

| 4 APRIL 2019

# Rotherhithe to Canary Wharf Crossing

## Briefing for the Mayor

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EVERY JOURNEY MATTERS

## The Draft London Plan

*“The lack of river crossings in the area is holding back growth and development, and the Mayor has prioritised or is exploring a number of schemes which will help to unlock and/or connect growth areas, including...a new river crossing linking Rotherhithe and Canary Wharf.”*

## The Mayor's Transport Strategy

*“New crossings for pedestrians and cyclists can help connect local communities and encourage healthier lifestyles....A new crossing for pedestrians and cyclists between Rotherhithe and Canary Wharf can help support growth and encourage more active travel.”*



## Purpose of this briefing

1. To provide an update on our work since our last briefing (September 2018), including information on our preferred alignment, design and operations
2. To discuss the scheme's current forecast costs
3. To discuss the next steps for the project, including the timetable for public consultation and the TWAO application



# Contents

1. Progress since September 2018 briefing
2. Points to discuss:
  - A. Emerging Design
  - B. Operating the Bridge
  - C. Costs and Funding
  - D. Consultation
  - E. Programme
3. Next steps



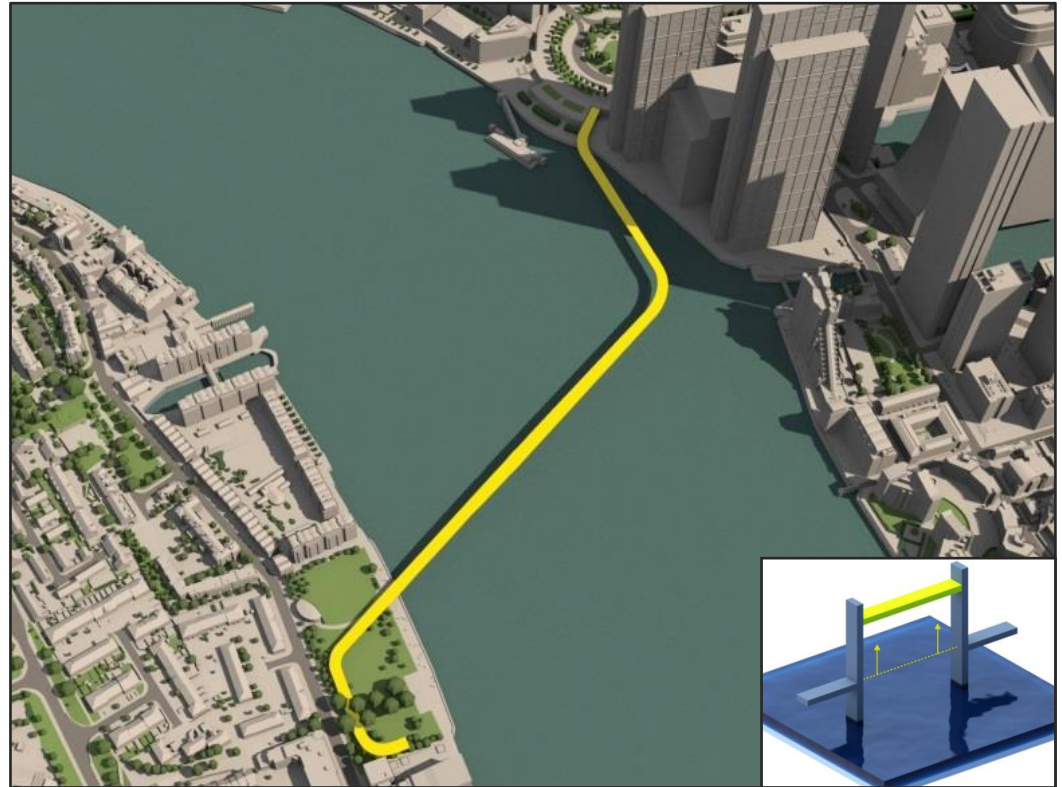
## Progress since September 2018 briefing

- We deferred the public consultation that was planned in October 2018 due to uncertainties over the Business Plan
- We have revised our programme to minimise delays from the deferral of the public consultation
- We have agreed key parameters for the bridge with stakeholders, such as the Port of London Authority and London Boroughs, and completed a concept design for the scheme
- We have updated our demand forecasts that indicate in the years following opening up to 7,000 pedestrians and up to 6,000 cyclists per day could use the new bridge
- We have developed the construction methodology for the scheme, including the main worksites and logistics plans
- We have developed the operating concept for the bridge.



## Emerging Design

- We have selected a preferred alignment between Durand's Wharf (Rotherhithe) and Westferry Circus (Canary Wharf)
- We are continuing to refine the detail of the scheme as we work through navigational simulation with the PLA
- We have agreed with the PLA 12m above mean high water as the bridge height
- We are continuing to work with the local community to develop designs for Durand's Wharf park
- We are working with Canary Wharf Group and Tower Hamlets to develop designs for Westferry Circus – issues remain around connection to Future Cycle Route 5
- We have selected a vertical lifting bridge as the preferred opening mechanism and the Institution of Civil Engineers has undertaken an independent review of our selection process (see Appendix I).





# Emerging Design



Images of the designs for the landing points at Durland's Wharf and Westferry Circus are provided in Appendix 2



# Operating the Bridge

- The bridge will be operational 24 hours a day
- The bridge will be staffed, although we are still determining the need for 24/7 staffing
- The 12m height allows 98% of river traffic to pass without needing a lift
- For the remaining 2% (c. 2,000 passages) the bridge will need to be lifted. In most cases, lifting the bridge will mean it is not available to pedestrians and cyclists for c. 15 minutes on average\*
- Gates will prevent access during bridge lifts
- We are working with the PLA to agree clear periods between closures (a minimum of 30 mins has been agreed, but we are looking to increase this)
- Bridge users will have a minimum of 24 hours notice of bridge lifts.



*\* On average, the bridge will need to be lifted 5 times per day. However, river traffic is highly seasonal, resulting in more lifts during the Summer months and larger vessels requiring longer lifting periods.*





# Costs

- Following a thorough review of costs the mid point estimate for the bridge is **£455m**, including risk and inflation (breakdown provided on next slide)
- The increased costs are primarily due to design changes to address PLA requirements in respect of positioning of the main towers and ship impact protection, together with a change in indices post Brexit
- Where possible we have revised the design to reduce costs (e.g. use of concrete rather than steel towers and reducing the number of lifts and stairs) and there are potential further opportunities as the concept design matures (e.g. risk allowances)
- The scheme has a strong strategic case (alignment with the MTS, London Plan, etc.), but at £455m the bridge would produce a Benefit-Cost Ratio (BCR) of 1.1:1\*. The alternative of a ferry continues to be promoted by stakeholders such as Canary Wharf Group and whilst it does not achieve the same level of change in cycling or long-term benefits it has a capital cost of £37m, with a BCR of 2.1:1
- As part of the TWAO process, a compelling case in the public interest will need to be made for the compulsory purchase of land. Opponents to the bridge, particularly those whose land may be compulsorily purchased, may try and use the ferry BCR to undermine the case for the bridge.

\*including risk, operating costs and optimism bias at 43 per cent to produce a 60 year appraisal



# Breakdown of cost estimates

Concept design for central lifting bridge @ 12m height	Sept 2018 Estimate	Mar 2019 Estimate	Variance	Comments
Construction	£140 - 150m	£180m	+£30m / + £40m	Changes to the positioning of the towers and ship impact protection design has lengthened the opening section of the bridge increasing the amount of steelwork, foundations and requiring larger mechanical and electrical equipment. Additional allowances also added for works at Durand's Wharf due to ground conditions.
Indirect costs	£40m	£40m	£0m	Design, surveys, supervision and associated costs
Risk	£70 - 75m	£90m	+£15m / +£20m	Allowance on construction, indirect costs and inflation at 40% in accordance with Treasury & TfL guidance
Land costs (inc. risk)	£35 - 55m	£45m	+£10m / -£10m	Change in design so no land is taken from JP Morgan, but instead extinguishment of restaurant at Westferry Circus
Point estimate at current prices	£290 - £320m	£355m	+£35m / +£65m	
Inflation	£65 - 70m	£100m	+£30m / +£35m	Based on the latest BCIS indices that forecast a significant rise in inflation post the Brexit transition period
Point estimate outturn prices	£355 - 395m*	£455m	+£60m / +£100m	
Range	£250 to £595m	£365m to £590m	n/a	A cost range of -20% to +30% has been applied based on design maturity and market sounding (reduced from -30% to +50% at September 2018)

\* In September 2018 two variations (C1 and C2) on the preferred alignment between Durands Wharf in Rotherhithe and Westferry Circus in Isle of Dogs were under consideration resulting in two estimates of £355m and £395m.



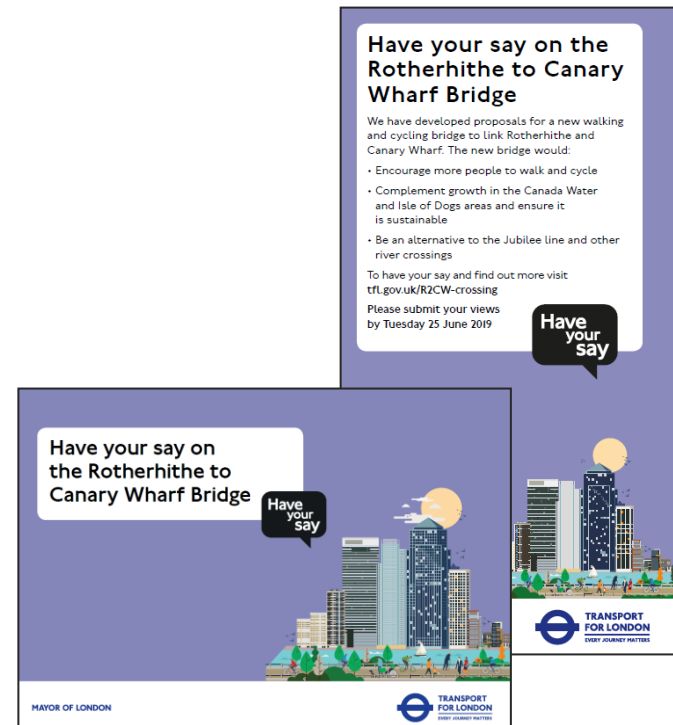
## Funding

- A Funding Statement will be required as part of the TWAO submission
- We have agreed £355m of funding for the scheme, as part of the Healthy Streets programme in our 2018 Business Plan
- We are currently exploring further funding opportunities, such as Community Infrastructure Levy with the London Borough of Southwark, although the bridge is competing against other transport priorities (e.g. Elephant & Castle Northern Ticket Hall and Bakerloo Line extension)
- We are exploring commercial opportunities, such as retail units and advertising, to fund the ongoing costs of the scheme, such as staffing, maintenance and operations
- There is potential to consider any shortfall as part of the 2019 business planning process.



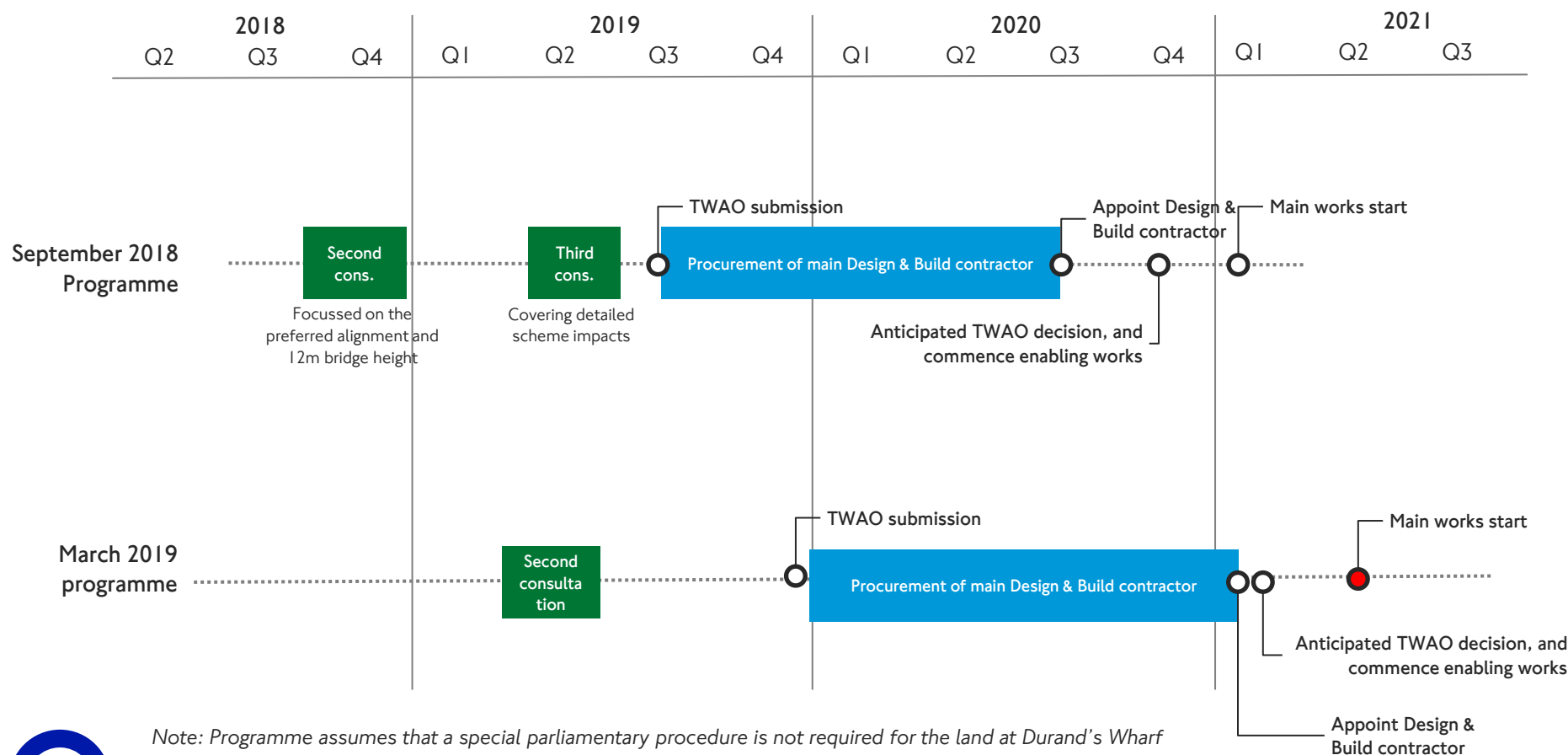
# Consultation

- We have been actively engaging with a wide range of stakeholders in advance of the next public consultation that is planned to commence at the end of April 2019 (summary of stakeholder views in Appendix 3)
- Subject to the feedback received, this will be the final consultation before we make the Transport and Works Act Order (TWAO) submission for the powers to build and operate the new crossing. This final consultation will include full details on:
  - Our design
  - Our operating concept
  - Our construction methodology
  - Potential environmental impacts and mitigations
  - Costs, funding, benefits and the case for the scheme.



# Programme

- In light of the changes to the consultation strategy, we have revised our programme
- As far as practical we have minimised the delays to the TWAO submission. Through our procurement strategy we are exploring options to accelerate enabling and construction works.





## Next Steps

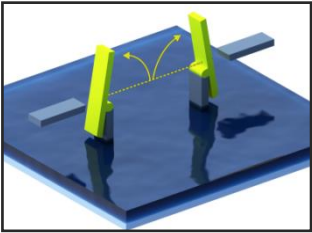
Subject to the discussion at the meeting, next steps would be to:

- Review the funding status of this project - the project funding would need to be considered in the context of the Business Plan and in advance of a TWAO including the likely need for a Mayoral Direction and further Delegation given the need to be clear about funding and powers for that process
- Commence second consultation on 30 April 2019 and continue negotiation with key stakeholders (especially PLA, CWG, Tower Hamlets, Southwark and relevant landowners)
- Finalise the designs and refine the costs of the scheme in September 2019
- Publish the results of the consultation in September 2019
- Submit a paper to the 20<sup>th</sup> November TfL Board meeting seeking authority to submit the TWAO application
- Submission of the TWAO application in December 2019.



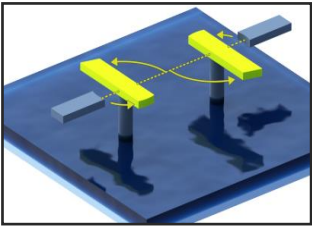
# Appendix 1 – Opening Mechanism

- Three potential opening mechanisms have been considered. A **vertical lifting mechanism** is **preferred**. This solution has been endorsed through an independent review by the Institute of Civil Engineers.



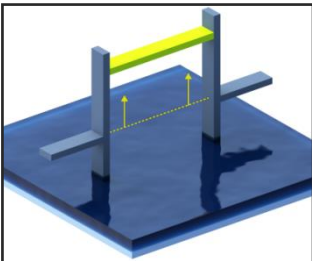
## Bascule – *Not Preferred*

- No precedent: Significant unknown technical challenges and risks
- Higher maintenance costs
- Reduced reliability for bridge users



## Swing Bridge – *Not Preferred*

- Requires large ship impact protection structures in the river
- Higher maintenance costs and a more complex maintenance regime
- Reduced reliability for bridge users



## Vertical lifting – *Preferred*

- Greater precedent: reduced technical risk and uncertainty
- Improved reliability for bridge users: unlikely to misalign when lowered
- Potentially shorter waiting times for bridge users.



## Appendix 2 – Emerging designs for landing areas



Bridge approach and connections at Durands Wharf



Bridge approach and connections at Westferry Circus

# Appendix 3 - Stakeholders and requirements

