

# Hucklow Net

## Bringing Fibre Broadband to Village Life

For rural communities across the UK a fast fibre broadband service can be an essential part of village life. Without it, more and more young families are opting to leave rural locations as the flexibility of working from home, teleworking and video conferencing becomes difficult and small local businesses which provide employment struggle against their better connected competitors. This has a major impact on villages as the number of children living there decreases and schools are left empty or struggling to exist with minimal government funding. In addition, local shops, pubs and other services begin to suffer as a result. For rural communities to thrive, fast broadband provision is a must.

Great Hucklow is a small village situated in the middle of the Peak District National Park. With approximately 50 houses and 200 residents, Great Hucklow was formerly a centre of the Derbyshire lead mining industry. The village boasts a number of businesses including a working fluorspar mine, a conference centre, a public house and a primary school with 50 pupils.

Up until now, the businesses and residents of the village have had to make do with a DSL broadband connection delivering speeds of around ½Mbps (megabytes per second) supplied on copper telephone lines into Great Hucklow from the nearest telephone exchange in Tideswell, 3 miles away.

These typical broadband speeds has have a significant impact on the local businesses, no more so than for Conformance Ltd., a quality and product safety consultancy based in the centre of Great Hucklow.

Nick Williams, Managing Director of Conformance Ltd. explains,

“With 12 employees and an expanding client base, Conformance is a heavily IT based business relying on email, internet and video conferencing to conduct its day to day activities.

The DSL broadband speeds made aspects of our work almost impossible and poor communications forced face to face meetings with our clients all over the world, adding unnecessary time and cost to the business”.

Even with a new copper line into the business, Nick was only able to see a maximum of 2Mbps connection speed, which offered little more than he was already getting. It was at this point that Nick, as a business owner and a resident of Great Hucklow recognised the need for a fast fibre broadband connection into the village.

Nick began to explore various options with the aim of getting a fast fibre broadband link to the village. After contact with a number of different suppliers and network operators it was clear that because of current infrastructure, there were no immediate plans to run fibre to Great Hucklow.



During Nicks investigations, he found that Nottinghamshire, Derbyshire and Leicestershire county councils had teamed up to form the EMBC (East Midlands Broadband Consortium), a task group set up and funded by local government to promote and manage the roll out of fast fibre broadband connectivity to schools and other public service offices cross the region.

Within the project plans for the EMBC was providing a fibre link to the primary school in Great Hucklow, delivering fast fibre broadband with speeds up to 100Mbps. This was installed by BT Open Reach in early 2011.

It was discovered after making a number of calls and enquiries, that when BT Open Reach had installed the fibre to the school, additional fibre had been laid at the same time and was at that point in time unconnected and not being used. Following this Conformance and BT were able to put an agreement in place where the fibre could be leased in order to provide broadband to the village and beyond. It was at this point that Hucklow Net was established and progress could be made.

The first step was to get the BT fibre linked to a central location in the village. The obvious choice for this was the Old Methodist Chapel, the offices of Nick Williams' company, Conformance Ltd.

Plenty of research was carried out in terms of how the fibre would be distributed around the village. Nick and his colleagues spent some time with Barry Forde, CEO of B4RN (Broadband for Rural North), to see how fibre broadband had been delivered to a number of villages across Lancashire. Following this, Hucklow Net was keen to adopt the B4RN model for their own project.

The Hucklow Net team was able to call upon a number of resources during the initial stages of the project. Tim Sharpe from Sharpe IT had experience with fibre laying and was able to advise on which fibre to use, the connectors needed and splicing requirements. Another of the team ran a data centre in Mansfield and was able to recommend what software and hardware was needed to run the network on.

With the fibre now present at the Chapel, Nick and his colleagues built a rack in the roof space to accommodate switches, servers, patch panels and a PC to run the software and the firewalls needed. From here the fibre was then fed back out to the street ready to be distributed to properties and businesses around the village. Initially, the fibre was installed to a number of residential houses and a farm offering purpose built office units. Because of the close community in Great Hucklow, Hucklow Net was able to lay fibre in the ground across neighbouring land, fields and gardens. Using FST closures from HellermannTyton, the fibre could be spliced and re-directed with ease to the properties requiring fibre. The FST closures were placed in well-chosen locations to ensure the most direct route to each property. The FST closures were fitted into access pits where the fibre would enter and exit through underground ducting.

The FST is a compact cap-ended ready access closure for use in aerial, underground and directly buried installations. Its small size, port flexibility and value makes the FST popular for splicing low fibre count distribution cables in FTTH, FTTK, trunk and campus networks, CATV and CCTV installation.



Craig Jones, Business Development Manager for HellermannTyton Broadband commented...

“The FST closure lends itself to this type of project. This small closure can offer up to 36 fibre splices, ideal for servicing clusters of properties in rural village locations. We’ve seen huge success in the B4RN projects and it’s great to see a similar infrastructure model applied here.”

The next steps for Hucklow Net are for the fibre to be run to the Nightingale Centre, a conference centre that also provides holiday accommodation to disadvantaged children. Nick Williams comments “At present, the Nightingale Centre is running on Hucklow Net through a Wi-Fi connection between the Chapel and the centre. This is working fine as a stop-gap, but our plan is to run the fibre to the Centre to offer a full fibre broadband service.”

The Hucklow Net project is very much a community project, with village residents taking a ‘hands on’ approach in getting fibre installed in and around Great Hucklow. Nick Williams concludes “This project is very much in its infancy. There is a long way to go, but the early installations have been successful and with the positive response from the local communities, we’re looking ahead to delivering fibre broadband to more residents of Great Hucklow and surrounding parishes. If nothing else, we have proven that small rural villages do not have to rely on central government funding or BT to get fast broadband to their community”.



## About HellermannTyton

Founded in 1988, HellermannTyton Connectivity is an established leader in the design, development and manufacture of innovative network infrastructure solutions for both LAN and WAN environments.

The company offers a broad range of quality, high performance structured cabling products including Deca10, the Category 6A solution; the unique pre-terminated, ‘plug & play’ RapidNet system and a full range of market leading closures for Broadband applications incorporating the patented Cablelok mechanical seal.

Based in Northampton, UK, the company is part of the global HellermannTyton Group, with operations in 39 countries worldwide.

For more information visit [www.htdata.co.uk](http://www.htdata.co.uk) or [www.hellermanntyton.com](http://www.hellermanntyton.com)

## About Hucklow Net

Hucklow Net was established in 2013, with the objective to deliver high speed broadband connectivity to the village of Great Hucklow and surrounding parishes including Grindlow.

Hucklow Net is an independently owned and managed broadband service provider, servicing residents and businesses in the local area.