

River Medway - Flood Risk Assessment Confidential Client

*Providing a
long-term strategy
for development in
the floodplain*

A major property development company is interested in the long-term development of land on greenfield sites at the fringes of the River Medway floodplain. The whole area is currently classified as lying within the indicative floodplain on the Environment Agency (EA) Indicative Floodplain Maps and the EA had objected to the scheme.

The EA indicative flood risk maps show the majority of the area as being at risk from fluvial flooding but do not differentiate as to cause and type. In fact, flooding problems in the area are of a diverse nature and scale, and it has been necessary to carry out a more detailed study to separate out the different causes and types of flooding and to arrive at technically more sustainable solutions.

Work has included liaison with the EA and Internal Drainage Board, review of floodplain constraints using GIS datasets, hydrological / hydraulic study of local drainage networks, integration with the Medway Flood Model and formulation of potential mitigation methods including local and strategic flood storage solutions and incorporation of Sustainable Urban Drainage Systems (SUDS) within the development. Recommended solutions include stream diversions and the creation of wetland storage and washland areas, thereby maximising the nature conservation potential of the surrounding area.

Entec has assisted the developer in compiling representations on flood risk and PPG 25 to inform the Local Plan and is currently conducting further consultation with the EA in working up the scheme.

The work has shown that flood risk in areas nominally marked as 'blue' on the Agency's maps may be due to a variety of causes and that a more detailed assessment can result in a potentially sustainable development, which overcomes many of the problems and demonstrates best practice. The opportunity also exists to improve the existing drainage network and overcome existing constraints that cause regular and disruptive localised flooding.

