



Case

STUDY

STRATAGRID

Cock Lane, Clavering
Reinforced soil wall solution



MARKET SECTOR:
Environmental



LOCATION:
Cock Lane, Clavering
Saffron Walden, CB114QL



CONTRACTOR:
Ringway Jacobs



INSTALLER:
Topbond PLC

The BACKGROUND

Cock Lane is a small rural road between the villages of Clavering and Starling's Green.

The route forms a secondary connection between the two villages. The River Stort runs parallel with the road and its tributaries cross under the road at various locations.

Our Client's REQUIREMENTS

A sustainable solution for a reinforced soil wall solution.

Due to erosion of the riverbank it was identified that the road foundation was in danger of failure.

The road was closed under a emergency closure for approximately 400m with only pedestrian traffic allowed access.



Our Value Engineered **SOLUTION**

A reinforced soil wall solution was proposed to retain soils above a gabion wall which was located at the toe of the river bank.

The use of a reinforced soil wall reduced the amount of excavation required when compared with the use of a gabion wall and facilitated a vegetated solution which was desirable for the site.

The structure was installed in under a week and the use of Rivel formwork allowed the contractor the ability to maintain a consistent slope angle of 70 degrees along the structure.

The structure was designed to accommodate a surcharge of 20kPa from the traffic loadings from the road. The solution formed part of the works which enabled the reopening of the road which had remained closed since 2016.

Due to the time constraints and the importance of getting the road reopened Geosynthetics were required to develop a suitable solution in a short space of time, the calculations and drawings were completed in little over a week and the proposal was approved by both Essex Highways and the Environment Agency.

The materials used in the solution were available from stock which assisted in the scheme being delivered on time.

