

Annex F

Replacement Page of Sewerage Impact Assessment



5 ASSESSMENT

5.1 Designed Sewage Flow – Proposed Development

5.1.1 The estimated peak flow generated by the estimated population for the proposed development is summarized on Table 3. Detailed calculation is contained in **Appendix D**.

Catchment ID	Contributing Population	ADWF (m ³ /day)	Peaking Factor	Peak Flow (m ³ /s)
T1 & T2 (carpark inclusive)	1171	306.88	5	0.0177
Clubhouse (swimming pool inclusive)		9.12	5	0.00053

Table 3- Estimated Peak Flow

5.1.2 The proposed sewer connecting with the proposed foul terminal manhole no. FTMH1 and the planned public sewer manhole no. FMH-J07 constructed by CEDD is checked to be hydraulic adequate by Colebrook-White equation. Detailed calculation is contained in **Appendix D**.

5.1.3 The proposed sewage flow for the Site under this S16 application is 316 m³/day, which is larger than CEDD's design sewage flow of 166m³/day for the Site (Area 48). An assessment on the pipelines connecting with planned public sewer manhole no. FMH-J07 and existing CYRSPS are conducted.

5.1.4 The hydraulic capacity of the planned public sewerage pipeline system being constructed by CEDD is checked to be hydraulic adequate by Colebrook-White equation. Detailed calculation is contained in **Appendix D**.

5.1.5 The current dry weather flow of the existing CYRSPS and TCSPS, and are 22,464 m³/day and 52,992 m³/day respectively, while the current treatment capacity of SHWSTW is approximately 70,000 m³/day. Insignificant sewerage impact to the existing sewerage facilities is envisaged.

6 CONCLUSION & RECOMMENDATIONS

6.1 Conclusion

6.1.1 According to the Development Parameters for the proposed residential development provided by the developer, the estimated ADWF for the whole development site discharging to CYRSPS, TCSPS and SHWSTW is 316 m³/day. No adverse impact to the existing sewerage facilities is envisaged.

6.1.2 The hydraulic capacity of the planned public sewerage pipeline system being constructed by CEDD is checked to be hydraulic adequate to convey both CEDD's design sewage flows and the increased sewage flow from the proposed residential development. No adverse impact on the sewerage system is expected.