



土瓜灣區沿線的樓宇

Buildings along Alignment of Central Kowloon Route in To Kwa Wan

編者的話

在第二期公眾參與活動期間，土瓜灣區沿線居民向我們表達對中九龍幹線的關注。因此，我們在2013年2月22日特別為土瓜灣區沿線居民舉辦了一場焦點小組會議，討論以下主要事項：

- ▶ 中九龍幹線的走線
- ▶ 施工安排
- ▶ 重建潛力
- ▶ 設立地役權及永久權利

本通訊就這些課題作專題報導。

Message from the Editor

During the Phase 2 Public Engagement for Central Kowloon Route (CKR), many residents of To Kwa Wan living along the alignment of CKR have raised concerns on the project. As such, we held a special focus group meeting for the residents on 22 February 2013 to discuss the following main issues :

- ▶ alignment of CKR
- ▶ construction arrangement
- ▶ redevelopment potential
- ▶ rights related to the creation of easement and other permanent rights

This newsletter reports on these issues.

引言

中九龍幹線全長4.7公里，採用雙程三線分隔車道的設計，連接西九龍的油麻地交匯處與東九龍的啟德發展區和九龍灣道路網。

Introduction

CKR is a 4.7 km long dual 3-lane trunk road across central Kowloon linking West Kowloon at Yau Ma Tei Interchange with the Kai Tak Development and road network at Kowloon Bay in East Kowloon.



中九龍幹線的走線

選擇走線需要考慮多個因素。走線須符合道路設計標準，例如不能太斜及彎度不能太急。同時，盡量減少工程對環境、交通、現有設施及附近居民的影響。走線亦應盡量避免收回私人土地或拆卸私人樓宇。

選取的走線主要由3.9公里長的隧道組成，西起友翔道，沿甘肅街，經彌敦道進入京士柏、何文田、馬頭圍、馬頭角，再經過九龍灣，在啟德發展區返回地面。其中由上海街至九龍城碼頭公共運輸交匯處一段將以鑽爆方法建造。由於該段隧道主要在深入地底的岩層建造，所以建造不會影響現有私人樓宇的結構安全及使用，亦不涉及收回及遷拆任何私人樓宇。明挖回填式隧道的建造亦只會影響政府設施及一些臨時設施。

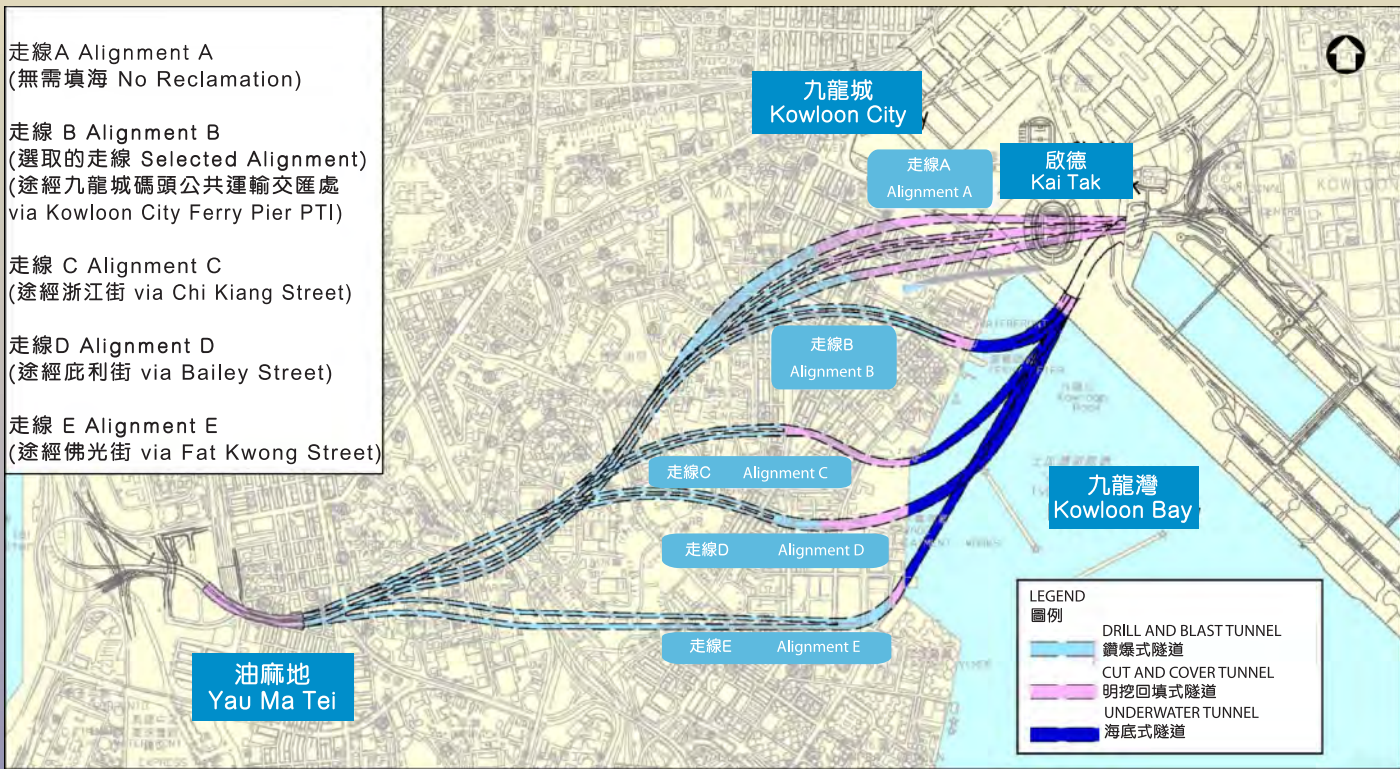
其他曾考慮的走線方案，包括一些下圖所示無需填海或途經現有道路的方案，均需建於現有私人樓宇下的軟土層而涉及拆卸及收回有關樓宇，而不獲建議採納。

The Alignment of CKR

Various factors had to be considered in selecting the alignment. The alignment would need to comply with road design standards. For example, the gradient should not be too steep and the radius of the horizontal curves should not be too tight. Furthermore, the alignment should minimize the impacts on the environment, traffic, existing facilities and adjacent residents. The alignment should also avoid in so far as possible resumption of private land and demolition of private buildings.

The selected alignment consists mainly of tunnels with a total length of 3.9 km starting in the west from Yau Cheung Road, running along Kansu Street, entering through Nathan Road into King's Park, Ho Man Tin, Ma Tau Wai, Ma Tau Kok and then going through Kowloon Bay before surfacing in Kai Tak Development. The section between Shanghai Street and Kowloon City Ferry Pier Public Transport Interchange (PTI) will be constructed using drill-and-blast method. As that tunnel section will be constructed deep under rock strata, its construction will not affect the structural integrity and use of private buildings and will not require resumption and demolition of any private properties. Construction of cut-and-cover tunnel will only affect government facilities and some temporary facilities.

The other alignments reviewed, including those with no reclamation or going through existing roads as shown in the diagram below, were not further considered because they need to be constructed in soft ground underneath existing private buildings thus necessitating their resumption and demolition.

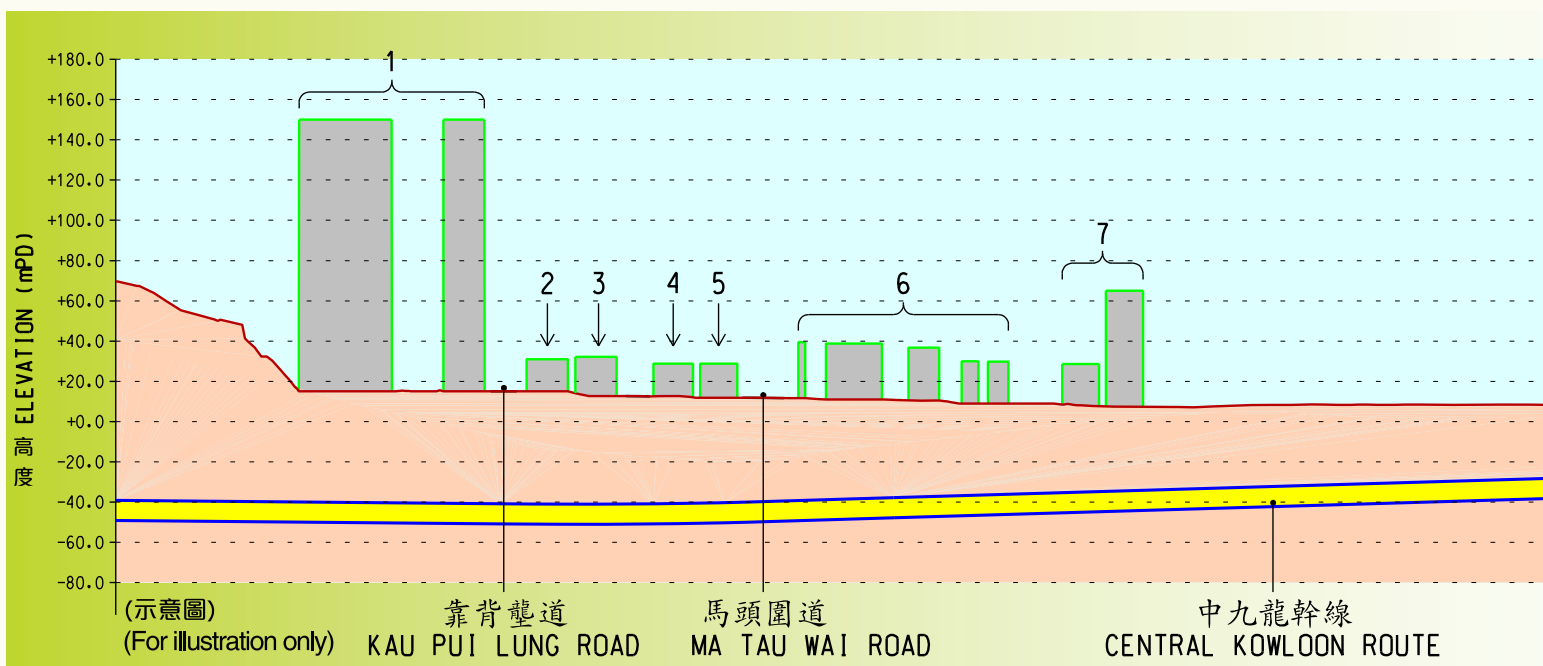
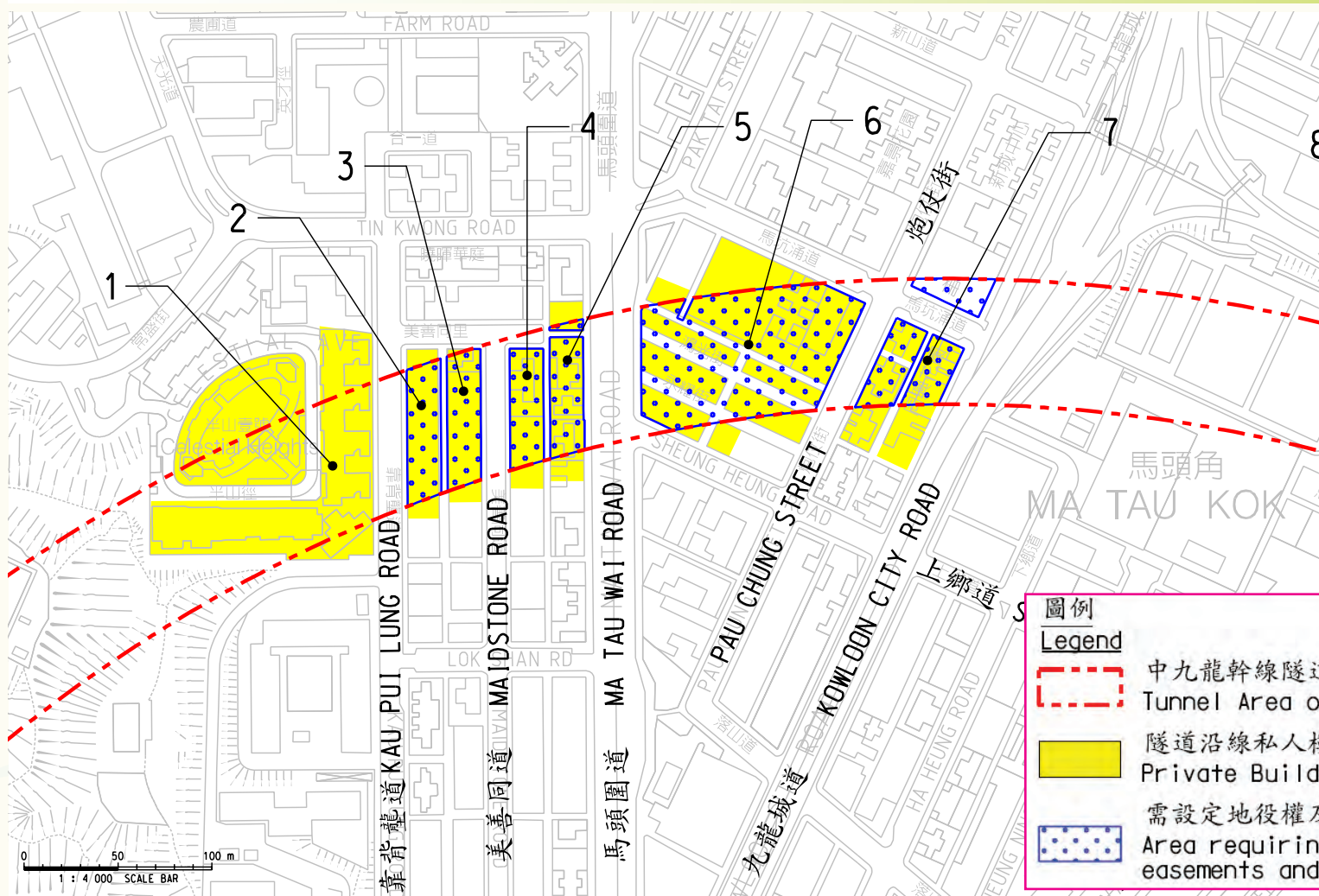


土瓜灣區沿線私人樓宇

雖然中九龍幹線現時選取的走線不涉及收回及遷拆任何私人樓宇，但由於走線所經地區已是高度發展，所以部分隧道會經過一些現有私人樓宇下面的地層。在土瓜灣區，這些樓宇位置顯示於以下的平面圖。

Private Buildings along Alignment to To Kwa Wan

While the current alignment of CKR will not involve resumption and demolition of private buildings, as the alignment will go through developed areas, parts of the tunnels will have to be constructed in the underground strata underneath existing buildings. The locations of these buildings in To Kwa Wan are shown in the plan below.



施工安排

Construction Arrangement

中九龍幹線在土瓜灣區一段的隧道將會以鑽爆方法建造，確保安全是我們首要的考慮。採用鑽爆方式建造隧道在香港已有超過40年的經驗。我們已參考一些成功的經驗，為中九龍幹線的隧道制定妥善的設計及施工方案，以確保中九龍幹線的建造及其後的營運均不會影響沿線樓宇的結構安全及使用。



爆破工程會在地底進行
Blasting will be carried out underground

施工程序

爆破工程的安全會受土木工程拓展署礦務部嚴格規管。爆炸品的使用亦同時受《危險品條例》、消防處、警務處及屋宇署的密切監控。我們會在規劃和設計階段，完成「爆破評估報告」，由礦務部批核，以說明爆破工程切實可行，並能以安全和符合標準的方式進行。在工程合約批出後，我們會向礦務部申請燃爆許可證。申請須評估燃爆對鄰近的設施，包括樓宇、公用設施及斜坡的影響。爆破工程須由合資格的承建商及工程人員執行。



在岩石壁上鑽洞以安裝炸藥
Drilling on rock face

在進行每一次開挖前，我們會先核實開挖面前方的岩土情況。我們亦會勘察、覆核及記錄毗鄰工程範圍樓宇的狀況以制定最合適和穩妥的施工安排。每一次的施工安排亦須獲礦務部按承建商提交的工程細節批核。每次爆破所用的爆炸品劑量將受嚴格控制，以確保樓宇結構安全。我們會安裝監測點，監測工程對附近樓宇的影響。

The section of CKR in To Kwa Wan will be constructed using drill-and-blast method and safety is our primary consideration. The drill-and-blast method has been adopted in Hong Kong with over 40 years of experience. We have taken into account the successful experience and developed appropriate design and construction arrangements for CKR to ensure that the construction and subsequent operations of CKR will not affect the structural integrity and use of buildings along the tunnel alignment.

Construction Procedures

The blasting works will be subject to stringent control of the Mines Division of the Civil Engineering and Development Department. The use of explosives will also be subject to close monitoring under the Dangerous Goods Ordinance and by the Fire Services Department, the Hong Kong Police Force and the Buildings Department. We will complete in the planning and design stage the Blasting Assessment Report for approval by the Mines Division to demonstrate the feasibility of the blasting works and executing them in a safe manner in accordance with relevant standards. Upon the letting of the construction contracts, we will apply to the Mines Division for Blasting Permit. The application will include an assessment on the impact of the blasting works on adjacent facilities including buildings, public facilities and slopes. Blasting works will be carried out by qualified contractors and personnel.

Before each blasting operation, we will first confirm the ground conditions in the section to be excavated. We will also survey, confirm and record the conditions of buildings adjacent to the works so as to formulate the most appropriate and robust construction arrangements. The construction arrangements for each blast operation will have to be approved by Mines Division based on details to be provided by the contractors. The quantity of explosives to be used will be subject to stringent control for ensuring building safety. We will also establish monitoring points to monitor the impact of the works on adjacent buildings.



使用岩石銷釘和噴漿作臨時支撐
Rock dowel and shotcrete for temporary support

與附近居民的聯絡

我們會與居民保持密切聯繫。我們會在每次進行爆破前最少一星期通知附近居民相關爆破時間表。爆破當日，工地外會豎立告示牌展示當天的爆破時間表。在正式進行引爆前，會有專人在工地及受影響範圍敲響銅鑼以作警示。



Liaison with Adjacent Residents

We will keep in close touch with adjacent residents. We will inform them at least one week in advance of the timetable for blasting operations. On the day of blasting, appropriate notice board will be displayed outside the work site to advise on the time of the blasting. Dedicated personnel will issue warning by sounding gongs around the affected areas immediately before blast operations.



爆破的影響

爆破會在密封的環境進行。承建商會實施嚴格的安全及監控措施。爆破不會影響沿線樓宇的結構安全及使用。惟爆破地點附近居民有可能感到短暫震動及聽到輕微聲響。



Impact of Blasting

Blasting will be conducted in a completely enclosed environment. The contractors will implement strict safety and monitoring measures. The blasting will not affect the structural integrity and use of buildings along the tunnel alignment. However, residents adjacent to the blast sites may experience short vibrations and hear slight sound.



跟進異常情況

若沿線樓宇在工程期間出現異常情況，我們會立即派員跟進及檢查，並會在有需要時安排相關修復工程，以盡量減少對居民的不便及確保樓宇安全。

Follow-up of Irregularities

If irregularities are observed in adjacent buildings during the course of construction, we will immediately arrange inspection by site personnel and repairs works where appropriate so as to minimize the inconvenience to residents and ensure building safety.

設立地役權及其他永久權利

雖然建造中九龍幹線不需要收回任何私人土地，但仍需根據《道路(工程、使用及補償)條例》，在隧道所經過的私人土地設定地役權及其他永久權利，以容許政府及其他獲政府授權的人士在地層中興建、運作、保養、維修中九龍幹線及容許市民進入及使用中九龍幹線。有關業主仍然保留持有整個地段包括地層的業權。設立地役權及其他永久權利的位置在第3及4頁的平面圖顯示。

重建潛力

我們十分了解居民對重建潛力的關注。我們會按每個項目的情況，提出最切實有效的工程措施，以減少對附近樓宇的影響。在中九龍幹線而言，由於幹線的隧道將深入堅固的基岩建造，而隧道的設計亦已考慮沿線樓宇重建後的荷載，所以中九龍幹線的隧道不會影響沿線物業在現有建築法例、地契及各分區計劃大綱圖規限下可達的各種發展參數，如高度、地積比率和樓面面積，亦即不會影響沿線物業在現有建築法例、地契及各分區計劃大綱圖規限下的重建潛力。

中九龍幹線於土瓜灣區的隧道距離地面普遍超過30米，深入堅固岩層下大約超過10米。一般而言，樓宇樁柱不一定會進入石層。如土瓜灣區的農圃道18號，樓高超過50層，其樁柱的深度亦在石層之上。即使樁柱插入石層，仍會與隧道保持相當距離。所以，中九龍幹線的隧道不會影響樓宇重建時所採用的地基設計。

重建的例子

事實上，香港不少行車隧道及鐵路隧道亦建於現有樓宇下。亦有很多成功在鐵路隧道上重建的例子，包括港鐵港島線沿線上環永樂街的重建物業、英皇道的物業及德輔道西的重建項目。



英皇道的物業
Development on King's Road

Creation of Easement and Other Permanent Rights

While the construction of CKR will not involve resumption of any private land, easement and other permanent rights will have to be created under the Roads (Works, Use and Compensation) Ordinance underneath private buildings to allow Government and personnel authorized by Government to construct, operate, maintain and repair the tunnels and allow the public to enter and use CKR. However, the concerned owners will still retain the title of their properties (including the underground strata). The locations for creation of easement and other permanent rights are shown on the plan on pages 3 and 4.

Redevelopment Potential

We fully understand that residents are concerned about redevelopment potential. We will adopt the most effective engineering solution in taking forward the project to minimise any possible impact to nearby properties taking into account the specific nature of each individual project. For CKR, as the tunnels will be constructed deep in strong rock strata and the additional loadings resulting from the redevelopment of buildings along the tunnel alignment have been allowed in the tunnel design, the tunnels of CKR will not affect the various development parameters (such as height, plot ratio and gross floor areas) that could otherwise be achieved under the existing building regulations, land leases and Outline Zoning Plans (OZP), i.e. CKR will not affect the redevelopment potential under existing building regulations, land leases and OZP.

The section of CKR in To Kwa Wan will be constructed at generally more than 30 m below ground level and approximately more than 10 m inside rock strata. Generally speaking, the piles of buildings may not necessarily penetrate into rock. For example, while the building of an adjacent development, No. 18 Farm Road, is over 50-storeys high, the piles of the buildings are founded above the rock strata. Even if the piles do penetrate into the rock strata, the piles will still be separated from the tunnels by a considerable distance. As such, CKR will not affect the foundation designs to be adopted for the redevelopment of existing buildings.

Examples of Redevelopment

Indeed, several road and rail tunnels in Hong Kong are constructed underneath existing buildings. Similarly, there are many examples of successful redevelopment and new developments above rail tunnels, including redevelopment on Wing Lok Street of Sheung Wan, the development on King's Road and the redevelopment on Des Voeux Road West along the MTR Island Line.

補償

《道路(工程、使用及補償)條例》保障在其樓宇地層設定地役權及其他永久權利的業主的權益。如設定地役權及其他永久權利影響相關土地的價值或重建的工程費用，有關業主可按條例的第27條提出申索。

總結

中九龍幹線在土瓜灣區一段的隧道將會以鑽爆方法建造。我們已參考過往使用這方法的經驗，為中九龍幹線的隧道制定妥善的設計及施工方案，以確保中九龍幹線的建造及其後的營運不會影響沿線樓宇的結構安全及使用。隧道亦不會影響沿線樓宇的重建潛力。我們亦會在施工階段採取妥善的措施，確保樓宇安全。

在2013年2月22日的焦點小組會議上出席的一些土瓜灣區居民表示期望能盡快為其樓宇進行重建。我們已把有關意見轉達市區重建局及九龍城市區更新地區諮詢平台。

Compensation

The rights of owners of buildings under which easement and other permanent rights will be created are protected under the Roads (Works, Use and Compensation) Ordinance. The owners may claim compensation under section 27 of the ordinance if the creation of easement and other permanent rights affects the value of their properties or the building cost for redeveloping their sites.

Conclusion

The section of CKR in To Kwa Wan will be constructed using drill-and-blast method. We have taken into account the previous experience in using this method and developed appropriate design and construction arrangements for CKR to ensure that its construction and subsequent operations will not affect the structural integrity and use of buildings along the tunnel alignment. Furthermore, the tunnel will not affect the redevelopment potential of these buildings. We will implement appropriate measures at construction stage to assure building safety.

Some residents who attended the focus group meeting on 22 February 2013 expressed their desire to pursue redevelopment of their buildings as soon as possible. We have conveyed their views to the Urban Renewal Authority and the Kowloon City District Urban Renewal Forum.

聯絡資料 Contact Information

如對本工程有任何疑問及意見，可透過以下方法聯絡我們。
Should you have any enquiries and comments on the project, please contact us.

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