

**ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE (CAP 499)**

**S.5(1)(a)**

**PROJECT PROFILE  
FOR  
DESIGNATED PROJECT**

**ON**

**WIDENING OF YEUNG UK ROAD BETWEEN  
TAI HO ROAD AND MA TAU PA ROAD,  
TSUEN WAN**

**NEW TERRITORIES NORTH AND WEST DEVELOPMENT OFFICE  
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT  
December 2005**



## **1. BASIC INFORMATION**

### **Project Title**

- 1.1 Widening of Yeung Uk Road between Tai Ho Road and Ma Tau Pa Road, Tsuen Wan

### **Purpose and Nature of Project**

- 1.2 In accordance with approved development plans, there are new developments in the vicinity of the West Rail Tsuen Wan West Station comprising 11500 flats, 4500 apartment units/hotel rooms and non-domestic GFA of 340000 m<sup>2</sup> scheduled to be in place in stages in the period before 2010. It is envisaged that by 2010, motorists along the road would experience congestion when all developments are in place. As advised by Transport Department, the traffic conditions on the existing dual two-lane carriageway for the section of Yeung Uk Road between Tai Ho Road and Ma Tau Pa Road would become unacceptable by 2010 from a traffic engineering viewpoint as a result of the traffic generated by the new developments.
- 1.3 To cope with the demand, the section of Yeung Uk Road between Tai Ho Road and Ma Tau Pa Road is recommended to be upgraded to a dual three-lane carriageway to provide relief with a service road and lay-by adjacent to the residential/commercial redevelopments.

### **Name of Project Proponent**

- 1.4 The Project Proponent is the New Territories North and West Development Office of Civil Engineering and Development Department, Government of the Hong Kong Special Administrative Region (HKSAR).

### **Location and Scale of Project and History of Site**

- 1.5 The Project is located at the southern part of Tsuen Wan near the existing Yeung Uk Road Municipal Services Building for the section of Yeung Uk Road from its junctions with Tai Ho Road to Ma Tau Pa Road of about 550 metres long. Yeung Uk Road is an existing dual two-lane carriageway which serves as a district distributor road in the southern part of Tsuen Wan. A location plan (Drawing no. NTW Z1293) is attached at Annex 1.
- 1.6 The scope of the Project includes the following:
- (a) widening of about 550 metres long Yeung Uk Road between Tai Ho Road and Ma Tau Pa Road from dual 2-lane to dual 3-lane carriageways;
  - (b) construction of service laybys and a westbound service road at Yeung Uk Road;
  - (c) realignment of about 200 metres long Ma Tau Pa Road and provision of a service layby thereat;

- (d) removal of existing structures including the electricity substation and those at the ex-sport ground at Yeung Uk Road;
- (e) associated works for landscaping, drainage, traffic aids, noise mitigation measures, E&M and utilities diversions; and
- (f) remaining works for modifications to two junctions of Yeung Uk Road with Ma Tau Pa Road and Tai Ho Road arising from nearby developments.

### **Number and Types of Designated Project to be covered by the Project Profile**

- 1.7 Only one project is covered in this project profile. It is a Designated Project (A1, part I of Schedule 2) under the Environmental Impact Assessment Ordinance.

### **Name and Telephone numbers of Contact Persons**

- 1.8 All queries regarding the project can be addressed to:

Mr K L Cheung      Senior Engineer/NTW4  
New Territories North & West Development Office  
Civil Engineering Development Department  
Tel. No.: 2417 6370

OR

Mr S M Lai          Engineer/18  
New Territories North & West Development Office  
Civil Engineering Development Department  
Tel. No.: 2417 6528

## **2. OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME**

- 2.1 The Project Proponent will engage consultants to undertake investigation, design and supervision of construction of the project. The consultancy work is planned to start in mid 2006. Works are scheduled to commence in mid 2008 for completion in 2010. The consultants work will include a detailed Environment Impact Assessment (EIA) in accordance with the requirement of the Environmental Impact Assessment Ordinance.
- 2.2 The consultants will be asked to liaise with the following authorities regarding the possible interface issues with the following projects (as shown on Drawing No. NTW Z1293 at Annex 1) which are anticipated to be implemented in the near future :

#### Authorities

Project Manager/New Territories North  
and West, Civil Engineering and  
Development Department

#### Projects

Tsuen Wan Road Upgrading between Tuen  
Mun Road and Kwai Tsing Road

Kowloon-Canton Railway Corporation	“Comprehensive Development Area” at and near West Rail Tsuen Wan West Station (shown as “TW5”, “TW6” and “TW7” at Tsuen Wan Town Lot 401, 402 and 403 respectively on Drawing No. 1293 at Annex 1)
Urban Renewal Authority	- Comprehensive Development at Tsuen Wan Town Lot 394  - Proposed Comprehensive Development at Tsuen Wan Town Lot 398
Developers	- Mixed Hotel and Commercial Development at No. 8 Yeung Uk Road, Tsuen Wan Town Lot. 353, Tsuen Wan  - Service Apartment on Tsuen Wan Town Lot. 373 at Yeung Uk Road, Wang Lung Street, 1-9, Fui Yiu Kok Road and Ma Tau Pa Road, Tsuen Wan  - Land Sale Site at Yueng Uk Road, Tsuen Wan (to be known as Tsuen Wan Town Lot 393)

### **3. POSSIBLE IMPACT ON THE ENVIRONMENT**

- 3.1 The likely environmental impacts of the proposed works that may arise during both construction and operational phases are described below:

#### **Gaseous emissions**

- 3.2 Vehicle and plant exhaust emissions from the site are not considered to be a significant source of air pollutants during the construction phase. However, vehicular traffic will be the main source of gaseous emissions during the operational phase. Gaseous emissions shall be assessed and the associated mitigation measures shall be recommended, where necessary, under the EIA study, such that the air quality is complied with the Air Pollution Control Ordinance.

#### **Dust**

- 3.3 Potential impacts arising from the construction phase would include dust generated due to exposed site areas, stockpiling of materials, movement of vehicles along the road and excavation and handling of construction materials. In general, dust control measures of the Air Pollution Control (Construction Dust) Regulation shall be followed to suppress the dust emission during the construction phase. During operational phase, particulates will be generated from vehicle emissions. The air

quality shall be assessed and the associated mitigation measures shall be recommended, where necessary, under the EIA study, such that the air quality is complied with the Air Pollution Control Ordinance.

### **Noisy operations**

- 3.4 During the construction phase, dominant powered equipment and machineries which are expected to generate noise include: breakers (both portable and excavator-mounted), power units for various types of plant, including air compressors, excavators, ready mixed concrete lorries and poker vibrators, drilling machines and cranes. Moreover, major noisy activities include breaker road surface, excavation, concreting, road surfacing and handling of earth materials. The construction noise impacts shall be critically assessed in the EIA study and the contractor will be governed by the licensing conditions of construction noise permits issued under the Noise Control Ordinance. During the operational phase, traffic noise from the new road may have impact to the sensitive receivers. The traffic noise impacts shall be assessed and appropriate mitigation measures shall be recommended, where necessary, under the EIA study.

### **Solid waste**

- 3.5 Waste generated will comprise excavated materials, construction and demolition waste and general refuse during the construction phase. The management and disposal of the construction and demolition material would follow relevant procedures and requirements such as those specified in the Works Bureau Technical Circular (Works) No. 15/2003 – Waste Management on Construction Sites.

### **Water Quality**

- 3.6 The key issues pertinent to water pollution include discharge of contaminated wastewater, silting of the existing drainage etc. during the construction phase. It is anticipated that there would be no adverse impacts to water quality with the implementation of suitable mitigation measures. Similarly, the potential water quality impacts arising from land based construction activities could be readily controlled through a series of “best practice” methods to control wastewater discharges from the construction sites. The water quality will be assessed and appropriate mitigation measures will be recommended, where necessary, under the EIA study.

### **Landscape and Visual Impact**

- 3.7 Since the construction works will be carried out in the existing busy roads, significant landscape impact during the construction phase is not expected. The potential visual impacts on residents in the vicinity of the construction site during the construction phase shall be addressed with suitable mitigation measures. During the operational phase, there will be significant visual impacts if noise barriers/enclosures are required. These impacts will be assessed and appropriate mitigation measures will be recommended, where necessary, under the EIA study. Several trees adjacent to the TWTL No. 394 may have to be transplanted/removed subject to the recommendation of the EIA study.

## Traffic Generation

- 3.8 Temporary traffic diversions during the construction of the road widening works will be formulated in order to minimize the traffic impacts. It is considered that the traffic impacts will not be severe. For the projected future traffic flow of Yeung Uk Road after the road widening, these traffic flow figures will be assessed in parallel with the EIA study.

## 4. MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT

- 4.1 With reference to Annex 1, on the northern side of Yeung Uk Road, most of the existing buildings are old residential blocks with shops at ground floor level. There are also a municipal building, a primary school and a clinic.
- 4.2 On the southern side of Yeung Uk Road, there are ongoing mixed hotel and commercial developments at Tsuen Wan Town Lot. 353, ongoing residential developments at Tsuen Wan Town Lot. 394, and there will be a future commercial development at Tsuen Wan Town Lot 393. The area between Tsuen Wan Town Lot 394 and Tsuen Wan Road is district open space. The existing Tsuen Wan Road is about 300m south of Yeung Uk Road.
- 4.3 The major existing and planned sensitive receivers that may be affected by the proposed projects are summarized as follows. The locations of these receivers are shown in the drawing (Drawing no. NTW Z1294) at Annex 2.

### Air Sensitive Receivers

Receivers	Description	Use
ASR1	TW 5 (Bayside)	Residential
ASR2	TW 5 (Cityside)	Residential
ASR3	Skyline Plaza	Residential
ASR4	URA residential development at TWTL 398	Residential
ASR5	5-storey buildings at 67 Yeung Uk Road	Residential
ASR6	Tsuen Wan Caritas Clinic	Medical Clinics
ASR7	Mary of Providence Primary School	Educational institution
ASR8	Shek Pik New Village	Residential
ASR9	The Chinese Rhenish Church Tsuen Wan	Place of public worship
ASR10	Harmony Garden Block 1	Residential
ASR11	Harmony Garden Block 2	Residential
ASR12	URA residential development at TWTL 394	Residential

Noise Sensitive Receivers

<b>Receivers</b>	<b>Description</b>	<b>Use</b>
NSR1	TW 5 (Bayside)	Residential
NSR2	TW 5 (Cityside)	Residential
NSR3	Skyline Plaza	Residential
NSR4	Tsuen Wan Plaza – Block 1	Residential
NSR5	Tsuen Wan Plaza – Block 2	Residential
NSR6	URA residential development at TWTL 398	Residential
NSR7	The Blue Yard	Residential
NSR8	5-storey buildings at 67 Yeung Uk Road	Residential
NSR9	Tsuen Wan Caritas Clinic	Medical Clinics
NSR10	Mary of Providence Primary School	Educational institution
NSR11	Shek Pik New Village	Residential
NSR12	St. Francis Xavier's School	Educational institution
NSR13	Jade Plaza	Residential
NSR14	Bo Shek Mansion Block 1	Residential
NSR15	Bo Shek Mansion Block 3	Residential
NSR16	The Chinese Rhenish Church Tsuen Wan	Place of public worship
NSR17	Harmony Garden Block 1	Residential
NSR18	Harmony Garden Block 2	Residential
NSR19	URA residential development at TWTL 394	Residential

## **5. ENVIRONMENTAL PROTECTION MEASURES TO BE INCORPORATED IN THE DESIGN AND ANY FURTHER ENVIRONMENTAL IMPLICATIONS**

### 5.1 Measures to Minimize Environmental Impacts

#### (a) Air

The following dust control measures to minimize the dust nuisance during the construction phase should be considered:

- vehicle wheel and body washing facilities at site exists
- reduction of vehicular speed and unpaved roads
- regular wetting of the site (using browsers, sprays or vapour mists) to reduce dust
- the earthmoving activities must be carefully and well planned. Such planning shall include the transportation routes as well as protective

measures such as the employment of water-spraying and tarpaulin sheets to suppress the dust generated during and after excavation.

Dust is not expected to be an issue during the operational phase.

(b) Noise

To mitigate the construction noise impacts, the following measures should be considered:

- the use of silenced equipment
- the employment of alternative concrete breaking techniques
- the siting of equipment
- the careful scheduling of work, especially near the educational institution where examination periods shall be taken into consideration
- the use of temporary acoustic barriers
- the proper maintenance of equipment
- the utilization of construction noise specification and clauses
- adequate site supervision to ensure that every practical mean is utilized to minimize the noise impacts

To reduce traffic noise during the operational phase, the following measures should be considered:

- noise enclosure and/or barrier
- noise reducing road surfacing

This is a basically an at-grade road widening project. Provision of noise barriers at the sides of the road may not be practicable as this may affect the business of the shops, and may be intrusive visually. Also it should be noted that due to the layout of the service road and the bus-stops, entrances and exits etc, the provision of noise barriers without substantial breaks may not be possible. However, this will be reviewed during the Environmental Impact Assessment study, together with the investigation of low-noise surfacing as an alternative direct mitigation measure and the possible need for indirect noise mitigation measures.

(c) Water

Measures include the provision of temporary drainage systems in accordance with EPD's guidelines, interceptor manholes to trap oil pollutant; appropriate means to trap debris and sedimentation of silt in the temporary drainage system prior to discharging into the drainage.

(d) Waste

The main source of solid waste during the construction phase will be excavated spoil. Other materials including surplus construction materials, used products and municipal type waste will also be generated. To minimize impacts, the following mitigation measures should be taken into consideration:

- solid materials and waste shall be removed from the site and taken to a designated disposal site
- construction vehicles to and from the site will be routed to avoid sensitive receivers where possible



No solid waste in excess of normal roadside litter will be expected during the operational phase.

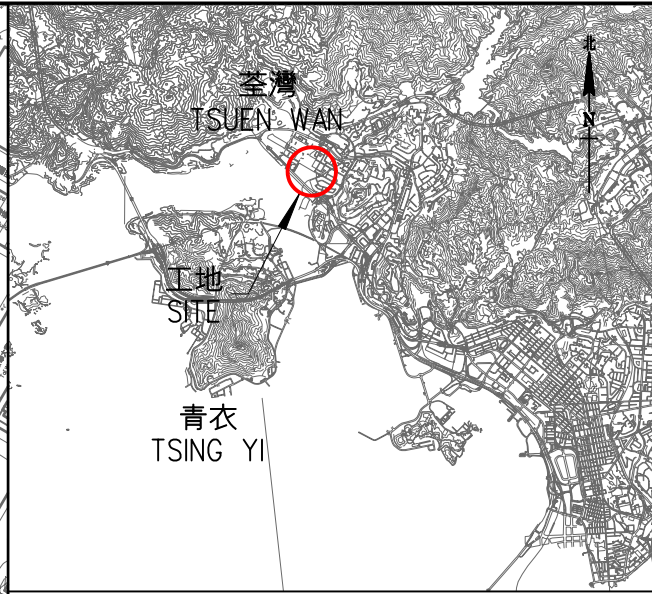
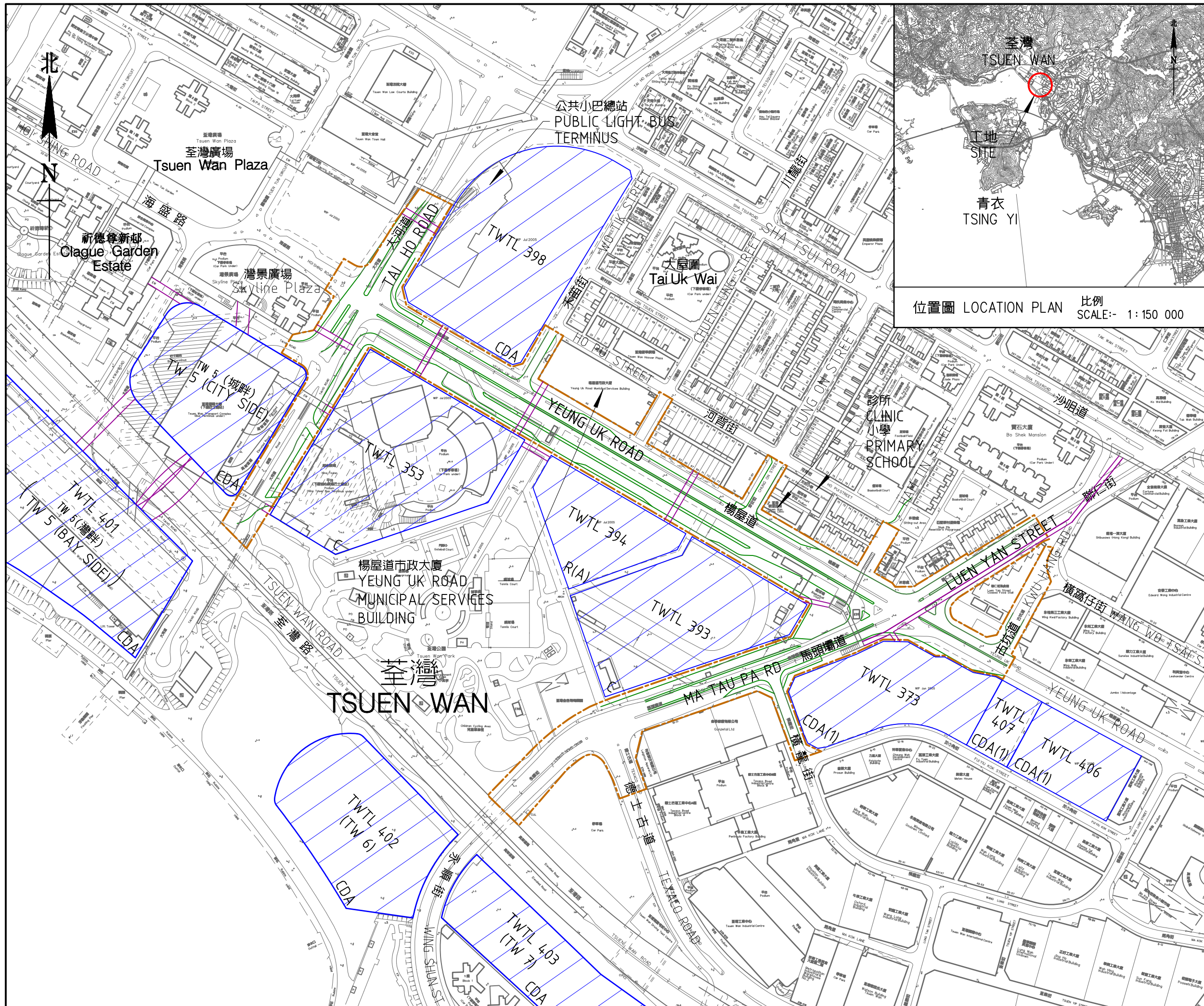
(e) Landscape and visual

Mitigation measures to minimize the landscape and visual impacts may include but not limited to:

- compensatory planting
- aesthetic design of noise mitigation measures

**6. USE OF PREVIOUSLY APPROVED EIA REPORTS**

6.1 No previous EIA has been carried out by this Office for this project.



位置圖 LOCATION PLAN 比例 SCALE:- 1:150 000

註釋 NOTES :

圖例 LEGENDS :

- 現時發展計劃 CURRENT DEVELOPMENT PROJECTS
- 項目範圍 PROJECT LIMIT
- 由其他人建造的行人天橋 FOOTBRIDGES TO BE CONSTRUCTED BY OTHERS
- 建議的擴闊工程 PROPOSED ROAD WIDENING

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

	姓名 name	簽署 initial	日期 date
繪圖 drawn	Y. L. CHAU	SIGNED	21.11.05
核對 checked	S. M. LAI	SIGNED	21.11.05

核准 approved	日期 date
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工程編號 project no. 324TH

檔案編號 file no.

合約編號 contract no.

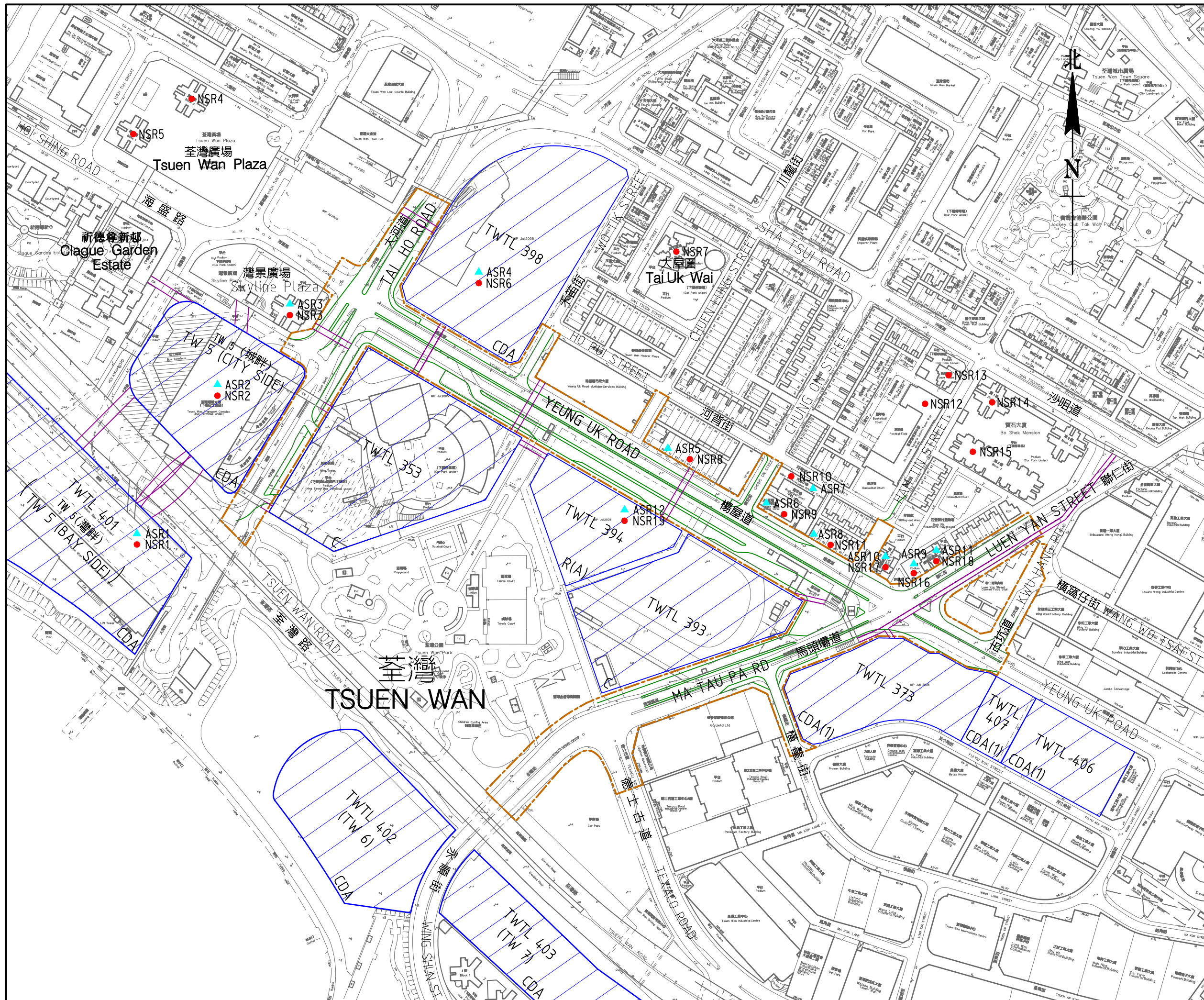
合約 contract

圖則名稱 drawing title  
 荃灣大河道與馬頭壩道之間一段楊屋道的擴闊工程  
 WIDENING OF YEUNG UK ROAD BETWEEN TAI HO ROAD AND MA TAU PA ROAD, TSUEN WAN

圖則編號 drawing no.	比例 scale
NTW Z1293	1 : 3 000

辦事處 Office  
 新界西及北拓展處  
 NEW TERRITORIES NORTH AND WEST DEVELOPMENT OFFICE





註釋 NOTES :

圖例 LEGENDS :

- ▲ ASR 易受空氣污染影響的受體  
AIR SENSITIVE RECEIVER
- NSR 噪音感應強的地方  
NOISE SENSITIVE RECEIVER
- CDA 現時發展計劃  
CURRENT DEVELOPMENT PROJECTS  
參閱荃灣分區計劃大綱圖的規劃地帶  
ZONING REFERS TO TSUEN WAN OUTLINE ZONING PLAN
- PROJECT LIMIT 項目範圍  
PROJECT LIMIT
- 由其他人建造的行人天橋  
FOOTBRIDGES TO BE CONSTRUCTED BY OTHERS
- 建議的擴闊工程  
PROPOSED ROAD WIDENING

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

	姓名 name	簽署 initial	日期 date
繪圖 drawn	Y. L. CHAU	SIGNED	06.12.05
核對 checked	S. M. LAI	SIGNED	06.12.05

核准 approved

	日期 date
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工程編號 project no. 324TH

檔案編號 file no.

合約編號 contract no.

合約 contract

圖則名稱 drawing title  
荃灣大道與馬頭壩道之間一段楊屋道的擴闊工程——易受空氣污染影響的受體及噪音感應強的地方  
WIDENING OF YEUNG UK ROAD BETWEEN TAI HO ROAD AND MA TAU PA ROAD, TSUEN WAN—LOCATION OF AIR AND NOISE SENSITIVE RECEIVERS

圖則編號 drawing no.

NTW Z1294

比例 scale  
1 : 3 000

辦事處 office

新界西及北拓展處  
NEW TERRITORIES NORTH AND WEST DEVELOPMENT OFFICE

