

A1 Leeming to Barton improvement scheme

Open for traffic





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The A1 Leeming to Barton scheme has taken 4 years to construct and brings big benefits to the region - improving safety, relieving congestion, and supporting economic growth.

Thomas Howard, Senior Project Manager

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Upgrading to motorway standard

Our £400 million scheme has delivered improvements to a 12 mile stretch of the A1 between Leeming and Barton - replacing the existing dual carriageway with a new 3-lane motorway, providing new improved junctions and local access roads.

> Tunstall Road overbridge A replacement bridge to tie into the new road layout

> > East Appleton

Junction 52 Catterick

Tunstall

A1(M) and local access road

A new grade-separated junction which

provides access in all directions to the

River Swale

Brompton on Swale

Catterick

A replacement crossing widened

to accommodate the additional

Fort Bridge

lanes of the A1(M)

Low Street A new bridge carrying the local access road over the A1(M)

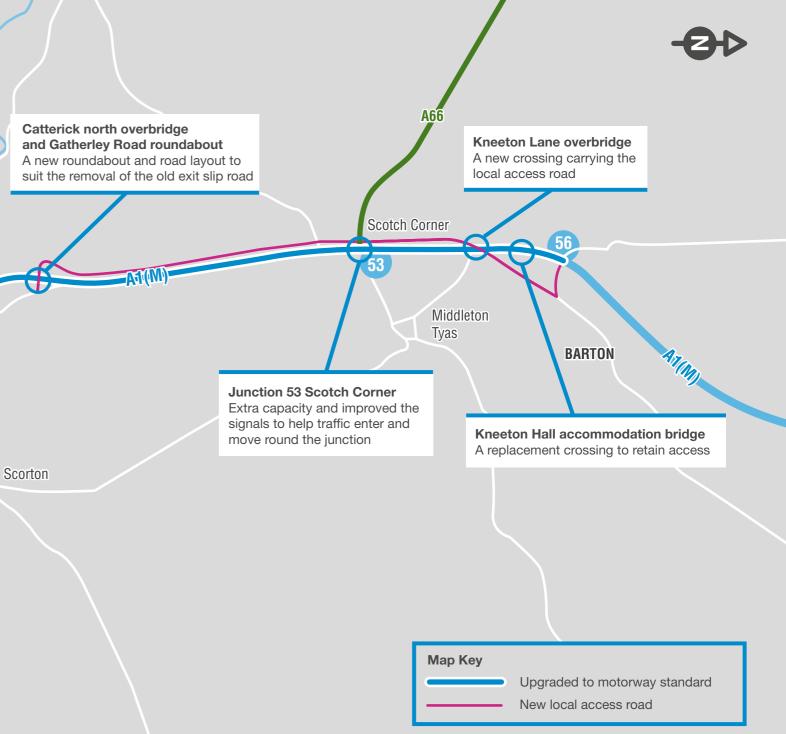
> Sowber Hill accommodation bridge A new crossing to retain access

ser Swale

Little Holtby

41(111)

LEEMING



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Improving safety

Before this major upgrade, there were many side road junctions, farms and field accesses joining onto this stretch of the A1. This resulted in local traffic having to join the A1 to access nearby villages and towns and at unsuitable junctions. The accident rate was broadly in line with the national average for older dual carriageways but generally the incidents were more serious.

Through our scheme we've made access to the motorway much safer via a new junction at Catterick and an improved junction at Scotch Corner. The Catterick junction is "grade-separated" which means that motorway traffic doesn't have to stop and local traffic can easily join the A1 via sliproads. Our scheme also provides a new local access road alongside the motorway improving safety for local traffic from the surrounding communities as well as providing an improved route for cyclists, equestrians and pedestrians.

The scheme is predicted to save around 20 lives and prevent around 450 accidents over a 60 year period.



Supporting economic growth

Between 59,000 and 69,000 vehicles use the A1 between Leeming and Barton every day. This is a scheme for drivers, business and the community. It not only improves safety, relieves congestion and connects communities, but also supports economic growth.

For every £1 Highways England invest in the strategic road network, it brings around £4 of economic benefit. Through this scheme we estimate that over £1 billion will be added to the economy, through a 20% reduction in journey times and safety improvements.



66 The A1 Leeming to Barton scheme will help to play a big part in improving surface access connectivity to Leeds Bradford Airport and this upgrade will ensure the economic benefits the airport can deliver for the wider Leeds City Region will be accelerated.

David Laws, Chief Executive, Leeds Bradford Airport



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Connecting communities

Our scheme helps to connect communities in the local area and across the region. The new local access road alongside the new motorway linking Leeming, Catterick, Brompton-on-Swale and Barton provides a safer route for motorists travelling between local towns and villages.

We've designed these in consultation with key cycling organisations as well as Sustrans, ramblers and the British Horse Society.

We know that living close to a major road scheme can sometimes be disruptive. That's why it's so important that we give something back to our neighbours and local communities.



From offering work placements to planting trees, here's some of the ways we've helped make a positive difference over the last 4 years.

- 27 visits to educational facilities, including universities and colleges
- Over 2,000 people attended our archaeology open days
- Planted over 300 tree saplings to form a local pollinator corridor
- Restored paths at a local nature reserve
- Free health checks for HGV drivers

I want to thank you for your help and support while the work was going on. It made a real difference for me. The road is wonderful, well done everybody involved.

Irene Glen, frequent user of the A1.





"I feel that you should all be congratulated on a magnificent civil engineering project that has brought a lot of interest to a sleepy Catterick Village during the past months. The benefits of the finished project will soon be appreciated by most people and A1 users."

Jim Snaddon, Catterick Village



The making of a road

Construction timeline







March

construction of scheme starts

October

sheet piling works undertaken south of Brompton-on-Swale

March

2015

Agricola Bridge beams installed

November

- Junction 52 Catterick opened for traffic
- Fort Bridge demolished
- Brompton bridges demolished

December

Low Street Bridge beams installed



2016



March

Kneeton Lane beams installed

May

traffic diverted from old A1 on to new A1 between Catterick North bridge and Scotch Corner

September

- A1 opened between Sowber Hill and Catterick Junction
- Fort Bridge beams installed

March

Catterick South Bridge demolished

March 2017

traffic using the local access road between Scotch Corner and Barton

June

Barton Southbound entry slip road reconstructed

July

Traffic using the local access road between Leeming and Catterick

September

- A1(M) Leeming to
- traffic using the local access Bridge and Scotch Corner Junction

November

Fort Bridge re-opens







Catterick open for traffic road between Catterick North

February A1(M) Brompton to Barton open for traffic

March

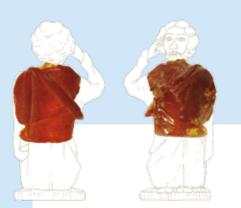
scheme open for traffic

May

Scotch Corner improvements complete

Uncovering Roman treasures

Archaeologists have uncovered a wealth of Roman finds as part of our scheme and these have shed new light on Roman life in Northern England. They hint at a far more sophisticated industrial and administrative centre in Yorkshire than had previously been known about. They also point to wealthy citizens having lived in the area. The excavations have led to the unearthing of a major new Roman settlement at Scotch Corner which pre-dates settlements in York and Carlisle by 10 years. This tells us that the Romans had a major presence and even possibly began their territorial expansion into northern England a decade earlier than previously thought.



Amber carving

The figure of a toga-clad actor carved from a block of amber was recently found at Scotch Corner. Nothing like this has ever before been found in the UK.

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Coin workshops Workshops for making gold, silver and copper coins found near Scotch Corner demonstrate that the late Iron Age community, or first Romans settlers, were carrying out significant industrial activity in this part of England and potentially producing coins of high value.

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Roman shoes

A number of well-preserved Roman leather shoes have been found in Catterick, where an important leatherworking centre has been identified. Other finds in the town have included large sheets of leather, perhaps used for producing clothes.

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Death and burial

Part of a major cemetery was excavated near the Roman town of Bainesse. At this site excavations identified over 250 inhumation and cremations, a number of which were accompanied by grave goods. These included many complete pottery vessels as well as glass and jet beads. Environmental samples have also identified evidence of flowers being placed in some graves at Catterick.





Roman keys

Many keys have been found at Catterick, from small keys on rings to larger ones for lifting latches. The amount found is unusual for a northern suburb, suggesting people who lived in the town were conscious of protecting their valuable possessions. Further archaeological discoveries have also been made elsewhere on the scheme including a nationally important Mesolithic site where excavations revealed rare evidence for structures, as well as over 7,000 flints.

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Find out more in our archaeology booklet on our website: www.highways.gov.uk/ Alleemingtobarton

Training and apprenticeships

and initiatives, including:

Through our scheme we've supported a number of training schemes graduates recruited work experience placements jobs created for individuals who were previously unemployed, or employed as a trainee apprentice new entrants into the opportunities

construction industry



Being on the A1 Leeming to Barton project has put my career on the right road.

Ben Donegan, Trainee Site Engineer

I look forward to going to work every day, being taught new things, having responsibilities of my own and the confidence and experience to be able to do my job well.

Charllotte Ellerker, Apprentice

Helping the environment

This scheme is a flagship project for sustainable construction and we've embraced environmental and sustainability challenges.



Managing waste materials

Substantial volumes of waste have been produced on the scheme, but we've managed to re-use or recycle huge volumes. On completion, we sent just 5.7% of our waste to landfill.

We worked in partnership with the Environment Agency on the Catterick Flood Alleviation scheme where we provided 60,000 tonnes of excess spoil for the new flood banks. This project provides improved flood protection to 149 properties.



Minimising our carbon footprint

Due to the size and nature of our scheme, managing our carbon footprint has been challenging. We've managed to achieve massive carbon savings through effective use of resources and local sourcing of materials. Quarried aggregate, for example, was sourced only 12 miles from the scheme.

We introduced Cement Bound Granular Material (CBGM) which is a type of surfacing for the road. We set up a CBGM plant next to the scheme which enabled us to recycle parts of the old road surface to create the new road - saving 6,025 tonnes of CO2.

Protecting plant and animal species

- 47 bat boxes have been erected and recent inspections have confirmed that they're being used
- New ponds have been created in a former quarry
- Parts of the project office car park have been turned into bee friendly areas
- During a routine environmental inspection a project ecologist noted a rare UK butterfly – the White-letter Hairstreak – at an area of woodland next to the A1. To help increase numbers of the species we've planted more elm trees which are the butterfly's favoured habitat.



Awards

The team

Constructing excellence 2015 Innovation, BIM project of the year and "Best of the Best" awards

- Chartered Institute of Highway Engineers 2015 Technological application award
- Considerate Constructors 2017 Gold Award Most considerate site runner up
- Green Apple Award 2015 Bronze Award
- **CECA**, Yorkshire and Humberside 2016 Linda Grant Award for Safety and Most Promising Apprentice Awards
- British Construction Industry 2016 Application of Technology Award





- Chartered Institute of Highway Engineers 2017 Skills Award
- British Construction Industry 2017 Community Engagement Initiative Award
- Constucting Excellence, Yorkshire and Humber 2017 Collaborative Working Award
- NCE Techfest 2017 Advance in Automation and Robotics and Judges' Supreme Awards
- Construction Investing in Talent 2017 Best Project to Work on Award
- Considerate Constructors 2018 Gold Award Most considerate site runner up

We'd like to thank all our partners involved in the successful delivery of this scheme.







Main Contractor



Lead Designer



Designer Support

Client Representative



Member of the SNC-Lavalin Group

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