



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: Thurrock Council
- b) Scheme / structure name and LHA bridges number: Orchard Road Footbridge
- c) Location (OS Grid Reference) of the scheme/structure (to identify location on map):
- Easting: 559028
- Northing: 182207
- d) Name of Project Manager: Peter Wright
- e) Email address: PGWright@thurrock.gov.uk
- f) Phone number: 01375 652 652
- 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.

The proposal is for a replacement pedestrian footbridge situated west of Orchard Road, South Ockendon which provides an essential link over the electrified railway line. The existing bridge construction is a steel footbridge over Network Rail railway with steel approach ramps on trestle

supports. The deteriorated condition of the existing footbridge has raised concerns regarding the long-term structural integrity and safety of the footbridge.

The existing paintwork system contains lead, requiring full encapsulation to undertake in situ repairs. Due to low vertical clearance to the tracks, these works would require extensive closure of the railway to complete. Network Rail will not permit in situ repairs due to the required duration of rail closures.

The form of construction prevents removal of the main span for offsite repairs as the main span will need to be cut free. The remaining parts of the structure would require extensive in situ works to reconnect the main span, which Network Rail will not permit.

The only remaining feasible option to eliminate the risk of further deterioration and failure is replacement of the structure. Replacement also allows for relocation of the supports and approach ramps off Network Rail land and separate overhead line equipment that is currently connected to the bridge. This will greatly reduce the Network Rail interface and simplify future maintenance activities.

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.

The proposal seeks the demolition of the existing footbridge and in its place provide an improved structure which is safe, secure and better suits the needs and character of the surrounding area, providing an essential link for active travel.

The proposed new footbridge provides accessible ramps to current design standards and stepped access, while maintaining the east/ west connectivity for pedestrians using the footbridge.

All demolition works and removal of materials from site will be carried out in accordance with the appropriate regulations to protect the natural environment and species present on site.

The new footbridge will provide improved active travel connectivity between the conurbations, with new ramps and steps and will tie in to the existing footpaths on each side. Ramps will be provided at a 1 in 12 gradient with landings in line with current design guidance which will be an improvement over the existing and will be more accessible for all users, especially those with mobility impairments.

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

No, it is within and passes over Network Rail land

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

N/A

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..

Several studies have been undertaken to understand the condition of the structure. There is severe corrosion posing a risk to structural integrity and bridge users. The existing paint system on the bridge is failing and previous studies confirmed the entire structure needs to be repainted and refurbished rather than just patch repairs. The structure will continue to degrade without intervention leading to failure of deck plates or support elements rendering the structure unsafe for use and posing a risk to the railway below.

Paint sampling has confirmed the presence of lead, requiring full encapsulation for any in situ works. Limited clearance to the railway means the necessary encapsulation cannot be established without closure of the Grays to Upminster rail line for several weeks. Network Rail will not permit these extensive closures of the railway.

The main girders of the main span and approach ramp are continuous preventing the segmental removal and reinstatement of the structure for offsite repairs and repainting without cutting the bridge. An option study carried out by Project Centre (2021) compared this approach with replacement and recommended replacement of the entire structure.

Continued degradation of the structure is likely to result in its closure due to user safety before the end of 2029. Subsequent degradation is likely to result in the structure posing a risk to the railway, necessitating the removal of the main span.

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 structure is a footbridge which provides an essential link for non-vehicular traffic, linking the community to schools, employment and services. It provides a key link for those without access to vehicles and a safe route for vulnerable road users. There are no current restrictions on non-vehicular users, but the current layout does not meet current standards, so does reduce accessibility. As described earlier, repairs to the structure would require its closure and disrupt the main rail line, restricting pedestrian, cycle and rail passengers.

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.

The condition and degradation rates of the structure will result in closure by the end of 2029. The severance caused will add to traffic on the surrounding highway network due to the significant diversion routes should it not be replaced and the connection over the railway is therefore closed.

The Network Rail structures on the diversion routes; Stifford Road and West Road, are subject to weight limits currently and therefore there is a risk if the number of vehicle movements is increased over these bridges resulting from the modal shift as a result of the closure of the footbridge.

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.

Due to the poor condition of the structure, it is subject to additional monitoring to ensure that any temporary measures can be identified and implemented as soon as necessary.

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.

The structure has multiple defects including failure of the paint system throughout and corroding steelwork to the soffit of the deck plates, main span elements, and substructure. The condition does not currently require interim measures or additional risk mitigation.

By 2029/30 it is expected that temporary measures would be required to manage the risk to users and the railway by potential failure of steel elements. Practically these will be difficult to implement over the railway so this would likely result in the structure being closed.

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: 55.48

BCI Ave: 71.39

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.

July 2026 General Inspection (GI):

Main Span: Finishes: substructure elements – failure of paint system (4C), Finishes: parapet/safety fences (3B), Pier/column – Surface corrosion (3B), Footbridge surfacing – failed surfacing leaves plates exposed (4B)

East Ramps: Finishes: substructure elements – failure of paint system (3B), Finishes: Parapet – failure of paint system (3B), Parapet – surface corrosion (3C), Footbridge surfacing – failure of footway surfacing (4C)

West Ramps: Pier/column – paint flaking and corrosion (3C), Abutments – displaced masonry, cracked brickwork (2C), Parapet – failed paint system and displaced parapet section (3B), footway – failure of footway surfacing (4B)

From previous January 2025 GI:

Parapet – surface corrosion (2B)

From previous November 2020 Principal Inspection:

Transverse Beams – surface corrosion (3C) throughout the structure, Deck Plate – surface corrosion (3C)

- j) Submit, alongside this submission template, the most recent, dated copy of the structural inspection proforma or a report summarising this.
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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 replacement of the footbridge aligns with policy at all levels and will provide a positive difference to the area, enhancing access for all users. In particular, the funding is made available in support of the Government's Economic Growth Mission:

- The new bridge will support GROWTH by avoiding lengthy diversions for trips to schools, public transport and employment opportunities which would be severed by the railway line. In many cases, the alternative would be for a modal change from walking and cycling to car use which would add to congestion on the nearest crossing points.
- Reduction to journey times and congestion has the potential to improve business productivity and profitability within the local area.

- 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 replacement of the bridge will also support other aspects of the Governments missions

- CLEANER ENERGY would be met by providing a much-improved link for active travel with fully accessible ramps, avoiding significant diversion and potential increase in motorised vehicle trips on the surrounding network. Avoidance of route closure and diversion will reduce emissions and improve air quality. Structures that have suffered from and/or are vulnerable to the increasing risk of extreme weather events due to climate change can be adapted, through the fund, building climate resilience.
- HEALTHIER AND SAFER STREETS would be provided by enabling active travel journeys, accessible by all users. Replacing key structures for walking and cycling routes will have positive health impacts for users continuing to walk and cycle.
- Failure to provide the new bridge would effectively prevent this vital active travel link which also ties into BREAKING DOWN BARRIERS as it supports travel routes to schools, employment and local facilities and reduces potential community severance. The improved structure meets current design standards which ensures the crossing is negotiable for all users, having fully accessible ramps, improved visibility, lighting and public safety improvements.

Click or tap here to enter text.

- 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.

The footbridge will provide a positive difference to the area, while maintaining access for pedestrians over Network Rail lines.

The bridge provides a crucial link without which there would be significant diversions and potentially an increase in vehicle trips to avoid much longer walking trips. This encourages healthier and safer journeys in line with local and national policy.

The benefits of the proposed footbridge will maintain an essential link within South Ockendon and benefit locals and visitors in the area. The bridge provides a vital link on the local cycle network as shown on the Council's cycle route map. The proposal will enhance the existing connection in relation to access and aesthetics. The proposals to improve lighting and visibility will reduce the potential for anti-social behaviour and improve community safety.

Design will improve access for all by providing ramps to modern design standards to enable access for people with pushchairs, in wheelchairs or with mobility difficulties, breaking down barriers to movement.

The designs and improvements it will also mitigate and design out existing anti-social behaviour concerns with the existing structure, improving visibility, lighting, and passive surveillance.

The proposals will minimise maintenance; materials and construction details are chosen to simplify and minimise maintenance and the carbon footprint of the footbridge. The bridge will require less maintenance than traditional structural arrangements. The footbridges structure footprint will be relocated away from Network Rail land, meaning access for future inspections and routine maintenance will be significantly easier.

- 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.

Consultation and engagement with local and strategic stakeholders has happened throughout the scheme development and planning stages. This has included public consultation which showed 58% support, the main themes relating to antisocial behaviour (ASB) on the bridge, requirements for improved visibility of people on the bridge from ground level and requirements for better lighting and safety measures to alleviate crime and ASB. All these aspects are improved in the proposed design. Essex Police, Fire and Rescue, and East of England Ambulance Service were contacted, the Police were keen to support the design to improve lighting and deter crime and ASB.

Network Rail were formally consulted in both the design and planning stages. The proposals are supported with standard informatives to protect their operations.

The scheme has received support from the Cabinet Member for Highways and Transport who is keen to address long standing ASB perception. The Community Forum and Ward Members also support the scheme, and the previous planning application received no objections.

- 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.

Structures schemes are prioritised based on the condition data and the risk these structures pose to network operations. Condition data is reviewed through BCI scoring data from routine inspections considering both current condition and trends incorporating historic data which may indicate increased degradation rates of specific structures. Network operational risks are assessed considering structure usage and other asset management documents including Structural Reviews. The structural reviews determine comparative risk and reliability scores across the entire asset stock and the need for quantitative assessments. The Structural Review recommendations also support an assessment on the likely need for intervention. A subsequent rationalising exercise is undertaken by assessing the costs of different intervention approaches against other criteria to understand the preferred approach. The prioritised scoped schemes are reviewed against budget constraints to understand what works can be delivered.

A lower cost in situ intervention for this scheme was originally pursued to refurbish the existing structure. However, site and third-party constraints resulted in a greater scheme scope and cost beyond the available structures budget.

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 Orchard Road Footbridge has been identified as a priority for Structures Fund investment due to its advanced state of deterioration and the high risk of future closure. Inspections have confirmed significant corrosion, failing protective coatings (including the presence of lead-based paint), and widespread defects requiring major intervention. An options appraisal concluded that full replacement is the only viable long-term solution, as refurbishment is constrained by Network Rail access and would not provide a cost-effective or sustainable outcome.

The structure provides a critical pedestrian link over the electrified railway, connecting communities to schools, public transport, employment and essential services. Without intervention, there is high confidence the bridge will require closure by 2029, leading to severe community severance, lengthy diversion routes and increased reliance on private vehicles, placing additional pressure on the surrounding highway network.

The scale and complexity of demolition and replacement over a live railway, combined with the need to deliver a modern, accessible and compliant structure, results in a scheme cost that cannot be accommodated within Thurrock Council's existing capital and maintenance budgets. This is compounded by the Council's constrained financial position, which limits its ability to fund major infrastructure renewals of this nature. Structures Fund support is therefore essential to enable delivery of the scheme, safeguard connectivity and reduce future whole-life costs.

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.

Failure to deliver the Orchard Road Footbridge replacement would result in the eventual closure of the existing structure due to its deteriorating condition, for which there is high confidence by 2029. This would remove a critical pedestrian link across the electrified railway, causing significant community severance within South Ockendon.

The loss of the crossing would force pedestrians and cyclists to undertake substantial diversion routes to the nearest alternative crossing points. This would disproportionately impact access to schools, public transport, employment opportunities and local services, particularly for those without access to a private vehicle. The increased journey times and reduced convenience are likely to result in a shift from active travel to car use, leading to higher traffic volumes, increased congestion and associated environmental impacts on the surrounding highway network.

There would also be adverse social impacts, including reduced accessibility for vulnerable users such as those with mobility impairments, parents with pushchairs and older residents, as the existing structure already performs poorly in terms of accessibility. The closure would exacerbate inequality in access and undermine local and national objectives for inclusive mobility.

In addition, ongoing maintenance liabilities and safety risks associated with the deteriorating structure would increase over time, requiring reactive interventions without resolving the underlying issues, representing poor value for money.

- 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 footbridge link provides a vital link for the community which will be improved with the proposed new structure with the provision of accessible ramps and improvements for safety and security. The failure of the existing bridge and closure of the link would have a significant detrimental effect, causing community severance and a clear physical barrier to movement over the railway lines.

The link provides essential access to public transport, employment, schools and open spaces. It currently carries c. 1000 journeys per weekday and it is likely this would increase with the provision of an improved structure with accessible ramps and improved safety and security.

Survey data from June 2026 shows peak times align with school drop off and pick up times, providing an essential link for the local community. The diversion routes to alternative crossings are c. 2km which is significant particularly for school age children, adding at least 30 minutes each way. The diversion routes also include areas with narrow footways and the local strategic highway network carrying large volumes of HGV's which increases danger, increases exposure to poor air quality and likely will result in mode shift to vehicle trips, further increasing the pressure on the existing highway network and reducing active travel.

- 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.

Survey data recorded in June 2026 shows c. 1000 trips per weekday and c. 600 trips per weekend over the bridge. Applying appropriate seasonal uplift factors (calculated from local active mode counts) indicates that the bridge is used for approximately 300,000 pedestrian and 20,000 cyclist trips per year. In this bridge's absence these trips will undergo detours, and it is anticipated that there will be a degree of trip suppression as people decide switch to other modes or not to make their trips.

With the improvements in safety, security and access referred to elsewhere, this number is highly likely to increase, thereby making the ramps a viable link for more people has the real potential to reduce vehicle trips on the wider network.

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.

While bridges are explicitly listed as eligible structures for this funding, the fund's strategic objectives and economic toolkit are oriented toward highway network functionality and vehicle movement. A pedestrian-only structure over a railway is technically eligible but sits awkwardly within the fund's quantitative tools.

Accordingly, applying the provided Economic Tool, which is built around motorised traffic (specifically journey time savings and vehicle operating costs) to a pedestrian-only structure produces no monetised benefits under these appraisal criteria.

The main sources of economic benefits expected to be delivered by the Orchard Road scheme are travel time benefits from a more direct route, which currently operates effectively, serving users from the local catchment area.

Maintaining the existing structure will ensure that pedestrian journey times are preserved at their current levels and prevent severance issues.

On this basis, a bespoke economic appraisal approach has been undertaken.

- 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)	-
Present Value Benefits (PVB)	-
Benefit to Cost Ratio (BCR)	-

- 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.

An alternative economic appraisal has been undertaken with costs, risk and other assumptions summarised in response f) below.

- 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).

An alternative economic appraisal has been undertaken with costs, risk and other assumptions summarised in response f) below.

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.

Non monetised benefits:

As a pedestrian scheme non-monetised impacts have been assessed against the TAG A4.1 Appraisal Summary Table framework, scoring each social impact category on the standard seven-point scale (Large Adverse to Large Beneficial) relative to the do-minimum diversion.

The details of the appraisal are detailed in the attached spreadsheet. A summary of the scored social impact criteria is:

- | | |
|-----------------------------|------------------|
| • Accidents | Slight adverse |
| • Physical activity | Slight adverse |
| • Security | Neutral |
| • Severance | Large adverse |
| • Journey Quality | Neutral |
| • Option and Non-use Values | Neutral |
| • Accessibility | Moderate adverse |
| • Personal Affordability | Neutral |

The non-monetised impact of severance to pedestrian movement and community connectivity should the Orchard Road Footbbridge be closed for an extended time is adjudged to be 'large adverse'.

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 alternative appraisal was undertaken to estimate the economic outturn of the scheme, using the DfT Active Mode Appraisal Toolkit (AMAT) principles.

Underlying Data:

- Demand data derived from surveyed weekday/weekend pedestrian and cyclist trips
- Volumes annualised using cyclist / pedestrian specific factors derived from regional 2025/26 active mode counts
- Route geometry (414m direct crossing vs. 1,663m detour) sourced from OS Open Roads.
- Appraisal parameters, such as growth factors, VOT's, discount factors, speeds, QALY taken from TAG or AMAT. Discounting followed TAG A1.1 (3.5% or 3.0% beyond 30 years). Value of time from TAG Databook Table A1.3.1; physical activity valued via METs (TAG A4.1) and QALYs (Green Book);

Key assumptions:

- Weekday journeys taken on the footbridge between 6am to 10am, and 2pm to 6pm are commuter or education trips for the purpose of value of times
- 60-year appraisal period (for consistency with EKT and design life)

- 0.75%/year active mode growth (from AMAT, sensitivity test applied)
- 60% average detour-uptake rate (i.e. not all diverted trips take the full alternative route)
- No demand suppression (conservative assumption)
- Journey quality and Collision impacts assessed qualitatively as negligible.

Sensitivity testing (shorter 20-year appraisal, lower growth, narrower peak, lower detour uptake) produced BCRs ranging from 1.43 to 4.92, indicating the scheme remains positive value for money across all tested scenarios.

All assumptions and methodology can be tested using the provided economic assessment. An additional appendix summarising this methodology is also provided.

Present Value Costs (PVC)	£4,008,183
Present Value Benefits (PVB)	£13,514,342
Benefit to Cost Ratio (BCR)	3.4

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.

Thurrock Council has a strong track record in delivering highway and transport infrastructure schemes through effective programme and project management. The authority routinely delivers capital works funded through Department for Transport (DfT) allocations and Integrated Transport Block programmes on time and within budget, demonstrating robust governance, financial control and risk management processes.

While this scheme represents a larger and more complex structure replacement than is typically delivered through the Council's core programme, additional capacity and expertise has been secured to ensure successful delivery. The Council has engaged its Term Maintenance Contractor through an Early Contractor Involvement (ECI) approach, providing early input into design, buildability, risk management and cost certainty. The contractor has extensive experience in delivering similar bridge and structural schemes for other clients, providing confidence in their ability to manage the technical and logistical challenges associated with construction over a live railway.

In addition, the Council has commissioned its Professional Services term consultant (Bridge Consultant) to provide specialist structural engineering advice, design support and project management oversight. This combined approach ensures that the Council has access to the appropriate technical expertise, supply chain capability and project controls required to deliver the scheme efficiently, safely and within the required timescales.

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 Thurrock Council's established Term Maintenance Contractor (TMC) using an existing NEC-based contract, ensuring a compliant and efficient procurement route without the need for a separate tender exercise. An Early Contractor Involvement (ECI) approach has been adopted, enabling the contractor to input into design development, buildability, programming and risk management from an early stage. This has strengthened cost certainty and ensured that key delivery risks, particularly those associated with working over a live railway, are identified and mitigated.

Advanced concept design has been completed, alongside early scoping and engagement with Network Rail to understand access constraints, possession requirements and programme dependencies. These discussions have informed the delivery strategy and will continue through detailed design and construction planning.

The Council is also supported through its Professional Services (Pell Frischmann) contract, providing specialist engineering, commercial and project management expertise to support scheme development and delivery.

This integrated delivery model, combining the Council's internal project management capability, an experienced TMC and specialist professional support, provides a robust and proven approach. It enables effective coordination of stakeholders, clear programme management and strong cost control, ensuring the scheme can be delivered safely, efficiently and within the required timeframe.

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.

Key delivery risks include construction over a live railway, stakeholder dependencies, and programme constraints. Network Rail (NR) approvals, possessions and safe systems of work presents a significant programme risk, as site access is limited and subject to change. Delays to approvals or possession bookings could delay the construction timetable and challenge Structures Fund delivery timescales. NR has been engaged from the outset of the project to comply with their technical design and construction requirements and their approval processes. Thurrock has entered several agreements to enlist NR delivery support. The project team has worked collaboratively with NR to develop the design, construction strategy, and delivery programme.

There is also risk of statutory undertakers and buried utility diversions or protection works. A comprehensive utilities search has been completed and all relevant providers engaged early. This proactive approach has enabled requirements to be clearly defined and incorporated into the

delivery programme. Diversion works for UKPN apparatus have been identified, scoped and are being actively managed in coordination with the provider. Utility risks are well understood and being effectively mitigated, with ongoing coordination to avoid programme impacts.

Ground conditions have been investigated and are well understood through completed surveys, significantly reducing uncertainty and enabling appropriate foundation design.

Construction risks include working in a constrained environment and coordinating demolition and installation over the railway, requiring careful planning and robust health and safety management. These risks are being managed through ECI, stakeholder engagement and a live risk register to support delivery within programme.

- 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.

Liaison with third-party organisations is a key consideration for this scheme, particularly due to its location over a live railway and the need to coordinate with multiple stakeholders. The principal third party is Network Rail, whose approvals, access requirements and possession regimes present a potential programme risk. However, early and ongoing engagement has been undertaken throughout design development, including initial discussions on constructability, access constraints and programme requirements. Network Rail has been consulted through the planning process and has indicated support for the scheme, subject to standard technical approvals and conditions.

Engagement has also been undertaken with statutory undertakers, with utility providers consulted to identify assets, diversion requirements and programme implications. These discussions have enabled risks to be defined early, with mitigation measures embedded into the delivery approach.

Local emergency services, including Essex Police and Fire and Rescue Service, have also been consulted. Feedback has been positive, with support for the scheme's design improvements, particularly in relation to enhanced lighting, visibility and user safety.

While third-party interfaces remain a programme risk, particularly in relation to Network Rail approvals and coordination, these risks are well understood and actively managed through early engagement, clear communication and ongoing stakeholder collaboration, providing confidence in the ability to secure the necessary consents and deliver the scheme within programme.

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	£	£3M	£	£	£3M
LA contribution	£0.2M	£0.8M	£	£	£1M
Other contribution	£	£	£	£	£
Total costs	£0.2M	£3.8M	£	£	£4M

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.

Thurrock Council has sought to manage the Orchard Road Footbridge within its existing capital and maintenance budgets; however, the scale and complexity of the scheme has made this unachievable. The estimated cost of replacement is in the order of £4,000,000, which represents a significant proportion of the Council's annual Department for Transport (DfT) capital allocations. Delivering the scheme from existing resources would therefore require the deferral or cancellation of a substantial number of other planned highway maintenance and transport improvement schemes.

This challenge is compounded by the Council's constrained financial position, which limits its ability to fund large-scale infrastructure renewals and prioritises essential statutory services and network-wide maintenance liabilities. As a result, structures of this scale cannot be accommodated within existing funding envelopes.

The Council has also explored alternative funding opportunities, including the use of Section 106 (S106) developer contributions. However, these have not proven viable due to the absence of sufficiently large or appropriately located development contributions that could be allocated to the scheme.

Given these factors, the scheme cannot be delivered through existing budgets or alternative local funding sources. External funding through the Structures Fund is therefore essential to enable delivery of this critical infrastructure and avoid further deterioration and risk of closure.

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.

The total estimated gross whole life cost for implementing the scheme is £5,115,014. The total estimated gross whole life cost for not implementing the scheme is £1,106,831. Refer to the appended alternative economic assessment.

Whole-life costs from not implementing the scheme include ongoing annual maintenance required to maintain absolute minimum safety standards until such time the structure is not deemed safe for the public. These maintenance costs account for increased inspection and maintenance requirements as the structure's condition continues to decline. This includes Network Rail access requirements and associated charges. At this point, it is assumed the main span needs to be removed to minimise the risk to the railway. The remainder of the structure would be inspected and maintained as per existing arrangements. Extending the life of the structure through small scale annual interventions will add to the whole life cost of the structure due to an increase in maintenance expenditure.

The proposed scheme reduces these costs by minimising the maintenance liability and associated network rail charges of retaining the existing structure.

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.

A tender exercise for the design and fabrication of all above ground elements of the structure (steel superstructure) was carried out the appointed contractor cost came in at roughly £1.2 million. This includes design of the superstructure, fabrication and delivery of the superstructure.

Installation and all remaining civils costs have been estimated by Thurrock Councils Term contractor, H&T, who are the Principal Contractor for the works. This includes demolition of the existing bridge, RC foundations and ground bearing ramps, craneage, landscaping, lighting, and surfacing. A risk item has been attributed to these costs as there is the potential for design and quantity changes, and to account for future material cost changes etc.

Utility diversionary and protection works costs have been sought directly from the affected utility providers, with each providing a detailed C4 estimate. Network Rail agreements cover their costs for engagement and support through the design and construction stages. As the final APA covering the construction works has not been agreed, a risk item has been included to cover further Network Rail costs.

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.

Key financial risks with this project are time overrun including the reliance on Network Rail and possession windows they allocate to undertake all the works. Contingencies in place allow for flexibility in the overall programme which will be managed and monitored throughout the works and key dates for track possession will be set around the delivery to ensure the design and installation of the structure are dictated on pre agreed possession windows. Price fluctuation / variance with contingencies allowed for inflation increases of 3% pa.

As the design is not finalised, there is a risk of the remaining civils works increasing in cost. A risk allowance has been made to cover any increases above the current estimate.

Optimism bias has been included at 28% as recommended in TAG guidance for bridge schemes in the economic assessment at Stage 3 design for estimated cost items. This is not included within the estimated £4m total construction cost.

- 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.

Thurrock Council is committed to contributing £1,000,000 towards the delivery of the Orchard Road Footbridge replacement, funded through approved capital borrowing. This contribution forms part of the Council's capital programme and has already supported scheme development to date, including design, surveys and stakeholder engagement.

The allocation has been formally approved through the Council's governance process, including Cabinet approval, providing a high level of certainty that the funding is available. This commitment reflects Members' recognition of the strategic importance of the structure, the risks associated with its continued deterioration, and the significant consequences of potential closure for local communities.

At present, no additional third-party contributions have been secured. While alternative funding sources, including developer contributions, have been explored, these have not proven viable.

The Council's confirmed contribution demonstrates strong local commitment to the scheme and provides assurance that match funding is in place to support delivery alongside the requested Structures Fund investment.

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?

July 2027

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

December 2027

- 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.

Thurrock Council will continue with the existing management approach that has already delivered the scheme through to planning submission and preliminary design completion. This is

underpinned by established partnerships with proven delivery experience including management of key stakeholders throughout the project lifecycle. The council is using its existing highway structures framework consultant to deliver the design and lead engagement with Network Rail. This framework has been operating for six years with a track record of successfully delivering bridge improvement and design schemes. The council is using its existing term maintenance contractor as the principal contractor. They have been servicing Thurrock for highways and structures build works for over 20 years. This collective delivery team brings extensive experience in collaboratively delivering Thurrock bridge improvement schemes. Both framework consultant and term maintenance contractor have established specialist supply chains that have also been deployed to deliver bridge works for Thurrock. Thurrock has engaged an engineering and project management consultant to project manage the scheme. They have experience in delivering large scale projects from inception to completion and an existing working relationship with Thurrock Council. The collective team has been delivering the Orchard Road replacement project to date. Each organisation has clearly defined roles and responsibilities and adopts a collaborative approach to risk identification and management. The team has worked together with Network Rail to establish a build programme that incorporates possession planning and duration requirements.

- 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?).

A key delivery risk is contractor procurement. Thurrock Council has applied early engagement through established relationships. The council has completed a competitive tender exercise for the steelwork design and fabrication. Early Contractor Involvement has mitigated build programme and cost risks through the design. Land registry searches identified privately owned land required to build the bridge. Thurrock council has engaged the landowner and expects to purchase the land within 6 months. Early identification and engagement have reduced the delivery risk of land acquisition. Some financial risk remains regarding the land price. Outstanding planning approval is a delivery risk. Amendments or conditions pose a financial risk. A similar scheme gained planning approval but this lapsed when financial constraints paused the project. Thurrock has incorporated the conditions of that approval into this submission. Pre-application advice has been received and incorporated. Planning application is imminent with no expected issues. Network Rail (NR) and statutory undertaker approvals pose a delivery risk. The delivery team has experience executing works in Thurrock with a NR interface. Thurrock has entered into a BIA, and BAPA for various elements of the scheme with NR and is agreeing an APA for the construction works. This has enabled coordination of the design and possessions to maintain programme and cost certainty. Thurrock has engaged all affected utility providers and obtained detailed diversion costs where required. Thurrock and the delivery team employ a detailed risk management process including a live risk register that is periodically reviewed and updated.

- 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.

To maintain delivery to programme and within budget, the council is employing a blend of proactive planning, continuous monitoring, and responsive adjustments. Thurrock has established detailed scope and quality requirements to minimise the risk of abortive works. The Council has engaged a specialist organisation as a dedicated project manager to oversee delivery. This provides robust programme control, including schedule management, cost monitoring and coordination of all parties. Regular progress updates are held with the whole delivery team to ensure collaboration and accountability throughout the project lifecycle. The project manager distributes minutes with clear actions ascribed to individual delivery team members. A detailed project programme with clear task ownership, interdependency, and identification of float has been developed. The programme is reviewed holistically by the entire delivery team at the periodic progress meetings. This programme identifies the critical path and delivery risks which are scrutinised through the project risk management process. This includes collaboratively assessing the potential outcomes, risk severity level, and agreeing a suitable mitigation strategy and risk owner. Thurrock has developed a costed risk register to ensure sufficient risk allowance contingency is included within the overall scheme budget. To ensure timely delivery and budget surety, Thurrock Council has utilised its existing supply chain within the delivery team to undertake Early Contractor Involvement. This has also included appointing key suppliers for both the design and build stage. This ensures lead-in times are accurately programmed, reduces the risk of procurement delays, and confirms major cost components of the works.

- 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 requires planning approval from the local planning authority. This process includes engagement with local community and statutory consultees including emergency services. Thurrock previously undertook this for a similar scheme and obtained approval. The requirements and planning conditions from this have been incorporated into this submission. Pre-application advice has also been sought. The planning decision is anticipated to be over 6 months before construction works. The council has also engaged with statutory undertakers to protect or divert existing assets and provide future maintenance access. Diversionary works for Cadent Gas have already been completed. The design has been altered to mitigate the impacts on both Openreach and Anglian Water plant. UK Power Networks has been engaged and has provided a diversionary estimate for their plant. These works are planned for completion over 6 months before construction works. Network Rail (NR) consents are required for the design and construction, including securing track possessions to demolish the existing structure and erect the new bridge. Thurrock Council has engaged NR's Asset Protection team and has agreements with NR to provide support for the design, demolition, and construction works. The project is undergoing NR technical review and approval processes and has established and incorporated NR technical requirements. The delivery team has worked with NR to identify suitable possession opportunities in summer 2027 to complete the works. This date provides sufficient time to complete all preliminary design and construction planning activities, including obtaining consents.

- 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.

Initial scoping of the project identified that the proposed structure is not within a flood zone and is not susceptible to forecast flooding issues due to climate change. The effects of extremes of temperature have been accommodated in the bridge design through compliance with design standards for a 120-year design life. Steel and concrete specifications ensure robustness against very low temperatures and freeze-thaw effects. The steelwork paint finish has been specified to reduce the need for maintenance and minimise the risk of steelwork degradation. Simple main span connections permit the partial removal of sections to facilitate offsite future maintenance and repainting without the need for prolonged closure of the railway. Similarly, the proposed supports, approach ramps, and access stairs have been located away from Network Rail land. This minimises the rail interface, simplifying and reducing the time required for future maintenance. These measures will significantly reduce the duration of any maintenance closures and the associated impact on bridge users. The scheme incorporates the repurposing of an existing under-used car park adjacent to the site into a soft landscaped green space. Reducing the area of hard impermeable surfacing reduces the demand on the local surface water drainage system. This will reduce the risk of localised flooding during extreme weather events that could affect use of the bridge, the local highway, or adjacent properties and rail infrastructure.

- 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).

A qualitative approach to minimising embodied carbon has been employed since replacement of the existing structure was deemed the optimal remediation strategy. This has included consideration of low-maintenance construction materials for the approach ramps and superstructure. Similarly, the design has been developed to minimise inclusion of durability elements such as expansion joints and bearings. This reduces the future maintenance demand of the structure and the associated carbon footprint. Materials have been specified to maximise their working life and meet the 120-year design life. In addition, foundations and ground bearing ramp concrete specification incorporates cement replacement products. This reduces the use of high embodied carbon Portland cement. These cement replacement products are byproducts of other industries and have improved durability performance when compared with Portland cement. This minimises the carbon associated with the manufacture of these materials and improves whole-life performance. The articulation of the deck superstructure allows for removal of sections of the bridge without full demolition. This allows for offsite maintenance activities which will significantly reduce the carbon impact of undertaking these works compared with in situ works. This also facilitates a simplified demolition procedure when the structure reaches the end of its working life. All steel and concrete used in the structure can be recycled, reducing the future demand for carbon-intensive extraction and refinement of raw materials. As part of this submission, the estimated total carbon impact associated with the bridge replacement is 313t CO₂ equivalent.

- 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.

A full utilities search report has been compiled to understand the above and below ground utilities that may be affected. Of the 30 companies operating in the area, nine have been identified as being affected, these are; Anglian Water, BT Openreach, Essex and Suffolk Water, Gas Transportation Company (Envoy), Global X_Level 3, LineSearch, National Grid / Cadent, Network Rail and UKPN. Cadent Gas – Utilities have been cut to the corner of Ardmore Road, this now does not interact with the structure. BT – New structure does not affect BT utilities. UKPN – Testing to be undertaken to test the cables on the west side of the structure. UKPN believe these are not in operation but awaiting confirmation. Anglian Water – liaising with Anglian water to protect assets and ensure they are fully accessible once project is completed

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 existing access to the structure is through steep step-free ramps only with only one intermediate landing on each approach. The proposed access has both stairs and ramps, catering for different user groups including persons of reduced mobility (PRMs) who may struggle with extended lengths of incline. Those able to use stairs benefit from a shorter route better aligned with the user desire lines.

The new ramps are geometrically compliant with DMRB document CD 353, but are relatively steep to minimise their overall length. Spatial constraints at the site have also prevented the structure being wide enough to operate as a shared use structure. Incorporating multiple intermediate ramps will support use of the structure by PRMs including those with mobility difficulties, those with prams, and dismounted cyclists.

The proposed lighting design and parapet arrangement will promote user safety and comfort whilst minimising anti-social behaviour and impacts on local residents.

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.

[Click or tap here to enter text.](#)

3.3 Declarations

Senior Responsible Owner declaration

As Senior Responsible Owner for [Orchard Road Footbridge], I hereby submit this request for approval to DfT on behalf of [Thurrock Council] and confirm that I have the necessary authority to do so.

I confirm that [Thurrock 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: Peter Wright



b) Signed:

c) Date: 3rd August 20026

d) Email: pgwright@thurrock.gov.uk

Section 151 Officer declaration

As Section 151 Officer for [Thurrock Council], 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: Dawn Calvert

f) Signed: 

g) Date: 31/07/26

h) Email: dawn.calvert@thurrock.gov.uk