



EXECUTIVE SUMMARY

- 1.1 Trial planting under R&D Item No. RD1060 “Trial Planting at Kai Tak Nullah” was divided into 2 stages: (a) Stage 1 trial was on aquatic planting inside final sedimentation tank at the Shatin Sewage Treatment Works (STSTW) to test their survival ability under treated effluent, of which the water quality was expected to be similar to the flow inside Kai Tak River (KTR) under Tolo Harbour Effluent Export Scheme; and (b) Stage 2 trial was to further investigate suitable plant species, growing media/anchorage system and hard landscape options for consideration in landscaping design of the KTR improvement projects. The trial planting under Stage 2 trial was carried out at both existing KTR and the STSTW.
- 1.2 Stage 1 trial planting was implemented and completed in December 2009, with a establishment period of 3 months up to February 2010. A total of 42 plant species were tested inside the final sedimentation tank at the STSTW. By the end of the establishment period, it was observed that 8 species were in fair condition, 21 species were able to survive but their health conditions were not satisfactory, and the remaining 13 species were found dead. The results of the Stage 1 trial planting was studied and the Consultants made recommendations with a view to improve the Stage 2 trial planting results.
- 1.3 Stage 2 trial planting commenced in early December 2010 and was completed in end March 2011, with an extended establishment period of 24 months up to end March 2013. Many plant species and 10 different planting systems were tested. The 10 planting systems tested are summarized below:

System	Description	Location
I	Granite Block Wall Cladding with Angled Planting Pocket	Kai Tak River
II	Green Wall Panel System	Kai Tak River
IIIA	Grasscrete for Channel Wall	Kai Tak River
IIIB	Grasscrete for Channel Bed	Kai Tak River
IV	Artificial Rock on Channel Wall	Kai Tak River
V	Floating Wetland Roll	Kai Tak River



System	Description	Location
VI	Planting Pots for Channel Bed	Kai Tak River
VII	Trailing Plants / Climbers	Kai Tak River
VIII	Submerged Planting at STSTW	Final Sedimentation Tank, STSTW
IX	Palm Rock	Kai Tak River
X	Floating Island	Kai Tak River

- 1.4 According to the results of the Stage 2 trial planting and the public aspiration for revitalizing the Kai Tak Nullah into a natural green river corridor, the Consultants recommended to adopt System IIIB – Grasscrete on channel bed, System IV – Large shrubs and groundcovers planted in pockets within the proposed artificial rock panel, and System VII – Trailing Plants /Climbers for the Kai Tak River improvement projects.
- 1.5 Furthermore, the results of System I – Granite Block Wall Cladding with Angled Planting Pockets, and System IIIA – Grasscrete for Channel Wall were found satisfactory, the Consultants recommended these systems to be considered in other suitable nullah revitalization projects.