

- 6.6.1.6 The construction of these works may not be finished before people are ready to move into the newly developed residential area. It is expected that the construction of the rising main from pump station 4 to To Kwa Wan PTWs will have the longest construction period.
- 6.6.1.7 As an interim measure, as confirmed under Review of Central and East Kowloon SMP, it will be possible to discharge sewage generated by the early developed areas into the existing gravity trunk sewer which passes along Prince Edward Road East. Discussions have been held with the consultants responsible for preparing the 'Central and East Kowloon Sewerage Management Plan (CEKSMP)' in regard to this temporary discharge. In this regard they have advised that the existing sewer in Prince Edward Rd East has been modelled allowing for an average flow of $0.45\text{m}^3/\text{s}$ which will satisfy this SEKD temporary discharge requirement before the completion of the SEKD pumping station no. 4.
- 6.6.1.8 The discharge of sewage from the hinterland (Wong Tai Sin, Wang Tau Hom, Kowloon City, Kowloon Tsai and the western part of San Po Kong) into pump stations other than pump station 4 is also being discussed with the consultants preparing the CEKSMP, DSD, and other government departments.

6.7 Catchment Descriptions

- 6.7.1.1 Drainage culverts act as boundaries to most of the sewerage catchments because the size of the culverts does not allow gravity sewage pipes to pass over or under the culverts necessitating the need to convey the sewage over the culverts in rising mains. The pump stations are mostly situated near the boundary of the catchments and a short rising main conveys the sewage over the boundary, such as drainage culvert, to discharge into the gravity system of the neighboring catchment.
- 6.7.1.2 The sewers and rising mains generally follow roads but where this has not been possible sewerage reserves must be obtained. Where pump stations are not located immediately off roads emergency vehicle access (EVA) is required for maintenance purposes.
- 6.7.1.3 SEKD has been divided into ten separate catchment areas. **Drawing No. 22936/SW/003** shows the catchment boundaries. The catchment descriptions are as follows:
- Catchment A**
- 6.7.1.4 Located in the north of SEKD catchment A is bounded by drainage culvert R and its branch line V2 and its branch line V1A. Sewage in this catchment and that pumped from catchment A1 gravitates to pump station 1 and is then pumped over culvert R into catchment B.
- Catchment A1**
- 6.7.1.5 Located in the north of SEKD to the southeast of catchment A catchment A1 is bounded by drainage culvert R and its branch lines V1, V2 and V1A. Sewage in this catchment gravitates to pump station A1 and then pumped over culvert V1A into catchment A.
- Catchment B**
- 6.7.1.6 Located at the western end of SEKD catchment B is bounded by culvert R and the airport tunnel. Sewage within the catchment along with the flow from pump station 1 travels through a gravity system to pump station 2. The sewage is then pumped into catchment C. Pumping station 3 which pumps sewage from Hinterland areas outside SEKD (Wong Tai Sin, Wang Tau Hom, Kowloon City, Kowloon Tsai and the western part of San Po Kong) is also located within catchment B but the sewage gravitating to this pump station is pumped directly to Pump station 4.

Catchment C

- 6.7.1.7 Catchment C is bounded by the airport tunnel, culvert R and culvert Q. Sewage collected within the catchment along with the flows from pump station 2 is fed to pumping station 4 through a gravity system. From pump station 4 the sewage is pumped directly to the To Kwa Wan Preliminary Treatment Works.

Catchment D

- 6.7.1.8 Catchment D is bounded by culverts Q and P2. The sewage is flows through a gravity system to pumping station 5 where it is then pumped to the To Kwa Wan Preliminary Treatment Works along with the sewage from Catchment E.

Catchment E

- 6.7.1.9 Catchment E is located in the southwestern corner of the SEKD and is separated from catchment D by culvert P1. Sewerage from this catchment flows to pump station 6 where it is then pumped to pumping station 5 in catchment D.

Catchment F

- 6.7.1.10 Catchment F is bounded by culverts R and S. Sewage from this catchment flows to Pumping Station 7 where it is pumped into catchment G.

Catchment G

- 6.7.1.11 Catchment G is bounded by culverts T and S. Sewage in catchment G along with pumped flow from catchments F and H is transported by a gravity system to pumping station 8. Pumping station 8 delivers the sewage via a rising main to the KTPTW.

Catchment H

- 6.7.1.12 Catchment H is located on the southeastern tip of the old runway and is separated from catchment G by culvert T. The sewage from this catchment is pumped into catchment G via Pumping Station 9.

Catchment I

- 6.7.1.13 Catchment I is the area around the existing Kwun Tong PTW. The catchment boundaries are existing developed sites and the sea. This catchment is non-residential and the expected sewage generation is small (details provided in flow calculations in **Appendix 6A**). The sewage from this catchment passes to KTPTW.

6.8 Sewerage Infrastructure

6.8.1 Catchment A

Sewage Pumping Station – PS1

- 6.8.1.1 This pumping station is shown on **Drawing Nos. 22936/SP/001 and 22936/SP/002**. It consists of a wet well/dry well station and pumps a peak flow of 2.00 m³/s. This flow includes a contribution of 1.2m³/s (peak flow) from the existing North Kowloon Trunk Sewer.

Rising Main

- 6.8.1.2 The rising main between PS 1 and Catchment B consists of a 300m long, twin 900mm diameter concrete lined ductile iron pipe.