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ACE-EIA Paper 1/2013
For advice

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

Construction of Cycle Tracks and the Associated Supporting Facilities at Nam Sang Wai, Yuen Long

PURPOSE

This paper is to present the key findings and recommendations of the Environmental Impact Assessment (EIA) Report on "Construction of Cycle Tracks and the Associated Supporting Facilities at Nam Sang Wai, Yuen Long" (hereafter known as the "Project") submitted under section 6(2) of the Environmental Impact Assessment Ordinance (EIAO) (Application No. EIA-205/2012). The Director of Environmental Protection (DEP), in conjunction with the relevant authorities, consider that the EIA report meets the requirements of the EIA Study Brief and the Technical Memorandum on EIA Process (TM) for purpose of public inspection under section 7(4) of the EIAO. Civil Engineering and Development Department (the applicant) and their consultants will present the report at the EIA Subcommittee meeting. Civil Engineering and Development Department (the applicant) and their consultants will present the report at the EIA Subcommittee meeting.

ADVICE SOUGHT

2. Members' views are sought on the findings and recommendations of the EIA report. DEP will take into account the comments from the Advisory Council on the Environment (ACE) and members of the public received under the EIAO in deciding whether or not to approve the EIA report.

BACKGROUND OF AND NEED FOR THE PROJECT

3. The Project is to construct cycle tracks with associated supporting facilities at Nam Sang Wai to connect with the existing cycle tracks in the area. It will provide a direct linkage between Tin Shui Wai and Nam Sang Wai and form an integral part of the cycle track network spanning from Sai Kung in the east to Tuen Mun in the west.

4. The Project is intended primarily for recreational use and for promotion of eco-tourism by providing cycle tracks with easy access and safe access. The proposed tracks alignments will route through the scenic areas in Tin Shui Wai and Nam Sang Wai for cyclists to enjoy scenic views and appreciate natural features along the cycle tracks.

5. On the need of the project, the project proponent has advised that without this Project, the cycle track network will be disconnected in the Tin Shui Wai and Nam Sang Wai section. Although cyclists can travel through the area on existing cycle tracks in the urban area of Yuen Long Town, these tracks are sub-standard in terms of design, not logically linked and cannot provide a safe and convenient network of dedicated tracks for cyclists around the Nam Sang Wai area. In addition, the existing cycle tracks facilities may not be able to cater for the growth of recreational cyclists in the future. The increasing number of users already creates conflicts between the bicycles and vehicles, particularly at Nam Sang Wai Road and Yau Pok Road. These potential safety concerns will not be resolved unless systematically designed cycle tracks are in place.

DESCRIPTION OF THE PROJECT

6. The Project comprises three sections, with Section 1 (S1) stretching from Tin Shui Wai to Shan Pui River and a proposed bridge crossing over Shan Pui River; Section 2 (S2) along Nam Sang Wai Road; and Section 3 (S3) along Yau Pok Road (**Figure 1**). The cycle track is approximately 9.2 km in length with a minimum width of 3.5m. Along the cycle tracks, three resting stations and one public toilet will be provided. Other ancillary provisions include bicycle parking racks, landscape works, education signage / guidance notes, traffic aids installation, street lighting, etc.

7. In meeting the objective of promoting eco-tourism, the cycle tracks and supporting facilities are designed to incorporate eco-tourism elements. The recommended eco-tourism elements include (i) subdued colour and wooden board panel pavements to match the natural environment; (ii) signage boards to assist visitors to appreciate the natural environment; and (iii) bicycle racks to allow cyclists to park and

enjoy the scenery (**Figure 2**).

8. The proposed cycle tracks, primarily for recreation, partly fall within the "Conservation Area" zones and Deep Bay Buffer Zones, and the proposed bridge crossing over Shan Pui River is over 100m in length between abutments. Accordingly, the Project is classified as a designated project by virtue of items A.8, P.1 and Q.1 of schedule 2 of the EIA Ordinance.

CONSIDERATION OF ALTERNATIVE ALIGNMENTS AND OPTIONS

9. In compliance with the Study Brief requirements, alternative cycle track alignments and options have been considered for avoidance/minimization of impacts on the ecologically sensitive areas. The revised cycle track alignments have taken into account environmental consideration, site constraints and comments received during consultation with conservation interest groups, Rural Committees, the Yuen Long District Council and various stakeholders. Key alternative alignments and options considered are highlighted below.

Avoidance

10. There have been a number of changes made to the original alignments (**Figure 3**) depicted in the Project Profile for application for an EIA Study Brief. The changes made to the cycle track alignments (**Figure 4**) to avoid causing adverse impact on the environmentally sensitive areas include :

(a) The proposed bridge crossing over Kam Tin River near the confluence with Shan Pui River, which records high usage by waterbirds, has been discarded. The connection of the cycle track network between Nam Sang Wai Road and Pok Wai Road will make use of the existing cycle track at Hung Mo Kiu (Cycle Tracks S2 & S3);

(b) The proposed cycle track alignment in the southern part of Nam Sang Wai, where marsh area and fish ponds prevail, has been removed to avoid wetland loss (Cycle Track S2);

(c) The western end of the proposed cycle track along Yau Pok Road has been cut short to avoid encroachment on Mai Po Inner Deep Bay Ramsar Site (Cycle Track S3); and

(d) The proposed bridge crossing over Shan Pui River near the confluence with Kam Tin River is relocated upstream to avoid the winter migratory birds habitat (Cycle Tracks S1 & S2).

Minimization

11. Besides consideration of alternative alignments to avoid environmental impacts, mitigation measures are also recommended to minimize the Project impacts, which include in main:

(a) The water quality impact arising from construction of the bridge over Shan Pui River will be addressed by undertaking the construction works in phases. Only one-thirds of the channel will be closed at anytime for construction works and watertight cofferdam will be provided to surround the works area to create a dry working environment;

(b) Construction works at Nam Sang Wai Road and Yau Pok Road will be suspended during the winter season (November to March);

(c) Quieter plant and movable noise barriers will be used during construction;

(d) Landscape planting and visual screen boards will be provided along the cycle tracks to minimize the potential visual disturbance to the nearby habitats during operation; and

(e) The cycle tracks are designed to mainly align alongside the existing carriageway to reduce the loss of natural habitat and avoid filling of fishponds. Where the cycle tracks have to route through fishponds, the loss of wetland habitat is minimized by adoption of retaining structures at pond bunds to support the cycle track.

SPECIFIC ENVIRONMENTAL ASPECTS TO HIGHLIGHT

Ecological Impact

12. The Project largely falls within ecologically sensitive areas. The ecological impact of the Project has been avoided as far as practicable by adoption of alternative cycle track alignments and design as well as the recommended mitigation measures.

13. About 0.21 ha of wetland will be directly affected by the Project. To address the direct loss of wetland (including pond bund area), the EIA report has recommended at least 1.5 ha of wetland enhancement area as compensation.

Landscape Impact

14. As the cycle tracks are mainly aligned along the existing roads, the vegetation located close to the roads will be affected. The affected trees are largely common landscaping species. A total of about 1,066 trees on site will be retained in situ and approximately 101 trees will be transplanted to new planting areas close to their current locations. The proposal includes felling of 461 trees and compensatory planting to be provided at a ratio of not less than 1:1 in accordance with the guidelines/criteria of Environment, Transport and Works Bureau Technical Circular (Works) No. 3/2006.

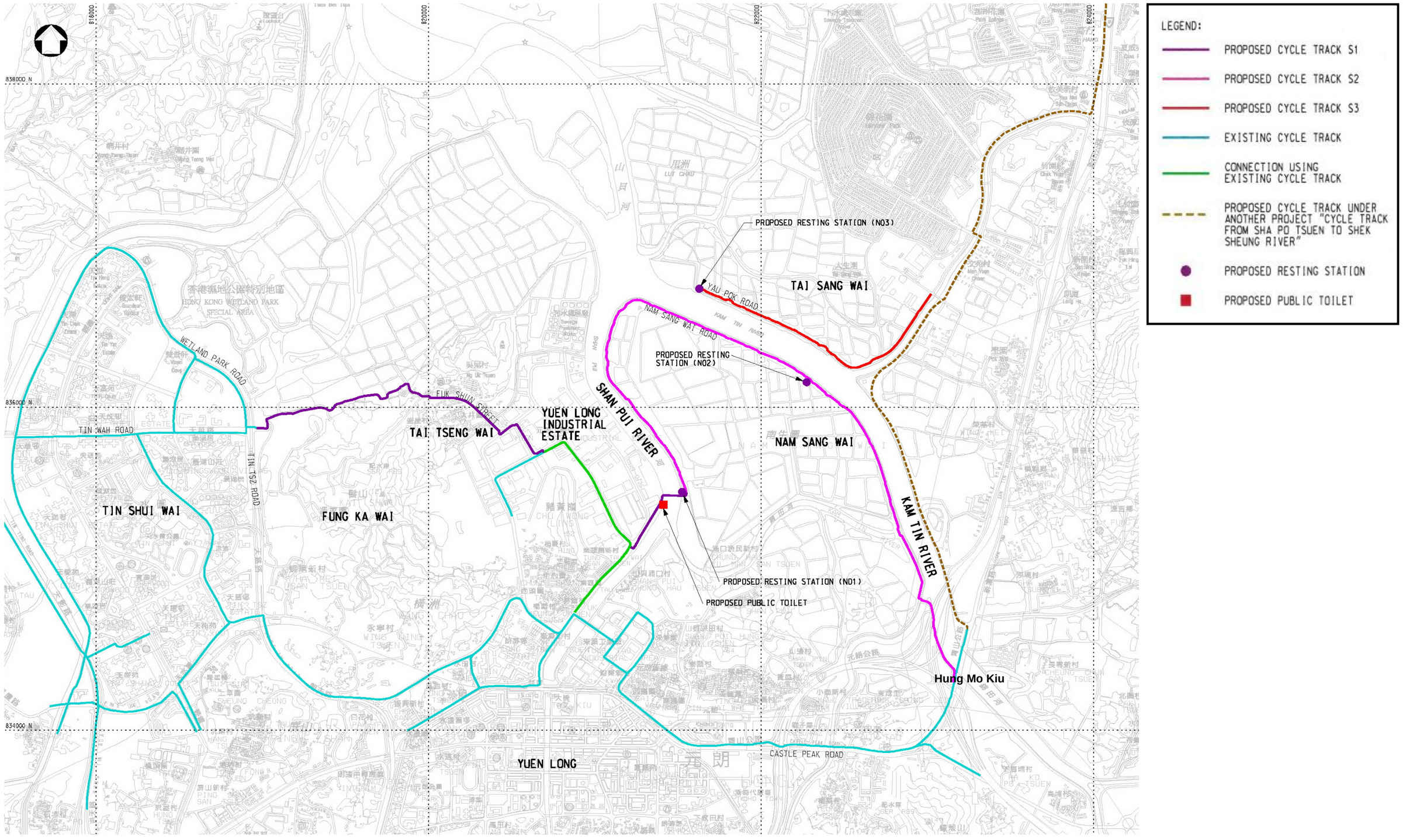
ENVIRONMENTAL MONITORING AND AUDIT

15. The EIA report includes an Environmental Monitoring and Audit (EM&A) Manual, which recommends an EM&A programme during both the construction and operation phases of the Project. Key recommended EM&A requirements include (i) noise and water quality monitoring during construction; and (ii) waterbirds monitoring during construction, and wetland enhancement area monitoring during construction and operation.

PUBLIC CONSULTATION

16. The applicant has made the EIA report, EM&A Manual and Executive Summary available for the public to comment under the EIAO from 6 March 2013 to 4 April 2013. Members will be informed of any public comments received by the Environmental Protection Department.

April 2013
Environmental Assessment Division
Environmental Protection Department



Project Title – Construction of Cycle Tracks and the Associated Supporting Facilities at Nam Sang, Yuen Long	Application No.: EIA – 205 / 2012
Figure 1 – The proposed three sections of the cycle tracks at Nam Sang Wai	

Possible design of screen board with subdue color and materials harmonize with the surrounding environment and bird guide for bird watching

Possible design of information board and resting station introducing wetland plantation along Kam Tin River and conservation of Ramsar Site

Bicycle racks for temporary parking

Possible design of wetland enhancement

Possible design of screen planting

Possible design of footpath with subdue color and materials harmonize with the surrounding environment

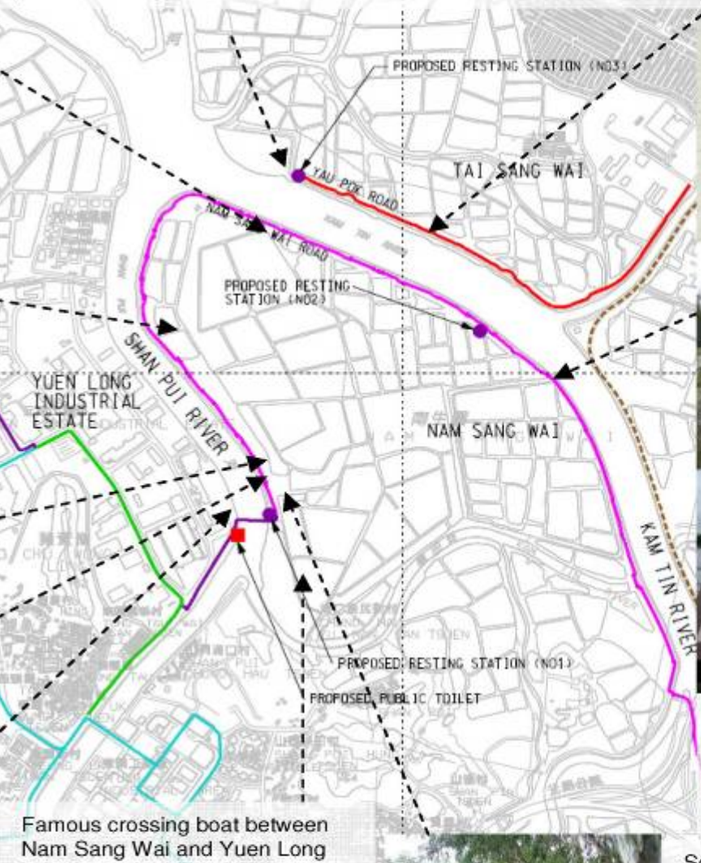
Possible design of sign boards to show the scenery hotspots direction and guidelines for bird watching

Possible bridge design with reference to overseas' study

Famous crossing boat between Nam Sang Wai and Yuen Long Old Town

Scenery hotspot for public appreciation of the nature

Possible design of information board or bird watching guide with reference to existing board along Nam Sang Wai Road



LEGEND:

- PROPOSED CYCLE TRACK S1
- PROPOSED CYCLE TRACK S2
- PROPOSED CYCLE TRACK S3
- EXISTING CYCLE TRACK
- CONNECTION USING EXISTING CYCLE TRACK
- PROPOSED CYCLE TRACK UNDER ANOTHER PROJECT "CYCLE TRACK FROM SHA PO TSUEN TO SHEK SHEUNG RIVER"
- PROPOSED RESTING STATION
- PROPOSED PUBLIC TOILET

Project Title – Construction of Cycle Tracks and the Associated Supporting Facilities at Nam Sang, Yuen Long

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Figure 2 – Potential enhancement measures for nature conservation and eco-tourism

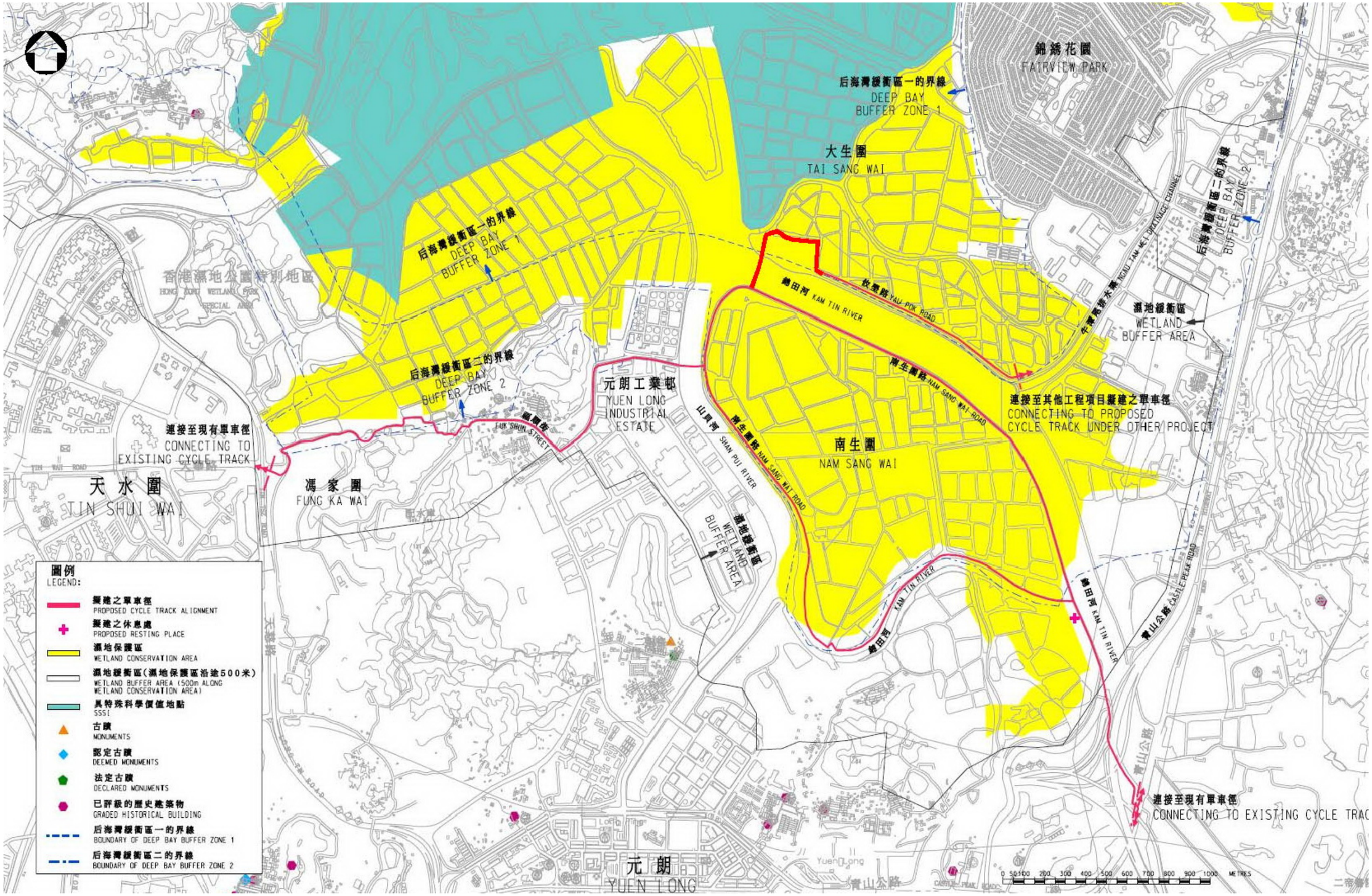

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Figure 3 – Proposed cycle track alignment in Project Profile	

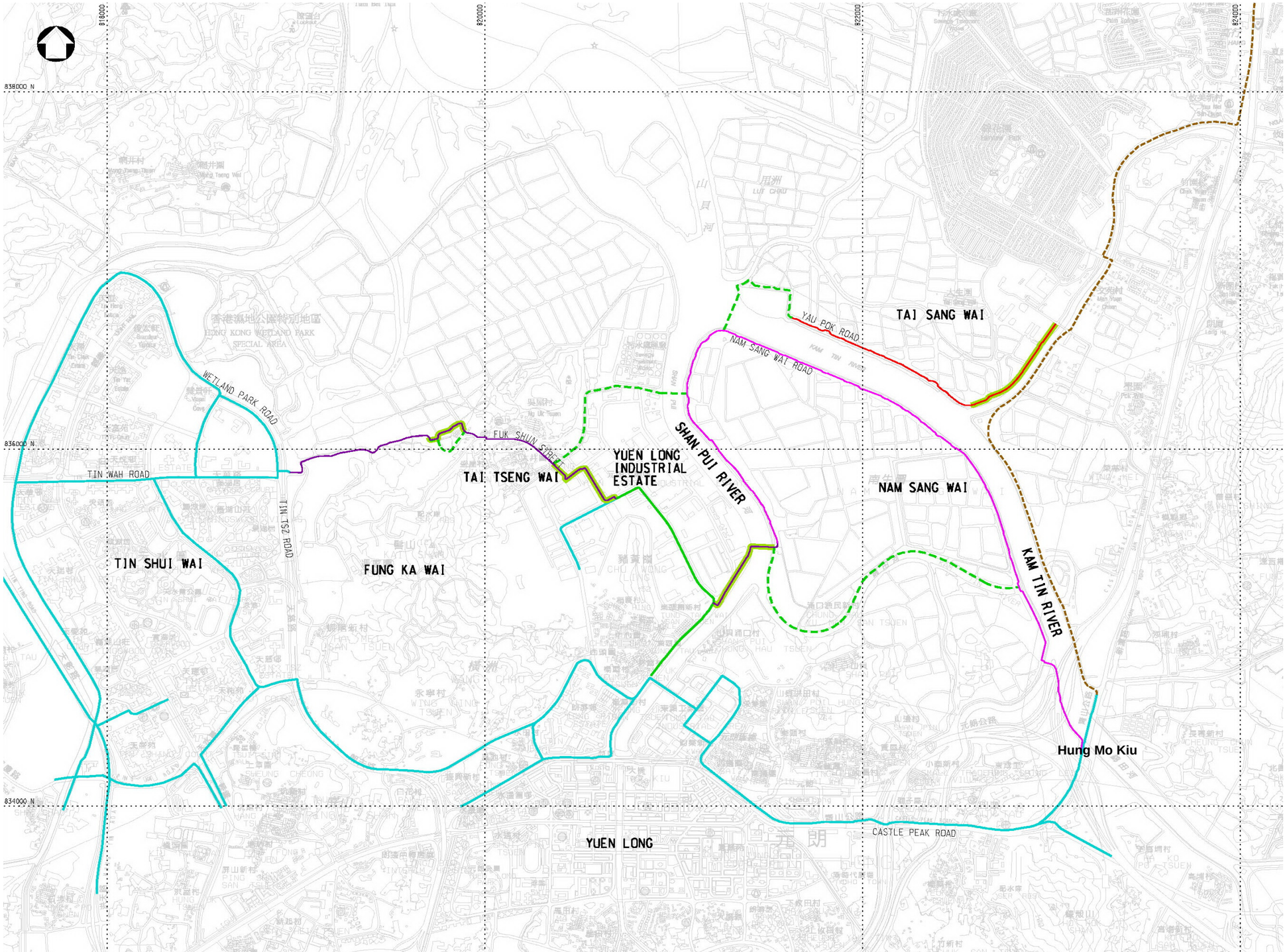

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Figure 4 – Major alignment adjustments after consideration of alternative options	