

ANNEX J

Assessment of Inland Alignment

Agreement No. CE 41/2014 (HY)

Boardwalk underneath Island Eastern Corridor – Investigation



土木工程拓展署
Civil Engineering and
Development Department



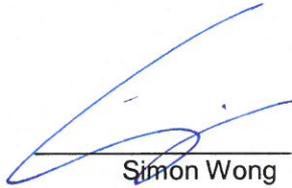
Agreement No. CE 41/2014 (HY)
Boardwalk underneath Island Eastern Corridor -
Investigation

Working Paper on Preliminary Assessment for Inland Alignment of Boardwalk

(Ref. R08-1)

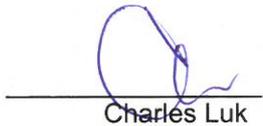
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20 November 2015

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20 November 2015

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1 INTRODUCTION

1.1 Background

1.1.1 In May 2009, the Planning Department commissioned the Hong Kong Island East Harbourfront Study (HKIEHS) to formulate a comprehensive plan for enhancing the Hong Kong Island East harbourfront, with a focus on improving connectivity and pedestrian accessibility of the harbourfront. A 3-stage public engagement programme was undertaken to solicit public views on the proposed enhancements and to build consensus on the proposals recommended in the HKIEHS. The HKIEHS was completed in March 2012.

1.1.2 Under the HKIEHS, a boardwalk of about 2km long was proposed to be constructed underneath the Island Eastern Corridor (IEC), from the future waterfront park recommended under the Wan Chai Development Phase II (WDII) project at Oil Street to Hoi Yu Street in Quarry Bay. The proposed boardwalk was well received by the public during the public engagement exercise.

1.1.3 In January 2012, the Civil Engineering and Development Department (CEDD) commissioned a Topical Study for Boardwalk underneath Island Eastern Corridor (Topical Study) to establish preliminary engineering feasibility of the proposed boardwalk and, as this proposed boardwalk lies within the statutory limit of Victoria Harbour and is therefore subject to the Protection of the Harbour Ordinance (PHO), to assess the implications of the PHO on the proposal, to facilitate further project planning and implementation.

1.1.4 In March 2015, CEDD commissioned this current assignment: “Boardwalk underneath Island Eastern Corridor - Investigation” under Agreement No. CE 41/2014(HY). The objective of this assignment is to review the feasibility of the proposed boardwalk under the IEC to demonstrate its compliance with the PHO before proceeding with the detailed design and construction of the project. An initial task in this regard is to review the findings of the Topical Study from the PHO perspective and demonstrate preliminary compliance with the PHO.

1.2 Purposes of Working Paper

1.2.1 The purposes of this working paper are to:

- (a) review the existing inland pedestrian route from Oil Street to Hoi Yu Street and assess the its accessibility to existing waterfront (**Section 2**); and
- (b) develop an alternative inland alignment of the boardwalk and preliminarily assess the associated impacts caused (**Section 3**).

2 REVIEW ON ACCESSIBILITY OF EXISTING WATERFRONT

2.1 Existing Inland Pedestrian Route

2.1.1 For the pedestrians traveling from Oil Street at the west to Hoi Yu Street at the east, the existing inland route is described as below (also see **Drawing Nos. 60341972/PAIA/101 and 102**):

- (a) entering the City Garden Road through Electric Road and Power Street;
- (b) going eastward along City Garden Road passing by City Garden;
- (c) turning into Wharf Road in front of Hong Kong Baptist Church Henrietta Secondary School;
- (d) going eastward along Wharf Road passing by Provident Centre;
- (e) crossing Tong Shui Road and going north to reach North Point Promenade;
- (f) going eastward along North Point Promenade passing by North Point Ferry Pier;
- (g) going southward along Tin Chiu Street to enter Java Road;
- (h) going eastward along Java Road passing by K. Wah Centre, ICAC Building, Kodak House, North Point Fire Station and North Point Government Offices; and
- (i) entering Hoi Yu Street in front of North Point Police Station.

2.2 Accessibility of Existing Waterfront

2.2.1 Along the existing inland route mentioned in **Section 2.1**, there are a few locations where the pedestrians might access the waterfront. Those locations are described below:

- (a) Northern End of Corridor inside Garden Road
 - The pedestrians could enter the corridor next to City Garden Block 4 from City Garden Road and access the waterfront by reaching the northern end of the corridor.
 - The length of accessible waterfront is less than 10m.
- (b) Tong Shui Road Garden
 - The pedestrians could access the waterfront by entering the Tong Shui Road Garden at the eastern end of Wharf Road.
 - The length of accessible waterfront is about 30m.
- (c) North Point Promenade
 - North Point Promenade between Tong Shui Road and Tin Chiu Street is part of the exiting inland pedestrian route.
 - The length of accessible waterfront is about 400m.
- (d) North Point Ferry Concourse Promenade and Adjacent Car Park
 - The pedestrians could access the waterfront by entering the North Point Ferry Concourse Promenade and adjacent car park at Java Road.
 - The length of accessible waterfront is about 120m.
- (e) Man Hong Street Playground
 - The pedestrians could access Man Hong Street Playground behind the ICAC Building and reach the waterfront from the Java Road/Man Hong Street Junction.

- The length of accessible waterfront is about 60m.

(f) Northern End of Healthy Street East

- The pedestrian could access the waterfront by turning into the northern end of Healthy Street East from Java Road.
- The length of accessible waterfront is about 30m.

2.2.2 Except the North Point Promenade which is a long continuous path with length of about 400m, all other accessible waterfront are quite short in length, distributed in a discrete manner and detoured from the main pedestrian route, as shown in **Drawing Nos. 60341972/PAIA/101 and 102.**

3 ALTERNATIVE INLAND ALIGNMENT FOR BOARDWALK

3.1 Description of Alternative Inland Alignment

3.1.1 Instead of providing a separate boardwalk structure outside the existing IEC Viaduct, an alternative inland boardwalk alignment running along the waterfront was also studied. The alignment from west to east is described as below:

- (a) entering the City Garden from the CWB reclamation area;
- (b) going eastward along waterfront passing through City Garden, Hong Kong Baptist Church Henrietta Secondary School, Po Leung Kuk Yu Lee Mo Fan Memorial School, Provident Centre, and reach Tong Shui Road Garden;
- (c) entering Wharf Road from Tong Shui Road Garden ;
- (d) crossing Tong Shui Road and going northward to reach North Point Promenade;
- (e) going eastward along North Point Promenade passing by North Point Ferry Pier;
- (f) going eastward along the waterfront crossing the North Point Dangerous Goods Vehicular Ferry Pier to reach North Point Ferry Concourse Promenade;
- (g) going eastward along the waterfront passing through the K.Wah Centre;
- (h) crossing Man Hong Street at the Java Road/Man Hong Street Junction to reach Man Hong Street Playground behind ICAC Building; and
- (i) going eastward along the waterfront passing through Kodak House, North Point Fire Station, North Point Government Offices and North Point Police Station to reach Hoi Yu Street.

3.1.2 The alternative inland alignment could run along the continuous waterfront, except at Tong Shui Road and Man Hong Street where there are existing slip roads connecting to IEC Viaducts and insufficient headroom could be provided for the boardwalk at waterfront. Therefore, the alternative alignment would head south to Wharf Road (or Java Road) first for crossing Tong Shui Road (or Man Hong Street) via pedestrian crossing.

3.2 Preliminary Assessment on the Impacts caused by Alternative Inland Alignment

3.2.1 The alternative inland alignment of boardwalk would bring significant impacts to surroundings in various aspects. The major issues are described in the paragraphs below:

Land Resumption

3.2.2 The alternative inland alignment for the boardwalk would encroach onto various areas which are currently occupied and/or occupied by private properties, including City Garden, Provident Centre, K. Wah Centre and Kodak House. In order to have sufficient space to accommodate the inland boardwalk, land resumption of these private areas would be required.

3.2.3 Apart from the private properties, some areas which are currently used by government buildings and schools would need to be released for accommodating the alternative inland boardwalk alignment. They are namely, Hong Kong Baptist Church Henrietta Secondary School, Po Leung Kuk Yu Lee Mo Fan Memorial School, ICAC Building, North Point Fire Station, North Point Government Offices and North Point Police Station.

Impact on Existing Piers

- 3.2.4 The alternative inland alignment of boardwalk would cross the access route of the following existing piers:
- (a) North Point Dangerous Goods Vehicular Ferry Pier;
 - (b) Private Pier of K.Wah Centre;
 - (c) Private Piers of Kodak House; and
 - (d) North Point Fireboat Pier.
- 3.2.5 In order to maintain the functioning of these piers, modification at the crossing interface would be required. Liaison with the pier owners/operators would be required on the detailed interface arrangement.

Impact on Existing Structures

- 3.2.6 The alternative inland alignment of boardwalk would be in conflict with the following existing building structures:
- (a) Block 6 to Block 10 of City Garden and their podium;
 - (b) Main Building of Hong Kong Baptist Church Henrietta Secondary School;
 - (c) Main Building of Po Leung Kuk Yu Lee Mo Fun Memorial School;
 - (d) Block 1, Block 6 to Block 12 and Block 17 of Provident Centre and their podium;
 - (e) Podium of K.Wah Centre;
 - (f) Podium of Kodak House;
 - (g) Married Quarters of North Point Fire Station;
 - (h) Podium of North Point Government Offices; and
 - (i) Podium of North Point Police Station.
- 3.2.7 Demolition or reconstruction of these building structures would be required to allow open space for the alternative inland boardwalk.
- 3.2.8 If the detour of alternative inland alignment as mentioned in **Section 3.1.2** is replaced by a direct path running along the waterfront, the existing slip roads at Tong Shui Road and Man Hong Street connecting to IEC Viaducts would need to be realigned for allowing sufficient headroom for the boardwalk. Thus, reconstruction of the bridge structures supporting the slip roads would also be anticipated.

Impact on Design of North Point Reclamation Area

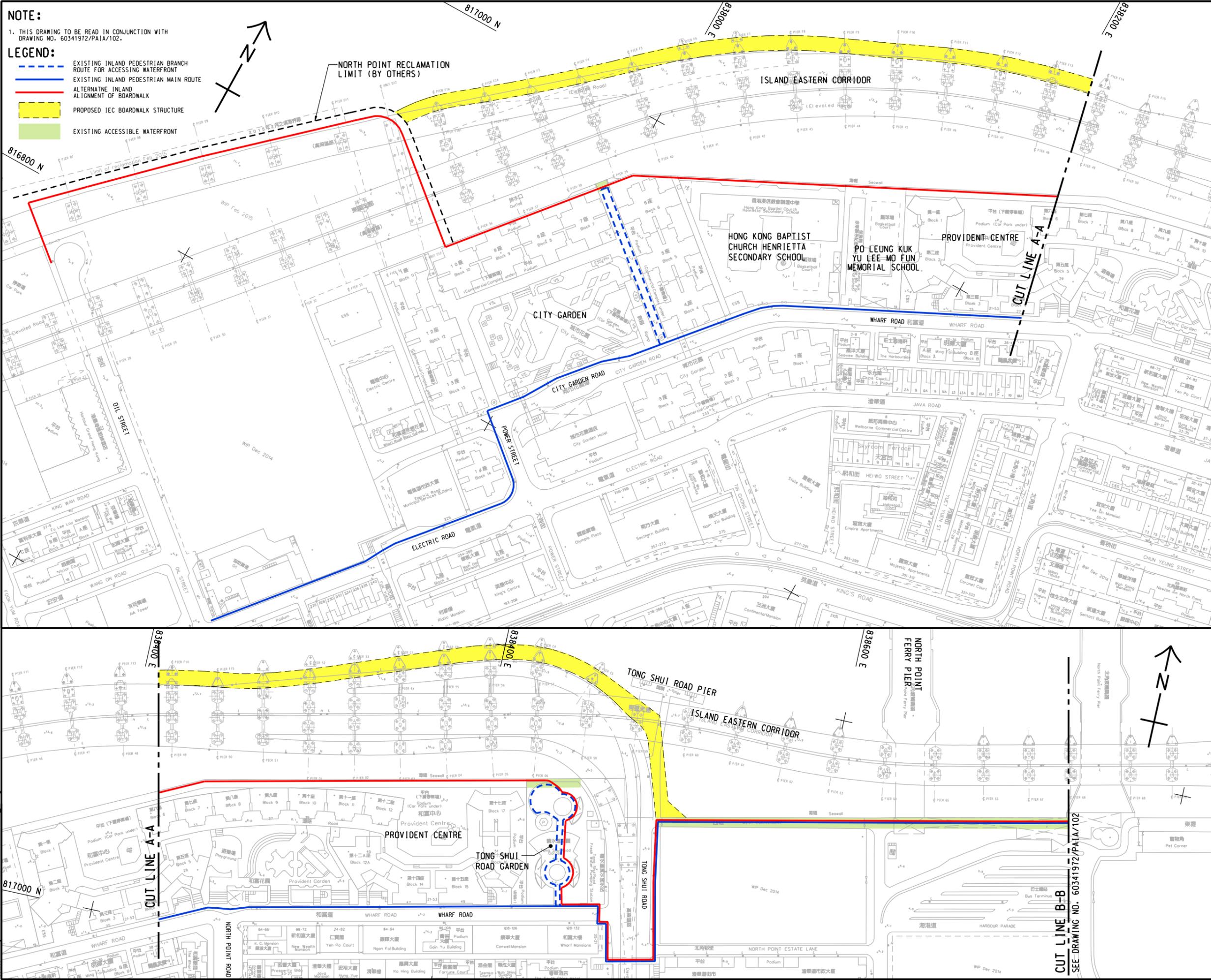
- 3.2.9 The original design of North Point Reclamation Area did not allow any connection for pedestrian to access City Garden. Therefore, to make the alternative inland alignment along the waterfront work, substantial modification to the current design of the North Point Reclamation Area would be required.

4 CONCLUSIONS

- 4.1 The preliminary review on the existing pedestrian route from Oil Street to Hoi Yu Street revealed that the accessibility to the waterfront is very limited and distributed in a discrete manner at various locations. The only exception is the North Point Promenade which is a continuous path of about 400m long along the seawall.
- 4.2 Despite that the alternative inland alignment of boardwalk could significantly increase the accessibility of the waterfront, it would also bring remarkable impacts to surroundings. It include land resumption of numerous land lots of private properties, schools and government buildings, modification at the interface with existing piers, demolition/reconstruction of numerous building structures and modification to the design of North Point Reclamation Area.
- 4.3 In view of the alternative inland alignment, much of the land abutting the waterfront lies in private hands. The consequent cost (economic implications: the unreasonable additional cost required to provide the continuous access along the waterfront) and length of time (social implications: the delay in meeting the need for the continuous access along the harbourfront) in acquiring this land and associated marine rights for redevelopment would be significant. Thus an “inland” promenade option would face many challenges, some of which might be insurmountable. It is also likely that it would take many years (if it can be done at all) to resolve all land issues and to acquire the extent of private land required to achieve the development of a continuous waterfront.
- 4.4 Considering the implication and effort on resumption of land, it is found that there is no feasible reasonable alternative that would effectively secure continuous access along the waterfront. Although PHO implication may be a major concern which will need further agreement from general public, construction of boardwalk running underneath the IEC supported on existing dolphin structures would be the optimum solution which brings the least impacts with minimal reclamation.

DRAWINGS

ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:



NOTE:
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NO. 60341972/PAIA/102.

- LEGEND:**
- EXISTING INLAND PEDESTRIAN BRANCH ROUTE FOR ACCESSING WATERFRONT
 - EXISTING INLAND PEDESTRIAN MAIN ROUTE
 - ALTERNATE INLAND ALIGNMENT OF BOARDWALK
 - PROPOSED IEC BOARDWALK STRUCTURE
 - EXISTING ACCESSIBLE WATERFRONT

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PROJECT
BOARDWALK UNDERNEATH ISLAND EASTERN CORRIDOR - INVESTIGATION

CLIENT
CEDD 土木工程拓展署
Civil Engineering and Development Department

CONSULTANT
AECOM Asia Company Ltd.
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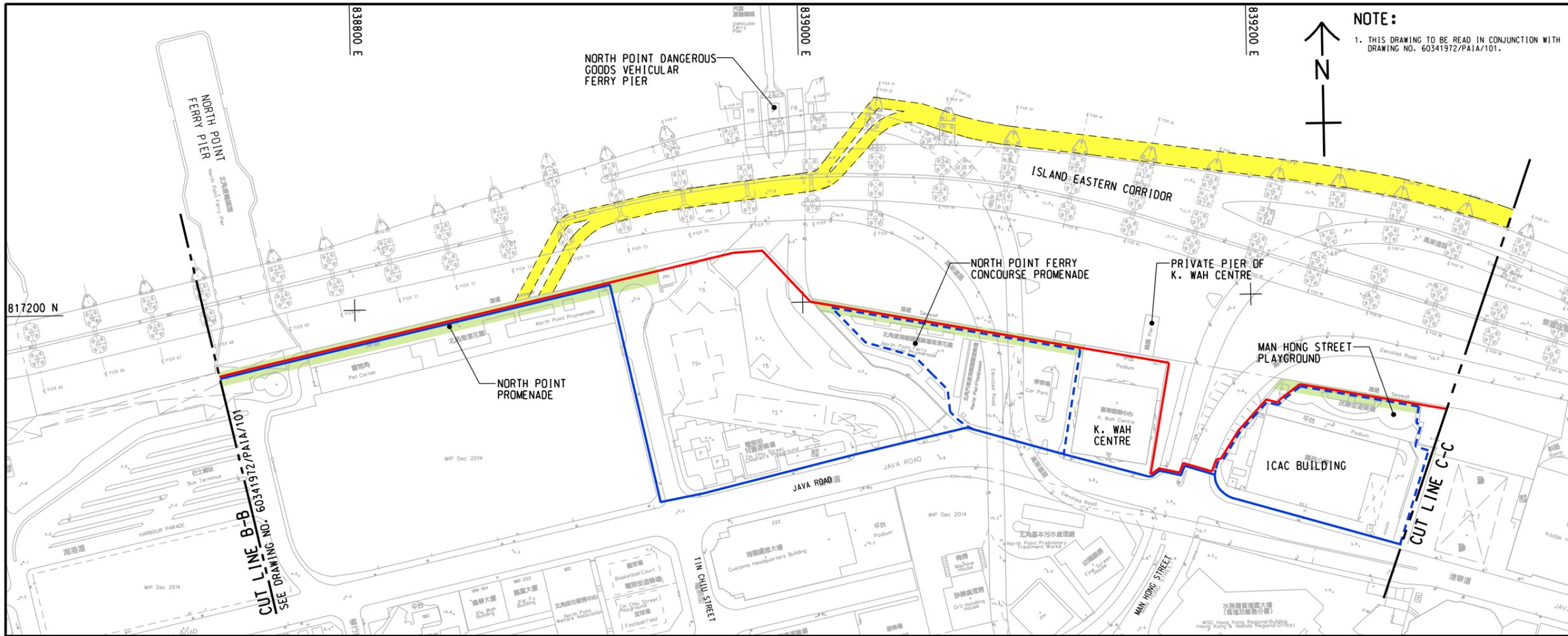
SHEET TITLE
INLAND ALIGNMENT LAYOUT

SHEET NUMBER
60341972/PAIA/101

SHEET 1 OF 2

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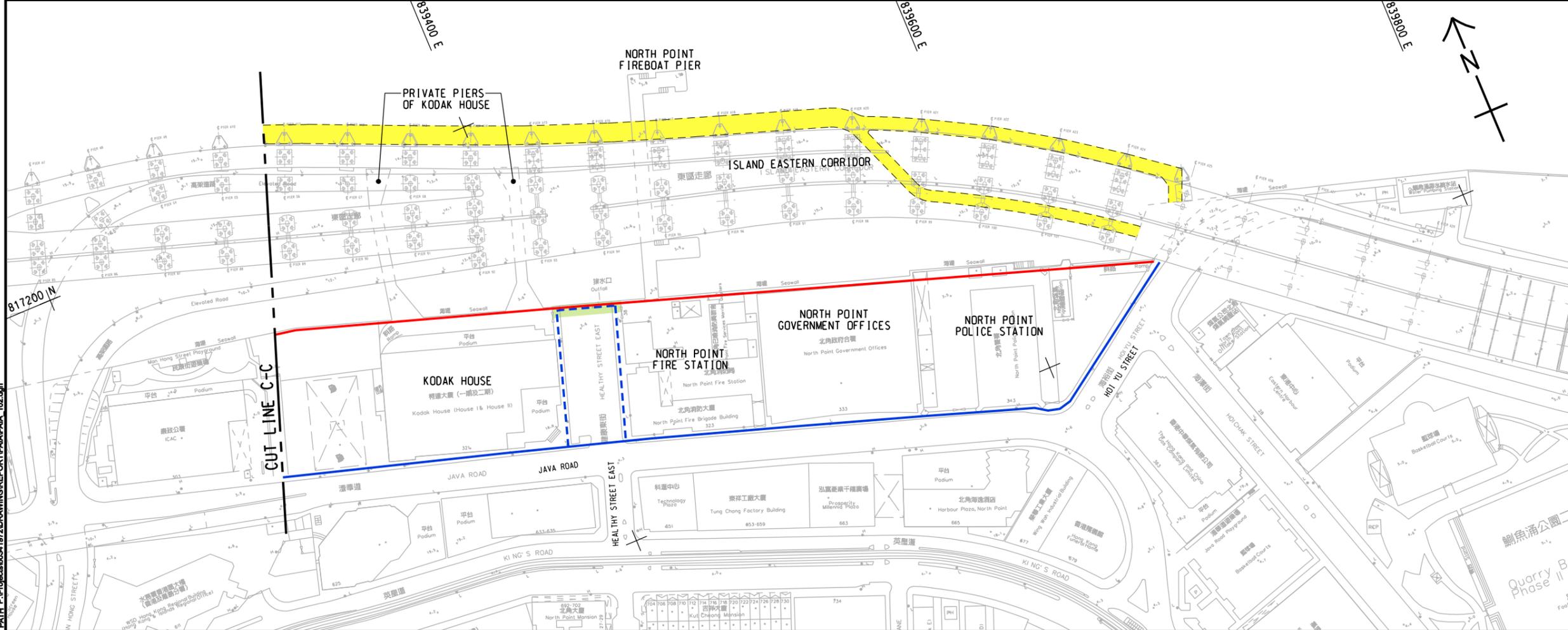
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SHEET 2 OF 2

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