

Archaeology

Save the Portland Viaduct at Mill Waters heritage site

TN
TEACHER'S NOTES

TITLE SLIDE

In this lesson we're going to find out what built heritage is and why we should care about old buildings, focusing on the 200-year-old viaduct (the old railway bridge) at the Mill Waters heritage site.



SLIDE 2 BUILDINGS CAN TELL US ABOUT THE PAST

We can find out about history by reading books or looking at records in the archives – such as the Nottinghamshire Historic Environment Record. But sometimes the past is evident in old buildings or structures.

Buildings might tell us something about how people lived or made money in the past. This could include their culture, for example how they worshipped or were entertained (before TV and video games were invented). They might provide clues about how the country defended itself – this is known as our military history. Buildings might also demonstrate particular architectural styles from history or particular craftsmanship which is rare and worth preserving. They may also include clues about belief systems during a particular era – for example gargoyles (grotesque creatures carved into the stone) in Gothic architecture were believed to ward off evil spirits.

SLIDE 3 THE PORTLAND VIADUCT

The Portland Viaduct (now known as King's Mill Viaduct) was built of local stone in 1817 to take the new Mansfield and Pinxton Railway, which was completed in 1819, across the river Maun. The main purpose of the railway was to bring coal into Mansfield from Pinxton to power the factories around Mansfield, which were converting to steam.

Originally it was meant to be a three-arch viaduct, but at the last minute the design was changed to the current five-arch viaduct. Thanks to restoration work in 1990 it is now England's oldest railway viaduct.

Archaeology

Save the Portland Viaduct at Mill Waters heritage site

TN
TEACHER'S NOTES

SLIDE 4 **THE NEW HERMITAGE VIADUCT**

In 1871 the railway was straightened out and the Portland Viaduct was replaced with a timber one, about 150 metres away, which cut across the Hermitage Mill pond, although the Portland Viaduct was still used as a siding until 1970 – a section of the track which splits off from the main route.

SLIDE 6 **JOSIAS JESSOP BUILT THE** **PORTLAND VIADUCT**

The lead engineer for the Mansfield and Pinxton Railway was Josias Jessop who was the 2nd son of William Jessop, one of the great canal engineers of the late eighteenth and early nineteenth centuries.

Josias went on to work on the Liverpool and Manchester Railway with George Stephenson – the father of the railways – between 1826 and 1830, before dying at the age of 45 years.

SLIDE 5 **THE DUKE OF PORTLAND**

The Portland Viaduct is named after the Duke of Portland who owned the land around the Mill Waters heritage site at the time the railway was built. One of the main advocates of the scheme was John Coke who owned the coalmine in Pinxton. He wanted to sell his coal to the factories in Mansfield and the train would enable him to transport it directly to them. The Duke was a powerful man – he was a Member of Parliament (MP) and the main landowner in Sutton-in-Ashfield and Mansfield. The Duke had a financial interest as he earned income from leasing out his land and the mineral rights. He was known affectionately as 'Old Leather Breeches' to his tenants.

SLIDE 7 **THE CONSTRUCTION WORKERS**

It took 300 men two years to build the Mansfield and Pinxton Railway. The tracks would have been transported by wagons pulled by horses. Many of the construction workers were unemployed and receiving Poor Relief (a type of social benefit from the local Parish). The construction work would have helped many of them stay out of the Poor Houses in Mansfield and Sutton.

It would have been hard labour, but they would have been grateful for the opportunity to work. When the railway line was officially opened the workers were rewarded with a meal at various public houses around Mansfield, while the proprietors had their meal at the Swan Inn in the centre of Mansfield.

A newspaper article states that 300 men who had worked on the railway from the past three months ate the meal, but the viaduct had been completed about 18 months earlier. It would have been specialist stonemasons and their labourers who built the viaduct.

Archaeology

Save the Portland Viaduct at Mill Waters heritage site

TN
TEACHER'S NOTES

SLIDE 8 THE RAILWAY SUPPORTED THE INDUSTRIAL REVOLUTION

The railway was an amazing invention. Before then goods were transported around by wagons pulled by horses and taken to surrounding counties via the canal network. The railways enabled goods, namely coal, to be transported in heavier loads at greater speed. This was vital for local industries in Sutton and Mansfield at large to flourish at the start of the Industrial Revolution.

The railways also enabled the local foundries to prosper by enabling goods such as iron and stone to be transported in bigger loads, more efficiently, to the surrounding counties.

It's worth remembering that there was no motor cars until the 20th century, so the ability to transport things by lorry was still a long way off.

The Portland Viaduct not only tells us about local history but provides evidence of a significant period in the country's history - the Industrial Revolution - when the advent of mechanical production meant that factories could make goods on a large scale.

SLIDE 9 WHAT DO HERITAGE GROUPS DO?

Archaeology is not just about preserving things that are found buried deep under the ground, it is about preserving buildings which remind us of times gone by. Archaeologists often work closely with heritage organisations and museums to provide them with evidence about the authenticity (how real something is) of heritage artefacts and buildings. Heritage organisations exist to research history, educate people, help conserve a particular area of heritage, as well as organise celebrations.

There are lots of heritage organisations whose sole purpose is to conserve different aspects of history, including modes of transport such as the canals, shipping and the railways.

There are history groups for Mansfield, Kirkby and Sutton in Ashfield as well as a dedicated heritage group which has researched and published information about the Mansfield and Pinxton Railway called the Mansfield & Pinxton 200 project.

SLIDE 10 CAMPAIGNS TO CONSERVE BUILT HERITAGE

Archaeologists not only help discover old ruins and artefacts, they also support campaigns to protect heritage for example when an old theatre was discovered under the ground on London's South Bank - on a piece of land that had been approved for planning permission.

The archaeologists got lots of famous actors including Sir Ian McKellen, Dame Judy Dench and Dustin Hoffman to support their campaign to stop building works going ahead.

In the end, the developer and government spent an additional £11m on further archaeological research and redesigned the new building to accommodate the theatre.

Read the full story here: www.citymetric.com/horizons/archaeologists-saved-shakespeares-rose-theatre-planning-reform-could-threaten-future

There have been many other campaigns, and charities set up, to save different types of heritage buildings (also known as heritage assets) for example the War Memorials Trust works to protect and conserve war memorials in the UK. You can read more about the Trust here: www.warmemorials.org

Archaeology

Save the Portland Viaduct at Mill Waters heritage site

TN
TEACHER'S NOTES

SLIDE 11 DIFFERENT TYPES OF HERITAGE BUILDINGS

About Historic England

Historic England is the main body which protects heritage buildings. It classifies buildings that are of historic or archaeological significance.

There are around 400,000 listed building entries in England. Listed buildings are classified into three grades:

- Grade I buildings are of exceptional interest. Just 2.5% of listed buildings are Grade I. These tend to be very very old buildings built before 1700 but some may have been built as recently as 1850 if they are exceptional in some other way.
- Grade II* buildings are particularly important buildings of more than special interest. 5.8% of listed buildings are Grade II*. These may include buildings that are less than 30 years old if they are of an outstanding architectural quality.
- Grade II buildings are of special interest warranting every effort to preserve them. The majority of listed buildings (90%) fall into this category. It means that the owners can't materially alter them because they are of historic or archaeological significance.

You can read more about Historic England on their website: historicengland.org.uk

Heritage assets include places of worship, as well as former power stations, coastguards, amusement parks and even shopping parades!

There is lots of information about Heritage Assets on the Historic England website: historicengland.org.uk/listing/selection-criteria/listing-selection/ihas-buildings

SLIDE 12 HERITAGE CAN BE IMPORTANT FOR YOUR IDENTITY

As well as being able to learn from the past, people can be very proud of their local heritage because it may provide a link with their ancestors, as well as a reminder of the culture and traditions which they carry on today.

For some people, losing the Portland Viaduct would feel like throwing away something important from Mansfield and Sutton's past - like a precious photograph of a grandparent who has since passed away, or a piece of jewellery passed down through the generations.

Archaeology

Save the Portland Viaduct at Mill Waters heritage site

TN
TEACHER'S NOTES

LEARNING ACTIVITIES

1. Devise a campaign to protect the Portland Viaduct

Work through the slides with your class.

Begin by starting a discussion about heritage buildings. Here are a few prompts:

How can a building tell us about the past?

POSSIBLE ANSWERS:

It might have once been a place of worship, somewhere people once socialised, studied, or did business.

Some buildings or structures might have details on or in them which tell us something about the person that built it or beliefs at that time – stained glass windows, gargoyles etc.

How did the Mansfield and Pinxton Railway make a difference to local industry?

POSSIBLE ANSWERS:

It enabled coal to be transported in to help power the factories which had converted to steam, as well as transport goods out of the area to be sold.

Why not just knock down the viaduct and build a museum with pictures showing what it looked like?

POSSIBLE ANSWERS:

There's nothing like seeing a real structure to imagine what it must have been like in the past. You can imagine the trains rattling past across the Viaduct and how exciting it must have been to travel on the railway for the first time. Would a picture of the Eiffel Tower in Paris replace taking the lift high up to the top?

Is heritage important to your family or community – in what way?

DISCUSSION:

This might provide an opportunity to discuss customs enjoyed by pupils from other backgrounds and how they remember their forebears.

Archaeology

Save the Portland Viaduct at Mill Waters heritage site

TN
TEACHER'S NOTES

Now split your class into small groups of 4-5 to work on a presentation challenge.

Tell your class that Ashfield District Council has a limited budget for maintaining the Mill Waters heritage site. They have decided that it would be best to knock down the Viaduct and replace it with a play area.

A local heritage group and you are very angry to hear about the Council's plans.

Plan a presentation to convince the councillors responsible for Mill Waters not to destroy this valuable heritage asset.

You could produce a PowerPoint presentation, poster or even a video about the Viaduct and its historic railway to help get across your arguments. Show how the Viaduct is important to local history as well as an important symbol of the Industrial Revolution.

Once the groups have shared their presentations you can read out this message from Ashfield District Council:

“Well done on your excellent presentations – the council is very proud of the Portland Viaduct, and have invested in work to keep it standing for another 200 years.

We've worked with local heritage groups to help tell the story of the Mansfield and Pinxton Railway in our Heritage Centre and around the Mill Waters site. We also work closely with Historic England, which has classed the Viaduct as a Grade II Heritage Building - which will ensure the conservation work meets their high standards and we don't make any material changes to the structure.

Thanks for your brilliant work and enthusiasm for your local history at Mill Waters – we hope to see you there soon.”

Finally, inform your students that The Portland Viaduct was Grade II listed on 17th March 1978. The entry can be found here historicengland.org.uk/listing/the-list/list-entry/1288554. They have no need to worry about the Viaduct ever being knocked down. They should all now appreciate why the Viaduct is so important and why is it protected by law.