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Section 16 Planning Application

Proposed Temporary Green Fuel Station for Electric Taxi and Shop and Services (Motor Vehicle Showroom and Refreshment Kiosk) with Associated Filling of Land for a Period of 3 Years at Lot 91RP(Part) in D.D. 81, Man Uk Pin, N.T.

Planning Statement

Applicant

Hong Kong Big Bee Green Energy Technology Limited

Prepared by

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Executive Summary

This planning statement is prepared in support of a planning application for proposed green fuel station for electric taxi and shop and services (motor vehicle showroom and refreshment kiosk) with associated filling of land ("the proposed development") for a period of 3 years at Lot 91RP(Part) in D.D. 81, Man Uk Pin, N.T. (the "Application Site").

The Application Site, which covers an area of about 1,626 sq.m., is located within an area zoned "Agriculture" ("AGR") on the Approved Man Uk Pin Outline Zoning Plan (OZP) No. S/NE-MUP/11 gazetted on 27.10.2006. According to the Notes of the OZP, 'Green Fuel Station' and 'Shop and Services' uses are neither the Column 1 nor Column 2 uses of the "AGR" zone. In accordance with the covering note of the OZP, temporary use or development of any land or building not exceeding a period of three years required planning permission from the Town Planning Board (the "Board").

The Application Site is currently vacant. The Applicant is one of the taxi fleet operators selected by the Transport Department. Given the growing popularity of electric vehicles (EVs) in Hong Kong, as well as the operational needs of the Applicant's electric taxi fleet, the Applicant intends to convert the Application Site into an EV charging station to provide charging facilities for electric taxis as well as additional facilities such as a motor vehicle showroom and a refreshment kiosk.

The proposed development will provide a total of 27 parking spaces (2.5m x 5m), 23 of which will be designated for electric taxis. Among the electric taxi parking spaces, 21 of them will be fee-paying parking spaces and equipped with direct current (DC) ultra-fast EV charging devices with an output power of 120kW. The remaining 2 parking spaces will be designated waiting spaces for the charging facilities and will be free of charge. In addition, 2 private car parking spaces will be provided for visitors to the motor vehicle showroom, as well as 2 parking spaces for staff.

The proposed development comprises 4 temporary structures, including a motor vehicle showroom with a floor area of 145 sq.m. (BH: 5m), a refreshment kiosk with a floor area of 26 sq.m. (BH: 3m), a transformer room/switch room with a floor area of 53 sq.m. (BH: 3.5m), and a washroom with a floor area of 7 sq.m. (BH: 3m). All of the proposed structures will be single-storey and located in the western part of the Application Site, while the open area will be reserved for manoeuvring vehicles.

The ingress/egress point of about 8m wide will be located at the eastern boundary of the Application Site, connecting to a local track leading to Sha Tau Kok Road – Wo Hang. The proposed hours of operation of the EV charging station at the Application Site are 24 hours daily, from Mondays to Sundays (including public holidays). Meanwhile, the shop and services (motor vehicle showroom and refreshment kiosk) will operate from 7am to 8pm, Mondays to Sundays (including public holidays).

The justifications of this application are:

1. The proposed development is in line with Government policy to promote EVs usage;
2. The proposed development will contribute to the development of taxi fleet;
3. The proposed development meets the demand for quick EV charging facilities and supplementary services for electric taxis;
4. The proposed development does not contravene the planning intention of "AGR" zone;
5. The proposed development is considered not incompatible with surrounding land uses;
6. The proposed development will promote optimization of valuable land resources; and
7. The proposed development will not generate adverse traffic, drainage and environmental impacts on the surrounding areas.

In light of the justifications set out in this planning statement, the Board and relevant government departments are respectfully invited to approve the application for a period of three years.

行政摘要

此規劃報告書旨在支持在新界萬屋邊丈量約份第 81 約地段第 91 號餘段(部分) (“申請地點”)，作擬議臨時電動的士潔淨能源站和商店及服務行業(汽車陳列室及小食亭)及相關的填土工程，為期三年(“擬議發展”)的規劃申請。

申請地點的面積約 1,626 平方米，座落於在 2006 年 10 月 27 日刊憲的萬屋邊分區計劃大綱核准圖(圖則編號：S/NE-MUP/11)上的「農業」地帶。根據該大綱圖的註釋，擬議「潔淨能源站」和「商店及服務行業」皆不屬「農業」地帶內的第一或第二欄用途，而不超過三年土地或建築物的臨時用途或發展，須先向城規會提出申請。

申請地點目前處於空置狀態。申請人是運輸署選定的的士車隊營辦商之一。鑒於電動車在香港日益普及，加上申請人旗下電動的士車隊的營運需求，申請人擬將該申請地點改建為電動的士充電站，以提供電動的士的充電設施，並增設汽車陳列室及小食亭等配套設施。

擬議發展將提供共計 27 個停車位(2.5 米 x 5 米)，其中 23 個將專供電動的士使用。在這些電動的士停車位中，有 21 個為收費停車位，並配備輸出功率為 120kW 的直流快速充電設備。其餘 2 個停車位將劃為充電設施的等候區，且免費供電動的士使用。此外，將為汽車陳列室的訪客提供 2 個私家車停車位，以及 2 個員工停車位。

擬議發展將包括 4 座臨時構築物，其中包括一座樓面面積為 145 平方米的汽車陳列室(高度約 5 米)、一座樓面面積約 26 平方米的小食亭(高度約 3 米)、一座樓面面積約 53 平方米的電力變壓房/掣房(高度約 3.5 米)，以及一座樓面面積約 7 平方米的洗手間(高度約 3 米)。所有擬建構築物均為單層建築，並位於申請地點的西部，而空地則將保留作車輛流轉之用。

申請地點的出入口將設於東面(約 8 米闊)，並由一條道路連接到沙頭角公路 - 禾坑段。擬議電動車充電站的營運時間為星期一至日(包括公眾假期) 24 小時運作，至於商店及服務行業(汽車陳列室及小食亭)的營業時間則為星期一至日上午 7 時至晚上 8 時(包括公眾假期)。

本規劃申請的理據為：

1. 擬議發展符合政府推動電動車普及化的政策；
2. 擬議發展將有助於的士車隊的發展；
3. 擬議發展可滿足對電動的士快速充電設施及配套服務的需求；
4. 擬議發展不會違背「農業」地帶的規劃意向；
5. 擬議發展與周邊土地用途兼容；
6. 擬議發展可有效利用寶貴的土地資源；及
7. 擬議發展不會對周邊地區造成交通、排水及環境方面的負面影響。

基於本規劃報告書所述的理據，敬希城規會及有關政府部門能批准此項申請，作為期三年的臨時用途。

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1. Introduction

1.1 Purpose

Pursuant to Section 16 of the Town Planning Ordinance, this planning statement is submitted to the Town Planning Board (“the Board”) in support of a planning application for temporary green fuel station for electric taxi and shop and services (motor vehicle showroom and refreshment kiosk) with associated filling of land for a period of 3 years at Lot 91RP(Part) in D.D. 81, Man Uk Pin, N.T. (hereafter referred to as “the Application Site”). **Figure 1** shows the location of the Application Site and the lot index plan indicating the concerned lot is shown per **Figure 2**.

The Application Site, covering an area of about 1,626 sq.m., falls within an area zoned “Agriculture” (“AGR”) on the Approved Man Uk Pin Outline Zoning Plan (OZP) No. S/NE-MUP/11 gazetted on 27.10.2006. According to the Notes of the OZP, ‘Green Fuel Station’ and ‘Shop and Services’ uses are neither the Column 1 nor Column 2 uses of the “AGR” zone. In accordance with the covering note of the OZP, temporary use or development of any land or building not exceeding a period of three years required planning permission from the Board.

The Application Site is currently vacant. The Applicant intends to convert it into an electric vehicle (EV) service depot, which will include an EV charging station with charging spaces for electric taxis, as well as additional facilities such as a motor vehicle showroom and a refreshment kiosk. The Application Site is considered a preferred location for the proposed development.

1.2 Background of the Application

In response of combating global climate change, electrification of transportation system has become a global trend. Electric vehicles (EVs) are considered a preferable choice to conventional vehicles with no tailpipe emissions of air pollutants, which can help improve air quality and reduce greenhouse gas emissions.

In the 2023 Policy Address, the Government emphasized the importance of promoting the new energy transport industry. To support the green transformation of public land transport, the Government announced its aim to formulate a citywide green transformation roadmap and timetable for public buses and taxis, with a view to achieving zero vehicular emissions by 2050.

On 10 December 2024, the Government has also announced the “Green Transformation Roadmap of Public Buses and Taxis” to expand the adoption of EVs in public transportation with introduction of 3,000 electric taxis by mid-2026. The Government has also highlighted a multi-pronged approach in promoting the expansion of EV charging facilities, so as to gradually develop a territory-wide network for ensuring sufficient and convenient charging support for suiting the needs of various EVs.

Following the promulgation of the “Updated Version of the Hong Kong Roadmap on Popularisation of Electric Vehicles” on 12.2.2026, it is noted that the overall electrification of commercial vehicles remains at an early stage of technological and market development. The Government has also indicated that a pragmatic approach will be adopted to progressively promote the large-scale application of electric commercial vehicles. In addition, the Government has stated that market forces will be leveraged in the future through policy guidance to build a public charging network with

fast charges as the backbone. The target is to increase the number of fast chargers to no less than 4,000 by 2030, thereby supporting approximately 200,000 EVs.

The Applicant, Hong Kong Big Bee Green Energy Technology Limited, is one of the selected taxi fleet operators that has officially commenced services, primarily operating electric luxury taxis. To meet operational needs, the Applicant intends to convert the Application Site into an EV service depot. This will include an EV charging station with charging spaces for electric taxis, as well as a motor vehicle showroom and a refreshment kiosk. All chargers will be direct current (DC) chargers with an output power of 120kW to enhance charging efficiency.

1.3 Organization of the Planning Statement

This planning statement is divided into 6 chapters. Chapter 1 is an introduction outlining the above background of the planning application. Chapter 2 will then illustrate the site context and land status followed by Chapter 3 which describes the planning context in details. Chapter 4 gives the particulars of the proposed development. Detailed accounts of planning justifications of the proposed development are presented in Chapter 5. The planning statement finally concludes with a summary in Chapter 6.

2. Site Context

2.1 The Application Site and Its Existing Condition

The Application Site, which covers an area of about 1,626 sq.m., is located in Man Uk Pin to the north of Sha Tau Kok Road – Wo Hang, N.T. The Application Site is currently vacant and covered with wild grass. It is generally flat in the east and has a lower level in the west. Part of the Application Site is fenced off with metal sheets approximately 2.5m high (see **Site Photos**).

2.2 Surrounding Land Uses

The surrounding areas are predominantly rural. To the northwest, within the same “AGR” zone, there are scattered temporary structures. Tree clusters can be found to the east, south and west of the Application Site. To the immediate east of the Application Site is a local access road and to the south is the Sha Tau Kok Road – Wo Hang.

2.3 Accessibility

The Application Site can be accessed via a local track to the east, which leads to Sha Tau Kok Road – Wo Hang. The entrance/exit to the Application Site is about 8m wide and is located at the eastern boundary of the Application Site. **Figure 3** shows a plan of vehicular access to the Application Site.

2.4 Land Status

According to the records of the Land Registry, the subject lot is held under Block Government Lease and is demised as agricultural use with lease term for 75 years, from 1.7.1898 and is renewable for a further term of 24 years.

The subject lot is an old schedule agricultural lot. Upon obtaining planning approval for this application, the Applicant will apply to the Lands Department for a Short Term Waiver (STW) for the proposed structures.

3. Planning Context

3.1 Outline Zoning Plan

The Application Site is currently located within an area zoned “Agriculture” (“AGR”) on the Approved Man Uk Pin Outline Zoning Plan (OZP) No. S/NE-MUP/11 gazetted on 27.10.2006 (see **Figure 1**).

The planning intention of “AGR” zone is “primarily to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. It is also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes.”

According to the Notes of the OZP, the proposed ‘Green Fuel Station’ and ‘Shop and Services’ uses are neither the Column 1 nor Column 2 uses of the “AGR” zone. In accordance with the covering note of the OZP, temporary use or development of any land or building not exceeding a period of three years required planning permission from the Board.

3.2 Previous Application

Part of the Application Site involves a previous application (No. A/NE-MUP/85) for the temporary open storage of construction machinery, construction material and ancillary workshop for a period of 3 years. This application was rejected by the Board on 16.8.2013, primarily because it was not in line with the planning intention of the “AGR” zone. The application also did not comply with the TPB Guidelines for Application for open storage and port back-up uses under Section 16 of the Town Planning Ordinance (TPB PG-No.13E); and approving of the application would set an undesirable precedent for other similar applications within the “AGR” zone.

3.3 Similar Application

There is no similar application within the same “AGR” zone under the Man Uk Pin OZP No. S/NE-MUP/11.

4. Development Proposal

4.1 Site Configuration and Layout

The Applicant proposes using the Application Site for a temporary green fuel station for electric taxis and shop and services (motor vehicles showroom and refreshment kiosk) with associated filling of land for a period of 3 years. The proposed development intends to provide charging spaces for a designated fleet of electric taxis and to offer supplementary services (i.e. shop and services) for taxi drivers.

The Application Site covers an area of approximately 1,626 sq.m. The proposed development will

provide a total of 27 parking spaces (2.5m x 5m), 23 of which will be designated for electric taxis. Among the electric taxi parking spaces, 21 of them will be fee-paying parking spaces and equipped with direct current (DC) ultra-fast EV charging devices with an output power of 120kW. The remaining 2 parking spaces will be designated waiting spaces for the charging facilities and will be free of charge. In addition, 2 private car parking spaces will be provided for visitors to the motor vehicle showroom, as well as 2 parking spaces for staff (see **Figure 4**).

The Proposed Development comprises 4 temporary structures, including a motor vehicle showroom with a floor area of 145 sq.m. (BH: 5m), a refreshment kiosk with a floor area of 26 sq.m. (BH: 3m), a transformer room/switch room with a floor area of 53 sq.m. (BH: 3.5m), and a washroom with a floor area of 7 sq.m. (BH: 3m). All of the proposed structures will be single-storey and located in the western part of the Application Site, while the open area will be reserved for manoeuvring vehicles.

The Application Site will be fenced off with 2.5m high metal sheets. Only electric taxis with valid licences issued under the Road Traffic (Registration and Licensing of Vehicles) Regulations will be permitted to park on the Application Site.

To provide a flat surface that meets operational requirements, land filling works will be conducted. The Application Site will be filled with soil and covered with grasscrete/concrete. The existing level ranges from 33.1mPD to 33.8mPD, while the proposed level will be 34.0mPD, involving the filling of about 0.2m to 0.9m (see **Figure 5**).

The key development parameters of the application are shown below:-

Applied Use	Proposed Temporary Green Fuel Station for Electric Taxi and Shop and Services (Motor Vehicle Showroom and Refreshment Kiosk) with Associated Filling of Land for a Period of 3 Years
Site Area	About 1,626 sq.m.
Total Floor Area (Non-domestic)	About 231 sq.m.
No. of Structures	4 - 1 proposed motor vehicle showroom - 1 proposed refreshment kiosk - 1 proposed transformer room / switch room - 1 proposed washroom
Height of Structures	About 3 – 5m (1-storey)
No. of Parking Spaces	27 nos. (2.5m x 5m) - 21 EV charging spaces for electric taxis - 2 waiting spaces for electric taxis - 2 parking spaces for visitors (motor vehicle showroom) - 2 parking spaces for staff

4.2 Site Operations

The proposed development will provide EV charging facilities exclusively for electric taxis, and shop and services (motor vehicle showroom and refreshment kiosk). All EV chargers on site will be quick chargers, providing electric taxis with 600km of mileage after charging for approximately 30 minutes.

The Applicant, Hong Kong Big Bee Green Energy Technology Limited, is one of the 5 taxi fleet operators selected by the Government. Only taxis belonging to this fleet will be permitted to charge at the Application Site. The charging facilities will not be open to the public. The fee arrangement will be similar to that of other EV charging stations on the market, with users being charged on a time basis. Additional charges apply for overtime parking/charging. A mobile application for electric taxi drivers will be adopted, which includes a payment platform for EV charging and provide real-time information on the availability of EV charging spaces at EV charging stations managed by the Applicant.

The motor vehicle showroom will display private vehicles intended for use as electric taxis only. Vehicles for sale will arrive at Application Site bearing T-plates and will be stored in the motor vehicle showroom. The proposed refreshment kiosk will sell snacks and beverages to the taxi drivers. No cooking activities will take place at the Application Site.

The proposed hours of operation of the EV charging station at the Application Site are 24 hours daily, from Mondays to Sundays (including public holidays). Meanwhile, the shop and services (motor vehicle showroom and refreshment kiosk) will operate from 7am to 8pm, Mondays to Sundays (including public holidays). To minimize potential noise and environmental impacts on the surrounding area, no vehicle washing, dismantling, paint spraying and repairing activities will be conducted within the Application Site.

4.3 Traffic Arrangement and Traffic Impact Assessment

The ingress/egress of the Application Site is about 8m wide and is located at the eastern boundary. It connects to the local track leading to Sha Tau Kok Road – Wo Hang (see **Figure 3**). A Traffic Impact Assessment (TIA) (see **Appendix 1**) has been submitted to evaluate the potential traffic impact on the existing and future road network.

To analyze the existing traffic conditions, a traffic count survey was conducted on 10.7.2026 at the nearby critical links and junctions. The peak hour was identified to be between 16:30 – 17:30. Based on the existing traffic flows, all concerned junctions were performing satisfactorily and all concerned road sections were operating with spare capacity during the peak hours.

A swept path analysis is also included in the TIA to demonstrate that satisfactory manoeuvring of vehicles entering to and existing from the Application Site and manoeuvring within the Application Site. There will be no difficulties in internal traffic circulation sense as sufficient spaces for vehicle manoeuvring have been reserved within the Application Site such that no vehicle has to queue back to or reverse onto/from Sha Tau Kok Road – Wo Hang.

As identified in the TIA report, the peak traffic generation of the proposed development will be either between 1500 – 1700 or after midnight, before the shift changes of the electric taxi drivers. The proposed development is expected to generate a two-way traffic of 86 pcu/hour in the peak hour. By analyzing the Year 2029 Design Flows, which were derived from applying a nominal growth to the existing traffic flow plus the additional traffic generated and attracted by the proposed development, both the junction and link capacity assessments show that the concerned junction and road links would perform satisfactorily during the peak hour. Based on the assessment result, it can be concluded that the proposed development will not induce additional adverse traffic impact on the

surrounding road network and is considered acceptable from traffic engineering point of view.

The mobile application adopted by the Applicant will provide real-time information on the availability of EV charging spaces, helping electric taxi drivers to locate EV chargers. Drivers will be directed to the nearest alternative sites if all the EV chargers at the proposed EV charging station are in use. In addition, since the Application Site will use quick chargers, the charging time will be much shorter than with standard chargers, allowing for a high turnover rate and reducing waiting time. 2 parking / waiting spaces have been reserved at the Application Site to allow drivers to wait for an EV charging space. Therefore, no electric taxis will queue outside the Application Site along Sha Tau Kok Road – Wo Hang.

4.4 Drainage Proposal

Drainage facilities, including 375mm peripheral U-channels and catchpits with trap, are proposed to collect the surface runoff and divert it to the existing surface channels between the Application Site and Sha Tau Kok Road – Wo Hang. A 100mm high gap will also be provided at the bottom of the security hoarding/fence wall along the Application Site boundary to ensure that surface runoff flowing onto the Application Site from the surroundings will not be obstructed. To minimize the potential increase in surface runoff, grasscrete paving will be installed within the Application Site. A drainage proposal (see **Appendix 2**) has been submitted to illustrate the proposed drainage design. The Applicant will provide the drainage facilities to the satisfaction of the Drainage Services Department (DSD).

4.5 Landscape

The Application Site is currently vacant and covered with wild grass. The existing trees were planted by the previous occupier along the northern boundary of the site. However, these trees are ornamental and there are no old or valuable trees at the site. Trees will be removed to release space for parking provision and manoeuvring vehicles.

The Application Site is located within a rural area, surrounded by clusters of trees and scattered temporary structures. As the site is close to Sha Tau Kok Road – Wo Hang and the proposed development intends to provide EV charging facilities for electric taxis only, with a maximum BH of 5m (1-storey), the scale is minimal and the development is not considered incompatible with the surrounding landscape.

4.6 Fire Service Installations

To minimize the fire hazard, the Applicant will provide fire service installations (FSIs) upon approval of this application, in accordance with the requirements of the Fire Services Department.

4.7 Environmental Consideration

The proposed use will simply involve providing EV charging facilities and supplementary services for EVs. To minimize any possible environmental disruption, the Applicant will adhere to the 'Code of Practice on Handling the Environmental Aspects of Temporary Uses and Open Storage Sites' and implement the following mitigation measures:-

- (a) No more than 23 electric taxis and 4 private vehicles will be allowed at the Application Site at any one time;
- (b) No repairing, car washing, paint spraying or other workshop activities will be conducted at the Application Site;
- (c) The operating hours for the shop and services uses (motor vehicle showroom and refreshment kiosk) of the proposed development will be restricted from 7am to 8pm on Mondays to Sundays;
- (d) The Application Site will be fenced off with 2.5m high metal sheets on along the site boundary;
- (e) A washroom will be provided on the Application Site. The waste generated will be treated by a septic tank.

5. Planning Justifications

5.1 In Line with Government Policy to Promote EVs Usage

The Proposed Development will provide fast EV charging facilities for electric taxis. This aligns with the Government's initiative to expand the EV charging network in Hong Kong, particularly with regard to meeting the target of increasing the number of fast chargers to at least 4,000 by 2030. The Proposed Development will also address the growing demand for EV charging spaces specifically designed for electric taxis in Hong Kong. Furthermore, the Applicant is one of the taxi fleet operators selected by the Transport Department to provide EV taxi services in Hong Kong. The Proposed Development is therefore considered to be consistent with Government policy to promote the wider use of EVs, support the operation of electric commercial vehicles, and contribute towards achieving the aforementioned target.

5.2 Contribute to the Development of Taxi Fleet

The Government has been actively promoting the development of taxi fleets. Since the service commencement of the five taxi fleets, their vehicle numbers have continued to expand, with over 2,000 fleet taxis and about 2,400 fleet taxi drivers currently in service. As at end-May 2026, about 4.2 million trips in total had been completed by the five taxi fleets. The Applicant has coordinated with power companies to optimize charging infrastructure for the taxi fleet and to provide charging service points across the territory to facilitate the charging of electric taxis. The Applicant will continue to provide all-round support to enhance service quality and drive the fleet toward the committed fleet size.

5.3 Meeting the Demand for Quick EV Charging Facilities and Supplementary Services for Electric Taxis

Given the growing popularity of commercial EVs under the Government's initiative, the demand for EV charging spaces for commercial vehicles is expected to rise. Currently, the nearest EV charging facilities in the area are located at Queens Hill Estate and provide 33 parking spaces equipped with medium-speed chargers for private vehicles only. However, these facilities are considered inadequate for electric taxis as the charging speed is too slow to meet operational requirements. The lack of rapid charging facilities makes it difficult to attract drivers to operate electric taxis, resulting in a situation where taxi fleet operators have vehicles but face a shortage of drivers. The proposed development, which will provide EV charging spaces equipped with quick chargers, will directly address this issue and support the operation of electric taxis.

5.4 Not Contravene with the Planning Intention of “AGR” Zone

The Application Site is located within an area zoned “AGR” on the Approved Man Uk Pin OZP No. S/NE-MUP/11. As the site is currently vacant and covered with wild grass and the surrounding area is characterised by clusters of temporary structures, the planning intention of the “AGR” zone has not yet been realised. As the site will be paved with grasscrete and the proposed development involves only temporary, single-storey structures with a maximum height of 5m, the scale and impact are considered minimal. Given the temporary nature of the Application, the Proposed Development will not jeopardize the long-term planning intention of the “AGR” zone.

5.5 Not Incompatible with Surrounding Land Uses

The proposed development is considered not incompatible with the surrounding land uses. The surrounding areas comprise clusters of temporary structures and Sha Tau Kok Road – Wo Hang. Since the proposed development is intended to serve electric taxis only, it could co-exist well with the existing surrounding land uses without inflicting any environmental impacts. Given its nature and scale of use, the proposed development is considered not incompatible with other developments and facilities in the adjacent areas, and approval of the Application would not result in any interface problems with the surrounding environment.

5.6 Optimization of Valuable Land Resources

The Application Site is considered a suitable and preferred location for the proposed development. It is a piece of vacant land which will be converted into a flat surface, so conversion into the proposed development will be straightforward. The Applicant will convert the Application Site into an orderly development with good management practices.

In addition, the Application Site is directly accessible to Sha Tau Kok Road – Wo Hang, which connects to strategic road networks in different parts of the New Territories. Electric taxis could easily access the site and leave after charging. Providing EV charging spaces and supplementary services for electric taxis at the Application Site will be able to meet the growing demand for EV charging facilities in the area and support the taxi fleet service in Hong Kong. The proposed development is therefore considered fully commensurate with its local geographical setting and ideal for maximising land use.

5.7 No Adverse Impacts on the Surrounding Areas

Owing to the nature and size of the proposed development, no adverse impacts are anticipated on the surrounding areas, as discussed below:

Traffic

The design of the proposed development takes into account of vehicular circulation and manoeuvring. Waiting spaces have been designated within the Application Site to prevent any electric taxis from queuing outside. The Applicant will implement traffic management measures to ensure pedestrian safety. Based on the submitted TIA (see **Appendix 1**), it is concluded that the proposed development will not have a significant impact on traffic in the surrounding area and is considered acceptable from a traffic engineering point of view.

Drainage

The Applicant will provide drainage facilities within the Application Site to effectively collect and discharge surface runoff. The Applicant has submitted a drainage proposal (see **Appendix 2**) for details. Therefore, no adverse drainage impact on the surrounding area is anticipated.

Environment

As the proposed EV charging station is intended solely for charging electric taxis, it will not cause any adverse noise, water and air pollution or visual intrusion. Additionally, no repair work, car washing, paint spraying or other workshop activities will be carried out on the premises. Any sewage generated will be treated by a septic tank. Therefore, the proposed development will not have any adverse environmental impact on the surrounding area.

6. Conclusion

The Application Site falls within the “AGR” zone on the Approved Man Uk Pin OZP No. S/NE-MUP/11. The Application Site is currently vacant, and the Applicant intends to convert it into an EV charging station for electric taxis, with additional shop and services uses (motor vehicle showroom and refreshment kiosk). Given the location of the site, its existing conditions and the surrounding land uses, the proposed development is not considered to be incompatible with the surrounding land uses. Given the temporary nature of the proposed development, it will not therefore contravene the long-term planning intention of the “AGR” zone.

The Application Site is considered a suitable venue for the proposed development, given its geographical location and potential for maximising land use. Additionally, the proposed development will meet local demand for EV charging facilities, particularly by providing quick chargers for electric taxis. This therefore aligns with Government policy to expand EV charging networks and promote the wider usage of EVs in Hong Kong.

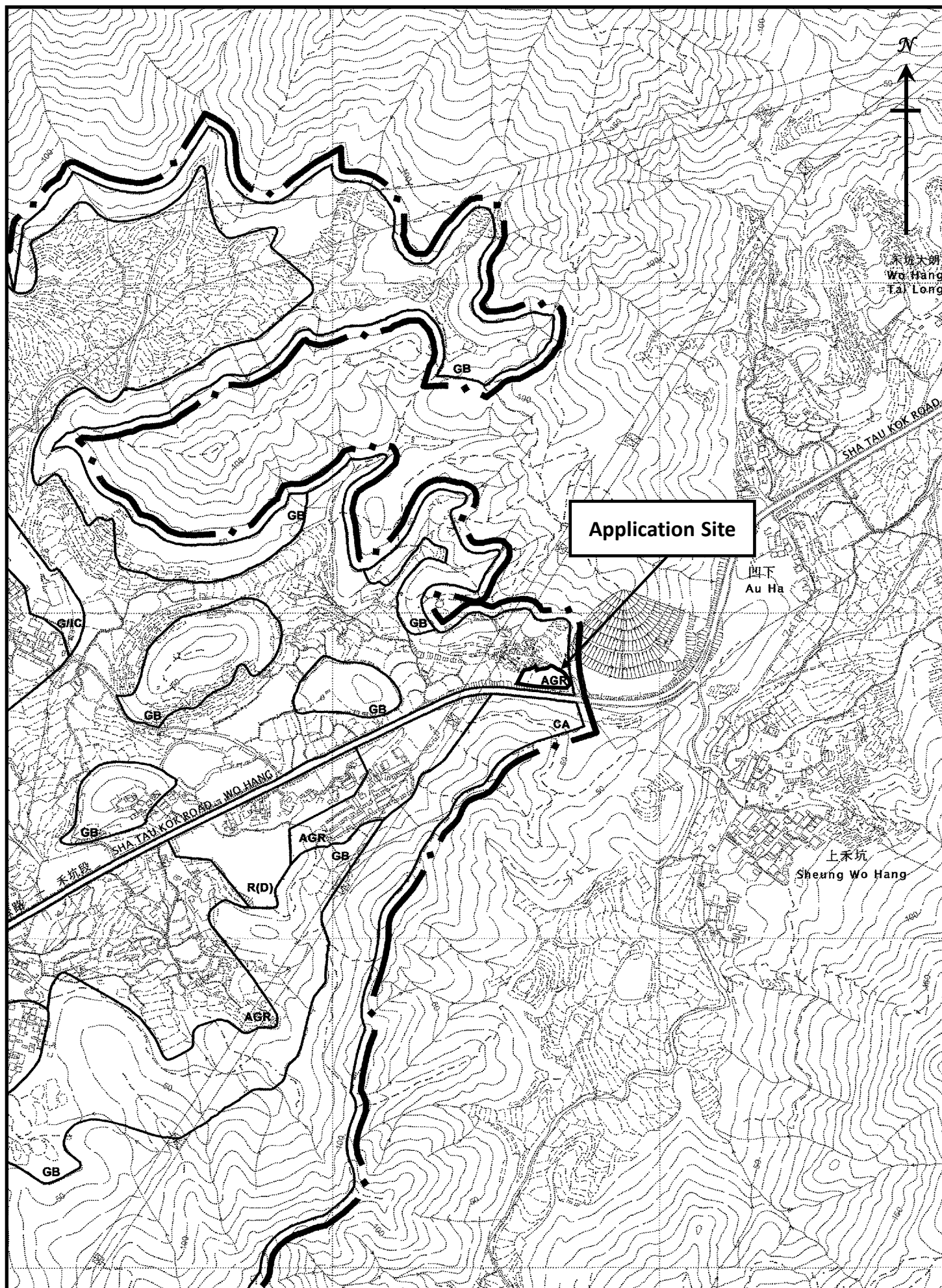
The proposed development will contribute to the growth of the taxi fleet by providing supporting charging infrastructure. It is also anticipated that the proposed development will not have an adverse impact on the surrounding environment and that the technical concerns of the relevant government departments can be addressed by implementing approval conditions.

In light of the justifications set out in this planning statement, the Board and relevant government departments are respectfully invited to approve the application for a period of three years.

Lawson David & Sung Surveyors Limited
August 2026

Figures

- Figure 1 Location Plan
- Figure 2 Lot Index Plan
- Figure 3 Vehicular Access to the Site
- Figure 4 Indicative Layout Plan
- Figure 5 Land Filling Plan



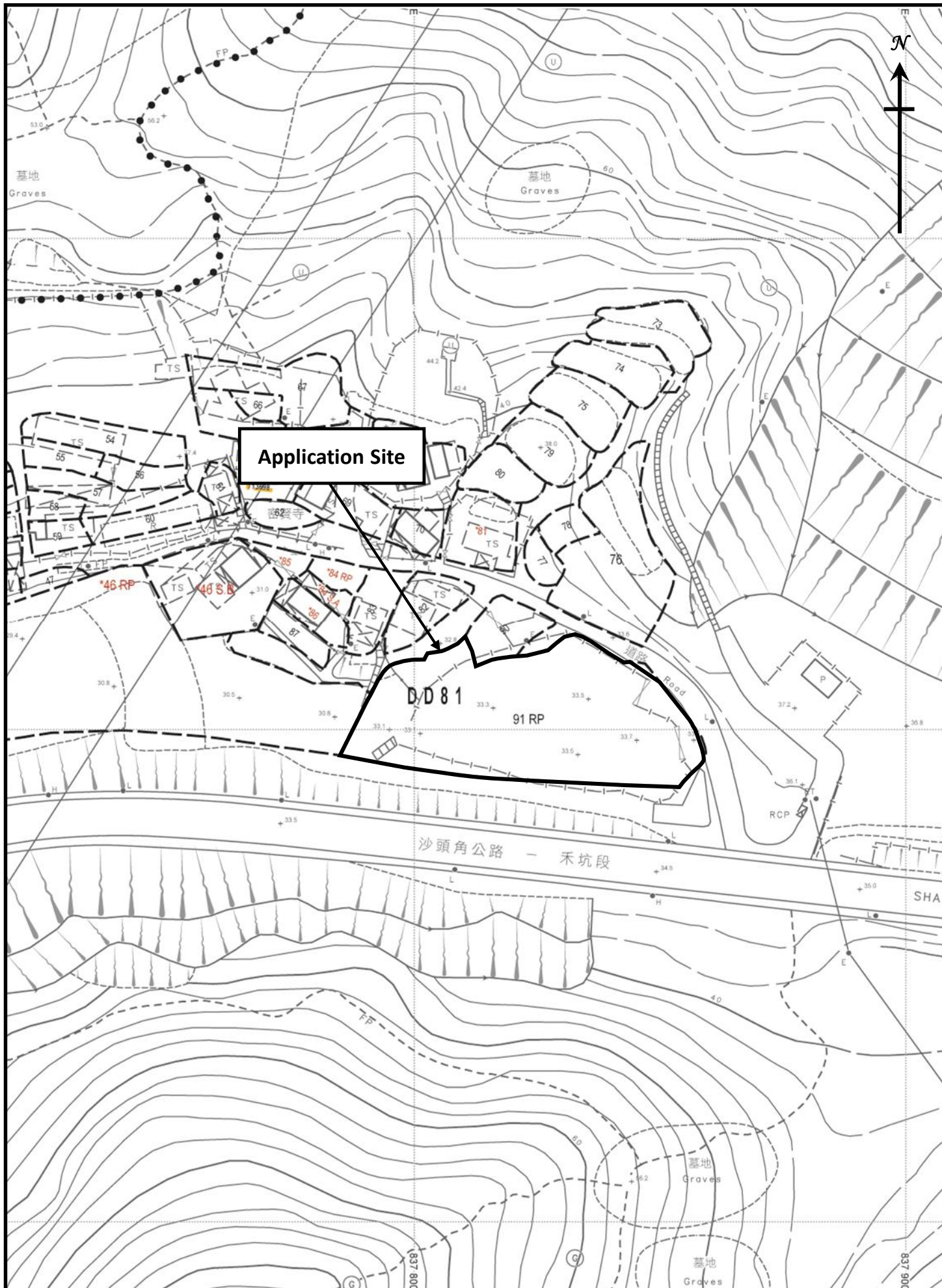
Location Plan
(Extract from Approved Man Uk Pin
Outline Zoning Plan No. S/NE-MUP/11)

Figure 1

1 : 7500



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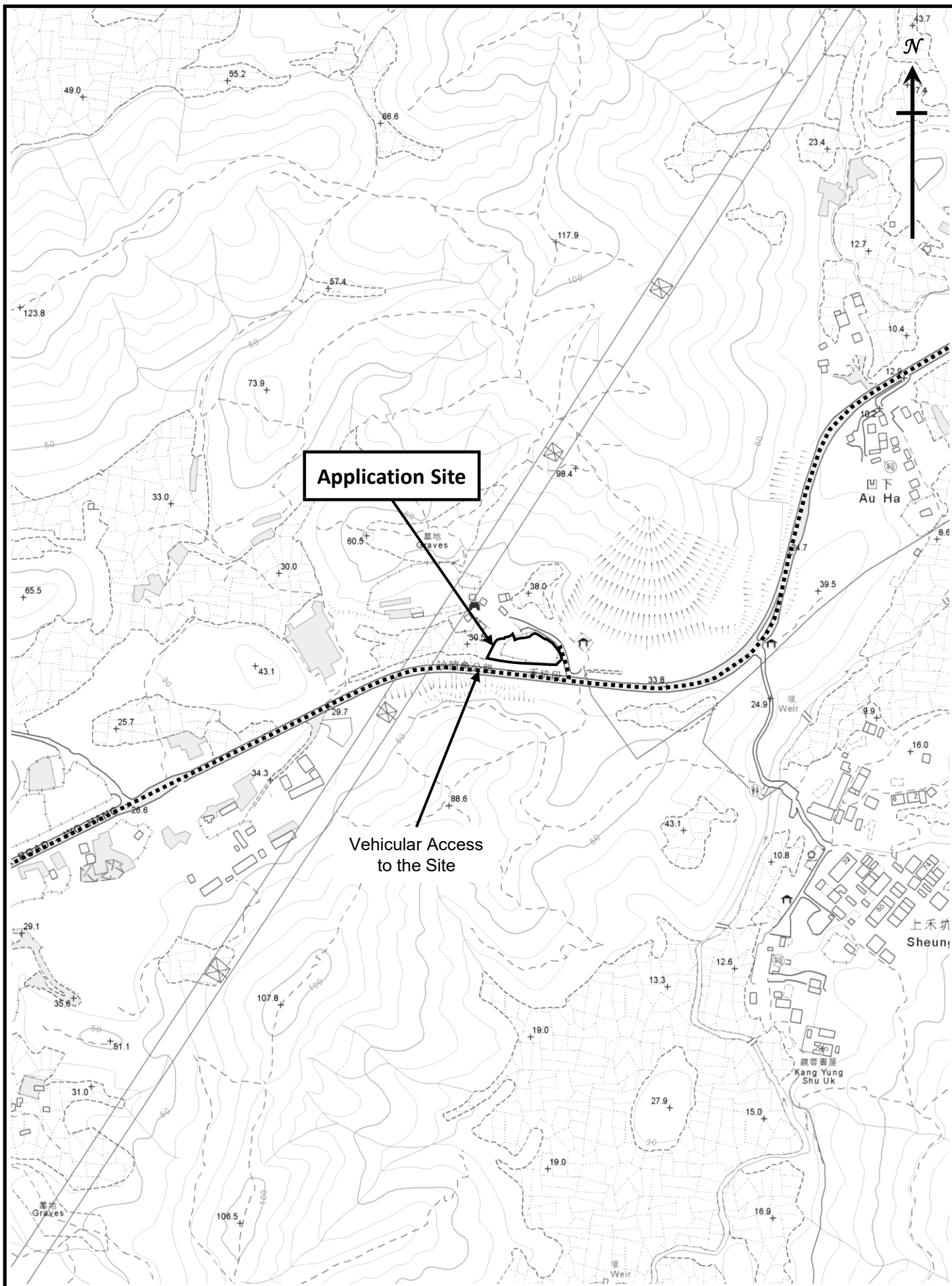
Lot Index Plan

Figure 2

1 : 1000



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Vehicular Access to the Application Site

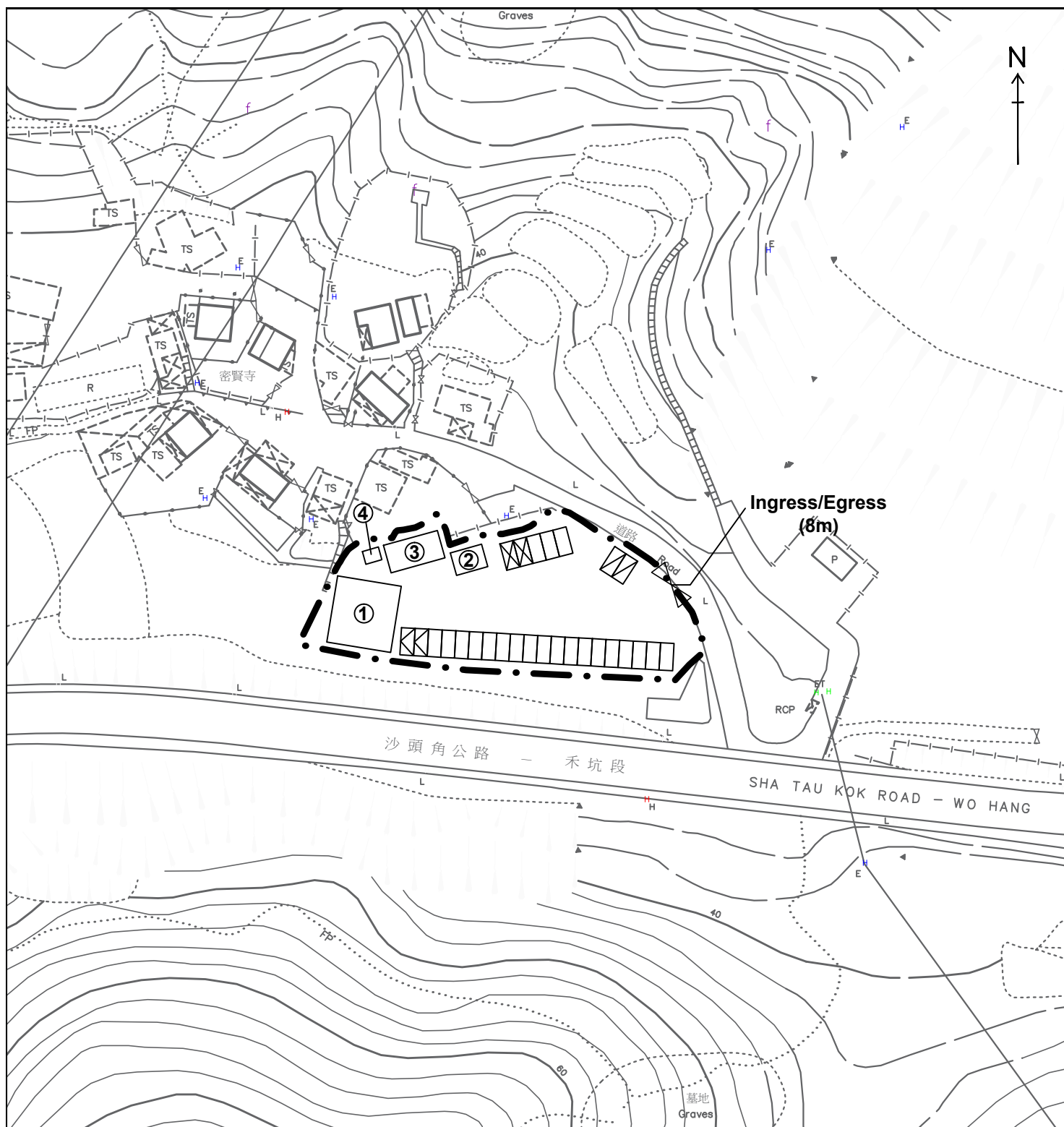
Figure 3

1 : 5000



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Structure No.	Uses	No. of Storey	Floor Area (m ²)	Height (m)
1	Motor Vehicle Showroom	1	145	5.0
2	Refreshment Kiosk	1	26	3.0
3	Transformer Room and Switch Room	1	53	3.5
4	Washroom	1	7	3.0

Legend:

- — Application Site (Area: about 1,626m²)
- EV Charing Spaces for Electric Taxi (21 nos.) (2.5m x 5m)
- ▨ Waiting Spaces for Electric Taxi (2 nos.)
- ▧ Private Car Parking Spaces for Visitors (Motor Vehicle Showroom) (2 nos.)
- ▩ Private Car Parking Spaces for Staff (2 nos.)

For Identification Purpose

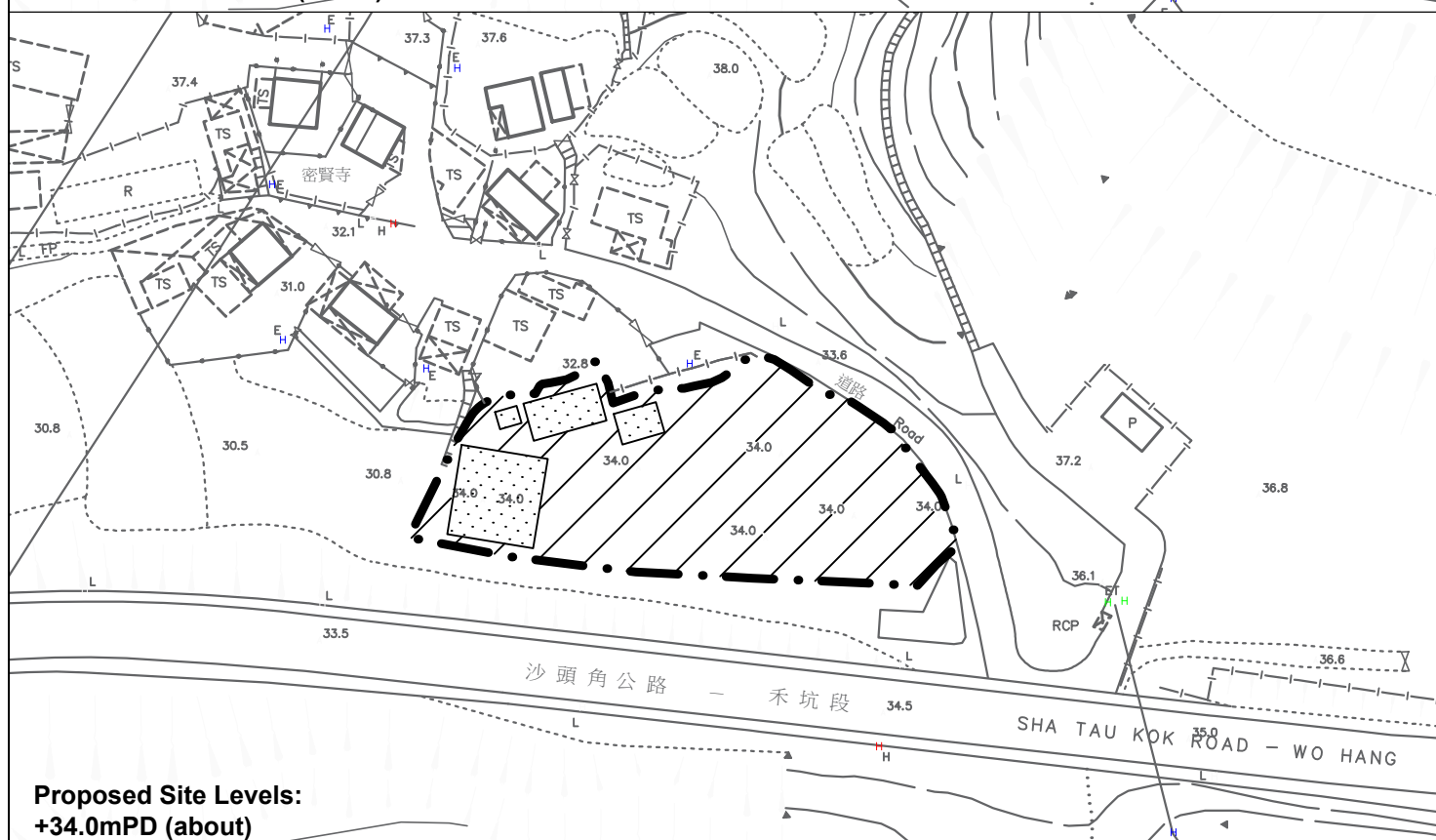
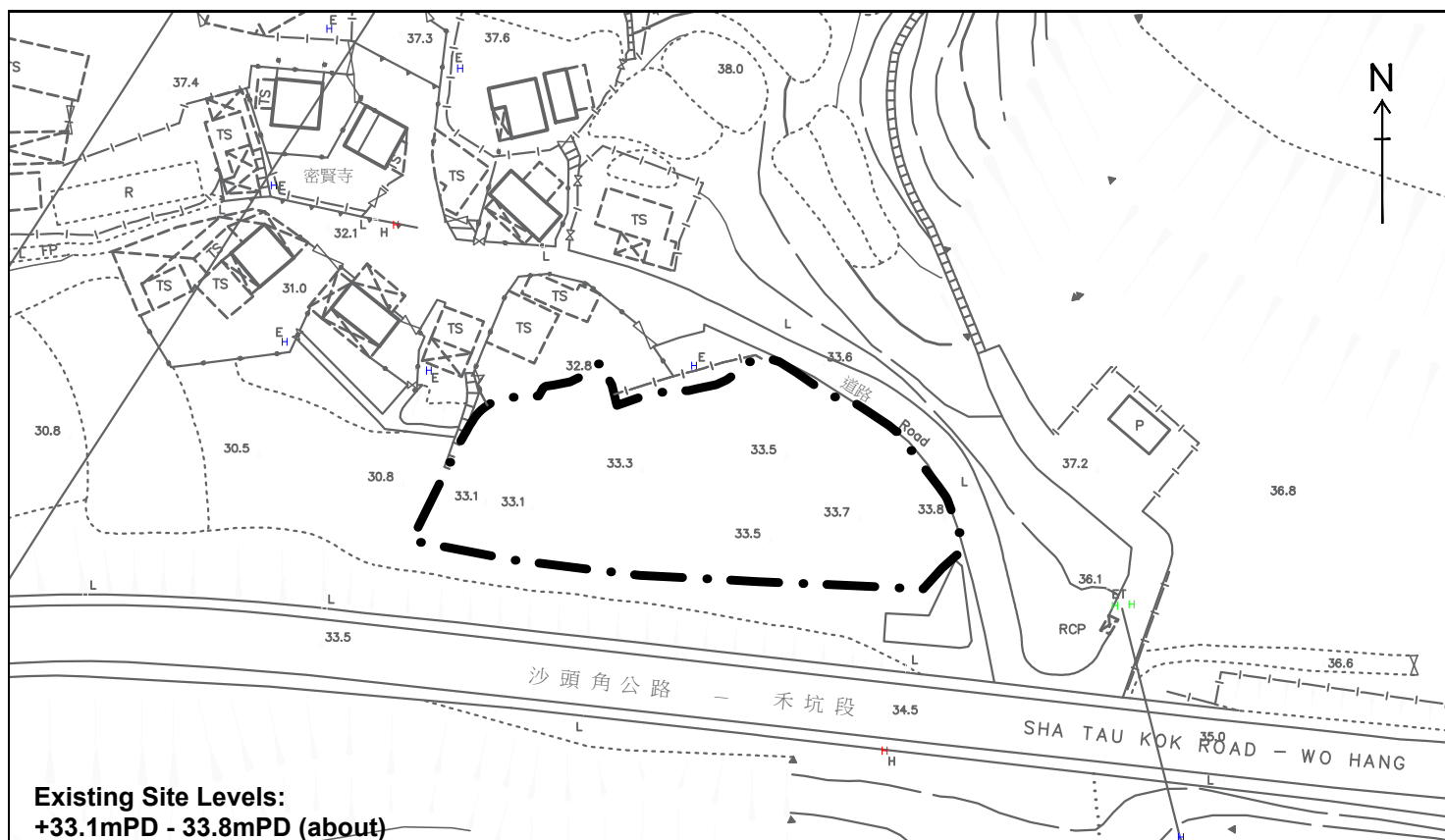
Indicative Layout Plan

Figure 4

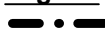
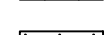
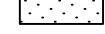
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Legend:

-  Application Site (Area: about 1,626m²)
-  Proposed Land Filling Area (Area: about 1,395m²)
-  Filling Materials: Soil with Grasscrete on top
-  Proposed Land Filling Area (Area: about 231m²)
-  Filling Materials: Soil with Concrete on top

Depth: Existing Level 33.1mPD - 33.8mPD
Proposed Level 34.0mPD
(about 0.2m - 0.9m)

For Identification Purpose

Land Filling Plan

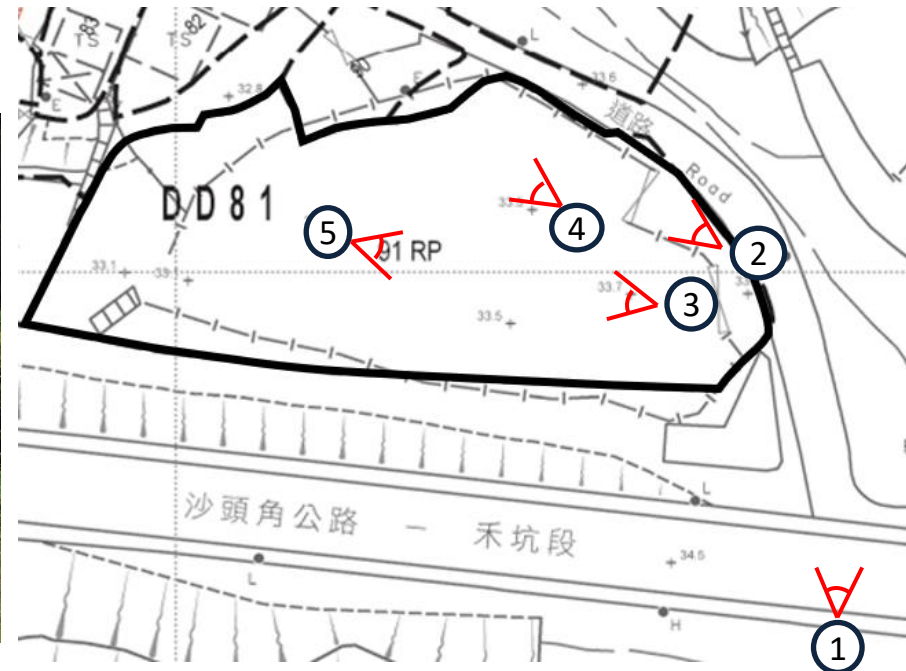
Figure 5

Scale 1:1000



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Site Photos



Legend:

 Viewpoint of the Photo

 Photo No.

Existing Condition of the Application Site and Its Surroundings

Site Photos



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Appendix 1

Traffic Impact Assessment Report

Document Status Control Record

**Proposed Temporary Green Fuel Station
for Electric Taxi and Shop and Services
(Motor Vehicle Showroom and Refreshment Kiosk)
with Associated Filling of Land for a Period of 3 Years
at Lot 91RP (Part) in DD81, Man Uk Pin, N.T.**

Traffic Impact Assessment Report

Originating Organisation: LLA Consultancy Limited 	Prepared by: SKL	SKL	Date: 24 August 2026
	Approved by: SLN	SLN	Date: 24 August 2026
	Revision No.: -		Date of Issue: 24 August 2026

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1 INTRODUCTION

1.1 Background

- 1.1.1 The Applicant proposes to use a piece of land for temporary green fuel station for electric taxi and shop and services (motor vehicle showroom and refreshment kiosk) for a period of 3 Years. The piece of land (hereinafter referred to “the Site”) is located at Lot 91RP (part) in DD81, Man Uk Pin, N.T..
- 1.1.2 The Site is zoned as “Agriculture” use under the Approved Man Uk Pin Outline Zoning Plan (OZP) No. S/NE-MUP/11. A planning application is required for the proposed temporary use.
- 1.1.3 LLA Consultancy Limited was commissioned to undertake the TIA to support the planning application. This TIA report presents the findings of the study.

1.2 Objectives

- 1.2.1 The objectives of the study are as follows:
- to review the existing traffic conditions in the vicinity of the Site;
 - to estimate the traffic generation and attraction of the proposed temporary use;
 - to project the future traffic situations in the surrounding road network;
 - to appraise the potential traffic impact of the proposed temporary use; and
 - to recommend the internal transport facilities for the proposed temporary use.

2 THE PROPOSED DEVELOPMENT

2.1 The Site

- 2.1.1 As shown in **Figure 2.1**, the Site is located at Sha Tau Kok Road – Wo Hang area. It has a total site area of about 1,626 m².

2.2 The Proposed Temporary Use and Internal Transport Facilities Provisions

- 2.2.1 The Site is used to provide charging facilities for electric taxis. The key development parameters are listed out in **Table 2.1**.

Table 2.1 Key Development Parameters

Use	Quantity
Site Area	1,626 m ²
EV Charging Facilities for Electric Taxi only (2.5m x 5.0m)	21 nos.
Parking Spaces / Waiting Spaces for Electric Taxi only (2.5m x 5.0m)	2 spaces
Motor Vehicle Showroom and Refreshment Kiosk (Retail Use)	171 m ²
Parking Space for Retail Use @ 1 space per 150 m ² (2.5m x 5.0m)	2 spaces
Parking Space for Staff (2.5m x 5.0m)	2 spaces

2.3 Swept Path Analysis

- 2.3.1 The Site is directly abutted a local access road connected to Sha Tau Kok Road – Wo Hang. In order to ensure the safety of pedestrians walking along the local access road, a pair of flashing warning lights will be installed at both sides of the site access as shown in **Figure 2.2**.
- 2.3.2 To ensure smooth manoeuvring of the parking area, swept path analysis was conducted to demonstrate that adequate space is provided for the vehicles for manoeuvring as shown in **Figure 2.3**.

3 EXISTING TRAFFIC SITUATION

3.1 Existing Road Network

- 3.1.1 Sha Tau Kok Road – Wo Hang is a single two lane carriageway connecting Ping Che and Sha Tau Kok. In 2024, it recorded an AADT of 5,020 vehicles.

3.2 Traffic Count Surveys

- 3.2.1 In order to appraise the existing traffic conditions, a traffic count survey was carried out on 10 July 2026 (Friday) for the time periods of 14:30 – 17:30, the peak traffic generation period of the vehicle charging station. More details will be discussed in **Section 4.2**.

- 3.2.2 The locations of the surveyed junctions are shown in **Figure 3.1**.

J1 – J/O Sha Tau Kok Road – Wo Hang / Local Access Road

J2 – J/O Sha Tau Kok Road Interchange

- 3.2.3 The peak hour identified are 16:30 – 17:30. The observed 2026 traffic flows are presented in **Figure 3.2**.

3.3 Existing Junction Capacity Assessment

- 3.3.1 Based on the observed traffic flows, the performance of the junctions is assessed. It is calculated that all junctions are operating satisfactorily. The results are presented in **Table 3.1** and the detailed calculation sheets are attached in **Appendix A**.

Table 3.1 Existing Junction Capacity Assessment

Ref.	Junction Location	Type/Index ⁽¹⁾	Peak Hour of the Station
J1	Sha Tau Kok Road – Wo Hang / Local Access Road	Priority /DFC	0.01
J2	Sha Tau Kok Road Interchange	Roundabout /DFC	0.42

Note: (1) DFC = Design Flow to Capacity

3.4 Existing Link Capacity Assessment

- 3.4.1 The Volume to Capacity (V/C) Ratios of Sha Tau Kok Road – Wo Hang is assessed and the results are presented in **Table 3.2**.

Table 3.2 Link Capacity Assessments

Road	Capacity ⁽¹⁾ (pcu/hr)	Peak Hour Traffic Volume (pcu/hr)	Peak Hour V/C Ratio
Sha Tau Kok Road E/B (between Heung Yuen Wai Highway and Local Access Road)	480	337	0.70
Sha Tau Kok Road W/B (between Heung Yuen Wai Highway and Local Access Road)	480	285	0.59

Note: (1) Capacity refers to TPDM Vol.2 Ch. 2.4. A factor of 1.2 (based on the traffic count survey result) is adopted to convert the capacity from veh/hr to pcu/hr.

- 3.4.2 As shown in **Table 3.2**, the concerned road sections are operating with spare capacity during the peak hour.

4 FUTURE TRAFFIC SITUATION

4.1 Design Year

- 4.1.1 The proposed temporary use, if approved by the Town planning Board, will be valid for 3 years until 2029. Hence, Year 2029 is adopted as the design assessment year.

4.2 Traffic Generation of the Proposed Temporary Use

Traffic Generation for Electric Vehicle Charging Station

- 4.2.1 For the charging facilities, all EV chargers are direct current (DC) quick chargers with output power of 120kW which can provide 600km of mileage when an electric taxi charged for about 30 minutes.
- 4.2.2 From the taxi trade, the drivers are usually working on two shifts, i.e., the day shift and the night shift. In general, the day shift is 05:00 to 17:00 while the night shift is 17:00 to 05:00. The peak hour usage of charging facilities is expected to be the time periods before the shift such that a fully charged taxi can be passed to the driver in the next shift. As a result, the peak traffic generation of the proposed charging station will be either between 15:00 to 17:00 or after midnight. It is anticipated that minimal drivers will charge their taxis during the normal highway peak hours because these time periods will be the busiest hour in their business.
- 4.2.3 According to the Hong Kong Planning Standard and Guidelines, Section 3.9.4, a minimum of two waiting spaces should be provided in each EV charging station to avoid the awaiting vehicles to queue on public roads. In view of the size of the Site, 2 waiting spaces can be provided. In addition, to minimize the waiting time of the taxi drivers and hence maximize the available operation hours, a mobile application catered for the taxi drivers will be introduced which will include the payment platform for EV charging and provide real-time availability of EV charging stations at different locations managed by the Applicant. Charging arrangements and regulations will be communicated to all taxi drivers in advance.
- 4.2.4 The estimated traffic generation and attraction for Electric Vehicle Charging Station during the peak operation hour will be a two-way traffic of 42 taxis (42 Nos. of vehicles = 21 EV charging stations x 2 because of 30 minutes charging/servicing time for each taxi).

Traffic Generation for Motor Vehicle Showroom and Refreshment Kiosk (Retail Use)

- 4.2.5 For conservative assessment purpose, traffic generated/ attracted by these components of the proposed development would be estimated based on the PM trip rates for retail documented in TPDM Volume 1 Chapter 3 – Transport Considerations of Town Plans.
- 4.2.6 Based on the above, the traffic generation of the proposed development has been estimated and presented in **Table 4.1**.

Table 4.1 Development Traffic Generation

Proposed Use	Unit /Content	Operation Peak Hour		
		Generation	Attraction	Total
Adopted Trip rates				
Retail ⁽¹⁾	pcu/hr/100m ²	0.3100	0.3563	-
Estimated Traffic Generation/Attraction				
EV Charging Station	21 stations	42 ⁽²⁾	42 ⁽²⁾	84 ⁽²⁾
Ancillary Retail Use	171 m ²	1	1	2
Total		43	43	86

Notes: (1) TPDM mean trip rates for retail use (PM peak) are adopted.

(2) Traffic generation and attraction discussed in **Section 4.2** are adopted.

4.2.7 As shown in **Table 4.1**, the Site will generate a two-way traffic flows of 86 pcu/hour in the peak hour. The distribution of the development traffic is shown in **Figure 4.1**.

4.3 Traffic Growth

Annual Traffic Census (ATC) Data

4.3.1 Reference was made to the 2020 to 2024 Annual Traffic Census Reports, published by the Transport Department, to determine the natural traffic growth. The traffic data recorded at counting station in the vicinity of the Site is shown in **Table 4.2**.

Table 4.2 Annual Traffic Census Data

Stn. No.	Road Section			AADT (vehicle/day) ⁽¹⁾					Average Annual Growth (%)
	Road	From	To	2020	2021	2022	2023	2024	
5860	Sha Tau Kok Rd	Ping Che Rd	Shun Lung St	6,300	5,970 (-5.2%)	4,900 (-17.9%)	5,010 (2.2%)	5,020 (0.2%)	-5.5%

Note: (1) Figures in bracket indicated the % increase between two successive years.

4.3.2 **Table 4.2** showed that the recorded average annual growth rate of the concerned counting stations is -5.5% between years 2020 to 2024.

Territorial Population and Employment Data Matrix (TPEDM)

4.3.3 Reference was also made to the 2021-based TPEDM published by Planning Department. The population and employment data of year 2026 and 2031 in Northeast New Territories are summarized in **Table 4.3**.

Table 4.3 Population and Employment Data in Northeast New Territories

Year	Population	Employment	Total
2026	1,361,150	421,350	1,782,500
2031	1,416,800	448,600	1,865,400
Average Annual Growth Rate			+0.9%

- 4.3.4 As shown in **Table 4.3**, the projected average annual growth rate of the population and employment total number under the TPEDM in Northeast New Territories is +0.9% between the years 2026 to 2031, which is larger than the annual growth rate derived from ATC. To be conservative, the larger growth rate of +0.9% is adopted for the subsequent assessments.

4.4 Reference and Design Flows

- 4.4.1 The 2029 Reference Flows, i.e. the future traffic flows in the local road network WITHOUT the development traffic, were estimated based on the following equation:

$$2029 \text{ Reference Flows} = 2026 \text{ Existing Flows} \times (1 + 0.9\%)^3$$

- 4.4.2 The 2029 Design Flows, i.e. the future traffic flows in the local road network WITH the development traffic, are estimated based on the following equations.

$$2029 \text{ Design Flows} = 2029 \text{ Reference Flows} + \text{Traffic generated and attracted by the proposed temporary use}$$

- 4.4.3 The forecast traffic flows for the two scenarios are shown in **Figures 4.2 and 4.3** respectively.

4.5 Junction Capacity Assessment

- 4.5.1 Junction capacity analysis is carried out for the assessment year 2029. The assessment results are shown in **Table 4.4** and the detailed calculation sheets are attached in **Appendix B**.

Table 4.4 2029 Junction Capacity Assessment

Ref.	Junction Location	Type/ Index ⁽¹⁾	2029 Reference Peak Hour	2029 Design Peak Hour
J1	Sha Tau Kok Road – Wo Hang / Local Access Road	Priority /DFC	0.01	0.13
J2	Sha Tau Kok Road Interchange	Roundabout /DFC	0.43	0.45

Note: (1) DFC = Design Flow to Capacity.

- 4.5.2 The results in **Table 4.4** show that the assessed junctions will operate satisfactorily in both reference and design scenarios. Therefore, it is anticipated that the proposed temporary use will not induce significant traffic impact to the surrounding road network.

4.6 Link Capacity Assessment

4.6.1 The V/C Ratios of Sha Tau Kok Road were assessed and the results are presented in **Table 4.5**.

Table 4.5 2029 Link Capacity Assessments

Road	Capacity ⁽¹⁾ (pcu/hr)	2029 Traffic Volume		2029 V/C Ratio	
		Reference Scenario	Design Scenario	Reference Scenario	Design Scenario
Sha Tau Kok Road E/B (between Heung Yuen Wai Highway and Local Access Road)	480	346	389	0.72	0.81
Sha Tau Kok Road W/B (between Heung Yuen Wai Highway and Local Access Road)	480	293	336	0.61	0.70

Note: (1) Capacity refers to TPDM Vol.2 Ch. 2.4. A factor of 1.2 (based on the traffic count survey result) is adopted to convert the capacity from veh/hr to pcu/hr.

4.6.2 As shown in **Table 4.5**, all the concerned road sections will operate with capacity during peak hour in all scenarios. Hence, it can be concluded that the traffic induced by the proposed temporary use will not induce significant traffic impact to the road network.

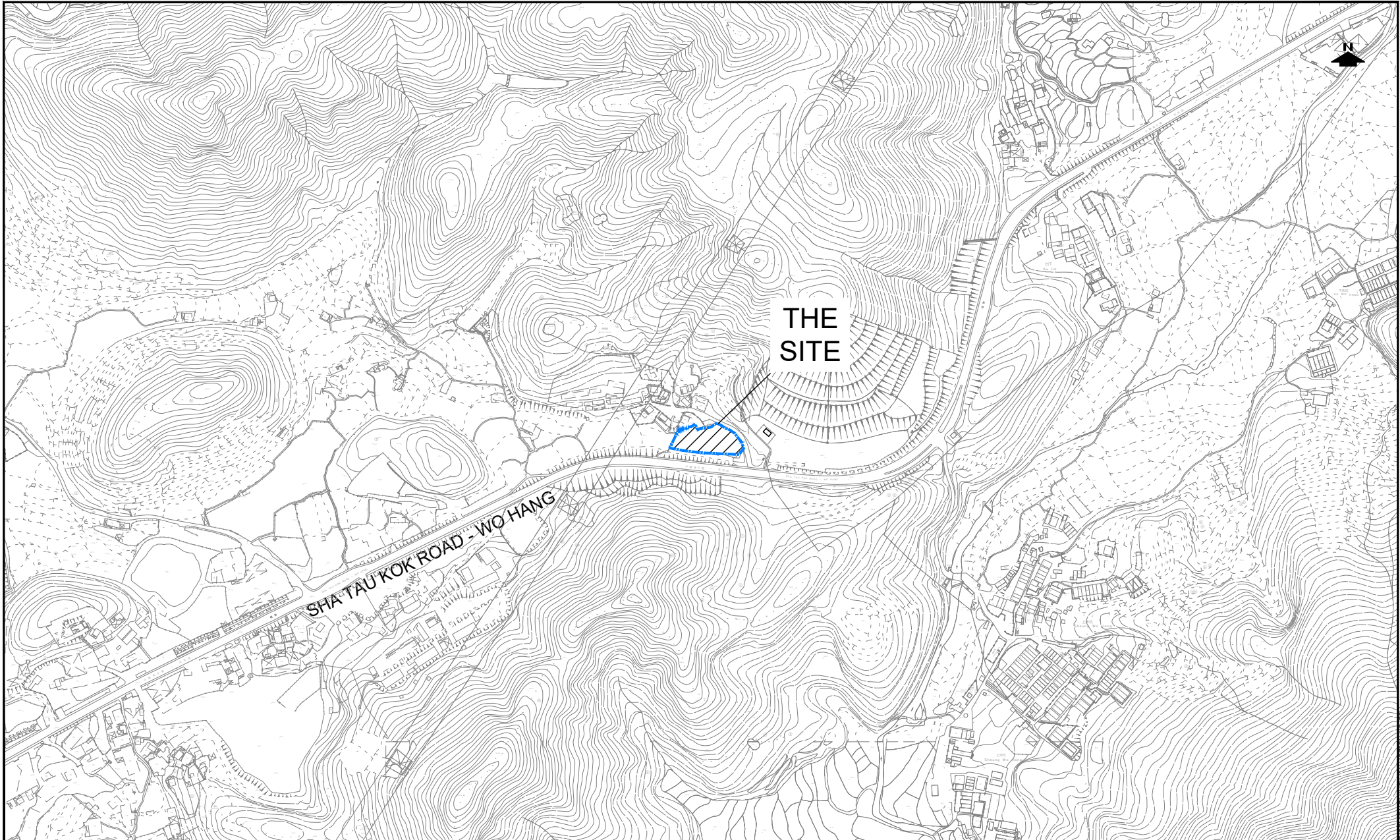
5 SUMMARY AND CONCLUSION

5.1 Summary

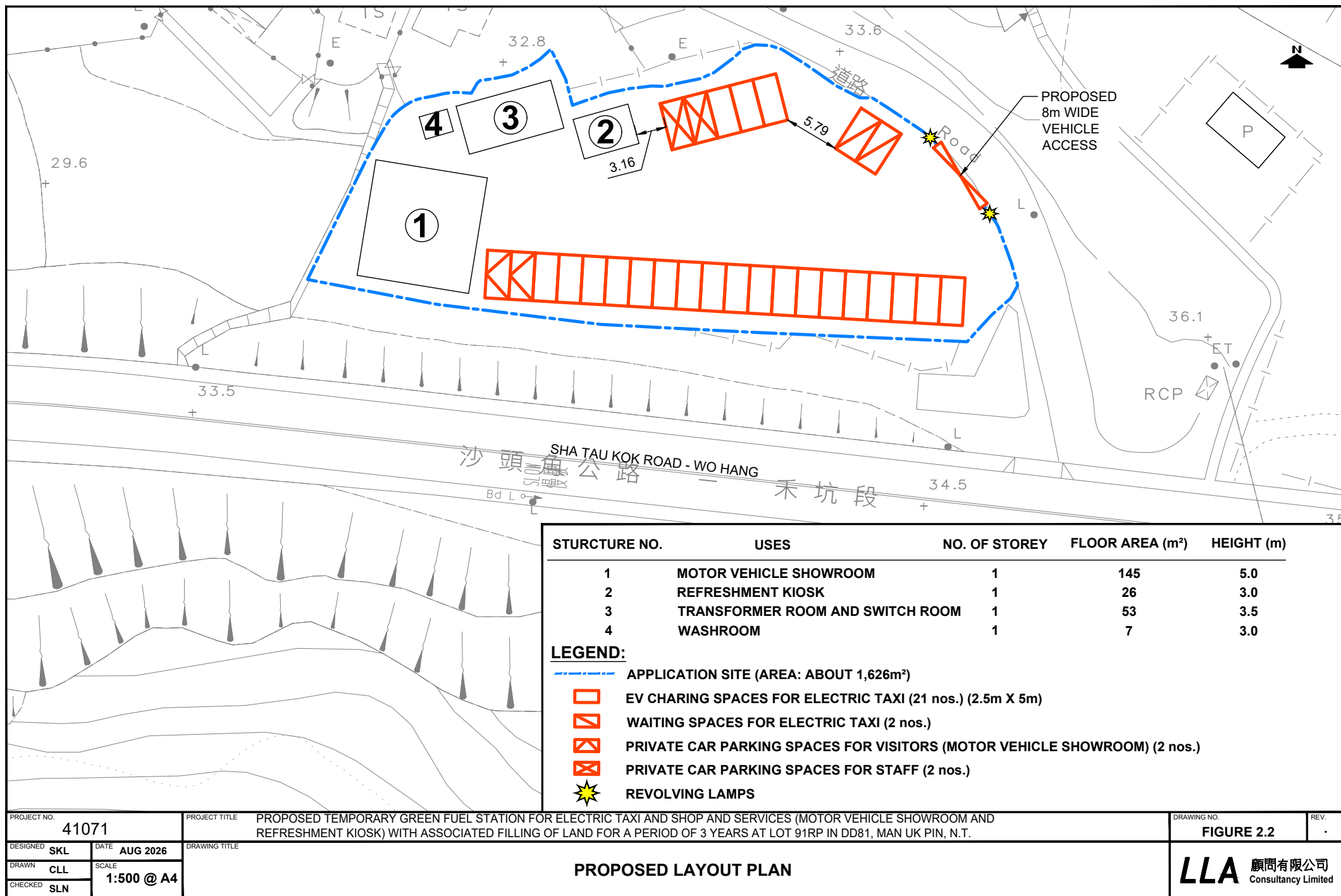
- 5.1.1 The Applicant proposes to use a piece of land for temporary green fuel station for electric taxi and shop and services (motor vehicle showroom and refreshment kiosk) for a period of 3 Years. The piece of land (hereinafter referred to "the Site") is located at Lot 91RP in DD81, Man Uk Pin, N.T. The main function of the Site is to provide charging facilities for electric taxis with supporting facilities, including motor vehicle showroom and refreshment kiosk.
- 5.1.2 Traffic count survey was carried out on 10 July 2026 (Friday) for the time periods of 15:30 – 17:30 which the time period will be the peak traffic generation period of the proposed development. Based on the existing traffic flows, the junction and link capacity assessments show that they are operating satisfactorily.
- 5.1.3 The proposed development is estimated to generate a two-way traffic of 86 pcu/hour in the operation peak hour. Junction and link capacity assessment was carried out for the reference and design scenarios in 2029 and the results revealed that the concerned junctions and road links would perform satisfactorily with spare capacity in 2029. Therefore, it is anticipated that the proposed temporary use will not induce significant traffic impact to the surrounding road network.
- 5.1.4 For the 21 nos. of EV charging stations, 2 nos. of waiting spaces can be provided (minimum two spaces in each EV charging station) to avoid the awaiting vehicles to queue on public roads. In addition, to minimize the waiting time of the taxi drivers and hence maximize the available operation hours, a mobile application catered for the taxi drivers will be introduced which will include the payment platform for EV charging and provide real-time availability of EV charging stations at different locations managed by the Applicant. Charging arrangements and regulations will be communicated to all taxi drivers in advance.

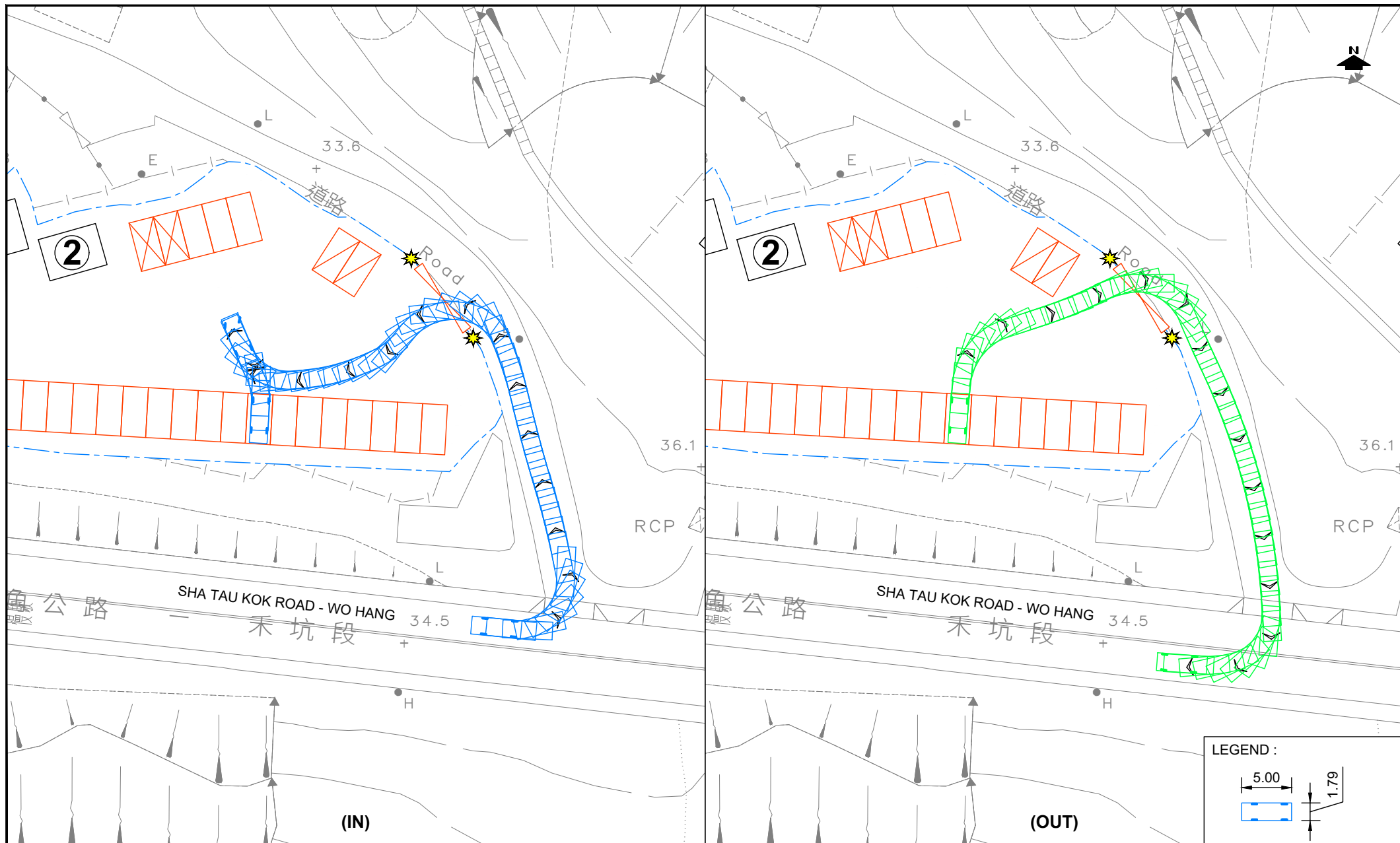
5.2 Conclusion

- 5.2.1 This planning application is to allow a temporary vehicle charging station with supporting facilities including motor vehicle showroom and refreshment kiosk for a period of 3 years. Based on the assessment result, it can be concluded that the proposed use will not induce additional adverse traffic impact on the surrounding road network and it is considered acceptable from traffic engineering point of view.



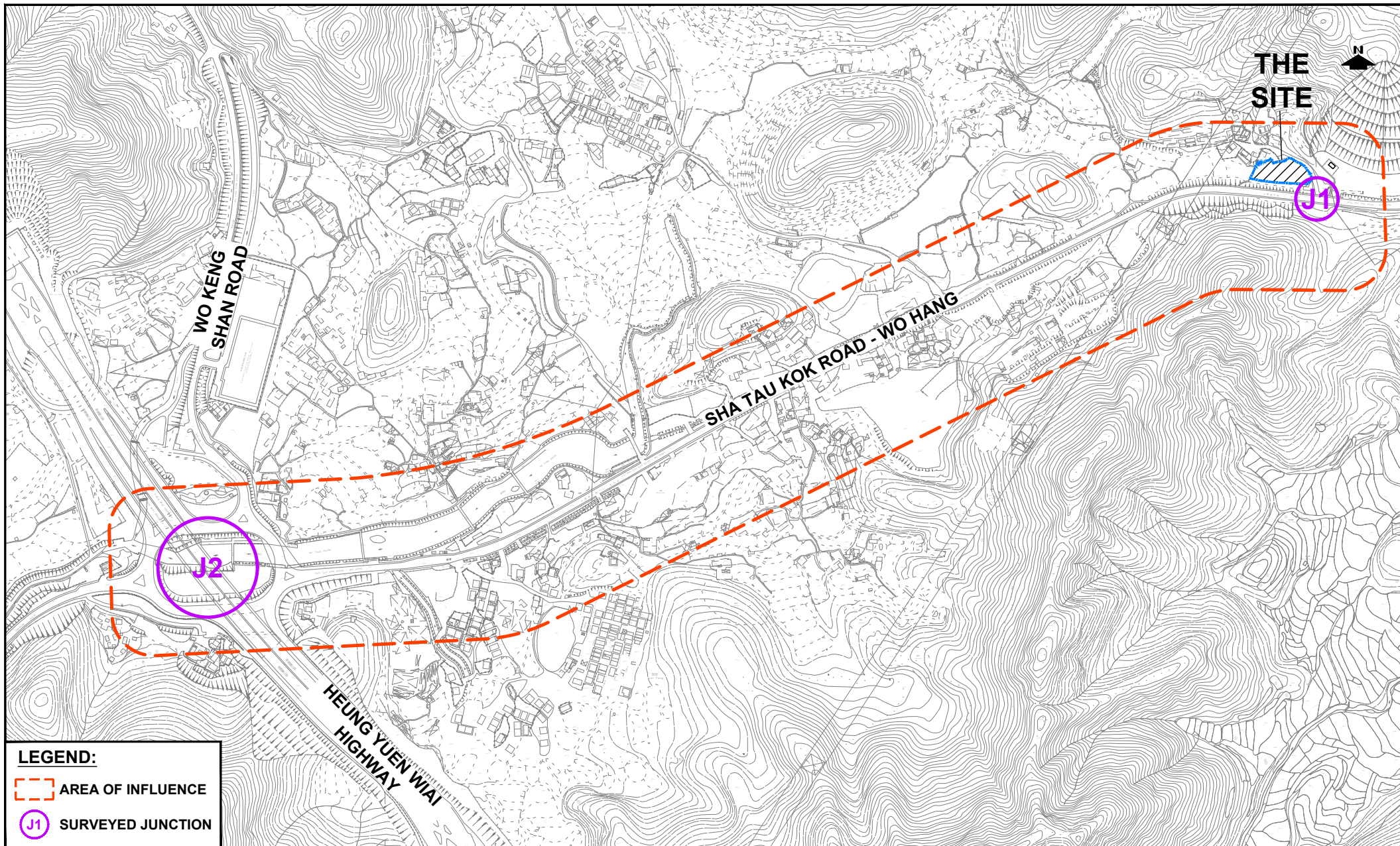
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DESIGNED SKL	DATE AUG 2026	DRAWING TITLE SITE LOCATION PLAN		LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL	SCALE 1:5000 @ A4				
CHECKED SLN					





PROJECT NO. 41071		PROJECT TITLE PROPOSED TEMPORARY GREEN FUEL STATION FOR ELECTRIC TAXI AND SHOP AND SERVICES (MOTOR VEHICLE SHOWROOM AND REFRESHMENT KIOSK) WITH ASSOCIATED FILLING OF LAND FOR A PERIOD OF 3 YEARS AT LOT 91RP IN DD81, MAN UK PIN, N.T.		DRAWING NO. FIGURE 2.3	REV. .
DESIGNED SKL	DATE AUG 2026	DRAWING TITLE		LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL	SCALE 1:500 @ A4				
CHECKED SLN					

SWEPT PATH ANALYSIS OF 5m VEHICLE



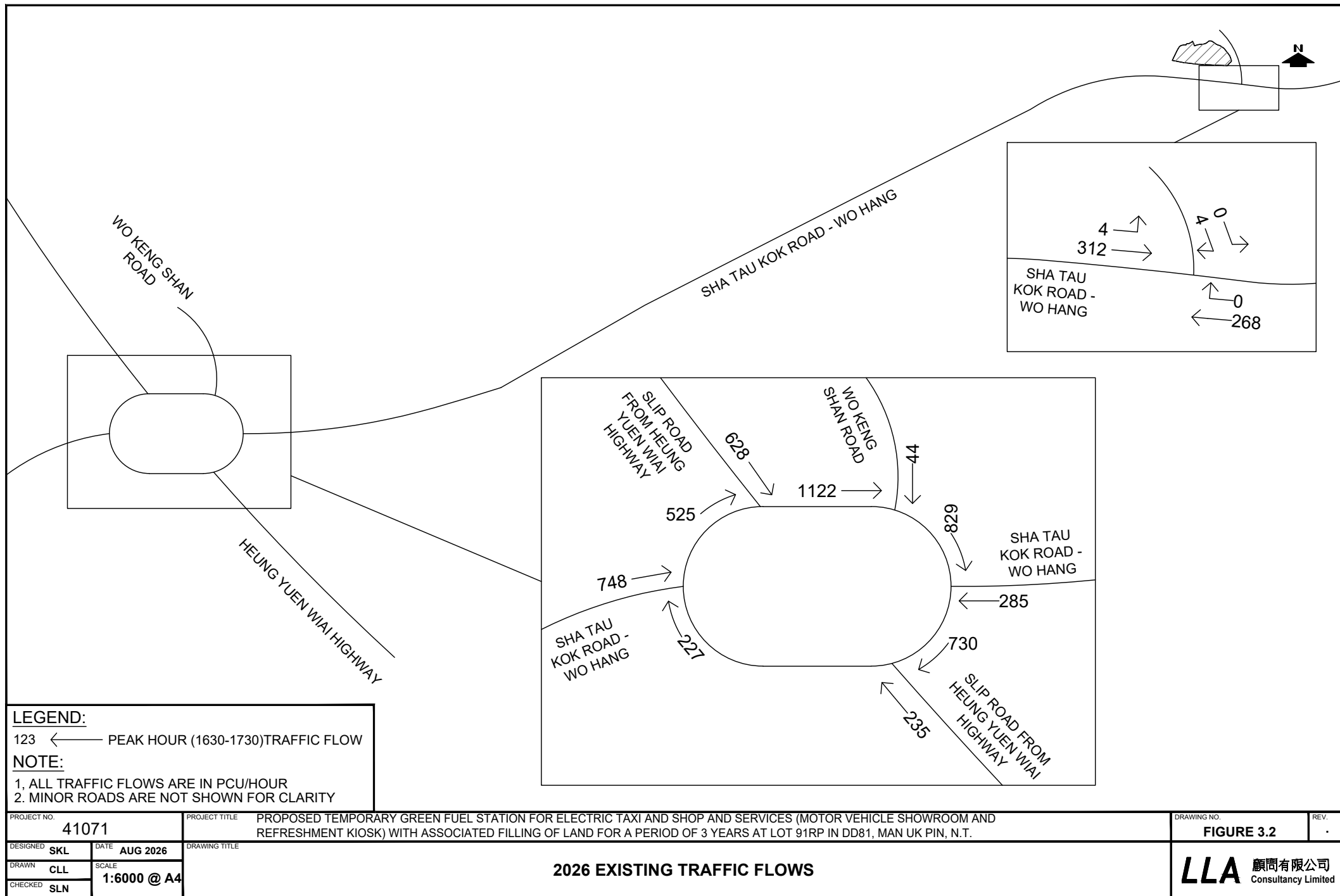
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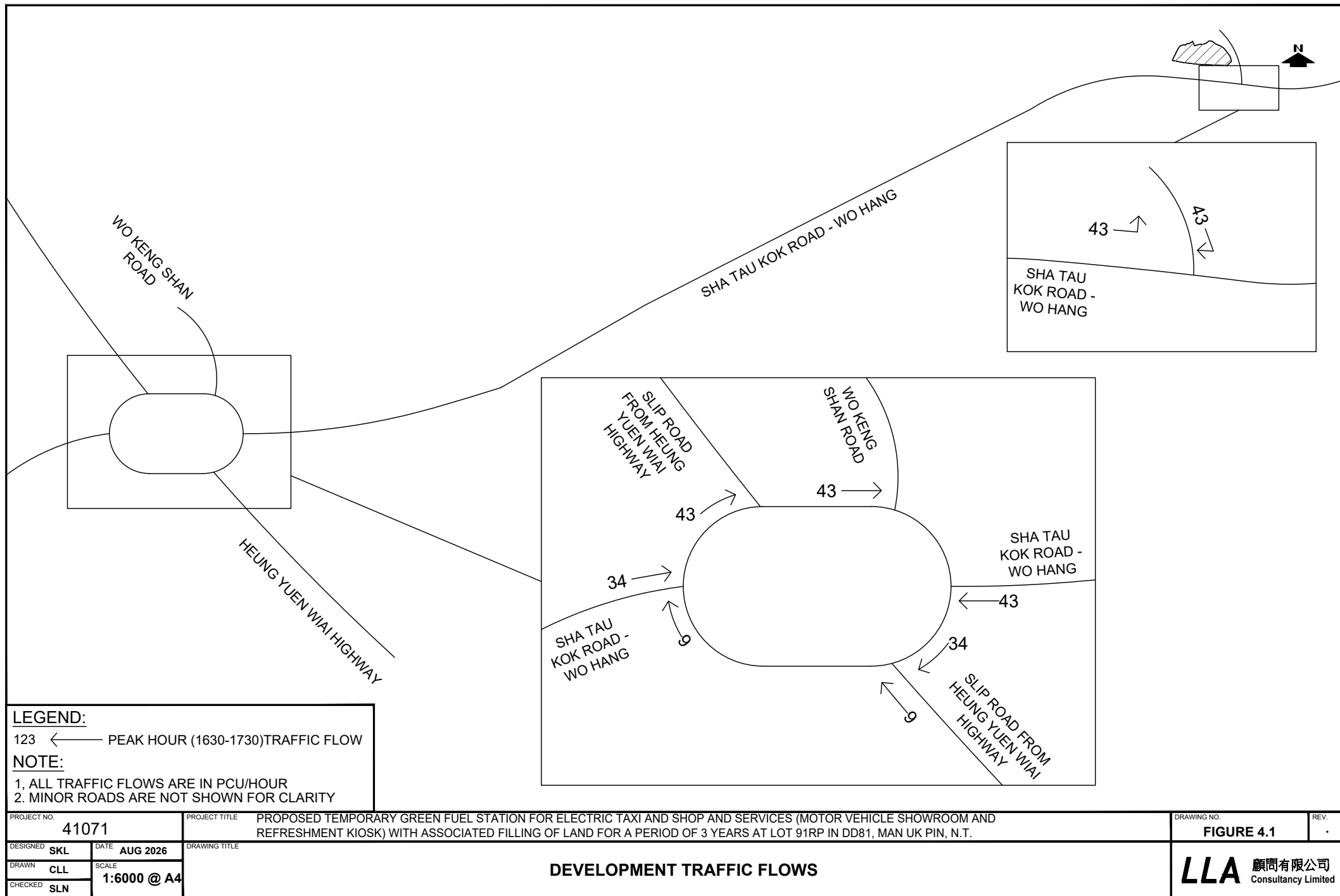
 AREA OF INFLUENCE

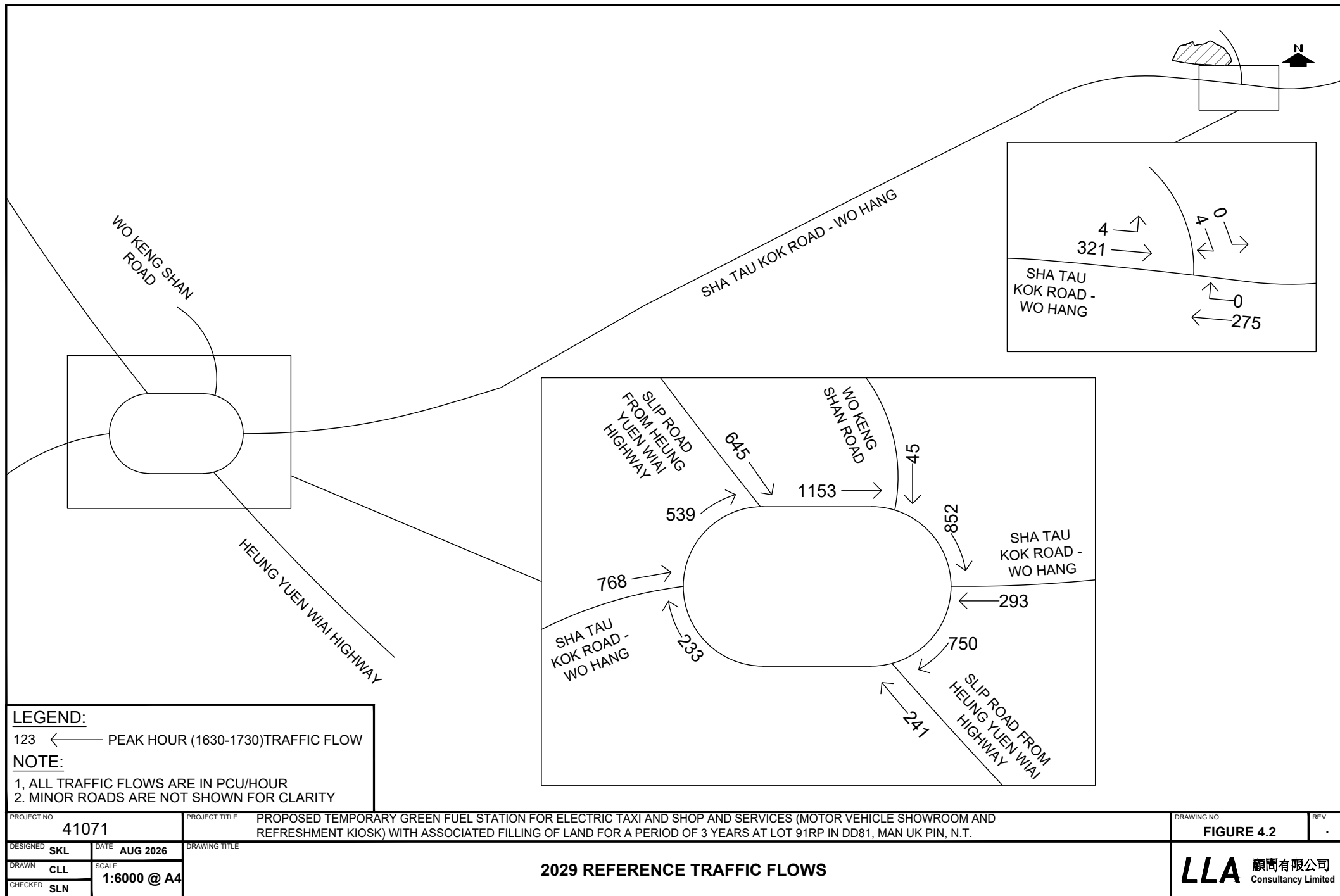
J1 SURVEYED JUNCTION

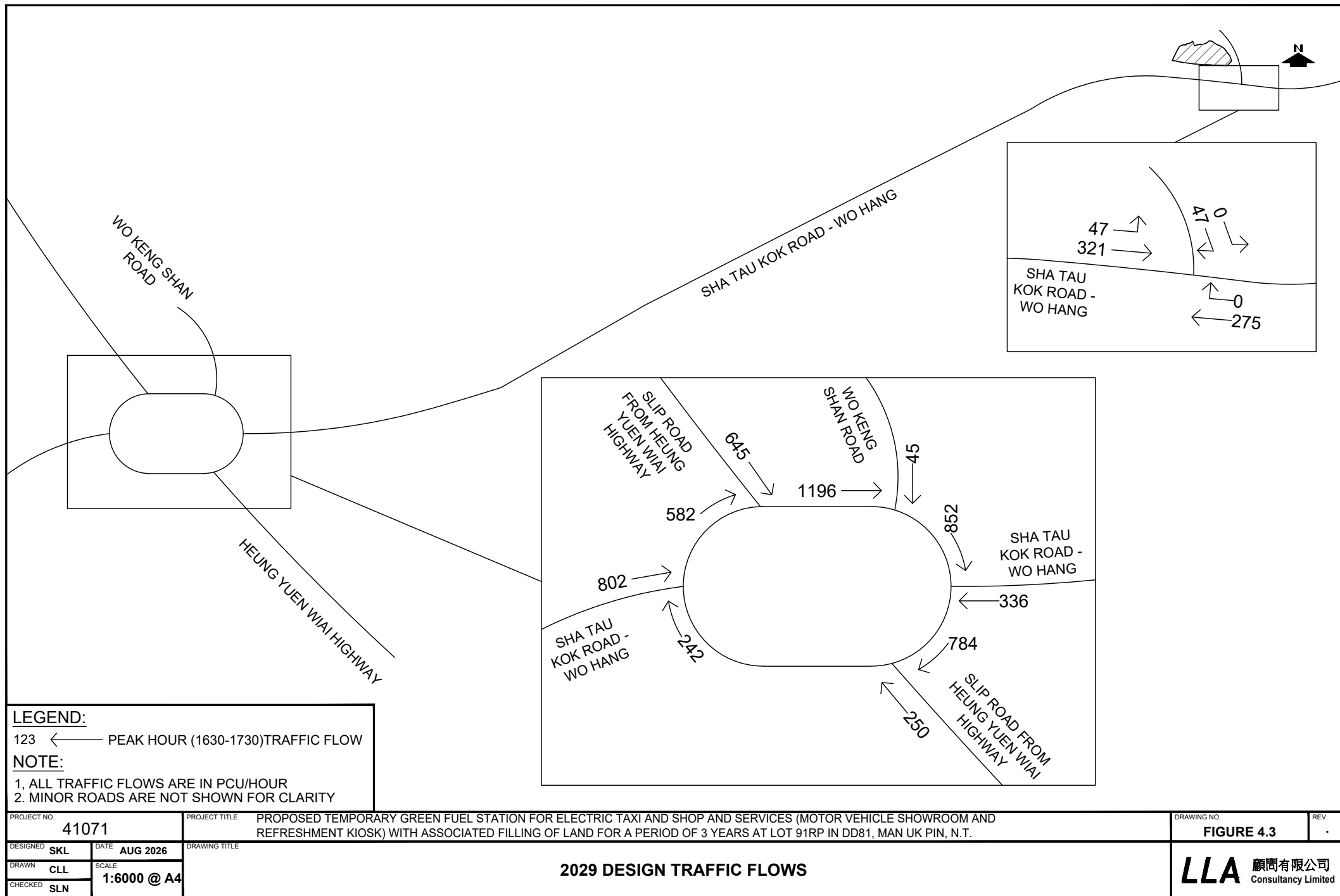
PROJECT NO. 41071		PROJECT TITLE PROPOSED TEMPORARY GREEN FUEL STATION FOR ELECTRIC TAXI AND SHOP AND SERVICES (MOTOR VEHICLE SHOWROOM AND REFRESHMENT KIOSK) WITH ASSOCIATED FILLING OF LAND FOR A PERIOD OF 3 YEARS AT LOT 91RP IN DD81, MAN UK PIN, N.T.		DRAWING NO. FIGURE 3.1	REV. .
DESIGNED SKL	DATE AUG 2026	DRAWING TITLE		LLA 顧問有限公司 Consultancy Limited	
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AREA OF INFLUENCE









Appendix A

Junction Capacity Assessments

- Existing Scenario

LLA CONSULTANCY LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Green Fuel Station for Electric Taxi and Shop and Services (Motor Vehicle Showroom and Refreshment Kiosk) with Associated Filling of Land for a Period of 3 Years at Lot 91RP in DD81, Man Uk Pin, N.T.

2026 Existing 1630-1730

PROJECT NO.: 41071

PREPARED BY:

SKL

Aug-26

FILENAME : J1_STKR_LA

CHECKED BY:

SLN

Aug-26

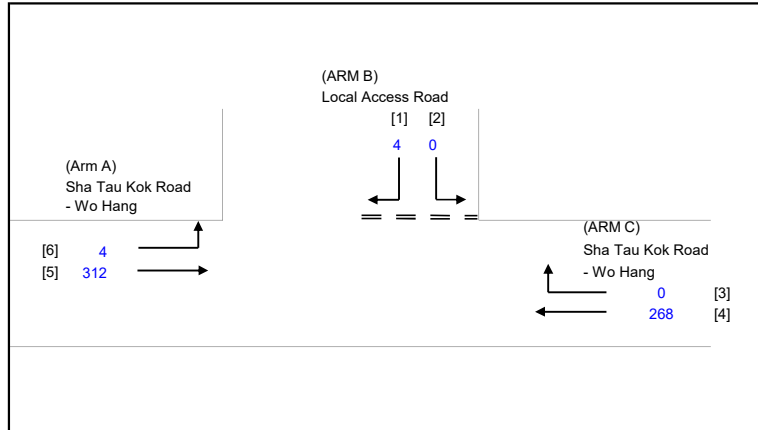
REFERENCE NO.:

REVIEWED BY:

SLN

Aug-26

J1 Sha Tau Kok Road - Wo Hang / Local Access Road



NOTES : (GEOMETRIC INPUT DATA)

W = MAJOR ROAD WIDTH
W cr = CENTRAL RESERVE WIDTH
W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D = STREAM-SPECIFIC B-A
E = STREAM-SPECIFIC B-C
F = STREAM-SPECIFIC C-B
Y = (1-0.0345W)

GEOMETRIC DETAILS:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)

W = 7.30 (metres)
W cr = 0 (metres)
q a-b = 4 (pcu/hr)
q a-c = 312 (pcu/hr)

D = 0.73872
E = 0.80069
F = 0.98200
Y = 0.74815

Q b-a = 366
Q b-c = 528 Q b-c (O) = 526.6
Q c-b = 647
Q b-ac = 366

DFC b-a = 0.0109
DFC b-c = 0.0000
DFC c-b = 0.0000
DFC b-c (share lane) = 0.0109

MAJOR ROAD (ARM C)

W c-b = 3.65 (metres)
Vr c-b = 100 (metres)
q c-a = 268 (pcu/hr)
q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0

TOTAL FLOW = 588 (PCU/HR)

MINOR ROAD (ARM B)

W b-a = 2.40 (metres)
W b-c = 2.40 (metres)
Vl b-a = 21 (metres)
Vr b-a = 17 (metres)
Vr b-c = 17 (metres)
q b-a = 4 (pcu/hr)
q b-c = 0 (pcu/hr)

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED

ROUNDBABOUT CALCULATION

INITIALS DATE

Job Title: Proposed Temporary Green Fuel Station for Electric Taxi and Shop and Services (Motor Vehicle Showroom and Refreshment Kiosk) with Associated Filling of Land for a Period of 3 Years at Lot 91RP in DD81, Man Uk Pin, N.T.

2026 Existing 1630-1730

PROJECT NO.: 41071

PREPARED BY:

SKL Aug-26

FILENAME J2_STKR_HYWH.xls

CHECKED BY:

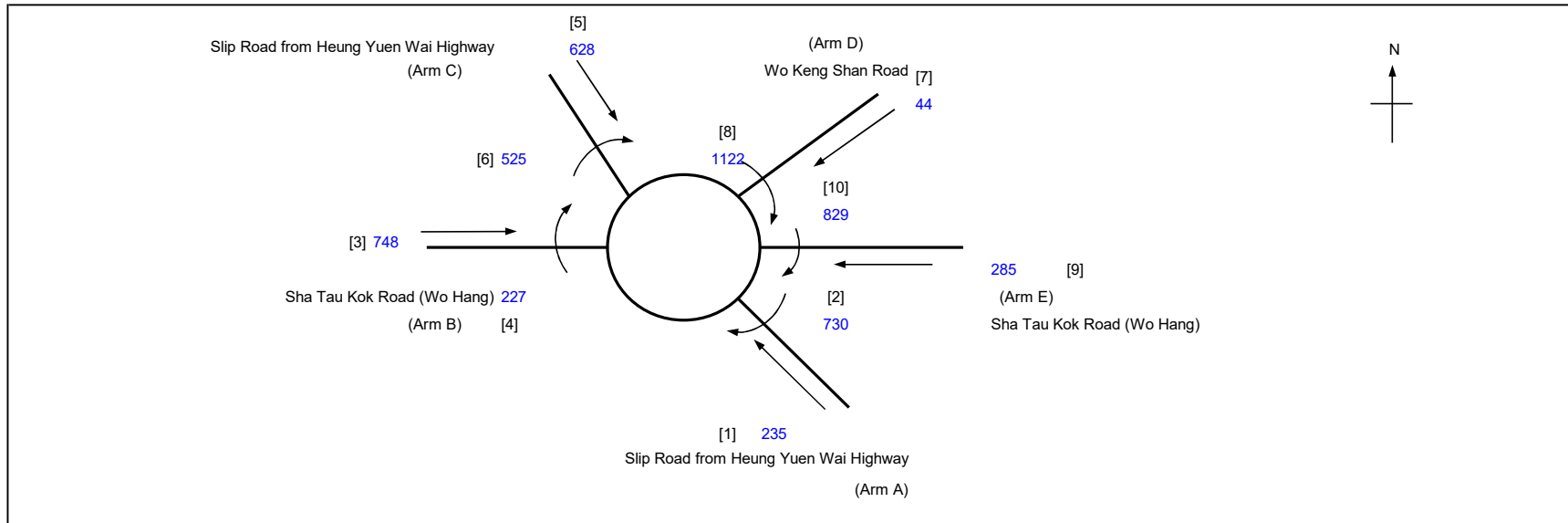
SLN Aug-26

J2 Sha Tau Kok Road Interchange

REFERENCE NO.:

REVIEWED BY:

SLN Aug-26



ARM	A	B	C	D	E
INPUT PARAMETERS:					
V = Approach half width (m)	4.00	3.30	4.00	3.90	3.70
E = Entry width (m)	9.90	7.60	9.80	7.70	7.70
L = Effective length of flare (m)	24.00	33.00	28.00	27.00	35.00
R = Entry radius (m)	60.00	40.00	40.00	44.00	27.00
D = Inscribed circle diameter (m)	50.00	50.00	50.00	50.00	50.00
A = Entry angle (degree)	35.00	35.00	35.00	35.00	10.00
Q = Entry flow (pcu/h)	235	748	628	44	285
Qc = Circulating flow across entry (pcu/h)	730	227	525	1122	829
OUTPUT PARAMETERS:					
S = Sharpness of flare = 1.6(E-V)/L	0.39	0.21	0.33	0.23	0.18
K = 1-0.00347(A-30)-0.978(1/R-0.05)	1.02	1.01	1.01	1.01	1.08
X2 = V + ((E-V)/(1+2S))	7.30	6.33	7.49	6.52	6.63
M = EXP((D-60)/10)	0	0	0	0	0
F = 303*X2	2213	1919	2269	1976	2009
Td = 1+(0.5/(1+M))	1.37	1.37	1.37	1.37	1.37
Fc = 0.21*Td(1+0.2*X2)	0.71	0.65	0.72	0.66	0.67
Qe = K(F-Fc*Qc)	1723	1784	1906	1246	1575
					Total In Sum = 1940 PCU
DFC = Design flow/Capacity = Q/Qe	0.14	0.42	0.33	0.04	0.18
					DFC of Critical Approach = 0.42

Appendix B

Junction Capacity Assessments

- Reference & Design Scenarios

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PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Green Fuel Station for Electric Taxi and Shop and Services (Motor Vehicle Showroom and Refreshment Kiosk) with Associated Filling of Land for a Period of 3 Years at Lot 91RP in DD81, Man Uk Pin, N.T.

2029 Reference 1630-1730

PROJECT NO.: 41071

PREPARED BY:

SKL

Aug-26

FILENAME : J1_STKR_LA

CHECKED BY:

SLN

Aug-26

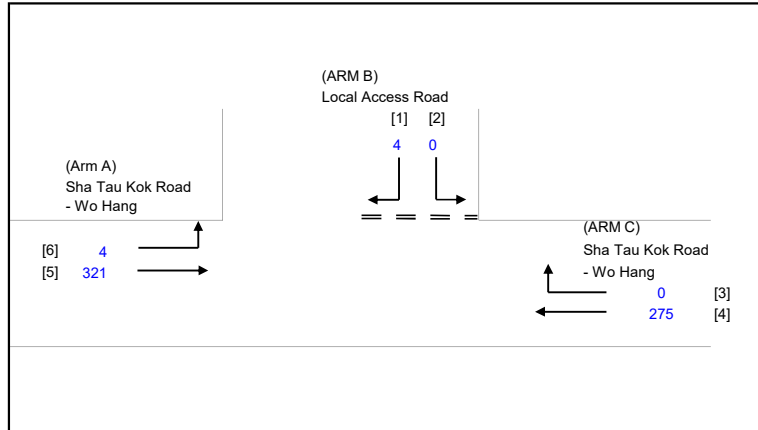
J1 Sha Tau Kok Road - Wo Hang / Local Access Road

REFERENCE NO.:

REVIEWED BY:

SLN

Aug-26



NOTES : (GEOMETRIC INPUT DATA)

W = MAJOR ROAD WIDTH
W cr = CENTRAL RESERVE WIDTH
W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D = STREAM-SPECIFIC B-A
E = STREAM-SPECIFIC B-C
F = STREAM-SPECIFIC C-B
Y = (1-0.0345W)

GEOMETRIC DETAILS:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)

W = 7.30 (metres)
W cr = 0 (metres)
q a-b = 4 (pcu/hr)
q a-c = 321 (pcu/hr)

D = 0.73872
E = 0.80069
F = 0.98200
Y = 0.74815

Q b-a = 363
Q b-c = 526 Q b-c (O) = 524.6
Q c-b = 645
Q b-ac = 363

DFC b-a = 0.0110
DFC b-c = 0.0000
DFC c-b = 0.0000
DFC b-c (share lane) = 0.0110

MAJOR ROAD (ARM C)

W c-b = 3.65 (metres)
Vr c-b = 100 (metres)
q c-a = 275 (pcu/hr)
q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0

TOTAL FLOW = 604 (PCU/HR)

MINOR ROAD (ARM B)

W b-a = 2.40 (metres)
W b-c = 2.40 (metres)
Vl b-a = 21 (metres)
Vr b-a = 17 (metres)
Vr b-c = 17 (metres)
q b-a = 4 (pcu/hr)
q b-c = 0 (pcu/hr)

CRITICAL DFC = 0.01

LLA CONSULTANCY LIMITED

PRIORITY JUNCTION CALCULATION

INITIALS

DATE

Proposed Temporary Green Fuel Station for Electric Taxi and Shop and Services (Motor Vehicle Showroom and Refreshment Kiosk) with Associated Filling of Land for a Period of 3 Years at Lot 91RP in DD81, Man Uk Pin, N.T.

2029 Design 1630-1730

PROJECT NO.: 41071

PREPARED BY:

SKL

Aug-26

FILENAME : J1_STKR_LA

CHECKED BY:

SLN

Aug-26

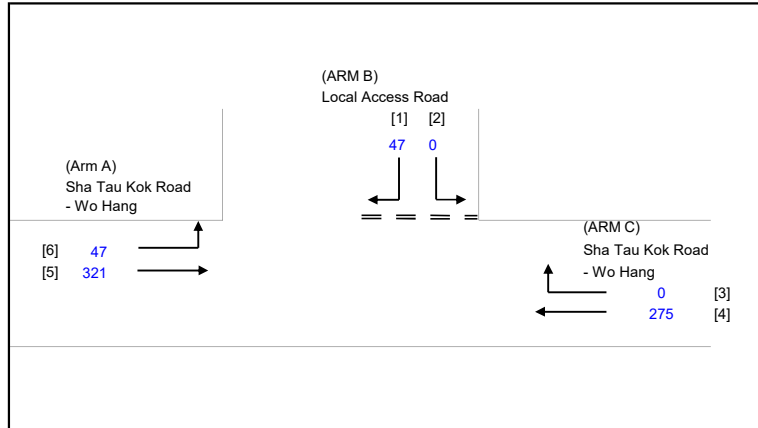
REFERENCE NO.:

REVIEWED BY:

SLN

Aug-26

J1 Sha Tau Kok Road - Wo Hang / Local Access Road



NOTES : (GEOMETRIC INPUT DATA)

W = MAJOR ROAD WIDTH
W cr = CENTRAL RESERVE WIDTH
W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D = STREAM-SPECIFIC B-A
E = STREAM-SPECIFIC B-C
F = STREAM-SPECIFIC C-B
Y = (1-0.0345W)

GEOMETRIC DETAILS:

GEOMETRIC FACTORS :

THE CAPACITY OF MOVEMENT :

COMPARISON OF DESIGN FLOW TO CAPACITY:

MAJOR ROAD (ARM A)

W = 7.30 (metres)
W cr = 0 (metres)
q a-b = 47 (pcu/hr)
q a-c = 321 (pcu/hr)

D = 0.73872
E = 0.80069
F = 0.98200
Y = 0.74815

Q b-a = 360
Q b-c = 522
Q c-b = 633
Q b-ac = 360

DFC b-a = 0.1306
DFC b-c = 0.0000
DFC c-b = 0.0000
DFC b-c (share lane) = 0.1306

MAJOR ROAD (ARM C)

W c-b = 3.65 (metres)
Vr c-b = 100 (metres)
q c-a = 275 (pcu/hr)
q c-b = 0 (pcu/hr)

F for (Qb-ac) = 0

TOTAL FLOW = 690 (PCU/HR)

MINOR ROAD (ARM B)

W b-a = 2.40 (metres)
W b-c = 2.40 (metres)
Vl b-a = 21 (metres)
Vr b-a = 17 (metres)
Vr b-c = 17 (metres)
q b-a = 47 (pcu/hr)
q b-c = 0 (pcu/hr)

CRITICAL DFC = 0.13

LLA CONSULTANCY LIMITED

ROUNABOUT CALCULATION

INITIALS DATE

Job Title: Proposed Temporary Green Fuel Station for Electric Taxi and Shop and Services (Motor Vehicle Showroom and Refreshment Kiosk) with Associated Filling of Land for a Period of 3 Years at Lot 91RP in DD81, Man Uk Pin, N.T.

2029 Reference 1630-1730

PROJECT NO.: 41071

PREPARED BY:

SKL Aug-26

FILENAME: J2_STKR_HYWH.xls

CHECKED BY:

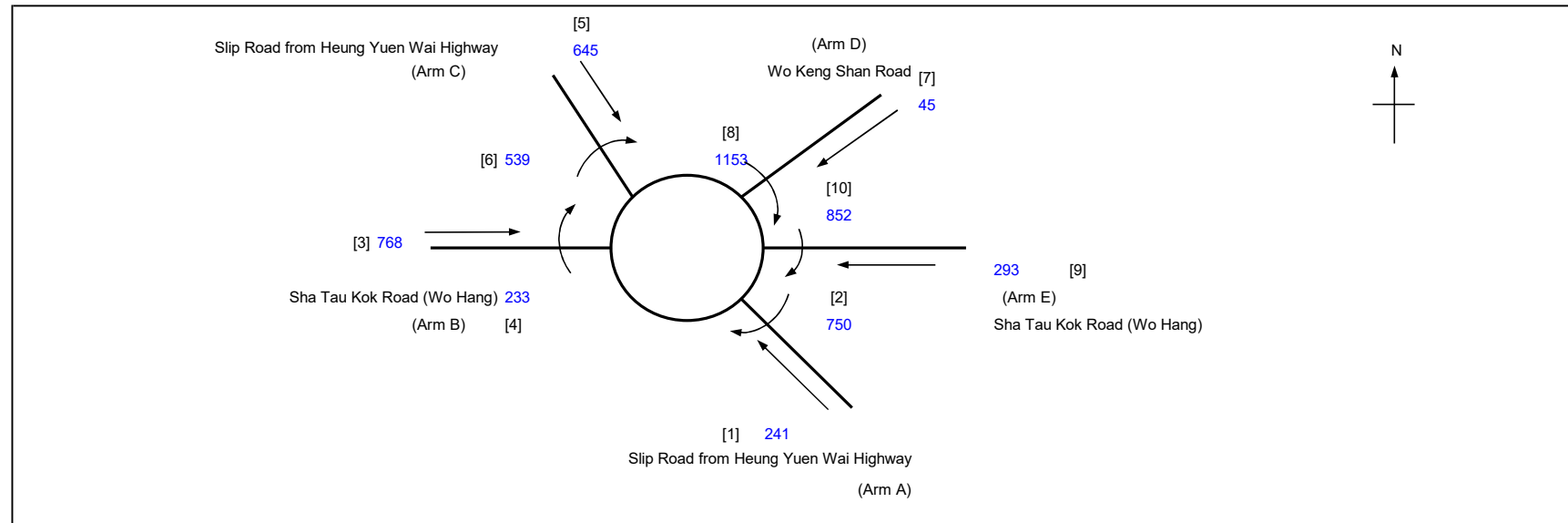
SLN Aug-26

J2 Sha Tau Kok Road Interchange

REFERENCE NO.:

REVIEWED BY:

SLN Aug-26



ARM	A	B	C	D	E
INPUT PARAMETERS:					
V = Approach half width (m)	4.00	3.30	4.00	3.90	3.70
E = Entry width (m)	9.90	7.60	9.80	7.70	7.70
L = Effective length of flare (m)	24.00	33.00	28.00	27.00	35.00
R = Entry radius (m)	60.00	40.00	40.00	44.00	27.00
D = Inscribed circle diameter (m)	50.00	50.00	50.00	50.00	50.00
A = Entry angle (degree)	35.00	35.00	35.00	35.00	10.00
Q = Entry flow (pcu/h)	241	768	645	45	293
Qc = Circulating flow across entry (pcu/h)	750	233	539	1153	852
OUTPUT PARAMETERS:					
S = Sharpness of flare = $1.6(E-V)/L$	0.39	0.21	0.33	0.23	0.18
K = $1-0.00347(A-30)-0.978(1/R-0.05)$	1.02	1.01	1.01	1.01	1.08
X2 = $V + ((E-V)/(1+2S))$	7.30	6.33	7.49	6.52	6.63
M = $EXP((D-60)/10)$	0	0	0	0	0
F = $303 \times X2$	2213	1919	2269	1976	2009
Td = $1+(0.5/(1+M))$	1.37	1.37	1.37	1.37	1.37
Fc = $0.21 \times Td(1+0.2 \times X2)$	0.71	0.65	0.72	0.66	0.67
Qe = $K(F-Fc \times Qc)$	1709	1780	1896	1225	1559
					Total In Sum = 1992 PCU
DFC = Design flow/Capacity = Q/Qe	0.14	0.43	0.34	0.04	0.19
					DFC of Critical Approach = 0.43

LLA CONSULTANCY LIMITED

ROUNABOUT CALCULATION

INITIALS DATE

Job Title: Proposed Temporary Green Fuel Station for Electric Taxi and Shop and Services (Motor Vehicle Showroom and Refreshment Kiosk) with Associated Filling of Land for a Period of 3 Years at Lot 91RP in DD81, Man Uk Pin, N.T.

2029 Design 1630-1730

PROJECT NO.: 41071

PREPARED BY:

SKL Aug-26

FILENAME: J2_STKR_HYWH.xls

CHECKED BY:

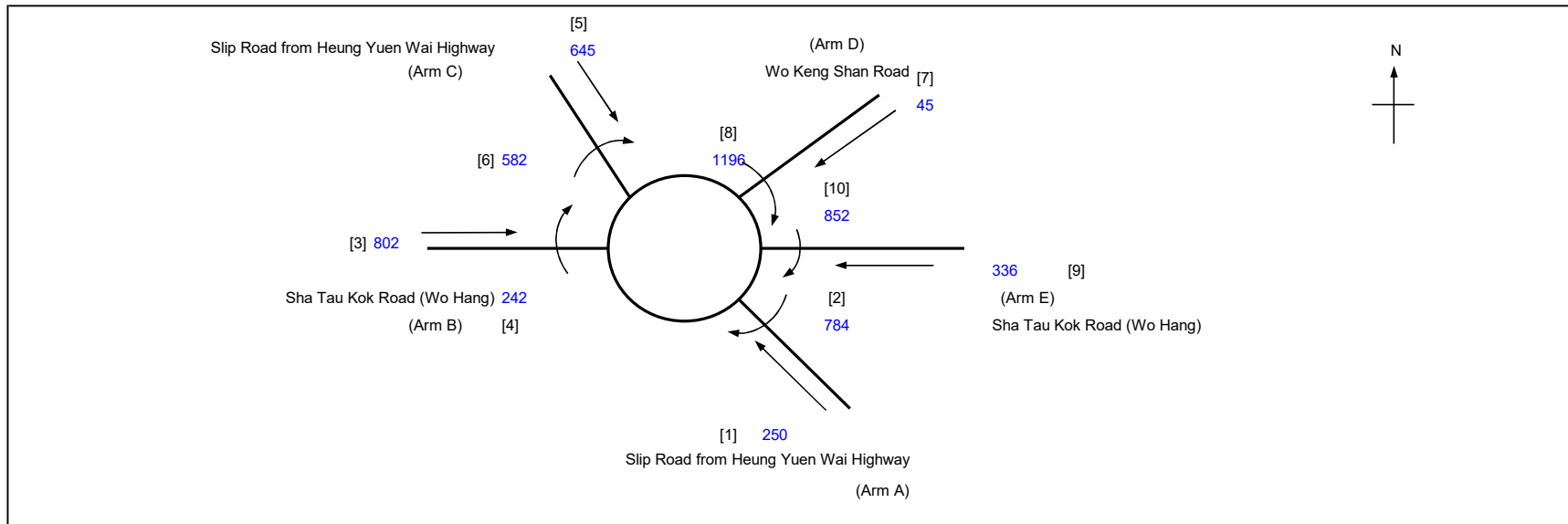
SLN Aug-26

J2 Sha Tau Kok Road Interchange

REFERENCE NO.:

REVIEWED BY:

SLN Aug-26



ARM	A	B	C	D	E
INPUT PARAMETERS:					
V = Approach half width (m)	4.00	3.30	4.00	3.90	3.70
E = Entry width (m)	9.90	7.60	9.80	7.70	7.70
L = Effective length of flare (m)	24.00	33.00	28.00	27.00	35.00
R = Entry radius (m)	60.00	40.00	40.00	44.00	27.00
D = Inscribed circle diameter (m)	50.00	50.00	50.00	50.00	50.00
A = Entry angle (degree)	35.00	35.00	35.00	35.00	10.00
Q = Entry flow (pcu/h)	250	802	645	45	336
Qc = Circulating flow across entry (pcu/h)	784	242	582	1196	852
OUTPUT PARAMETERS:					
S = Sharpness of flare = 1.6(E-V)/L	0.39	0.21	0.33	0.23	0.18
K = 1-0.00347(A-30)-0.978(1/R-0.05)	1.02	1.01	1.01	1.01	1.08
X2 = V + ((E-V)/(1+2S))	7.30	6.33	7.49	6.52	6.63
M = EXP((D-60)/10)	0	0	0	0	0
F = 303*X2	2213	1919	2269	1976	2009
Td = 1+(0.5/(1+M))	1.37	1.37	1.37	1.37	1.37
Fc = 0.21*Td(1+0.2*X2)	0.71	0.65	0.72	0.66	0.67
Qe = K(F-Fc*Qc)	1685	1775	1865	1196	1559
					Total In Sum = 2078 PCU
DFC = Design flow/Capacity = Q/Qe	0.15	0.45	0.35	0.04	0.22
					DFC of Critical Approach = 0.45

Appendix 2

Drainage Proposal

Drainage Submission in support of

S16 Planning Application for

Proposed Temporary Green Fuel Station for Electric Taxi and Shop
and Services (Motor Vehicle Showroom and Refreshment Kiosk)
with Associated Filling of Land for a Period of 3 Years
at Lot 91RP (Part) in D.D. 81, Man Uk Pin, New Territories

(HT26110)

August 2026

Drainage Consultant:

何田顧問工程師有限公司
HO TIN & ASSOCIATES
CONSULTING ENGINEERS LIMITED



Prepared & approved by	LEE Kwok Cheung <i>RPE(CVL)</i> (Registration No. RP0159301)	
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CONTENT

1. Introduction
2. Approach to Prepare this Proposal
3. The Application Site and Proposed Development
4. Existing Drainage Conditions of the Site
5. Drainage Assessment and Proposal
6. Conclusion and Recommendations

FIGURE (Referenced from the same figures enclosed in the Planning Statement of this Application)

Figure 1	<i>‘Not used’</i>
Figure 2	Lot Index Plan
Figure 3	<i>‘Not used’</i>
Figure 4	Indicative Layout Plan
Figure 5	Land Filling Plan

PLAN

Plan 1	Existing Drainage Conditions of the Application Site (with Photo Locations in July 2026)
Plan 2	Proposed Stormwater Drainage Layout
Plan 3	Site Cross Sections
Plan 4	Outfall Details

1. Background

1.1 With respect to a S16 Planning Application for Proposed Temporary Green Fuel Station for Electric Taxi and Shop and Services (Motor Vehicle Showroom and Refreshment Kiosk) with Associated Filling of Land for a Period of 3 Years in “Agriculture” zone at Lot 91RP (Part) in D.D. 81, Man Uk Pin, New Territories, Messrs. Ho Tin & Associates Consulting Engineers Limited was appointed to prepare a drainage submission.

2. Approach to Prepare this Proposal

2.1 This Drainage Submission is prepared in line with the “Technical Note to prepare a Drainage Submission (Relating to applications for temporary change of land use such as temporary storage areas, car parks, workshops, small factories ... etc. under S.16 of the Town Planning Ordinance)” issued by Drainage Services Department in December 2024.

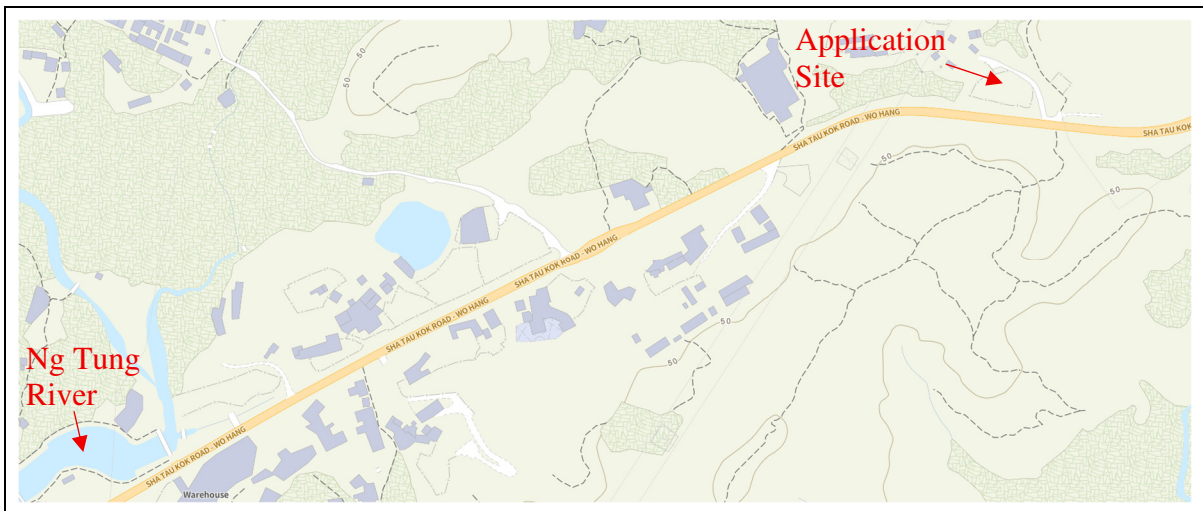
3. The Application Site and Proposed Development

3.1 The Application Site of approximately elongated shape with a total site area of about 1,626m² comprises of Lot 91RP (Part) in D.D. 81, Man Uk Pin, New Territories. The Application Site is on the north side of Sha Tau Kok Road – Wo Hang. A Lot Index Plan is shown in **Figure 2**.

3.2 The subject development consists of single-storey motor vehicle showroom (5m high, total floor area = 169m²), refreshment kiosk (3m high, total floor area = 26m²), transformer room and switch room structure (3.5m high, total floor area = 53m²) and washroom (3m high, total floor area = 7m²), and 21 numbers of EV charging spaces (open) for electric taxi accompanying with 2 numbers of waiting spaces for electric taxi, 2 numbers of parking spaces for visitors, and 2 numbers of parking spaces for staff. A plan showing the indicative site layout is at **Figure 4**.

4. Existing Drainage Conditions of the Site

4.1 The Application Site is located at about 820m to the northeast of an existing tributary of Ng Tung River (refer to the figure below).



4.2 At present, the Application Site is a piece of vacant flat grass land (refer to the **Aerial Photo** below and **Plate 1 to 3**). There is an existing 300mm u-channel running along the access road outside the northeastern boundary of the Application Site intercepting and conveying the overland flow from the east and northeast of the Application Site to its northwest (refer to **Plate 4 and 5**).



Aerial photo taken by drone on 7 July 2026

- 4.3 The area adjacent to the western boundary of the Application Site is at elevations (about +30.8mPD) relatively lower than those of the Application Site (about +33.5mPD). Hence, no surface runoff would flow onto the Application Site from its west. To the northwest of the Application Site is a cluster of small houses with fence walls which intervenes surface runoff running onto the Application Site from the northwest (refer to **Plate 6**).
- 4.4 Sha Tau Kok Road – Wo Hang runs in front of the southern boundary of the Application Site. There is a channel between the Application Site and Sha Tau Kok Road conveying surface runoff of the area including the Application Site towards the southwest (refer to **Plate 7 to 10**).
- 4.5 Current conditions of the Application Site and its existing drainage conditions are shown in the following photos (photo locations are shown on **Plan 1**):



Plate 1 – The western portion of the Application Site



Plate 2 – The southeastern portion of the Application Site



Plate 3 – The northern portion of the Application Site



Plate 4 – Existing 300mm u-channel running along the access road outside the northeastern boundary of the Application Site (1 of 2)

	
Plate 5 – Existing 300mm u-channel running along the access road outside the northeastern boundary of the Application Site (2 of 2)	Plate 6 – Photo showing the existing cluster of small houses with fence walls located on the northwest site of the Application Site
	
Plate 7 – Photo of the southern side of the Application Site taken from Sha Tau Kok Road – Wo Hang	Plate 8 – Photo of the existing channel between the southern side of the Application Site and Sha Tau Kok Road – Wo Hang (1 of 3)
	
Plate 9 – Photo of the existing channel between the southern side of the Application Site and Sha Tau Kok Road – Wo Hang (2 of 3)	Plate 10 – Photo of the existing channel between the southern side of the Application Site and Sha Tau Kok Road – Wo Hang (3 of 3)

5. Drainage Assessment and Proposal

5.1 The Application Site is a simple small site with a total site area of about 1,626m² (very much less than 1 ha in size). The existing Application Site levels are generally same as Sha Tau Kok Road – Wo Hang. Due to existence of channels near its boundary and be at relatively higher elevations, it is not anticipated that the Application Site would receive noticeable runoff from the surroundings.

5.2 The existing site levels would only be slightly raised due to laying grasscrete for formation of pavement. No significant site formation/leveling works would be carried out such that the subject proposed development would be maintained at levels relatively higher than its adjacent areas to the west and at similar levels to the other three sides (not including the existing channel between the Application Site and Sha Tau Kok Road).

5.3 The purpose of using grasscrete as pavement is to minimize potentially increasing the surface runoff.



[Extracted from the website of <https://grasscrete.com/>]

5.4 With respect to the “Technical Note to prepare a Drainage Submission” (the “TN”) published by Drainage Services Department, for the Application Site area = 1,626m² ≤ 1,800m², peripheral 375mm U channel at 1 in 200 gradient would be appropriate. It is therefore proposed to construct new peripheral 375mm U channel at 1 in 200 gradient for the subject development. A new catchpit with trap will be constructed at the end of the proposed 375 U channels at the southern corner of the Application Site before discharging into the existing channel between the Application Site and

Sha Tau Kok Road. A Proposed Stormwater Drainage Layout Plan is shown in **Plan 2**.

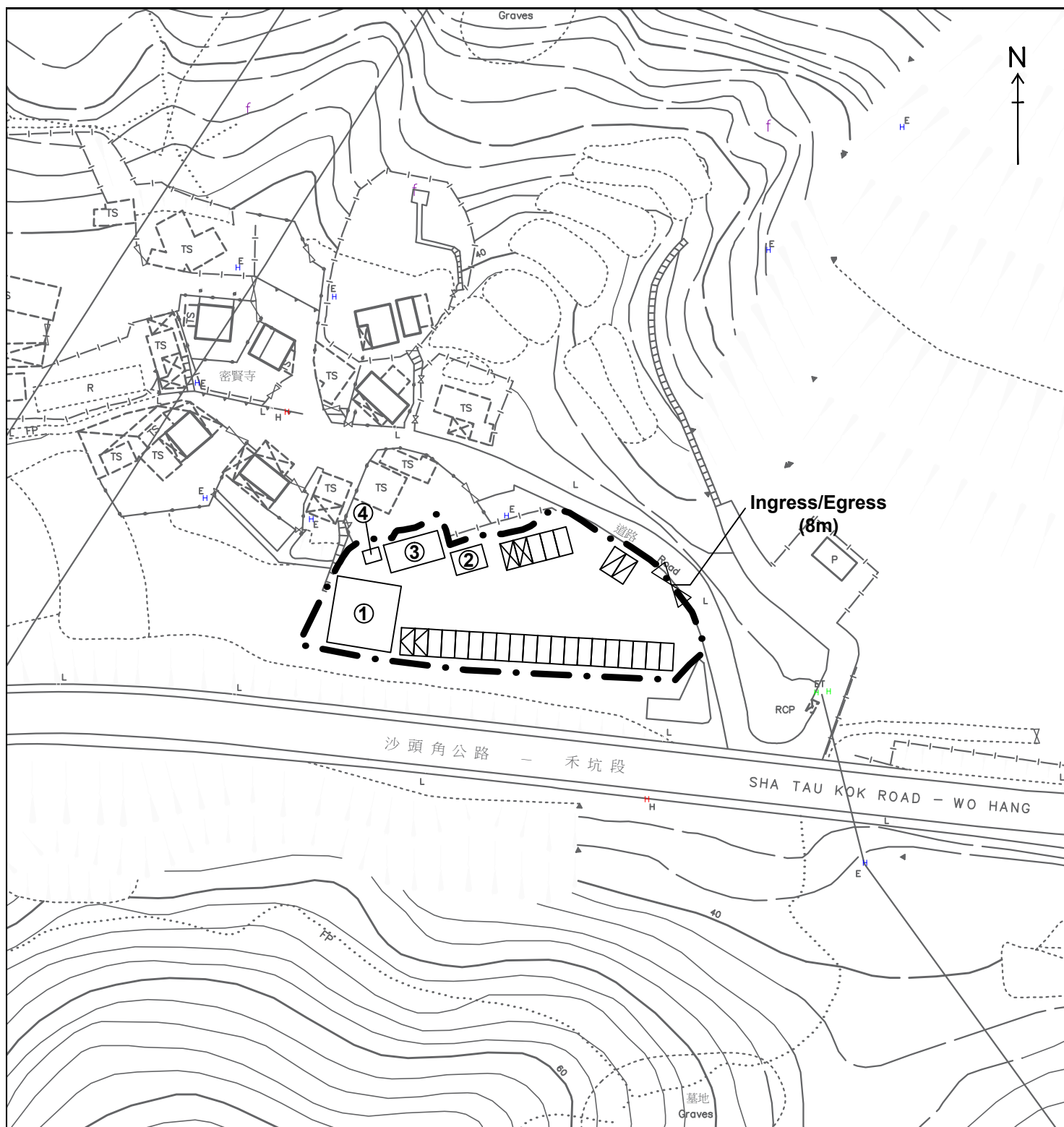
- 5.5 Besides, in order to ensure no surface runoff from the surroundings, due to any unexpected reasons, flowing onto the Application Site to be obstructed, 100mm high gap will be formed at the bottom of the security hoarding/fence wall along the Application Site boundary. Cross sections of the proposed subject development and typical details of the gap at the bottom of proposed security hoarding/fence are shown in **Plan 3**.
- 5.6 Moreover, the Application is committed to obtain consents from owners of adjacent relevant land/lots prior to commencement of the proposed drainage works outside the Application Site and to maintain regularly to avoid blockage of the drainage system to the satisfaction of relevant Government departments.
- 5.7 Details of proposed drainage provisions shall follow relevant details shown in Government departments' Standard Drawings as follows:

<i>Proposed Drainage Provisions</i>	<i>Standard Drawings</i>	<i>Drawing No. & Title</i>
Catchpit	CEDD Standard Drawings	C 2405/1 to /5 – Standard Catchpit Details
Catchpit with trap		C 2406/1 to /2A – Catchpit with Trap
Catchpit precast concrete cover		C 2407B – Precast Concrete Covers for Catchpit and Sand Trap
U-channel		C 2409J – Details of Half-round and U-channels
Channel cover		C 2412E – Cover Slab and Cast Iron Grating for Channels

6. Conclusion and Recommendations

- 6.1 The subject development is Proposed Temporary Green Fuel Station for Electric Taxi and Shop and Services (Motor Vehicle Showroom and Refreshment Kiosk) with Associated Filling of Land for a Period of 3 Years. The Application Site area is now a piece of vacant flat grass land and will be paved with grasscrete to maintain in general its current permeability such that potential increase in surface runoff incurred by the proposed subject development would be minimized. The existing site levels would be raised slightly to accommodate the proposed grasscrete layer. Other than the laying of grasscrete, the existing site levels will be maintained in general and no site formation/leveling works would be carried out.
- 6.2 At present, the levels of the Application Site are relatively higher than/similar to those of the surroundings. In principle, no surface runoff would flow onto the Application Site from its surroundings. 375mm U channel at 1 in 200 gradient will be constructed at the peripheral of the Application Site to intercept all crossing surface runoff. For conservative, 100mm high gap will be formed at the bottom of the security hoarding/fence along the Application Site boundary to ensure no surface runoff from the adjacent, due to any unexpected incidents, to be obstructed. A new catchpit with trap will be constructed at the ends of the proposed peripheral 375mm U channel before discharging into the existing channel between the Application Site and Sha Tau Kok Road – Wo Hang.
- 6.3 The Application is committed to obtain consents from owners of adjacent relevant land/lots prior to commencement of the proposed drainage works outside the Application Site and to maintain regularly to avoid blockage of the system to the satisfaction of relevant Government departments.
- 6.4 The subject development would not alter the existing drainage conditions and pattern of the area and the proposed drainage system would be maintained with appropriate drainage clearance and repair works, i.e. debris clearance and damage repair. Therefore, in conclusion, the subject development would not cause any adverse drainage impact onto the area.





Structure No.	Uses	No. of Storey	Floor Area (m ²)	Height (m)
1	Motor Vehicle Showroom	1	145	5.0
2	Refreshment Kiosk	1	26	3.0
3	Transformer Room and Switch Room	1	53	3.5
4	Washroom	1	7	3.0

Legend:

- — Application Site (Area: about 1,626m²)
- EV Charing Spaces for Electric Taxi (21 nos.) (2.5m x 5m)
- ▨ Waiting Spaces for Electric Taxi (2 nos.)
- ▧ Private Car Parking Spaces for Visitors (Motor Vehicle Showroom) (2 nos.)
- ▩ Private Car Parking Spaces for Staff (2 nos.)

For Identification Purpose

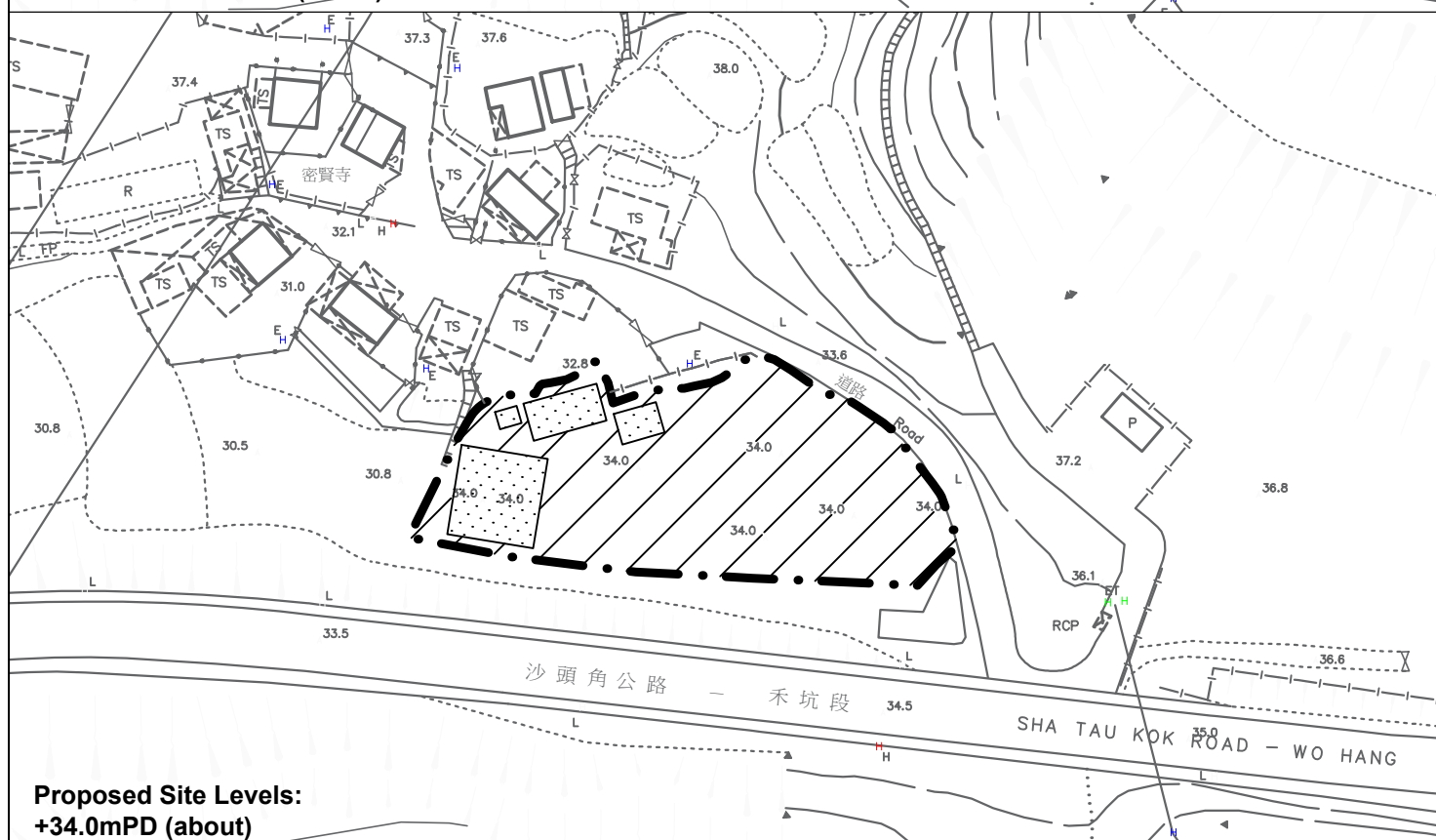
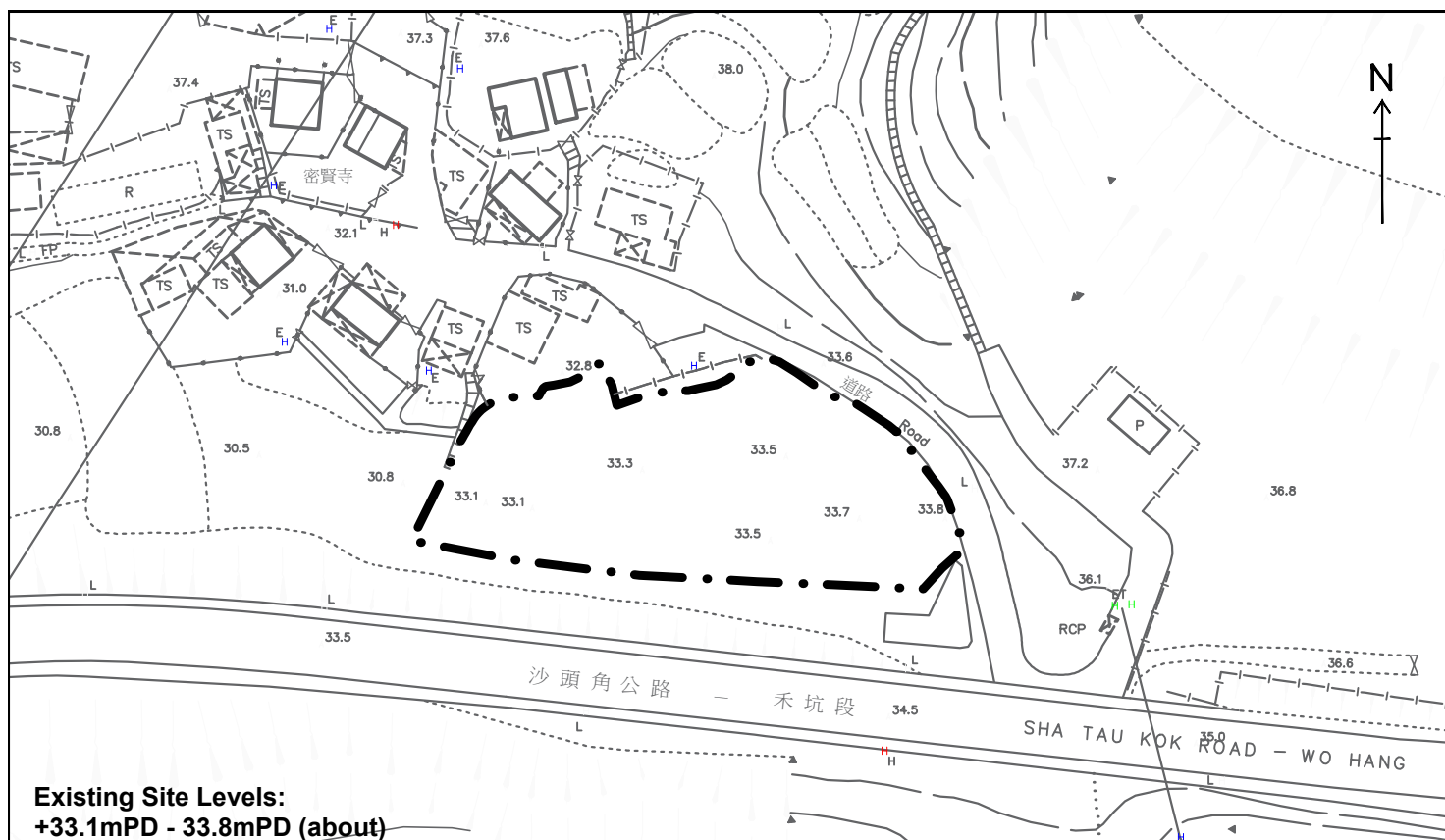
Indicative Layout Plan

Figure 4

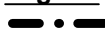
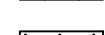
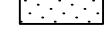
Scale 1:1000



羅迅測計師行
Lawson David & Sung
 SURVEYORS LIMITED
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 Estate Agency Licence No. C-006328



Legend:

-  Application Site (Area: about 1,626m²)
-  Proposed Land Filling Area (Area: about 1,395m²)
-  Filling Materials: Soil with Grasscrete on top
-  Proposed Land Filling Area (Area: about 231m²)
-  Filling Materials: Soil with Concrete on top

Depth: Existing Level 33.1mPD - 33.8mPD
Proposed Level 34.0mPD
(about 0.2m - 0.9m)

For Identification Purpose

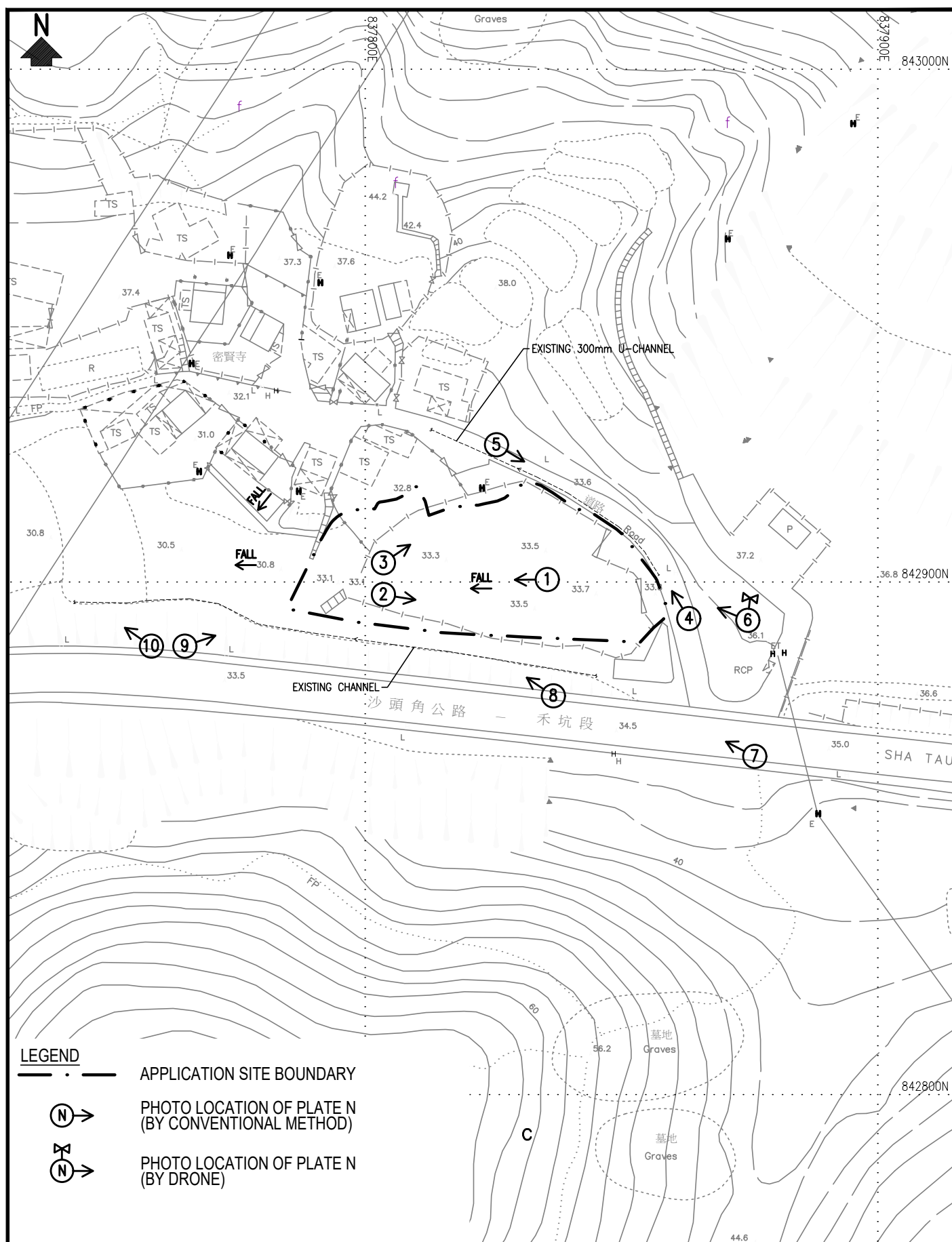
Land Filling Plan

Figure 5

Scale 1:1000



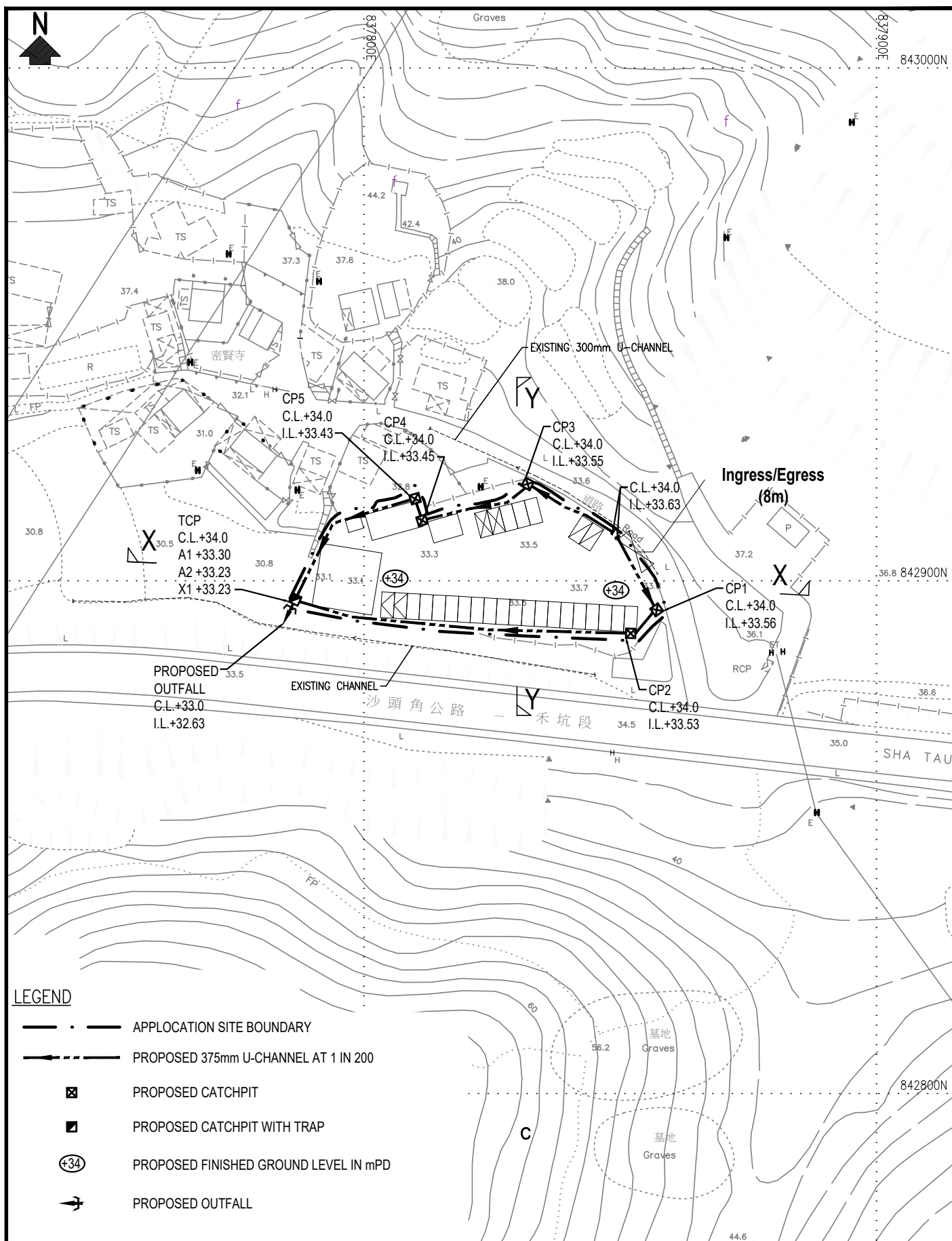
羅迅測計師行
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Estate Agency Licence No. C-006328



TITLE

何田顧問工程師有限公司
HO TIN & ASSOCIATES
CONSULTING ENGINEERS LIMITED

H:\26110_ManUkPin\Drawing\26110_PLAN1_00_PLAN2_01_PLAN3_00 & PLAN4_00.dwg, 14/8/2026 10:22:48



TITLE

PROPOSED STORMWATER DRAINAGE LAYOUT

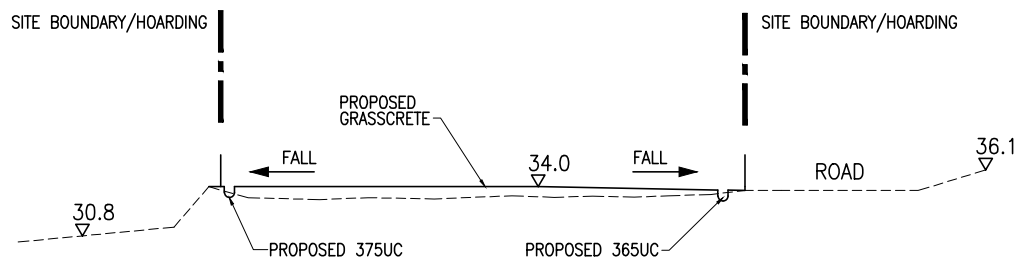
何田顧問工程師有限公司
HO TIN & ASSOCIATES
CONSULTING ENGINEERS LIMITED

SCALE

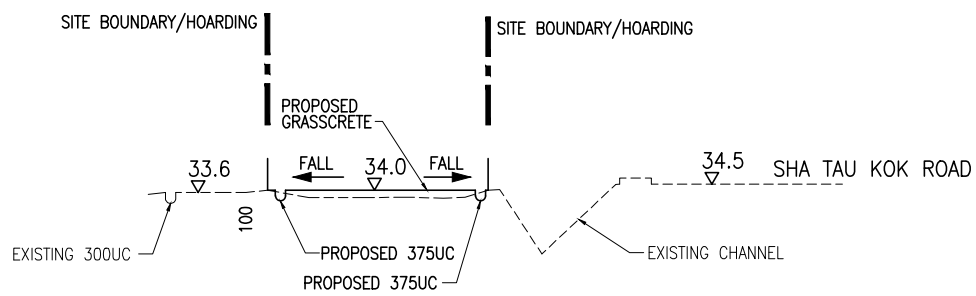
1 : 1000 - A4

DRAWING No.

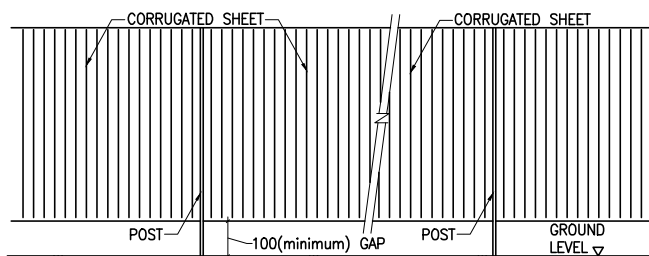
PLAN 2



SECTION X - X



SECTION Y - Y



TYPICAL ELEVATION OF THE HOARDING N.T.S.
WITH 100mm HIGH GAP AT BOTTOM

TITLE

SITE CROSS SECTIONS

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HO TIN & ASSOCIATES
CONSULTING ENGINEERS LIMITED

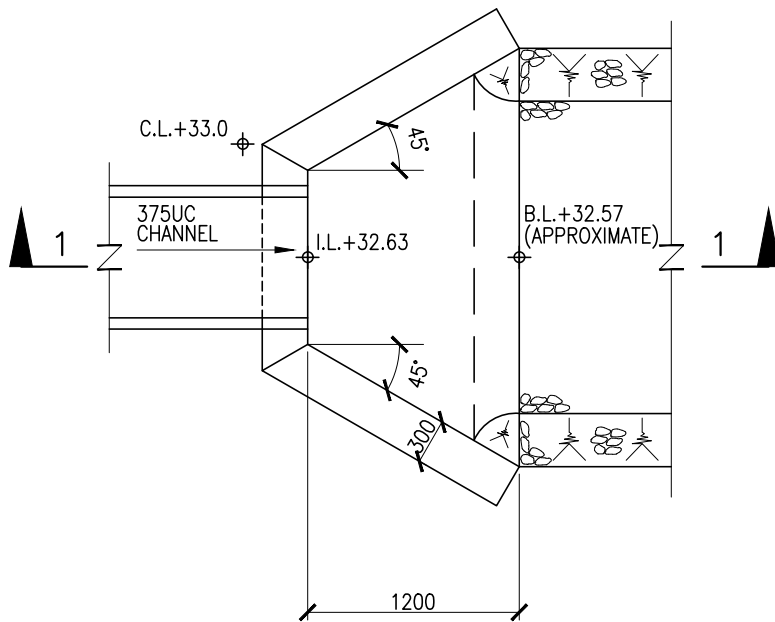
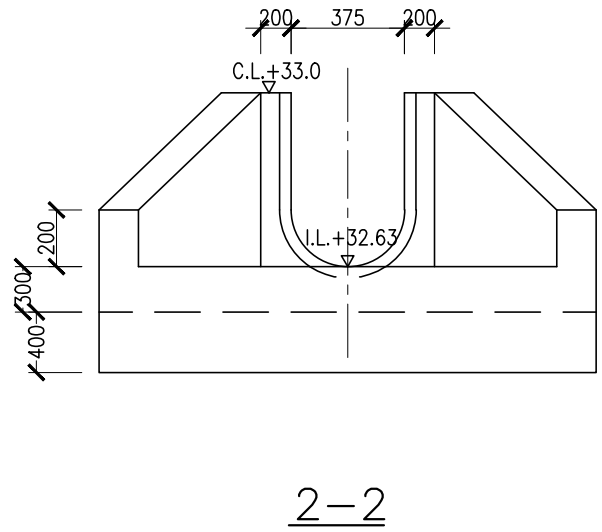
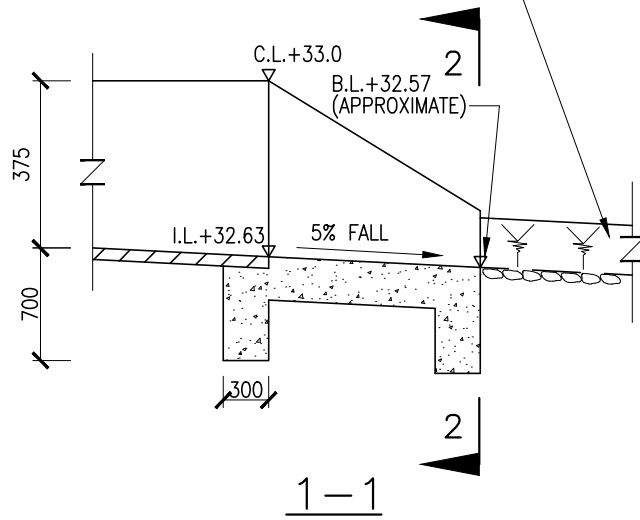
SCALE

1 : 500 - A4

DRAWING No.

PLAN 3

250mm MINIMUM UNCOURSED
RANDOM RUBBLE MASONRY
BEDDED AND JOINTED IN 1:2 CEMENT
MORTAR WHERE DIRECTED BY THE ENGINEER



NOTES :

1. CONCRETE : GRADE 30D/20

TITLE

DETAILS OF OUTFALL

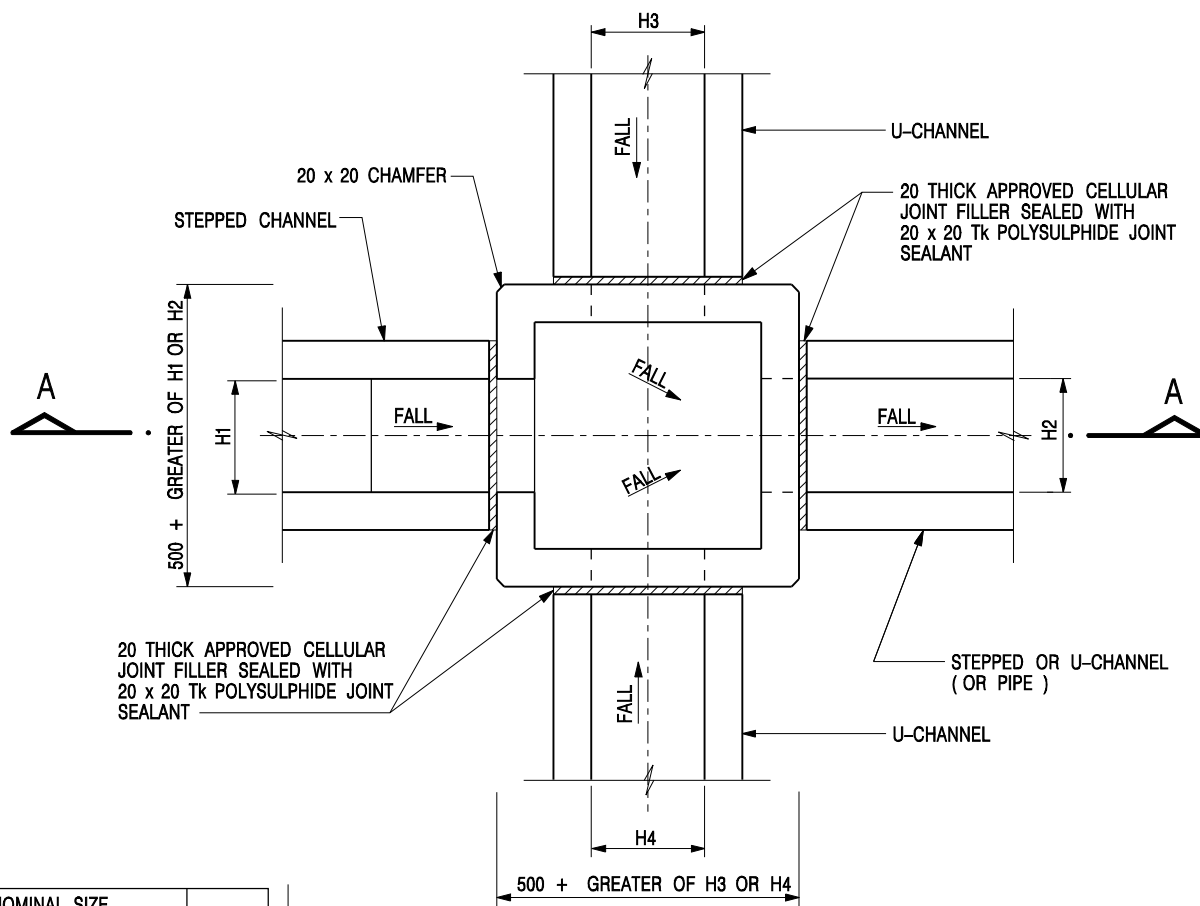
何田顧問工程師有限公司
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CONSULTING ENGINEERS LIMITED

SCALE

N.T.S.

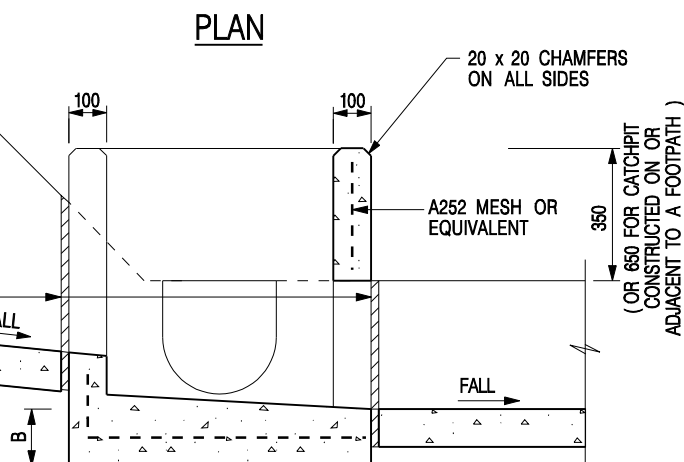
DRAWING No.

PLAN 4



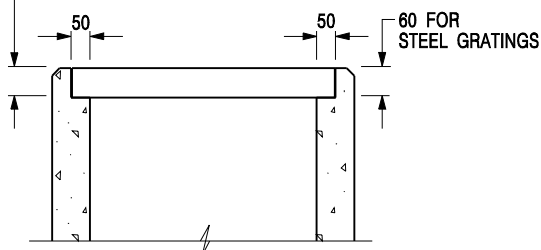
NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
300 - 600	150
675 - 900	175

20 THICK APPROVED CELLULAR JOINT FILLER SEALED WITH 20 x 20 Tk POLYSULPHIDE JOINT SEALANT



SECTION A - A

DEPTH OF RECESS AND DETAILS OF PRECAST CONCRETE COVERS (SEE STD. DRG. NO. C2407)



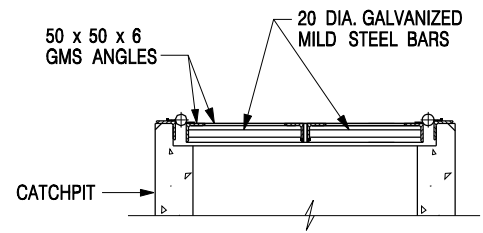
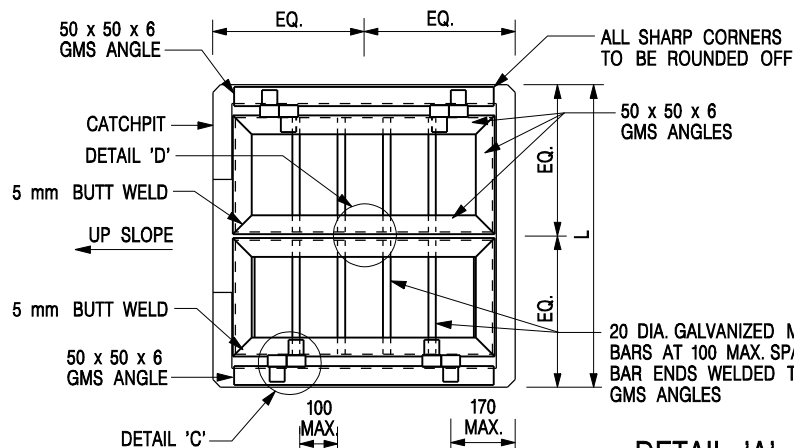
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. REFER TO SHEET 5 FOR OTHER NOTES.

ALTERNATIVE TOP SECTION FOR PRECAST CONCRETE COVERS / GRATINGS

STANDARD CATCHPIT DETAILS (SHEET 1 OF 5)

-	FORMER DRG. NO. C2405J.	Original Signed	03.2015
REF.	REVISION	SIGNATURE	DATE
 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT			
SCALE 1 : 20		DRAWING NO. C2405 /1	
DATE JAN 1991			

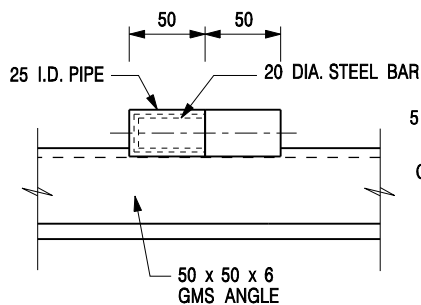


SECTIONAL ELEVATION

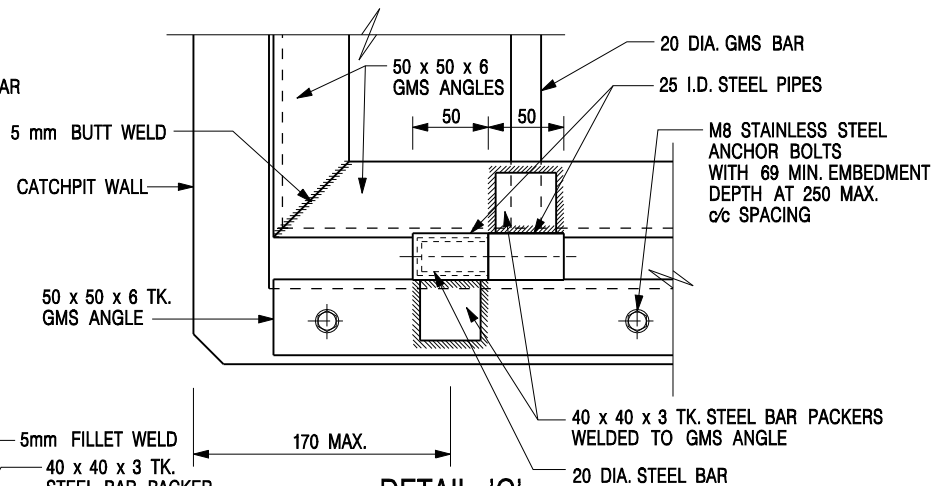
DETAIL 'A'

(DETAILS OF DOUBLE SIDE OPENING STEEL GRATING FOR L > 900mm)

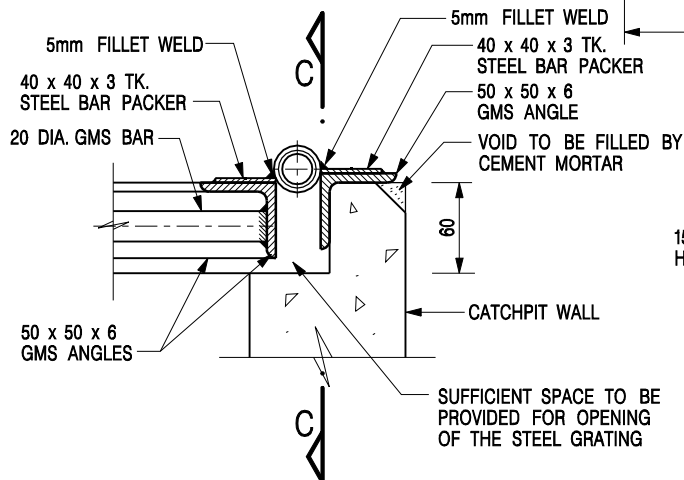
SCALE 1 : 20



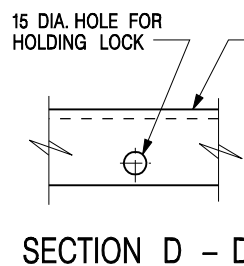
SECTION C - C



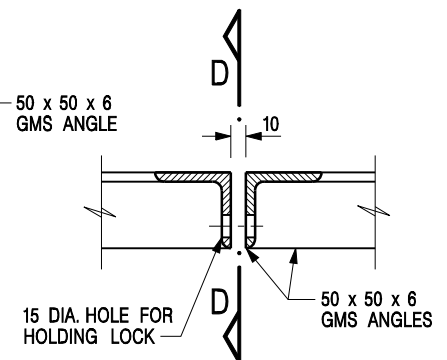
DETAIL 'C'
(DETAILS OF HINGE)
SCALE 1 : 5



SECTIONAL ELEVATION
(DETAIL 'C')



SECTION D - D



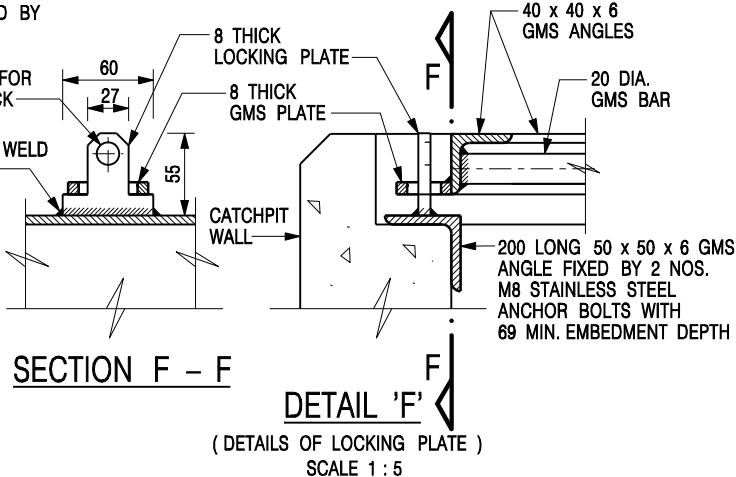
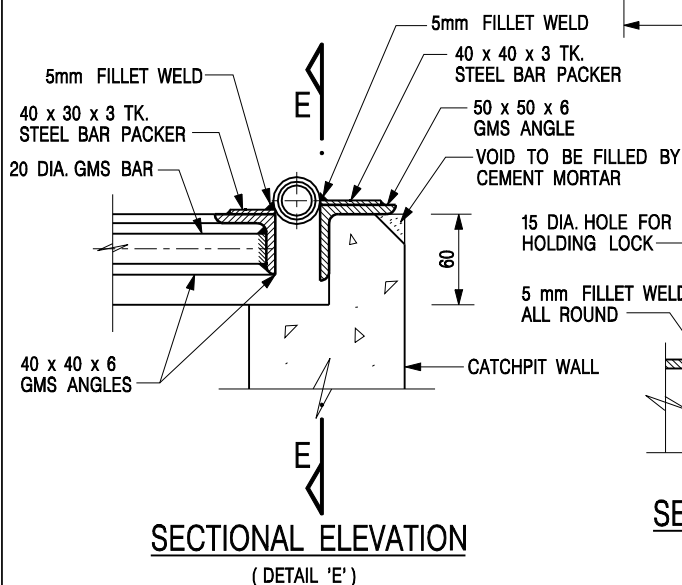
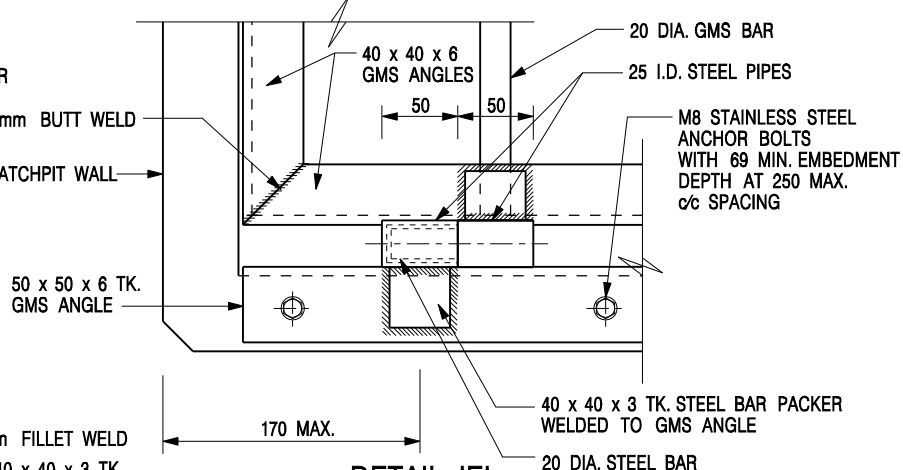
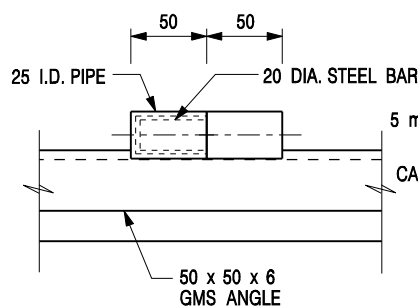
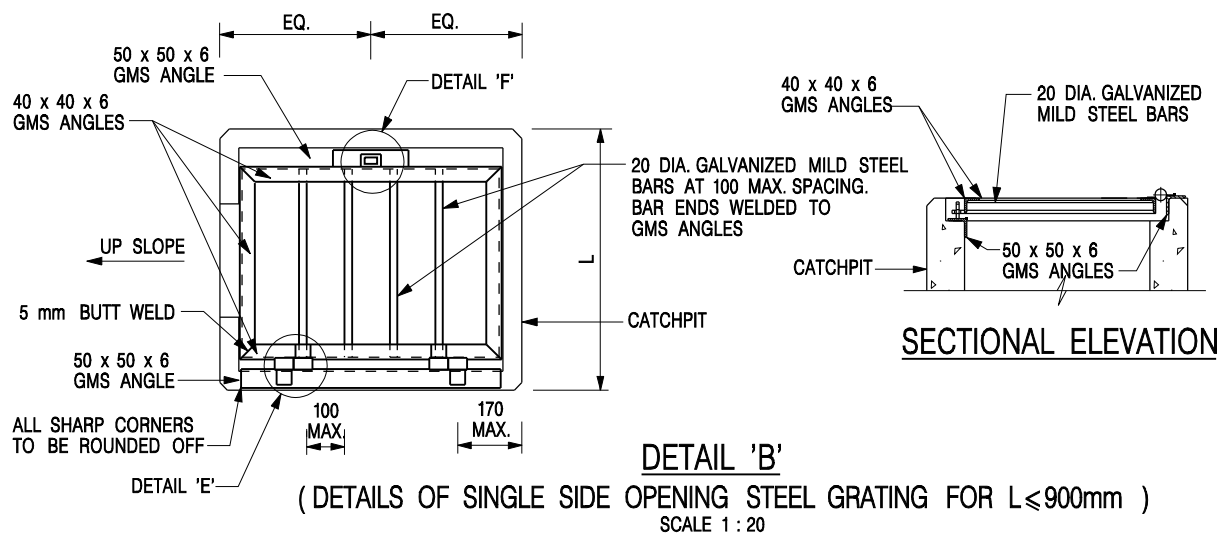
DETAIL 'D'
(DETAILS OF HOLE FOR LOCK)
SCALE 1 : 5

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. REFER TO SHEET 5 FOR OTHER NOTES.

STANDARD CATCHPIT DETAILS
(SHEET 2 OF 5)

-	FORMER DRG. NO. C2405J.	Original Signed	03.2015
REF.	REVISION	SIGNATURE	DATE
 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT		SCALE AS SHOWN DATE JAN 1991	
		DRAWING NO. C2405 /2	

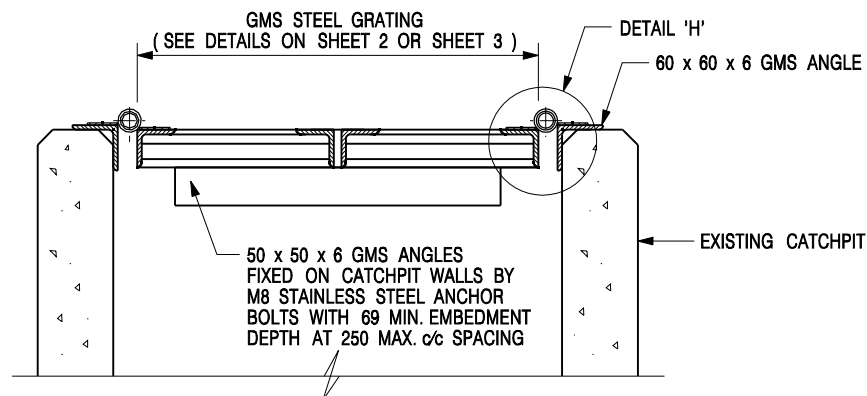


NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. REFER TO SHEET 5 FOR OTHER NOTES.

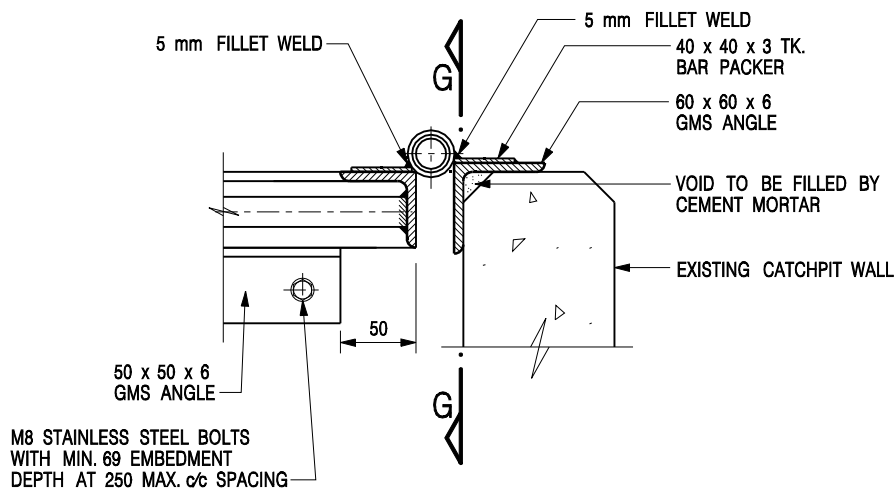
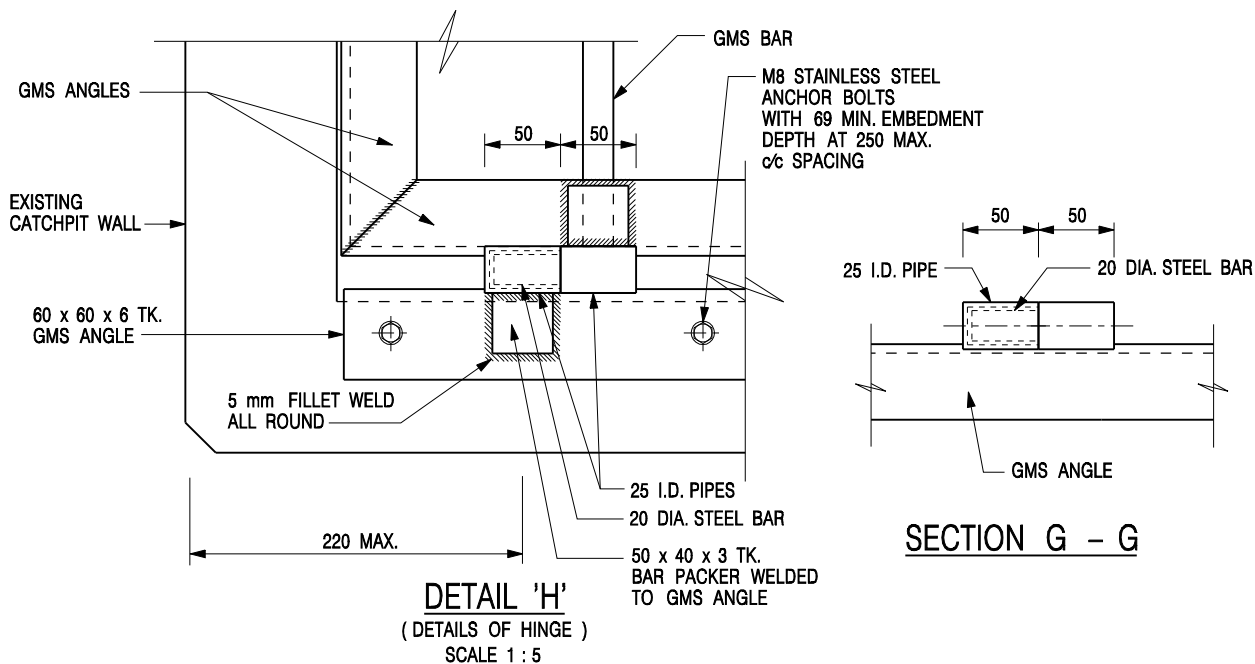
STANDARD CATCHPIT DETAILS
(SHEET 3 OF 5)

-	FORMER DRG. NO. C2405J.	Original Signed	03.2015
REF.	REVISION	SIGNATURE	DATE
 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT		SCALE AS SHOWN DATE JAN 1991	
		DRAWING NO. C2405 /3	



DETAIL 'G' - DETAILS OF STEEL GRATING CONSTRUCTED ON EXISTING CATCHPIT

SCALE 1 : 10



SECTIONAL ELEVATION

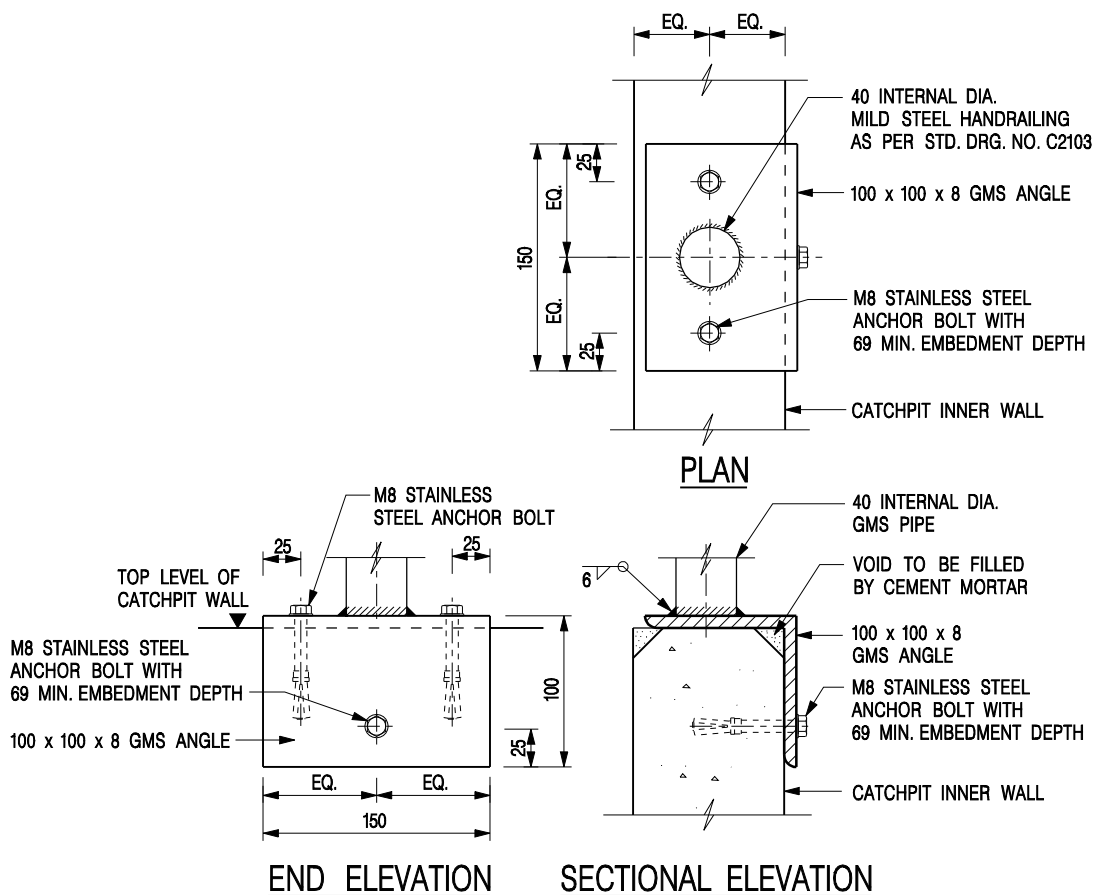
(DETAIL 'H')

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. REFER TO SHEET 5 FOR OTHER NOTES.

STANDARD CATCHPIT DETAILS
(SHEET 4 OF 5)

-	FORMER DRG. NO. C2405J.	Original Signed	03.2015
REF.	REVISION	SIGNATURE	DATE
 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT			
SCALE AS SHOWN		DRAWING NO. C2405 /4	
DATE JAN 1991			



DETAIL 'J' – FIXING DETAILS FOR HANDRAILING ON TOP OF CATCHPIT WALL

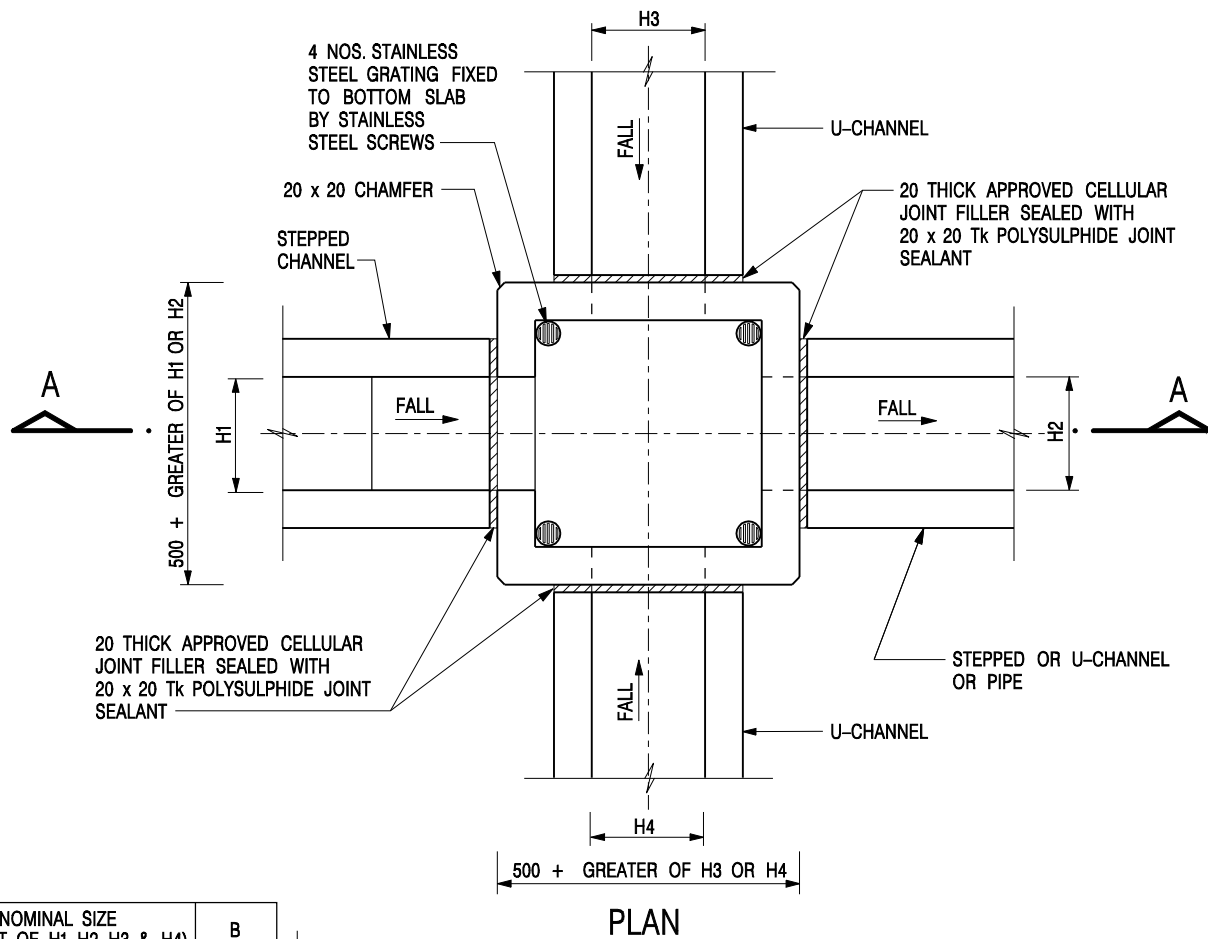
SCALE 1 : 5

NOTES:

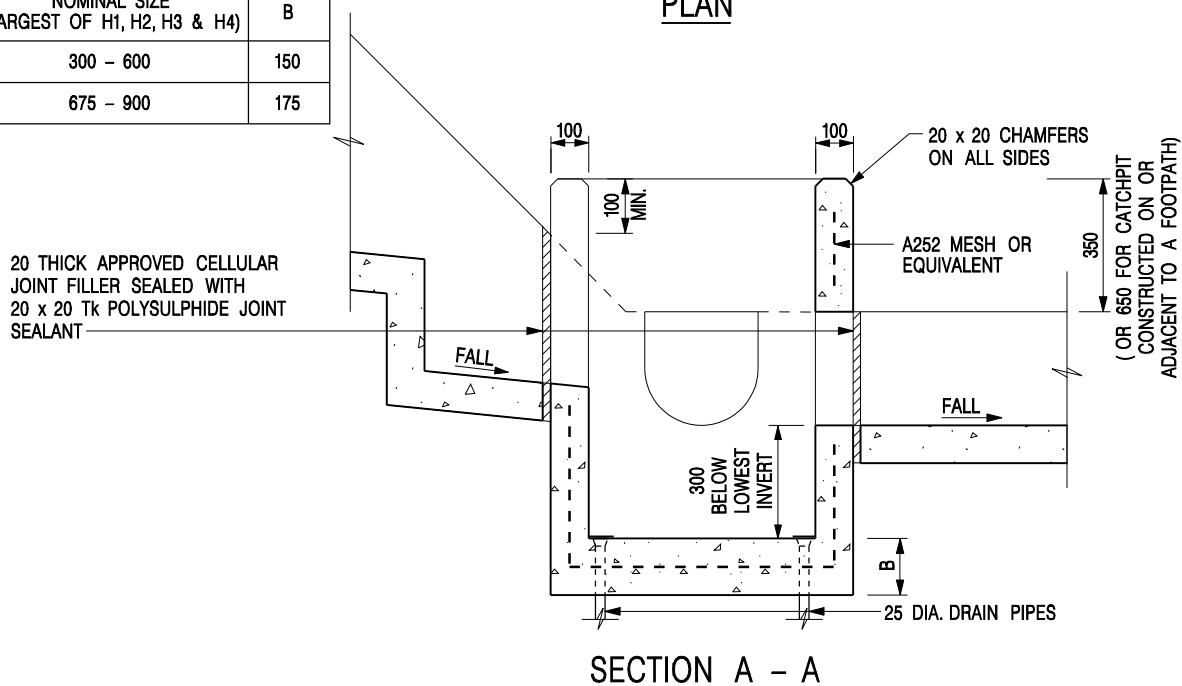
- ALL DIMENSIONS ARE IN MILLIMETRES.
- ALL CONCRETE SHALL BE GRADE 20 /20.
- CONCRETE SURFACE FINISH SHALL BE CLASS U2 OR F2 AS APPROPRIATE.
- FOR DETAILS OF JOINT, REFER TO STD. DRG. NO. C2413.
- CONCRETE TO BE COLOURED AS SPECIFIED.
- FOR CATCHPITS CONSTRUCTED ON OR ADJACENT TO A FOOTPATH, STEEL GRATINGS (SEE DETAILS ON SHEET 2 OR SHEET 3) OR CONCRETE COVERS (SEE STD. DRG. NO. C2407) SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.
- IF INSTRUCTED BY THE ENGINEER, HANDRAILING (SEE DETAIL 'J' ON SHEET 5; EXCEPT ON THE UPSLOPE SIDE) IN LIEU OF STEEL GRATINGS OR CONCRETE COVERS CAN BE ACCEPTED AS AN ALTERNATIVE SAFETY MEASURE FOR CATCHPITS NOT ON A FOOTPATH NOR ADJACENT TO IT. TOP OF THE HANDRAILING SHALL BE 1 000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.
- MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1 000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1 000 mm MEASURED FROM THE INVERT LEVEL TO THE ADJACENT GROUND LEVEL. AND, STEP IRONS (SEE DSD STD. DRG. NO. DS1043) AT 300 mm c/c STAGGERED SHALL BE PROVIDED. THICKNESS OF CATCHPIT WALL FOR INSTALLATION OF STEP IRONS SHALL BE INCREASED TO 150 mm.
- FOR RETROFITTING AN EXISTING CATCHPIT WITH STEEL GRATING, SEE DETAIL 'G' ON SHEET 4.
- ALL STEEL ANGLES SHALL COMPLY WITH BS EN 10025 AND BS EN 10056.
- UNLESS OTHERWISE SPECIFIED, ALL WELDS SHALL BE 5 mm CONTINUOUS FILLET WELDS.
- ALL WELDS SHALL BE CHIPPED, GROUND SMOOTH, BRUSHED TO REMOVE SLAG PRIOR TO HOT-DIP GALVANIZATION.
- ALL STEELWORK SHALL BE HOT-DIP GALVANIZED TO BS EN ISO 1461. ALL EXPOSED STEELWORK SURFACES SHALL BE TREATED AND PAINTED IN ACCORDANCE WITH THE GENERAL SPECIFICATION.
- SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

STANDARD CATCHPIT DETAILS
(SHEET 5 OF 5)

-	FORMER DRG. NO. C2405J.	Original Signed	03.2015
REF.	REVISION	SIGNATURE	DATE
 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT			
SCALE AS SHOWN		DRAWING NO. C2405 /5	
DATE JAN 1991			



NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
300 - 600	150
675 - 900	175

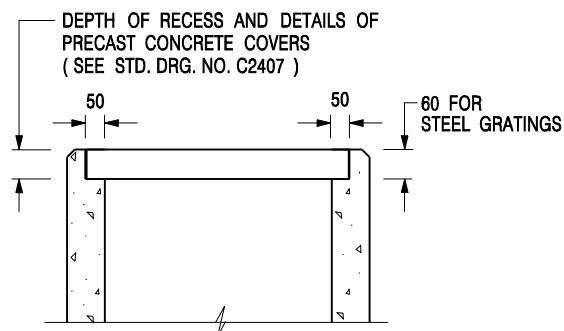


NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. REFER TO SHEET 2 FOR OTHER NOTES.

CATCHPIT WITH TRAP
(SHEET 1 OF 2)

-	FORMER DRG. NO. C2406J.	Original Signed	03.2015
REF.	REVISION	SIGNATURE	DATE
 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT		SCALE 1 : 20	
		DRAWING NO. C2406 /1	
DATE JAN 1991			



ALTERNATIVE TOP SECTION FOR PRECAST CONCRETE COVERS / GRATINGS

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE SHALL BE GRADE 20 /20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2 OR F2 AS APPROPRIATE.
4. FOR DETAILS OF JOINT, REFER TO STD. DRG. NO. C2413.
5. CONCRETE TO BE COLOURED AS SPECIFIED.
6. UNLESS REQUESTED BY THE MAINTENANCE PARTY AND AS DIRECTED BY THE ENGINEER, CATCHPIT WITH TRAP IS NORMALLY NOT PREFERRED DUE TO PONDING PROBLEM.
7. UPON THE REQUEST FROM MAINTENANCE PARTY, DRAIN PIPES AT CATCHPIT BASE CAN BE USED BUT THIS IS FOR CATCHPITS LOCATED AT SLOPE TOE ONLY AND AS DIRECTED BY THE ENGINEER.
8. FOR CATCHPITS CONSTRUCTED ON OR ADJACENT TO A FOOTPATH, STEEL GRATINGS (SEE DETAIL 'A' ON STD. DRG. NO. C2405 /2) OR CONCRETE COVERS (SEE STD. DRG. NO. C2407) SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.
9. IF INSTRUCTED BY THE ENGINEER, HANDRAILING (SEE DETAIL 'J' ON STD. DRG. NO. C2405 /5; EXCEPT ON THE UPSLOPE SIDE) IN LIEU OF STEEL GRATINGS OR CONCRETE COVERS CAN BE ACCEPTED AS AN ALTERNATIVE SAFETY MEASURE FOR CATCHPITS NOT ON A FOOTPATH NOR ADJACENT TO IT. TOP OF THE HANDRAILING SHALL BE 1 000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.
10. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1 000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1 000 mm MEASURED FROM THE INVERT LEVEL TO THE ADJACENT GROUND LEVEL. AND, STEP IRONS (SEE DSD STD. DRG. NO. DS1043) AT 300 c/c STAGGERED SHALL BE PROVIDED. THICKNESS OF CATCHPIT WALL FOR INSTALLATION OF STEP IRONS SHALL BE INCREASED TO 150 mm.
11. FOR RETROFITTING AN EXISTING CATCHPIT WITH STEEL GRATING, SEE DETAIL 'G' ON STD. DRG. NO. C2405 /4.
12. SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

A	MINOR AMENDMENT.	Original Signed	04.2016
-	FORMER DRG. NO. C2406J.	Original Signed	03.2015
REF.	REVISION	SIGNATURE	DATE

**CATCHPIT WITH TRAP
(SHEET 2 OF 2)**



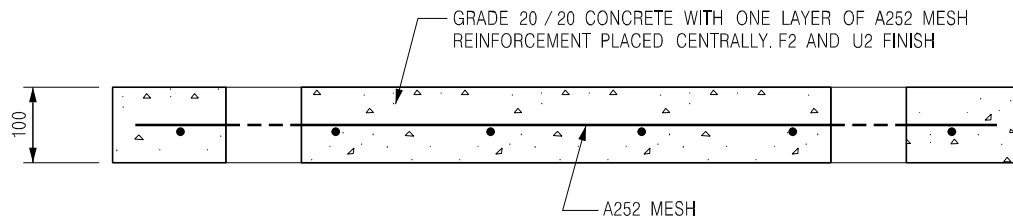
**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20

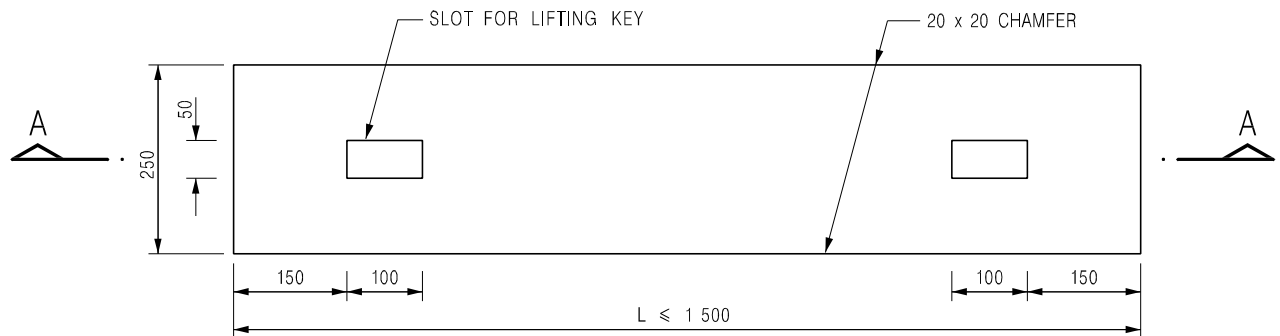
DATE JAN 1991

DRAWING NO.

C2406 /2A

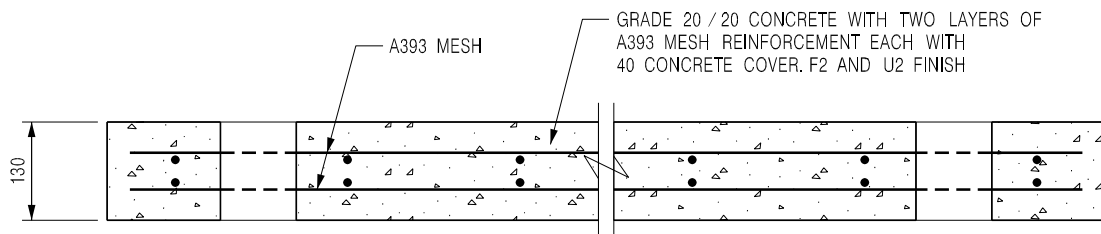


SECTION A - A

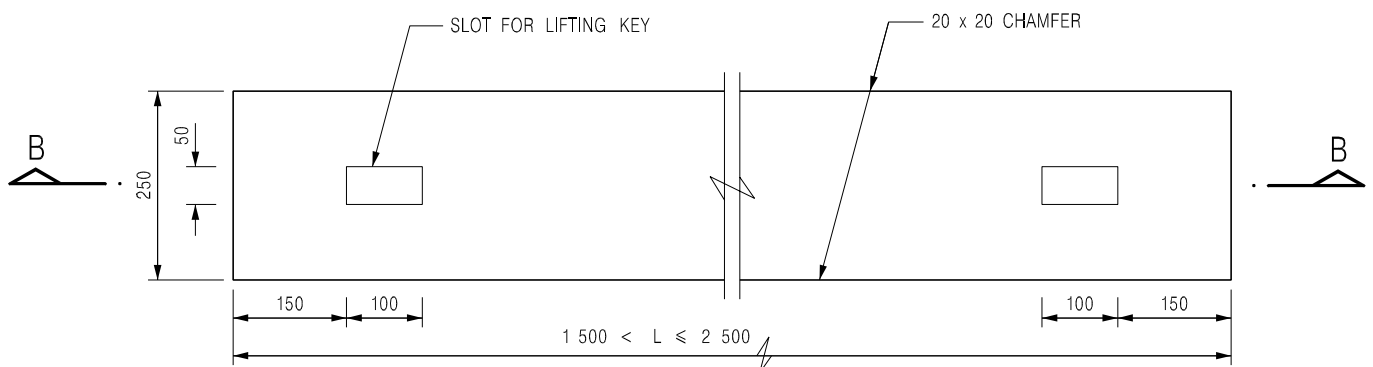


PLAN

TYPE 1 - FOR SPAN UP TO 1.5 m



SECTION B - B



PLAN

TYPE 2 - FOR SPANS 1.5 m TO 2.5 m

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL EXTERNAL EDGES OF THE COVERS SHALL BE 20mm CHAMFERED.

B	NAME OF DEPARTMENT AMENDED.	Original Signed	01.2005
A	GENERAL REVISION	Original Signed	12.2002
REF.	REVISION	SIGNATURE	DATE

PRECAST CONCRETE COVERS
FOR CATCHPIT AND SAND TRAP

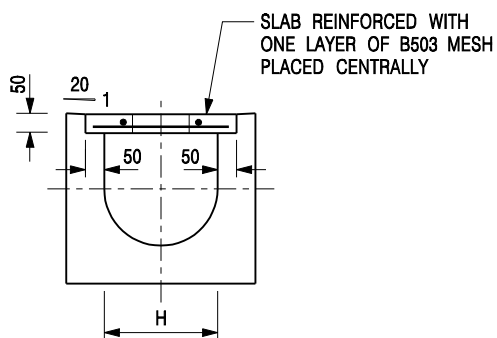


**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

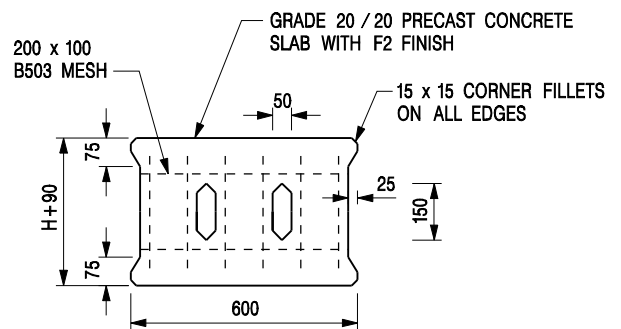
SCALE 1 : 10

DATE JAN 1991

DRAWING NO.
C2407B



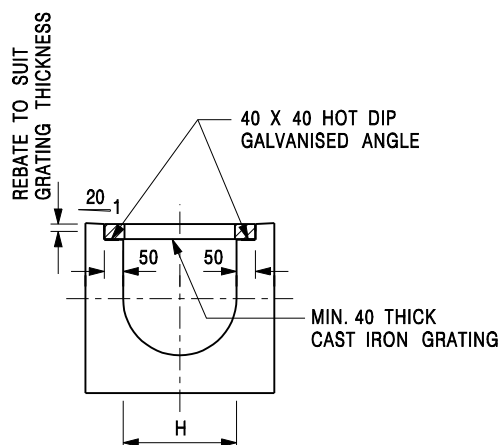
TYPICAL SECTION



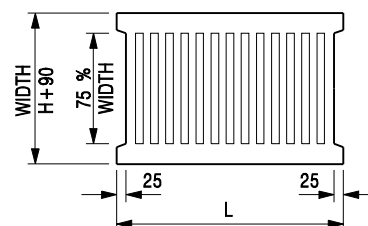
PLAN OF SLAB

U-CHANNELS WITH PRECAST CONCRETE SLABS

(UP TO H OF 525)



TYPICAL SECTION



L = 600mm FOR H ≤ 375mm
L = 400mm FOR H > 375mm

CAST IRON GRATING

(DIMENSIONS ARE FOR GUIDANCE ONLY, CONTRACTOR MAY SUBMIT EQUIVALENT TYPE)

U-CHANNEL WITH CAST IRON GRATING

(UP TO H OF 525)

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETRES.
- H=NOMINAL CHANNEL SIZE.
- ALL CAST IRON FOR GRATINGS SHALL BE GRADE EN-GJL-150 COMPLYING WITH BS EN 1561.
- FOR COVERED CHANNELS TO BE HANDED OVER TO HIGHWAYS DEPARTMENT FOR MAINTENANCE, THE GRATING DETAILS SHALL FOLLOW THOSE AS SHOWN ON HyD STD. DRG. NO. H3156.

E	NOTES 3 & 4 AMENDED.	Original Signed	12.2014
D	NOTE 4 ADDED.	Original Signed	06.2008
C	MINOR AMENDMENT. NOTE 3 ADDED.	Original Signed	12.2005
B	NAME OF DEPARTMENT AMENDED.	Original Signed	01.2005
A	CAST IRON GRATING AMENDED.	Original Signed	12.2002
REF.	REVISION	SIGNATURE	DATE

**COVER SLAB AND CAST IRON
GRATING FOR CHANNELS**



**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20

DATE JAN 1991

DRAWING NO.
C2412E