



33/F, Revenue Tower, 5 Gloucester Road, Wan Chai, Hong Kong

香港灣仔告士打道 5 號稅務大樓 33 樓

## **ACE-EIA Paper 3/2016**

*For advice on 12 September 2016*

# **Environmental Impact Assessment Ordinance (Cap. 499) Environmental Impact Assessment Report**

## **Police Facilities in Kong Nga Po**

### **PURPOSE**

This paper presents the key findings and recommendations of the Environmental Impact Assessment (EIA) report on “Police Facilities in Kong Nga Po” (the Project) submitted under section 6(2) of the Environmental Impact Assessment Ordinance (EIAO) (Application No. EIA-239/2016). The Civil Engineering and Development Department (CEDD) (the applicant) and their consultants will present the report at the meeting of EIA Subcommittee.

### **ADVICE SOUGHT**

2. Members’ views are sought on the findings and recommendations of the EIA report. The Director of Environmental Protection (DEP) will take into account comments from the public and the Advisory Council on the Environment (ACE) in deciding whether or not to approve the EIA report under Section 8(3) of the EIAO.

### **BACKGROUND**

3. The “Land Use Planning for the Closed Area” study completed in 2010 suggests to further review the development potential of land released from the

Closed Area, including Kong Nga Po (KNP), a rural area in the North District as shown in **Figure 1**, with very limited existing development. CEDD carried out further review over the relevant planning, environmental and overall development factors and concluded that, in comparison with potential low-density residential development, the provision of police training facilities at KNP is more desirable.

4. An engineering feasibility study including an environmental impact assessment was commissioned by CEDD to confirm the feasibility and environmental acceptability of co-locating various police training facilities at KNP. The site is characterized by a number of platforms of disturbed land created by past activities as a borrow site on a hilltop.

5. The applicant submitted the EIA report for the Project for approval. The DEP, in conjunction with the relevant authorities, considered that the EIA report met the requirements in the EIA Study Brief and the Technical Memorandum on EIA Process (TM), for the purpose of exhibiting the report for public inspection, under Section 7(4) of the EIAO.

## **NEED FOR THE PROJECT**

6. Hong Kong Police Force (HKPF) operates a number of existing police training facilities in Hong Kong as part of its Hong Kong Police College. These existing police facilities are currently scattered throughout Hong Kong. The Project is to co-locate various existing training facilities within the North District, and this centralized arrangement shall enable better site utilization and operation efficiency for police training. It will also release the land currently occupied by existing facilities in the more developed area in Kwu Tung North and Fanling North areas for other development.

## **ENVIRONMENTAL BENEFITS**

7. Because of the nearby existing San Uk Ling Firing Range, the KNP site itself is suitable for the proposed facilities. Currently, the police facilities proposed to be co-located at KNP are scattered spatially and close to existing and planned residential areas. By co-locating these police facilities to a centralized location in KNP, the overall environmental impacts and the overall number of

sensitive receivers affected would be reduced. The EIA report assessed that the Project will fully comply with the EIAO requirements with no adverse residual environmental impacts. Further, the Project would include provision of public sewerage network and stormwater drainage system to improve water quality of watercourses in the area.

## **DESCRIPTION OF THE PROJECT**

8. The Project consists of site formation and building works for the co-location of various police facilities in the Project site at KNP as well as improvement works to a section of the existing KNP Road, a viaduct of about 95m between abutments, and associated works such as slope works and retaining walls. The location of the Project is shown in **Figure 2**. The scope of the Project comprises the following key elements:

- (i) a Firing Range (relocated from Lo Wu);
- (ii) a second Firing Range (relocated from Ma Tso Lung);
- (iii) a Police Driving and Traffic Training Facilities, including a multi-storey training complex (relocated from Fan Garden);
- (iv) a Helipad (relocated from Lo Wu);
- (v) a proposed Police Training Facility;
- (vi) an internal access road network with a 12m underpass; and
- (vii) associated infrastructure/utilities: (a) underground stormwater storage tank; (b) sewage pumping station (capacity approx. 150m<sup>3</sup>/day); and (c) petrol/diesel filling station (with vehicle washing area and vehicle charging area).

9. The Project covers the following work elements that are Designated Project (DP) under Schedule 2 of the EIAO:

- (i) Item B.2: A helipad within 300m of existing residential development; and

- (ii) Item O.5: An open firing range.

## **CONSIDERATION OF ALTERNATIVE OPTIONS**

10. The EIA report has considered various key design elements to optimize the development of the Project, including optimization of development layout and road access. The environmental benefits and dis-benefits of the various alternatives, including 3 layout options and 6 options for road access, have been evaluated. The recommended design has been chosen with a view to avoiding or minimizing environmental impacts where practicable. Some of the key environmental benefits arising from the final preferred layout option as compared with the original preliminary layout are highlighted below.

### **Avoidance and Minimization of Impacts**

- (i) By adopting a terrace design to match the existing stepped topography and to maximize the use of disturbed land on existing platforms at different levels, the generation of construction and demolition materials is minimized and the volume of surplus excavation material is reduced by 80,000m<sup>3</sup>;
- (ii) by adopting the minimum footprint requirement for individual facilities while keeping the maximum building height to no more than about 20m, the development footprint is reduced by 18,000m<sup>2</sup>; and
- (iii) by selecting the existing KNP Road as the preferred road access, less construction work is required, resulting in less disturbance and impacts to the environment. The overall width of the future improved KNP road is further minimized by eliminating the standard 1.5m verge between carriageway and footpath on the northern side, and by reducing the verge from 2m to 1m on the southern side wherever practicable. This would minimize slope works and the number of trees affected, so as to avoid adverse impacts to the maximum practicable extent.

## **SPECIFIC ENVIRONMENTAL ASPECTS TO HIGHLIGHT**

### **Noise Impacts**

11. According to the EIA, with the adoption of design and operation measures which include allowing only 1 helicopter in the air while the other helicopter idles on the helipad during 2-helicopter training, restricting approach/taking-off flight paths and flight angles, and implementing 2.5m high perimeter wall / boundary wall at Project site, the helicopter noise impact arising from the Project will comply with the noise criterion of 85 dB(A)  $L_{max}$  for both scheduled and emergency flights from 7am to 7pm.

12. For the period from 7pm to 7am the next day, only emergency use is allowed at the helipad. No residual helicopter noise impact is anticipated.

13. Other noise impacts including construction noise, road traffic noise and fixed plant noise are relatively minor and have been fully addressed in the EIA report. With the implementation of recommended mitigation measures, the Project will comply with the relevant requirements under the TM.

### **Ecological Impacts**

14. The Project site comprises five habitat types, including developed area, plantation, shrubland, grassland and orchard. Amongst these habitat types, grassland is dominant in the Project site. According to the assessment findings, ecological impacts from Project construction and operation will be limited to loss of habitats of relatively low ecological value. Notwithstanding this, the EIA recommends compensatory planting within the Project area.

15. Three flora species of conservation interest (*Brainea insignis* (蘇鐵蕨), *Keteleeria fortunei* (油杉) and *Spiranthes sinensis* (綬草)) were found within the Project site. These are either locally common/widespread or purposely planted. To minimize impact on these flora species, the EIA report proposed to conduct a detailed baseline vegetation survey prior to the commencement of site clearance. During construction phase, temporary protective fence will be erected to enclose the flora species of conservation interest to be preserved. A proper transplantation proposal will be prepared and implemented if individuals of flora species of conservation interest are identified as not practicable to be preserved on site.

16. Two butterfly species of conservation interest (Small Three-ring and Swallowtail) were found in the grassland habitat within the Project site. To minimize potential impact on these butterfly species, the EIA report proposed the inclusion of some common grass species which are the larval food plants of Small Three-ring and Swallowtail in the proposed vegetation planting or the Landscape Master Plan. The EIA also revealed large availability of grassland habitat as well as larval food plants in the vicinity.

### **Landscape and Visual Impacts**

17. Within the Project site there are 8,726 existing trees identified, and about 5,717 existing trees will be affected under the Project. For the affected trees, about 4,317 are found within the proposed training facilities site boundary and about 1,400 along KNP Road. The broad-brush tree and vegetation survey conducted under the EIA indicates that the affected trees are mainly exotic species commonly used for engineering schemes. The EIA recommends planting of approximately 5,869 new trees, comprising principally of native trees selected for their ecological value to the area, as an important part of the landscape mitigation strategy. For the two species of conservation concern affected, i.e. the undersized seedlings of *Aquilaria sinensis* (土沉香) and about 80 nos. *Keteleeria fortunei* (油杉) along KNP Road, the EIA recommends transplantation to the proposed woodland buffer areas within Project site. Other affected trees will be felled.

### **Other Environmental Impacts**

18. Other impacts including air quality, water quality, land contamination, waste management, hazard to life, sewerage and sewage treatment implications are relatively minor and have been fully addressed in the EIA report. With the implementation of recommended mitigation measures, the Project will comply with the relevant requirements under the TM.

## **ENVIRONMENTAL MONITORING AND AUDIT**

19. The EIA report includes an Environmental Monitoring and Audit (EM&A) Manual which recommends an EM&A programme during the construction and operation phases of the Project. Key recommended EM&A requirements cover air, noise, water quality, sewerage, waste management, land contamination, ecology, landscape and visual and hazard to life issues.

## **PUBLIC CONSULTATION**

20. The applicant has made the EIA report, EM&A Manual and Executive Summary available for public inspection under the EIAO from 4 August to 2 September 2016. The public comments received will be summarized in a gist to be provided to Members separately.

**September 2016**

**Environmental Assessment Division**

**Environmental Protection Department**

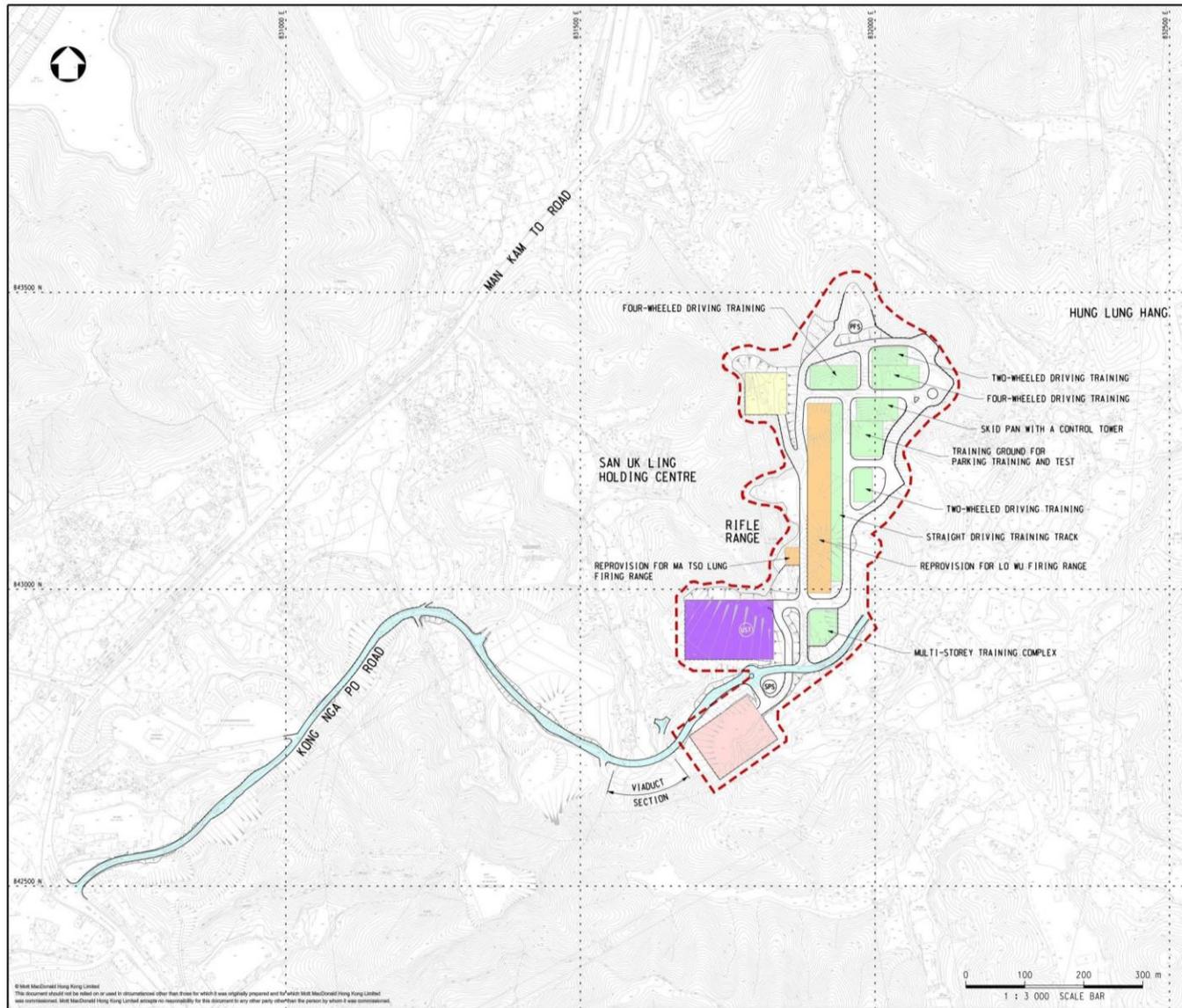


**Project Title: Police Facilities in Kong Nga Po**

**Application No.:EIA-239/2016**

**Figure 1: Location Plan**





**LEGEND:**

- PROPOSED KONG NGA PO DEVELOPMENT AREA
- POLICE DRIVING AND TRAFFIC TRAINING FACILITIES
- FIRING RANGE
- HELIPAD
- PROPOSED POLICE TRAINING FACILITY
- WEAPONS TRAINING FACILITIES
- PROPOSED KONG NGA PO ROAD IMPROVEMENT WORKS
- SPS SEWAGE PUMPING STATION
- PFS PETROL / DIESEL FILLING STATION
- UST UNDERGROUND STORMWATER STORAGE TANK

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**Figure 2: Project Location Plan**

