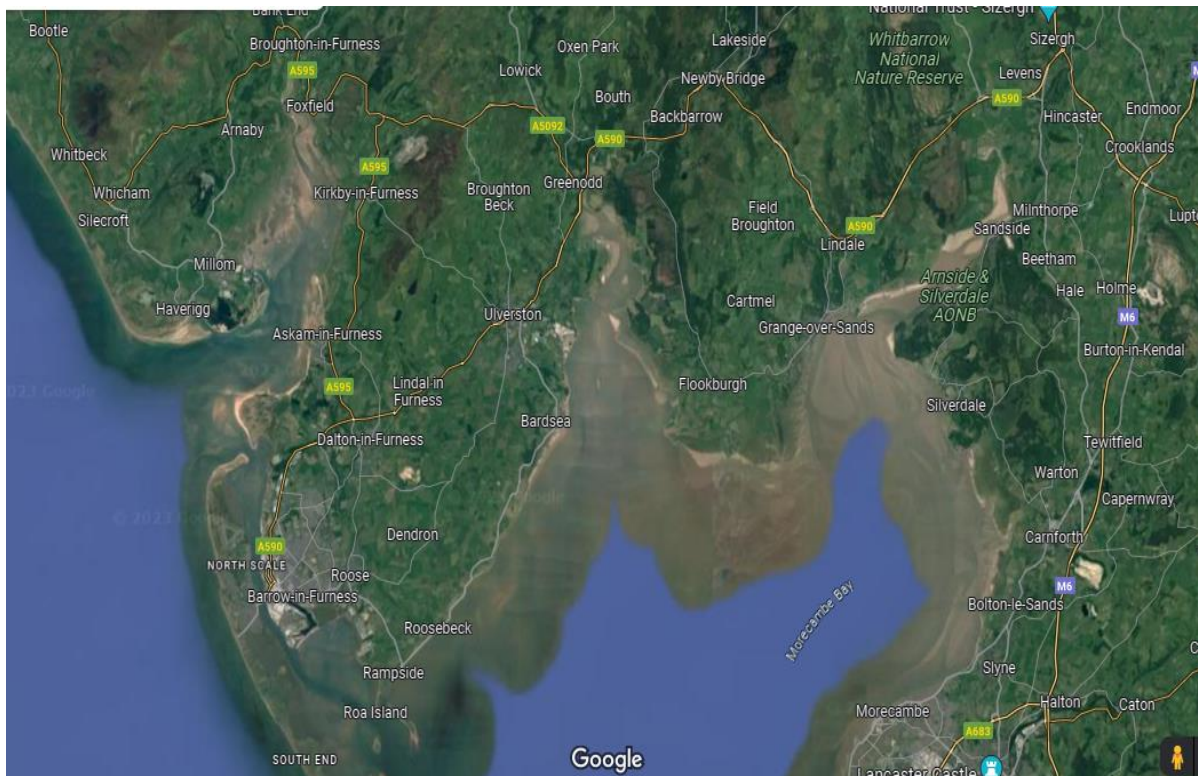


A590 Resource Information Pack



How can we improve the A590?

Group Name/Number: _____

Names of people in the group:

The Task – How can we improve the A590?

This project will require you to work as a group to conduct an enquiry into how the A590 can be improved. You will each have your own individual role to play in this project including:

- Project Manager
- Sustainability Officer
- Archaeologist
- Road Designer/Planner
- Lake District National Park Ranger

Using this information pack, and any additional information that you can find online, you will need to produce a group presentation about the improvements that you will make to the A590. Each presentation should last approximately 3-4 minutes **and every member of the group should contribute.**

In your presentation you should include:

- What changes you would make to the A590 and why.
- How much these changes will cost.
- How the environment will be protected/enhanced.
- If you have any future plans for improving the road.

Be prepared for questions at the end of your presentations!

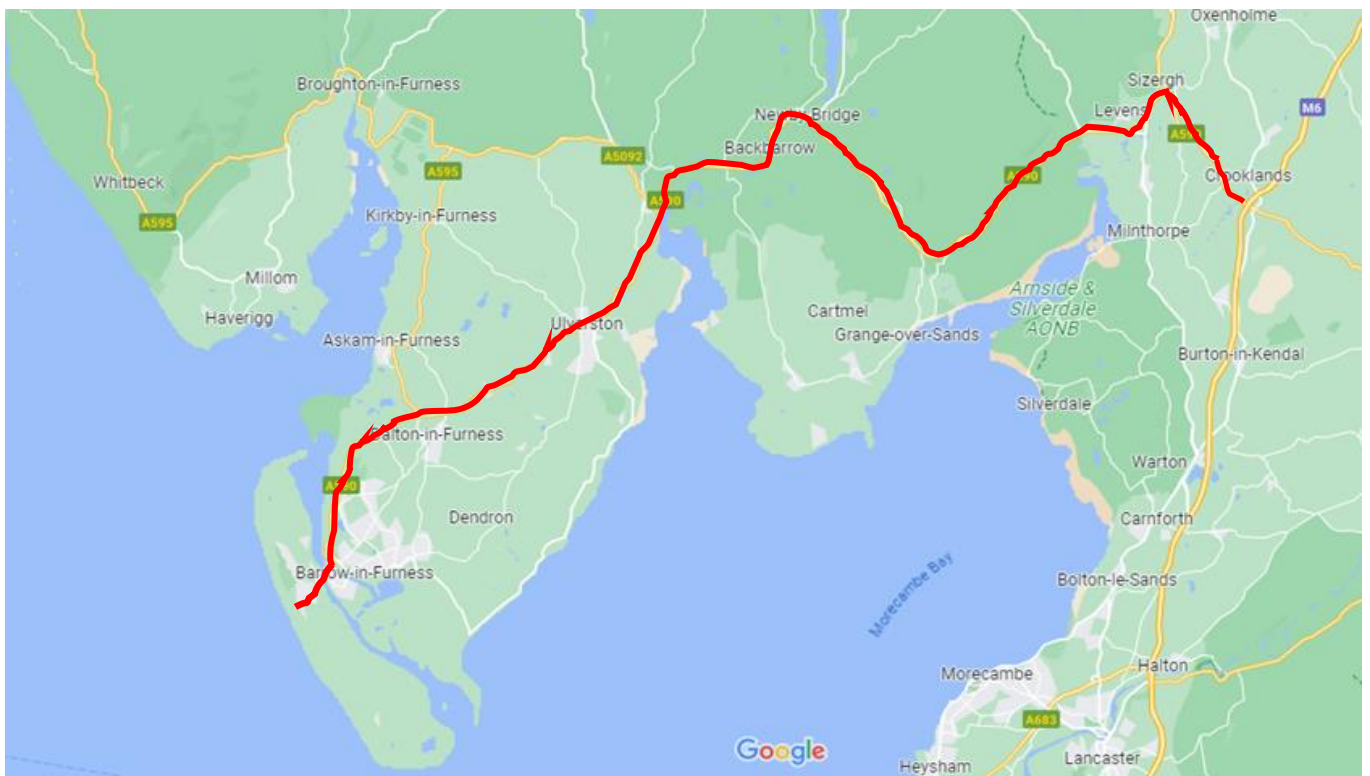
Initial Ideas/Planning

The A590

Background Information

The A590 is a major road in south Cumbria in the north west of England. The road starts at Junction 36 of the M6 motorway and ends at Biggar Bank on Walney Island. At 34.9 miles long, this road passes through a number of settlements including Lindale, High and Low Newton, Newby Bridge, Greenodd, Ulverston and Barrow-in-Furness. The A590 is a popular route for people that are commuting into work and for visitors to the Lake District. The road has already had a number of improvements including the Lindale bypass (costing £35.3 million), the creation of roundabout at Greenodd and more recently, the construction of the Cross-a-Moor roundabout at Swarthmoor. However, there are still parts of the A590 that are winding and narrow and parts of the road alternate between being a single road and a dual carriage way.

Despite improvements to the A590 over the years there are still a number of accidents that take place. Since 2018, there have been 263 crashes, 97 of these happened in 2019 alone!



Lindale Bypass



Cross-a-Moor Roundabout

Environmental Considerations

South Cumbria is home to a number of species of wildlife including red squirrels, badgers, deer, hedgehogs, foxes and grass snakes to name but a few. The A590 also runs through a number of rural areas and therefore any changes that are made to the road will need to ensure that they do not negatively impact the countryside. There are also rivers such as the River Levens, and other water sources nearby that contain a number of different species of aquatic life that need to be protected. Finally, there are sections of coastline which will also need to be considered if the layout of roads are significantly altered.

As well as considering the wildlife, it is also important to ensure that the carbon dioxide emissions that are produced during any work on the A590 are as minimal as possible. How will you ensure this happens?

There are a number of methods to encourage sustainability including: replanting of trees, the spreading of wildflower seeds to encourage pollination and the protection of bees and placing bird boxes and red squirrel feeders.

Further information on the species that can be found in Cumbria can be found here:

<https://www.cumbriawildlifetrust.org.uk/wildlife-explorer>



Archaeology

This history of Cumbria is quite diverse and stretches back in time to 11,000 BC where the first evidence of human occupation was found at Kirkhead Cave, near what is now Grange-over-Sands.

There have been a number of invaders and battles that have shaped Cumbria's past. One of these was the Roman invasions of Britain in 43 AD. The Romans eventually made it to Cumbria approximately 30 years later. There is significant evidence of the Romans in the north of the county in the form of Hadrian's Wall. After the retreat of the Roman Empire, the Celts took control of the county before being conquered by the Normans in 1066. According to the Domesday Book that was created 20 years after the Norman Conquest, only the south of the county was included, suggesting that was the only part of the county that was taken over by the Normans.

This is just a brief overview of the history of Cumbria to support your presentations and decision making.

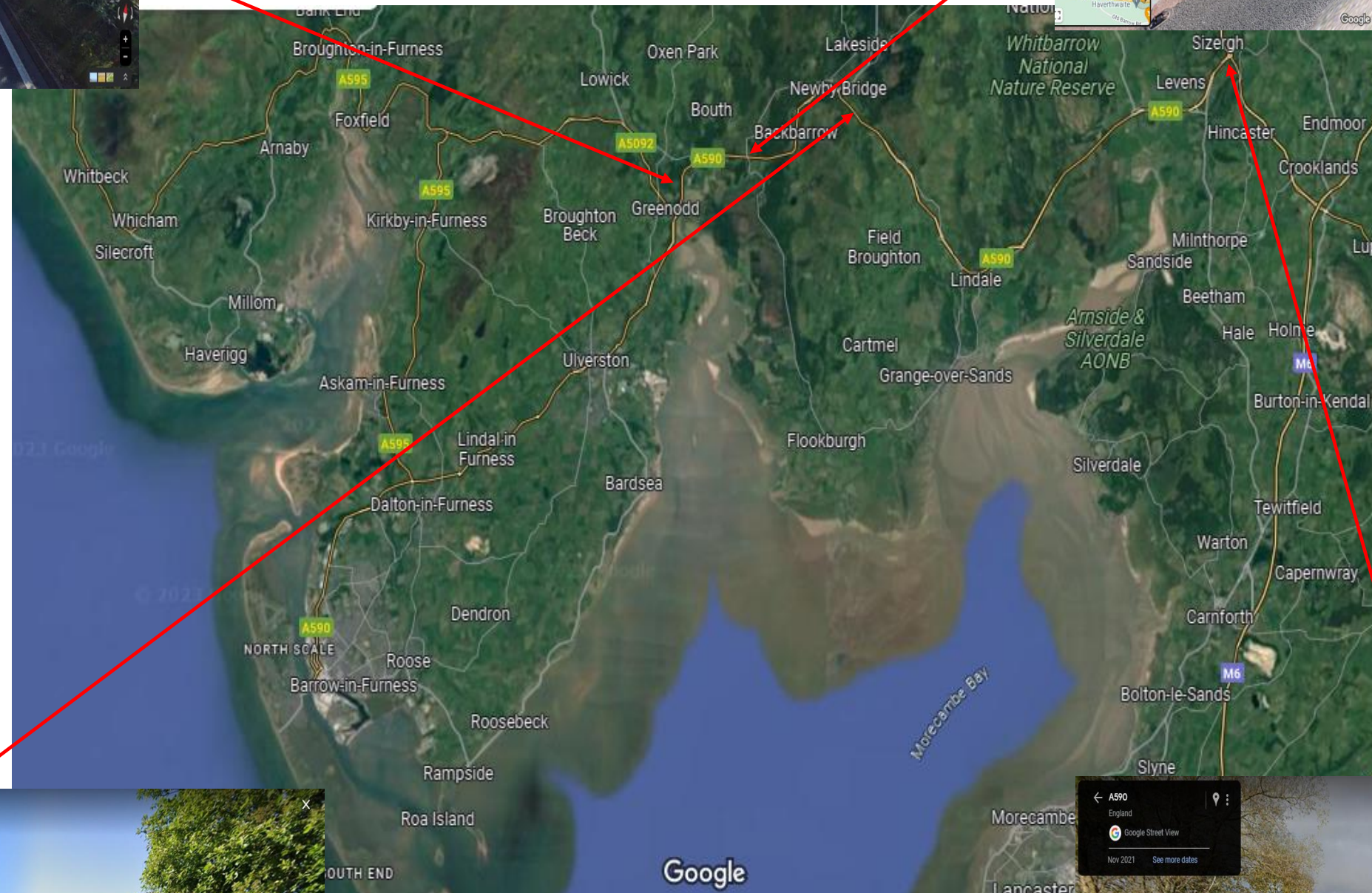
As an archaeologist, you should ensure that before any construction work is completed there is an archaeological survey and, if necessary, excavations take place.





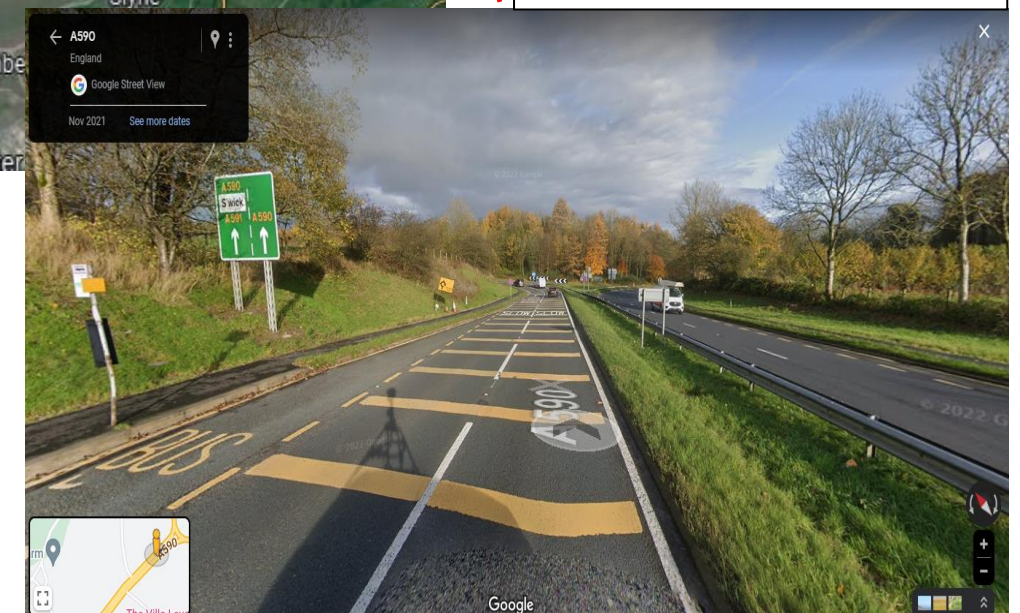
Location 1: Just after the Greenodd roundabout there is a section of road that is windy and becomes slightly narrower than the rest of the road. This road has a speed limit of 60 mph. It already has double white lines painted on the road indicating that cars cannot overtake on this section of road.

Location 2: At Haverthwaite, there is a small section of dual carriageway that has junctions on either side. At this point vehicles can travel up to 70 mph.



Location 3: At Newby Bridge, there is a garage whereby cars can enter and exit from both sides (crossing both lanes). This is also in a 60 mph speed zone. A number of accidents happen here each year.

Location 4: Brettargh Holt Roundabout is an exceptionally busy roundabout where the A590 and A591 meet. The speed limits on the roads leading to the roundabout is 60 mph. A number of accidents happen on this road each year.



Possible Improvements and Costings

In your groups you need to decide what improvements you are going to make to the A590. The Road Designer/Planner member of the group should monitor how much money is being spent on the projects and whether they are in budget. They should also oversee the decisions that are made and ensure that they are in the best interests of the road users and their safety.

Improvements:

- Reducing speed limits – new signs will cost £300 each
- Speed cameras – each speed camera will cost £400
- Straightening out the road - £1,000,000
- Warning signs/road signs - £300 each
- Creation of wildflower/conservation area - £500 per square mile
- Birdboxes - £20 each
- Planting new trees – £1 per tree
- Barriers at the edge of roads (to prevent cars from leaving the road during an accident) - £100 per metre.
- Chevrons (markings on the road to slow down traffic) - £100 per metre

The budget for your project is £1.5 million

Use the space below to complete your costings and calculations.

Project Manager

As Project Manager, it is your responsibility to make sure that all members of your team know what they are doing and that they are all participating in the presentation. You are also responsible for organising the presentation and checking on the progress of each member of your group.

Skills

- Good communication skills
- Excellent organisational skills
- Work well as part of a team
- Be able to manage people



Responsibilities for the group project:

- Make sure that every member of your group has a role and know what they should be doing (you will need to check on them throughout the task).
- Ensure that the presentation is finished on time and is ready to present.

Name of Project Manager: _____



Sustainability Officer

A Sustainability Officer is responsible for developing and implementing projects and strategies to ensure that a company or organization has very little negative impact on the environment. It is the responsibility of the Sustainability Officer to make sure that carbon emissions are reduced, there is very little negative impact on the environment including: animal habitats, the natural landscape (e.g. forests) and water sources.

Skills

- Excellent communication skills
- The ability to meet targets
- Work well as part of a team
- A passion for protecting the environment and ensuring the sustainability of the planet for future generations.



Responsibilities for the group project:

- Ensure that the improvements to the A590 do not negatively impact the environment.
- You will need to explain in your presentation how your group have considered the environment when implementing the changes to the A590.

Name of Sustainability Officer: _____



Archaeologist

As an Archaeologist your job is to study past human activity by excavating, dating and interpreting objects and sites of historical interest. You will take part in excavations (digs), surveys, recording sites through drawings, clean and preserve finds and produce and publish site reports.

Skills

- Excellent knowledge of local history
- The ability to meet targets
- Work well as part of a team
- Practical skills such as excavating
- Excellent problem solving skills



Responsibilities for the group project:

- You will need to ensure that your group are aware of the local history of the area.
- You will have to explain in your group presentation how you will ensure that the archaeology of the area is considered and how you will ensure that any archaeology is protected.

Name of Archaeologist: _____



Road Designer/Planner

As a Road Designer/Planner) it is your responsibility to ensure that roads are safe and can implement changes to existing roads to improve them to allow increased traffic flow, safety measures and improve the overall layout of the roads. You will need to be able to work to a budget and work with other groups of people such as environmentalists, archaeologists etc.

Skills

- Excellent budgeting skills
- The ability to meet targets
- Excellent organisational skills
- The ability to communicate with a range of people
- Excellent planning skills



Responsibilities for the group project:

- You will be in charge of budgeting for any changes that made to the A590, and you will oversee the discussions about these alterations.
- Your priority is the safety of the people who use the roads.

Name of Road Designer/Planner: _____



Lake District National Park Ranger

You are responsible for representing the views of the Lake District National Park. The A590 is one of the main roads that allows people from across the country to access the Lake District National Park. The Lake District receives 15.8 million visitors each year! As a Lake District National Park Ranger you need to make sure that the Lake District is accessible and that its visitors are safe.

Skills

- Excellent communication skills
- The ability to work as part of a team.
- A passion for the success and Sustainability of the Lake District National Park.
- Excellent organisational skills.



Responsibilities for the group project:

- You should ensure that in the group presentation you explain how the changes to the A590 will continue to support the Lake District National Park.
- You should work closely with the Sustainability Officer to ensure the preservation and sustainability of local wildlife and natural landscapes.

Name of Lake District National Park Ranger:



Lake District
National Park

Presentation Evaluation Feedback Sheets

Group Name/Number	Changes Implemented	Positives	Further considerations?	Sustainability rating /5