

Drainage Services Department

Project Profile

Drainage Improvement in Northern New
Territories - Package C (Remaining Works)

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1 PROJECT INFORMATION

1.1 PROJECT TITLE

The project title is “*Drainage Improvement in Northern New Territories –Package C (Remaining Works)*” (hereafter referred to as the Project).

1.2 PURPOSE AND NATURE OF THE PROJECT

The purpose of the Project is to alleviate flooding problems in Ping Che / Ta Kwu Ling Area by improving part of the Ping Yuen River in Ta Kwu Ling in accordance with the recommendation of “*Drainage Master Plan Study in the Northern New Territories*”.

1.3 NAME OF THE PROJECT PROPONENT

The Project Proponent is the Drainage Services Department (DSD).

1.4 LOCATION AND SCALE OF THE PROJECT

The Project comprises the improvement of Ping Yuen River through construction of 1.9 km of Drainage Channel TKL05 in Ta Kwu Ling. The proposed location of the drainage improvement works identified to be designated project is shown in *Figures 1.1 and 1.2*.

1.5 NUMBER AND TYPES OF DESIGNATED PROJECT TO BE COVERED BY THIS PROJECT PROFILE

In accordance with *Schedule 2 Part I, Item I.1 – Waterways & Drainage Works* of the *Environmental Impact Assessment Ordinance* (EIAO), the following drainage improvement works is classified as a designated project:

- Drainage channel at Ta Kwu Ling (i.e. Drainage Channel TKL05), which discharges into an area (i.e. Deep Bay) of less than 300 m from the nearest boundary of an existing Site of Special Scientific Interest (i.e. Mai Po Marshes) and Conservation Area (Mai Po Conservation Area) under *Item I.1(b)* of *Schedule 2 Part 1* of EIAO.

1.6 *NAME AND TELEPHONE NUMBER OF CONTACT PERSON*

Name, Position & Title	Telephone Number
Ms Cannifer FUNG, Engineer, Drainage Projects Division, Drainage Services Department 45/F, Revenue Tower Wanchai	2594-7346
	Facsimile Number
	2827-8700

2 **OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME**

2.1 **RESPONSIBILITIES OF PARTIES**

DSD is responsible for the overall planning, design, construction and operation of the Project. Consultants have been engaged to undertake site investigation, impact assessments, design and construction supervision of the Project. The Project will be implemented by Contractor(s) to be appointed by the Project Proponent at the subsequent stage.

2.2 **PROJECT TIME TABLE**

According to the latest programme, the key dates of the design and construction of Drainage Channel TKL05 are as follows:

Anticipated Date	Activity
October 2010	Commencement of Detailed Design
September 2011	Completion of Detailed Design
July 2012	Commencement of Construction Works
December 2014	Completion of Construction Works

2.3 **INTERACTIONS WITH OTHER PROJECTS**

The Project will have interactions with the following project that might cause environmental impacts due to cumulative effects:

- *Regulation of Shenzhen River Stage IV*, undertaken by the Drainage Services Department.

3 *POSSIBLE IMPACTS ON THE ENVIRONMENT*

3.1 *GENERAL*

The Project comprises construction of Drainage Channel TKL05 and associated drainage facilities. Its potential environmental impacts are associated with construction and operation.

The construction phase impacts will mainly involve site clearance, site preparation, earthworks and other general construction activities. The operation phase works will primarily be the routine maintenance and operation of the completed drainage channel. No other major activities are expected.

The following sections consider the likely construction and operation activities and associated potential environmental impacts that may arise.

3.2 *CONSTRUCTION PHASE*

3.2.1 *Air*

The works of the Project during construction stage have the potential to generate dust and gaseous emission generated from construction activities and construction vehicles. Such emissions may results in short term impacts on local air quality. The related construction activities in this respect mainly include spoil transport, construction traffic and excavation works.

3.2.2 *Noise*

The powered mechanical equipment and plant have the potential to generate temporary noise upon noise sensitive receivers (NSRs) which include village houses and residential areas. The equipment and plant likely to be used include air compressors, generators, hydraulic or pneumatic breakers, excavation plant and dump trucks.

3.2.3 *Waste*

Waste such as excavated materials, used and surplus construction materials, chemical wastes and general refuse would be generated from construction activities. Any contaminated soil shall be disposed of strictly in accordance with the required procedures, however, it is not expected that large volume of contaminated material will be present.

3.2.4 *Water*

Potential water quality impact may arise from site run-off carrying suspended solids, fuel or oil spill from construction plant, discharge of wastewater from construction site and sewerage generated by workforce. Further assessment

will be carried out to determine the significance of these potential impacts and the requirement for any mitigation measures during construction.

3.2.5 Ecology

The works of the Project may have the potential to impose the direct loss of or disturbance to existing habitats, including active agricultural land and wetlands, along with their associated flora and fauna, as well as direct disturbance to the existing river and beds. Works may also result in indirect disturbance to adjacent habitats and their associated flora and fauna. Further assessment will be carried out to determine the significance of these potential impacts and the requirement for any mitigation measures during construction.

3.2.6 Cultural Heritage

The works of the Project may be close to some archaeological sites (eg Ping Che Archaeological Site) or declared monument and as such construction works may have the potential to cause impacts to these sensitive receivers should they be present. Comments from the Antiquities and Monuments Office will be sought to avoid any unacceptable adverse impacts to cultural heritage during construction.

3.2.7 Landscape and Visual

The works of the Project may potentially lead to loss of vegetations and trees within the work site. The presence of construction equipment and stockpiled materials on work site may also be a source of visual impacts to nearby sensitive receivers. A landscape and visual impact assessment will be conducted to investigate the significance of these potential impacts and the requirement for any mitigation measures during construction.

3.3 OPERATION PHASE

It is not expected that the Project will generate any significant environmental impacts in the operation phase.

3.4 CONCURRENT PROJECTS

It is noted that other drainage channels in the area are undergoing rehabilitation and improvement works. Depending on the schedule of progress, there may be potential for these works to run concurrently with the proposed Project. Cumulative environmental impacts generated by the Project and any other concurrent project shall be assessed.

4 MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT

4.1 EXISTING AND PLANNED SENSITIVE RECEIVERS

The Project area is located in proximity to Lei Uk Village, Tai Po Tin Village, Fung Wong Wu Village and Ping Che New Village, amongst other isolated rural houses. It is likely these areas will be considered as air and noise sensitive receivers. The Ping Che Archaeological Site is also located to the south of the Project area.

Such sensitive receivers are not exhaustive and will be reviewed during the EIA study.

4.2 MAJOR ELEMENTS OF SURROUNDING ENVIRONMENT AND LAND USES

The area covered by the Project runs from the Ping Che Road at Ping Che New Village, alongside Tai Po Tin through to Lei Uk Village. The habitats within the potential study area for the project primarily consist of cultivated land of both active and abandoned agricultural land, along with smaller areas of shrubby grasslands, mixed shrubland, wetlands, natural watercourses, modified watercourses and rural industrial storage / containers and urban residential and highly modified areas. Residential areas are mostly rural in nature and mainly comprise agricultural and village houses.

The area is also bounded by the Frontier Closed Area to the north. The key land features based on the Outline Zoning Plan are Agricultural Land with small areas of isolated Green Belt, Government / Institution / Community, Industrial and Village Type Development.

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

To alleviate potential environmental impacts associated with the proposed Project, the following mitigation measures are recommended to be implemented on site:

- Regular checking should be undertaken to ensure that the work site boundaries are not exceeded and that no damage occurs to surrounding areas;
- Implementation of mitigation measures specified in EPD's *Practice Note for Professional Persons, Construction Site Drainage - Non-statutory ProPECC PN1/94* to control site runoff and drainage at the work site during construction;
- Implementation of noise control measures at the construction site to reduce impacts of construction noise to habitats adjacent to works areas in accordance with EPD's *Practice Note for Professional Persons, Noise from Construction Activities - Non-statutory (ProPECC PN2/93)*; and,
- Implementation of dust control measures at the construction site to minimize dust nuisance to adjacent habitats during construction activities in accordance with the *Air Pollution Control (Construction Dust) Regulation of Air Pollution Control Ordinance (APCO)*.

Specific mitigation requirements to alleviate potential ecological impacts will be developed at the detailed design stage, based on findings of the detailed ecological impact assessment. Measures to be examined shall include the adoption of environmental friendly design features in the channel design as far as possible, such as planting of riparian vegetation along channel embankments, abandoned meander management to provide wetland habitats, use of natural bottom lining, provision of shallow ponds and aquatic planting bays at the base of the channels.

Specific mitigation requirements to minimize any potential cultural heritage impacts associated with the proposed improvement works for Drainage Channel TKL05 will also be developed at the detailed design stage, based on the findings of the EIA.

6 USE OF PREVIOUSLY APPROVED EIA REPORTS

In March 2007, an EIA Report for Drainage Improvement in Northern New Territories - Package C (EIA-128/2007) was submitted to EPD, covering six drainage channels in Man Uk Pin, Lung Yeuk Tau and Lin Ma Hang, New Territories. This EIA concluded that there would be no adverse long term or cumulative effects/impacts on the environment and the Environmental Permit (EP) was granted on 9 July 2007 (EP-277/2007), with a Variation the EP received on 1 December 2009 (EP-277/2007/A).

The EIA Report for Drainage Improvement in Northern New Territories - Package C is related to the EIA of this Project as it examined similar drainage improvement works in Northern New Territories.


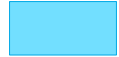
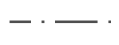
7 **SUMMARY**

This project profile has presented information concerning the intention of the Drainage Services Department to improve the Ping Yuen River through the construction of the Drainage Channel TKL05 in Ta Kwu Ling, Northern New Territories. The Project comprises the construction of about 1.9 km of drainage channels and associated drainage facilities.

The EIA Study will pay particular attention to impacts to any sensitive receivers identified and mitigation measures will be proposed, where necessary, in accordance with the requirements of the *EIAO*.

The English version of this Project Profile shall prevail wherever there is a discrepancy between the English version and the Chinese version.

Key

-  Drainage Channel TKL05 (Preliminary Design)
-  River
-  HKSAR Boundary

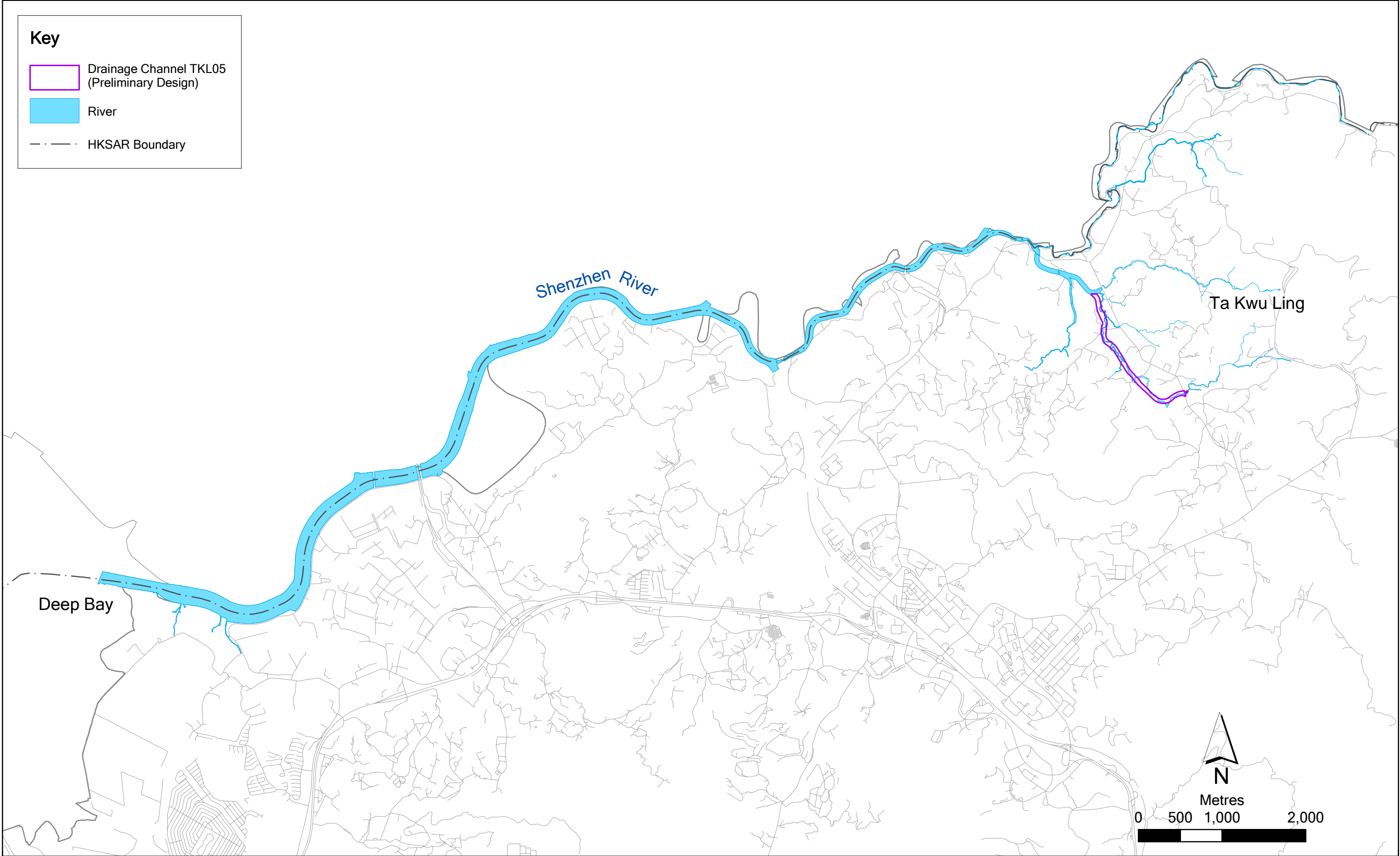


Figure 1.1

Location Plan of the Project

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Date: 21/07/2010

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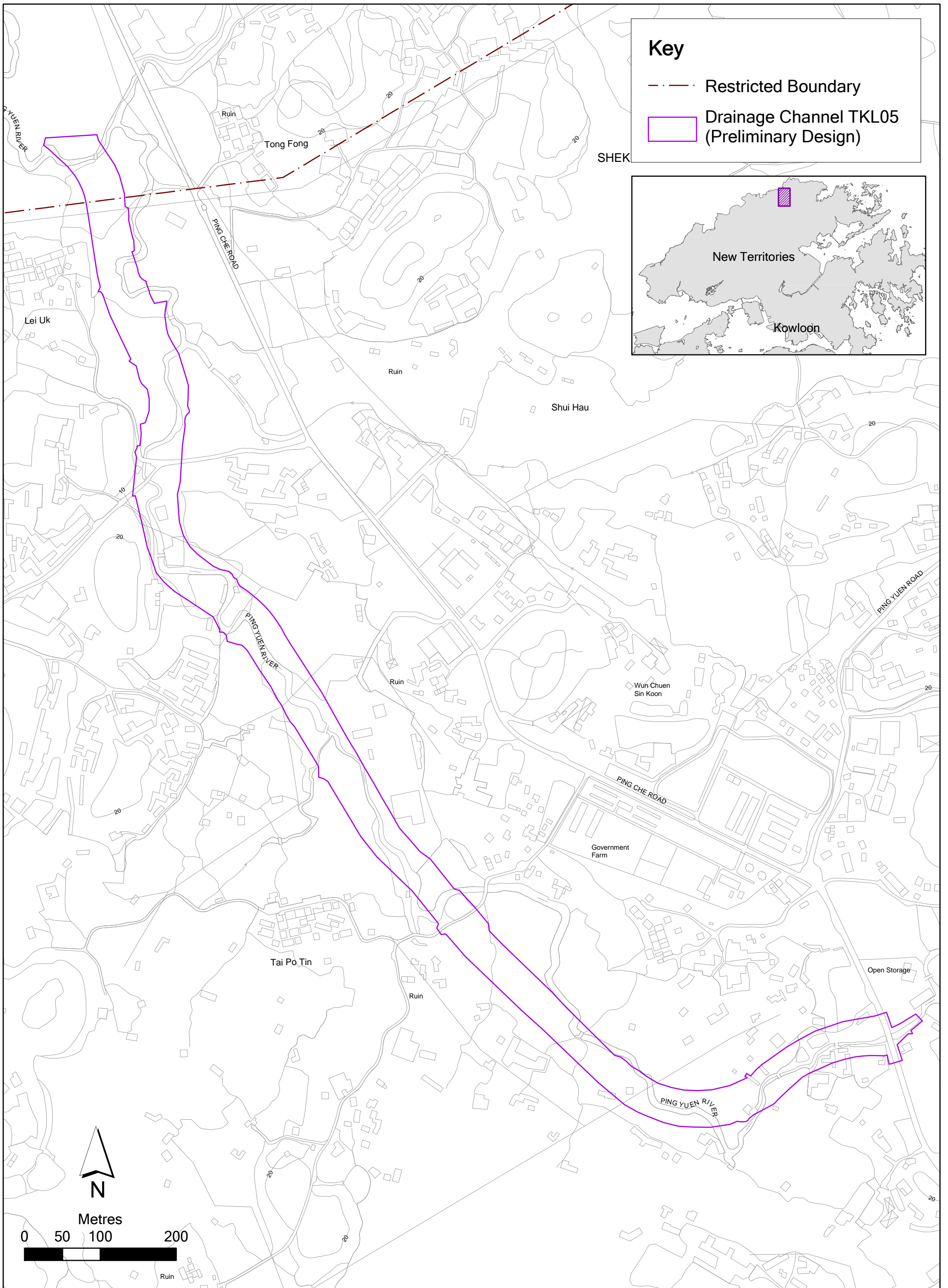


Figure 1.2

Proposed alignment for Drainage Channel TKL05

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