

Replace flood walls with earth banks

Project Summary

Title: Yeading Brook

Location: Yeading Brook, Ruislip, NW London, England

Technique: River bank restoration as part of a redevelopment

Cost of technique: £

Overall cost of scheme: £

Benefits: ££

Dates: 2004 - 2005

Mitigation Measure(s)

Replace flood walls with earth banks

How it was delivered

Delivered by: Funded as part of site re-development

Partners: Private developer, London Borough of Hillingdon and Environment Agency



Pre-development 2004 - an unappealing drain All photos © Environment Agency copyright and database rights 2013

Background / Issues & Step-by-step

A site on the left bank of Yeading Brook came up for redevelopment prior to the production of the first round of RBMPs. As part of the redevelopment, the developer was asked to remove the concrete river wall and re-grade the river banks in order to increase flood storage and restore more natural riparian habitat. The developer undertook a flood risk assessment as part of the consenting process and agreed to include a previously shelved EA bank restoration design as part of a Flood Defence Consent application. 40m of river banks were first regraded behind the concrete wall and excess spoil was reused across the site. The concrete walls were then broken out and removed off site. Low level wooden boarding was installed along the toe of the re-graded bank to protect it from erosion and avoid any potential impacts on the adjacent development. The banks were then planted with a native wildflower mix. The opposite bank could not be restored as it supports a major road and limited space was available.

Benefits & Lessons Learnt

- The reprofiling has created a naturally functioning marginal and riparian zone that is closely connected to the river.
- Greater wildlife benefit.
- Natural river bank restored.
- Vegetated buffer strip created that acts as a runoff interceptor.
- A higher quality environment created on the development site for people.
- A cheap and easy example of how to implement mitigation measures on the back of development to meet requirements of the WFD whilst improving the overall development.



Post-development 2005 – an emerging river

Project contact: Flood and Coastal Risk Management, North West Thames Area, South East Region, Environment Agency