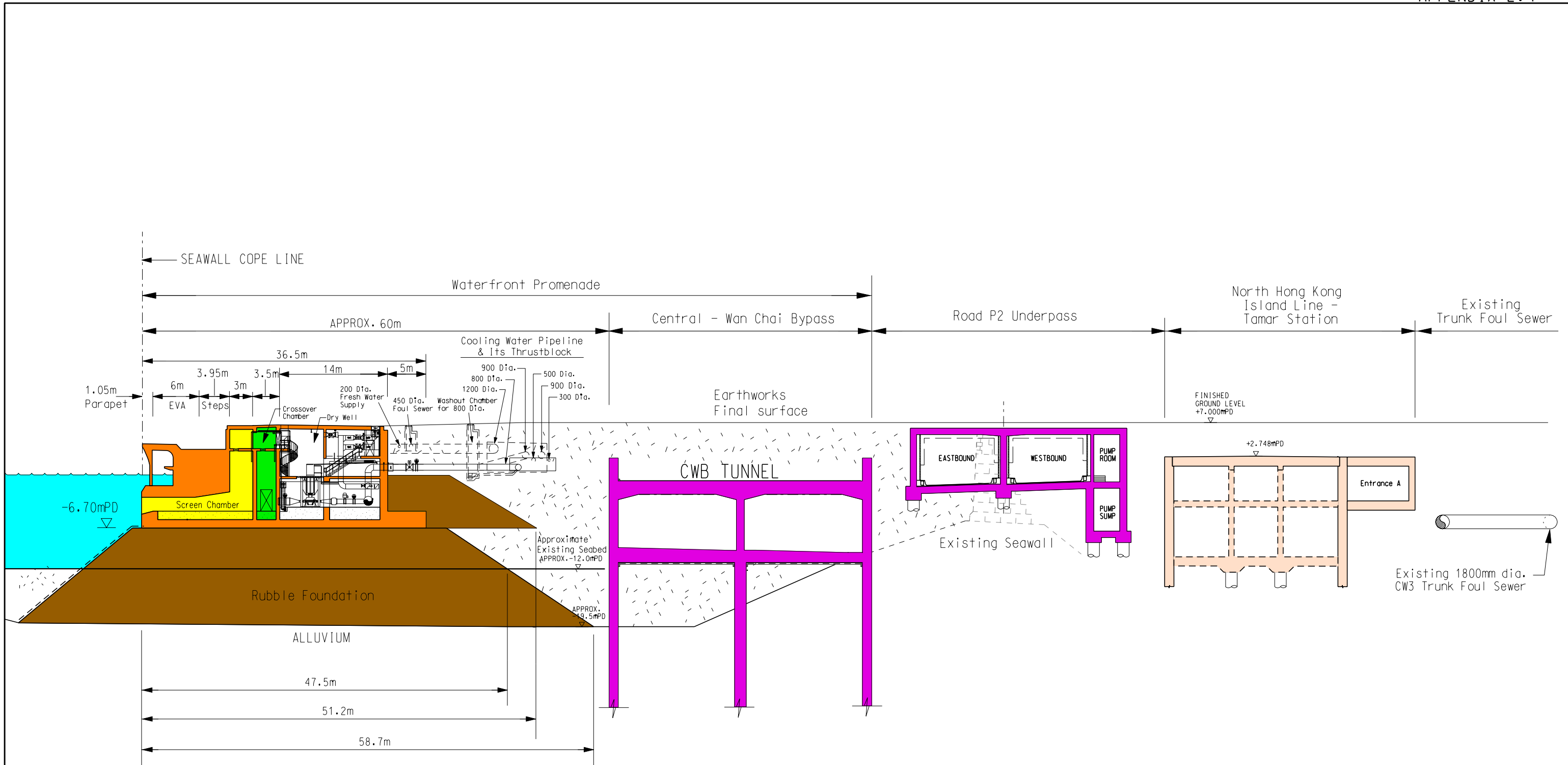
Existing Rumsey Street Flyover

Horizontal Alignment Options :

- Along Connaught Road Central
- Between Connaught Road Central and Man Cheung Street
- Along Man Cheung Street
- North of Man Cheung Street
- Current Alignment

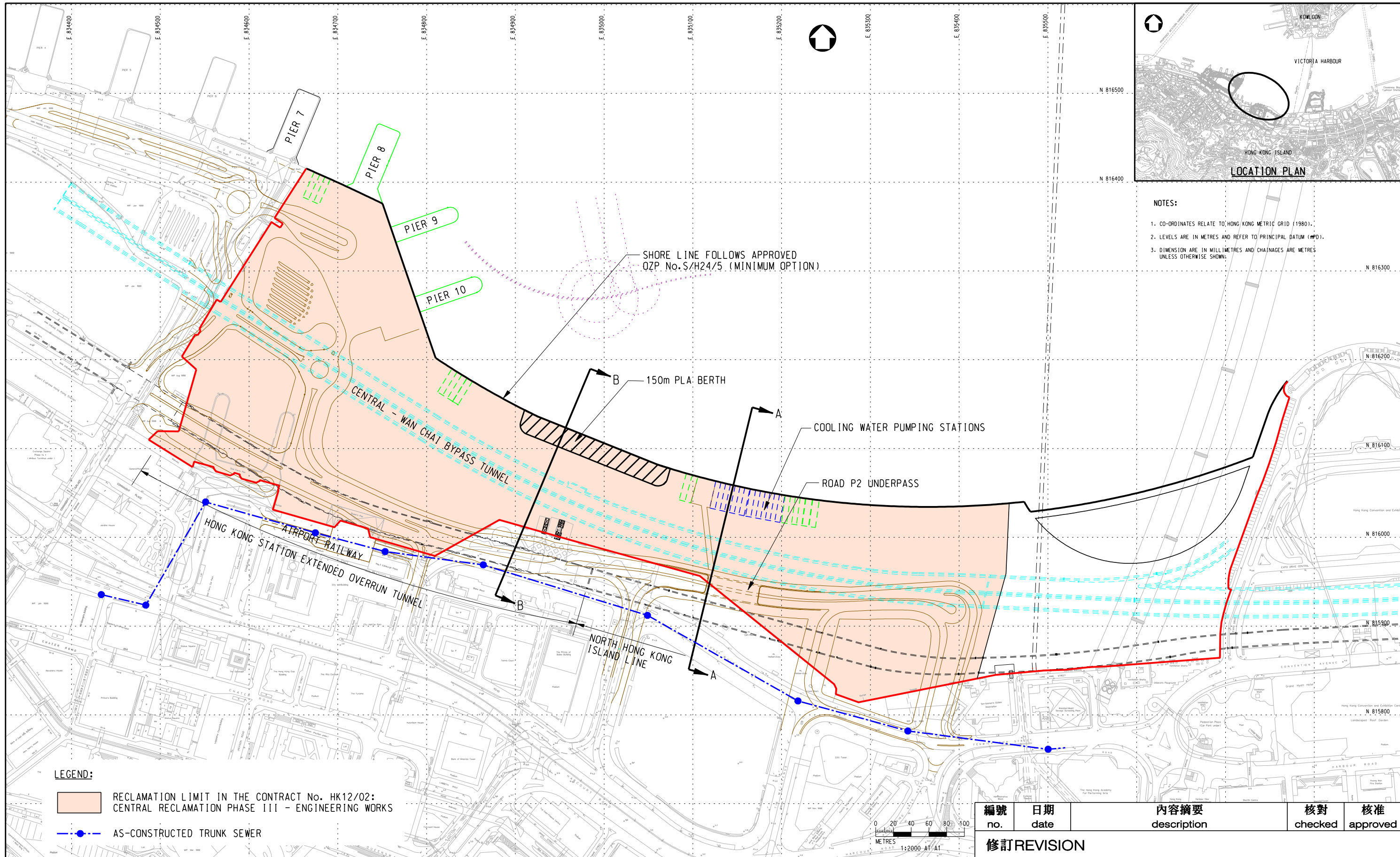
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修訂 REVISION																						
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	核對 checked S K KEUNG	簽署 initial SIGNED	日期 date 24-10-03	比例 scale -																		
	核准 approved H H YEUNG	簽署 initial SIGNED	日期 date 24-10-03	圖則編號 drawing no. HKI-Z605	 拓展署 TERRITORY DEVELOPMENT DEPARTMENT																	

Horizontal Alignment Options for the section of CWB between Rumsey Street Flyover and Man Yiu Street



編號 no.	日期 date	內容摘要 description	核對 checked	核准 approved
修訂 REVISION				

<p>圖則名稱 drawing title</p> <p style="text-align: center;">Central Reclamation Phase III Typical Cross-section across Current Minimum Option</p>	繪圖 drawn	簽署 initial	日期 date	項目編號 item no.	<p>辦事處 office</p> <p>港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE</p> <p style="text-align: center;">拓展署 TERRITORY DEVELOPMENT DEPARTMENT</p>
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	核對 checked	簽署 initial	日期 date	比例 scale	
S K KEUNG	SIGNED	25.11.2003	1:500		
核淮 approved	簽署 initial	日期 date	圖則編號 drawing no.		
H H YEUNG	SIGNED	25.11.2003	HKI-Z624		



LEGEND:

- RECLAMATION LIMIT IN THE CONTRACT No. HK12/02: CENTRAL RECLAMATION PHASE III - ENGINEERING WORKS
- AS-CONSTRUCTED TRUNK SEWER

編號 no.	日期 date	內容摘要 description	核對 checked	核准 approved
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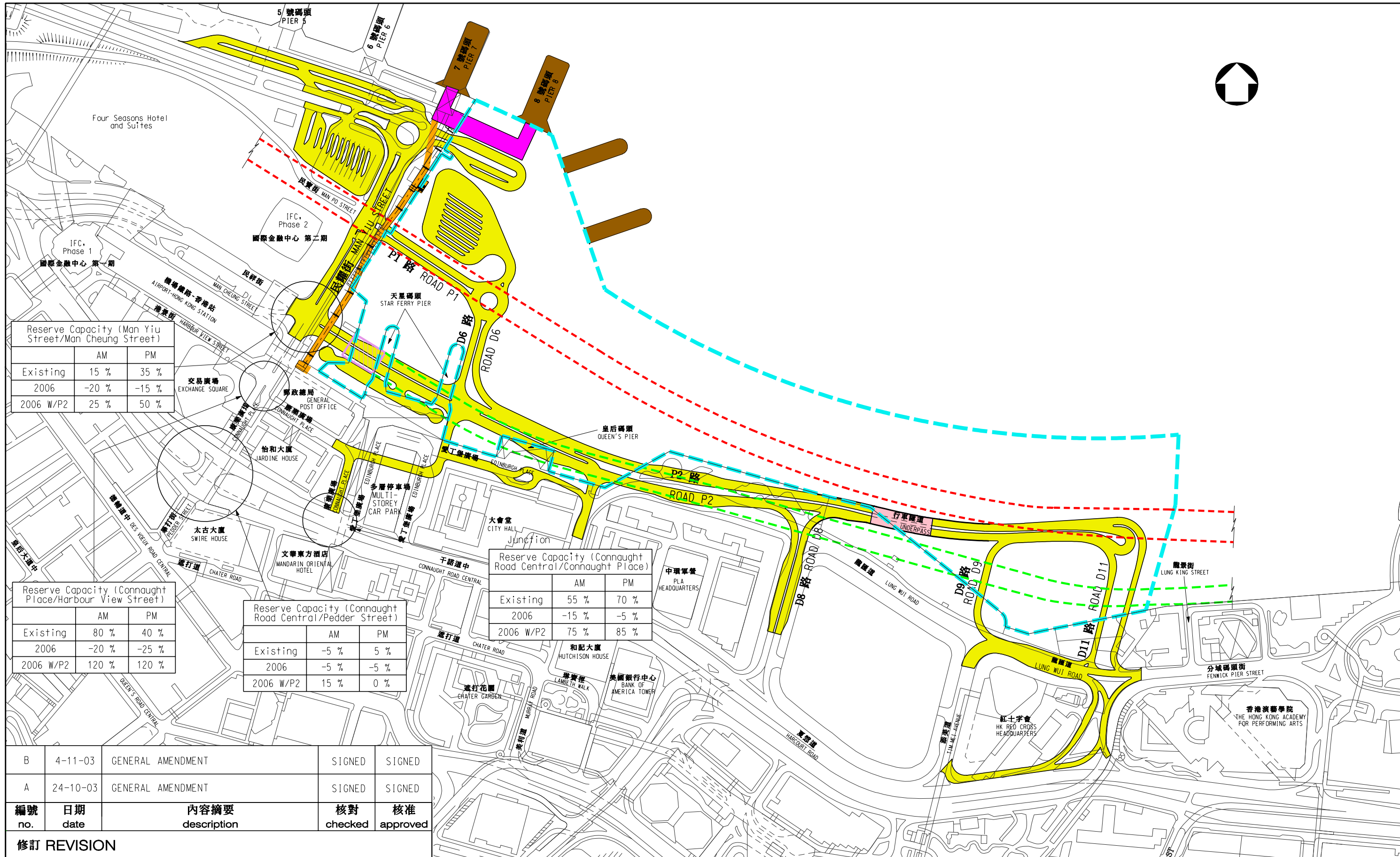
修訂REVISION


項目編號 item no.	辦事處 office
比例 scale	港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE
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HK I - Z534	

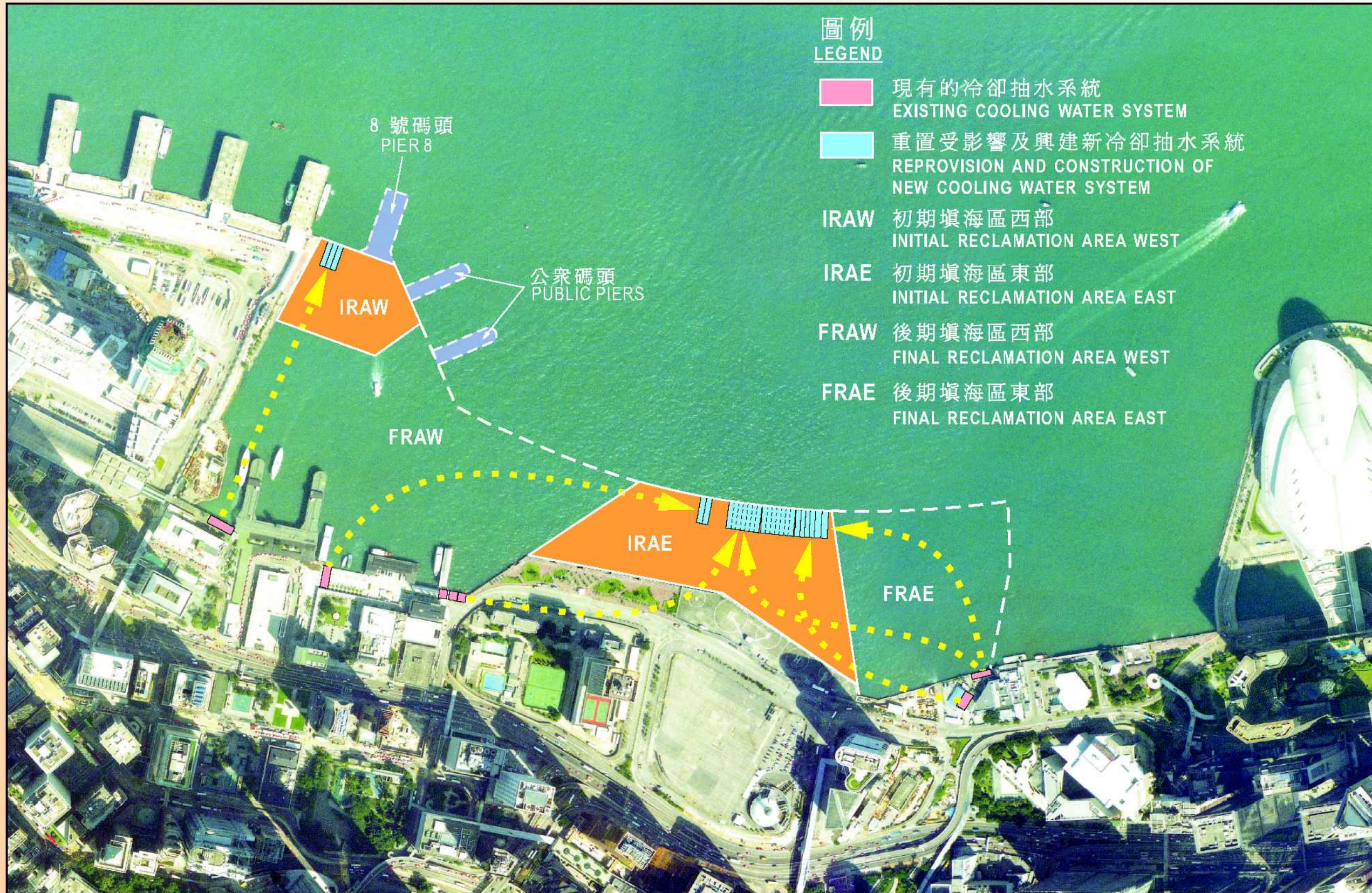
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CENTRAL RECLAMATION PHASE III
RECLAMATION EXTENT FOR MINIMUM OPTION

繪圖 drawn	簽署 initial	日期 date
H C LAU	SIGNED	28.8.2003
核對 checked	簽署 initial	日期 date
S K KEUNG	SIGNED	28.8.2003
核准 approved	簽署 initial	日期 date
K F TANG	SIGNED	28.8.2003



圖則名稱 drawing title		繪圖 drawn	簽署 initial	日期 date	項目編號 item no.	辦事處 office 港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE
PROPOSED CENTRAL RECLAMATION PHASE III ROAD NETWORK AND JUNCTIONS PERFORMANCE IN CENTRAL		C M LO	SIGNED	09-10-03		
		核對 checked	簽署 initial	日期 date	比例 scale	
		W K KWOK	SIGNED	09-10-03	1:4 000	
		核准 approved	簽署 initial	日期 date	圖則編號 drawing no.	 拓展署 TERRITORY DEVELOPMENT DEPARTMENT
		H H YEUNG	SIGNED	09-10-03	HK I-2569B	



中環填海計劃第III期 - 填海次序
CENTRAL RECLAMATION PHASE III - RECLAMATION SEQUENCE

比例 scale

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N.T.S.

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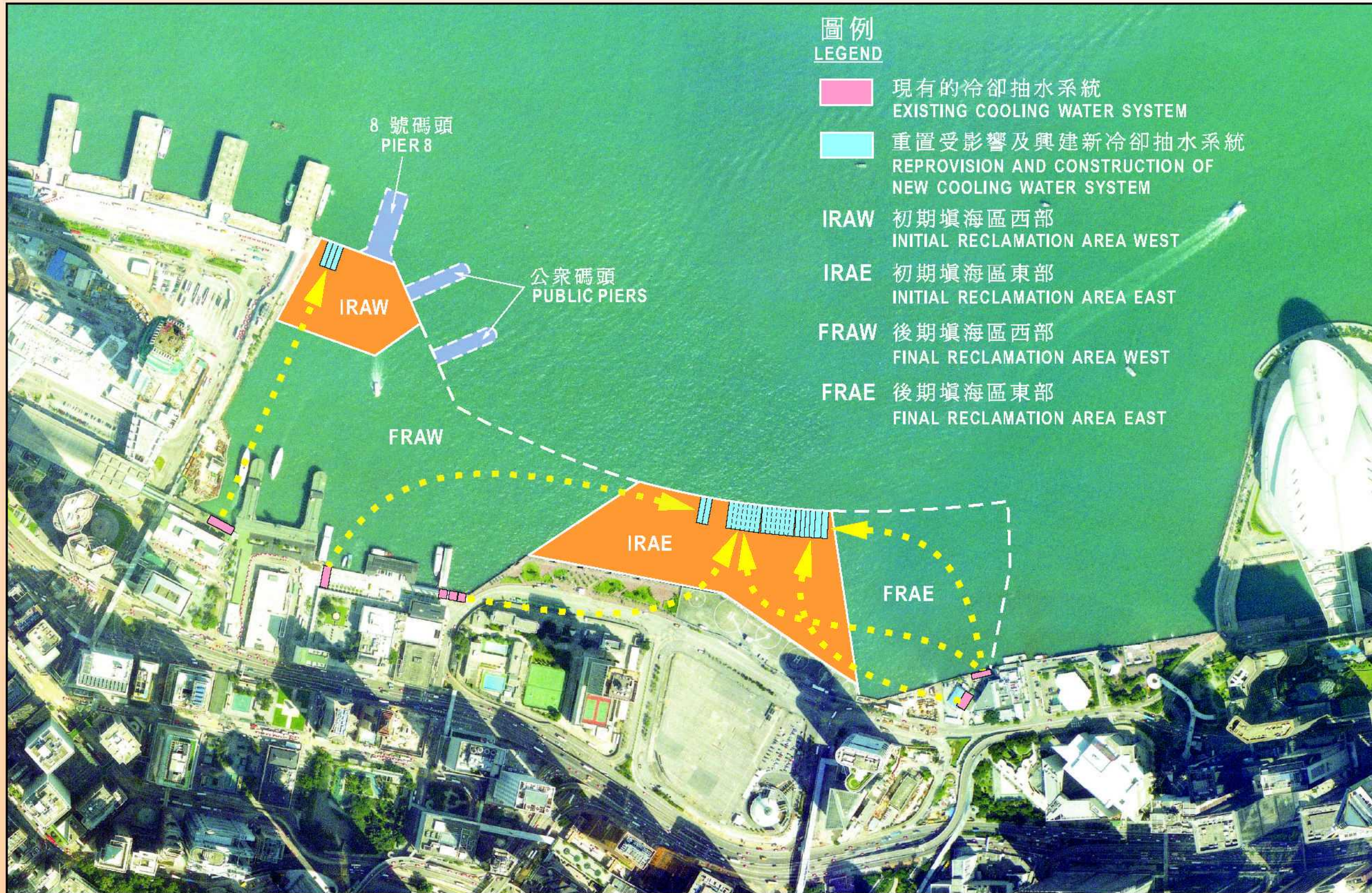
HKI-Z479A

辦事處 Office

港島及離島拓展處
HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE



拓展署
TERRITORY DEVELOPMENT DEPARTMENT



中環填海計劃第III期 - 填海次序
CENTRAL RECLAMATION PHASE III - RECLAMATION SEQUENCE

辦事處 office
港島及離島拓展處
HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE

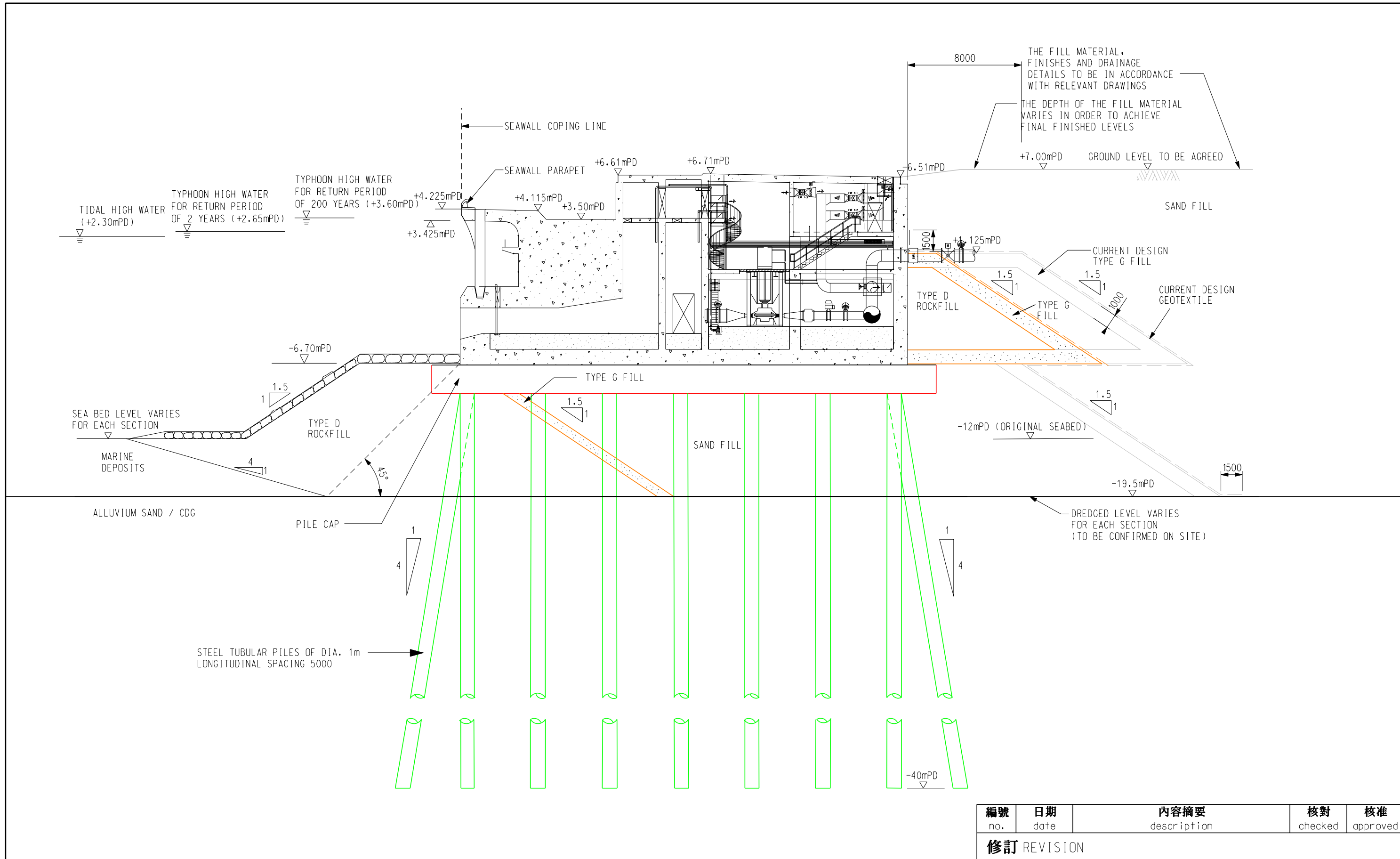
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TERRITORY DEVELOPMENT DEPARTMENT

Various Foundation Options for Cooling Water Pumping Station

Foundation Scheme	Feature	Cost Estimation million \$	Advantage	Constraints	Remarks
Rock Fill Mound (Current Design)	Rock fill between elevations –6.7 mPD and –19.5 mPD with slope gradient of 1:1.5	9.0	Optimal design	-	Viable
Driven Pile Foundation	Tubular Steel Piles of diameter 1 m penetrated to –40 mPD with top of pile cap level at –6.7 mPD.	121	6 m less lateral extent of the rock fill mound	Difficult to construct the pile cap underwater	Not viable. Private Sector may be required to share the foundation cost.
Bored Pile Foundation	Bored Piles of diameter 1.5 m penetrated to –50 mPD with top of pile cap level at –6.7 mPD.	127	6 m less lateral extent of the rock fill mound	Difficult to construct the pile cap underwater	Not viable. Private Sector may be required to share the foundation cost.
Mat Foundation	Precast cellular caisson with top and bottom elevations of –6.7 mPD and –18.5 mPD in-filled with ballast material	120	6 m less lateral extent of the rock fill mound	-	Not viable. Private Sector may be required to share the foundation cost.

Notes:

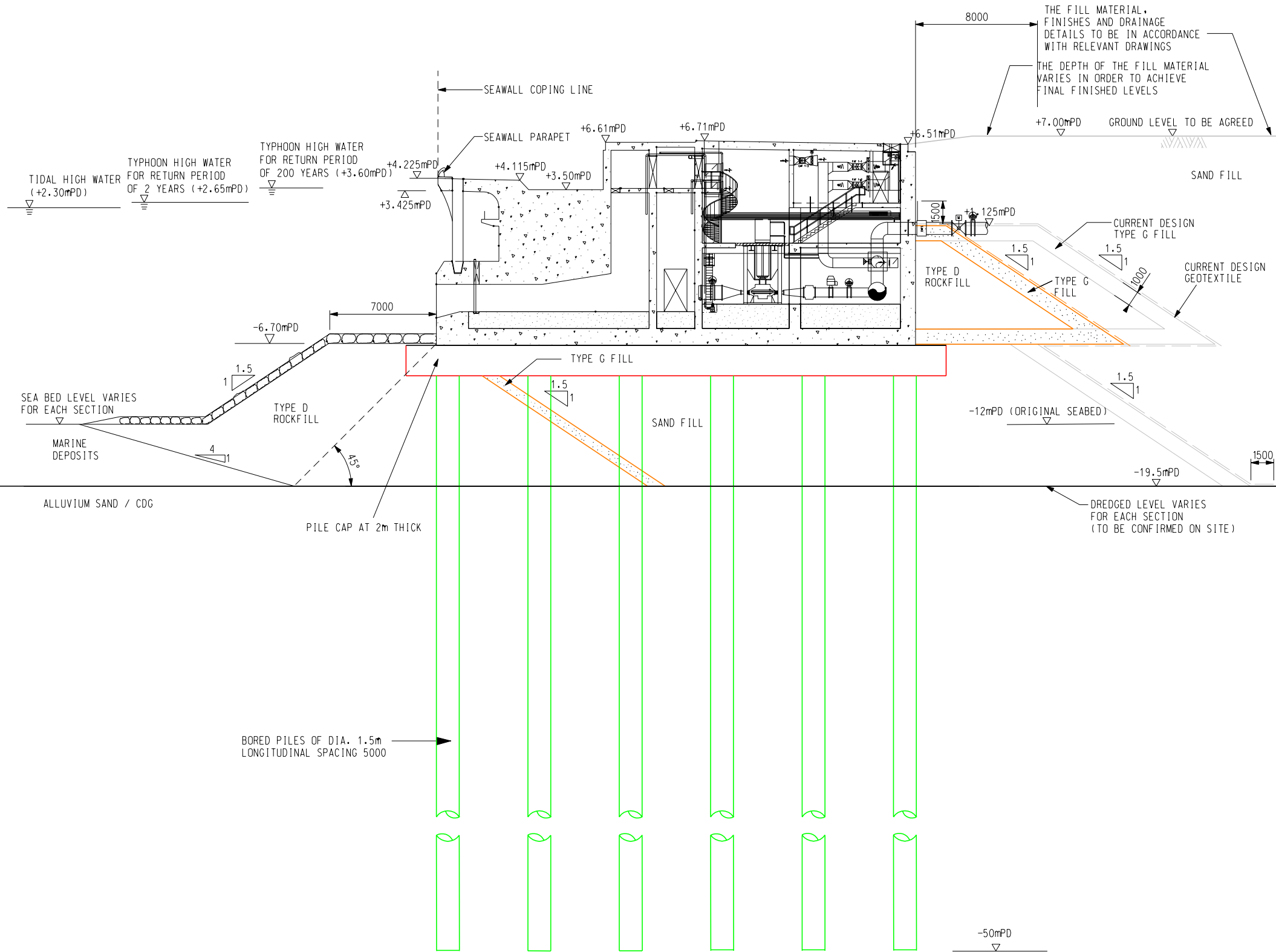
- (1) Cost estimations for various schemes do not include preliminary items and the caisson units.
- (2) The cost estimations in this Table are the total cost for the foundation beneath the CWPS units that has the total length of approximately 175 m along the coping line direction.



編號 no.	日期 date	內容摘要 description	核對 checked	核准 approved
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修訂 REVISION

圖則名稱 drawing title TYPICAL SECTION OF DRIVEN PILE FOUNDATION FOR COOLING WATER PUMPING STATION	繪圖 drawn W L LAM	簽署 initial SIGNED	日期 date 25-11-03	項目編號 item no.	辦事處 office 港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE 拓展署 TERRITORY DEVELOPMENT DEPARTMENT
	核對 checked S K KEUNG	簽署 initial SIGNED	日期 date 25-11-03	比例 scale 1:250	
	核准 approved H H YEUNG	簽署 initial SIGNED	日期 date 25-11-03	圖則編號 drawing no. HKI-Z625	



編號 no.	日期 date	內容摘要 description	核對 checked	核准 approved
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修訂 REVISION

圖則名稱 drawing title

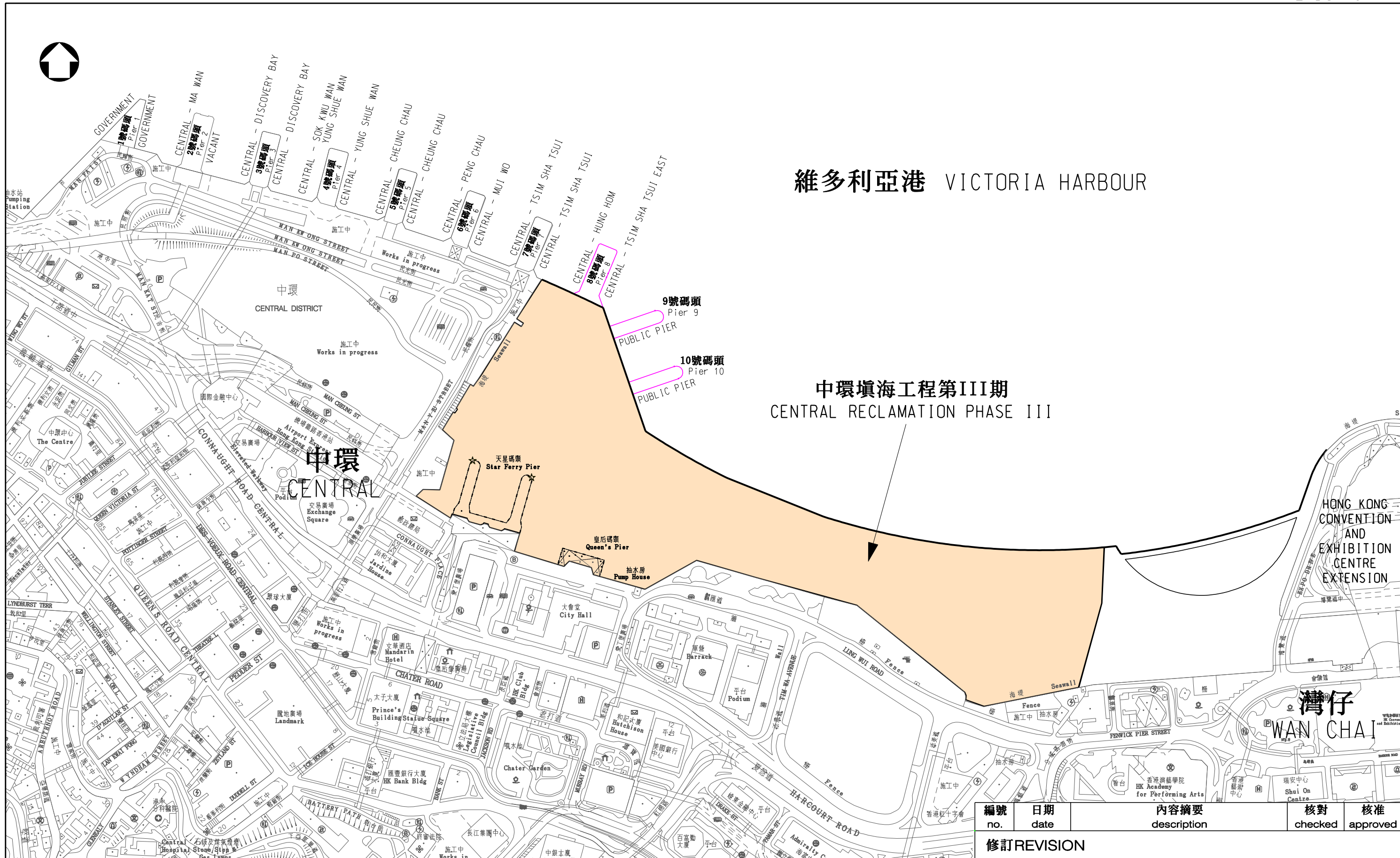
TYPICAL SECTION OF BORED PILE FOUNDATION FOR COOLING WATER PUMPING STATION

繪圖 drawn W L Lam	簽署 initial SIGNED	日期 date 25-11-03
核對 checked S K Keung	簽署 initial SIGNED	日期 date 25-11-03
核准 approved H H YEUNG	簽署 initial SIGNED	日期 date 25-11-03

項目編號 item no.
比例 scale 1:300
圖則編號 drawing no. HK I-Z626

辦事處 office
港島及離島拓展處
HONG KONG ISLAND AND ISLANDS
DEVELOPMENT OFFICE





維多利亞港 VICTORIA HARBOUR

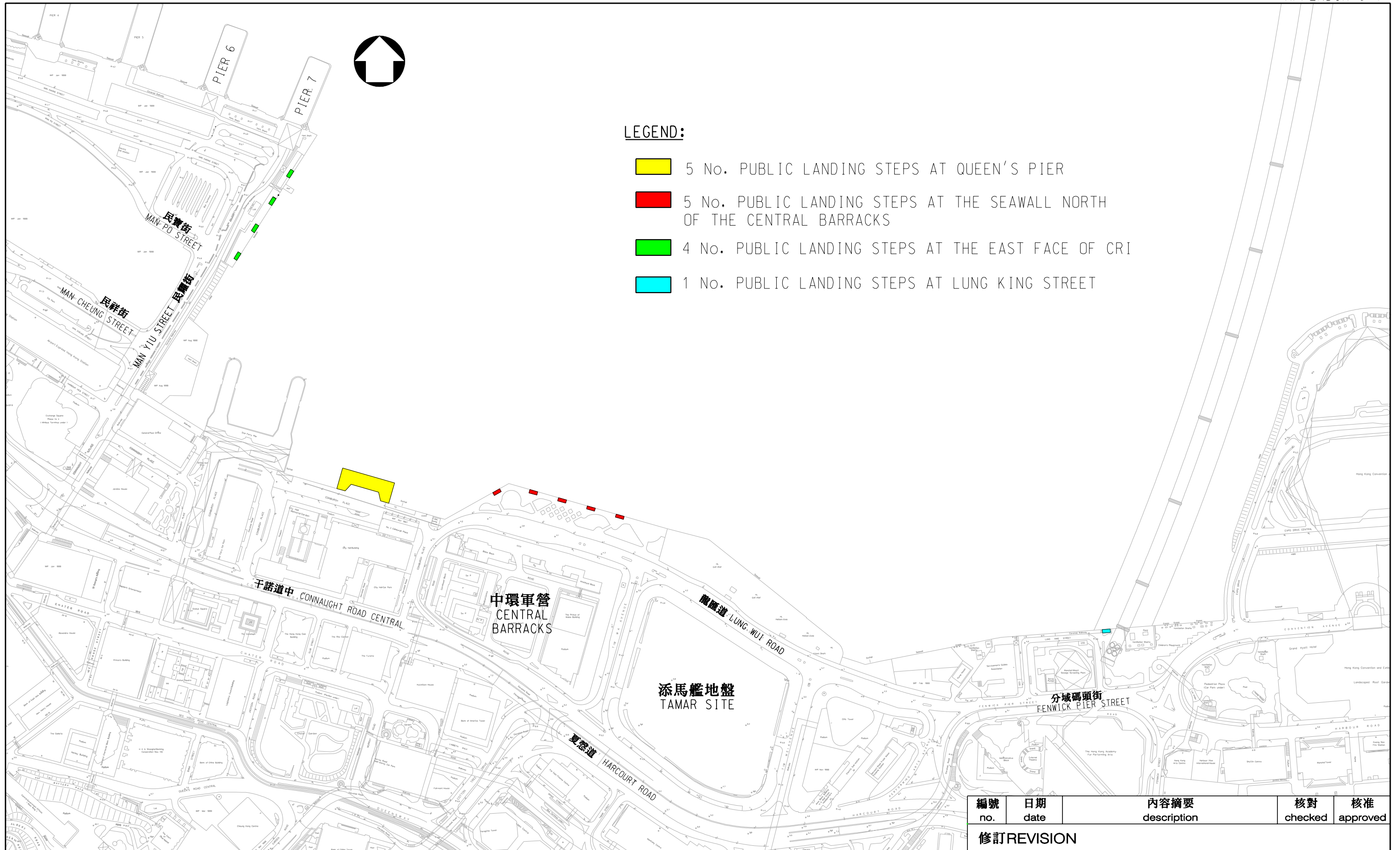
中環填海工程第III期
CENTRAL RECLAMATION PHASE III

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	W L LAM	SIGNED	08-10-03		
PIERS IN CENTRAL	核對 checked	簽署 initial	日期 date	比例 scale	拓展署 TERRITORY DEVELOPMENT DEPARTMENT
	S K KEUNG	SIGNED	08-10-03	1:5000	
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	H H YEUNG	SIGNED	08-10-03	HKI-Z567	

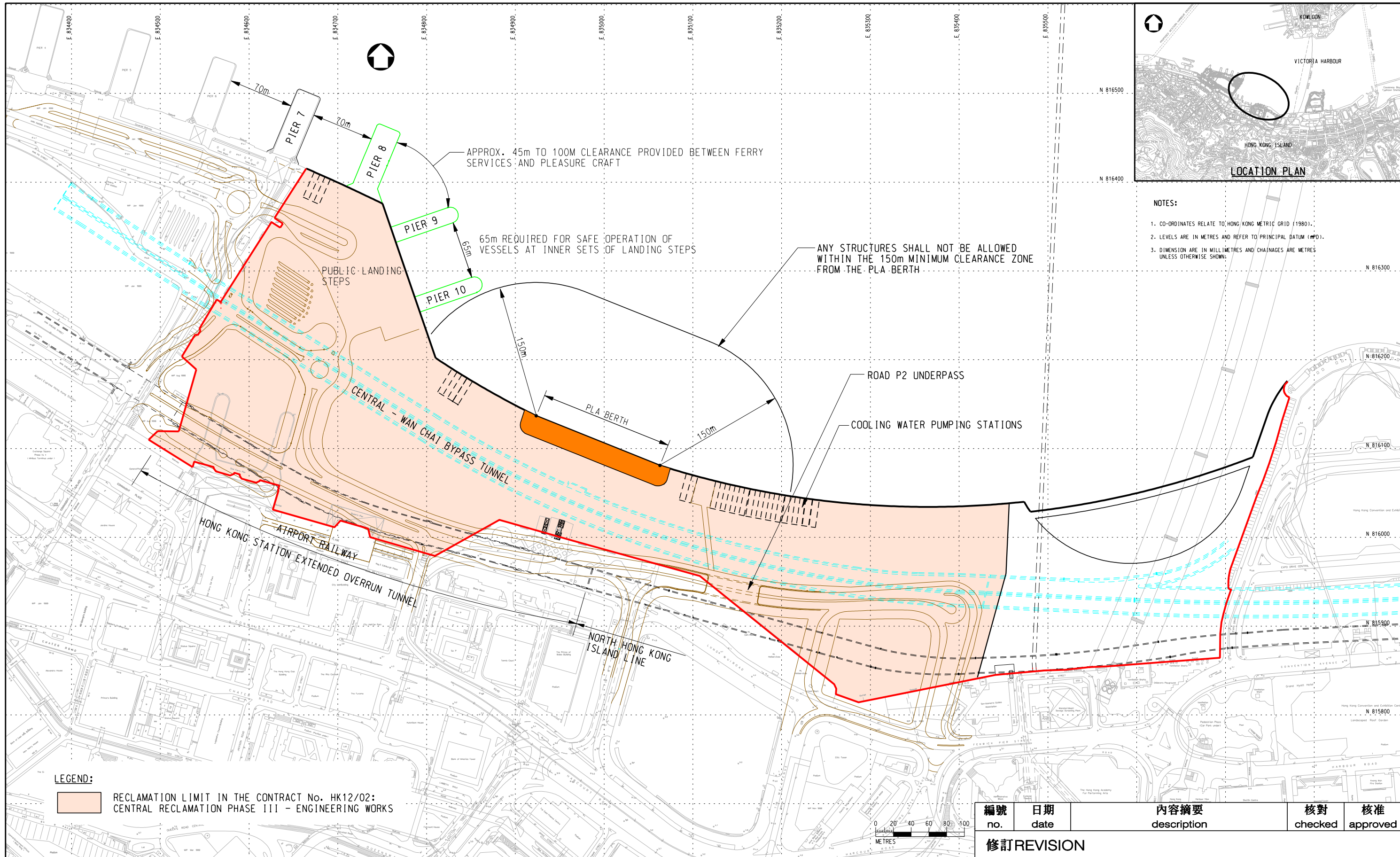
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修訂 REVISION				



LEGEND:

- 5 No. PUBLIC LANDING STEPS AT QUEEN'S PIER
- 5 No. PUBLIC LANDING STEPS AT THE SEAWALL NORTH OF THE CENTRAL BARRACKS
- 4 No. PUBLIC LANDING STEPS AT THE EAST FACE OF CRI
- 1 No. PUBLIC LANDING STEPS AT LUNG KING STREET

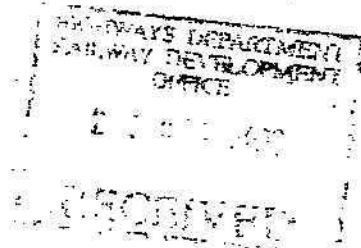
<p>圖則名稱 drawing title</p> <p style="text-align: center;">EXISTING PUBLIC LANDING STEPS IN CENTRAL WATERFRONT BEFORE THE COMMENCEMENT OF CENTRAL RECLAMATION PHASE III</p>		<p>繪圖 drawn</p> <p style="text-align: center;">H S TSANG</p>		<p>簽署 initial</p> <p style="text-align: center;">SIGNED</p>		<p>日期 date</p> <p style="text-align: center;">14-11-03</p>		<p>項目編號 item no.</p>		<p>辦事處 office</p> <p style="text-align: center;">港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE</p>	
		<p>核對 checked</p> <p style="text-align: center;">S H YU</p>		<p>簽署 initial</p> <p style="text-align: center;">SIGNED</p>		<p>日期 date</p> <p style="text-align: center;">14-11-03</p>		<p>比例 scale</p> <p style="text-align: center;">1:4000</p>			
		<p>核准 approved</p> <p style="text-align: center;">H H YEUNG</p>		<p>簽署 initial</p> <p style="text-align: center;">SIGNED</p>		<p>日期 date</p> <p style="text-align: center;">14-11-03</p>		<p>圖則編號 drawing no.</p> <p style="text-align: center;">HKI-Z620</p>		<p style="text-align: center;">拓展署 TERRITORY DEVELOPMENT DEPARTMENT</p>	



圖則名稱 drawing title	CENTRAL RECLAMATION PHASE III RECLAMATION EXTENT FOR MINIMUM OPTION ARRANGEMENT OF PIERS WITH THE MARINE OPERATIONAL REQUIREMENT			繪圖 drawn W L LAM	簽署 initial SIGNED	日期 date 28.8.2003	項目編號 item no.	辦事處 office 港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE 拓展署 TERRITORY DEVELOPMENT DEPARTMENT
	核對 checked S H YU	簽署 initial SIGNED	日期 date 28.8.2003	比例 scale 1:4000				
	核准 approved H H YEUNG	簽署 initial SIGNED	日期 date 28.8.2003	圖則編號 drawing no. HKI-Z553				

Mr. Timothy Leung
Highways Department
1/F, Ho Man Tin Government Offices
88 Chung Hau Street
Ho Man Tin
Kowloon

Our ref : C/DM/5018/CS00
18 December 2000



BY FAX & POST

8/15/01

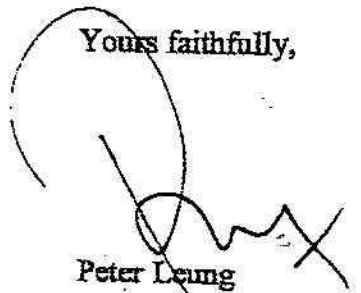
Dear Sir,

Hong Kong Station Extended Overrun Tunnel

I refer to your letter ref. RD 8/5/2/1 dated 30 November 2000.

As requested, I enclose a copy of the paper which confirms the EOT is required for the LAR to meet safety requirements and to provide train reversing facilities. Without the EOT, the LAR cannot operate to its full design capacity.

Yours faithfully,


Peter Leung
Design Manager (New Projects)

Encl.

c.c. TDD - Mr. K F Tang

PL/CN/CH/03/REFS#00483571

LANTAU AND AIRPORT RAILWAY
HONG KONG STATION EXTENDED OVERRUN TUNNEL

1. INTRODUCTION

1.1 This paper describes the Hong Kong Station Extended Overrun Tunnel and outlines the reasons why it is required.

2. BACKGROUND

2.1 During the feasibility study and design stages of the Lantau and Airport Railway (LAR), it was identified that an overrun tunnel was required east of Hong Kong Station for the following reasons:

- (a) To ensure trains failing to stop at the design position do not collide with the tunnel end.
- (b) To allow trains to be turned back on the east side of the station without hindering trains approaching from the west, thereby enabling the LAR to operate to its design capacity and allow the use of separate platforms for AEL arrivals and departures.

2.2 Due to phasing problems with the Central Reclamation, it was recognised from the outset that the full overrun tunnel could not be completed by the opening date of LAR Phase 1. A scheme was developed to construct the overrun tunnel in two stages to suit the phasing of the Central Reclamation.

2.3 In the first stage, as a compromise solution which would avoid demolition of the Star Ferry pier, a short overrun tunnel of approximately 80m route length was planned to be constructed together with LAR Phase 1. This short overrun tunnel has been completed and put into operation when Phase 1 of the LAR opened in mid-1998.

2.4 In the second stage, the overrun tunnel would be extended to its full extent to satisfy the requirements stated in section 2.1 above. This extension is now called the Hong Kong Station Extended Overrun Tunnel (EOT) and is intended to be constructed at the same time as Central Reclamation Phase III (CRIII).

2.5 The original envisaged programme for completion of CRIII and the EOT was 2001. However, due to problems with the scope of CRIII, the CRIII programme has been delayed. The current programme shows that CRIII construction will commence in April 2002 and complete by end 2006.

2.6 It should be noted that construction of the EOT was agreed with Government during negotiations on the LAR project in 1991. This agreement is now embodied in paragraph 8A of the Airport Railway Financial Support Agreement.

3. LAR PHASE 1 (SHORT OVERRUN TUNNEL)

- 3.1 The schematic layout at Hong Kong Station for LAR Phase 1 is shown in Figure 1 attached to this paper. The existing railway facilities are not sufficient to meet the requirements in section 2.1 above. This is explained in the following sections.
- 3.2 For safety reasons, an overrun tunnel of at least 110m is required at all terminal stations to ensure trains failing to stop at the design position, as a result of human error or defective equipment, would not collide with the tunnel end. These train overruns occur relatively infrequently and pose no safety risk provided adequate overrun tunnel is available. It is not possible to eliminate overruns.
- 3.3 As the existing short overrun tunnel constructed as part of LAR Phase 1 is only 80m long, it does not meet the safety requirements. This is tolerable while the LAR operates at extended headways, as on a statistical basis the risk of such accidents can be accepted. The HK Railway Inspector has accepted this sub-standard overrun tunnel, based on the lower frequencies of AEL and TCL trains during initial operation of LAR. MTR is required to report on an annual basis, whether the risk remains acceptable.
- 3.4 Taking into account the latest patronage figures and forecasts and proposed improvements to headways to accommodate increased flows from the new West Rail connection at Nam Cheong Station, the latest risk assessment conducted by MTR shows that the EOT should be commissioned latest by 2003. Based on the current CRIII programme, the earliest EOT opening date that can be achieved, assuming the EOT construction is entrusted to TDD under CRIII, is 2006. MTR Corporation consider this to be marginally tolerable, again on a statistical basis, and has advised the HK Railway Inspector accordingly.
- 3.5 Whilst the existing crossovers located on the west side of Hong Kong Station allow trains to reverse at HOK, they constrain the overall LAR capacity due to the following reasons:
- The location and geometry of the turnouts for the crossovers impose speed restrictions on approaching trains.
 - Trains leaving the TCL platform obstruct the approaching track for a short period of time, requiring approaching trains to be kept further away.
 - The single AEL crossover encroaches into the AEL platform thus imposing a limit of 8 car operation for the AEL. In order to provide full capacity, AEL has to operate with 10 car trains and with two platforms.
 - With a single AEL crossover and platform, approaching AEL trains have to wait until the single AEL platform is cleared. This constrains the AEL service and consequently the TCL service.
- 3.6 In order to operate AEL and TCL to full design capacity, the existing crossovers west of HOK have to be removed and re-provisioned east of HOK and an overrun tunnel of sufficient length (approximately 500m) for trains to reverse is required.

4. LAR PHASE 2 - HOK EXTENDED OVERRUN TUNNEL

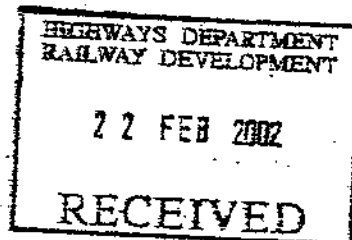
- 4.1 The required extent of the LAR Phase 2 HOK Extended Overrun Tunnel which satisfies the requirements in section 2.1 is shown in the attached Figure 2. The length of the EOT has been calculated to meet safety requirements and to allow trains to reverse.
- 4.2 After commissioning of the EOT, passengers arriving at HOK Station would alight at the arrival AEL or down TCL platforms. The trains will then enter the overrun tunnel via the crossovers east of HOK and return to the departure AEL or up TCL platforms to pick up departing passengers.

5. CONCLUSIONS

- 5.1 The existing short overrun tunnel east of Hong Kong Station was a compromise solution to reclamation phasing problems and is not adequate to meet safety and operational requirements at improved LAR service levels.
- 5.2 The HOK Extended Overrun Tunnel has been delayed from the original intended completion date of 2001 and must be constructed as soon as possible to meet the safety and operational requirements in section 2.1 above.

Our Ref PID/LAR/125

Date 21 February 2002



BY FAX & POST
(2537 3231)

Secretary for Transport
Transport Bureau
16/F Murray Building
Garden Road
Hong Kong

Attention : Mr Paul Tsang

Dear Paul,

Central Reclamation Phase III
Hong Kong Extended Overrun Tunnel

I refer to our previous discussions on the intended arrangements for construction of the Hong Kong Extended Overrun Tunnel (EOT) and wish to advise the Corporation's current position following a review of the overall need, based on the latest projections for growth in demand on the Airport Express (AEL) and Tung Chung Line (TCL).

As you may be aware the need for the EOT is dictated by two issues.

The first concerns the ability of the AEL and TCL to meet the future demand. Any major improvements in headways which might be needed to achieve higher capacities, can only be realised if the second AEL platform is provided and trains are turned back on the east side of Hong Kong Station. The full 500m of the EOT is needed for this purpose.

The second issue is a safety issue and concerns the risk of trains colliding with the end wall of the tunnel. The current overrun of 84m, which was the maximum possible at the time of construction of Hong Kong Station, is less than our standard length of 110m.

Recent data on population assumptions for North Lantau, West Kowloon and the North West NT, updated patronage forecasts for the Airport, observed current ridership on the AEL and TCL, and current and envisaged future levels of bus competition have been used to develop revised predictions for future demand and the necessity for increasing the frequency of TCL and AEL services and hence the need for the EOT. Assuming that the rate of population increase in the AEL and TCL catchments is at the new reduced rate and that the KCRC West Rail and Kowloon Southern Link projects are completed in 2003 and 2008 respectively, the ability of the existing TCL and AEL to accommodate the reduced future demand is now predicted to be adequate until at least 2014. Only at that time will the provision of the full 500m EOT, with train reversing provisions east of Hong Kong Station, be required.

With regard to the safety issue the existing overrun tunnel length of 84m remains a safety concern for the operation of the TCL and AEL. Our current assessment is that this arrangement will be tolerable until 2006, at which time patronage increases will necessitate an increase in the overrun tunnel length. A modest increase of the tunnel length by approximately 40m will overcome the safety concern.

The Corporation has therefore concluded that we only require a 40m extension of the existing overrun tunnel at this time.

We do acknowledge the desirability of avoiding future disruption to the completed CRIII works, by constructing the full 500m of overrun tunnel concurrently with the reclamation works. We would therefore welcome discussions on the way forward, with one suggestion being that, except for the 40m required for safety reasons, Government fund and undertake these tunnel works as railway route protection measures, to be refunded by the Corporation when the works are incorporated into the railway to meet operational needs. Other funding arrangements may also need to be explored, possibly combined with a package for NIL funding.

We understand that Government intend to invite tenders for the CRIII works in April 2002 and award the contract in August 2002. In order not to delay this programme and to allow sufficient time to consider the timing and funding arrangements for the EOT we would propose that the EOT works are included in the contract as an Option subject to excision. It is understood that the contractor would not need to be instructed to proceed with the EOT until December 2002. This should allow sufficient time for a decision on funding and route protection to be taken.

We recognize that this strategy differs from our original intention and regret having to inform you of this approach in the final stages of preparation of the tender documentation for CRIII by TDD, however the Corporation has only recently received the planning data confirming the very substantial reduction in population growth forecasts.

We would be pleased to discuss further as necessary.

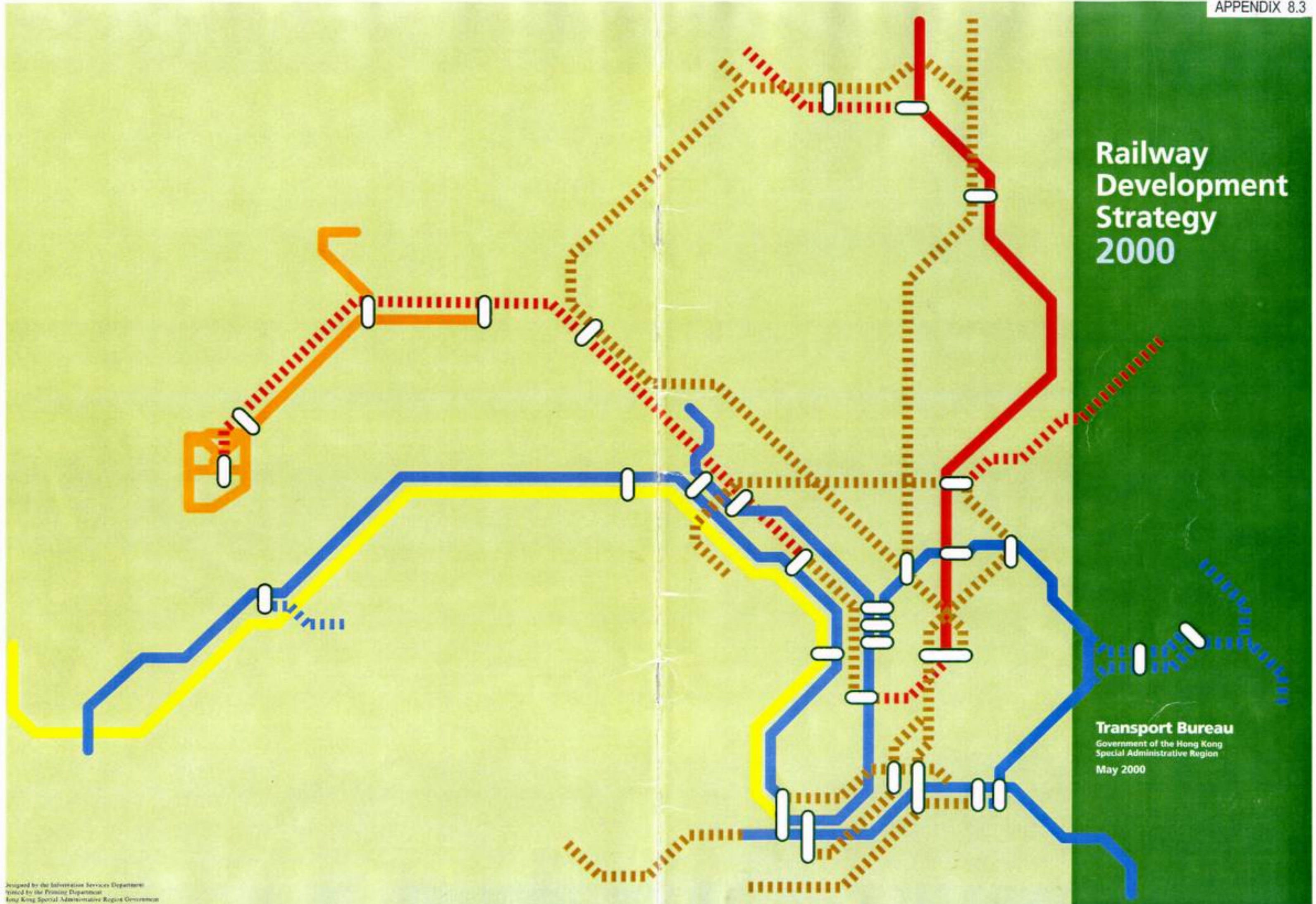
Yours sincerely,

R.J. Black
Project Director

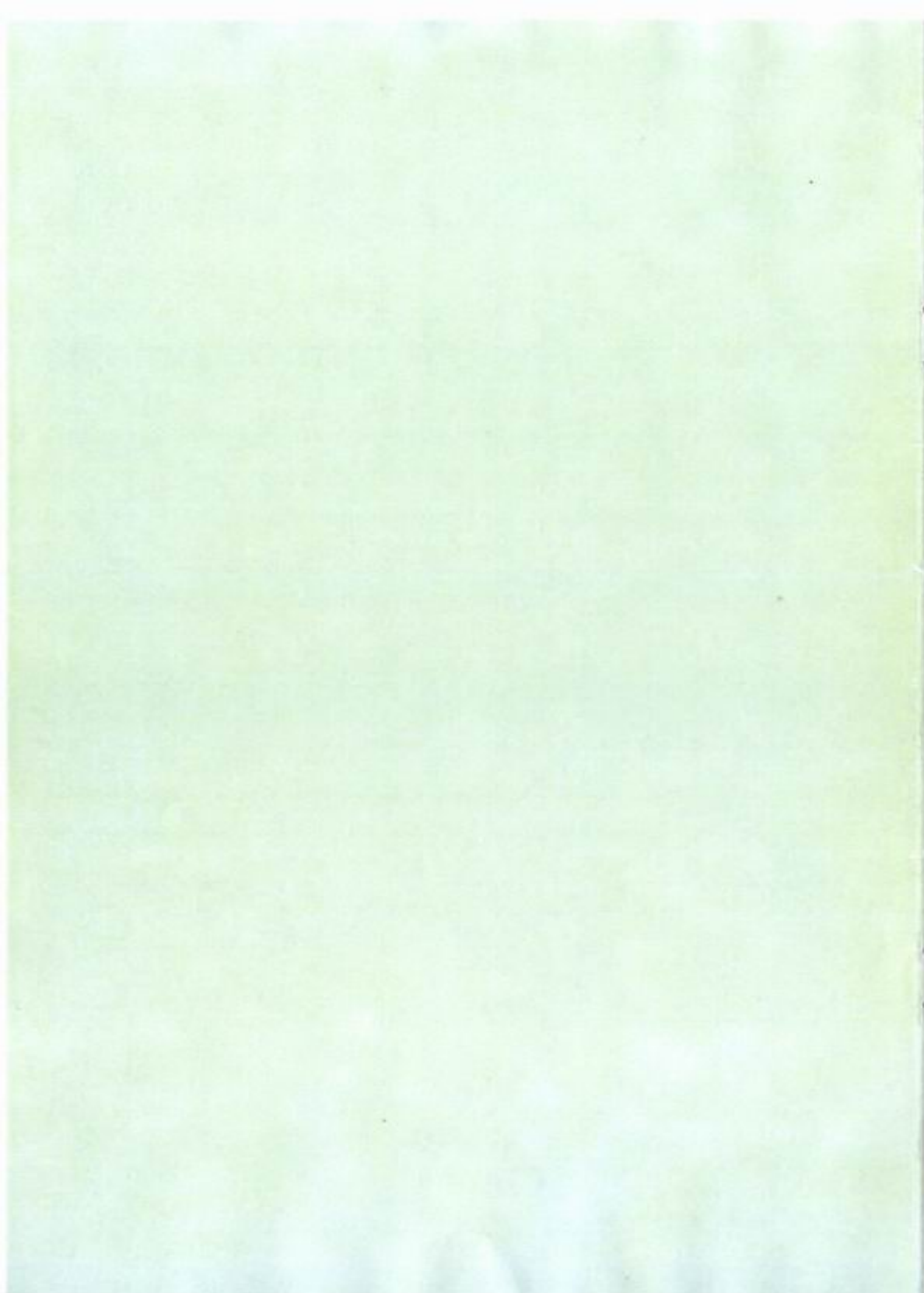
c.c. RDO, HyD - Attn. Mr John Chai
TDD - Attn. Mr H.K. Wong
FB - Attn. Mr M. Glass

RJB/AMG/af

Railway Development Strategy 2000



Transport Bureau
Government of the Hong Kong
Special Administrative Region
May 2000



**Government of the Hong Kong
Special Administrative Region
Transport Bureau**

Railway Development Strategy 2000

May 2000

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1 INTRODUCTION

- 1.1 This is the second Railway Development Strategy to be prepared for Hong Kong. The Strategy provides the planning framework for further expansion of Hong Kong's railway network up to 2016.
- 1.2 The Strategy is based on the findings of the Second Railway Development Study which was completed in early 2000. The further decision to build individual railway projects will follow on detailed engineering, environmental and financial studies relating to these projects. Public consultation will be undertaken prior to the implementation of any railway projects.

Policy on railway development

- 1.3 Railways are environmentally friendly and efficient mass carriers. Hong Kong's railways now account for more than 30% of daily domestic passenger travel, over 80% of cross-boundary passenger trips and a limited amount of freight movement between Hong Kong and the Mainland. The new transport strategy entitled "Hong Kong Moving Ahead" promulgated in October 1999 has reaffirmed the need to rely on railways as the backbone of Hong Kong's transport system. Railways are essential to Hong Kong's continued economic, social and land development, and will be given priority in Government's plans for infrastructure development.
- 1.4 The two Railway Corporations have to operate on a prudent commercial basis. Government acknowledges that any new railway project will have to provide a commercial return to the Corporation, or any other operator, chosen to implement the project. The present practice to allow, where appropriate, the Railway Corporations to develop property on the stations and depots has worked well and should be retained. Government will also continue to pay for ancillary public works item required to support railway development. Other support for marginally viable projects will be considered on the basis of the need for the individual projects.

The 1994 Railway Development Strategy

- 1.5 The Government formulated the first Railway Development Strategy for Hong Kong in 1994. It set out a railway development programme, according priority to the implementation of three new railway projects, namely, the KCR West Rail, the MTR Tseung Kwan O Extension, and the Ma On Shan to Tai Wai Rail Link which is to couple with an extension of the KCR East Rail from Hung Hom to Tsim Sha Tsui.
- 1.6 The three rail projects are now at different stages of implementation. In addition, the decision was taken in 1999 for the implementation of the Sheung Shui to Lok Ma Chau Spur Line to provide additional rail passenger crossing facilities between Hong Kong and Shenzhen to relieve the congestion at Lo Wu. In late 1999, we decided to build the Penny's Bay Rail Link to open in time for the Disney Theme Park. Thus a total of six new railway lines are scheduled for completion between 2002 and 2005. These six railway lines cost over HK\$100 billion. Their completion signifies the expansion of the existing railway network by about 40% to more than 200 kilometres. The completed railway network by the year 2006 is shown in **Figure 1**.



FIGURE 1: 2006 RAILWAY NETWORK

2. THE SECOND RAILWAY DEVELOPMENT STUDY

- 2.1 In order to cater for Hong Kong's continued population growth (which is projected to reach 8.9 million by 2016) and the increasing cross-boundary social and economic activities, Government commissioned the Second Railway Development Study (RDS-2) in March 1998 to examine how best to further expand the rail network to the year 2016.

The study objectives

- 2.2 The RDS-2 examined the needs of the future railway network to fulfill the following objectives:
- to relieve bottlenecks in the existing railway systems;
 - to provide rail service to strategic growth areas for housing and economic development;
 - to meet cross-boundary passenger and freight demands; and
 - to increase the share of rail in the overall transport system to reduce reliance on road-based transport.

New railway schemes

- 2.3 In order to achieve the intended objectives, RDS-2 has studied a number of new railway schemes which can be combined in different ways with the existing railway lines to form expanded railway networks. Six component railway schemes have been shortlisted for the formation of the basic network options. They are:-
- North Hong Kong Island Line;
 - East Kowloon Line;
 - Fourth Rail Harbour Crossing;
 - Tai Wai to Diamond Hill Link;
 - Kowloon Southern Link; and
 - Northern Link
- 2.4 In addition, three stand-alone schemes, which would not affect the formation of the basic network options, have also been identified to serve transport needs in particular corridors. They are the West Hong Kong Island Line, the Regional Express Line and the Port Rail Line.
- 2.5 RDS-2 recommends that network expansion should be based on the East Kowloon Line connecting with the Fourth Rail Harbour Crossing.

3. RAILWAY DEVELOPMENT STRATEGY 2000

3.1 Based on the key findings of RDS-2, Government has formulated Railway Development Strategy 2000. The Strategy maps out the preferred railway network expansion plan for the HKSAR up to the year 2016.

Key features of the preferred network

3.2 On completion, the Network will feature six new rail corridors and a potential Port Rail Line (PRL). The six new rail corridors are shown in **Figure 2**. They are:-

- (a) an east-west corridor from Chai Wan to Tung Chung formed by the MTR Island Line (ISL), the North Hong Kong Island Line (NIL) and the Tung Chung Line (TCL);
- (b) a second east-west corridor from Tseung Kwan O to Kennedy Town formed by the MTR Tseung Kwan O Extension, ISL and the West Hong Kong Island Line (WIL);
- (c) a north-south corridor which, depending on the operator, could either run direct from Tai Wai or Ma On Shan to Hong Kong Island via South East Kowloon;
- (d) a Kowloon Southern Link (KSL) that will provide convenient connection between the KCR East Rail and West Rail via the Kowloon peninsula;
- (e) a Northern Link (NOL) that will connect the KCR East Rail and West Rail at the northern part of the New Territories; and
- (f) a Regional Express Line (REL) that will provide rapid rail transport between the Boundary and the Metro areas.

The potential PRL will be from Lo Wu to the Kwai Chung terminals, via either East Rail or West Rail.

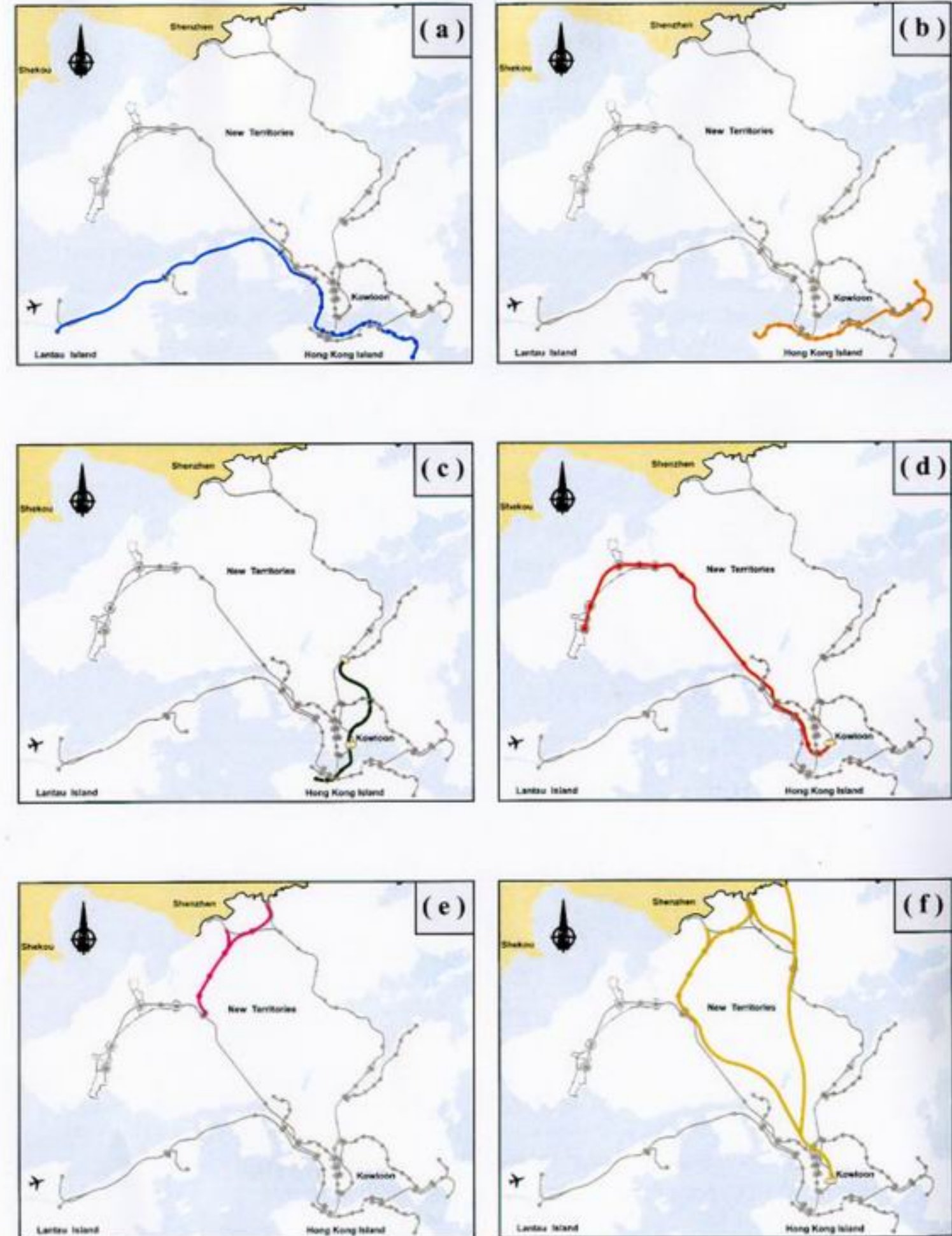


FIGURE 2: NEW RAIL CORRIDORS

The new railway projects

3.3 In order to achieve the Network desired, we intend to group the new railway schemes identified in RDS-2 into the following projects for implementation (see **Figure 7** on pages 10 and 11):-

Island Line Extensions

3.4 The Island Line Extensions comprise a new North Hong Kong Island Line (NIL) and a West Hong Kong Island Line (WIL). The NIL is an extension of the existing MTR TCL along the north shore of Hong Kong Island to run through onto the eastern half of the existing MTR ISL at the Fortress Hill Station. Concurrently, the new MTR Tseung Kwan O Extension (TKE) will join and run through onto the western half of the ISL at the Tin Hau Station. NIL can relieve the Causeway Bay section of the ISL and the Nathan Road section of the Tsuen Wan Line (TWL) by redistributing the cross-harbour trips to the TCL and TKE. The WIL is an extension of the MTR ISL from Sheung Wan to Kennedy Town.

3.5 Implementation of the NIL depends on the forecast timing of occurrence of the bottlenecks on the ISL and TWL and on the availability of the Central and Wanchai Reclamation. The viability of WIL would be affected by the progress of the Western District Development and success of the urban renewal process. As both NIL and WIL are natural extensions of the Island Line, they should be considered to be implemented as a package. The layout of the two railway lines is shown in **Figure 3**.

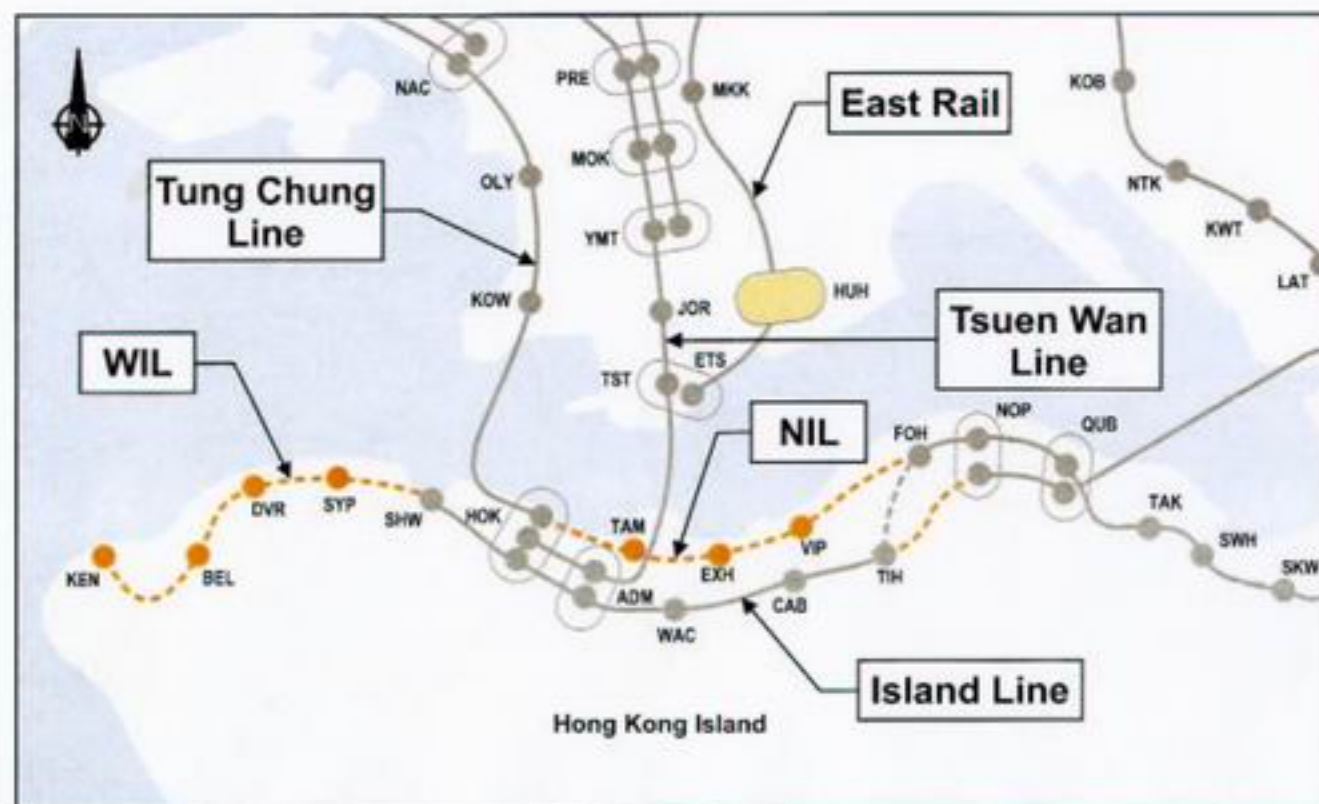


FIGURE 3: ISLAND LINE EXTENSIONS

Sha Tin to Central Link

3.6 The Sha Tin to Central Link will be a new strategic rail corridor in the rail network formed by EKL, FHC and TDL (see **Figure 4**). Not only will it increase significantly the cross-harbour and Shatin-Kowloon rail capacities, it will also help to redistribute the flows and relieve the other railway lines in Hong Kong and Metro Kowloon.

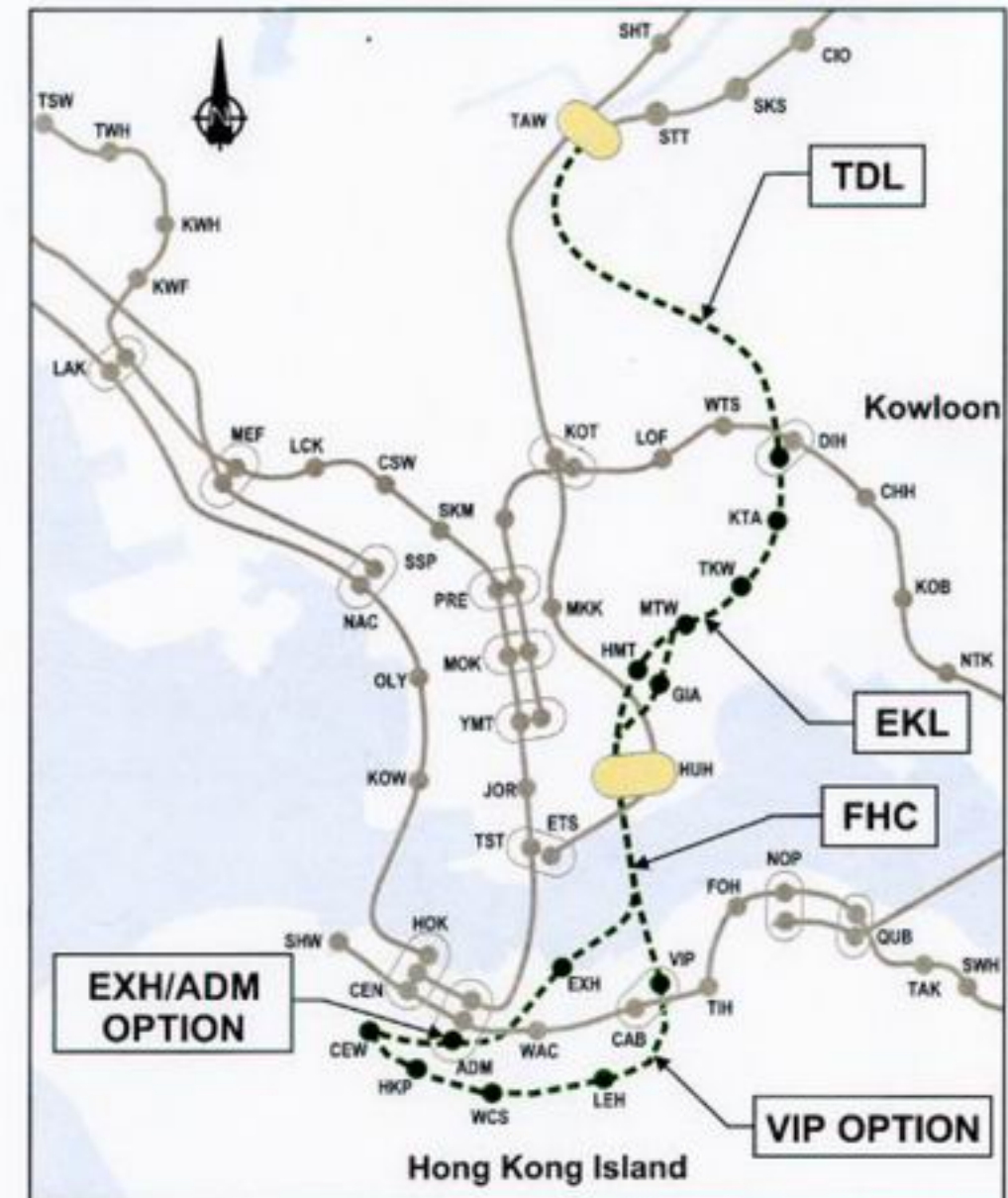


FIGURE 4: SHA TIN TO CENTRAL LINK

3.7 The East Kowloon Line (EKL) section of the Link connects the MTR Diamond Hill Station and the KCR Hung Hom Station. RDS-2 has found that on its own, the EKL is not an efficient, nor a viable project. It should be connected with other railway schemes to form a strategic rail corridor. To the south, the EKL would be extended from Hung Hom across the harbour to Hong Kong Island, forming the Fourth Rail Harbour Crossing (FHC). To the north, the EKL would be extended from Diamond Hill to Tai Wai, forming the Tai Wai to Diamond Hill Link (TDL).

- 3.8 The Fourth Rail Harbour Crossing (FHC) starts from Hung Hom on Kowloon side. On Hong Kong Island, the FHC could route directly to Central via Exhibition/Admiralty (the EXH/ADM Option) or via Victoria Park, Leighton Hill and Wanchai South (the VIP Option). The EXH/ADM Option is cheaper to build and provides a direct route from Hung Hom to Central. It caters well for the daily commuter traffic. On the other hand, the VIP Option would be able to accommodate a more diversified nature of trips as it connects to the busy commercial and retail Causeway Bay district. In longer term, the VIP Option may help facilitate a shift of the development focus from Central towards Causeway Bay.
- 3.9 The Tai Wai to Diamond Hill Link (TDL) will provide an additional rail corridor from North East New Territories to Kowloon so as to relieve the East Rail bottleneck at Beacon Hill Tunnel.
- 3.10 The implementation of the Sha Tin to Central Link will depend on the overall transport requirement of the network expansion, the pace of the planned developments in North East New Territories and Ma On Shan as well as the programme of the South East Kowloon Development and the Central and Wanchai Reclamation.

Kowloon Southern Link

- 3.11 The KSL is an extension of West Rail from its Nam Cheong Station to connect with the KCR Tsim Sha Tsui Extension. The layout of the KSL is shown in Figure 5.



FIGURE 5: KOWLOON SOUTHERN LINK

- 3.12 The KSL will provide an efficient east-west link round the southern part of the Kowloon peninsula and will help support development in Lantau Island, North West New Territories, West and East Kowloon. In addition, it can help relieve the cross harbour section of the TCL by attracting some of the cross-harbour trips originated from North West New Territories to the FHC. Implementation of the KSL is dependent on the growth in travel demands, in particular that on the TCL arising from further development of Lantau Island and the strategic growth areas in North West New Territories.

Northern Link

- 3.13 The Northern Link (NOL) would connect West Rail at Kam Sheung Road to East Rail at Kwu Tung and to the boundary crossing point at Lok Ma Chau. It will provide domestic passenger service for the strategic growth areas in North New Territories and cross-boundary passenger service for the western part of the HKSAR. Implementation timing of the line will depend on the development programme of the strategic growth areas in North East New Territories and North West New Territories and the growth of the cross-boundary traffic. The layout of NOL is shown in Figure 6.

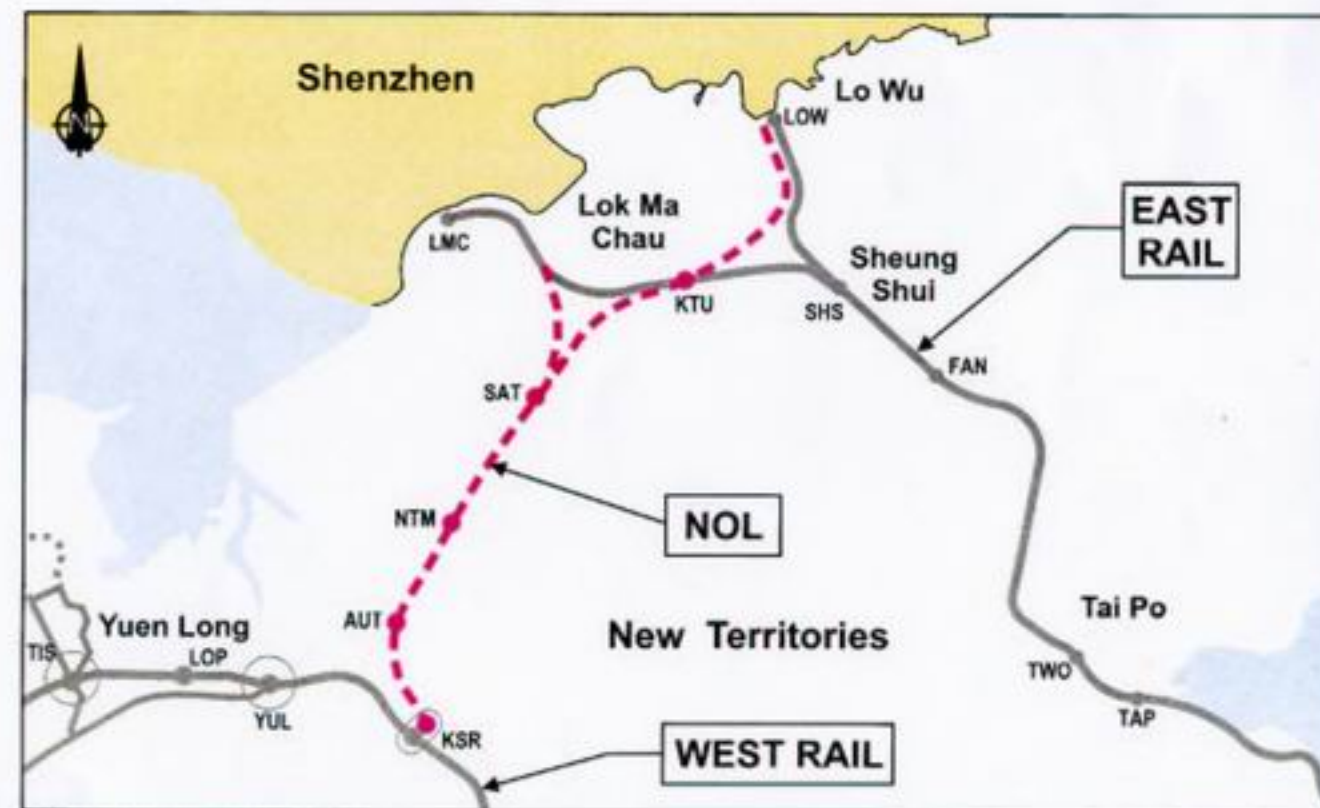


FIGURE 6: NORTHERN LINK

- 3.8 The Fourth Rail Harbour Crossing (FHC) starts from Hung Hom on Kowloon side. On Hong Kong Island, the FHC could route directly to Central via Exhibition/Admiralty (the EXH/ADM Option) or via Victoria Park, Leighton Hill and Wanchai South (the VIP Option). The EXH/ADM Option is cheaper to build and provides a direct route from Hung Hom to Central. It caters well for the daily commuter traffic. On the other hand, the VIP Option would be able to accommodate a more diversified nature of trips as it connects to the busy commercial and retail Causeway Bay district. In longer term, the VIP Option may help facilitate a shift of the development focus from Central towards Causeway Bay.
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- 3.11 The KSL is an extension of West Rail from its Nam Cheong Station to connect with the KCR Tsim Sha Tsui Extension. The layout of the KSL is shown in Figure 5.



FIGURE 5: KOWLOON SOUTHERN LINK

- 3.12 The KSL will provide an efficient east-west link round the southern part of the Kowloon peninsula and will help support development in Lantau Island, North West New Territories, West and East Kowloon. In addition, it can help relieve the cross harbour section of the TCL by attracting some of the cross-harbour trips originated from North West New Territories to the FHC. Implementation of the KSL is dependent on the growth in travel demands, in particular that on the TCL arising from further development of Lantau Island and the strategic growth areas in North West New Territories.

Northern Link

- 3.13 The Northern Link (NOL) would connect West Rail at Kam Sheung Road to East Rail at Kwu Tung and to the boundary crossing point at Lok Ma Chau. It will provide domestic passenger service for the strategic growth areas in North New Territories and cross-boundary passenger service for the western part of the HKSAR. Implementation timing of the line will depend on the development programme of the strategic growth areas in North East New Territories and North West New Territories and the growth of the cross-boundary traffic. The layout of NOL is shown in Figure 6.

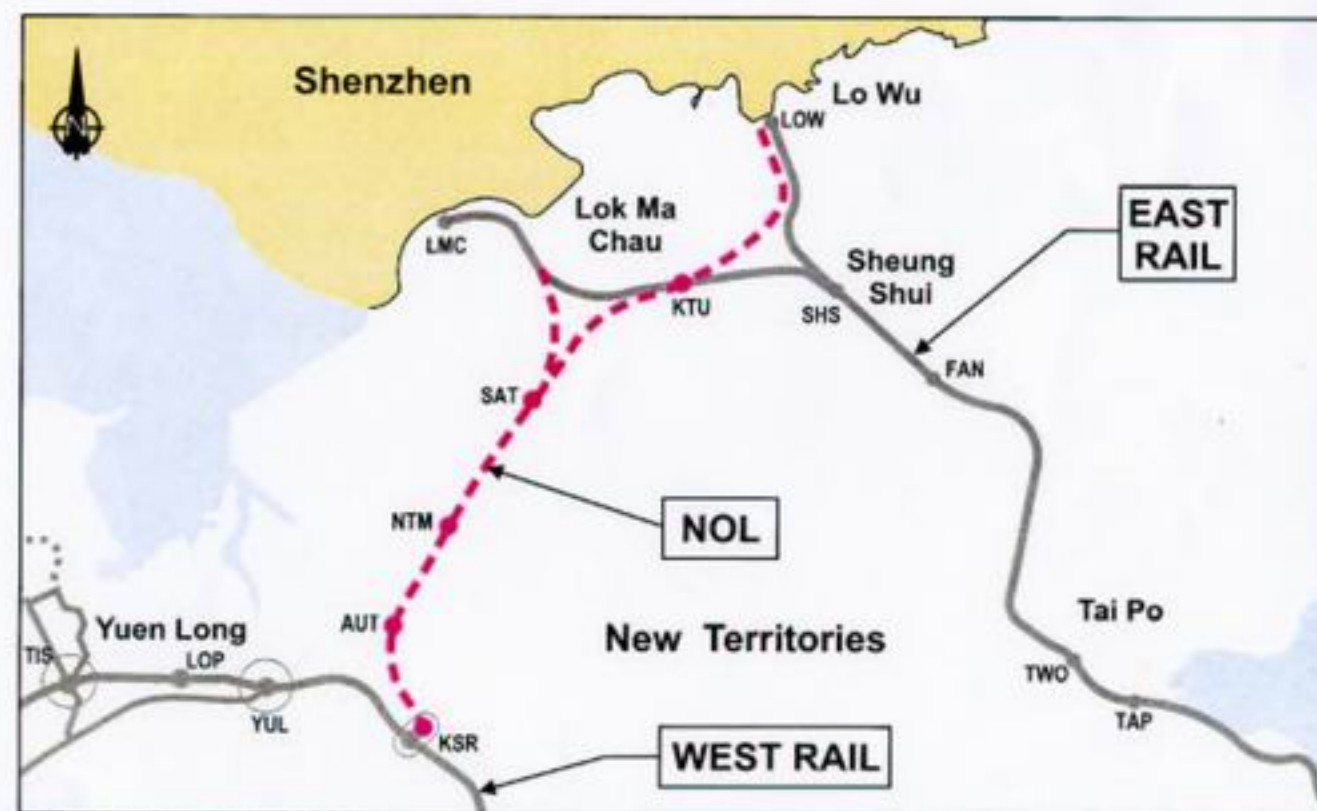


FIGURE 6: NORTHERN LINK

Regional Express Line

- 3.14 The Regional Express Line (REL) is an express rail service which will link the urban area with the Boundary. In addition to providing fast domestic service with limited stops, through train may also run on the REL.
- 3.15 The preliminary alignment of the REL will link Hung Hom to the Boundary via Shek Kip Mei. It has two route options in the New Territories, an eastern one via Fanling South and a western one via Kam Sheung Road. The eastern option may incorporate a third Rail Boundary Crossing, but this would depend on co-ordinating with the planning intentions of the Shenzhen side. A possible extension of the REL from Hung Hom to the Central on Hong Kong Island would further enhance the attractiveness of the corridor given the increasing integration of the economic activities between the HKSAR and the Pearl River Delta. The layout of the REL is shown in Figure 8.
- 3.16 The annual cross-boundary passenger traffic has been growing at 18-20% since mid 1996. The average daily number of cross-boundary passengers at Lo Wu now reaches 220,000. Should the present growth rate continue, it may be necessary to start planning the REL early in order that this new rail corridor could be provided in a timely manner.



FIGURE 8: REGIONAL EXPRESS LINE

Port Rail Line

- 3.17 The Port Rail Line (PRL) is a new freight rail connection from Lo Wu to a new port rail terminal at Kwai Chung. The line has two route options, one as part of West Rail via Kam Sheung Road to Kwai Chung and the other via East Rail and then a new tunnel from Tai Wai to Kwai Chung. The two route options are shown in Figure 9.
- 3.18 Allowing direct cross-boundary freight service through Lo Wu to the Kwai Chung ports, the PRL would support the growth of the port cargo by tapping freight from the deep hinterland of the Mainland and could benefit the SAR's economy. The implementation of the PRL hinges on growth of the rail-borne freight to the Kwai Chung ports.

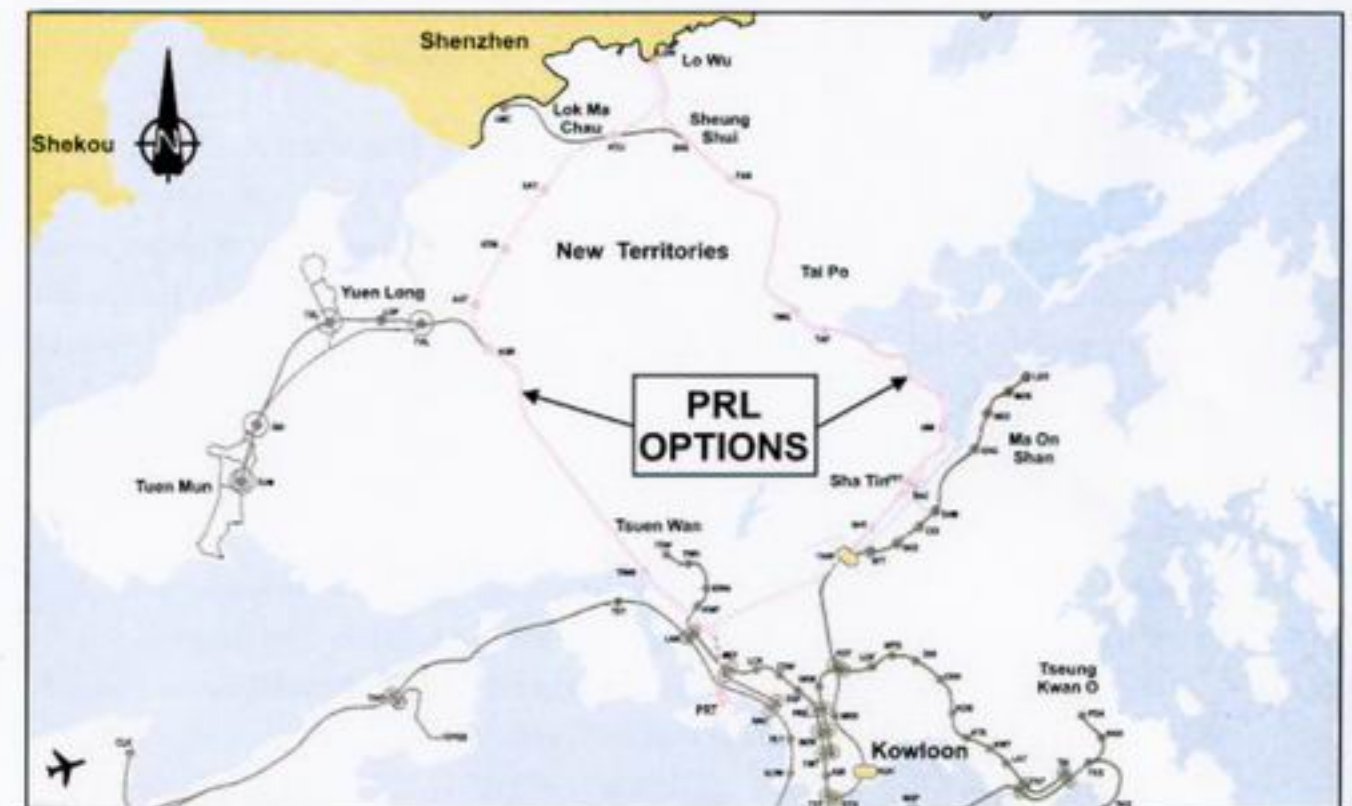


FIGURE 9: PORT RAIL LINE

Hung Hom as the Mass Transportation Centre

- 3.19 In addition to the new railway schemes, RDS-2 also investigated the role and function of a Mass Transportation Centre (MTC). The MTC differs from other public transport interchanges. It provides for terminal facilities for cross boundary inter-city services with the necessary customs and immigration facilities. The existing Hung Hom Terminal, which is centrally located in the HKSAR is already functioning as an MTC with good capability for expansion.
- 3.20 Hung Hom will be the preferred landing point of the FHC on Kowloon side. Other rail lines including the East Rail, West Rail and EKL will also be connected to Hung Hom, where many cross-harbour tunnel bus routes are providing convenient interchange between the rail and the road mode of transport. Hung Hom should remain as the MTC for the HKSAR.

Benefits of the expanded railway network

- 3.21 Railways will be vital in supporting the economic, social and population growth of the HKSAR in the next 15 years. Implementing the network expansion will facilitate closer economic and social linkages between the HKSAR and the Mainland, particularly Guangdong and the Pearl River Delta. Investing in the Network will yield the following benefits to the community:

(a) Improving accessibility

Implementing the Network would place about 70% of the population and about 80% of job opportunities within one kilometre of a railway station. The Network would facilitate the development of the strategic growth areas in the New Territories and development and redevelopment in the Metro area.

(b) Realization of integrated transport planning

The comprehensive Network coverage will facilitate co-ordination with other public transport services at key interchange stations. This will enable the realization of integrated transport planning in which railways will form the backbone of Hong Kong's transport system, while other public transport services will operate in a co-ordinated manner to maximise efficiency of service to passengers in terms of time and cost and to meet forecast demand.

(c) High level of transport service

The comprehensive Network will offer fast and reliable travel throughout the SAR. Typical journey times are as follows:

Tin Shui Wai to Central	41 minutes
Lo Wu to Admiralty	50 minutes
Tsuen Wan to Kai Tak	32 minutes
Tseung Kwan O to Central	21 minutes

(d) Meeting cross-boundary demand

The Network will be able to meet the growing cross-boundary demand, which is forecast to increase by over 3 times by 2016.

(e) Economic Return

The investments in the Railway Network will yield an economic internal rate of return of more than 15%.

(f) Environmental benefits

The Strategic Environmental Assessment carried out as part of the RDS-2 has concluded none of the new railway schemes will present insurmountable environmental problems, though all have some potential environmental impacts. These will be addressed during the design and development process of individual railway scheme.

On completion, the Network would increase the rail share in the public transport system from 31% at present to 43% by 2016, or in terms of the distance travelled by passengers, from 34% to almost 60%. This would reduce the reliance on road-based transport and translate to environmental benefits amounting to a reduction of air pollutants by some 600 tonnes of NO_x and respirable suspended particulates per year and 160,000 tonnes of CO₂ per year.

Implementation

- 3.22 In terms of implementation, the actual sequence and timing of the six new rail projects would be subject to more detailed engineering feasibility studies, having regard to the building up of transport demand, the pace of development of the strategic growth areas, project interfaces and consultation with the two Corporations. The implementation of some of the projects could be phased to meet demand.
- 3.23 As regards the implementation arrangement, the Island Line Extensions, being formed from extensions of the MTR system, have to be built and operated by MTRC. On the other hand, the KSL and NOL have to be undertaken by KCRC in order to facilitate their proper integration with the East Rail and the West Rail.
- 3.24 In awarding other new railway projects which are not natural extensions of any existing line, the Government shall adopt an open and fair approach by inviting the two Railway Corporations to bid for the projects. The Government shall specify the terms with which the two Corporations can bid on a level playing field basis. In considering the proposals, the Government would take into account all relevant factors including technical, financial and other alternative suggestions by the Corporations which would enhance the cost-effectiveness of the projects.
- 3.25 As the Shatin to Central Link is not a natural extension of an existing line and connects to both the MTR and the KCR networks, it may be undertaken by either Corporation. The two Corporations will be invited to put forward competitive proposals on its implementation. The REL is also a potential candidate for bidding by the two Corporations, if it is planned on the basis of a third rail passenger crossing, in addition to Lo Wu and Lok Ma Chau. The decision on how best to take forward this project would be subject to more detailed feasibility study on the alignment of the REL.
- 3.26 As regards the potential PRL, it is a natural KCRC project. KCRC will be invited to explore in more detail how the project can be implemented and Government will render full support in its planning and implementation.

- 3.27 Subject to future developments, the implementation of the new schemes in Railway Development Strategy 2000 could be grouped into six packages as follows:-

Package	Operator	Remarks
Shatin to Central Link (TDL/EKL /FHC)	MTRC/KCRC	Needed to provide a strategic rail corridor for relieving ER, supporting South East Kowloon Development and enhancing cross-harbour rail capacity. Operator selection through competitive bidding. Likely completion window: 2008-2011
Island Line Extensions (NIL and WIL)	MTRC	NIL needed to relieve TWL and ISL but subject to the availability of the Central and Wanchai Reclamation. WIL needed to support development and urban renewal in Western District Likely completion window: 2008-2012
KSL	KCRC	Improves east-west connectivity across Kowloon and helps relieve TCL. Dependent on development of Lantau Island and the strategic growth areas in North West New Territories Likely completion window: 2008-2013
NOL	KCRC	Needed to improve accessibility of Western New Territories to the Boundary. Serves planned strategic growth areas at Ngau Tam Mei, San Tin and Au Tau Likely completion window: 2011-2016
REL	MTRC/KCRC	Preliminary planning to proceed early. Subject to alignment, operator selection by competitive bidding. Implementation depends on cross-boundary traffic build-up.
PRL	KCRC	KCRC to investigate into implementation opportunities. Implementation depends on cross-boundary freight build-up.

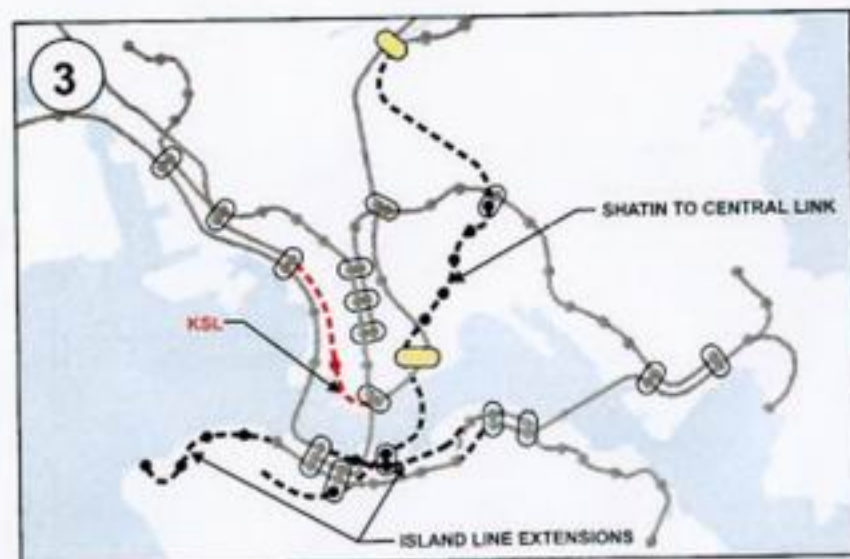
A possible development sequence of the first three packages is shown in **Figure 10**.



Stage 1 :
Implementation of the Island Line Extensions. Completion of the NIL should precede the WIL in order not to overload the ISL.



Stage 2 :
Implementation of the Shatin to Central Link. The link can be completed in phases.



Stage 3 :
Implementation of the Kowloon Southern Link. This links the KCR West Rail round the Kowloon peninsula to Hung Hom and provides convenient interchange for passengers.

FIGURE 10: A POSSIBLE DEVELOPMENT SEQUENCE OF THE RAILWAY NETWORK

Order of costs

3.28 The order of costs estimated for the component and stand-alone schemes are listed in Table 1.

Table 1 Order of Cost Estimates

Scheme	Cost Estimate (\$ billion)
NIL	9-10
FHC	10-16
EKL	12-14
TDL	3-5
CEW Extension	2
KSL	7-8
NOL	9
WIL	10
REL	13-17
PRL/PRT	5-9
TOTAL	80-100

- Notes: (1) Order of cost estimates are in 1998 prices and include land costs.
 (2) A range is given for the cost estimates for schemes with alternative arrangement.
 (3) The higher NIL costs include a VIP station for interchange with FHC.
 (4) CEW Extension starts from HKP or ADM respectively under the VIP and EXH/ADM options.
 (5) Costs for REL exclude rolling stock.

3.29 The costings will need to be refined following detailed financial, engineering and environmental studies, to be carried out in conjunction with the implementation of any railway projects.

Long term railway development possibilities

3.30 There are other rail schemes which have been investigated in RDS-2. These include South Hong Kong Island Line, the Fifth Rail Harbour Crossing, the Outer Western Corridor, the Deep Bay Link, Chek Lap Kok Link and the East-west Kowloon Link (see Figure 11). These projects do not command priority at this stage as the traffic demand has yet to warrant a mass carrier. They should be further investigated if planning parameters change significantly.

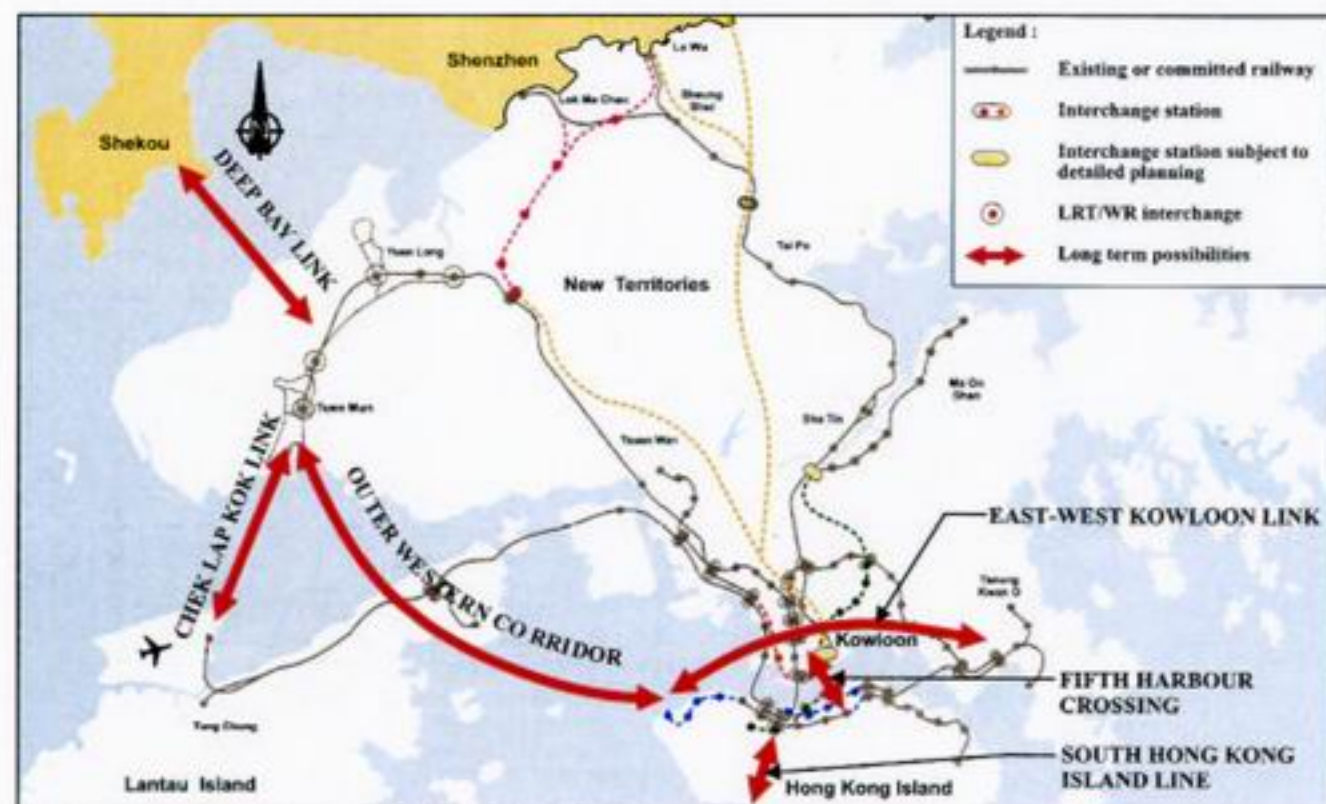


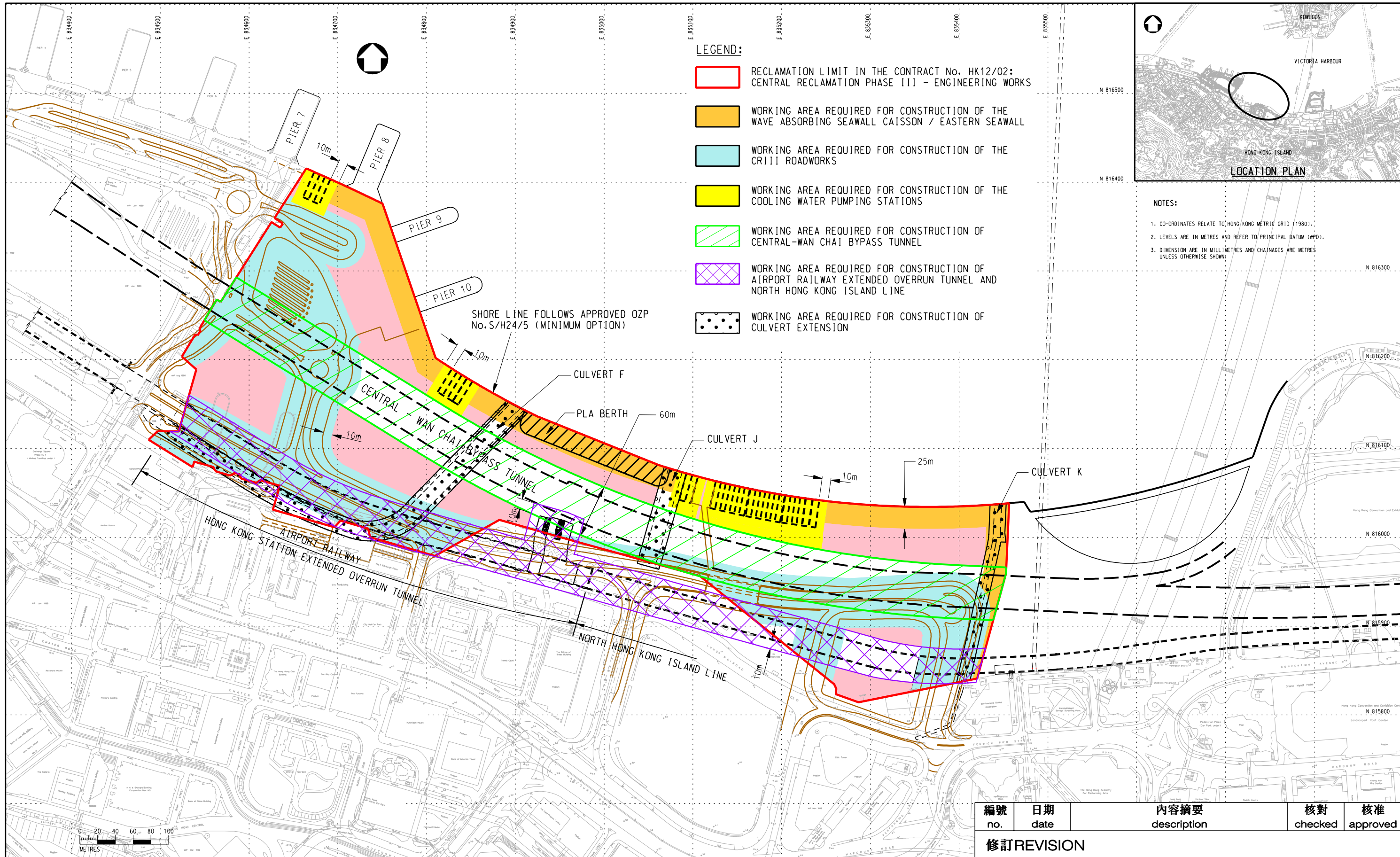
FIGURE 11: LONG TERM RAILWAY DEVELOPMENT POSSIBILITIES

STATION ABBREVIATIONS

ADM	Admiralty	MTW	Ma Tau Wai
AUT	Au Tau	NAC	Nam Cheong
BEL	Belcher Garden	NOP	North Point
CAB	Causeway Bay	NTK	Ngau Tau Kok
CEN	Central	NTM	Ngau Tam Mei
CEW	Central West	OLY	Olympic
CHG	Chevalier Garden	PEB	Penny's Bay
CHH	Choi Hung	POA	Po Lam
CHW	Chai Wan	PRE	Prince Edward
CIO	City One	PRT	Port Rail Terminal
CLK	Chek Lap Kok	QUB	Quarry Bay
CSW	Cheung Sha Wan	SAT	San Tin
DIH	Diamond Hill	SHT	Shatin
DVR	Des Voeux Road	SHM	Shek Mun
ETS	East Tsim Sha Shui	SHS	Sheung Shui
EXH	Exhibition	SHW	Sheung Wan
FAN	Fanling	SIH	Siu Hong
FAS	Fanling South	SKM	Shek Kip Mei
FOH	Fortress Hill	SKS	Sha Kok Street
FOT	Fo Tan	SKW	Shau Kei Wan
GIA	Gillies Avenue	SSP	Sham Shui Po
HAH	Hang Hau	STT	Sha Tin Tau
HEO	Heng On	SWH	Sai Wan Ho
HFC	Heng Fa Chuen	SYP	Sai Ying Pun
HKP	Hong Kong Park	TAK	Tai Koo
HMT	Ho Man Tin	TAM	Tamar
HOK	Hong Kong	TAP	Tai Po
HUH	Hung Hom	TAW	Tai Wai
JOR	Jordan	TIH	Tin Hau
KEN	Kennedy Town	TIK	Tiu Keng Leng
KOB	Kowloon Bay	TIS	Tin Shui Wai
KOT	Kowloon Tong	TKO	Tseung Kwan O
KOW	Kowloon	TKS	Tseung Kwan O South
KSR	Kam Sheung Road	TKW	To Kwa Wan
KTA	Kai Tak	TST	Tsim Sha Tsui
KTU	Kwu Tung	TSW	Tsuen Wan
KWF	Kwai Fong	TSY	Tsing Yi
KWH	Kwai Hing	TUC	Tung Chung
KWT	Kwun Tong	TUM	Tuen Mun
LAK	Lai King	TWH	Tai Wo Hau
LAT	Lam Tin	TWO	Tai Wo
LCK	Lai Chi Kok	TWW	Tsuen Wan West
LEH	Leighton Hill	UNI	University
LEO	Lee On	VIP	Victoria Park
LMC	Lok Ma Chau	WAC	Wan Chai
LOF	Lok Fu	WCS	Wan Chai South
LOP	Long Ping	WKN	West Kowloon
LOW	Lo Wu	WTS	Wong Tai Sin
MEF	Mei Foo	YAO	Yam O
MKK	Mong Kok (KCR)	YAT	Yau Tong
MOK	Mong Kok (MTR)	YMT	Yau Ma Tei
MOS	Ma On Shan	YUL	Yuen Long

RAILWAY LINES ABBREVIATIONS

EKL	East Kowloon Line
ER	East Rail
FHC	Fourth Rail Harbour Crossing
ISL	Island Line
KSL	Kowloon Southern Link
LRT	Light Rail Transit
NIL	North Hong Kong Island Line
NOL	Northern Link
PBL	Penny's Bay Rail Link
PRL	Port Rail Line
REL	Regional Express Line
SIL	South Hong Kong Island Line
TCL	Tung Chung Line
TDL	Tai Wai to Diamond Hill Link
TKE	Tseung Kwan O Extension
TWL	Tsuen Wan Line
WIL	West Hong Kong Island Line
WR	West Rail



LEGEND:

- RECLAMATION LIMIT IN THE CONTRACT No. HK12/02: CENTRAL RECLAMATION PHASE III - ENGINEERING WORKS
- WORKING AREA REQUIRED FOR CONSTRUCTION OF THE WAVE ABSORBING SEAWALL CAISSON / EASTERN SEAWALL
- WORKING AREA REQUIRED FOR CONSTRUCTION OF THE CR111 ROADWORKS
- WORKING AREA REQUIRED FOR CONSTRUCTION OF THE COOLING WATER PUMPING STATIONS
- WORKING AREA REQUIRED FOR CONSTRUCTION OF CENTRAL-WAN CHAI BYPASS TUNNEL
- WORKING AREA REQUIRED FOR CONSTRUCTION OF AIRPORT RAILWAY EXTENDED OVERRUN TUNNEL AND NORTH HONG KONG ISLAND LINE
- WORKING AREA REQUIRED FOR CONSTRUCTION OF CULVERT EXTENSION



- NOTES:
1. CO-ORDINATES RELATE TO HONG KONG METRIC GRID (1980).
 2. LEVELS ARE IN METRES AND REFER TO PRINCIPAL DATUM (MPD).
 3. DIMENSION ARE IN MILLIMETRES AND CHAINAGES ARE METRES UNLESS OTHERWISE SHOWN.

編號 no.	日期 date	內容摘要 description	核對 checked	核准 approved
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修訂REVISION

項目編號 item no.		辦事處 office		
比例 scale	1:4000	港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE		
圖則編號 drawing no.	HKI-2544	拓展署 TERRITORY DEVELOPMENT DEPARTMENT		

圖則名稱 drawing title	繪圖 drawn	簽署 initial	日期 date	核對 checked	簽署 initial	日期 date	核准 approved	簽署 initial	日期 date
CENTRAL RECLAMATION PHASE III WORKING AREAS FOR THE ESSENTIAL INFRASTRUCTURES	W L LAM	SIGNED	22-09-03	S K KEUNG	SIGNED	22-09-03	H H YEUNG	SIGNED	22-09-03