Scheme Summary

Name of scheme:	**Flood Alleviation Scheme 2 (FAS 2) - Leeds**
PMO scheme code:	GD-PA4-020
Lead organisation:	Leeds City Council
Senior responsible officer:	Martin Farrington, Director of City Development
Lead promoter contact:	Vanessa Allen, Leeds City Council Richard Dennis, Leeds City Council
Case officer:	Chris Brunold, Combined Authority

Applicable funding stream(s) – Grant or Loan:	Local Growth Fund – Grant - £3.9 million
Growth Fund Priority Area (if applicable):	Priority 4C – Integrated Flood Risk Reduction

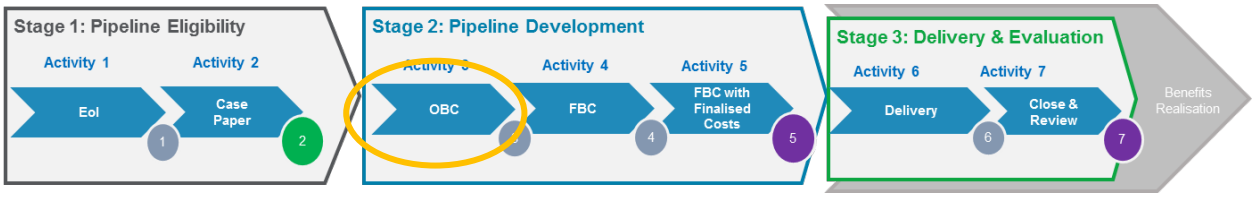
Approvals to date:	£20m approved by June 2017 Combined Authority for the Leeds City Region Flood Alleviation Programme. Approval for projects to come forward at OBC, FBC or FBC+ given, each project must be considered by Combined Authority before full approval can be given.
Forecasted full approval date (decision point 5):	Full Business Case expected Summer 2019
Forecasted completion date (decision point 6):	October 2018 OBC programme shows: • Calverley flood storage area complete Dec 2021 • Linear defences and conveyancing complete Aug 2022 • Full completion October 2023

Total scheme cost (£):	£112 million
Combined Authority funding (£):	Up to £3.9 million Local Growth Fund (LGF)
Total other public sector investment (£):	£65.0 million Defra and the Environment Agency (confirmed) £10.0 million Leeds City Council (confirmed) £3.82 million ESIF for Stourton and Kirkstall (confirmed and OBC) £1.75 million Forestry Commission (applied for) £0.48 million Yorkshire Wildlife Trust (applied for) £5.0 million Highways England (applied for)

Total other private sector investment (£):	£1.4 million Network Rail (application submitted) £1.75 Woodland Trust (application submitted)

Is this a standalone project?	No
Is this a programme?	Yes – Leeds City Region Flood Alleviation Programme
Is this project part of an agreed programme?	Yes as above

Current Assurance Process Activity:



Scheme Description:

The Leeds Flood Alleviation Scheme Phase 2 (LFAS2) is a major project which will reduce flood risk to residential, commercial and industrial property, and infrastructure assets along the River Aire in Leeds. It is intended to be the second and final phase of Leeds City Council's plans for managing current and future flood risk in the city from the River Aire, and will bring the benefit area of both phases up to a 1-in-200 year standard of protection.

In order to achieve this, the proposed scheme consists of works within the River Aire corridor between Leeds City Centre (Whitehall Waterfront) and Apperley Bridge, including:

- The removal of redundant bridges at Armley Mills
- Raising of Milford Place footbridge to remove the potential for flow restriction
- The removal of the under-hanging structure at Redcote Lane bridge
- The local widening of the channel adjacent to the A65
- Construction of linear defences
- Construction of new flood water storage area at Calverley

And, in order to maximise future economic regeneration benefits:

- Provision of access improvements along the corridor and woodland creation at Kirkstall Valley Nature Park.

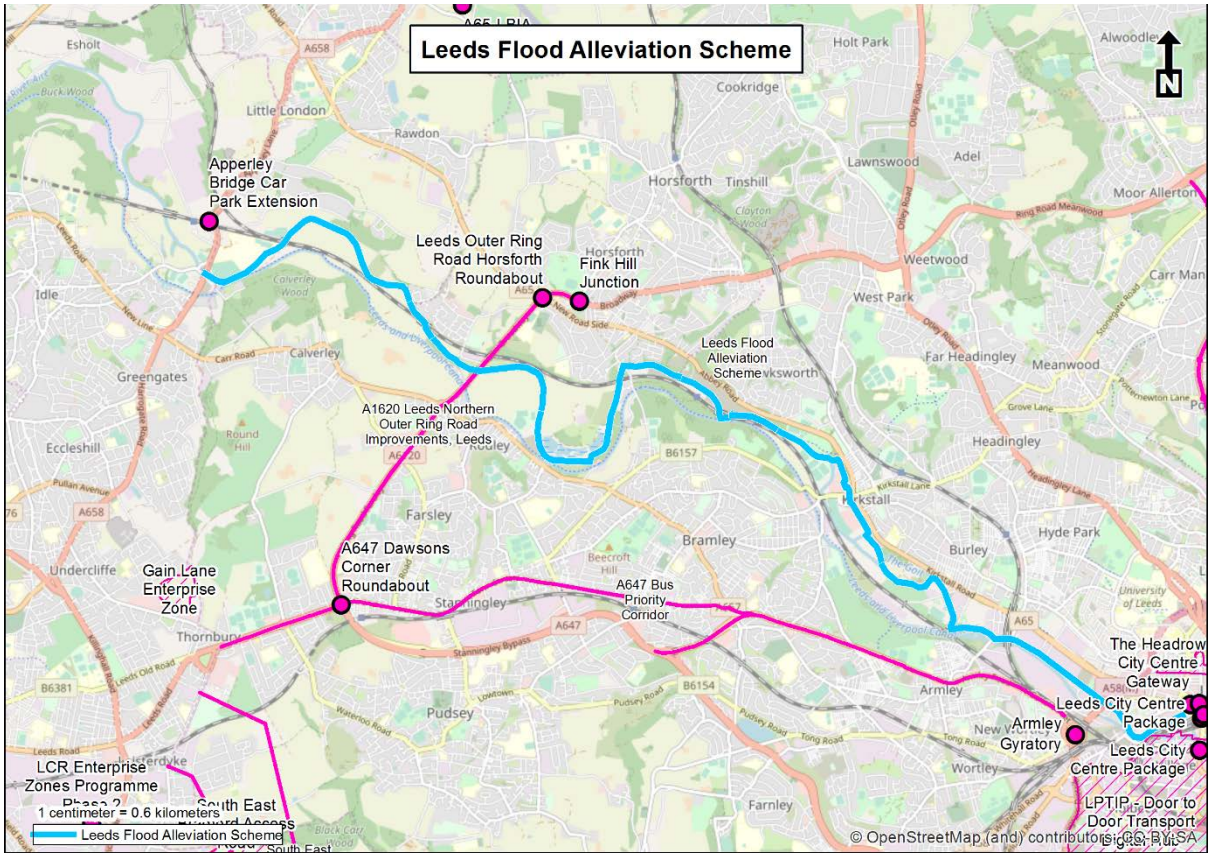
Communities along this stretch of the river have taken several years to recover from the extensive damage and disruption caused by the major flooding on Boxing Day 2015. Had the flood occurred on a normal working day the impacts would have been more severe. The flooding heavily affected a significant number of local businesses, a number of which have since failed or have relocated outside of the area.

Business Case Summary:	
Strategic Case	The impact of the floods on Boxing Day 2015 was substantial and unprecedented in living memory. The Combined Authority's own research estimated total economic losses across the region of £500 million, with a total of 2,000 businesses and 4,000 homes flooded. Calderdale and Leeds were the worst affected areas. The impact on businesses and communities would have been much worse had it been a normal business day rather than a bank holiday. If the city region is to achieve ambitious targets for 35,000 additional jobs and additional gross value added (GVA) of £3.7 billion, it needs to ensure that it retains and builds upon the jobs it already has and provides the environment in which businesses can flourish. Leeds is the third largest employment centre in the UK and contributes £16.3 billion GVA to the UK economy annually. It is a major transport hub centred on Leeds Railway Station the future terminus of High Speed Rail 2. The River Aire valley upstream of the station provides a vital transport corridor, with eastern rail lines linking Kirkstall, Airedale and Wharfedale to the wider national rail network. The A65 passes along the river corridor, and this is the primary highway connection between Leeds Railway Station and Leeds Bradford International Airport, as well as many businesses and commuters based in the west of the city. Leeds City Council has a long-standing strategic ambition to protect the city from flood events of this magnitude, and to ensure it is resilient to climate change. The Upper Aire Flood Risk Management Strategy was produced and approved by the Environment Agency in 2010.It sets out achieving a 1-in-200 year standard– the level of protection recommended by The National Infrastructure Commission for major cities. The project aims to extend the Flood Alleviation Scheme (FAS) 1 delivered in Leeds in 2017 along 4.5km of the River Aire from Leeds Railway Station to Thwaite Mills by continuing work 14km further upstream to Apperley Bridge. The scheme will bring both Phase 1 and Phase 2 benefit areas up to a 1-in-200 year standard of protection.
Commercial Case	The commercial case for this project is based on the fact Leeds is the third largest employment centre in England outside of London and investing in flood management will protect an existing 470 businesses employing 11,000 people and create the commercial confidence to allow the city to continue to thrive and generate good growth for the benefit of all its citizens in the future. The construction phase of the works will be tendered competitively. A separate Technical Advisory Services contract is proposed. This will be tendered competitively.

	The construction cost estimate has been verified by using the project cost tool benchmarked against the actual costs from the Leeds FAS Phase 1 over the past 36 months and information related to similar schemes completed elsewhere. The costs have also been benchmarked against the Environment Agency's project cost tool.
Economic Case	Alternative options for a scheme with stakeholders involved in Leeds FAS Phase 1 have been evaluated and a 1-in-200 year standard of protection scheme has been selected as the local preferred choice. This is because it will uplift the benefit areas of both Phase 1 and Phase 2 to a 1-in-200 year standard, and produce benefits in terms of health and wellbeing by preventing the damage to livelihoods, .Finally, it utilises natural flood management delivering improved wildlife habitats and the riverside public realm.
Financial Case	The total capital cost estimate of £112.1 million has been verified using a project cost tool. It has been benchmarked against the actual costs from the Leeds FAS Phase 1 over the past 36 months, and information related to similar schemes completed elsewhere. The costs have also been benchmarked against the Environment Agency's project cost tool. In the event of an overspend above the approved amount of £112.1 million, then Leeds City Council will look to fund these costs directly or from local contributions. The Council is committing £10 million and underwriting £18 million. DEFRA has committed £65 million. The project demonstrates positive benefits that outweigh the cost of the works in terms of commercial prosperity. The prevention of urban flooding and management of peak flows up river will turn the river into an asset in the heart of the city.
Management Case	The project is being led by Leeds City Council which successfully delivered Leeds FAS Phase 1 through the same project team.

Location map:

The following location map shows the scheme in relation to the other Combined Authority funded schemes in the surrounding area.



Please note, depending on the level of scheme development the location and scope of the schemes indicated here are indicative only.

For further information on Combined Authority schemes across the Leeds City Region please refer to: https://www.westyorks-ca.gov.uk/economy/leeds-city-region-infrastructure-map/