Legislative Council Panel on Development

PWP Item 579TH — Central-Wan Chai Bypass and Island Eastern Corridor Link

PURPOSE

This paper seeks Members' view on the Administration's proposal to upgrade **579TH** – Central-Wan Chai Bypass and Island Eastern Corridor Link to Category A for the construction of the Central-Wan Chai Bypass (CWB) and Island Eastern Corridor (IEC) Link (the Trunk Road).

PROJECT SCOPE AND NATURE

- 2. The scope of **579TH** comprises
 - (a) construction of a dual three-lane road tunnel of about 3.7 kilometres (km) long between the Rumsey Street Flyover in Central and the IEC in North Point;
 - (b) construction of the approach roads to the proposed road tunnel west portal and the associated slip roads in Central, Wan Chai and Causeway Bay of about 3 km in total length;
 - (c) modification of Rumsey Street Flyover westbound up ramp, demolition of Rumsey Street Flyover eastbound down ramp and widening of the Rumsey Street Flyover Extension of about 200 metres (m) long;
 - (d) modification of a section of IEC of about 800 m long between Hing Fat Street and Po Leung Kuk

- Yu Lee Mo Fan Memorial School and an up ramp from Hing Fat Street to IEC eastbound;
- (e) installation of the following noise mitigation facilities
 - (i) vertical noise barriers of about 350 m long and 3.5 m high and cantilevered noise barriers of about 230 m long and 5.5 m high with 1-3 m cantilever along sections of the proposed slip road leading to the IEC eastbound; and
 - (ii) noise semi-enclosures of about 730 m long and 10 m high along both bounds of the IEC and a section of the proposed slip road branching out from the IEC westbound;
- (f) installation of a traffic control and surveillance system (TCSS);
- (g) reprovisioning of the Whitfield Depot, the affected facilities within Victoria Park and the affected mooring facilities in the Causeway Bay Typhoon Shelter (CBTS);
- (h) associated electrical and mechanical (E&M), drainage, landscaping and slope works, and works on junction modifications, modification of the bus terminus at Central Ferry Pier, buildings and ventilation structures; and
- (i) implementation of an environmental monitoring and audit (EM&A) programme for the works mentioned in items 2(a) to 2(h) above.

A plan showing the proposed works is at **Enclosure 1**.

3. We plan to commence the construction works of the Trunk Road in end 2009 for completion in early 2017.

JUSTIFICATIONS

- 4. There is a compelling and present need for the Trunk Road to provide relief to the very congested east-west Connaught Road Central/Harcourt Road/Gloucester Road Corridor (the Corridor) which is currently operating beyond its capacity. Traffic congestion can often be observed along the Corridor in both directions during weekdays between 8 a.m. and 8 p.m.. Traffic queues along the Corridor also affect the traffic flow of the Cross Harbour Tunnel, the Aberdeen Tunnel and the Causeway Bay area. Furthermore, the side roads connecting to the Corridor form local road networks with substantial weaving and merging movements. Traffic queues from any bottleneck or a traffic incident therein often result in rapid deterioration of traffic conditions of these local networks or even complete blockage of the Corridor. These are clear indications that the service stability and reliability of the Corridor are unsatisfactory.
- 5. The need to provide a strategic route along the northern shore of Hong Kong Island was first identified in 1987 under the "Central and Wan Chai Reclamation Feasibility Study" commissioned by the then Territory Development Department (now Civil Engineering and Development Department (CEDD)) and was confirmed in the Second Comprehensive Transport Study¹ completed in 1989. The proposed Trunk Road is the last, yet to be built section of this proposed strategic route.
- 6. The need for the Trunk Road was further confirmed in the Third Comprehensive Transport Study (CTS-3) completed in 1999 and in a rerun of the CTS-3 transport model with the latest parameters in 2007. The CTS-3 model predicted that the traffic volume of the critical sections of the Corridor during peak hours in 2017 would exceed their capacities by 30% if the Trunk Road is not implemented.
- 7. In September 2005, the Sub-committee on Wan Chai Development Phase II (WDII) Review of the Harbour-front Enhancement

constraints in the road network system.

_

Comprehensive Transport Study (CTS) aims to provide a framework for which Government can develop a balanced transport strategy to facilitate the mobility of people and goods of Hong Kong in an environmentally sustainable manner. The CTS model is based on assumptions on land use planning, economic growth, vehicle fleet size and the road network information. The model is calibrated using field traffic survey data. It is used to forecast future demands on the transport system of Hong Kong. The CTS model simulates both passenger and goods vehicle movements in Hong Kong and identifies

Committee (HEC) ² convened an "Expert Panel on Sustainable Transport Planning and Central-Wan Chai Bypass" (the Expert Panel) to examine the sustainable transport planning along the northern shore of Hong Kong Island and to assess the need of the Trunk Road. The Expert Panel considered the recurrent congestion along the Corridor and the adjoining areas to be socially, economically and environmentally unacceptable and supported the implementation of the Trunk Road and its intermediate access roads.

8. The projected volume to capacity (v/c) ratios³ in the morning peaks with and without the proposed Trunk Road are as follows –

	without with Trunk Trunk Road Road		2021	
Location			without Trunk Road	with Trunk Road
Connaught Road Central	1.3	0.9	1.3	0.9
Harcourt Road	1.3	0.9	1.3	0.9
Gloucester Road	1.3	0.9	1.3	0.9
Trunk Road	-	0.7	-	0.7

- 9. A v/c ratio of 1.3 may be considered as the limiting ratio. The road cannot physically handle a greater volume of traffic and as demand increases beyond this level, longer queues would result.
- 10. The Trunk Road will help alleviate the existing congestion along the Corridor and cater for the anticipated growth of traffic on Hong Kong Island. Without the Trunk Road and its access roads, there will not be sufficient capacity to serve the heavy traffic demands at both strategic and local levels.

The HEC was established in May 2004 to advise the then Secretary for Housing, Planning and Lands on the planning, land uses and developments along the existing and new harbour-front of the Victoria Harbour. The HEC set up a sub-committee, namely the Sub-committee on WDII Review (HEC Sub-committee), to advise on the planning and engineering review of the WDII project (the WDII Review) conducted by the then Territory Development Department.

Volume to capacity (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; that above 1.2 indicates more serious congestion with traffic speeds deteriorating progressively with further increase in traffic.

FINANCIAL IMPLICATIONS

11. We estimate the cost of **579TH** to be \$28,104.6 million in money-of-the-day (MOD) prices, made up as follows –

			\$ million
(a)	Tunnel construction works		15,262.5
	(i) Marine works	983.6	
	(ii) Diaphragm walls and foundations	5,643.2	
	(iii) Earthworks	2,230.7	
	(iv) Tunnel structures	6,405.0	
(b)	Tunnel E&M works		1,543.3
	(i) Tunnel ventilation works	527.0	
	(ii) E&M works	1,016.3	
(c)	Roads and drains		109.5
(d)	Elevated structures and foundations		1,174.5
(e)	Retaining walls and slope works		431.9
(f)	Building and ventilation structures		636.9
(g)	Noise mitigation facilities		1,102.6
	(i) Vertical noise barriers	44.6	
	(ii) Cantilevered noise	61.5	

\$ million

barriers

	(iii) Noise semi-enclosures	996.5	
(h)	Reprovisioning of affected facilities		234.4
(i)	Landscaping works		74.4
(j)	TCSS		212.5
(k)	Tunnel vehicles		54.1
(1)	Consultants' fees		222.8
	(i) Contract administration	73.9	
	(ii) Management of resident site staff (RSS)	96.7	
	(iii) Environmental monitoring and audit (EM&A) programme	23.2	
	(iv) Electrical and Mechanical Services Trading Fund (EMSTF) ⁴	29.0	
(m)	Remuneration of RSS		1,353.1
(n)	Contingencies (including about \$60 million for the cost of protection works for the Trunk Road at		2,159.7

Upon its establishment from 1 August 1996 under the Trading Funds Ordinance, the EMSTF charges government departments for design and technical consultancy services for electrical and mechanical (E&M) installation. The services rendered for this project include checking consultants' submissions on

all E&M installations and providing technical advice to the Government on all E&M works and their

impacts on the project.

_

\$ million

its interface with the Shatin to Central Link)

Sub-total 24,572.2 (in September

2008 prices)

(o) Provision for price adjustment

3,532.4

Total 28,104.6 (in MOD prices)

JOB CREATION

12. We estimate that the proposed works will create about 6 400 jobs (1 175 for professional/technical staff and 5 225 for labourers) providing a total employment of 425 500 man-months.

OVERRIDING PUBLIC NEED FOR THE TRUNK ROAD

- A previous scheme of the Trunk Road was gazetted under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 19 April 2002. The relevant draft Wan Chai North Outline Zoning Plan (WCN OZP) was also gazetted at the same time. A judicial review (HCAL 19/2003) was sought on the decisions of the Town Planning Board (TPB) regarding the draft WCN OZP. The Court of Final Appeal handed down its judgment (the CFA Judgment) on 9 January 2004 that the presumption against reclamation stipulated in the Protection of the Harbour Ordinance (Cap. 531) (PHO) could only be rebutted by establishing an overriding public need for reclamation (the Overriding Public Need Test). The CFA quashed the decisions of the TPB.
- At the request of the TPB, the WDII Review was conducted for compliance with the CFA Judgment. In October 2005, the need of constructing the Trunk Road was endorsed by the Expert Panel mentioned in paragraph 7 above. The "Report on Cogent and Convincing Materials to Demonstrate Compliance with the Overriding Public Need Test" (the CCM report) was issued in February 2007 to demonstrate the overriding public need of the Trunk Road and its associated reclamation. The CCM Report demonstrated that there was no feasible "no reclamation" option for

constructing the Trunk Road, and a minimum extent of reclamation had been proposed for its construction. The CCM Report also gave an account of the process of identifying the alignment that would best serve to protect and preserve the Victoria Harbour.

- 15. Extensive public review was conducted from May 2004 to June 2007 through the "Harbour-front Enhancement Review - Wan Chai, Causeway Bay and Adjoining Areas" (HER)⁵. The former Panel of Planning, Lands and Works (PLW Panel) (now the Panel on Development (Development Panel)) of the LegCo, the four District Councils (DCs) of Hong Kong Island, the TPB, the Transport Advisory Committee and relevant professional institutions were also consulted on specific findings of the WDII Review and the Trunk Road alignment. The Trunk Road scheme received strong support from the public in general. We also consulted the local residents from April to June 2007 on the East Ventilation Building (EVB) and its associated vent shaft, the environmental impacts of which was of concern. We explained to the residents that the vent shaft would not cause unacceptable environmental impacts according to the environmental impacts assessment (EIA) conducted under the EIA Ordinance (Cap. 499) (EIAO). To address their concerns, an electrostatic precipitator system will be provided to remove about 80% of the respirable suspended particulates from the tunnel exhaust; and split the vent shaft from the EVB to the northern tip of the eastern breakwater of the CBTS, a location further away from the residential areas. A summary of the above public engagement activities conducted is set out at Enclosure 2.
- 16. The current road scheme was then formulated and first gazetted on 27 July 2007 and the previous scheme gazetted on 19 April 2002 was de-gazetted on the same day. Ten objections were received, two of which have subsequently been withdrawn unconditionally, one has been withdrawn conditionally and the remaining seven remained unresolved⁶. Details of the objections and the Administration's response are at **Enclosure 3**.

⁵ HER is a public engagement project conducted by the HEC Sub-committee to enhance public participation.

⁶ Under the Ordinance, an objection that is withdrawn unconditionally is treated as if the objector has not lodged the objection. An objection which is not withdrawn or withdrawn with conditions is treated as an unresolved objection and will be submitted to the Chief Executive-in-Council for consideration.

TEMPORARY RECLAMATION

- In the light of the Court of First Instance (CFI)'s judgment on 20 March 2008⁷ on the application of the PHO to temporary reclamation, we examined the overriding public need for the temporary reclamation for constructing the Trunk Road Tunnel and the compliance with the PHO. In October 2008, we presented supplementary cogent and convincing materials to demonstrate that the temporary reclamation for the construction of the Trunk Road Tunnel satisfied the Overriding Public Need Test and the extent of temporary reclamation was determined to be the minimum required. The temporary reclamation would be removed and the seabed would be reinstated after the completion of the construction works in the CBTS and ex-Wan Chai Public Cargo Works Area (ex-PCWA).
- 18. In reviewing the need for the originally proposed temporary breakwater and temporary piled wave walls, we explored various options for temporary reprovisioning of the affected moorings and anchorages in the CBTS and recommended the option which would involve off-site reprovisioning for the pleasure vessels in the private mooring area of the CBTS while allowing all other vessels to moor in the CBTS or ex-PCWA. Having identified the feasible and practicable reprovisioning arrangements which would not involve the construction of the originally proposed temporary breakwater and temporary piled wave walls, we proposed to delete them in compliance with the PHO. The area of proposed temporary reclamation would subsequently be reduced from the original area of 10.7 hectares (ha) to 8.3 ha.
- In line with the CFI's judgment on the application of the PHO to temporary reclamation, we also prepared the "Report on Comparison of Trunk Road Tunnel and Flyover Options in accordance with the Overriding Public Need Test" (the Comparison Report) to address specifically the reclamation requirements of the feasible Trunk Road options, especially the temporary reclamation requirements under them. With the updated information, the comparison of the Tunnel and Flyover Options had been reviewed for the purpose of reaffirming which one is the reasonable alternative in accordance with the CFA's Judgment. The Comparison Report

-

The judgment relating to the judicial review HCAL 116/2007 lodged on 3 October 2007.

has reaffirmed that the Tunnel Option serves best to protect and preserve the Victoria Harbour.

- 20. From April to November 2008, we consulted the Development Panel of the LegCo, the four DCs of Hong Kong Island, the HEC and the public including the CBTS users on the findings mentioned in paragraphs 17 to 19 above. It was generally agreed that the Trunk Road tunnel could not be safely and practically constructed without temporary reclamation and the recommended mooring reprovisioning arrangements in the CBTS received general support. There was also unanimous support for the Tunnel Option and general sentiment to implement the Trunk Road project as early as practicable to resolve the traffic congestion along the already very congested Corridor. The details of this round of public engagement activities are also in **Enclosure 2**.
- Subsequent to the public engagement activities, we gazetted the amendment scheme of the Trunk Road by deleting the originally proposed temporary breakwater and temporary piled wave walls on 5 December 2008. Three objections were received, all of which remained unresolved. Details of the objections and the Administration's response are set out in **Enclosure 3**.
- Having considered the unresolved objections to the road scheme gazetted on 27 July 2007 and the amendment road scheme gazetted on 5 December 2008, the Chief Executive-in-Council authorised the proposed works without modifications under the Ordinance on 19 May 2009. The notice of authorisation will be gazetted on 22 May 2009.

COORDINATION OF THE TRUNK ROAD PROJECT AND THE SHATIN TO CENTRAL LINK PROJECT

23. The section of cross-harbour tunnel for the SCL will probably cross over the Trunk Road Tunnel at the CBTS. The planning of the Trunk Road project is at the final design stage and a detailed scheme has gained general support from the public after extensive public engagement and consultation. The SCL project, which is in the planning and designing stage, is far from ready for implementation. The SCL project is still subject to public consultation and objections, and any reclamation work required still has to be justified by establishing the overriding public need. We are fully aware of the need to coordinate the design and construction of the SCL with the Trunk Road Tunnel inside the CBTS. We have reaffirmed our commitment to coordinate the interface works between the two projects on a

number of public occasions. Relevant divisions of the senior management level of the Highways Department (HyD) are closely monitoring the potential interfacing works. HyD also holds regular meetings with MTR Corporation Limited (MTRCL) which is planning the SCL and the consultants of the two projects. The close liaison between the projects will continue so that interface issues can be resolved expeditiously to facilitate planning objectives to be met for both projects.

- 24. The Government has not ruled out the possibility of carrying out protection works within the Trunk Road project if this helps reduce the amount of temporary reclamation required for the SCL project and the overall construction disruption. The Government has also not ruled out the possibility of the SCL and the Trunk Road being constructed within overlapping time frames in the CBTS. To accommodate the possible works for the SCL at the CBTS in future, we have made provisions in the construction contracts for variation of works and for the costs for protection works under the Trunk Road project.
- 25. The Government, however, considers it inappropriate to hold up the progress of the much more advanced Trunk Road project to tie in with the SCL project, bearing in mind the programme uncertainty of the SCL project and its alignment options crossing the Victoria Harbour and the corresponding methods of construction are still under investigation, and that proceeding with the Trunk Road at this stage will not rule out coordinated construction.
- 26. To facilitate a clear understanding of the significant difference in the progress in the planning of the Trunk Road and the SCL projects, key dates and milestones of these projects are set out below –

	Trunk Road	SCL
Policy Direction	• Review the Trunk Road alignment under the WDII Review in compliance with the CFA Judgment in January 2004	• In Mar 2008, the Executive Council agreed that MTRCL should be asked to proceed with the further planning and design of the SCL based on the

	Trunk Road	SCL
		scheme jointly developed by the MTRCL and KCRC previously
EIA Study	• completed end 2008	• by 3rd quarter 2009 (target)
Cogent and Convincing Materials (CCM)	 completed February 2007 for reclamation required for Trunk Road supplementary CCM completed November 2008 for temporary reclamation 	• by 3rd quarter 2009 (target)
Public Consultation	• May 2005 – November 2008	• by 3rd quarter 2009 (target)
Scheme Gazetted under the Relevant Ordinance	July 2007December 2008	• Late 2009 (target)
Authorization of Scheme	Authorized on 19 May 2009	• 4th quarter 2010 (target)
Approval of Funding for Construction	• July 2009 (target)	• 4th quarter 2010 (target)

ENVIRONMENTAL IMPLICATIONS

27. The Trunk Road project is a designated project under Schedule 2 of the EIAO. An EIA report was prepared based on the previous road scheme under the EIAO and the Director of Environmental Protection (DEP) approved the EIA report with conditions on 31 August 2001 after consulting the Advisory Council on the Environment (ACE). To address the revised Trunk Road scheme within the boundary of the WDII area, another EIA

report was prepared for the section of the Trunk Road within the WDII area under the EIAO and the DEP approved the report with conditions on December 2008 after consulting the ACE. The EIA reports concluded that the environmental impact due to the proposed road scheme would be acceptable with the implementation of the recommended mitigation measures. We shall implement the environmental mitigation measures and EM&A programme as recommended in the EIA Reports. The recommended mitigation measures include zero portal emission at the eastern tunnel portal, installation of electrostatic precipitator system for the tunnel exhaust system at the EVB, deployment of silt curtains at the dredging and filling areas, installation of silt screens at selected seawater intakes for reclamation works, installation of silencers to ventilation fans in ventilation buildings and installation of noise barriers/ semi-enclosures, implementation of the construction noise control measures including restricted use of pneumatic breakers and setting up of community liaison groups. We estimate the cost of implementing the environmental mitigation measures and the EM&A programme to be about \$1,518 million. We have included this cost in the overall project estimate.

- 28. With the implementation of the noise mitigation measures in accordance with the recommendation in the EIA report, the operational road traffic noise levels of residential areas along the existing open road section at IEC viaduct from the Victoria Centre to City Garden would be reduced from the range between 68 and 82dB(A) to between 51 and 71 dB(A)⁸.
- 29. We have considered all the proposed works and construction sequences in the planning and design stages to reduce the generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated materials) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste to public fill reception facilities⁹. We will encourage the contractor to maximise the use of recycled or recyclable inert

The predicted overall noise levels at certain floors would still exceed the noise limit of 70dB(A) by 1 dB(A) due to the noise contributions from existing roads. However, the "New" road noise contributions to the overall noise level would be less than 1.0 dB(A) and the "New" road noise levels at these NSRs would be all below 70 dB(A). Hence, no further direct mitigation measures are considered effective in mitigating the noise impact.

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

construction waste, as well as the use of non-timber formwork to further minimise the generation of construction waste.

- We will also require the contractor to submit for approval a plan 30. setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. We will control the disposal of inert construction waste and non-inert construction waste to public fill reception facilities and landfills respectively through a trip-ticket system.
- We estimate that the project will generate in total about 6.118 31. million tonnes of construction waste. Of these, we will reuse about 0.432 million tonnes (7.1%) of inert construction waste on site and deliver about 5.678 million tonnes (92.9%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of about 8 000 tonnes (0.1%) of non-inert construction waste at landfills. In addition, we will import about 1.694 million tonnes of public fill and rock fill materials from the public fill reception facilities for temporary reclamation works and these import materials will all be removed and returned to the public fill reception facilities after use. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$200 million for this project (based on a unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne¹⁰ at landfills).
- We estimate that the temporary reclamation works will generate 32. about 168 000 cubic metres (m³) of uncontaminated mud and about 385 000 m³ of contaminated mud. We will dispose of the dredged marine mud at respective designated disposal sites to be allocated by the Marine Fill Committee or other disposal sites to be agreed by the Marine Fill Committee and the Environmental Protection Department.

HERITAGE IMPLICATIONS

This estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90/m3), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

33. We will take all necessary measures to avoid adverse impacts on the archaeological deposit at the Kellett Island Archaeological Site which partly falls within the project boundary. Other than the Kellett Island, this project will not affect any other heritage sites.

LAND ACQUISITION

34. The proposed road works require resumption of about 8 520 square metres (m²) of private land. Creation of easement and permanent rights and temporary rights of occupation of about 3 080 m² and 13 790 m² of private land respectively will also be required for the road scheme. The clearance will involve both private land and Government land. Compensation cost for land acquisition is estimated at \$252.61 million. Funds will be made available under **Head 701** - Land Acquisition of the Capital Works Reserve Fund.

TREE PROPOSAL

35. The proposed works will involve removal of about 556 trees, including about 18 trees to be felled, 4 dead trees to be removed as well as 200 trees and 334 trees to be transplanted outside and within the project site respectively. All of them are not important trees¹¹. We will incorporate planting proposals as part of the project, including about 120 trees as compensatory planting and around 42 400 shrubs and 25 620 m² of grassed area.

TEMPORARY TRAFFIC ARRANGEMENTS

[&]quot;Important trees" refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

⁽a) trees of 100 years old or above;

⁽b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument and trees in memory of important persons or events;

⁽c) trees of precious or rare species;

⁽d) trees of outstanding form (taking account of overall tree size, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or

⁽e) trees with trunk diameter equal or exceeding 1.0 metre (measured at 1.3 metre above ground level), or with height/canopy spread equal or exceeding 25 metres.

- We shall conduct traffic impact assessment on the temporary traffic arrangements (TTAs). To minimise the traffic impact caused by the works to the IEC, we will maintain the same number of traffic lanes in each direction of the existing carriageway during peak hours in the construction period. We will also provide a temporary vehicular bridge for traffic diversion purpose when the IEC is modified. To facilitate the safe demolition of the existing central divider of the IEC for traffic diversion, we will implement lane closures at night time or during non-working days. We will minimise the lane closures as far as practicable.
- We will consult the relevant DCs prior to the implementation of major TTAs for the project especially those involving lane closures. A traffic management liaison group comprising representatives of the Highways Department, the Police, the Transport Department and other concerned Government departments will be set up to assess the TTAs to be proposed by the contractors.

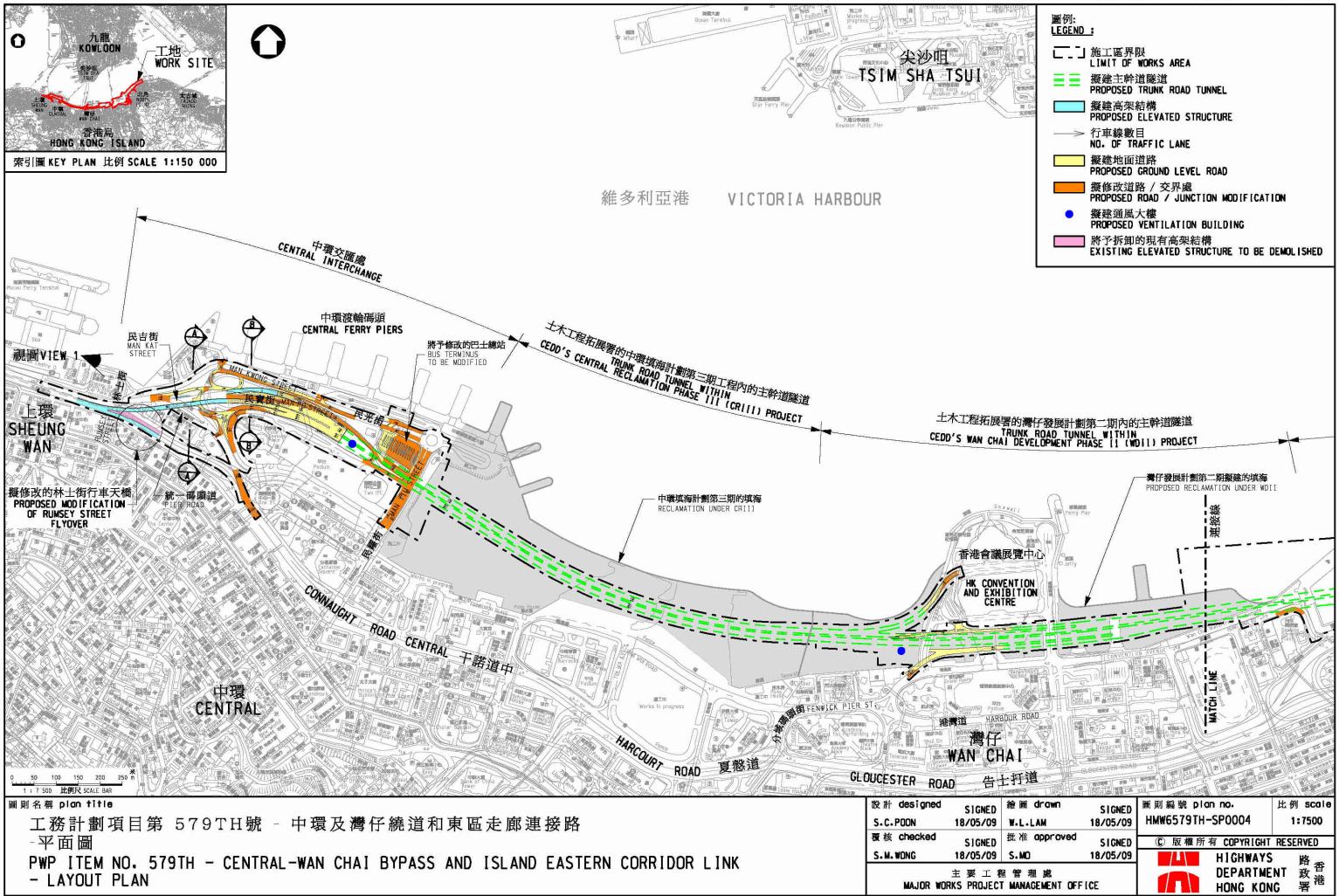
WAY FORWARD

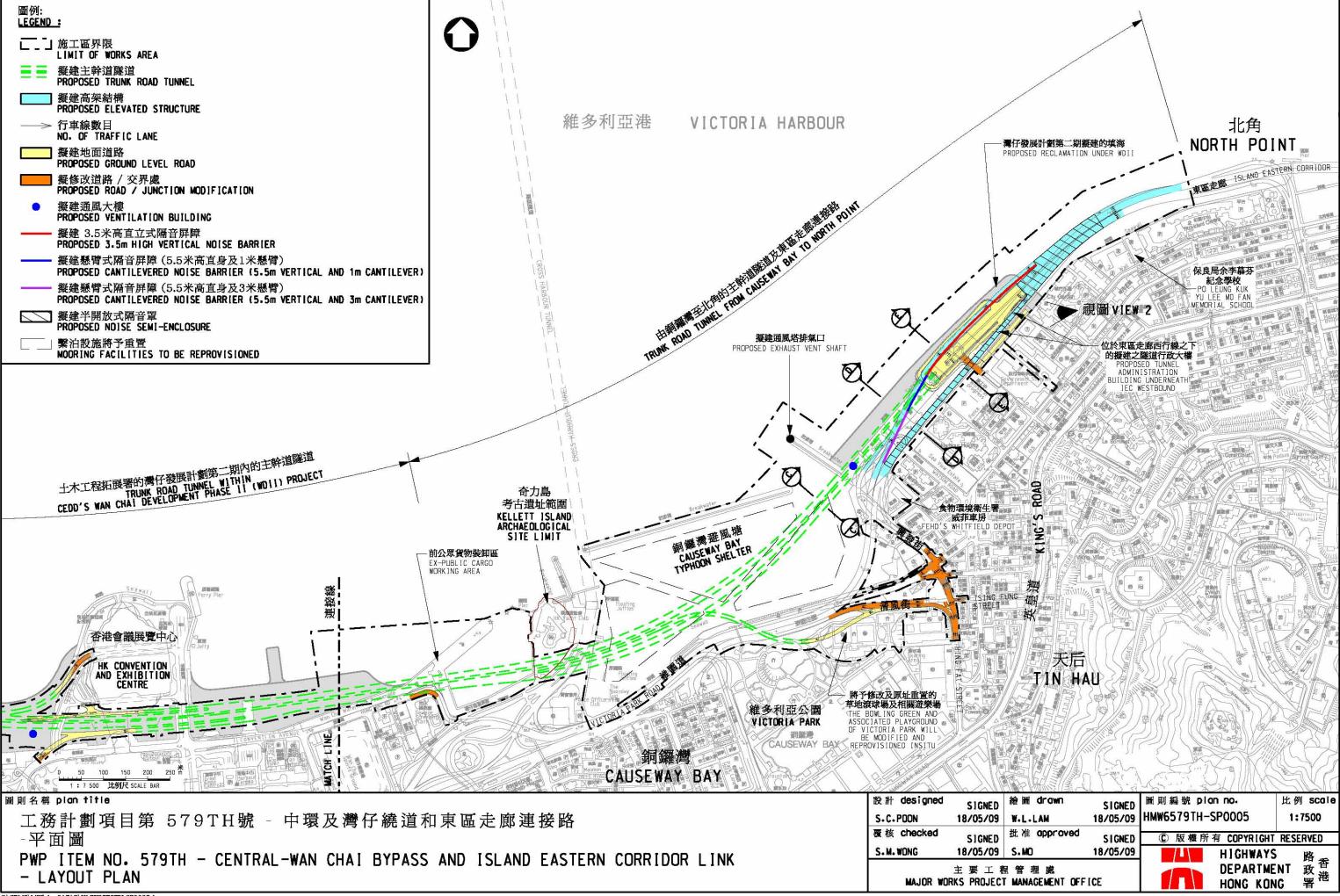
38. We intend to seek funding support of the Public Works Sub-committee and Finance Committee of the LegCo on 10 June and 3 July 2009 respectively to upgrade **579TH** to Category A. Subject to funding approval, we plan to start the construction works in end 2009 for completion in early 2017.

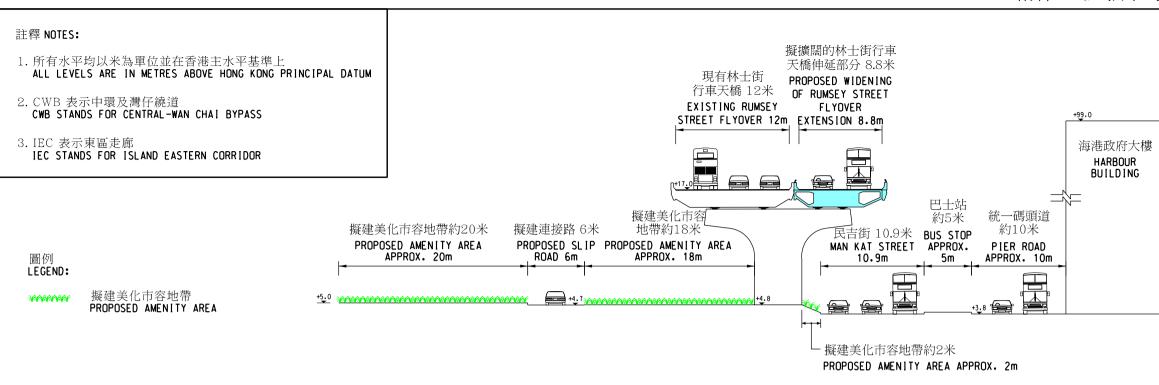
ADVICE SOUGHT

39. Members are invited to comment on this paper.

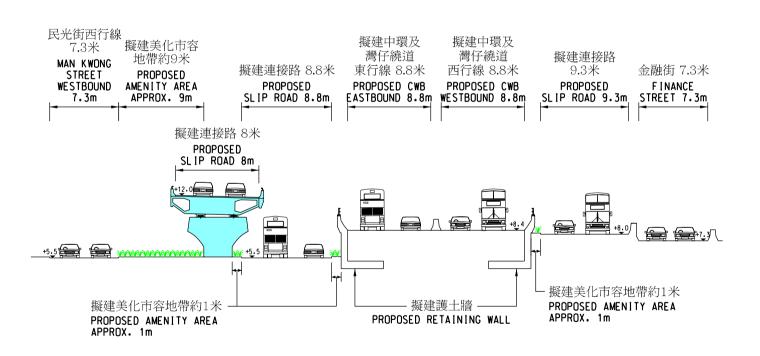
Transport and Housing Bureau May 2009







切面 SECTION A-A



切面 SECTION B-B

圖則名稱 plan title

工務計劃項目第 579 TH號 - 中環及灣仔繞道和東區走廊連接路

- 切面圖

PWP ITEM NO. 579TH - CENTRAL-WAN CHAI BYPASS AND ISLAND EASTERN CORRIDOR LINK - CROSS SECTION

設計 designed S.C.POON	SIGNED 18/05/09	繪圖 drawn W.L.LAM	SIGNED 18/05/09	圖 HI
覆核 checked	SIGNED	批准 approved	SIGNED	
S.M.WONG	18/05/09	S.MO	18/05/09	
	主要工程	星管 理 處		

MAJOR WORKS PROJECT MANAGEMENT OFFICE

HIGHWAYS 路 DEPARTMENT 政港 HONG KONG 署

路肩 MARGINAL 註釋 NOTES: STRIP 0.5m米 1. 所有水平均以米為單位並在香港主水平基準上 擬建中環及灣仔繞道 擬建中環及灣仔繞道 路肩 ALL LEVELS ARE IN METRES ABOVE HONG KONG PRINCIPAL DATUM MARGINAL 東行線 MARGINAL MARGINAL 西行線 STRIP 0.5m米 STRIP PROPOSED CWB PROPOSED CWB 2. CWB 表示中環及灣仔繞道 現有海牀水平(約-4.0)(將予修復) 0.5m米 EASTBOUND 11m米 WESTBOUND 11m米 0.5m米 CWB STANDS FOR CENTRAL-WAN CHAI BYPASS EXISTING SEA BED LEVEL (-4.0 APPROX.) (TO BE REINSTATED) 3. IEC 表示東區走廊 IEC STANDS FOR ISLAND EASTERN CORRIDOR 切面 SECTION C-C 比例 SCALE 1:300 擬建中環及灣仔繞道 擬建中環及灣仔繞道 東行線 西行線 擬建東區走廊西行線 約16米 PROPOSED CWB EASTBOUND PROPOSED CWB WESTBOUND PROPOSED IEC WESTBOUND APPROX. 16m 擬建東區走廊東行線 PROPOSED IEC EASTBOUND +120.0 擬建半開放式隔音罩 行車道 MARGINAL PROPOSED NOISE SEMI-ENCLOSURE CARRIAGEWAY 8.3m米 海峰園 HARBOUR HEIGHTS STRIP 擬建懸臂式隔音屏障 PROPOSED CANTILEVERED NOISE BARRIER -花槽 PLANTER +16.4 花槽 PLANTER-花槽 -PLANTER ///\$\\\ 切面 SECTION D-D 比例 SCALE 1:400 圖則名稱 plan title 繪圖 drawn 圖則編號 plan no. 比例 scale 設計 designed SIGNED SIGNED HMW6579TH-SP0007 工務計劃項目第 579TH號 - 中環及灣仔繞道和東區走廊連接路 S.C.POON 18/05/09 W.L.LAM 18/05/09 AS SHOWN 覆核 checked 批准 approved SIGNED SIGNED © 版權所有 COPYRIGHT RESERVED

S.M. WONG

18/05/09

S.MO

主要工程管理處

MAJOR WORKS PROJECT MANAGEMENT OFFICE

18/05/09

- CROSS SECTION

C:\CDMS\MW\dms01719\HMW6579TH-SP0007.dgn

PWP ITEM NO. 579TH - CENTRAL-WAN CHAI BYPASS AND ISLAND EASTERN CORRIDOR LINK

路香

HIGHWAYS

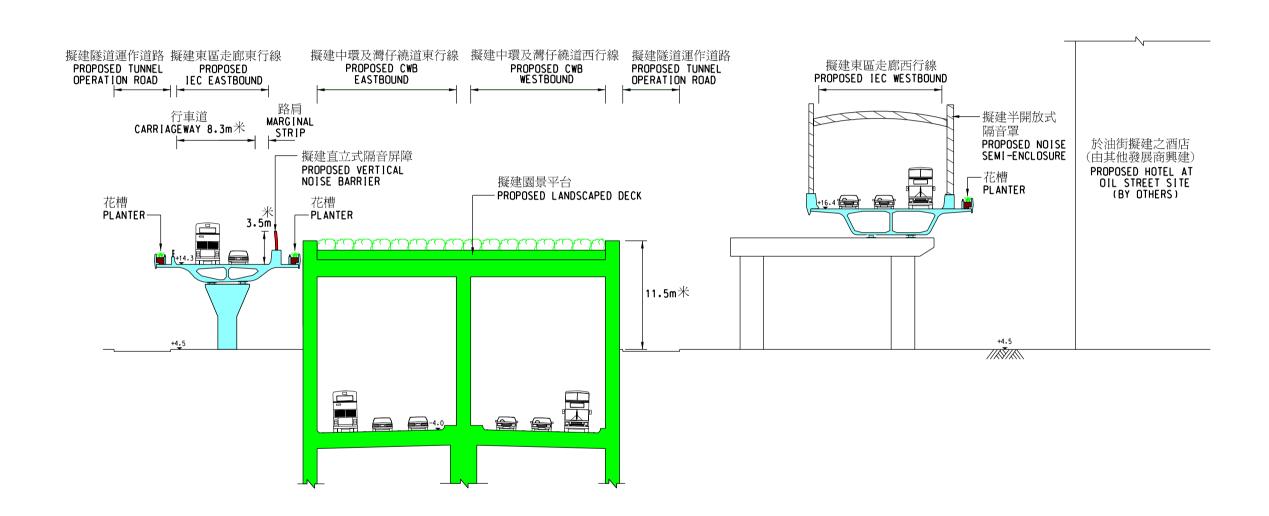
DEPARTMENT 政 HONG KONG 署

註釋 NOTES:

- 1. 所有水平均以米為單位並在香港主水平基準上 ALL LEVELS ARE IN METRES ABOVE HONG KONG PRINCIPAL DATUM
- 2. CWB 表示中環及灣仔繞道 CWB STANDS FOR CENTRAL-WAN CHAI BYPASS
- 3. IEC 表示東區走廊 IEC STANDS FOR ISLAND EASTERN CORRIDOR

LEGEND:

八八八 擬建園景平台 PROPOSED LANDSCAPED DECK



切面 SECTION E-E

圖則名稱 plan title

工務計劃項目第 579TH號 - 中環及灣仔繞道和東區走廊連接路

- 切面圖

PWP ITEM NO. 579TH - CENTRAL-WAN CHAI BYPASS AND ISLAND EASTERN CORRIDOR LINK - CROSS SECTION

設計 designed	SIGNED	繪圖 drawn	SIGNED	圖
S.C.POON	18/05/09	W.L.LAM	18/05/09	НМ
覆核 checked	SIGNED	批准 approved	SIGNED	
S.M.WONG	18/05/09	S.MO	18/05/09	
	主 要 丁 和	早 管 理 處		

MAJOR WORKS PROJECT MANAGEMENT OFFICE

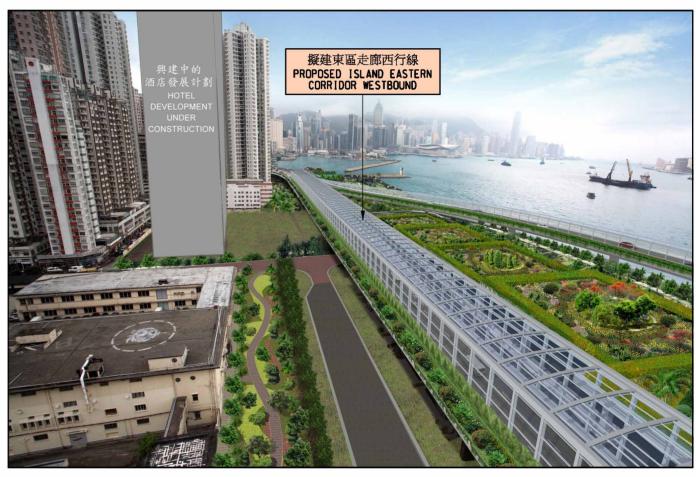
則編號 plan no. 比例 scale HMW6579TH-SP0008 © 版權所有 COPYRIGHT RESERVED

路香 HIGHWAYS DEPARTMENT 政 HONG KONG 署

1:400



視圖 1 - 林士街天橋 VIEW 1 - RUMSEY STREET FLYOVER



視圖 2 - 北角東區走廊的半開放式隔音罩 VIEW 2 - NOISE SEMI-ENCLOSURES AT ISLAND EASTERN CORRIDOR AT NORTH POINT

圖則名稱 plan title

工務計劃項目第 579TH號 - 中環及灣仔繞道和東區走廊連接路 -合成照片

PWP ITEM NO. 579TH - CENTRAL-WAN CHAI BYPASS AND ISLAND EASTERN CORRIDOR LINK - PHOTOMONTAGE

設計 designed	SIGNED	繪圖 drawn	SIGNED	l
S.C.POON	18/05/09	W.L.LAM	18/05/09	l
覆核 checked	SIGNED	批准 opproved	SIGNED	ŀ
S.M. WONG	18/05/09	S.MO	18/05/09	Γ

主要工程管理處 MAJOR WORKS PROJECT MANAGEMENT OFFICE

圖則編號 plan no. 比例 scole HMW6579TH-SP0009 C 版權所有 COPYRIGHT RESERVED

HIGHWAYS DEPARTMENT 政 HONG KONG 署

579TH – Central–Wan Chai Bypass and Island Eastern Corridor Link

Summary of Public Engagement Activities

A. Public Engagement on WDII Planning including Trunk Road Alignment, the Associated Reclamation and Harbour-front Enhancement

Public Engagement undertaken under the HER comprised three stages: Envisioning, Realization and Detailed Planning.

1. Envisioning Stage

May – Nov 2005

Public engagement on the need for constructing the Trunk Road and harbour-front enhancement ideas

2. Realization Stage

Public Engagement on Trunk Road alignments and harbour-front enhancement proposals

•	HEC Sub-committee	20 Apr 2006
•	TPB	21 Apr 2006
•	HEC Sub-committee	8 May 2006
•	Works and Development Committee of Eastern District Council (EDC)	11 May 2006
•	Traffic and Transport Committee of Southern District Council (SDC)	15 May 2006
•	Wan Chai District Council (WCDC)	16 May 2006

•	Transport Advisory Committee	17 May 2006
•	Joint Forum of Hong Kong Institute of Architects, Hong Kong Institution of Engineers, Hong Kong Institute of Landscape Architects, Hong Kong Institute of Planners and Hong Kong Institute of Surveyors	20 May 2006
•	LegCo PLW Panel	23 May 2006
•	Central and Western District Council (C&WDC)	25 May 2006
•	LegCo PLW Panel	9 Jun 2006
	blic engagement on the Concept Plan of OII	
•	HEC Sub-committee	13 Jun 2006
•	LegCo PLW Panel	26 Jun 2006
•	TPB	25 Aug 2006
•	HEC Sub-committee	31 Aug 2006
•	Task Force of HEC Sub-committee	6 Sep 2006
•	Planning, Transport and Environmental Protection Committee of WCDC	26 Sep 2006
•	Collaborator's Working Session	14 Oct 2006
•	Traffic and Transport Committee of C&WDC	19 Oct 2006
•	Works and Development Committee of EDC	19 Oct 2006

•	Planning, Works and Housing Committee of SDC	23 Oct 2006
•	Community Workshop and Harbour Walk	21 & 28 Oct 2006
•	LegCo PLW Panel	28 Nov 2006
•	Consensus Building Town Hall Meeting	16 Dec 2006
Pu	tailed Planning Stage blic Engagement on the Recommended Outline velopment Plan of WDII and relevant draft Ps	
•	TPB	3 & 20 Apr 2007
•	HEC Sub-committee	14 May 2007
•	WCDC	15 May 2007
•	Traffic and Transport Committee of C&WDC	17 May 2007
•	LegCo PLW Panel	29 May 2007
•	Works and Development Committee of EDC	31 May 2007
•	Planning, Works and Housing Committee of Southern District Council	4 Jun 2007
•	WCDC	11 Jun 2007
•	Public Briefing	23 Jun 2007
•	TPB	29 Jun 2007

3.

B. Consultations on Temporary Reclamation and Reprovisioning of Affected Moorings and Anchorages in the CBTS

1.	Temporary Reclamation for the Construction of the Trunk Road Tunnel	
	 Hong Kong Institution of Engineers 	7 Apr 2008
	Hong Kong Construction Association	11 Apr 2008
	 Joint Professional Forum for Hong Kong Institution of Engineers, Hong Kong Institute of Architects, Hong Kong Institute of Planners, Hong Kong Institute of Surveyors and Hong Kong Institute of Landscape Architects 	16 Jun 2008
	 Planning, Works and Housing Committee of Eastern District Council 	3 Jul 2008
	• WCDC	15 Jul 2008
	• C&WDC	17 Jul 2008
	• Public Forum	19 Jul 2008
	 District Development and Environment Committee of SDC 	28 Jul 2008
	• HEC	18 Aug 2008
2.	Reprovisioning Arrangements of Affected Moorings and Anchorages during Trunk Road Construction at the CBTS	
	Local Vessel Advisory Committee	24 Apr 2008

Discussion Sessions with the CBTS users 6-17 Sep 2008

	•	Public Forum organized by the ad-hoc Working Group under Planning, Works and Housing Committee of EDC	22 Sep 2008
	•	Local Vessel Advisory Committee	14 Oct 2008
	•	Discussion Session with the CBTS users	18 Oct 2008
3.	of An An at	mporary Reclamation for the Construction the Trunk Road Tunnel, Reprovisioning trangements of Affected Moorings and achorages during Trunk Road Construction the CBTS and Review on the Comparison of unk Road Tunnel Option and Flyover Option	
	•	Public Forum	25 Oct 2008
	•	HEC	31 Oct 2008
	•	Planning, Works and Housing Committee of EDC	12 Nov 2008
	•	Traffic and Transport Committee of C&WDC	13 Nov 2008
	•	SDC	13 Nov 2008
	•	WCDC	18 Nov 2008
	•	LegCo Development Panel	25 Nov 2008

C. Meetings with Local Residents on the East Ventilation Building and its Associated Vent Shaft

•	Residents in Causeway Bay, Tin Hau and	14 and 15 Apr
	North Point and Eastern District Council members	and 30 Jun 2007
•	TPB	7 Dec 2007
•	Residents of Victoria Centre and EDC members	14 Aug 2008
•	Public Forum organized by the ad-hoc Working Group under Planning, Works and Housing Committee of EDC	22 Sep 2008

579TH - Central-Wan Chai Bypass and Island Eastern Corridor Link

Details of Objections and Administration's Response under the Roads (Works, Use and Compensation) Ordinance (Cap. 370)

Details of the objections to the road scheme gazetted on 27 July 2007 and the Administration's response are summarized as follows –

(a) A group of members of an owner's committee objected to the proposed location of the exhaust vent shaft of the EVB at the eastern breakwater of the CBTS. The objectors were concerned about the environmental impacts, including air quality, noise and visual impacts, of the exhaust vent shaft. They proposed to relocate the exhaust vent shaft to the western end of the north breakwater of the CBTS or the northern end of the west breakwater of the CBTS.

We explained to the objectors that the design and location of the exhaust vent shaft had already taken into account their concern expressed during the public consultation exercises in April 2007. The proposed location of the exhaust vent shaft would be about 310 m away from their property. electrostatic precipitator system would be incorporated in the tunnel ventilation system to remove about 80% of the generated respirable suspended particulates. The exhaust would only contribute a tiny fraction of the pollution level. It is expected that the Trunk Road will divert 60% of the open road traffic to the proposed tunnel and the air pollution level of the area in 2031 is anticipated to be reduced compared to the scenario without the Trunk Road. We also explained that the exhaust vent shaft is required to be designed with a minimum height to facilitate air dispersion and discharge. We had carried out environmental impacts assessment for the proposed road works in accordance with the EIAO and concluded that the proposed works would not cause unacceptable environmental impacts, including air quality, noise and visual impacts, to the area. We also advised that the objectors' proposed alternative locations were considered not practically feasible due to technical constraints, including the risk of damaging the cross-harbour gas main and the Cross Harbour Tunnel. Despite our explanation, the objectors did not indicate withdrawal of the objection. The objection thus, is considered unwithdrawn.

- (b) One objector was of the view that the works would seriously affect the major vehicular access road of the Harbour Heights from Watson Road. We explained to the objector that we would carry out temporary diversion of the current vehicular access for the Harbour Heights from Watson Road as appropriate. Noting our explanation, the objector withdrew the objection unconditionally.
- (c) One objector, on behalf of the owners of a commercial building, alleged that the proposed road works, the new land uses and the Phase III extension of the Hong Kong Convention and Exhibition Centre (HKCEC) reported in some press would introduce an unacceptably large volume of additional traffic but there would be inadequate traffic improvement measures in the Wan Chai North area. The objector was of the view that there was a need to reassess the road network so as to reduce the potential flow of traffic into the Wan Chai North area.

We explained that a district traffic study had been carried out concluding that the traffic situation would improve with the implementation of the Trunk Road project because part of the east-west traffic from the Corridor would be diverted to the Trunk Road. The proposed change in the road network should be adequate to cope with the predicted traffic flow of the area. The proposed Phase III extension of the HKCEC was not included in the proposed amendments to the draft WCN OZP gazetted on 27 July 2007. Despite our explanation, the objector maintained the objection.

(d) One objector, on behalf of the owners of a commercial building, was of the view that the temporary reclamation at the CBTS would adversely affect the flow of sea water to and from the pumping system of its client's property.

We explained to the objector that we would carry out temporary reclamation at the CBTS in stages so that continuous flow of sea water to and from the pumping system could be maintained at all time during construction. We would provide mitigation measures and monitor the water quality to ensure that it would not be adversely affected by the construction works. We would also maintain regular liaison meetings with the objector. The objector agreed to withdraw the objection subject to the above conditions.

- (e) One objector was of the view that the proposed road works would affect its client's lot. The objector requested the Administration
 - (i) to ascertain the ground level stability and user safety of a car park at the lot during excavation in the vicinity of the lot;
 - (ii) to maintain an unobstructed vehicular access to and from the lot at Hung Hing Road during construction;
 - (iii) to implement relevant mitigation measures to minimize noise and water quality impacts during construction;
 - (iv) to arrange reprovisioning of jetties at the temporarily occupied area; and
 - (v) to keep the objector's client informed of the relevant arrangements of the marine works in advance;

We responded to the objector as follows –

- (i) we would install temporary tunnel supports during excavation of the tunnel underneath the area of the car park and would closely monitor its ground level stability and user safety;
- (ii) we would closely monitor the traffic situation

along the at-grade Hung Hing Road during construction;

- (iii) we would implement monitoring and mitigation measures to reduce noise and water quality impacts during construction;
- (iv) we would make temporary arrangement for reprovisioning of the jetties during construction; and
- (v) we would give advance notice prior to commencement of marine works near the lot and liaise closely with the objector's client during the construction stage.

Despite our explanation, the objector maintained the objection.

(f) An organization was of the view that the proposed works including temporary reclamation and ancillary works would fundamentally affect the Victoria Harbour. It alleged that the Administration had failed to demonstrate that the proposed works comply with the requirements of the PHO and requested the Administration to review the Plans and Scheme in accordance with the requirements of the PHO and the CFA Judgment.

The objector lodged a judicial review in respect of the proposed temporary reclamation as described in paragraph 17 and footnote 7 of the main text. The Administration's responses regarding the findings on the need for the temporary reclamation for the construction of the Trunk Road tunnel and the proposed amendment to the road scheme to delete the temporary breakwater are described in paragraphs 17 to 18 of the main text. In a letter dated 23 October 2008, the objector supported that the Trunk road should be built as soon as possible, but without excessive reclamation, and considered that the deletion of the temporary breakwater to be proper and in compliance with the law.

We updated the objector on 5 December 2008 on the latest findings on the need for the temporary reclamation for the construction of the Trunk Road tunnel, and the proposed amendment and invited his last representation. As the objector did not reply by the specified deadline, the objection, thus, is considered unwithdrawn.

(g) One objector, on behalf of the owner of two lots in North Point, alleged that the proposed works would result in loss of income from, and reduction in use, value and redevelopment potential of its client's lots.

We explained to the objector that the concerned lots would be required for constructing the connection of the Trunk Road to the IEC in order to minimize the extent of reclamation for compliance with the PHO. We also explained the relevant procedures of claim for compensation under the Ordinance. Despite our explanation, the objector maintained its objection. The objection, thus, is considered unwithdrawn.

One objector objected to the adoption of the Tunnel Option for (h) the Trunk Road leading to resumption and temporary occupation of its lots at North Point. The objector alleged that the Flyover Option for the construction of the Trunk Road should be adopted. The objector also claimed that his rights and interests would be affected by the proposed road works due to resumption and temporary occupation of land and the likely environmental impacts arsing from the construction works. The proposed resumption of its lots would lead to non-compliance of conditions under the lease modification for The objector also requested the Administration to its lots. consider its Objection Statement submitted to the TPB in relation to his further objection/representation to the relevant draft outline zoning plans (OZPs).

We referred the objector to the CCM Report as mentioned in paragraph 14 of the main text and highlighted that the proposed design of the Trunk Road had complied with the PHO, the CFA Judgment and the Administration's internal circular. We explained the relevant procedures of claims for compensation under the Ordinance and advised that the Administration would consider proposals for modification of the existing lease conditions in accordance with the prevailing policy. We also

informed the objector that its objection/representation to the relevant draft OZPs would be processed separately under the TPO. Nevertheless, we had responded to the key issues in the Objection Statement as highlighted by the objector. Despite our explanation, the objector did not indicate withdrawal of the objection. The objection, thus, is considered unwithdrawn.

(i) One objector was the tenant of one of the concerned lots mentioned in paragraph 1(g) above. The objector alleged that the resumption of the concerned lot would seriously affect its business operation. The objector also enquired about the programme of the proposed works and the arrangements for relocation and compensation.

We responded that the resumption of the lot is required to minimize the extent of reclamation for compliance with the PHO. We also provided the programme of the works and explained the relevant procedures of claim for compensation under the Ordinance. Despite our explanation, the objector maintained the objection. The objection, thus, is considered unwithdrawn.

(j) One objector objected to the proposed resumption and temporary occupation of its lot. The objector was of the view that the proposed works would be subject to amendments during the statutory objection period of the relevant OZPs, and it would be premature for the Administration to commence resumption and temporary occupation of any land at this stage. While the objector had submitted application to the TPB for the proposed development at its lot, the area to be temporarily occupied under the Trunk Road project would encroach upon the proposed emergency vehicular access (EVA). The objector was concerned about the interface issues and impact on its application of occupation permit.

We responded to the objector that it was the Administration's intention to submit the road scheme to the CE in Council for consideration no earlier than the submission of the amendments to the relevant OZP. We envisaged that the impact of construction activities of the Trunk Road on the operation of the proposed EVA would be minimal and would request the contractor to maintain access for the EVA. We would also endeavour to avoid any impact on its application of occupation

permit. After noting our explanation, the objector withdrew the objection unconditionally.

- 2. Details of the objections to the amendment scheme gazetted on 5 December 2008 and the Administration's response are summarized as follows
 - (a) One objector¹ alleged that the whole of its concerned lots should be resumed as the development potential of the remaining part of the lots would be limited, rendering such remaining part useless. It also enquired about the assessment of compensation.

We responded that the portion of the concerned lots to be resumed was the minimum area required to be permanently resumed for the purposes of or incidental to the works or the use for the Trunk Road. We would not resume more land than that required for the purposes of the road works or the use. As regards the assessment of compensation, we advised the objector that it could submit claims for compensation after the authorization of the road scheme and the compensation would be assessed according to the general principles set out in the Lands Resumption Ordinance (Cap. 124). Despite our explanation, the objector maintained its objection. The objection, thus, is considered unwithdrawn.

(b) An organization alleged that there was not enough park facility for dog owners and objected to the closure of the "dog garden" which was known as Wan Chai Waterfront Promenade (the Promenade) along Hung Hing Road.

We responded that the proposed amendments did not involve the Promenade area and thus the objection was irrelevant to the proposed amendments. We also advised that the temporary nature of the Promenade and its eventual closure for construction of the Trunk Road had been clearly pointed out to the Wan Chai District Council and the HEC which supported the arrangement. We also advised that there were ten existing pet gardens under the management of the Leisure and Cultural Services Department and eight under planning. There would be three new pet gardens on Hong Kong Island in future which

_

This objector is the same objector mentioned in paragraph 1(g) above.

could replace the Promenade for public use. Despite our explanation, the objector maintained his objection. The objection, thus, is considered unwithdrawn.

(c) An organization alleged that the gazetted works failed to limit the amount and duration of (temporary) reclamation and the (temporary) reduction in sheltered water. The objector also alleged that it would be unreasonable to proceed with the Trunk Road project and the SCL independently and without sufficient effort to combine the relevant works and to minimize the (temporary) reclamation required. The objector was also of the view that by failing to replace the existing northern breakwater of the CBTS with a new breakwater positioned further north, the available sheltered water would be reduced. The objector opined that sheltered water was already limited and sheltered water would be required to protect and enhance the value of the Victoria Harbour and enable the (safe) enjoyment of the harbour by commercial and leisure users.

We responded that the extent and duration of temporary reclamation for construction of the Trunk Road tunnel identified were the minimum to meet the Overriding Public Need Test. We were actively coordinating the design and construction of the SCL with the Trunk Road scheme inside the CBTS and would not rule out the possibility of carrying out protection works within the Trunk Road project if this would help reduce the amount of temporary reclamation required for the SCL project and the overall construction programme. As regards the construction of temporary breakwater, there was no overriding public need for the originally proposed temporary breakwater to the north of the CBTS.

As regards the effect of the temporary reduction of sheltered water within the CBTS on the enjoyment of the Victoria Harbour by commercial and leisure users, we replied that the affected pleasure boats would mostly be reprovisioned to the Aberdeen South Typhoon Shelter. The concerned commercial vessels would be reprovisioned to the basin of the ex-PCWA near the CBTS. The pleasure boats and commercial vessels could continue to navigate and operate in the Victoria Harbour. The sheltered water within the CBTS would be reinstated after completion of the Trunk Road project.

As regards the availability of sheltered space within the harbour to cope with the increasing demand of pleasure vessels, Marine Department (MD) responded that the current supply of typhoon shelter/sheltered anchorage space within Hong Kong waters had the ability to meet the future demand during the forecasting horizon. Furthermore, MD also pointed out that during typhoons over the past few years, the overall capacity of the typhoon shelters and sheltered water within the harbour was sufficient to cater for most of the locally licensed vessels, including pleasure vessels with their main base of business operations in the harbour. MD would regularly review the demand for a new typhoon shelter and liaise with relevant stakeholders.

Despite our explanation, the objector maintained his objection. The objection, thus, is considered unwithdrawn.