



Structures Fund template

This template is for local authorities proposing schemes for investment from the Structures Fund. Before completing the template, local authorities should read the [Structures Fund guidance and associated documents](#). Alongside the template, local authorities must also complete the economic toolkit for the proposed scheme.

Part 1 – Details of the Structure Being Promoted

1.1 Scheme Information

This section captures the key information on the scheme that is being proposed to the Structures Fund.

- a) Local highway authority (LHA) name: Kirklees Council
- b) Scheme / structure name and LHA bridges number: Shepley Bridge K176
- c) Location (OS Grid Reference) of the scheme/structure (to identify location on map):
- Easting: 421579
- Northing: 419823
- d) Name of Project Manager: Asad Jan
- e) Email address: asad.jan@kirklees.gov.uk
- f) Phone number: 01484 221000
- g) What type of eligible structure would your scheme address? (select all that apply)

☒	Bridges	☐	Cutting/embankment
☐	Fly-overs	☐	Tunnels
☐	Retaining walls	☐	Local highway repairs due to landslip
☐	Culverts	☐	Local highway repairs due to collapse
☐	Other structure type (please specify): Click or tap here to enter text.		

- h) Provide an overview of the structure proposed for intervention and the nature of the problem. (Maximum 250 words)

This could include, for example, the age, construction type, feature carried and feature crossed of the relevant structure and if the structure has listed heritage status.

Where is it and what does it do?

Figures 1&2 shows, Shepley Bridge along Steanard Lane, Mirfield in local and wider geographical setting.



Figure 1 - Local geographical setting

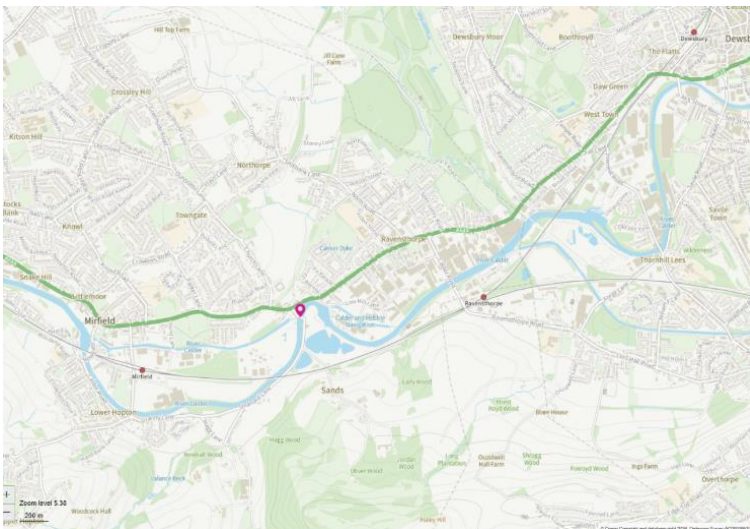


Figure 2 - wider geographical setting

The bridge provides an important local transport link between residential areas within the Dewsbury West and Mirfield wards, supporting east–west movements between Mirfield town centre, surrounding neighbourhoods, employment areas in Dewsbury and the wider Calder Valley corridor. The surrounding area comprises a mix of residential communities, businesses and industrial uses, including areas of higher deprivation. The route supports local economic activity by providing access for employees, customers, deliveries and service vehicles, whilst also accommodating vehicular, pedestrian and cycle movements and providing connections to nearby bus routes and Mirfield railway station.

The Current Problem

The bridge is in a deteriorating condition and increasingly requires maintenance and management interventions to maintain safe operation. To reduce loading on the structure whilst retaining access for all vehicle types, bollards have been installed within the footway and traffic is currently restricted to a single lane controlled by traffic signals. Continued deterioration could result in further restrictions and subject to ongoing monitoring and assessment, may ultimately require the introduction of a 3-tonne weight limit.



Figure 3 - existing bridge showing bollards in footway to prevent vehicle overrun



Figure 4 - Traffic signal control to ensure single lane flow

The Future Problem

Failure to replace the bridge would have significant transport, economic and environmental consequences. A bridge closure would affect access for local residents and businesses, particularly as there are no alternative routes for vehicles exceeding 3.7 metres in height due to a nearby rail underbridge restriction. The principal diversion route for smaller vehicles is also susceptible to flooding, creating a risk of severe disruption and isolation during flood events. Longer diversion routes would increase journey times, congestion and vehicle emissions, reducing network resilience and public confidence in the reliability of the transport network.

i) Provide an overview of the proposed intervention and how the works will address the problem.

This should set out the method of resolving the issue that is to be addressed.

A replacement bridge on a new alignment is proposed to address the issue. This approach will enable traffic to maintain access utilising the existing bridge until the new bridge is operational and mitigate against the need to provide temporary diversions for utilities across the river which would likely be in the form of a temporary or permanent separate structure to carry the utilities.

j) Is any part of the relevant structure owned by a third-party (e.g. the Canal and River Trust or Network Rail)?

No

k) If the structure is on a diversion route for the SRN provide a clear description/commentary.

Not applicable

1.2 Understanding the Condition of the Structure

Please set out the current condition of the structure in this section.

a) Provide evidence that the relevant structure is in need of repair either now or by the end of the 2029/30 financial year. (Maximum 250 words)

Provide details of the process used for determining whether this structure is in need of repair and the timescale in which the repair is needed..

Shepley Bridge has been subject to Principal Inspections in 2016 and 2023, supplemented by intermediate General Inspections. Inspection records demonstrate a deterioration in condition between the 2016 and 2023 Principal Inspections.

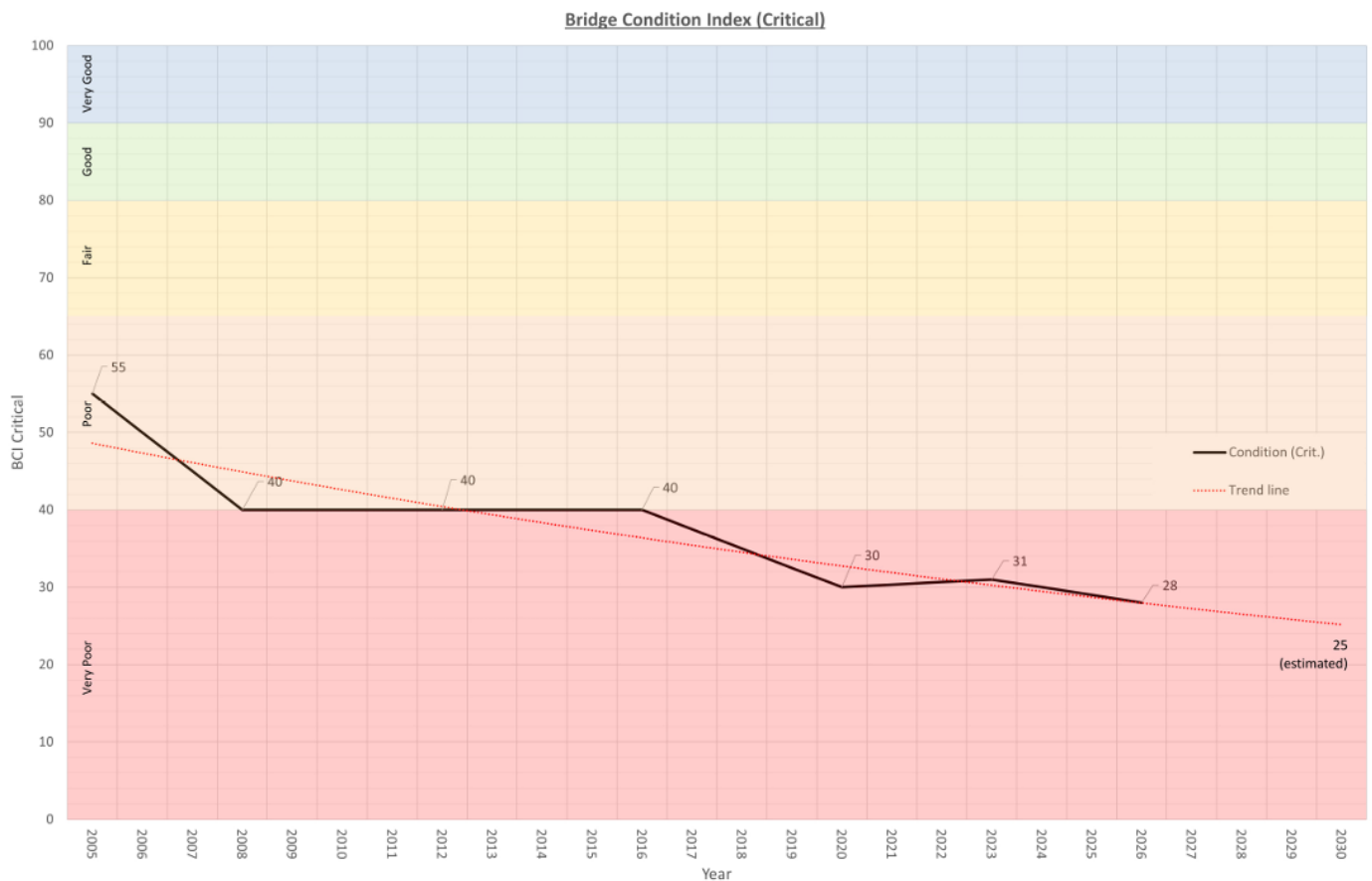
The principal structural issue stems from the widespread failure of the protective paint system to the wrought iron superstructure. Breakdown of the coating has resulted in corrosion, lamination and corrosion-related section loss affecting all the main structural member types, including the main girders, transverse beams and deck elements. The deterioration is widespread throughout the structure and continues to progress.

In addition to deterioration of the main structure, a number of secondary defects have been identified, including carriageway surfacing defects and impact damage.

The bridge remains in service with existing traffic management measures and a weight restriction. In addition to the deterioration identified through inspection, structural assessment has identified deficiencies in the load-carrying capacity of the bridge, necessitating continued operational restrictions and reducing the resilience of this route within the highway network. The condition of the structure is continuing to deteriorate and requires ongoing monitoring and maintenance intervention.

Major investment is required within the Structures Fund period to address the deteriorating condition of the asset and prevent the need for further operational restrictions including the eventual closure of the bridge.

BCIcrit is anticipated to continue declining, as indicated by the graph below. The trend demonstrates that intervention to address the risks associated with the current condition is already overdue and, without major investment, the structure is expected to reach a critical condition by 2030.



b) Please indicate if the relevant structure is **currently** subject to traffic restriction as a result of its condition.

Reference should be made to closures, weight limits, width restriction, limits on use.

The bridge is currently restricted to single lane working managed by traffic signals and a 7.5T except for access weight restriction. Bollards are also in place to prevent parking on the footway.

c) Please indicate if the relevant structure is **not currently** but **by the end of the 2029/2030 Financial Year is expected** to be subject to traffic restriction as a result of its condition.

Reference should be made to closures, weight limits, width restriction, limits on use that are anticipated.

Not applicable

d) If the answer to c) above is yes, then please estimate the likelihood of this occurring: (select box that applies):

- ☐ Low confidence in restriction occurring
- ☐ Medium confidence in restriction occurring
- ☐ High confidence in restriction occurring

e) Please indicate if the relevant structure is **currently** subject to other temporary measures to manage risk.

Reference should be made to measures such as propping, etc.

Not applicable

- f) Please indicate if the relevant structure is **not currently** but **expected by the end of the 2029/2030 Financial Year** to be subject to temporary measures to manage risk.

Reference should be made to measures such as propping, etc. that is anticipated.

Not applicable - appropriate measures already in place.

- g) If the answer to f) above is yes, then estimate the likelihood of this occurring:

- ☐ Low confidence in temporary measures being required
- ☐ Medium confidence in temporary measures being required
- ☐ High confidence in temporary measures being required

- h) If available and applicable, what is the current Bridge Condition Indicator score (average and critical) of the relevant structure?

BCI Crit: 28

BCI Ave: 49

- i) Which elements of the structure are negatively contributing to the BCI scores and how has this changed in the last 5 years.

Reference should be made to recent inspections and highlight the type and extent of the defects.

The elements contributing most significantly to the current BCI scores are the primary and secondary deck elements forming the wrought iron superstructure. The 2023 Principal Inspection identified widespread failure of the protective paint system, resulting in corrosion, lamination and consequential localised corrosion-related section loss affecting the main half-through girders, transverse beams and deck elements. The inspection also noted deterioration since the previous Principal Inspection undertaken in 2016, indicating an ongoing deterioration trend.

The primary deck elements (main girders - also forming the structural parapets) were recorded with moderate paint loss, surface corrosion and lamination affecting significant areas of the structure, whilst the secondary deck elements exhibited paint system failure, surface corrosion, lamination and localised deformation.

Tertiary elements contributing negatively to the BCI scores include carriageway surfacing, footway surfacing and approach walls. The 2023 Principal Inspection identified extensive carriageway cracking, potholing and surface breakup, together with impact damage and deterioration to approach walls. Whilst these defects are not the principal drivers of the bridge replacement proposal, they are consistent with an aging asset requiring increasing maintenance intervention.

Subsequent General Inspections have continued to identify deterioration of the bridge, confirming the ongoing decline in condition identified between the 2016 and 2023 Principal Inspections.

- j) Submit, alongside this submission template, the most recent, dated copy of the structural inspection proforma or a report summarising this.

Part 2 – Understanding the Case for Investment

2.1 Strategic Case

This section of the template captures the wider need for the scheme and how it aligns to the objectives of the Structures Fund.

- a) Provide a summary of how this scheme contributes to the Government's economic growth mission (Maximum 250 words)

Describe how the proposal will support economic growth (e.g. by creating jobs, attracting investment, improving productivity, or enabling new business activity) and set out the mechanisms through which these benefits will be delivered.

The UK Infrastructure Strategy (2025) identifies infrastructure investment as a key driver of economic growth, improved living standards, housing delivery and effective public services. Investment in Shepley Bridge supports these national priorities and aligns with WYCA, Local Plan and Structures Fund objectives by enabling growth, safer streets, cleaner travel and reduced barriers to opportunity.

Shepley Bridge is a vital link between Dewsbury West, Mirfield and the wider Calder Valley corridor. It provides the only direct access to the strategic road network for businesses and industrial sites south of the bridge, making it critical to local productivity, supply chains, employment and visitor access, including to Shepley Marina. A reliable crossing safeguards day-to-day business operations, avoids disruption costs and supports confidence for future investment.

The bridge is also close to the proposed Dewsbury Riverside Development of around 4,000 new homes. A replacement bridge, including improved walking and cycling facilities and an NMU link to Sands Lane, would strengthen local access to bus services, shops, employment and wider destinations. It would complement the TransPennine Route Upgrade, reduce community severance and promote healthier, more inclusive travel choices.

By improving reliability, resilience and active travel connectivity, the scheme supports economic growth while reducing the risk of unplanned closures. In contrast, bridge closure would create lengthy diversions, increase costs for residents and businesses, and could threaten the viability of some local employers.

- b) Explain how the scheme supports other Government policy objectives. (Maximum 250 words)

Provide a summary of the scheme's alignment to UK Government policy objectives as represented by the remaining missions.

The Shepley Bridge scheme aligns with key UK Government policy objectives, including:

- Better Connected: A Strategy for Integrated Transport (2026),
- National Infrastructure Strategy (2020),
- Gear Change: A Bold Vision for Cycling and Walking (2020), and
- Future of Mobility: Urban Strategy (2019).

These policies emphasise transport infrastructure as a driver of economic opportunity, social inclusion, health, and environmental sustainability.

The scheme supports policy objectives by addressing critical transport challenges. Upgrading the bridge will restore full two-way traffic flow, eliminating current restrictions that cause delays and future restrictions that will stop HGV movements that are essential for local businesses. This will improve journey time reliability, productivity, and access to economic centres in Dewsbury and Mirfield while aligning with the Government's productivity and growth goals.

Active travel provision is another key focus. The current bridge lacks adequate facilities for pedestrians and cyclists, with narrow footpaths and no cycling infrastructure. The proposed improvements will meet LTN 1/20 standards, integrating the bridge into the local and regional active travel network. This will encourage greener travel for short trips, supporting national climate change targets of carbon neutrality by 2030 and 2050, while promoting healthier, more active lifestyles.

By enhancing connectivity, reducing congestion, and enabling sustainable travel, the scheme also addresses social inclusion and environmental priorities. It ensures equitable access to jobs, services, and opportunities while contributing to cleaner air and reduced carbon emissions, delivering benefits that align with the Government's broader policy missions.

c) Explain why this scheme is a local priority. (Maximum 250 words)

Provide a summary of the scheme's alignment to local priorities and policies.

Shepley Bridge is a local priority as it provides the only direct access to the strategic network for businesses south of the bridge. Local business owners report that the current condition fails to meet their needs, particularly for those transporting wide loads such as plant and equipment. Capacity limitations and structural deficiencies force businesses to split loads, raising operational costs that severely disrupt operations. Business owners also reiterate that without a bridge they would be forced to close or relocate.

Moreover, the West Yorkshire Local Cycling and Walking Infrastructure Plan identifies Shepley Bridge as a key node in the active travel network, linking Mirfield, Dewsbury Riverside, and Dewsbury. Planned active mode links from the new Dewsbury Riverside development (a key housing development site in Kirklees Local Plan) via Sands Lane are expected to encourage modal shift and reduce traffic pressures.

Local policy frameworks including the West Yorkshire Plan, Local Transport Plan, and Local Growth Plan stress the importance of transport connectivity and multimodal integration for driving investment and long-term economic growth. Upgrading Shepley Bridge will enhance access for businesses, improve productivity and operational efficiency, and eliminate the need for extensive diversionary routes that contribute to wider network delays, longer journey times and pollution.

Overall, investing in Shepley Bridge will support sustained local economic outcomes and boost productivity by ensuring a reliable and resilient transport route for the community. There will be added benefits for improved health, wellbeing and safety outcomes for non-motorised users through better active travel facilities.

d) Summarise engagement with local stakeholders, any joint-owners, levels of support for the scheme and explain any controversial elements. (Maximum 250 words).

Summarise support from relevant stakeholders such as the Local MP, Elected Members relevant combined authorities, National Highways, Network Rail, neighbouring LHAs, or important utility providers.

Engagement for the Shepley Bridge scheme has focused on stakeholders most directly affected by the proposals. Early discussions have taken place with the Ship Inn owners to understand operational needs, and with the Canal & River Trust (CRT) on navigation, land ownership, access

requirements and design development. The Environment Agency has been consulted on environmental permitting and flood risk, while utility record searches have identified relevant statutory undertakers for engagement as the scheme progresses.

Land requirements remain a key consideration. CRT and the Ship Inn owners have both expressed support for the scheme, with further discussions planned to maintain operational continuity during construction and confirm any land or access arrangements. Additional engagement with affected landowners will continue as the preferred option is refined. If a temporary road between Steanard Lane and Sands Lane is required, the relevant landowner will be consulted, and Network Rail will be engaged due to the proximity of the railway line.

A wider engagement programme is being developed for local residents, businesses, public transport operators, emergency services, active travel and accessibility groups, environmental organisations and regional partners, including WYCA. Engagement with local elected members will begin once new governance arrangements are in place following recent elections.

No significant objections or controversies have been identified to date. Potential concerns, including construction impacts, traffic management, land requirements and stakeholder approvals, will be managed through the scheme communications and risk management strategy.

e) Provide a summary of the local approach to prioritisation of structural maintenance work.
(Maximum 250 words)

Set out any weighting, scoring or other methodology which explains why this scheme has not been subject to work prior to this point.

Kirklees Council prioritises structural maintenance using a risk-based approach that focuses limited funding on the highest safety and serviceability risks across the highway structures portfolio. Schemes are typically assessed and ranked using a combination of factors, including:

- Asset condition and deterioration trend (inspection findings and remaining service life).
- Network criticality (availability of diversions, impact on emergency services, freight, buses, and access to key destinations)
- Operational impact (current restrictions, reliability issues, and user delay).
- Deliverability (land requirements, statutory consents, environmental constraints, utilities, and construction risk).
- Affordability and funding availability (whether the work can be delivered within the annual maintenance settlement or requires external capital funding)

Alongside reactive safety interventions, the council maintains a planned programme of renewals. Due to resource and funding constraints, it is generally the case that one major renewal scheme is progressed at a time, selected from the highest-ranked candidates and timed to match development capacity and approvals. This explains why Shepley Bridge has not been replaced earlier. Interim lane/weight restrictions were implemented to manage immediate safety risk and maintain limited operation, while developing the case for, and seeking significant external funding (in excess of the scope of the annual bridge maintenance budget) for a full replacement.

- f) Provide a summary of why this scheme has been selected for this application to the Structures Fund. (Maximum 250 words)

Provide a brief summary of the specific need for this structure is advanced to the Structures Fund.

The Shepley Bridge scheme has been selected for application to the Structures Fund due to its critical role in connecting the communities of Mirfield and Dewsbury West, facilitating access to jobs, services, and public transport. The bridge is in poor condition yet it remains essential for the economic viability of local businesses that rely on it for primary access.

Several operations, particularly those handling abnormal or wide loads, depend exclusively on the existing bridge, which is inadequate for their needs. If the scheme is not delivered, these businesses risk severance from the wider transport network, jeopardising their operations. Two long-established businesses in the area, with a combined turnover of approximately £100 million, would be unable to operate HGVs if the bridge were to close, resulting in closure or relocation. Other local businesses would face operational disruptions, requiring them to adapt by using smaller vehicles and navigating diversion routes that include height-restricted bridges.

The failure to provide a suitable alternative would not only threaten the survival of these businesses but also negatively impact local employment and economic growth. The Structures Fund offers a vital opportunity to invest in a new, sustainable bridge that can accommodate current and future transportation needs for both businesses and commuters, ensuring continued economic vitality in the region.

- g) Summarise the impacts of not delivering this scheme (Maximum 250 words).

The response should consider the impact of not delivering the scheme, such as community severance, lengthy diversion routes or impacts on other infrastructure.

If the scheme is not delivered, the bridge's deteriorating condition will require increasingly restrictive management measures. Current controls (single-lane operation and footway bollards) would likely tighten to restrict all HGV movements with full closure the worst-case outcome. This would create significant community severance and reduce resilience of the local transport network.

A closure or tighter restrictions would force traffic onto diversion routes, increasing journey times and costs for residents, commuters and businesses. Impacts would be greatest for HGVs as the only diversion route for local trips is via Steanard Lane is unsuitable for HGVs due to a 3.7m height-restricted railway bridge. This diversion route is also vulnerable to flooding from the River Calder, creating further disruption and unreliability.

To maintain HGV access during construction of the new bridge, a temporary road could be required, but this is unsuitable as a long-term arrangement given the loads and the local road environment. Re-routed HGVs and general traffic would also increase noise, air quality impacts and safety risk for communities along diversion corridors.

For wider traffic, redistribution would increase congestion on alternative routes (including through central Mirfield and the A644 Huddersfield Road), affecting buses and general network performance. Finally, a closure would sever walking and cycling connections, reducing access to local facilities such as Shepley Marina and weakening links to the wider active travel network.

- h) If applicable, explain how the scheme helps prevent the likelihood of community severance for all transport modes and the impact that this severance would have or already has. (Maximum 250 words)

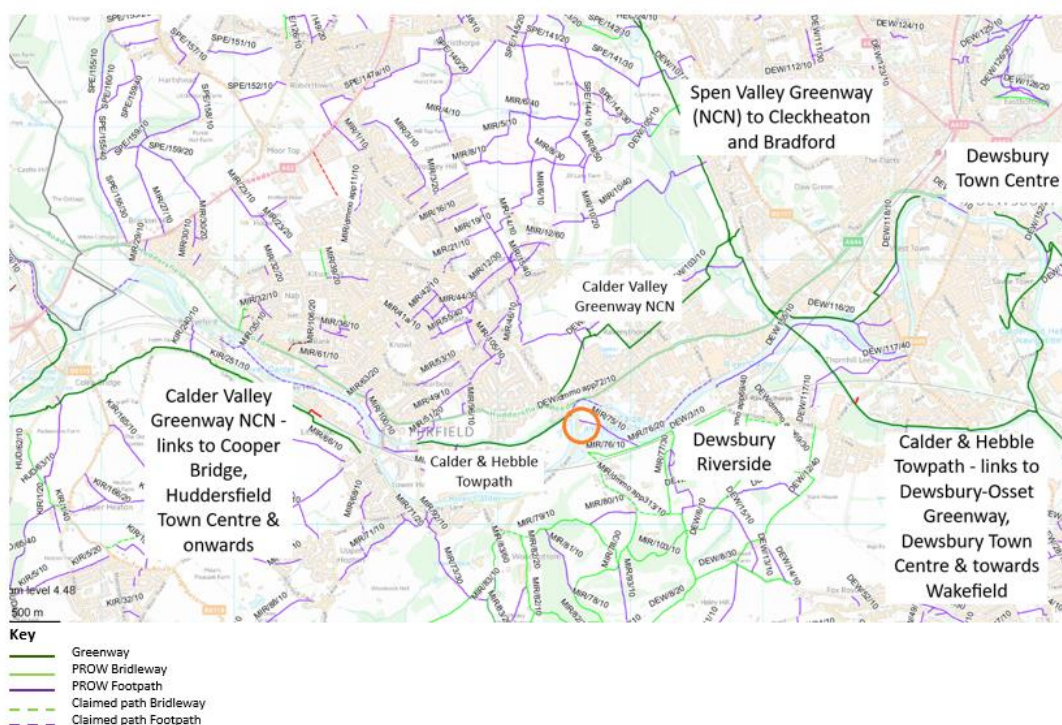
Answers should explain the impact on connecting local people to facilities, services, employment, education and local communities. The response should also summarise the extent of diversions for communities, which modes are impacted and how. Applicants may wish to use the guidance in TAG A4-4 Social Impact Appraisal.

The Shepley Bridge scheme is essential to preventing community severance and maintaining connectivity for all transport modes. The bridge is a critical link for residents accessing employment, education, services, and leisure destinations in Mirfield and Dewsbury, including Shepley Marina, Dewsbury Golf Club. It also supports businesses south of the bridge by ensuring reliable access for deliveries and HGV movements, which are vital for their operations and economic viability. For businesses south of the bridge, its absence would mean no HGV direct access to business premises requiring use of long diversion routes, which as previously mentioned also face other encumbrances. Additionally, longer diversion routes for motorised traffic would result in higher vehicle emissions, worsening air quality and environmental conditions in surrounding communities.

Currently, the bridge reduces severance for walking, wheeling, and cycling, though its narrow carriageways and limited active travel facilities restrict safe use. Bridge closure would exacerbate these issues, forcing non-motorised users to reroute via Calder Road or the railway underpass near Rhubarb Lane, significantly increasing journey distances and limiting access to parks, open spaces, and local destinations. This would negatively impact physical and mental wellbeing and hinder the goals of Kirklees Council's Health and Wellbeing Strategy 2022–2027, which prioritizes the creation of Healthy Places. The location of Shepley Bridge in relation to wider active travel network including crossings is shown below.

The scheme ensures sustainable connectivity for all modes, reducing severance and supporting economic, social, and environmental resilience.

Shepley Bridge - Wider Active Travel Context (traffic-free routes)

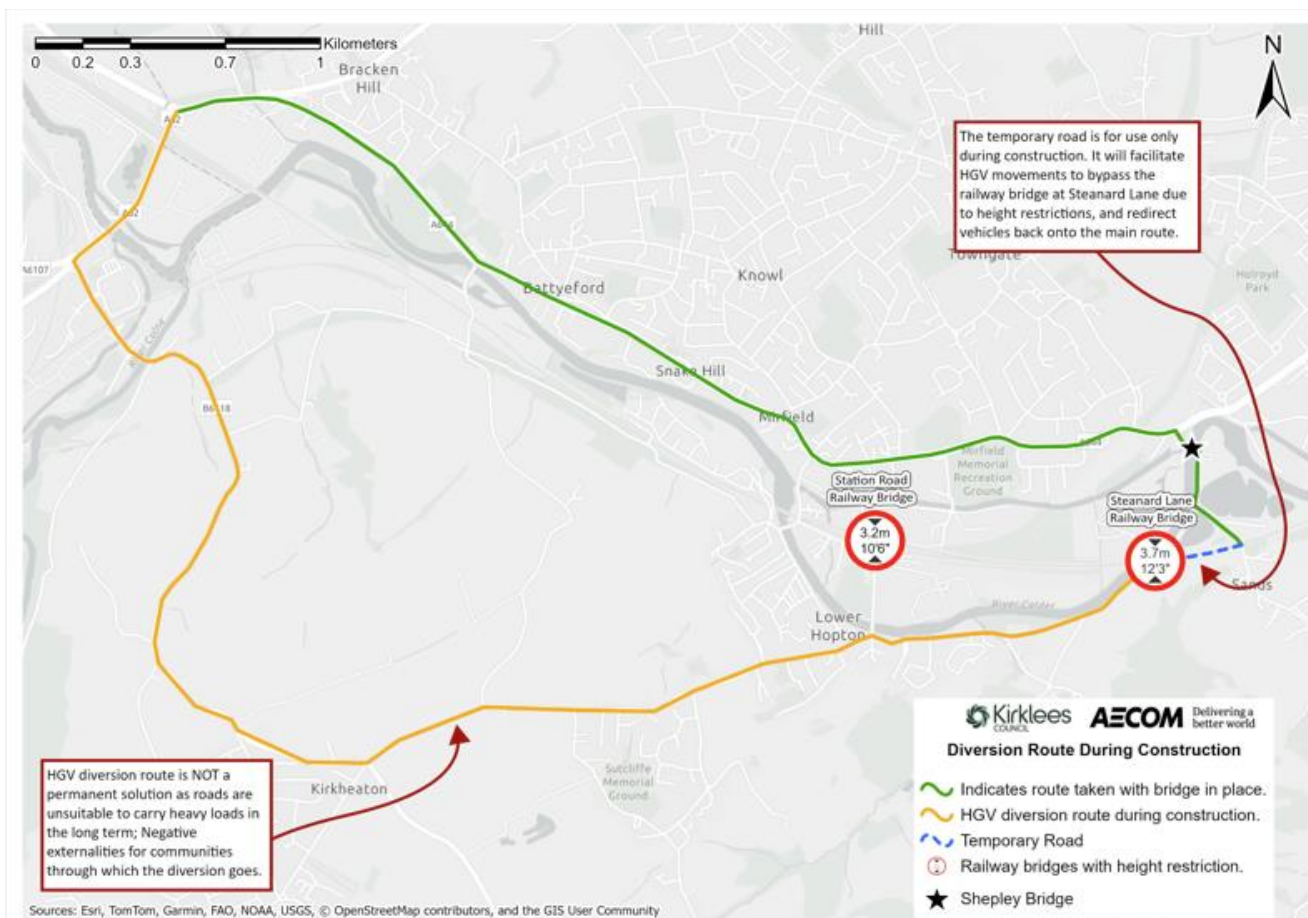


- i) Summarise the volumes of traffic by mode that are impacted as a result of any community severance (Maximum 250 words).

Explain the impacts on non-motorised and motorised traffic flow. Describe how diversions may differ by mode.

Closure of Shepley Bridge would sever a key local crossing and increase travel distance and journey times for both residents and businesses. We have identified three principal diversion movements affecting users:

- **Through traffic (cars/LGVs)** travelling between Huddersfield Road and areas west of the railway bridge. Due to the rail bridge height restriction, this movement is effectively limited to cars and LGVs which would divert primarily via Hopton New Road.
- **Local trips (cars/LGVs)** between Huddersfield Road and the Sands Lane business area would also divert via Hopton New Road, adding time and distance for employees, customers and servicing trips.
- **Business HGV movements** between Huddersfield Road and Sands Lane would no longer be possible. There is no existing suitable diversion route because the railway bridge height restriction prevents most HGVs using Steanard Lane. Maintaining HGV access during the construction phase is possible via a short section of temporary road to the south of the rail line, thus enabling a much longer diversion via Hollin Hall Lane, Bog Green Lane and Cooper Bridge Road. However, this option is not suitable as a long-term solution due to environmental consequences associated with HGVs in residential areas. The likely diversion route is illustrated below.



The table below is a snapshot of traffic flow counts at the junction of Steanard Lane and Sands Lane from surveys undertaken in October 2023. It indicates a combined 24-hour AADT total of 3,232 cars, 480 LGVs, 82 HGVs (OGV1+OGV2), 69 cyclists and 208 pedestrians crossing the bridge. The closure of the bridge would be particularly disruptive for walking access to local facilities and communities by requiring longer, less direct alternative crossings. The breakdown by vehicle type is shown below.

Diversions	Movement	24hr AADT							
		Ped	PC	MC	Car	LGV	OGV 1	OGV 2	PSV
Through Traffic	Steanard Ln N to S	0	31	17	1605	227	22	2	1
	Steanard Ln S to N	0	37	14	1185	194	37	1	3
Local Diversion	Steanard Ln (N) left turn into Sands Ln	96	0	0	211	40	2	2	0
	Sands Ln right turn to Steanard Ln (N)	112	1	0	230	20	6	10	0
	From ALL Movements	208	69	31	3232	480	67	15	4

2.2 Economic Case

This section sets out the assessment for Value for Money of the project. Applications must use the provided economic toolkit, but if alternative methods have also been used to support the economic case, this section provides the opportunity for the results to be reported.

- a) Set out the key sources for the economic benefits (e.g. journey-time savings, carbon, etc.) of the scheme. (Maximum 250 words)

Describe the main benefits the scheme is expected to deliver.

The scheme delivers three main benefits:

- Maintains access to local businesses that would otherwise face closure or relocation due to HGV restrictions on alternative routes.
- Provides journey time and distance savings for current bridge users, reducing reliance on more congested diversion routes.
- Enhances active travel infrastructure by maintaining and enhancing a vital, segregated link for walking and cycling.

Without the bridge, several businesses would lose HGV access because the only alternative route is height-restricted. At least two businesses in the Sands Lane area would be unable to operate and would be forced to close or relocate.

The bridge is also essential for local traffic, offering more direct routes and easing congestion elsewhere. Its removal would result in longer, less efficient journeys for many users.

Additionally, the bridge is a critical component of the local active travel network. It supports pedestrian and cyclist movement, especially with a major new housing development of 4,000 homes planned to the east. The proposed active travel link between this development and the bridge will improve access to destinations along the A644 corridor, encouraging more journeys by foot and bike.

In summary, the scheme safeguards local businesses, improves travel efficiency, and supports sustainable transport options for the community.

- b) Summarise the estimate of the present value of costs and benefits (in 2023 present values, market prices) and the benefit cost ratio of the scheme from the economic toolkit.

Present Value Costs (PVC)	£17,954,268
Present Value Benefits (PVB)	£29,436,195
Benefit to Cost Ratio (BCR)	1.64

- c) Explain assumptions used in the economic toolkit to estimate the present value scheme costs.
(Maximum 250 words)

Describe the basis of the costs input to the economic toolkit and provide justification for the risk and optimism bias values that have been used.

Do Something Scenario

Costs inputs for the scheme have been built up using *Spon's* price book based on 2026 prices. Costs include for total direct works cost, preliminaries, design costs, project management, site investigation, contingency and risk allowance.

Total direct works costs for the structure have been calculated on a cost per square metre basis assuming an average value between the upper and lower bounds owing to the medium level complexity of the proposed structure. Direct works costs also include estimates for the approach roads and retaining walls, site clearance, earthwork clearance and materials, piling and finishes. These were calculated using estimated material volumes. Design, planning and preliminaries costs have been calculated as a factor of direct work costs. Preliminaries were factored using guidance from the *Structure Asset Management Planning Toolkit* by the UK Bridges Board.

The risk and contingency values have been removed from the cost estimate for the purposes of the Economic Assessment. Optimism Bias of 55% has been applied in the Economic Case. This is the Bridges and Tunnels value for Stage 1 projects.

Maintenance costs have been assumed for the new bridge as in the table below:

MAINTENANCE COSTS OVER 60 YEARS		
Scheme	Cost	Notes
Bearing Replacement Scheme	£500,000.00	Assuming 2No. £250,000 bearing replacement schemes.
Joint replacement scheme	£200,000.00	Joints will only be required if a 60m span is adopted and a non-integral arrangement is required at one end.
Waterproofing replacement	£1,600,000.00	Assuming 2No. £800,000 waterproofing schemes.
Inspections	£74,500.00	Assuming 10no PIs (6 year interval) with underbridge unit at £7k each (based on previous tendered cost) and 30no GIs (2 year interval) at £150 each (based on in-house provision).
Assessments	£50,000.00	
Routine Maintenance	£300,000.00	Including potential parapet impact damage from bridge strikes.
Total	£2,724,500.00	

Year	Cost (Exc Risk and OB)	Sunk Cost (to End July 26)	Cost (Exc Risk, OB and Sunk Cost)
2026	£262,260.64	£97,758.40	£164,502.24
2027	£1,306,167.80		£1,306,167.80
2028	£1,561,480.14		£1,561,480.14
2029	£12,138,800.77		£12,138,800.77
2030	£271,629.89		£271,629.89
2031	£75,359.27		£75,359.27
2032	£16,423.43		£16,423.43
2033	£16,801.05		£16,801.05
2034	£17,178.67		£17,178.67
2035	£1,451.22		£1,451.22
Total	£15,667,552.88	£97,758.40	£15,569,794.48

Do Minimum Scenario

In the Do Minimum Scenario, the bridge will have to be demolished and a replacement Utility Bridge built. This has been costed in the same way as the new bridge with the costs being included as “maintenance” in the Toolkit. Excluding Risk and Contingency this is forecast to cost £2,175,715 in 2030.

d) Explain the sources of data and assumptions used to complete the Scheme Details section of the economic toolkit. (Maximum 250 words)

Provide details of the source of all data and associated assumptions (e.g. provenance, data checks, etc).

The scheme opening year is assumed to be 2030 and the standard appraisal period of 60 years has been applied.

Time and distance from Steanard Lane/Sands Lane to the Strategic Route Network A644 Huddersfield Road via the bridge and diversion routes have been obtained from the Kirklees Transport Model.

The traffic flows were derived from a one-day manual classified count in October 2023 at Steanard Lane / Sands Lane junction just south of Shepley Bridge. This has been adjusted to AADT using factors developed from historic counts on similar roads across Kirklees.

3 scenarios have been considered in the Toolkit:

- 1) Through traffic
- 2) Traffic accessing Sands Lane from the A644 East
- 3) Traffic accessing Sands Lane from the A644 West

Each has a different diversion route and number of vehicles. The detailed diversion routes are set out in the Toolkits. The congestion band has been selected based on whether the diversion route is mainly on the A644 or more minor roads. The A644 suffers significant congestion during most of the working day. The time and distance of each route and diversion route is set out in the table below.

Scenario	Bridge Closed		With Bridge Scenario		Time Change	Distance Change
	Time (S)	Dist (Kms)	Time (S)	Dist (Kms)		
Through Traffic	285	2.09	274	1.99	-11	-0.1
Sands Lane to A644 East	457	3.62	57	0.31	-400	-3.31
Sands Lane to A644 West	310	2.34	180	1.36	-130	-0.98

The benefits from the 3 scenarios have been summed as set out in the table below. No benefits have been assumed for HGVs as HGV traffic would have to cease if there was no bridge. This provides a conservative assessment of the benefits.

Monetised Benefits	Route Options - Benefits and Costs (£2023 PV)			Total Benefits £)
	Through Traffic (Cars+LGVs)	Local Diversion - Cars +LGVs		
		Sands Lane to A644 East (Dewsbury)	Sands Lane to A644 West (M62)	
Journey Times	2,350,275	6,929,622	2,061,330	11,341,227
Vehicle Operating Costs	299,880	917,834	235,059	1,452,773
External Impacts				
Decongestion	4,063,344	11,364,468	367,606	15,795,418
Accidents	227,533	607,876	167,062	1,002,471
Local Air Quality	11,614	35,777	9,276	56,667
Noise	15,169	91,549	16,498	123,216
Greenhouse Gases	91,482	311,664	81,968	485,114
Indirect Taxation	26,010	24,207	12,987	63,204
Infrastructure Carbon	-883,895	0	0	-883,895
Private sector capital costs	0	0	0	0
Private sector operating, maintenance and renewal (OMR) costs	0	0	0	0
Present Value Benefits	6,201,413	20,282,996	2,951,786	29,436,195
Costs				
Local Authority capital costs	4,036,572			4,036,572
Central Government capital costs	16,241,991			16,241,991
Infrastructure maintenance (external impacts)	-6,251	-65,364	-37,560	-109,175
Public sector operating, maintenance and renewal (OMR) costs	-2,215,120			-2,215,120
Present Value Costs	18,057,192	-65,364	-37,560	17,954,268
Benefit Cost Ratio				
Net Present Value				11,481,928
Benefit Cost Ratio				1.64

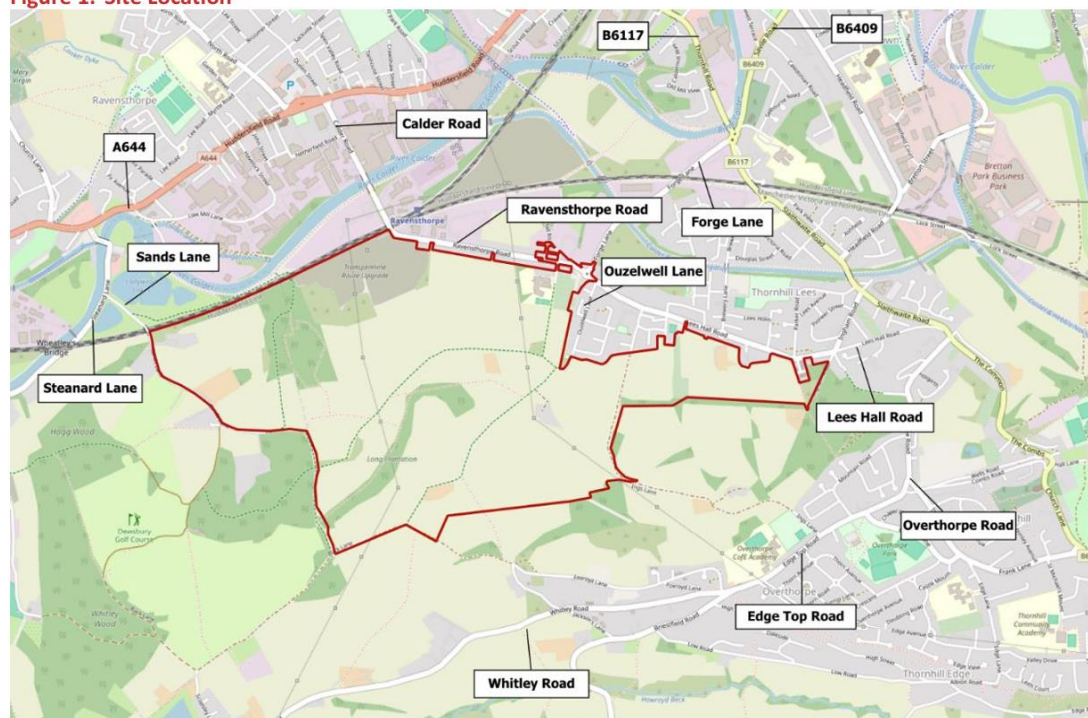
e) Describe significant non-monetised impacts of the scheme. (Maximum 250 words)

Consider any economic, environmental and social impacts that have not been monetised to fully describe the impacts of delivering the scheme.

One of the main economic impacts of the bridge closure is the reliance of local businesses on the bridge. There are at least 2 long established businesses who would not be able to operate HGVs in and out of their premises without the bridge. They would therefore be forced to close or relocate if a replacement bridge was not provided. They have a combined turnover of around £100M. There are other businesses which would need to adapt their operation, and that of their suppliers, to use smaller vehicles and use the diversion routes that require them to pass under the height restricted railway bridge.

There is a proposed development site in Kirklees Local Plan – see Figure 1. This has capacity for up to 4000 houses. While there are no current plans for the site to have vehicular access via Steanard Lane / Shepley Bridge it is proposed that there will be an active mode access into the western end of the site and this relies on there being a bridge over the river and canal in order to link the site with the developments along the A644 corridor either side of the Steanard Lane junction. Without this bridge, the ability of this development site to achieve high levels of active travel trips will be compromised.

Figure 1. Site Location¹



- f) Where an alternative economic assessment has been undertaken to support a case for investment, please summarise the data used, the assumptions made and the results obtained (in 2023 present values, market prices). (Maximum 250 words)

Some schemes may have been subject to economic assessment to support previous cases for investment. Summarise the key details of these here, including details of the data, assumptions and results (e.g. present value of costs and benefits and benefit cost ratio).

An assessment of the replacement bridge has also been undertaken using the highway element of the new Kirklees Transport Model. This is a strategic SATURN assignment model covering the whole of Kirklees. Results from the model have been appraised using TUBA. This model does not have sufficient spatial detail to assess the impact of very local trips which start / end in the Sands Lane area however, it can assess “through” traffic impacts. The assessment is based on the existing bridge having to close in 2030 as soon as the new bridge is available.

A comparison between the modelled and observed traffic flows on the bridge are set out below. In all cases the flows pass the TAG criteria for link flow validation.

Time Period	Count		Model		Difference		%Difference	
	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound
AM	129	205	128	190	-1	-15	-1%	-7%
IP	103	107	116	130	13	23	13%	21%
PM	151	359	157	265	6	-94	4%	-26%
12 Hour	1354	1721	1409	1918	55	197	4%	11%

Two forecast years (2030 and 2050) were assessed for both Do-Minimum and Do Something TEMPro growth factors for Kirklees were applied to the base year matrices to generate future year forecast matrices.

The BCR ratio below is artificially low because the strategic model is not detailed enough to consider the impact of the local trips to / from Sands Lane area. The TUBA analysis estimates benefits of £10.453M. This is comparable with the £7.1M of benefits from the “Through Traffic” element of the

Toolkit assessment. Based on this, it is reasonable to suggest that the true benefits of the scheme could well be higher than the £30.3M of benefit forecast using the Toolkit however, the £10.453M benefit has been used in the BCR calculation below.

Present Value Costs (PVC)	£17,954,268
Present Value Benefits (PVB)	£10,453,000
Benefit to Cost Ratio (BCR)	0.58

To enable the assessment of the economic case, please submit the supporting information listed below to StructuresFundTAB@dft.gov.uk

- Economic Toolkit
- Any supplementary reports which support the economic case

2.3 Commercial Case

This section captures information on the commercial viability and procurement strategy for the planning and delivery of the scheme being promoted.

a) Explain the LHA capacity and experience delivering comparable schemes. (Maximum 250 words)

Where capacity is challenging for local authorities, explain how any capacity gaps may be addressed to ensure delivery of the scheme.

The Authority has a strong track record of developing and delivering highway and civil engineering infrastructure schemes of comparable complexity, value and stakeholder sensitivity. Kirklees is recognised as one of the highest-performing district partners within the West Yorkshire Combined Authority, consistently delivering transport and infrastructure projects to programme and within approved funding allocations. This demonstrates the Authority's ability to manage funding, programme, risk and stakeholder expectations effectively.

Through its highways, structures and project management functions, the Authority has extensive experience delivering projects through the full lifecycle, from business case development and statutory approvals to detailed design, procurement, construction and handover. Established governance arrangements, including senior leadership oversight, project boards, commercial assurance and financial management processes, support the successful delivery of capital programmes funded through local, regional and national sources.

The project will be delivered by an experienced multidisciplinary team comprising project managers, highways and structures engineers, commercial and procurement specialists, finance officers and stakeholder engagement professionals. Specialist technical, legal and commercial expertise can be accessed through established framework arrangements where required.

The Authority has significant experience procuring and managing consultants and contractors under NEC contracts and operates robust systems for risk management, cost control, programme management and contract administration. Lessons learned from previous infrastructure schemes

have informed the proposed delivery approach, including the use of ECI to improve buildability and increase cost and programme certainty.

Relevant bridge delivery experience includes the £30M Huddersfield Narrow Canal restoration programme, incorporating bridge and tunnel reconstruction works, and the £1.7M strengthening and refurbishment of the Grade II listed Cleggford Bridge in Dewsbury.

b) Explain the delivery plans and procurement strategy for the scheme. (Maximum 250 words).

This section should include explanation of the various stages of the scheme that are required for completion. This may include design, consents and construction processes.

The scheme will be delivered through four stages: bid development, scheme development, construction delivery and post-completion handover. Kirklees Council has appointed AECOM to support the Structures Fund submission, with technical assurance provided by WSP.

The development stage will include design, planning consent, environmental assessments, Environment Agency approvals, stakeholder engagement, utility coordination and land acquisition.

The bridge crosses the River Calder within a floodplain; engagement with the Environment Agency is underway to manage consenting risks. C2 enquiries have been completed, and C3 enquiries will be issued during design development.

A land assembly exercise is underway and land required for the replacement bridge, associated infrastructure, temporary link and site compound has been identified.

A pre-application planning submission and engagement with the planning authority is underway.

Professional services will be procured through public sector frameworks, including YORconsult under NEC PSC contracts. The principal contractor will be procured through an Early Contractor Involvement approach using an NEC4 ECC contract to improve constructability and certainty.

Statutory undertaker diversions can transfer onto the new bridge following completion, avoiding impacts on the critical path.

The replacement bridge will be constructed adjacent to the existing structure to maintain access during delivery. Design will incorporate engineering requirements, including drainage, lighting and climate resilience measures.

The programme allows for development and approvals between August November 2026 and August 2028, with construction completing in March 2030. Following completion, the asset will be handed over to the Council's asset management team.

Critical path dependencies and associated timescales shown in the table below:

Critical dependency activity	Consenting body	Start date	End date
Land Acquisition	CRT, Owners of Ship Inn, Kirklees Council	April 2027	August 2028
Planning Consent	Kirklees Council Planning Authority	May 2028	August 2028
Habitat, environmental and geotechnical Surveys	None however dependant on FRAP	April 2027	Feb 2028

Flood Risk Activity Permit	Environment Agency	March 2027	August 2028
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- c) Describe the delivery risks associated to the project delivery. This should include risks which may challenge the end date for the Structures Fund.

Explain what risks have been identified and how might these be mitigated.

Risk / Dependency	Potential Impact	Proposed Mitigation
Planning and Environment Agency Consents	Delays to programme and increased costs arising from planning conditions, demolition requirements, environmental permits and mitigation measures.	Early engagement with the Planning Authority and Environment Agency, lessons learned workshop and appointment of a planning consultant during the development stage.
Land Acquisition and Third-Party Rights	Delays and additional costs associated with securing temporary or permanent land interests and rights from landowners.	Early engagement with affected landowners, appointment of specialist advisers and commencement of a Compulsory Purchase Order (CPO) process following a successful funding bid. Programme and costs assume the both routes including the need for a CPO.
Utility Diversions and Protection Works	Significant cost and programme impacts arising from complex diversion requirements, utility company approvals and interdependencies between works.	Early engagement with statutory undertakers, coordinated diversion planning, and integration of utility works into the development and delivery programme.
Flooding During Construction	Delays, disruption to construction activities and increased costs resulting from flood events affecting the site.	Programme and contract documentation will allow for flood events. Contractors will be required to demonstrate mitigation measures within tender submissions, supported by historic flood data. Contract mechanisms will be considered to manage flood-related costs.
Traffic Diversions and Business Access	Potential disruption to local businesses and impacts on access for customers, deliveries and operations.	Early consultation with affected businesses to understand vehicle movement requirements and inform the construction methodology, traffic management arrangements and diversion strategy.
Utility Rights Over Third-Party Land	Potential delays where utility diversions require access across privately owned land.	Utility companies can exercise statutory rights to divert apparatus over third-party land, subject to notice and compensation requirements.

- d) Explain whether liaison with any applicable third-party organisations present a particular risk to delivery and whether those organisations have agreed to support the scheme's delivery. (Maximum 250 words)

In this section set out if the scheme requires support from other organisations, and the nature of any engagement undertaken to date.

Stakeholder	Interest / Role in Scheme	Key Risks / Dependencies	Mitigation and Current Position
Canal and River Trust (CRT)	Bridge crosses the Calder and Hebble Navigation; CRT owns adjacent land and towpath areas. Temporary access and potential permanent land acquisition may be required.	Land acquisition, access agreements, navigational requirements and securing necessary approvals.	Early engagement has commenced and discussions have been positive. Ongoing liaison will ensure land, access and navigation requirements are addressed and agreements secured in a timely manner.
Environment Agency (EA)	Regulator for flood risk and environmental permitting associated with works adjacent to the River Calder.	Flood Risk Activity Permits, environmental approvals and	Early consultation is underway to confirm approval requirements, supporting information and lead times. Consenting activities have been

Stakeholder	Interest / Role in Scheme	Key Risks / Dependencies	Mitigation and Current Position
		associated programme delays.	incorporated into the programme to reduce delivery risk.
Adjacent Landowners	Potential requirement for permanent and or temporary land acquisition, including land associated with the Ship Inn site (recently acquired by owners of Chappelow Sports Turf) and other neighbouring properties.	Delays to land assembly and acquisition processes.	Early engagement with affected landowners has commenced and will continue throughout scheme development to confirm requirements and discuss acquisition options.
Statutory Undertakers (Utilities)	Existing utility apparatus affected by the bridge replacement works.	Utility diversions, approvals and programme impacts.	Utility record searches have been completed and affected undertakers identified. Diversions will be coordinated during design development and transferred onto the new bridge before demolition of the existing structure.
Local Planning Authority	Responsible for planning approvals and associated conditions.	Planning consent and programme implications.	Early engagement has been undertaken to identify planning requirements and incorporate approval timescales into the programme.

No objections have been identified by third-party stakeholders to date. Appropriate programme allowances have been included to secure the approvals, agreements and land interests required to support successful delivery of the scheme.

2.4 Financial Case

a) Provide estimated outturn costs (£million) for the scheme in the table below. The table should be completed with total costs, requested DfT investment, LHA contribution and third-party contributions. Only capital funding costs should be included in the table.

To note, the prospectus sets out that:

- schemes should be delivered by end-2029/30.
- schemes with early delivery (i.e. in 2026/27) may be prioritised.
- schemes should not be affordable from existing LA budgets.
- local contributions are required for proposed schemes.
- preference will be given to schemes with higher local contributions and/or those where there is a high percentage of local contribution.
- preference will also be given where the local contribution is:
 - not from other central government funding sources.
 - partially funded from other third-party sources.

	2026/27	2027/28	2028/29	2029/30	Total
Requested DfT investment	£494,248	£1,252,267	£2,800,227	£13,671,990	£18,218,731
LA contribution	£123,562	£313,067	£700,057	£3,417,997	4,554,683
Other contribution	£0	£0	£0	£0	£0
Total costs	£617,809	£1,565,333	£3,500,284	£17,089,987	£22,773,414

b) Outline how the LHA has sought to manage this scheme from existing budgets and why that has been unsuccessful.

Explain the local approach to managing the existing DfT contribution across its highway assets and what specific challenges have meant that this structure was not repaired earlier.

The authority has sought to manage this structure within existing structural maintenance budgets; however, this has not proven feasible due to the scale of the necessary intervention relative to available funding. The estimated scheme cost to replace the bridge is in the order of £23m, whereas the current annual structural maintenance budget for the entire asset stock is approximately £1.2m. This funding must support the relevant inspection programme, planned maintenance, and reactive works across a portfolio of highway structures with a total asset value of circa £1bn.

Within this context, available resources are necessarily prioritised towards safety-critical interventions and network risk management, limiting the ability to allocate funding to a single major scheme of this magnitude. While opportunities to phase or defer elements of the works have been considered, the nature of the required intervention does not readily lend itself to such phasing without compromising efficiency or increasing overall cost, delivery risk and impact on local businesses.

As a result, it has not been possible to progress the scheme through existing budgets, as significant external or additional funding is required to enable delivery within an acceptable timeframe.

c) Describe the whole life costs anticipated without the proposed scheme. Explain how the proposed scheme mitigates costs from a whole life perspective. (Maximum 250 words)

Explain maintenance considerations for maintaining the structure and compare these to the scheme cost to demonstrate the financial benefit of delivering this scheme.

Without the proposed bridge replacement scheme, whole life costs for Shepley River Bridge would remain high and uncertain. Constructed around 1880, the bridge is well beyond a reasonable design life and has inherent limitations in load capacity and durability. A “do minimum” approach would rely on ongoing inspections, structural assessments, reactive maintenance and piecemeal repairs, while retaining existing lane and weight restrictions and the risk of unplanned intervention following further deterioration.

Whole life costs would be driven by recurring maintenance, traffic management and an increasing likelihood of major repairs or emergency works. As the bridge crosses a navigable waterway, approvals from relevant stakeholders would be required for future interventions, increasing costs and programme risks through the need for extensive temporary works.

Over a 30-year period, these activities are estimated to cost £5–8 million, including maintenance, targeted repairs and traffic management. There would also remain a risk of disruption-related economic impacts, with no assurance that the bridge could remain safely operational throughout this period.

The proposed offline bridge replacement would require an investment of approximately £20 million and would provide a modern, compliant asset with a typical 120-year design life. It would reduce maintenance requirements to planned, low-cost activities, remove load restrictions, improve resilience and reduce user disruption. Delivering the bridge offline would minimise impacts on traffic and businesses, reduce the need for temporary works and service diversions, and provide an opportunity to improve the existing highway alignment.

Overall, the scheme would replace an estimated £5–8 million of reactive expenditure over 30 years on a substandard asset with a £20 million investment in a long-life structure (typically 120 years), delivering improved reliability, resilience, reduced maintenance liabilities and better long-term value for money.

d) Summarise how the cost estimate for the scheme has been developed.

Set out the basis for the estimate. For example, is it based on an estimate from similar work, developed by a quantity surveyor or a contractor quotation. Describe the inflation assumptions used and the rationale for these.

The scheme cost estimate has been developed using a bottom-up estimating approach based on the current level of design development, available site information and known project requirements. The estimate includes allowances for all key elements of the scheme, including design development, surveys and investigations, statutory undertaker diversions, environmental mitigation, traffic management, bridge construction, project management and other associated delivery costs.

Cost estimates have been informed by benchmark data from comparable bridge and highway infrastructure schemes delivered by Kirklees Council and other local authorities, together with current market rates and industry cost information. Assumptions have been reviewed by the project team and specialist technical advisors to ensure they are appropriate for the scope and complexity of the scheme.

Given the current stage of scheme development, a Quantified Risk Assessment (QRA) has not yet been undertaken. Instead, development stage optimism bias uplifts set out in HM Treasury Green Book have been applied as a proxy for risk to reflect the level of uncertainty associated with the estimate at this stage. As the scheme progresses through design development, surveys, investigations and stakeholder engagement, project risks will be further defined and the cost estimate refined accordingly.

The proposed Early Contractor Involvement (ECI) approach will provide additional assurance by enabling the contractor to contribute to buildability reviews, construction methodology development, programme optimisation and target cost development. This will support the production of a more robust and market-tested cost estimate prior to construction. The estimate will remain subject to ongoing cost assurance, change control and financial monitoring throughout the project lifecycle.

e) Explain the financial risks that have been considered and factored into the estimate and what contingency is allowed for.

Explain the key risks and their impact on the cost and programme, including how these link to the overall contingency allowed for in the estimate.

The key risks to cost and programme are utility diversions, land acquisition, flood risk activity permits (FRAPs)/environmental approvals, ground conditions, design/planning and construction methodology. Where costs can be reasonably identified, specific allowances have been included in the base estimate, with BCIS Road Cost Index inflation applied.

Residual uncertainty remains because some risks cannot yet be fully quantified. The percentage-based allowances set out below are used to derive the level of contingency considered appropriate at this stage of development and have been broken down by WYCA assurance stage to reflect the assurance process through which the scheme will progress for match funding. As the project matures, these percentage uplifts will be reviewed and replaced by a Quantified Risk Allowance and a defined contingency element. Management of any cost overruns will be addressed through the project's ultimate risk and contingency provision, once developed.

Forecast Costs

Stage	Stage Cost (Excluding R+C)	Contingency as a %	Contingency Sum	Total Stage Cost (Including R & C)
Strategic Assessment	£ 102,456.62	0.00%	£ -	£ 102,456.62
Strategic Outline Case	£ 429,460.66	20.00%	£ 85,892.13	£ 515,352.80
Outline Business Case	£ 1,414,871.11	20.00%	£ 282,974.22	£ 1,697,845.33
Full Business Case	£ 98,516.38	10.00%	£ 9,851.64	£ 108,368.02
Delivery	£ 13,435,623.98	50.00%	£ 6,717,811.99	£ 20,153,435.97
Post Delivery	£ 186,624.13	5.00%	£ 9,331.21	£ 195,955.33
Totals	£15,667,552.88		£ 7,105,861.19	£22,773,414.04

FRAPs

The Environment Agency is a key stakeholder due to permit, approval and environmental mitigation requirements. FRAP-related delays could affect delivery and increase costs, so early consultation has started to confirm requirements and timescales. The programme allows six months for site investigation permits and six months for construction-phase permits.

- f) Provide details of the local and other contributions, including the relevant funding sources and the certainty of whether these contributions are available. (Maximum 250 words)

Describe the various sources of funding and their availability.

The West Yorkshire Combined Authority will provide match funding up to 20% of scheme costs subject to assurance processes.

Based on current forecast costs, including Risk and Contingency, this would equate to £4.6m (rounded), refer to funding letter from WYCA.

2.5 Management Case

Outlines how the project will be delivered and managed effectively.

- a) Select the option which best describes the current stage of the project:

- ☐ No design, benchmarked against other schemes only
- ☒ Design concept only, no supplier yet engaged
- ☐ QS estimate / early supplier engagement, stable design

b) What is the anticipated start date for construction for the scheme?

August 2028

c) What is the anticipated end date for construction for the scheme?

March 2030

d) Summarise the approach to the management of the delivery of the scheme. This should be from the current point of development to completion.

This should include the management of resources, including the supply chain, to ensure delivery and an explanation of any evidence that provides certainty of delivery within the timescale.

The scheme will be delivered through a structured project management and governance framework from the current stage of development through to completion and benefits realisation. Overall responsibility for delivery will rest with the Strategic Transport and Delivery service, supported by an experienced multidisciplinary team comprising project management, highways and structures engineers, procurement and commercial specialists, finance officers and communications and stakeholder engagement professionals. The project is currently progressing through design development, surveys and investigations to further define scope, programme, risks and costs. Appropriate governance arrangements will be maintained throughout, including project board oversight, regular reporting, risk management, financial monitoring and change control processes. A key element of the delivery strategy will be the procurement of a contractor through an Early Contractor Involvement (ECI) approach. During the pre-construction phase, the contractor will work collaboratively with the Council and design team to develop buildable solutions, refine construction methodologies, identify and mitigate risks, optimise traffic management arrangements and establish a robust target cost and delivery programme. Resource planning and supply chain management will be undertaken throughout the project lifecycle to ensure the availability of the skills, materials and specialist contractors required to deliver the scheme. The ECI phase will facilitate early engagement with the supply chain, statutory undertakers and key stakeholders, helping to identify programme constraints, secure specialist resources and mitigate delivery risks at an early stage. Programme, resource and financial performance will be monitored through established project controls, enabling emerging issues to be identified and addressed proactively. A comprehensive communications and stakeholder engagement plan will be implemented throughout the project lifecycle. This will ensure that residents, businesses, elected members, transport operators, emergency services, statutory undertakers and other key stakeholders are kept informed and engaged, helping to manage disruption and maintain stakeholder confidence during delivery. Confidence in the proposed delivery programme is supported by Kirklees Council's strong track record of delivering transport and infrastructure schemes to programme and within approved funding allocations. As one of the highest-performing district partners within West Yorkshire, the Council has established project management, commercial and governance processes that provide assurance that the scheme can be delivered within the proposed timescales. Following completion of the ECI stage, the scheme will progress into construction, supported by established NEC contract management processes, including programme management, early warning procedures, compensation event management and performance monitoring. Throughout delivery, the Council will actively manage risks, stakeholder engagement, cost control and programme performance to ensure successful delivery of the scheme. Upon completion of construction, the project will progress through testing, commissioning, asset handover and defects management. A Benefits Realisation Plan will be

implemented to monitor and evaluate the scheme against its intended objectives, including improvements in network resilience, safety, accessibility and asset condition, ensuring that the anticipated outcomes and value for money are achieved.

- e) Explain the key delivery risks and challenges and how the local authority intends to address them. Answers should also explain any financial risks and how any cost overruns will be addressed by the local authority. (Maximum 250 words)

Explain how key financial risks are being managed and mitigated. Explain how other risks are being managed (e.g. are there any points of complexity or requirements regarding planning or land ownership?).

The principal delivery risks include scope definition, utility diversions, land acquisition, statutory approvals, environmental requirements and construction delivery. Further surveys, investigations and engagement may affect scope, cost and programme.

Utility diversions are a key risk due to statutory undertakers' assets in the bridge corridor. Delays in approvals or diversion works could affect programme and cost; however, utility record searches have been completed and early engagement with statutory undertakers will continue. The preferred option, a new bridge on a new alignment, reduces this risk by avoiding temporary diversions and enabling the new bridge to open to traffic if diversion works are delayed.

Land requirements for the Canal & River Trust, the Ship Inn and temporary diversion road also present cost and programme risks. Early engagement with affected landowners will help minimise delays in securing land and legal agreements.

Environment Agency, environmental and planning approvals are also key risks, and early discussions have commenced to confirm requirements, timescales and supporting information.

Cost estimates will be refined as design, surveys, approvals and methodology develop. At this stage, cost risk is managed through proportionate contingency allowances, which will be reviewed and replaced by a Quantified Risk Allowance and defined contingency provision as the scheme matures.

Early Contractor Involvement will improve cost certainty through buildability reviews, programme optimisation and target cost development.

- f) Describe the key project controls that will be employed by the local authority to ensure that schemes are delivered on time and in budget. (Maximum 250 words)

Provide details of the methods that the authority uses to ensure timely delivery within budget.

The principal delivery risks include scope definition, utility diversions, land acquisition, statutory approvals, environmental requirements and construction delivery. Further surveys, investigations and engagement may affect scope, cost and programme.

Utility diversions are a key risk due to statutory undertakers' assets in the bridge corridor. Delays in approvals or diversion works could affect programme and cost; however, utility record searches have been completed and early engagement with statutory undertakers will continue. The preferred option, a new bridge on a new alignment, reduces this risk by avoiding temporary diversions and enabling the new bridge to open to traffic if diversion works are delayed.

Land requirements for the Canal & River Trust, the Ship Inn and temporary diversion road also present cost and programme risks. Early engagement with affected landowners will help minimise delays in securing land and legal agreements.

Environment Agency, environmental and planning approvals are also key risks, and early discussions have commenced to confirm requirements, timescales and supporting information.

Cost estimates will be refined as design, surveys, approvals and methodology develop. At this stage, cost risk is managed through proportionate contingency allowances, which will be reviewed and replaced by a Quantified

Risk Allowance and defined contingency provision as the scheme matures.

Early Contractor Involvement will improve cost certainty through buildability reviews, programme optimisation and target cost development.

Any cost overruns will be managed through the project's risk and contingency provision, supported by governance, change control, cost assurance and affordability review by Kirklees Council.

- g) Set out if the scheme requires permission from other bodies, and how this permission can be obtained to ensure delivery.

Provide details of the permission required, the likely timescale for obtaining permission and any potential barriers to obtaining that permission.

The scheme will require permissions, approvals and agreements from several external bodies. These will be managed through a live consents strategy aligned to the project programme, risk register and governance arrangements. The critical consents are as follows.

Planning consent: Pre-planning advice has been obtained. A 17-month period has been allowed to develop the planning submission. A planning specialist will be appointed and engagement with the Local Planning Authority will continue through the preparation stage. A 13-week period has been allowed for determination, in line with statutory timescales.

Environment Agency: The Environment Agency is a statutory consultee for the planning process. Early engagement has commenced to confirm requirements for the scheme and construction methodology. Requirements are expected to be addressed during the development phase before planning submission. Flood Risk Activity Permits will also be required for site investigation and delivery, with six months allowed for each stage.

Canal & River Trust: The bridge crosses the Calder and Hebble Navigation. Early engagement has commenced with the Canal & River Trust to confirm navigational requirements, headroom constraints, land ownership, licences, agreements and any temporary access permissions required. Although the bridge is not a Canal & River Trust asset, access to CRT-owned land or towpath areas may be required during construction. These permissions are expected to be resolved within the 17-month development phase before planning submission.

Utilities: Utility searches have been completed and engagement with statutory undertakers will continue to confirm diversion requirements, technical approvals and programme implications.

- j) If applicable, explain how the scheme development has included consideration of climate adaptation and ensures the future resilience of the highway network (Maximum 250 words).

Describe how climate related risks (e.g., flooding, heat, extreme weather) have been assessed and incorporated into design measures to improve the long term resilience of the highway network. This may include evidence of risk assessments, adaptive design features, and how the scheme will maintain network performance under future climate conditions.

A flood risk desk study has been undertaken. Shepley Bridge is in a flood zone. Substructure elements in the watercourse have been ruled out to reduce flood risk and scour. Abutments will be suitably set back from the riverbanks. The concept raises the soffit datum level above the existing level, such that headroom above the towpath is 2.7m. This reduces flood risk to the bridge and supports active travel on the towpath. The concept includes semi-integral construction, involving no deck joints, helping to future proof the bridge, particularly against extreme weather conditions and corrosive environments from de-icing salts. Weathering steel is specified to maximise design life with minimal maintenance. Weathering steel should have a minimum headroom of 2.5m above water level, which has been comfortably met. Retaining walls will be constructed adjacent to the west and north boundaries of the 'Ship Inn' car park to support the extended road and cycleway. This will act as flood defence for the car park, supporting development and future resilience. The developed design will be assessed against the 1 in 100 year plus climate change design event. If impacts are shown, then design updates will be made to prevent increase in flood risk

elsewhere. Without the bridge, the diversion route for residents on Sands Lane uses Steanard Lane which floods several times a year. These residents do not have any other access routes to their properties and with flooding instances forecast to increase it will leave these residents cut off on an increasing frequency.

- h) Explain the considerations have been made or will be developed to account for the management of carbon for the development of the scheme.

This may include development of a carbon management plan dealing with whole life carbon (e.g. using low carbon construction measures to deliver the scheme or reducing emissions though reducing vehicle miles).

The embodied carbon has been estimated for the scheme using National Highways Carbon Tool. The Upfront carbon totals 2529tCO₂e and covers materials, transport, energy and waste emissions up to the end of construction. The In Use carbon over a 60-year assessment period, including bearing and waterproofing interventions, has been estimated as 408tCO₂e. A multi-girder composite bridge has been selected to optimise material use whilst keeping standard construction forms for safety in design. Further considerations will be made at outline design such as low carbon concrete, recycling existing ironwork and sourcing materials locally. Semi-integral construction is considered more suitable than fully integral as the long span would induce large forces on the substructure. Semi-integral construction thus reduces the size of the piles required and hence the volume of concrete and carbon. The concept design is ~17m wide with two lanes of traffic, one two-way cycleway and two footpaths. Two lanes of traffic reduce congestion on Steanard lane. The cycleways and footpaths tie into existing active travel routes, encouraging reduced vehicular travel and reduces carbon emissions. Landscaping and natural resources will be enhanced as part of the scheme to further encourage active transport. Weathering steel and semi-integral construction minimise maintenance requirements by eliminating painting and joint replacement. Over a 60-year assessment period, the User Carbon saved by the scheme compared to the 'do nothing' scenario is 2710tCO₂e. Therefore, the Upfront and In Use carbon for the scheme are comparable to the User Carbon saved by the scheme.

- i) What statutory undertakers affect the proposed scheme? Has any engagement been undertaken and how has this been accounted for within the delivery approach?

Set out the relevant statutory undertakers, the impacts they may have on the programme – including planning – and how this part of the programme will be managed. If applicable, describe how deterioration of the structure has or may impact utilities services and the extent of this disruption.

The following statutory undertakers and infrastructure providers have been identified as potentially affected by the proposed bridge replacement scheme: Yorkshire Water, Northern Powergrid, Northern Gas Networks, Openreach, Virgin Media, Vodafone, SkyCityFibre, Urban Traffic Control (UTC) assets. C2 enquiries have been commissioned from the relevant utility providers to identify the presence and indicative location of apparatus affected by the proposed works. The information obtained to date has informed the development of the scheme and identified utility diversions as a key consideration for the development and delivery strategy. Recognising the potential programme and construction risks associated with utility diversions, early engagement will be undertaken with all affected statutory undertakers during the design and development stages. This engagement will be used to validate asset locations, understand diversion requirements, identify lead times and establish utility-specific design, approval and commissioning requirements. Utility providers will also be engaged throughout the Early Contractor Involvement (ECI) phase to support programme development, construction phasing and coordination of works. The preferred delivery approach is to divert and transfer affected utility services onto the new bridge structure prior to demolition of the existing bridge, wherever practicable. This approach minimises disruption to customers and network operations, provides greater flexibility in planning and coordinating diversion works and enables utility installations to be incorporated into the detailed design of the replacement bridge. It also significantly reduces programme risk by ensuring that the majority of utility diversion activities can be undertaken in parallel or subsequent to the bridge construction rather than becoming critical path activities that could delay completion of the scheme. Utility diversions and associated approvals have been

incorporated into the project programme, with appropriate allowances made for detailed design, technical approvals, legal agreements, diversion works and commissioning. Progress will be monitored through regular engagement with statutory undertakers, programme reviews and project governance arrangements to ensure risks are identified early and managed proactively, providing greater certainty in the delivery programme.

Part 3 – Governance and Declarations

3.1 Equality Analysis

a) Has analysis of the equality impacts of the scheme been undertaken by the LHA in line with the Public Sector Equality Duty? Select below:

☒ Yes

☐ No

b) Explain how the equality impacts of the scheme have been considered or will be considered. Identify the relevant affected groups with protected characteristics, and any planned measures to mitigate these impacts. (Maximum 250 words)

The Equality Impact Assessment (EqIA) examines the proposed replacement of Shepley Bridge in Mirfield, which currently spans the River Calder and requires upgrading to meet modern load standards and ensure long-term safety and reliability. The project aims to improve structural integrity, maintain navigational clearance, increase network resilience, minimise disruption during construction, reduce environmental impacts where feasible, and provide value for money.

The assessment considered national, local and scheme-specific evidence, including Census data, demographic information, transport accessibility, and vehicle ownership statistics. Evidence shows that Mirfield has a relatively high proportion of older residents and high levels of car ownership, indicating a strong reliance on private vehicles for access to employment, healthcare, education and other essential services.

A safe and reliable bridge is important for supporting accessibility and connectivity, particularly for older people, disabled people, carers, pregnant women and individuals with mobility impairments. However, during construction there may be temporary impacts such as road closures, diversions and increased journey times. These could disproportionately affect some groups. To reduce disruption, the project will implement traffic management measures, provide advance communication of works, and ensure diversion routes are clearly signed.

Once completed, the replacement bridge is expected to provide a safer, more resilient transport link for pedestrians, cyclists and vehicle users, reducing the risk of unplanned closures and improving access to services and community facilities.

Despite these benefits, the assessment concludes that the scheme mainly maintains existing provision rather than introducing significant changes. It therefore identifies no direct relevance to protected characteristics under the Equality Act 2010 and assigns an overall relevance ranking of “None,” meaning a Stage 2 EqIA is not required.

3.2 Public Sector Transparency

When LHAs submit proposals for funding to DfT, as part of the Government’s commitment to greater openness in the public sector under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, they must also publish a version excluding any commercially sensitive information on their own website within two working days of submitting the final proposal to DfT.

a) Please specify the weblink where this proposal will be published.

<https://www.kirklees.gov.uk/beta/connecting-kirklees/transport-schemes.aspx>

3.3 Declarations

Senior Responsible Owner declaration

As Senior Responsible Owner for [Shepley Bridge Reconstruction], I hereby submit this request for approval to DfT on behalf of [Kirklees Council] and confirm that I have the necessary authority to do so.

I confirm that [Kirklees Council] will have all the necessary statutory powers and other relevant consents in place to ensure the planned timescales in this proposal can be realised.

a) Name: David Wildman



b) Signed:

c) Date: 03/08/2026

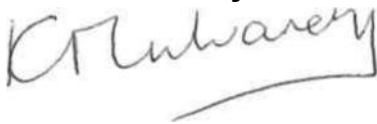
d) Email: david.wildman@kirklees.gov.uk

Section 151 Officer declaration

As Section 151 Officer for [name of organisation], I declare that the scheme cost estimates quoted in this proposal are accurate to the best of my knowledge and that [name of organisation]:

- has allocated sufficient budget to deliver this scheme on the basis of its proposed funding contribution.
- accepts responsibility for meeting any costs over and above the DfT contribution requested, including potential cost overruns and the underwriting of any funding contributions expected from third parties.
- accepts responsibility for meeting any ongoing revenue requirements in relation to the scheme.
- accepts that no further increase in DfT funding will be considered beyond the maximum contribution requested and that no DfT funding will be provided after 2029/30.
- confirms that the authority has the necessary governance and assurance arrangements in place and that all legal and other statutory obligations and consents will be adhered to.

e) Name: **Kevin Mulvaney**



f) Signed:

g) Date: 31 July 2026

h) Email: Kevin.mulvaney@kirklees.gov.uk