

## Case Study: Service Road Copt Hewick Hall, Ripon Products: Geoweb® for Load Support



As part of an extensive renovation of Copt Hewick Hall a service road was created using 150mm deep Geoweb. With a permeable surface such as that being used on this site confining the aggregate within the cells Geoweb improves the load distribution characteristics, reducing long term maintenance requirements. Without proper support areas used by traffic will rapidly deteriorate to a point where they become unusable. The relatively poor soil of the local area means that using Geoweb reduced excavation and aggregate requirements while minimising the likelihood of settlement and deformation. Only 200mm of subgrade was excavated compared to the 500mm required for conventional road construction and subgrades of this CBR value. A geotextile was laid to separation between the subgrade and the specified aggregate.

ATRA® Keys were used to join the Geoweb® panels rather than the traditional staples. ATRA Key is permanent, substantially quicker to install, and four times stronger than stapling. Geoweb incorporates I-SLOT® which enables ATRA key to create a friction-locked connection (1.1kN tensile strength per connection) for the Geoweb sections. As the Geoweb panels were expanded they were temporarily pinned into place to hold them open for infilling. Bends in the roadway were created by over expanding the outer cells and under expanding the inner cells until the desired radius was achieved. The Geoweb cells were then infilled with aggregate and spread to ensure that the cell walls would be over filled by 10mm once compaction had taken place.



### Contractor



### Client

### Property Owner