



KEY PROJECTS

HDB CONTRACT N8C1 – SITE CLEARANCE AND EARTHWORK (PHASE 2)

Date won/completed: 2023–
ongoing

Client: Samwoh Corporation
Pte. Ltd.

Developer: Housing
Development Board

Role: Lead Design consultant
(QP/QP(Geo), QECP, DfSP)

PROJECT BACKGROUND

Located in the densely populated Ang Mo Kio area, this project develops infrastructure including roads, drainage, sewerage, and earthworks for a new Housing Development Board residential precinct. The 20-hectare site features undulating terrain, requiring careful planning of terrain profiles and drainage catchment.

For sewer work construction, trenchless pipe jacking and pipe sleeving method was adopted. The alignment of sewer has several interfaces with critical utilities, pedestrian overhead bridge, and a challenging undercrossing drive below the live Central Expressway (CTE).

Due to the large site catchment, Earth Control Measures (ECM) were designed to manage infiltration and runoff, preventing silty water from entering public drains. A site analysis per PUB requirements checked local and global peak discharge values against drain capacities. Standard C7R precast drains were used for most sub-catchments, with larger cross-sections downstream to handle higher peak flows

THE OUTCOMES FOR THE CLIENT

Design of site enabling works including temporary slope work terrain, site logistics and earth control measures

Development of Risk Management following Design for Safety Guide 3

Design the feasible alignment for work zone locate at side table.

Provide the Swept path analysis to assess safety movement of vehicles

Develop the Traffic Impact Assessment for road closure due to work zone.

Secured approvals from various authorities through good planning and close client collaboration