



ACEGrid® in Slope Landscape on River Shore Case

Location: Kaohsiung City, Taiwan

Application: Slope Construction

Problem :

This project was located in upstream of Kaohsiung City, where many industrial effluents, farm and domestic wastewater were discharged together into the river, resulting in clogging the river silt, weeds and therefore can not be successfully discharged. The poorly-managed environment was a blot on the urban landscape.



Solution :

The case was designed to construct wrapped around reinforced embankment and natural vegetation slope to reduce the reinforced concrete volume, and keep the wildlife habitat free from the project. The wrapped around reinforced embankment was 0.6m in height with 30° angle, and use PE soil bag as the face of the retaining wall and wrapped by ACEGrid®. The face of reinforcement layer has become a nature vegetation slope and top and bottom of the structure was pavement, but bottom pavement with drainage ditch.

After river reconstructed, the flow discharge raise, the area has become a wetlands park. The structure of wrapped around reinforced retaining wall consumed less reinforced concrete and carbon emission than RC structure and better sense visual. The vegetation offered the great environment for the wildlife habitat. The wetlands park could provide not only a good urban ecological landscape but also flood detention during flood season.