

Drainage Submission (Revised) in support of

Planning Application No. A/YL-TT/523

Temporary Shop and Services with Ancillary Office for a Period of
3 Years at Lots 4915 S.A (Part), 4915 S.B (Part), 4916 S.A & S.B
(Part), 4917 RP (Part) and 4918 RP (Part) in D.D. 116 and
Adjoining Government Land (GL), Tai Tong Road, Yuen Long,
New Territories

(HT21105)

February 2022



Planning Consultant: Top Bright Consultants Limited










Drainage Consultant:

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

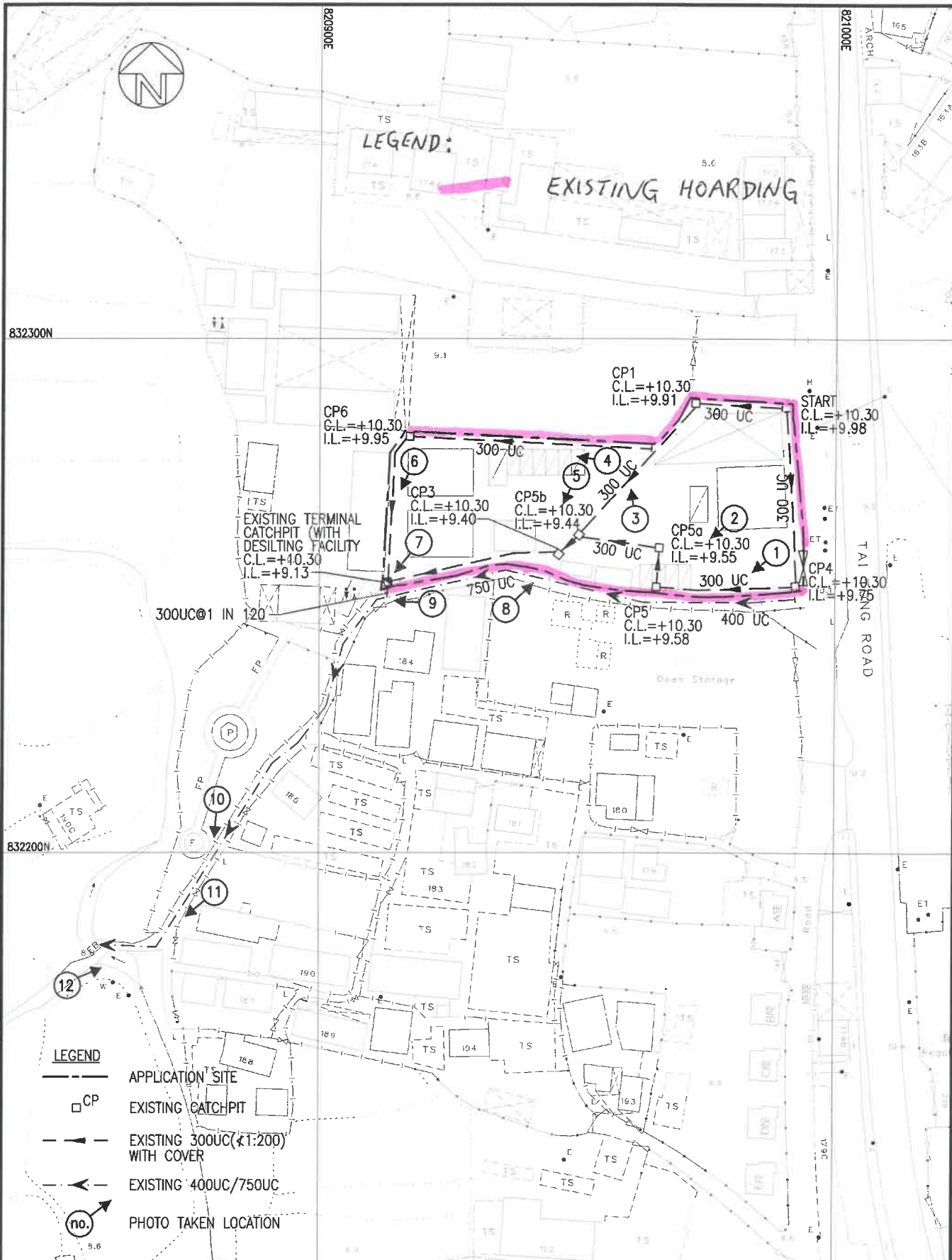


CE/MN, DSD's Comments issued under PlanD's Letter dated 24 December 2021	Responses
<p>(i) The existing drainage facilities, to which the stormwater of the development from the subject site would discharge, are not maintained by this office. The applicant should identify the owner of the existing drainage facilities to which the proposed connection will be made and obtain consent from the owner prior to commencement of the proposal works. In the case that it is a local village drains, DO/YL should be consulted.</p>	<p>DO/YL has confirmed no objection to the proposed drainage connection. A copy of the email of DO/YL dated 7/2/22 is enclosed in the revised Drainage Submission.</p>
<p>(ii) The applicant should check and ensure the hydraulic capacity of the existing drainage facilities would not be adversely affected by the captioned development.</p>	<p>The sizes of the channels of the subject site are in accordance with the "Technical Note to prepare a Drainage Submission (relating to application 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 DSD in November 2001, and DO/YL has agreed the subject site to discharge its surface runoff into their channel at the downstream of the subject site.</p>
<p>(iii) The location and details (i.e. cross section) of the proposed hoarding/peripheral wall should be shown on the proposed drainage plan. Please be reminded that overland flow from adjacent area should not be obstructed.</p>	<p>The subject site is bounded by hoarding at three sides, i.e. the eastern, southern and northern boundary, as indicated in the attached Sketch A. A photo showing typical details of the hoarding is attached below:</p>

CE/MN, DSD's Comments issued under PlanD's Letter dated 24 December 2021	Responses
	 <p data-bbox="1104 783 2045 943">There is no hoarding along the western boundary of the subject site, but there is an existing building on the adjacent lot abutting upon the boundary (please refer to the photo in the below). Surface runoff across the western boundary into the subject site can be ignored.</p> 

CE/MN, DSD's Comments issued under PlanD's Letter dated 24 December 2021	Responses						
	<p>At present, outside all the three sides of the subject site bounded by the hoarding are surface channels/gullies to receive surface runoff and therefore surface runoff from the adjacent areas would not flow across the boundary into the subject site. Current conditions are shown in the photos below:</p> <table border="1" data-bbox="1108 579 2040 967"> <tr> <td data-bbox="1108 579 1413 794">  </td> <td data-bbox="1413 579 1727 794">  </td> <td data-bbox="1727 579 2040 794">  </td> </tr> <tr> <td data-bbox="1108 794 1413 967"> Outside the southern boundary (gullies/water inlets exist) </td> <td data-bbox="1413 794 1727 967"> Outside the eastern boundary (gullies exist) </td> <td data-bbox="1727 794 2040 967"> Outside the northern boundary (surface channel exists) </td> </tr> </table>				Outside the southern boundary (gullies/water inlets exist)	Outside the eastern boundary (gullies exist)	Outside the northern boundary (surface channel exists)
							
Outside the southern boundary (gullies/water inlets exist)	Outside the eastern boundary (gullies exist)	Outside the northern boundary (surface channel exists)					
<p>(iv) The development should neither obstruct overland flow nor adversely affect existing natural streams, village drains, ditches and the adjacent areas, etc.</p>	<p>Noted. In addition to the existing channels at the subject area, appropriate peripheral channels will be constructed within the subject site. No overland flow would be obstructed. The collected surface runoff of the subject application site will be properly discharged to the existing DO/YL's channel. No existing natural streams, village drains, ditches and the adjacent areas, etc. would be adversely affected.</p>						

CE/MN, DSD's Comments issued under PlanD's Letter dated 24 December 2021	Responses
(v) The applicant should consult DLO/YL and seek consent from the relevant owners for any drainage works to be carried out outside his lot boundary before commencement of the drainage works.	Noted.
3. Please request the application to provide responses to the above comments and submit a revised drainage proposal incorporating the required information for comment.	Noted and followed.



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<p>PROJECT TEMPORARY SHOP AND SERVICES WITH ANCILLARY OFFICE AT VARIOUS LOTS AND ADJOINING GOVERNMENT LAND IN DD16, TAI TONG ROAD, YUEN LONG, N.T.</p>	<p>何田顧問工程師有限公司 HO TIN & ASSOCIATES CONSULTING ENGINEERS LIMITED</p>	
<p>TITLE LOCATIONS OF PHOTO TAKEN</p>	<p>SCALE 1 : 1000</p>	<p>DRAWING No. HT21105/DD/03</p>

SKETCH A

1. Background

- 1.1 In support of Planning Application No. A/YL-TT/523 for a temporary shop and services with ancillary office for a period of 3 years in “Residential (Group D)” (“R(D)”) Zone in Tai Tong Road, Yuen Long, New Territories, Messrs. Ho Tin & Associates Consulting Engineers Limited was appointed to prepare a drainage submission.
- 1.2 Drainage Services Department’s (DSD’s) comments on the previous Drainage Submission submitted in October 2021 were received under Planning Department’s letter dated 24 December 2021. A summary of responses to the DSD’s comments is enclosed in and the relevant responses have been incorporated into this revised submission.

2. Approach to Prepare this Submission

- 2.1 This Drainage Submission is prepared in line with the “Technical Note to prepare a Drainage Submission (relating to application 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 November 2001.

3. The Subject Site and Development

- 3.1 The subject site comprises of Lots 4915 S.A (Part), 4915 S.B (Part), 4916 S.A & S.B (Part), 4917 RP (Part) and 4918 RP (Part) in D.D. 116 and Adjoining Government Land (GL), Tai Tong Road, Yuen Long, New Territories. It is located on the west side of Tai Tong Road with a total site area of about 2,455m². A Site Location Plan is shown in **Drawing No. HT21105/DD/01**.
- 3.2 The subject site comprises three former sites for an extension of school building (previous Planning Application No. A/YL-TT/126), a temporary recyclable collection centre (previous Planning Application No. A/YL-TT/238) and a temporary shop and services with ancillary office (previous Planning Application No. A/YL-TT/360).

4. Existing Drainage Conditions of the Site

4.1 The subject site is now completely paved with concrete and fenced off and is currently partly occupied by the applied use. Its surrounding areas are all served by drainage, no overland flow across the boundary into the subject site is anticipated.

4.2 The subject site is now served by 300 surface U-channels including significant portion to be peripheral, with gradient not flatter than 1 in 200 of which some portions were approved under the previous Planning Application No. A/YL-TT/360. The channels discharge via a terminal catchpit with desilting facility into an existing 750 U-channel which runs outside the southern boundary of the subject site and toward the southwest direction into a watercourse. Existing drainage layout of the subject site is shown in **Drawing No. HT21105/DD/02**.

4.3 Current conditions of the subject site and its existing drainage system are shown in the following photos (photo taking locations are shown on **Drawing No. HT21105/DD/03**):



	
<p>Plate 1 – Existing peripheral 300UC within the southern subject site boundary</p>	<p>Plate 2 – Existing 300UC in front of an existing structure within the subject site boundary</p>



Plate 3 – Existing 300UC running across the subject site

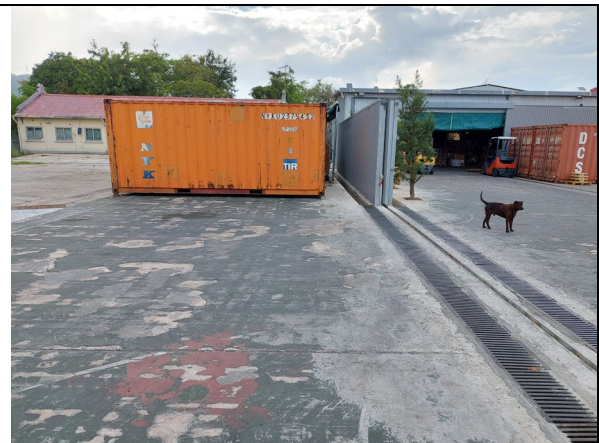


Plate 4 – Existing peripheral 300UC within the northern subject site boundary beside a peripheral channel of the adjacent site



Plate 5 – Existing peripheral 300UC within the southern subject site boundary



Plate 6 – Existing peripheral 300UC within the western subject site boundary



Plate 7 – Existing terminal catchpit with desilting facility at the southwest corner of the subject site

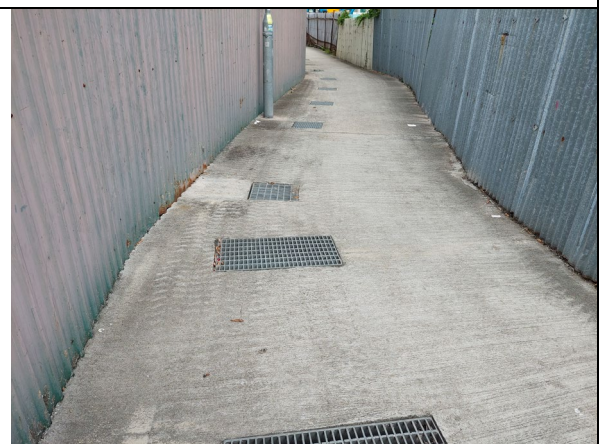


Plate 8 – Existing 750mm U channel receiving discharges from the subject site and running outside the southern subject site boundary



Plate 9 – Existing 750mm U channel receiving discharges from the subject site and running southwestward



Plate 10 – Existing 750mm U channel receiving discharges from the subject site and running southwestward



Plate 11 – Existing 750mm U channel receiving discharges from the subject site and running southwestward toward an existing watercourse



Plate 12 – Outfall of the existing 750mm U channel which receives discharges from the subject site at an existing watercourse

4.4 The subject site is bounded by hoarding at three sides, i.e. the eastern, southern and northern boundary. A photo showing typical details of the hoarding is attached below:



4.5 There is no hoarding along the western boundary of the subject site, but there is an existing building on the adjacent lot abutting upon the boundary. Surface runoff across the western boundary into the subject site can be ignored. At present, outside all the three sides of the subject site bounded by the hoarding are surface channels/gullies to receive surface runoff and therefore surface runoff from the adjacent areas would not flow across the boundary into the subject site. Current conditions of the boundary of the subject site are shown in the photos below:

	
<p>View to the western boundary of the subject site</p>	<p>Outside the southern boundary (gullies/water inlets exist)</p>
	
<p>Outside the eastern boundary (gullies exist) abutting upon Tai Tong Road</p>	<p>Outside the northern boundary (surface channel exists)</p>

4.6 Conditions of the existing channels are acceptable. Surface runoff of the subject site has been and is still properly intercepted by the existing channels and conveyed to the existing terminal catchpit near the southwest corner of the subject site for further discharging to an existing 750mm U-channel at the outside.

4.7 The existing 750mm U-channel into which the subject site would discharge its surface runoff is maintained by District Office/Yuen Long (DO/YL). DO/YL has confirmed no objection to the drainage connection from the subject site to the concerned existing 750mm U-channel. A copy of the email of DO/YL dated 7/2/22 is enclosed in this Submission for record.

5. Proposed Drainage Works

5.1 The subject site is currently paved and properly served by 300mm U-channels, of which significant portion is peripheral, with gradient not flatter than 1 in 200. Its existing levels and conditions would be unchanged and the existing channels would be undisturbed. There would have no change in the drainage conditions of the subject area. It is therefore considered that the subject development would not impose any additional adverse drainage effect upon its vicinity and downstream areas.

5.2 The subject site is a simple small site with a total site area of about 2,455m². With respect to the “Technical Note to prepare a Drainage Submission” (the “TN”) published by Drainage Services Department, channels at 1 in 200 gradient will be appropriate for the subject development.

5.3 An assessment table below reflects adequacy of the existing drainage of the subject development:

Drainage between (refer to Drawing No. HT21105/DD/02)		Sub-Catchment Area (m ²)	Cumulative Catchment Area (m ²)	Channel Size at 1:200 required under the DSD's "Technical Note" (mm U-channel at 1 in 200)	Size of Existing Channel (mm) / gradient	Remark (Adequate/ Not adequate)
Upstream point	Downstream point					
Start	CP1	200	200	225	300 / 1 in 200	Adequate
CP1	CP5b*	373	573	300	300 / 1 in 200	Adequate
Start	CP4	350	350	225	300 / 1 in 200	Adequate
CP4	CP5	280	630	300	300 / 1 in 200	Adequate
CP5	CP5a	49	679	300	300 / 1 in 200	Adequate

Drainage between (refer to Drawing No. HT21105/DD/02)		Sub-Catchment Area (m ²)	Cumulative Catchment Area (m ²)	Channel Size at 1:200 required under the DSD's "Technical Note" (mm U-channel at 1 in 200)	Size of Existing Channel (mm) / gradient	Remark (Adequate/ Not adequate)
Upstream point	Downstream point					
CP5a	CP5b**	154	833	300	300 / 1 in 200	Adequate
CP5b***	CP3	112	1518	375	300 / 1 in 140	Adequate
CP3	Terminal Manhole	263	1781	375	300 / 1 in 140	Adequate
Start	CP6	400	400	225	300 / 1 in 200	Adequate
CP6	Terminal manhole	274	674	300	300 / 1 in 200	Adequate
Terminal manhole	Existing 750UC	0	2,455	450	300 / 1 in 120	Adequate

- 5.4 Capacity of the required and existing channels are assessed by Manning Equation (i.e. Design Mean Velocity = $R^{1/6}/n(RS_f)^{1/2}$, where n = 0.013 for good concrete surface) in the following:

U-channel size (mm)	Gradient (1 in)	A (m ²)	P (m)	R (m)	Velocity (m/s)	Flow Capacity (m ³ /s)
375 [#]	200	0.2474108	1.6140486	0.1532858	1.56	0.39
300 ^{##}	140	0.2367715	1.814096	0.1305176	1.67	0.40
450 [#]	200	0.3704144	1.9997155	0.1852336	1.77	0.65
300 ^{##}	120	0.3517715	2.5807627	0.1363052	1.86	0.65

Remark: [#] size required under the DSD's "Technical Note"

^{##} actual size provided

- 5.5 With respect to the assessment done in the above paragraph 5.3 and capacity comparison conducted in the above paragraph 5.4, it indicates that the existing channels are capable and adequate to carry the surface runoff.

6. Conclusion and Recommendations

- 6.1 The subject development will be for temporary use for a period of three years. At present, it is served by 300mm U-channels of which significant portion is peripheral, with gradient not flatter than 1 in 200. Surface runoff collected from the subject site is discharged into an existing 750mm U-channel outside the southwest corner of the subject site. The 750mm U-channel discharges into an existing watercourse to the southwest. The existing 750mm U-channel is maintained by DO/YL who has confirmed no objection to the proposed drainage connection of the subject site.
- 6.2 There is no hoarding along the western boundary of the subject site, but there is an existing building on the adjacent lot abutting upon the boundary. Surface runoff across the western boundary into the subject site can be ignored. The subject site is bounded by hoarding at three sides, i.e. the eastern, southern and northern boundary. At present, outside all the three sides of the subject application site bounded by the hoarding are surface channels/gullies to receive surface runoff and therefore surface runoff from the adjacent areas would not flow across the boundary into the subject application site.
- 6.3 In addition to the existing channels at the subject area, appropriate peripheral channels will be constructed within the subject site. No overland flow would be obstructed. The collected surface runoff of the subject site will be properly discharged to the existing DO/YL's channel. No existing natural streams, village drains, ditches and the adjacent areas, etc. would be adversely affected.
- 6.4 The subject development would not alter the existing drainage conditions and pattern of the area, and the existing channels of the subject site would properly collect and convey surface runoff of the subject site to the downstream. Therefore, in conclusion, the subject development would not cause any adverse drainage impact upon the area.

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

31 December 2021
Our Ref.: HT21105/01/01/004

Home Affairs Department
Yuen Long District Office
Works Section (YLDO)
Yuen Long District Office Building
269 Castle Peak Road, Yuen Long
New Territories

Urgent by fax [REDACTED] and post

Dear sirs/madams,

Planning Application No. A/YL-TT/523
Drainage Submission in support of Planning Application of Temporary Shop and Services with Ancillary Office for a Period of 3 Years at Lots 4915 S.A (Part), 4915 S.B (Part), 4916 S.A & S.B (Part), 4917 RP (Part) and 4918 RP (Part) in D.D. 116 and Adjoining Government Land (GL), Tai Tong Road, Yuen Long, N.T.

We are the engineering consultants for the captioned project engaged by the client to submit a Drainage Submission to Planning Department for satisfying the planning approval condition.

Subsequent to our submission, we received DSD's comments via PlanD that drainage of the subject development would be discharged into a local village drains such that DO/YL should be consulted and consent should be sought. A copy of the relevant PlanD's letter ref. 21/711/L04 dated 24/12/21 is enclosed herewith for your information.

Because of the above-mentioned departmental comments, we would like to submit herewith a copy of our Drainage Submission for your approval and your consent of the discharge into the concerned local village drains is also sought hereby.

As there is a short time limit for complying the planning approval condition, your earliest reply will be very much appreciated. Should you require any further information or have any queries, please feel free to contact the undersigned on direct line [REDACTED] or via direct email address: [REDACTED]. Thank you very much for your kind assistance.
Regards,

Yours faithfully,
HO TIN & ASSOCIATES
CONSULTING ENGINEERS LIMITED


K. C. LEE
Managing Director (Acting)

Encl.

[REDACTED]

[REDACTED]



ISO 9001 : 2015
Certificate No.: CC 746

寄件者: prudence_kc_ho@had.gov.hk
寄件日期: Monday, February 7, 2022 6:39 PM
收件者: HO TIN & ASSOCIATES - Mr. K.C.Lee
副本: kam_cheong_wong@had.gov.hk
主旨: Re: FW: Adjoining Government Land (GL), Tai Tong Road, Yuen Long, N.T.

Dear Lee,

I refer to your preceding email and our telephone conversation this afternoon. Please be informed that the concerned channels as shown on Plate 8 to Plate 11 are maintained by Yuen Long District Office. This office has no comment to the proposed connection provided that the proposed works would not cause any adverse drainage impacts to the surrounding areas from maintenance point of view.

Regards,
Prudence HO
for District Officer (Yuen Long)

From: "HO TIN & ASSOCIATES - Mr. K.C.Lee" [REDACTED]
To: <prudence_kc_ho@had.gov.hk>
Date: 26/01/2022 10:39
Subject: FW: Adjoining Government Land (GL), Tai Tong Road, Yuen Long, N.T.

Dear Ms. Ho,

As spoken minutes ago, attached please find a copy of our latest submission to your department. Grateful if you would advise us whom of your department should we approach for further liaison.

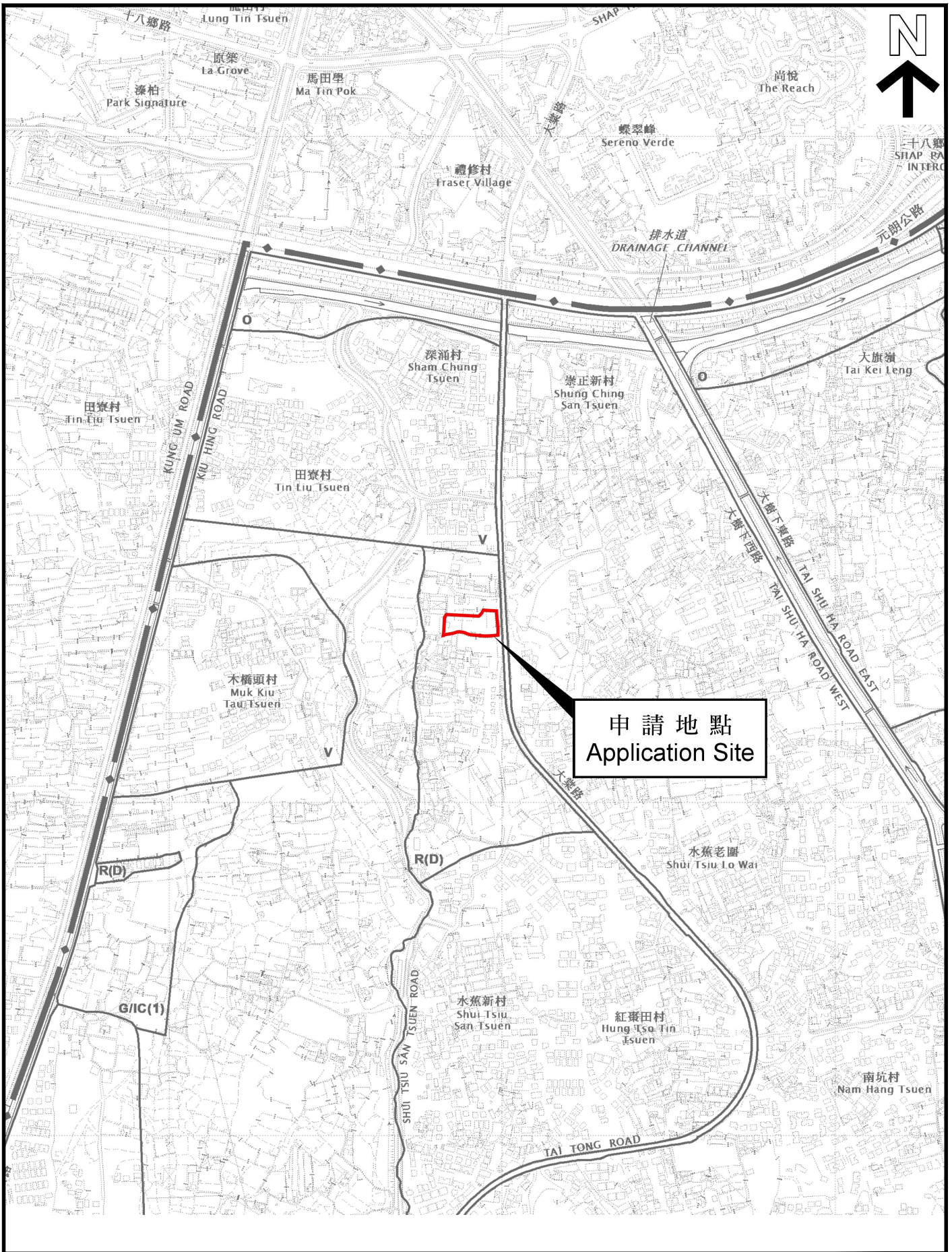
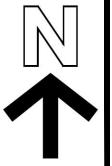
Thank you very much for your kind assistance. Should you have any questions, please feel free to contact the undersigned on direct phone line 2639 6655.

Regards,

K. C. LEE

HO TIN & ASSOCIATES
CONSULTING ENGINEERS LIMITED
E-mail : admin@hotin.com.hk

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申請地點
Application Site

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PROJECT
TEMPORARY SHOP AND SERVICES WITH ANCILLARY OFFICE
AT VARIOUS LOTS AND ADJOINING GOVERNMENT LAND IN
DD16, TAI TONG ROAD, YUEN LONG, N.T.

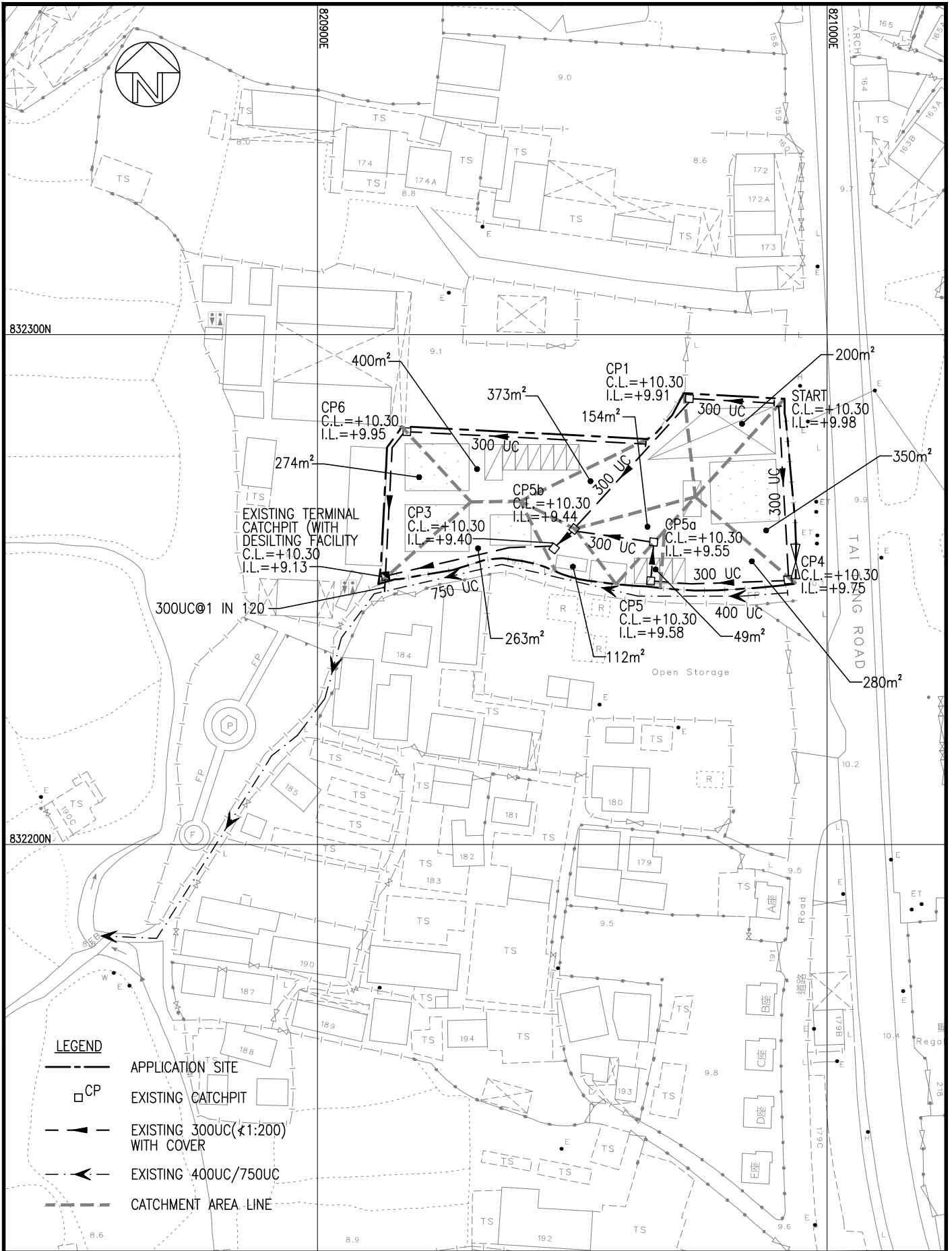
何田顧問工程師有限公司
HO TIN & ASSOCIATES
CONSULTING ENGINEERS LIMITED

TITLE
SITE LOCATION PLAN

SCALE
1 : 7500

DRAWING No.
HT21105/DD/01

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LEGEND

- APPLICATION SITE
- CP EXISTING CATCHPIT
- ▶ EXISTING 300UC(≠1:200) WITH COVER
- ◀ EXISTING 400UC/750UC
- - - CATCHMENT AREA LINE

PROJECT
 TEMPORARY SHOP AND SERVICES WITH ANCILLARY OFFICE
 AT VARIOUS LOTS AND ADJOINING GOVERNMENT LAND IN
 DD16, TAI TONG ROAD, YUEN LONG, N.T.

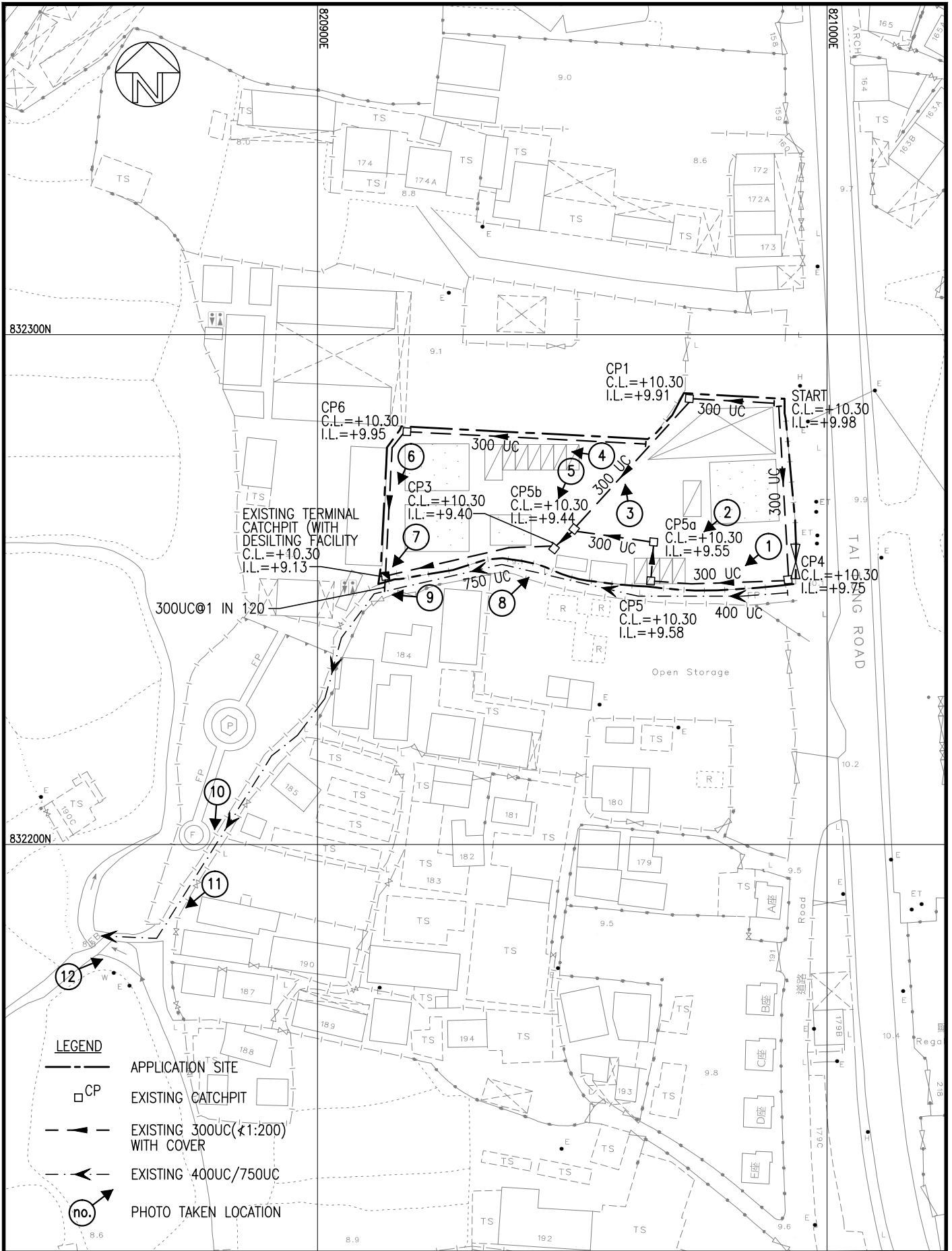
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HO TIN & ASSOCIATES
 CONSULTING ENGINEERS LIMITED

TITLE
 DRAINAGE LAYOUT PLAN

SCALE
 1 : 1000

DRAWING No.
 HT21105/DD/02

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PROJECT
 TEMPORARY SHOP AND SERVICES WITH ANCILLARY OFFICE
 AT VARIOUS LOTS AND ADJOINING GOVERNMENT LAND IN
 DD16, TAI TONG ROAD, YUEN LONG, N.T.

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TITLE
 LOCATIONS OF PHOTO TAKEN

SCALE
 1 : 1000

DRAWING No.
 HT21105/DD/03