Lancashire County Council

# South Lancaster to M6 Road Scheme

## Non-Technical Summary

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# Introduction

Lancashire County Council are putting together a planning application for a single carriageway Link Road connecting the A6 roundabout to the west of Junction 33 of the M6 to a Main Street through the proposed Bailrigg Garden Village site and a park and ride facility to the south of Hazelrigg Lane.

As part of the planning process, an Environmental Impact Assessment (EIA) is being carried out to understand the potential effects that the Scheme would have on the environment. An EIA investigates the environmental consequences of a plan, policy, programme, or actual projects before making the decision to proceed. Individual environmental topics will be assessed and summarised in the Environmental Statement (ES) chapters which will accompany a planning application.

This document is an interim report of the information available at present based on technical surveys. Some of the chapters are further progressed than others, so have more information available. This version of the Non-Technical Summary has been prepared to accompany the consultation occurring in March 2023. The details in this document will be updated for the planning application when all information will be available.

**Figure 1: Looking north along Lancaster Canal towards Ashford Road, Scotforth, and Scotforth Cemetery.**

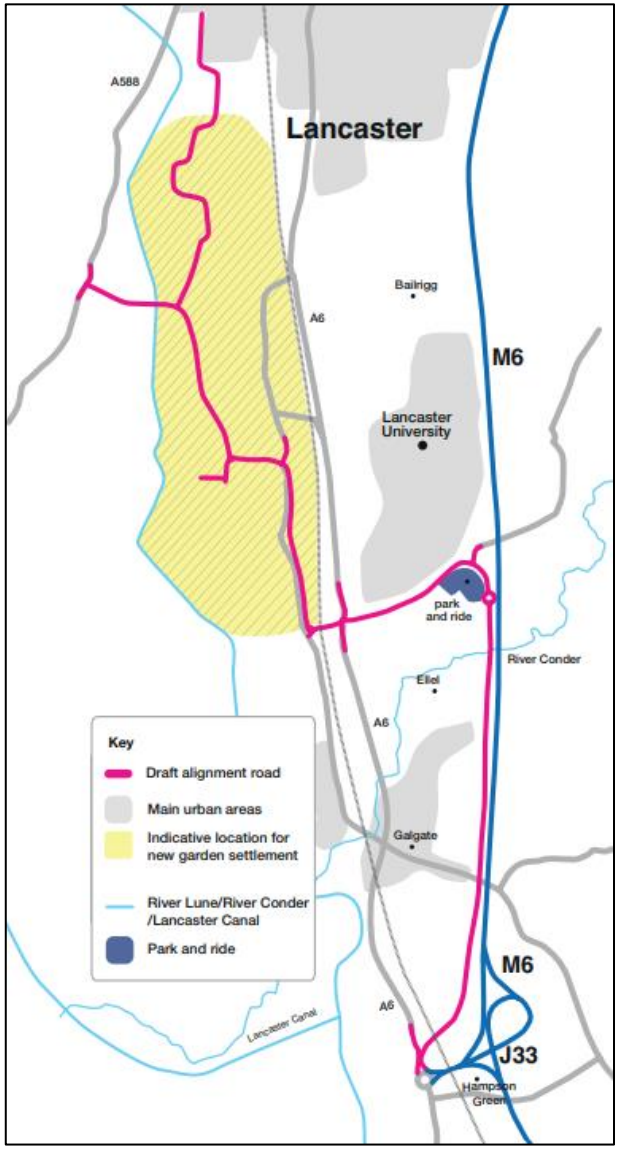
# Location

The South Lancaster to M6 Road Scheme would be located west of the M6, beginning at the A6 roundabout to the west of Junction 33 of the M6. The Link Road would travel over the West Coast Main Line then north around the eastern side of Galgate with bridges over Stoney Lane and the River Conder.

The Link Road would join Hazelrigg Lane to the south of Lancaster University. A new Park and Ride facility would be located on a parcel of land to the south of Hazelrigg Lane and west of the M6. The Park and Ride would be accessible from the northern roundabout of the Link Road.

To the north of Hazelrigg Lane, the Scheme approaches the proposed Bailrigg Garden Village after going through the newly constructed West Coast Main Line Underpass. The Main Street of the Garden Village then travels to the east of Burrow Road and then northwards alongside the Lancaster Canal to Ashford Road, with one branch crossing the Canal to connect with the A588.

**Figure 2: South Lancaster to M6 Road Scheme.**



# Why is the Scheme needed?

Lancaster City Council identified a broad location for growth in South Lancaster as part of their Local Plan Part One: Strategic Policies and Land Allocations, this included a proposed Bailrigg Garden Village which is set to deliver a minimum of 3,500 homes, with an estimated 1,205 to be delivered before 2034. A new road network is required to enable access to all land available for development in the Garden Village.

The aims of the proposed Scheme would be:

- Enable and connect to new areas for development, including Bailrigg Garden Village
- Enable the expansion of Lancaster University
- Easing congestion in the centre of Galgate Village
- Reducing traffic on the A6
- Removing the Air Quality management Area in Galgate by reducing traffic

**Figure 3: Looking north on Langshaw Lane towards Lancaster University and the M6 northbound, area proposed for the Park and Ride.**

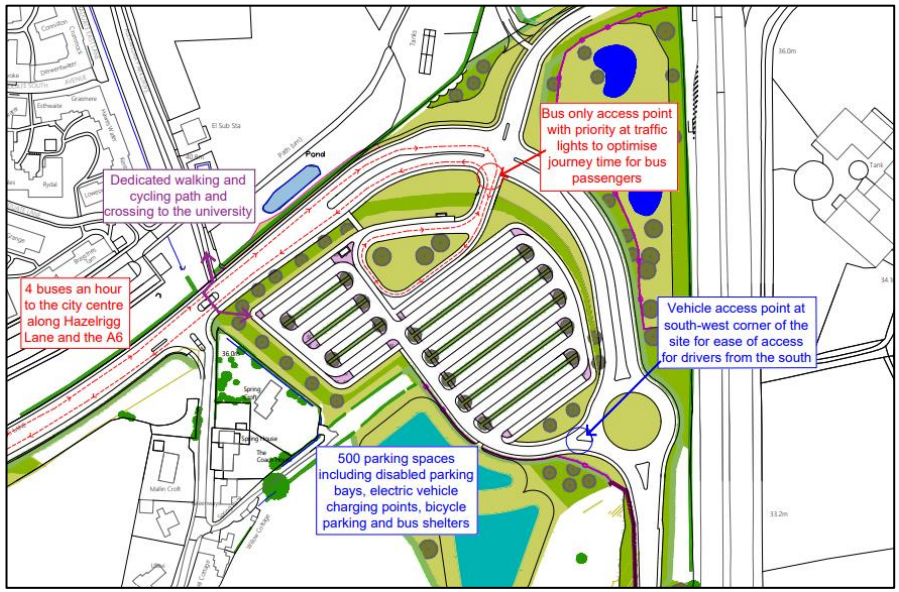
# Design of the Scheme

The Scheme has been designed to comply with national regulations around road and bridge design. Where possible, additional visual elements have been incorporated to minimise the landscape impact of the Scheme and increase wildlife.

Key elements of the Scheme include:

- Link Road around Galgate to Bailrigg Garden Village.
- Construction of a new bridge over the West Coast Main Line west of Junction 33.
- Construction of a new bridge over Stoney Lane.
- Construction of a new bridge over the River Conder.
- New footbridge over the Link Road to connect to the existing Cockshades Footbridge over the M6.
- Park and Ride Facility to the south of Hazelrigg Lane bound by Link Road.
- Reconfiguration of the Junction between Preston Lancaster Road (A6) and Hazelrigg Lane to include access to Bailrigg Garden Village and the newly constructed West Coast Main Line Underpass.
- Main Street for Bailrigg Garden Village from Hazelrigg Lane to south Lancaster.
- Construction of a new bridge over Burrow Beck with separate cycleway/footway.
- Construction of a new bridge over the Lancaster Canal to facilitate access to Bailrigg Garden Village and the A588.

**Figure 4: Proposed Park and Ride element of the Scheme.**



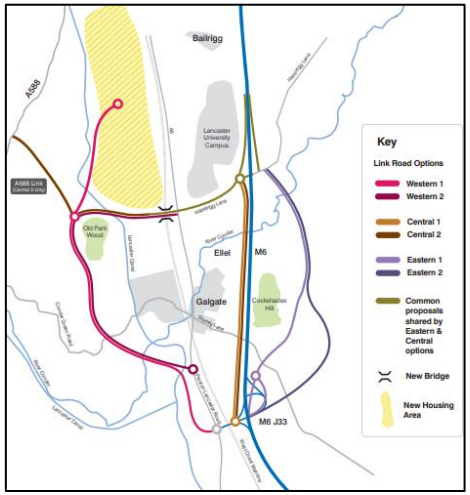
# Consideration of Alternatives

Six different options were put forward for consultation in 2020. These were:

- Eastern 1 – would be constructed to the east of the existing southbound off slipway at Junction 33, connecting to the retained southbound on slipway with the M6 and new Link Road.
- Eastern 2 – extends further east than Eastern 1, a simpler junction would be formed at the southern end and take a wider arc.
- Central 1 – would join with Hazelrigg Lane on the Galgate/Lancaster University side of the M6.
- Central 2 – follows Central 2 route option but includes an extra circa 1km length of new highway to connect into the A588.
- Western 1 – originates at Preston Lancaster Road (A6) Junction 33 roundabout heading in a north westerly direction until the link to Hazelrigg Lane and continues for circa 0.9km to its terminus.
- Western 2 – is an alternative to the first 900m of the west alignments and would commence 60m north of Lane House and meet the same route as Western 1 to the south of Galgate Cricket Ground.

Central 1 was selected as the preferred option by the public and was adopted by Lancashire County Council in 2021. Further technical work has taken place and amendments to the approved option were adopted by Lancashire County Council in February 2023 which included the removal of the slip roads to the M6 as they were no longer required.

**Figure 5: Six options from 2020 consultation.**



# Environmental Topics

Each chapter topic summary has been divided into the effects of construction of the Scheme, and effects once the Scheme is open for use.

## Landscape

At present the Scheme would be located in an area of minimal built development, however this is due to change around the Main Street over the next 20 years with the area proposed for growth, particularly for housing developments, with the proposed Bailrigg Garden Village (BGV) at this location.

The area has an undulating topography, with a variety of landscape features. These features include a Biological Heritage Site, Grade II Listed Bridges, ponds, several watercourses, ancient woodlands and well-established hedgerows. The A6, M6, and West Coast Main Line Railway run adjacent to the site at various points, with the village of Galgate sitting to the south of the Scheme, Lancaster University adjacent to the Scheme, Scotforth to the north of the Scheme, and various farmsteads and dwellings in close proximity to the Scheme.

It is acknowledged there will be significant landscape impacts during the construction of the Scheme due to the presence of plant and construction material. Screening of construction areas and controlled vehicle movement will help to reduce the impact of construction.

There will also be a noticeable change to the landscape during the operation of the Scheme due to the presence of the new infrastructure proposed to include several bridges, Link Road, Main Street in BGV, and a Park and Ride facility. Tree and hedgerow planting would not yet be established when the road is first opened. The Scheme would not result in any significant effects 15 years after opening of the road due to sufficient vegetation growth, as well as progressed development as part of BGV in the vicinity of the Scheme.

Further details about the proposed bridges and other drawings are on the Transforming Lancaster Travel website.

## Ecology

The Scheme is mostly located in an area of improved grassland used for grazing which is of low biological importance. However, habitats and species of nature conservation importance have been found in the wider area. These habitats include scattered mature broad-leaved trees; ancient woodland; and hedgerows. Species of nature conservation in the wider area include brown hare; breeding birds; wintering birds; bats; barn owl; common toad; European eel; hedgehog; slow worm; great crested newts; and otter.

The Scheme would incorporate tree planting, hedgerow planting and habitat creation for wildlife. The Scheme aims to achieve a net increase in biodiversity (the quality and total number of plant and animal species) in the local area.

Creating new habitats would result in beneficial effects for all species over the long term. Most species would remain largely unaffected by the Scheme once mitigation is put in place through the Environmental Masterplan, but there would be some limited local impacts to species and habitats. At this stage the species impacted are anticipated to be birds; barn owls; bats; and brown hare. The habitat impacted is anticipated to be other lowland mixed deciduous woodland; other broadleaved woodland types; scattered trees; line of trees; and native hedgerows.

## Cultural Heritage

There are designated and non-designated heritage assets in the vicinity of the Scheme. There are no impacts identified to Scheduled Monuments, however there are potential impacts to other non-designated archaeological assets. Archaeological remains in the ground might be impacted by the Scheme. Geophysical surveys are taking place and trial trenching will take place prior to construction to identify whether there are any remains that need to be removed. There are no physical impacts to any Listed Buildings, however the settings of some Listed Buildings in the vicinity of the Scheme will be slightly impacted. There are also some non-designated historic buildings that will

have their settings impacted, however these are identified as not having significant impacts.

There are no significant impacts identified with regards to the historic landscape, registered parks and gardens, registered battlefields and other heritage sites.

## Climate Change

Climate change resilience refers to the ability of the Scheme to adapt to the expected change in climate over its operational lifetime. Climate change assessments are ongoing, and analysis of the data needs to take place before an overall assessment of the climate change impacts on the final design can be made. These details will be available upon submission of the planning application.

The following mitigation measures are being considered as part of ongoing work to tackle climate change resilience of the Scheme:

- All construction material and methods will be considered in order to reduce their carbon impact;
- Assessment of the Greenhouse Gas emissions associated with the Scheme in its entirety would be undertaken and reductions in emissions would be sought where possible;
- Consideration of climate change projections to be within maintenance plans;
- Drainage systems designed to protect against return period of 1-in-100 years flood event allowing an additional 50% for the effects of climate change;
- Contingency plans will be put in place for dealing with severe weather events during operation of the Scheme; and,
- Regular maintenance of drainage infrastructure to ensure that it is still fit for purpose.

## Road Drainage

As the final design of the Scheme has not been completed there is still ongoing work to be completed with regards to road drainage. However, as shown in the current Scheme, several attenuation ponds are proposed. These are designed to hold large amounts of water that would otherwise runoff from the road in the event of large rainfall events. The water is then stored in these ponds and released either into existing watercourses or into appropriate fields at a controlled rate so as not to increase the risk of flooding.

The scheme is designed to required standards which include having capacity within the drainage pipes and chambers to not surcharge in a 1 in 5 year storm and capacity within the storage ponds to contain a 1 in 100 year storm event.

An allowance has been made for climate change of 50% additional capacity within the system.

The outfall rate from the storage ponds into existing watercourses is currently set to the greenfield runoff rate, essentially meaning that the drainage system for the new highway will allow water to drain into the watercourses at the same rate as if there was no development in place.

Drainage ponds and the overall design of the drainage system will collect particulate matter from the highway and prevent this from entering watercourses. Ongoing discussions with the Environment Agency will determine if additional measures are required.

Further details will be available upon submission of the planning application when the design is finalised.

## Transport

A full transport assessment has not yet been completed as the final design of the Scheme is required to comment on the impacts on the transport network. This is being completed at present and will be available upon submission of the planning application.

Traffic modelling has been undertaken at different stages of the Scheme to inform the alignment. This modelling was used to confirm the removal of the new northern slip roads proposed during the 2020 consultation was possible while still achieving the aims of the Scheme.

A new Park and Ride facility is proposed to be located south of Hazelrigg Lane and west of the M6 at the northern end of the new Link Road. The Park and Ride facility forms part of a wider package of measures to provide enhanced public transport links to encourage other travel choices and a shift away from the reliance on private vehicles. This would reduce vehicles in the city centre, resulting in a reduction in need for city centre parking provision.

The facility will have approximately 500 parking spaces, including disabled parking bays and provision for electric vehicle charging points. It is proposed that four buses per hour would serve routes between the Park and Ride and city centre. The Park and Ride facility would benefit from high-quality bus shelters and a dedicated bus-only access. This would support quicker and more reliable bus journeys for Park and Ride users.

The Park and Ride facility would intercept journeys to Lancaster from the motorway at Junction 33 and other journeys from the south reducing the number of private vehicles using the highway network. This would reduce traffic and improve air quality in South Lancaster and the city centre.

## Land Use and Accessibility

Land use and accessibility is the predicted impact that the Scheme would have on land use in the local area and the ability of people to access land, property, infrastructure, businesses, and community facilities.

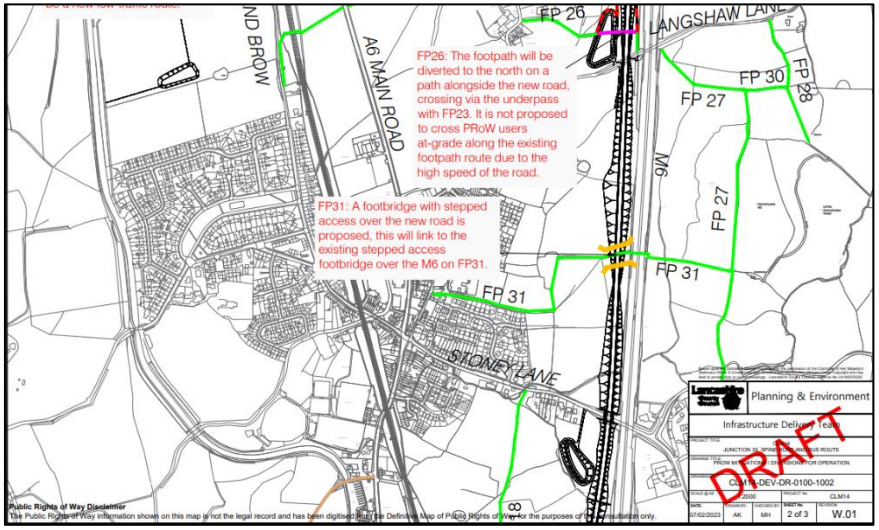
As construction begins on the Scheme, some disruption is expected to the local road network and Public Rights of Way. Suitable diversions and traffic management would help to minimise the impact this may have.

Once the Scheme is open, it is predicted that walking, wheeling, cycling and horse riding in the area would benefit from the improved infrastructure that would be constructed as part of the Scheme. Road users would also benefit from less congested road networks, and the ability to use the Park and Ride facility.

However, users of the public footpaths that are proposed to be diverted would experience impacts on journey times. Where a Public Right of Way is affected by the Scheme, the route of the Public Right of Way has been maintained as closely as possible.

Landowners and local business are predicted to experience a beneficial impact associated with the improvements to the highway network allowing shortened journey times.

**Figure 6: Proposed Public Rights of Way changes around Galgate, further details for changes around the whole Scheme are available on the Transforming Lancaster Travel website.**



## Air Quality

Air quality assessments and data analysis are still ongoing at this stage. The final air quality impacts will be assessed and be available upon the submission of the planning application

## Noise

Noise assessments are ongoing, and analysis of the data needs to take place before an overall assessment of the noise impacts can be made. These details will be available upon submission of the planning application.

## Soils

Geotechnical information is currently being gathered to assess the impacts on the environment. Full details of these impacts will be available upon submission of the planning application.

## Human Health

The potential impacts of the Scheme on human health will be assessed. Work is ongoing to fully assess these impacts and further details will be available upon submission of the planning application.

**Figure 7: Looking west on Hazelrigg Lane toward Ellel and Lancaster University.**

## Cumulative Impacts

Cumulative Impacts are the impacts of the Scheme that may not be a cause for concern when assessed individually but may become more serious when looked at in the context of the wider area.

With the South Lancaster Strategic Growth Area proposed to be developed in the coming years, residential development and associated infrastructure have the potential to cause cumulative effects. These effects have been considered during the preparation of the local plan. Through allocating the area as a location for growth, the Lancaster City Council would have considered the impacts of doing so. Further impacts of the cumulative impact of the proposed BGV will be considered as part of Lancaster City Council's South Lancaster Area Action Plan. This development plan document is currently in preparation and will supplement the existing Local Plan, with a specific focus on the policies and development areas in South Lancaster.

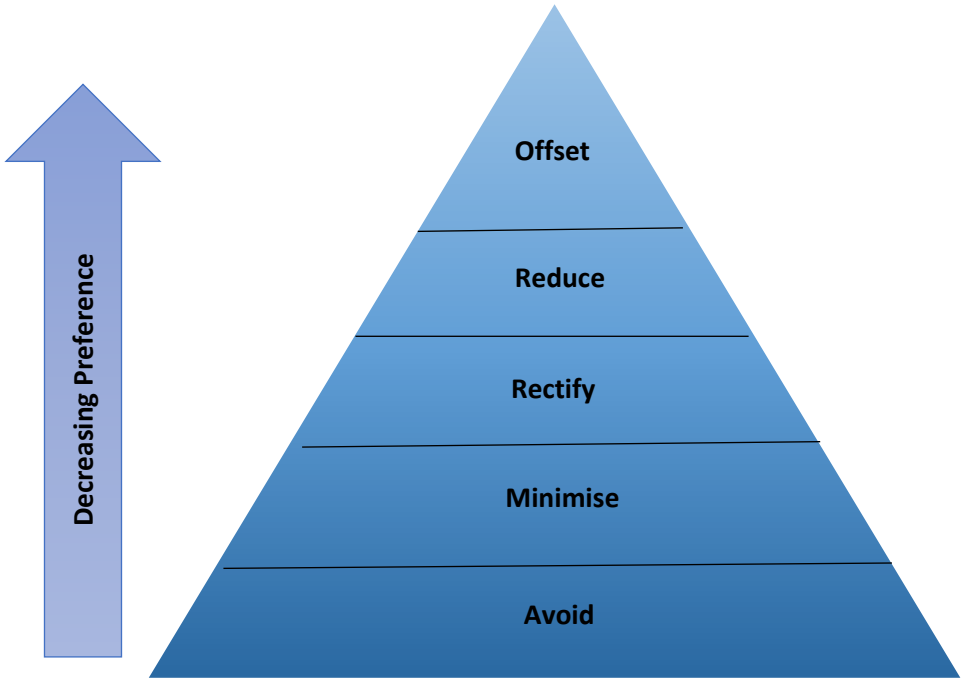
As part of the preparations for the submission of the planning application in late summer 2023, the cumulative impacts of this Scheme and other development coming forward in the area will be assessed. This involves considering other planning applications being submitted in South Lancaster and assessing whether the combined proposals will have a significant impact on the environment.

Further assessment of the impacts is ongoing and full details of these impacts will be available upon submission of the planning application.

# Summary

When mitigating for the Scheme in the context of the environment, there is an order to the approach taken, this is known as the mitigation hierarchy and is shown in Figure 8 below.

**Figure 8: The Mitigation Hierarchy.**




At this stage there is not a complete set of information available to confirm the extent of impacts the Scheme will have on the environment. These will be fully assessed and reported in the final planning submission due in late summer 2023 following final information gathering.

Any impacts likely to have an adverse impact on the environment would be mitigated through:

- the implementation of a Construction Environmental Management Plan (CEMP). The CEMP would address working hours, traffic management measures, ecological mitigation, best on-site practice and measures to address potential pollution sources, waste management, noise, dust and vibration creation.
- The implementation of the Environmental Masterplan, which incorporates landscaping and ecological mitigation, habitat creation, and sustainable drainage This Environmental Masterplan would seek to reduce impacts on the environment and where possible enhance the local surrounding area.