Questions and Answers: August 2018 Edition

If your question isn't answered here, please email it to LakeLothing3rdCrossing@suffolk.gov.uk.

Overview

Why do we need the Third Crossing?

The existing bridges over the lake at Mutford Lock and the A47 Bascule Bridge are inadequate to meet current and future traffic demand. Delays and congestion are a common occurrence for drivers, particularly during peak hours, and pedestrians and cyclists often have long and difficult journeys as they travel across the town.

There have been improvements to local roads in recent years, but the Third Crossing remains a missing link. Provision of an additional crossing will reduce congestion and severance, and allow the road network to operate efficiently, providing vital extra capacity. This new crossing presents an opportunity to introduce a focal point for the town enhancing its identity. This will help to regenerate the area and attract new investment in the local economy.

How much will the crossing cost and how will it be funded?

It is estimated that the Lake Lothing Third Crossing will cost in the region of £100 million (2020 prices). In March 2016 the Government agreed to provide around £73.4 million towards the crossing.

The remaining amount, will need to be secured from local funding sources such as New Anglia Local Enterprise Partnership and Waveney District Council. In the meantime, the money has been underwritten by Suffolk County Council (SCC).

Can this funding be used for other local transport proposals?

No. The money has been awarded following approval of the Outline Business Case, which demonstrated its very high value for money. The funding was also based on the preferred option for a bascule bridge in the current location.

What are the risks to funding, following the outcome of the European Union membership referendum?

Advice from the Department for Transport is the funding remains in place and there is no uncertainty around this. Peter Aldous MP has also reassured us that the Government funding is firmly committed subject to a successful planning application and a case continuing to show high value for money.
Programme

Why did you consult again in 2017?

The Secretary of State for Transport has directed that this project is to be treated as a project of national significance for the purposes of the Planning Act 2008 requiring a Development Consent Order (DCO) to construct, operate and maintain the project. While there had already been significant consultation on the principle of a third crossing in Lowestoft over a number of years, the 2017 consultation was the statutory consultation required by the Planning Act 2008 and ran from 4 September to 23 October 2017.

It is important for us to understand the views of those who live, work and visit the town or who may be interested in the development of the Lake Lothing Third Crossing.

Feedback received from this consultation exercise helped shape the development of the final project proposals, which have formed the basis of the application for development consent. Information obtained during the consultation has been presented in a Consultation Report which has been submitted to the Planning Inspectorate and a copy of the report can be found on their website:


How and when will development consent be given?

The development consent application was made on 13 July 2018 and accepted on 9 August 2018. The application is available to view on the Planning Inspectorate website. Following a Preliminary Meeting in the autumn, a public examination on behalf of the Secretary of State by the Planning Inspectorate will commence and last for 6 months. The Secretary of State will then make a decision in 2019.

How can I get involved in the public examination?

The public examination is predominantly a written process, but the appointed Examining Authority will additionally hold hearings on specific issues/topics.

Those who have an interest in land that may be affected by the project (and have received a notice to this effect) do not need to register to take part in the examination, and neither do other statutory parties or prescribed consultees.

If you do not fall in to any of these categories, you are required to submit a Relevant Representation to the Planning Inspectorate using the prescribed form, during the period 24 August 2018 to 24 September 2018. The form will be available here - https://infrastructure.planninginspectorate.gov.uk/projects/eastern/lake-lothing-third-crossing/.

Further guidance on making a Relevant Representation is available from the Planning Inspectorate, in particular their Advice Note 8.2 - https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2013/04/Advice-note-8-2v3.pdf
When will the crossing be constructed?
Subject to development consent, construction could start in 2019/20 and will take approximately two years.

Why won’t the crossing be finished until 2022, has it hit any complications? The Lake Lothing Third Crossing is well underway. The project has not hit any complications.
To obtain the necessary consents and planning approval we must follow a statutory planning process. The Government has streamlined the planning process to deal with Nationally Significant Infrastructure Projects such as the proposed crossing but it is still time consuming.

Project benefits
What are the benefits of the crossing?
The Lake Lothing Third Crossing will result in quicker journeys, reductions in delay, fewer accidents and benefits to businesses.
The new crossing will also create a striking visual feature across the river, enhancing the identity of the town.
The project has been developed to deliver the following objectives:
- Reduce congestion and delay on the existing bridges over Lake Lothing;
- Reduce congestion in the town centre and improve accessibility;
- Reduce community severance between north and south Lowestoft;
- Encourage people to walk and cycle, and reduce conflict between cyclists, pedestrians and other traffic;
- Improve bus journey times and reliability;
- Reduce accidents;
- Open up opportunities for regeneration and development in Lowestoft; and
- Provide the capacity needed to accommodate planned growth.

How were the benefits calculated?
A traffic model was used to calculate the transport benefits. The traffic model included the whole of Lowestoft.
The transport benefits together with wider benefits and costs were calculated in the Outline Business Case which was prepared in accordance with Department for Transport Guidance and is available on the project website: www.suffolk.gov.uk/lakelothing3rdcrossing. This was used to secure the funding for the scheme. A Final Business Case will be prepared once we have more certainty over the final design and construction costs and will incorporate updated benefits.
We have looked at the impact on journey times as a result of the crossing on a range of key routes across Lowestoft and in particular the A12/A47, where significant improvements arise.
Options appraisal

Were any other options considered?

An initial long list of 15 options for a third crossing was compiled. The long list included bridges and tunnels in three broad corridors; eastern, western and central, as well as non-road and low-cost options, and a flood barrage option. Ten different options for a bascule bridge were included in the initial “long list”, four in the east, and three in each of the central and western corridors. Each was assessed against its ability to meet the project objectives.

All of the non-bridge options were discounted as these did not meet the project objectives.

All tunnel options were fully explored but would not be possible in Lowestoft. There is not enough distance between the river and the road network for a tunnel to safely go under the river and would also not provide a link for walking and cycling.

Options considered, but not included in the long-list:

- Fixed bridge options - The provision of a fixed bridge high enough to remain open to both traffic and shipping at all times was considered in principle. It would need to have a 35m clearance and would be more expensive than a lifting bridge, more visually intrusive and – because of the levels involved – more difficult to tie back into the existing roads. For these reasons, fixed bridge options were excluded from the long list.

- Floating bridge options - Consideration was also given to the possibility of constructing a floating bridge. The superstructure would float on the surface of the lake, constrained by fixed piers. A pivoted central section would open as a swing gate to allow vessels to pass through. This method of construction has been used successfully elsewhere, for example in Dubai. Although a floating bridge could be significantly cheaper than a conventional bridge, it would not be feasible for this project because of the railway line on the north shore. It would not be possible to achieve sufficient clearance over, or under, the tracks from a bridge just above water level, and a level crossing would not be acceptable to Network Rail and would reduce the transport benefits. A floating bridge would also have to open for any size of vessel, whereas a conventional bridge would allow smaller vessels to pass without opening. For these reasons, floating bridge options were excluded from the long list.

There were three tunnel route options initially considered as part of the process; a Western, Central and Eastern Tunnel with bored tunnel and immersed tube tunnel options being considered. After review, it was found that the bored tunnel option would not be suitable due to the need for the crown of the tunnel having to be 12m below the base of the channel, resulting in the tie-in of the tunnel being hundreds of metres further in land to achieve the required gradient. This would result in the purchase of multiple properties for demolition and construction of the portal, which would increase project costs considerably.

An immersed tube tunnel would require significant engineering works to create the temporary opening within the existing lake walls to allow construction. The required maximum gradient of 6% can be achieved at the western crossing, whilst tying the tunnel into the existing road network, however this requires substantial realignment of existing roads. At the central crossing, the achievable vertical alignment for an immersed tube tunnel is 10% which exceeds the design guidance. It was concluded that the only potentially viable tunnel option is the immersed tube tunnel at the western crossing location.
Three alternative tunnel options were fully explored but have been considered unfeasible due to impact and cost. Whilst there are a number of advantages to the tunnel option; no interruption to ships passing through the port, no disruption to road traffic and less visual impact than a bridge, the disadvantages far outweigh these. There would be no provision for cyclists or pedestrians, there would be significant disruption to port and railway operations during construction, and it would be necessary to divert and reconstruct existing roads affecting woodland area, recreational area, and residential properties. Additionally, the overall cost of a tunnel is substantially higher than the central crossing option. This would reduce the benefit-to-cost ratio and affect the Business Case.

**How did you select the potential location for the crossing?**

Having identified a long list of fifteen options, the next stage was to identify any which do not represent realistic solutions. An initial sift was therefore undertaken to identify any “showstoppers” which are sufficiently serious to rule an option out. This resulted in a short list which was the subject of more detailed investigation to determine its feasibility and relative cost.

The proposed scheme is the central crossing option. It is the least expensive of the short-listed options, it produces the highest benefits, it is most likely to deliver the objectives, and it has a high level of public and business support.

**Why were the plans outlined by Peter Colby not taken forward? Why can’t we have an Amsterdam-style bridge where one road is always open?**

The ‘Colby plans’ or ‘Amsterdam style bridge’ proposals were considered along with many other options for a crossing when the Outline Business Case (OBC) for the Lake Lothing Third Crossing was being prepared. The main attractions of having an Amsterdam style bridge on Lake Lothing are that it would allow one of the two bridges to remain down, and open to traffic, at all times thus reducing traffic delays, also the lock would form part of a tidal barrage.

However, it has been concluded that such a scheme would not be deliverable due the likely environmental effects - the introduction of a lock system would effectively change the tidal basin of Lake Lothing into a static water level which would be a significant change from the current situation.

Furthermore, a large double lock structure would effectively sever the Port around the location of the existing Lake Lothing ship turning circle which would create a greater adverse effect for Associated British Ports (ABP) and the operation of the Port. Additionally, the Port Harbour Master, has advised that vessels of the larger size and type that currently use the Port would not be able to stop and position themselves between the two closed locks. Therefore, both locks would have to open at the same time for larger vessels, eliminating the potential traffic benefits.

**Could there be a link from Commercial Road over the railway?**

Previous options for the scheme which had a third crossing positioned to the east of the lake did include an over bridge at the end of Commercial Road spanning the railway. This option was not taken forward when a scheme in the central location of the lake was selected which crossed the lake and railway together.
Environmental Assessment

How will the impact on the environment be assessed?

We aim to minimise impacts on the environment, local communities, local businesses, road users and residents where possible to do so.

The project requires an Environmental Statement (ES) to be completed and submitted as part of our application for development consent. This can be found on the Planning Inspectorate website at https://infrastructure.planninginspectorate.gov.uk.

In early 2017 Suffolk County Council asked the Secretary of State for a scoping opinion to confirm the approach to the Environmental Impact Assessment. This identified the studies and assessments that should accompany the Development Consent Order (DCO) application in the Environmental Statement (ES) for the project.

Will flooding affect the new crossing? How are we mitigating this risk?

The new crossing will have a vertical clearance of a minimum of 12m above Highest Astronomical Tide (the technical term for the highest level which can be predicted to occur under average meteorological conditions). This is significantly higher than both of the existing bridges and will mean that the new crossing is at significantly less risk of flooding than the current crossings.

Proposals for a strategic tidal flood barrier are also being developed for the Outer Harbour, which will be of benefit to the project, when it is in place.

Land and Property

Are you talking to potentially affected landowners, and will any compensation be offered to those affected by the construction or operation of the Third Crossing?

A red line boundary is provided as part of the development consent application showing the area over which SCC may seek authorisation for the compulsory acquisition of interests in and rights over land, the temporary use of land and the overriding of easements and other rights in connection with land.

We have met with affected landowners and will continue to do this in the coming months. We are also continuing our discussions with ABP and Network Rail to ensure the impact on the port and railway are minimised as far as possible.

Where SCC needs to acquire land permanently or temporarily for the project, it will seek to do that via agreement in the first instance, however, SCC can fall back on compulsory acquisition powers if required and compensation claims would then be settled through the prescribed process for doing so. Owners/occupiers of properties that are found to be adversely affected by the operation of the Lake Lothing Third Crossing may be eligible for compensation under Part 1 of the Land Compensation Act 1973.

Suffolk County Council has already acquired a large plot of land on the north side of Lake Lothing. This is required to construct the new junction that will connect the new bridge to Peto Way and Denmark Road. It was acquired early to prevent new development commencing before the Third Crossing starts. There is no intention to acquire any residential land on the north side of Lake Lothing.

It is possible that the construction phase will cause some disruption to other property owners.
or occupiers and SCC will be developing mitigation measures to reduce those effects associated with noise and construction traffic.

Design

What will the new crossing look like?

The design for the Lake Lothing Third Crossing has been developed since conditional funding was granted in March 2016. To ensure the feasibility of the Lake Lothing Third Crossing, an initial design was generated to test the road alignment and connections to existing roads. This design was also priced to ensure it was within the budget of the project. Since this initial design, the project has undergone further development.

Working with SCC and Waveney District Council to determine the overall aspirations for Lowestoft and the role of the crossing in aiding regeneration of the town, the theme ‘Marine Tech’ was adopted. This theme reflects the forward-thinking attitude of the town, particularly its identity as the UK capital of renewable energy. This has been applied to the development of the crossing’s design.

Careful consideration has been given to the design of the opening mechanism to ensure it functions efficiently. This also presents the opportunity to introduce a distinctive design, with the potential to become one of the town’s landmarks.

How will Suffolk County Council ensure that the crossing is well designed? The crossing is being developed by a multidisciplinary design team including: transport planners, environmental and architecture specialists, landscape and urban designers, as well as engineers specialising in highways, structures, geotechnics, and maritime. This integrated team has collaborated with the local authority to design the best scheme for the town.

The design team have worked with Built Environment Experts from Design Council CABE who have reviewed the design at key points along the design process. Suggestions and advice provided by Design Council CABE have ensured a good quality design can be achieved.

How much design has been done and what design is still to be completed?

A significant amount of design has already been completed, and this is known as the ‘Reference Design’ or preliminary design. This was required to allow the necessary assessments to be prepared to a sufficient level to submit the application for Development Consent.

There will need to be a further period of detailed design before we will be ready for construction. This detail design will take approximately 1 year to complete, and we expect to start this final design process in October 2018 once we have appointed our Design & Build Contractor at the end of the summer.

Does the current design mean it is more expensive?

Whilst an initial design was generated to establish the feasibility of the crossing as a whole, the design has been developed to make the structure more efficient and cost effective.

For example, the in-water piers proved one of the most costly parts of the crossing to construct and were large enough to house the moving counterweight of the bascule bridge (in the same way the existing A47 Bascule Bridge works). By challenging the design of this
mechanism, it was possible to develop a more innovative design which reduced the size and impact of the piers required in-water. Whilst working to the cost constraints of the initial design, the new design is more effective on providing a good quality design for the crossing as a whole.

We will continue to work with our new design team to look for opportunities to reduce the construction costs whilst maintaining a high quality design. Highways design and traffic impacts.

**What are the traffic impacts of the new crossing?**

Computer-based transport modelling has been used to assess the potential impacts of the new crossing and how it will change the traffic movements across Lowestoft.

The model was created using a range of data sources such as road traffic surveys, predictions of development in the town and information on road layout, dimensions and speeds. The method used for modelling is a national standard. The results show the impact of traffic re-routing as a result of the new crossing being in place on the year of opening (2022) and the additional increase in traffic flows associated with developments coming forward in the area up to 2037 (15 years after project opening).

The traffic modelling will help identify whether any improvements to local junctions will be required to mitigate any significant adverse impact that the project may have.

The key findings from the traffic modelling are:

- Traffic flows drop significantly on the two existing bridges (by at least a third) compared to the current situation;
- Traffic journey times and network efficiency across the town improve considerably;
- Traffic from the two existing bridges re-route to use the new crossing, for journeys where a central crossing of the lake is more convenient and quicker for their journey; and

Unavoidably there are increases in traffic flows on routes to the new crossing (Peto Way, Rotterdam Road, Waveney Drive and Tom Crisp Way).

**Why does Durban Road have to close?**

The new roundabout must be able to provide adequate capacity for the forecast traffic flows. There is not enough space within existing highway land to accommodate an appropriately sized roundabout.

The closure of Durban Road has been led by the geometric requirements of highway design standards and the need to minimise the effect of the proposed southern roundabout on the existing properties to the north and south of Waveney Drive. During the design process, it was acknowledged that there was limited land for capacity enhancements for this junction within the highway boundary and therefore some additional land would be needed to be acquired. Various junction design options were modelled and provided unacceptable levels of performance to cope with future demand predicted by the traffic model. The design option initially preferred, that was small enough to minimise the impact on MotorLings and residential properties to the south, which also retained a connection to Durban Road did not provide an acceptable level of capacity for the predicted traffic flows.
In order to provide a junction that could provide an adequate level of service for the opening year and future design year, the roundabout needed to be increased in size. This, together with the geometric constraints imposed by the existing road network, land availability (and costs associated with this), meant that a compromise solution was required without a vehicular connection to Durban Road. This means that Durban road will only be accessed by vehicles from the southern end via Kimberley Road and Notley Road. This junction configuration was considered the most effective compromise given the constraints in this area, balancing the needs in terms of junction performance and land acquisition.

**Why are the new roundabouts so big?**

The roundabouts need to be large enough to accommodate the forecasted traffic flow to ensure they operate efficiently now and in the future. The roundabouts being proposed are of a similar size to other adjacent roundabouts (for example Tom Crisp Way roundabout).

**Why has the crossing not been designed as dual carriageway?**

Our traffic modelling has shown the project will provide the capacity required in the year of opening (2022) and the additional increase in traffic flows associated with developments coming forward in the area up to 2037 (15 years after project opening). There are also no dual carriageways on the surrounding highway network.

Finally, a dual carriageway would increase land-take, increase complexity of the opening section and have potentially greater implications for the operation of the port/marina.

**What provision will be made for cyclists and pedestrians?**

The scheme design promotes the experience and needs of all users including pedestrians and cyclists, who will benefit from this key new route in Lowestoft. The highway design for the crossing includes generous footways where possible, at a gradient that is comfortable for all users. There are crossing points proposed at key locations to enable pedestrians and cyclists to continue along their preferred routes around the area.

The design looks to connect to the existing cycle networks and infrastructure surrounding the scheme, facilitating more sustainable modes of transport to be used by locals and visitors. The proposed crossing features a segregated cycle lane on the western side and a shared cycle/footway on the eastern side, allowing a choice for cyclists of varying confidence levels and experience. The exact details of the cycle infrastructure are yet to be designed.

**What are the opportunities for open space?**

The areas of land around the crossing offer opportunities for public space and destination points for people to enjoy. These areas connect to the existing road network and pedestrian routes.

**A47 Bascule Bridge**

**What are the future plans for the existing A47 Bascule Bridge?**

SCC has regular communication with Highways England, who are responsible for maintaining and operating the existing A47 Bascule Bridge. In addition, technical meetings have taken place to discuss the potential design of the new crossing and the potential impact of the project on the Strategic Road Network within Lowestoft.

As part of these discussions Highways England has confirmed that there are no plans to
remove or ‘retire’ the existing A47 Bascule Bridge, should the Third Crossing project be constructed. Once the new crossing is constructed and traffic flows divert onto the new crossing, there will be a significant reduction in vehicle movements using the existing A47 Bascule Bridge. This will provide opportunities to consider different layouts in the areas either side of the A47 Bascule Bridge, but this is currently not within the scope of the Lake Lothing Third Crossing project and will be considered as a separate project in due course.

How are we working with Highways England and are our plans in line with their plans for A47?

SCC is working closely with Highways England, who is a member of the Stakeholder Group for the project. Highways England is supportive of the project given the benefits that the Third Crossing will bring to Lowestoft and the Strategic Road Network, in particular reduced traffic flows on the A47, improved network resilience and improvements to air quality on the A12 associated with the existing A47 Bascule Bridge.

Construction

When will a contractor be on board and what are the procurement timelines? Will there be a requirement for jobs/suppliers to be local? Will the contractor have to offer apprenticeships or work with local schools?

We are currently working with our procurement team to tender the work to deliver this project. Due to the scale of this project we will have to advertise this opportunity to companies in the UK and abroad. We currently anticipate that the contract will be awarded in September 2018 and will take into account many factors including quality and price. As part of the tender procurement process we will include measures to encourage the contractors to make use of local suppliers, offer apprentices and work with local schools.

The contract will be a two-staged process; the first stage will be completion of the detailed design and the second stage will be the construction phase. The detail design will start in October 2018 and last approximately 1 year allowing the construction phase to commence at the end of 2019, with the main construction activities, for example construction of bridge foundations and piers in Lake Lothing starting early in 2020.

Where will the construction sites be and where will construction traffic go?

We plan to have three main construction compounds, one on the south side of the lake, accessed from Riverside Road and two on the north side of the lake.

One of the northern compounds will be located off Peto Way and is primarily associated with the construction of the northern junction. A second, smaller compound will be required to the south of the railway on Network Rail/ABP land. This is required to support the construction of the bridge over the railway line and works in Lake Lothing. This site will be accessed via Commercial Road.

All compounds will typically contain site offices, vehicle parking and storage of materials. Smaller compounds may be required in other areas to manage works in that immediate area.

The DCO will secure the provision of a Code of Construction Practice, including a Traffic Management plan by the Contractor for approval before works can commence.
Crossing opening regime

Where will the control tower be located?
The crossing is proposed to be operated from a new control tower on the south side of Lake Lothing.

Who will control the opening of the crossing?
ABP operate the opening and closing of the existing A47 Bascule Bridge on behalf of Highways England and ABP’s Harbour Master is legally responsible for ensuring the safety of port users.

Although agreements are not finalised at this point it is likely that ABP will become responsible for operating the new crossing on behalf of SCC.

How will you notify people when the crossing will open?
The Intelligent Transport Systems (ITS) to support the crossing (such as variable message signing) are yet to be developed and finalised. It is likely that the new crossing will operate in a similar manner and have similar signing strategy to the existing A47 Bascule Bridge, but this is to be confirmed.

Why are maintaining the port operations so important?
The Port supports a large number of jobs and economic benefits for the region and hosts a number of industries and leisure activities. A fixed bridge of a similar height to that proposed would restrict commercial port and recreational activity.

Which boats will require the crossing to be opened? How often will the crossing open? Will the new crossing need to open at the same time as the existing A47 Bascule Bridge when vessels are passing through?
The crossing is designed to be a minimum of 12m above Highest Astronomical Tide (which is the technical term for the highest level which can be predicted to occur under average meteorological conditions). The need to open it will be determined by the air draft of the vessel, the state of the tide, and other relevant navigational factors (such as weather conditions) and the opening protocol for the crossing. The latter is yet to be determined but will likely be similar to that associated with the existing A47 Bascule Bridge.

We do know that the new crossing will open significantly less frequently than the existing A47 Bascule Bridge as it will be significantly higher enabling more vessels to pass underneath it without the need for the crossing to be opened. It will also be located west of the Kirkley Ham ship turning area so many of the larger vessels will not need to go under the new crossing to access the quays. However, as the Port continues to develop, it can be expected that in the future more commercial traffic may seek access to quays west of the crossing.

On a small number of occasions, for the larger vessels that are destined for a location to the west of the lake (such as the old Shell base), the Harbour Master may decide to open both bridges simultaneously for safety reasons.