Total: 7 pages

Date: 6 April 2024

TPB Ref.: A/NE-HLH/68

By Email

Town Planning Board 15/F, North Point Government Offices 333, Java Road North Point Hong Kong (Attn: The Secretary)

Dear Sir,

Proposed Temporary Warehouse and Open Storage of Construction Machinery & Construction Material for a Period of 3 Years at Lots 171 (Part), 172 (Part), 176 (Part) & 177 (Part) in D.D. 87, Ta Kwu Ling, New Territories

Our response to the further comments of the CE/MN, DSD is as follows:

CE/MN, DSD's comments	Applicant's response
(a) Please provide photo at the discharge point and the downstream existing watercourse.	Noted. Please see attached photo in the following. The photo viewpoint is found in updated drainage plan in the attachment (Figure 4)
(b) Please provide calculation to justify the adequacy of using 525mm U-channel.	Please see the calculation below.
(c) Please clearly indicate the catchpit with sand trap in the drainage proposal.	Please see the updated drainage plan (Figure 4) attached in the following.
(d) Figure 7 refers. Please advise the clearance between the proposed catchpit and the existing river embankment. You are required to place all the proposed works at least 3m away from the top of the bank of the streamcourse. All the proposed works in the vicinity of the streamcourse should not create any adverse drainage impacts, both during and after construction. Proposed flooding mitigation measures if necessary shall be provided at the resources of the applicant to my satisfaction."	All proposed works would be at least 3m away from the top of the bank of the streamcourse. All the proposed works in the vicinity of the streamcourse would not create any adverse drainage impacts, both during and after construction. Proposed flooding mitigation measures if necessary shall be provided at the resources of the applicant to CE/MN, DSD's satisfaction

The applicant has implemented the accepted drainage proposal for the last planning permission No. A/NE-HLH/51 and the application site is equipped with surface channel along the site periphery. However, the applicant didn't complete the implementation of the accepted drainage proposal before the expiry date of the condition regarding the implementation of drainage proposal so that the last planning permission No. A/NE-HLH/51 has been revoked

For the implementation of the FSI proposal, the applicant also cannot complete the implementation of FSI proposal before the expiry date of the said condition because the applicant cannot erect the temporary structures according to the approved layout plan without the short term waiver to be issued by DLO/N.

Should you have any enquiries, please feel free to contact our Mr. Patrick Tsui at at your convenience.



c.c. Sha Tin , Tai Po and North District Planning Office (Attn: Ms. Carmen CHEUNG) – By Email

Proposed Temporary Warehouse and Open Storage of Construction Machinery & Construction Material for a Period of 3 Years at

Lots 171 (Part), 172 (Part), 176 (Part) & 177 (Part) in D.D. 87, Ta Kwu Ling, New Territories

Annex 1 Drainage Proposal

1.1 Existing Situation

A. Site particulars

- 1.1.1 The application site occupies an area of about $6,800m^2$.
- 1.1.2 The site is serviced by a vehicular access leading from Ping Che Road. The area adjacent to the proposed development is mainly rural in nature and some open storage yards were found.
- B. Level and gradient of the subject site & proposed surface channel
- 1.1.3 It has a gradient sloping from the southwest to northeast from about +15.4mPD to +12.4mPD. (Figure 4)
- C. Catchment area of the proposed drainage provision at the subject site
- 1.1.4 The land to the north, south, west and east is found lower in level than the application site. As such, no external catchment has been identified.

D. Particulars of the existing drainage facilities to accept the surface runoff collected at the application site

1.1.5 As shown in **Figure 4**, a river is found to the immediate north of the application site. The stormwater intercepted by the proposed surface drain at the application site will be dissipated to the said river.

1.2 <u>Runoff Estimation</u>

1.2.1 Rational method is adopted for estimating the designed run-off

$$Q = k \times i \times A/3,600$$

Assuming that:

- i. The area of the catchment is 6,800m²; (**Figure 4**)
- ii. The application site has been fully paved. It is assumed that the value of run-off co-efficient (k) is taken as 1.

Difference in Land Datum	=	15.4m – 12.4 m	= 3m
L	=	180m	
: Average fall	=	3m in 180m or	1m in 60m

According to the Brandsby-Williams Equation adopted from the "Stormwater Drainage Manual – Planning, Design and Management" published by the Drainage Services Department (DSD),

Time of Concentration (t _c)	= 0.14465 [L/(H ^{0.2} ×A ^{0.1})]
tc	$= 0.14465 \ [180/ \ 1.67^{0.2} \times 6,800^{0.1}) \]$
t _c	= 9.72 minutes

With reference to the Intensity-Duration-Frequency Curves provided in the abovementioned manual, the mean rainfall intensity (i) for 1 in 50 recurrent flooding period is found to be 225 mm/hr

By Rational Method,

Q_1	= 1 × 225 × 6,800 / 3,600
$\therefore \mathbf{Q}_1$	= 425 l/s $= 25,500 $ l/min $= 0.43$ m ³ /s

In accordance with the Chart or the Rapid Design of Channels in "Geotechnical Manual for Slopes", for an approximate gradient of about 1:67 and 1:73 in order to follow the gradient of the application site, <u>525mm surface U-channel along the site</u> periphery is considered adequate to dissipate all the stormwater accrued by the application site.

1.3 <u>Proposed Drainage Facilities</u>

- 1.3.1 Subject to the calculations in 1.2 above, it is determined that proposed 525mm concrete surface U-channel along the site periphery is adequate to intercept storm water passing through and generated at the application site (**Figure 4**).
- 1.3.2 The collected stormwater will then be discharged directly to the river to the north of the application site.
- 1.3.3 All the proposed drainage facilities will be provided and maintained at the applicant's own expense. Also, sand trap and surface U-channel will be cleaned at regular interval to avoid the accumulation of rubbish/debris which would affect the dissipation of storm water.
- 1.3.4 The provision of the proposed surface channel will follow the gradient of the application site. <u>All the proposed drainage facilities will be constructed and maintained at the expense of the applicant.</u>
- 1.3.5 Prior to the commencement of the drainage works, the applicant will seek consent from District Lands Office/North and relevant land owners for the provision of drainage facilities outside the application site.
- 1.3.6 The proposed development would not affect the existing ditches, drains and obstruct the flow of the flow of surface runoff.
- 1.3.7 The provision of trees and surface channel at site boundary is detailed hereunder:
- (a) Soil excavation at site periphery, is inevitably for the provision of surface channel. The accumulation of excavated soil at the site periphery would obstruct the free flow of the surface runoff from the surroundings. Hence, the soil will be cleared at the soonest possible after the completion of the excavation process.
- (b) In view of that soil excavation may be continued for several working days, surface channel will be dug in short sections and all soil excavated will be cleared before the excavation of another short section.
- (c) No leveling work will be carried at the site periphery. The level of the site periphery will be maintained during and after the works. The works at the site periphery would not either alter the flow of surface runoff from adjacent areas.
- (d) 100mm gap at the toe of the site hoarding will be provided at the toe of site hoarding to allow unobstructed flow of surface runoff.

Photo at the discharge point and the downstream

Photo 1



Photo 2



