

Annex D

Replacement Pages of Sensitivity Test for the Proposed “R(B)14” Zone

2 LAND STATUS

- 2.1 The majority (78%) of the northern portion of the Application Site is Tai Po Town Lot 183 RP, which has been developed into a residential development (i.e. Mont Vert). Other private lots owned by others and the Applicant are 11% and 2% respectively. The remainings are Government land (9%).

Table 3.1 Breakdown of Land Ownership of Northern Portion

Land Ownership ^[a]	Northern Portion
TPTL 183 RP	50,246 (78%)
Private lots owned by others ("Third Party Lots") (m ²)	7,143 (11%)
Private lots owned by the Applicant (m ²)	1,159 (2%)
Government land (m ²)	5,939 (9%)
Total (m ²)	64,486

[a] The areas are measured by using geographic information system software, and subject to detailed on-site survey.

- 2.2 These scattered private lots are distributed mostly to the northeast, northwest and south of Mont Vert. For the lots to the northeast, most of them are small in size and fragmented except Lot 400 in D.D. 11. There is a natural stream course meandering alongside the lots. Land suitable for potential development are limited. For the land to the northwest, most of the lots are sat on slope and/or occupied by graves and urns. For the land to the south, although most lots are third party lots and falling within village environ, they are already occupied by existing or committed development.
- 2.3 Private lots owned by the Applicant have very low development potential considering their fragmented size and remote location. Only a few of third party lots (about 3,000m²) are available for potential developments. The location of the available land for potential developments is illustrated in **Figure 4**.

3 POTENTIAL DEVELOPMENTS ASSUMPTION

- 3.1 Under the proposed amendment to the Statutory Notes of the OZP for “Residential (Group B)” Zone, ‘*On land designated “R(B)14”, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum domestic GFA of 87,356m², a maximum non-domestic GFA of 376m² and a maximum building height in terms above Principal Datum as stipulated on the Plan, or the GFA and height of the existing building, whichever is the greater.*’ Considering that Mont Vert has used up all the permissible GFA of the proposed “R(B)14” zone, third party lots owners who wish to develop their land will be required to submit separate application(s) under section 16 of the Town Planning Ordinance to the Town Planning Board for minor relaxation of the GFA restriction, even the proposed uses are Column 1 uses¹. Application(s) will be considered based on the individual merits of the development or redevelopment proposal.
- 3.2 While adverse infrastructural impact created by a single NTEH development shall not be anticipated, the cumulative impact arising from all the potential NTEH developments may need to be assessed. **Also, the Applicant has no proposed development on its private land within the northern portion.** As such, a sensitivity test assuming all available third party lots for NTEH development has been carried out.
- 3.3 Adopting the standard land estimation of 250m² per NTEH for Small House s16 Planning Applications, with a total available third party lots of 3,000m² (para 2.3 refers). Ultimately, 12 NTEHs is assumed to be developed within the proposed “R(B)14” zone . The estimated population is 95 persons with the assumption of 3 units per NTEH.
- 3.4 By allocating the 12 NTEHs to the more intact third party lots, 8 potential NTEHs to the northeast, 1 NTEH to northwest and 3 NTEHs to the south are expected to be built ultimately. The location of the potential developments is illustrated in **Figure 4**.

¹ New Territories Exempted House (“NTEH”) subsumed under ‘House’ is proposed to be one of the Column 1 uses under the “R(B)14” zone and therefore no planning permission is required. Also, the development of NTEH is exempted from certain provisions of the Buildings Ordinance and its subsidiary regulations, including the need for obtaining prior approval and consent to the commencement of works from the Buildings Department.

Sewerage

- 4.6 The Application Site is characterised by rural/suburban topography, with limited access to public sewerage infrastructure. Connection to the public system is deemed impractical due to challenges in maintenance, construction responsibilities, and site constraints, such as distance from terminal manholes and potential disruption to existing utilities. However, for conservative consideration, the sewerage sensitivity analysis incorporated the scenario that the total design sewage flow from all proposed NTEH's will be received by the public sewerage system.
- 4.7 The potential NTEH development in the "R(B)14" zone will not cause adverse sewerage impacts to the surroundings. Two schemes (Scheme 1 – Hypothetical Sewerage Tank / Sewerage Treatment Plant and Scheme 2 – Discharge to Public Sewerage) are proposed for the hypothetical development. **With private septic tanks or sewerage treatment plan proposed by NTEH owners,** sewage will be fully managed on-site, complying with EPD/DSD standards and avoiding strain on public infrastructure. The low population density and rural setting further minimise risks. NTEH owners might propose constructing sewerage pipe(s) through others lot boundary and discharged to public sewerage system in Fung Yuen Road. The proposed sewerage pipe(s) should be carried by the owner at his own cost.

Water Supply

- 4.8 Based on the unit water demand and the estimated population, the mean daily fresh water and flushing water demands for the potential NTEH Developments in the proposed "R(B)14" zone are approximately 22m³/day and 7m³/day. As the existing DN150 salt water mains along Fung Yuen Road ends near the entrance of Mont Vert, salt water can only be supplied to the potential NTEH developments in Region A. For the potential NTEH development in Region B, it is assumed the flushing water will be provided by the existing DN200 fresh water main along Fung Yuen Road as there are no existing salt water mains at its adjacency.
- 4.9 Based on the hydraulic calculation, residual heads under hypothetical scenario, which included the potential NTEH development in "R(B)14" zone and the Development in the proposed "R(B)13" and "Government, Institution or Community" ("G/IC") zones, as well as the potential NTEH developments, are estimated. The residual heads for the fresh water supply system under hypothetical scenario range from 63.08m to 28.07m. For the salt water supply system, the residual heads under hypothetical scenario range from 72.26m to 31.12m. The residual heads under hypothetical scenario are well within residual head requirement of 20m and 15m for water supply system.
- 4.10 Based on the assessment findings, it is considered that there is no insurmountable impact due to the additional water demand from the potential NTEH developments in

The total foul water flow from Social Welfare Complex and Phase II Residential Tower are summarized as 0.000825m³/s and 0.002226m³/s.

3. Hypothetical Sewerage System

The proposed development in the remaining areas of "R(B)14" zone includes up to 12 NTEHs, in line with the attached plan. Each NTEH is assumed to accommodate up to three residential units, resulting in a total of 36 units. Based on standard occupancy rates for NTEHs (approximately 2.6 persons per unit), the anticipated population is 95 persons.

3.1 Scheme 1 – Hypothetical Sewerage Tank / Sewerage Treatment Plant

The site is located in a rural Hong Kong area, away from public sewerage networks managed by the DSD with a minimum 28m distance. It is not practical to construct the sewerage pipe through others lot boundary due to construction difficulties and maintenance responsibilities. NTEH developers are required to install private sewage disposal systems, such as septic tanks or package sewage treatment plants, to treat and dispose of effluent on-site or via licensed means, ensuring no direct discharge into public sewers or surrounding watercourses. The hypothetical sewerage works are shown in [Appendix C](#).

3.2 Scheme 2 – Discharge to Public Sewerage

			<i>New Territories Exempted Houses (NTEH)</i>
No. of Flats			36
Occupant per Flats (2024 census)			2.6
Population	Residential		95
	Employee		0
Unit Flow Factor (UFF)	Domestic	m ³ /day/person	0.270
	Commercial Employee	m ³ /day/employee	0.080
	Commercial Activities	m ³ /day/employee	0.200
Foul Water Flow (Q)	Domestic	m ³ /s	0.000297
	Commercial Employee	m ³ /s	0.000000
	Commercial Activities*	m ³ /s	0.000000
	<i>Total</i>	<i>m³/s</i>	<i>0.000297</i>

Table 3.1 Assumed Populations and Average Foul Flow which catchment covers the existing developments within NTEH to manhole FMH1005471

	Catchment A (A1 + A2 + A3 + C1 + C2 + D + E + NTEH)
Calculated Total Average Flow (m ³ /s)	0.006493
Peaking Factor	6*
Total Peak Flow (m ³ /s)	0.038958

*Peaking Factor (including stormwater allowance) for facility with existing upstream sewerage is adopted

Table 2.2 Total Peak Flow Calculations from existing developments (Catchment A1 + A2 + A3 + C1 + C2 + D + E + NTEH) to manhole FMH1005471

The calculated peak sewerage flow from proposed development of NTEH is about 0.0017 m³/s. According to the sewerage record plan from DSD, there is no existing sewer for the proposed NTEH. It is recommended that an independently proposed sewerage system be provided to deliver flow to the existing sewerage system by the lot owner at his own cost and maintenance responsibilities. **No adverse sewerage impact is anticipated according to the calculation.** The hypothetical sewerage works and calculation are shown in [Appendix C](#).

4. Conclusion

- 4.1 This sensitivity test demonstrates that the proposed 12 NTEHs in the "R(B)14" zone will not cause adverse sewerage impacts to the surroundings.
- 4.2 Two schemes are proposed for the hypothetical development.
- 4.3 **With private septic tanks or sewerage treatment plan proposed by NTEH owners,** sewage will be fully managed on-site, complying with EPD/DSD standards and avoiding strain on public infrastructure. The low population density and rural setting further minimize risks.
- 4.4 NTEH owners might propose construction sewerage pipe through others lot boundary and discharged to public sewerage system in Fung Yuen Road. The proposed sewerage pipe should be carried by the owner at his own cost.