# Improving Places Select Commission October 2022

# Update on: Reducing flood risk and the Council's Six Priority Flood Alleviation Schemes

Sam Barstow and Richard Jackson



### **Contents**

### 1. Previous updates to Improving Places Select Commission (IPSC) on flooding

### 2. Reducing flood risk across the Borough

- a) Progress since the November 2019 floods
- b) Examples of completed works
- c) Ongoing and future needs for work
- d) Upcoming actions for work to reduce flood risk

### 3. The Council's Six Priority Flood Alleviation Scheme projects

- a) Progress on advanced construction phases & on survey / investigation work on future phases
- b) Delivery process for the "Shovel Ready" work
- c) Funding position
- d) Work planned to be undertaken over the next year / questions

### 1: Previous updates to IPSC on flooding

### Introductory note:

- Previous IPSC presentations on flooding have been:
  - 6<sup>th</sup> February 2020 to full IPSC
  - 30<sup>th</sup> November 2020 to Flood Alleviation Scheme (FAS) sub-group of IPSC
  - 7<sup>th</sup> September 2021 to full IPSC

### Information reported to 7<sup>th</sup> September 2021 meeting:

- Overview of the Council's Six Priority FAS projects to help new IPSC members become familiar with the projects
- Identified initial (2020) estimated delivery cost of £52m
- Progress update on what funding had been secured via both the Council's Corporate resources and several External Funding sources £15.5m had been secured at the time
- Progress update on advanced phases of work located along the River Don corridor
- Progress update on achieving a "Shovel Ready" status for all six Priority FAS projects setting out how and when an external supply chain was to be established through 2021
- Overview of the pre-construction work planned to be delivered between 2022 and 2024

### 1: Previous updates to IPSC on flooding

### The "next steps" reported to 7th September 2021 meeting were:

- Begin the pre-construction process with the three Consultant suppliers
- Work through a three staged approach (as detailed at IPSC) for each of the six priority FAS
  projects to achieve "Shovel Ready" status in 2024, with concurrent working across the six projects
  - Stage 1: Mobilisation of resources, surveys and investigation
  - Stage 2: Initial design work and engagement with third parties
  - Stage 3: Detailed design, finalisation of third party approvals and work up to procurement of construction suppliers
- Work with stakeholders on these complex FAS projects
- The Drainage Team would continue to respond to flood incidents as and when they occur
- Continue to work to attract funding to fully deliver the schemes in future and protect residents, businesses and road network from flooding in the future

Today's presentation provides additional information on the above.

### 2a: Progress since the November 2019 floods



### Local Flood Risk Management Strategy

February 2022

Produced: Drainage Team File: 17/187/46 Issued: 16/02/2022 Edition: 2 Revision: 2



#### Work undertaken

- Local Flood Risk Management Strategy (LFRMS)
  has been updated in February 2022
- Sets the Council's policy framework for managing flood risk across the borough
- Link to the LFRMS: <u>https://www.rotherham.gov.uk/water-management-flooding/flood-risk-management-strategy</u>

### **General principles of the LFRMS**

- Community focus and partnership working
- Sustainability
- Risk Based Approach
- Proportionality
- Multiple benefits

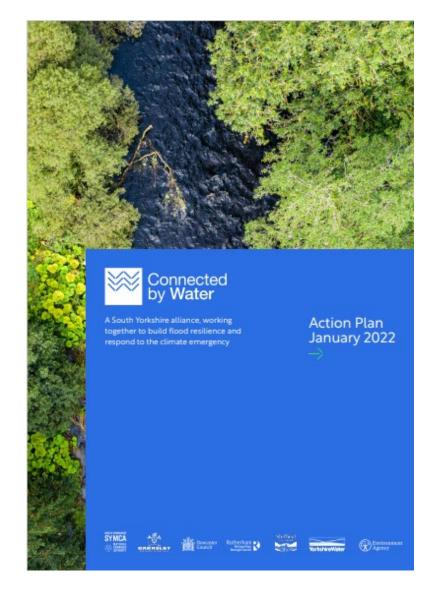
### 2a: Progress since the November 2019 floods

### What is Connected by Water?

- It is an "Action Plan" that was published in January 2022
- Developed by a South Yorkshire alliance of the 4 Local Authorities, Environment Agency, South Yorkshire Mayoral Combined Authority and Yorkshire Water Services Ltd
- Along with the above partners, a number of supporting organisations are crucial to the delivery of this plan
- https://connectedbywater.co.uk/

### Ongoing actions specific to the Council

- Delivery of the Council's six Priority FAS projects
- Delivery of Theme 4: Communication, Engagement and Building Resilience
- Support partners in the delivery of the project they lead on (e.g. Environment Agency projects)



### 2a: Progress since the November 2019 floods

### Working with communities

- We have taken the opportunity to work with Town/Parish Council's and Local Community Groups to help them increase their resilience
- The South Yorkshire wide "Connected by Water" initiative supports the above and may open up further funding opportunities in the medium to long term



### 2b: Examples of completed works across the Borough

### Small scale capital works continue to be delivered

 Targeted at reducing risk to small numbers of properties located across the borough

#### Ravenfield

- Increased size of the culvert, installed a new trash screen and cleared remainder of existing culvert
- Reduced risk of flooding to 13 properties that were impacted in November 2019

#### **Fence**

- Cleared watercourse, created new bund and installed a new box culvert
- Reduced risk of flooding to a dwelling, kennels and highway that were impacted in November 2019

### Salt Hill, Firbeck

- Installed 2 large diameter soakaways
- Removed surface water connections to a highway drain that lacked capacity
- Reduced risk of flooding to 6 properties that were impacted in November 2019













# 2c: Ongoing and future needs for works across the Borough

### Works delivered to the end of July 2022

- Since November 2019, small and medium sized projects have been constructed in areas that were both affected by flooding in June 2007 and November 2019
- Typically the works involved increasing capacity within systems or installing new drainage systems, with focus on reducing the risk of surface water flooding to residential properties
- Small to medium scale projects have been carried out at over 60 locations

#### Works that still need to be undertaken

- Flooding continues to be one of the greatest risks to the Borough ongoing improvement works,
   maintenance and understanding will be at the forefront of managing the risk
- Historically, highway drainage assets have been designed to hold rainfall events of 1 in 30 year storms – this capacity will be reached more frequently with climate change, and so ongoing improvements will be required

### Development control role as the LLFA helps the Council manage flood risk in the long term

- As a Statutory Consultee for major planning applications, the LLFA have the ability to control new development through the planning application process
- Currently looking into emerging legislation on LLFA responsibilities for sustainable drainage

# 2d: Upcoming actions for work to reduce the flood risk across the Borough

### Continue work on communications and engagement

- With partners via "Connected by Water" project
- With the Cabinet Member for Transport and Environment
- With Ward Members, Town/Parish Council's and Community Groups
- Continue attendance of the Cabinet Member for Social Inclusion at Regional Flood and Costal Committee meetings, as a delegated responsibility from the Cabinet Member for Transport and Environment
- Continue to update the website with information on flooding

### Ongoing delivery of LLFA works

- In-house team will continue to deliver small scale works in known flood risk locations
- Develop a programme of works for areas of flood risk that we already know of
- Add investigations and works following future flood incidents to the programme of works
- This is a rolling programme of works (<a href="https://www.rotherham.gov.uk/roads-pavements/indicative-drainage-repair-programme-202223">https://www.rotherham.gov.uk/roads-pavements/indicative-drainage-repair-programme-202223</a>)

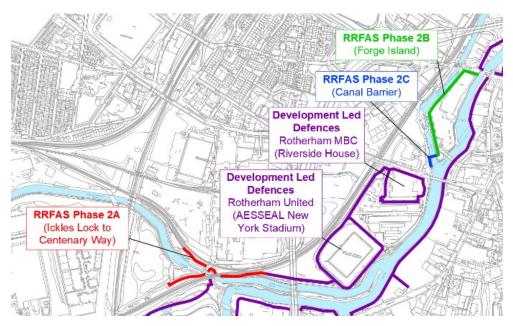
### Ongoing delivery of other works

- Continue maintenance work and improve the gully cleansing process
- Continue LLFA role in development control and sustainable drainage

# 3a: Progress on advanced phases of construction on the six Priority FAS projects

Key focus continues to be to construct works along the River Don in Rotherham Town Centre as part of the Rotherham Renaissance Flood Alleviation Scheme (i.e. Phases 2A, 2B & 2C).

- By 2023, approximately £15m of works will have been constructed as part of these three phases
  - This will provide a continuous line of defence over 1.6km (on the north/west bank)
- This leaves a further 1.9km to design and construct (on the north/west bank)
- Need the full 3.5km of defences in order to reduce risk (from the River Don) between Forge Island and Parkgate
  - This area includes the A633, the railway and the tram/train network including Rotherham Central station and Parkgate station
- Works need to be designed and constructed on the south/east bank at:
  - Marsh Street/Sheffield Road (opposite the Rotherham United FC stadium)
  - Effingham Street/St Anne's (near Parkgate)



# 3a: Progress on advanced construction phases (works now complete)

Within Rotherham Town Centre, advanced construction phases of Rotherham Renaissance Flood Alleviation Scheme (RRFAS) have been completed. These phases are along the River Don corridor.

### Phase 2B: Forge Island Flood Wall and Public Realm Improvements

- Pre-construction completed between 2017 and 2019
- Construction completed in 2021

### Phase 2C: Forge Island Canal Barrier

- Pre-construction completed between 2019 and 2021
- Construction completed in August 2022





# 3a: Progress on advanced phases of construction (works now complete)

Construction photos of the Rotherham Renaissance Phase 2C: Forge Island Canal Barrier







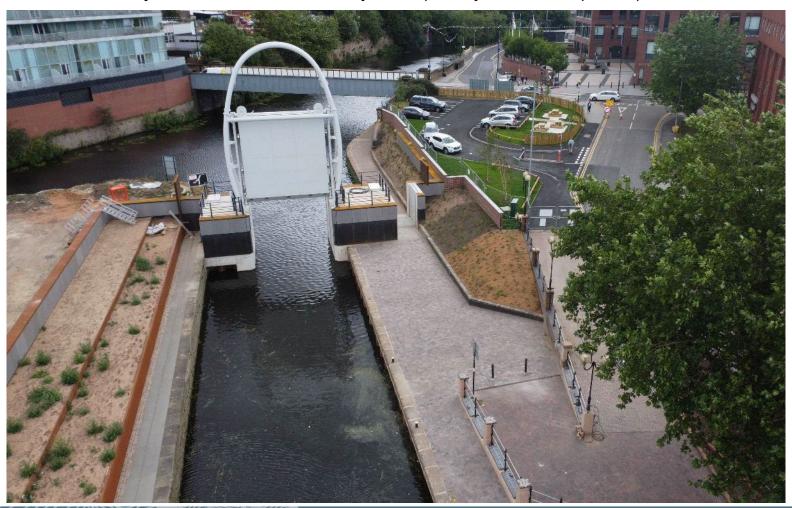






# 3a: Progress on advanced phases of construction (works now complete)

Canal Barrier and adjacent works, at end of July 2022 (shortly before completion)



# 3a: Progress on advanced phases of construction (that started in 2022)

As part of the Rotherham Renaissance FAS the next phase of construction around Ickles Lock has started.

- Phase 2A: Ickles Lock to Centenary Way Flood Wall and Flood Embankment
  - Pre-construction detailed design and third party approvals completed (including Network Rail, Canal & River Trust, Trans Pennine Trail, BOC Ltd and Northern Power Grid Ltd)
  - Construction Started in May 2022 and planned to be completed in June 2023









3a: Progress on survey and investigation work (that started in 2022)

Pre-construction work is ongoing for all six Priority Flood Alleviation Scheme projects, using the £5.8m allocated by the Council in April 2021, for example:

- Engagement with Town/Parish Council's
- Letter drops to inform of survey work
- Engineering & Environmental surveys
- Topographic surveys
- Culvert surveys and clearance works
- Geotechnical investigation

Delivering the above has allowed the team to start to engage with landowners alongside the watercourses and with other people and organisations impacted upon by flooding - with positive feedback so far

### Targeting completion of survey work in 2023

Survey and investigation allows the Design Team to establish the extent, scale and size of each FAS project – i.e. the work up to "Approval in Principle" through 2022 and 2023







### LAUGHTON COMMON

urses (also called ordinary watercourses) in the area cannot always cope with

Rotherham Council work together with other organisations including the Envi Agency, South Yorkshire Mayoral Combined Authority and Dinnington St John's Town Council to reduce the risk of flooding.

#### TOWN COUNCIL



#### What can you do?

- before a flood Know how to turn off gas, electricity as
- · Prepare a flood kit of essential

t. 0370 850 6506 - General enquirie

#### What's happening in

#### Future flood prevention







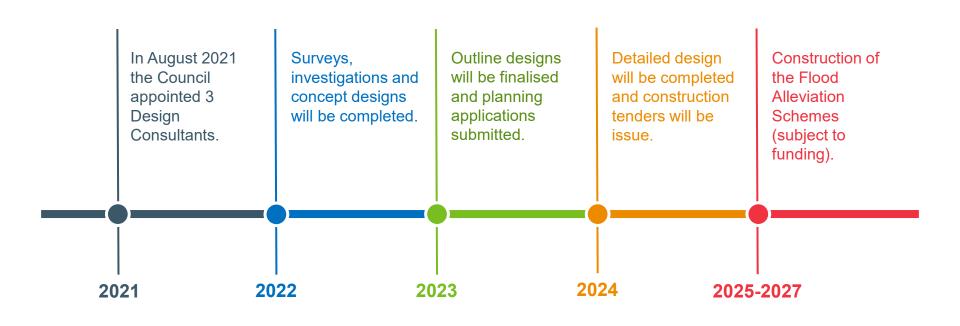






### 3b: Delivery process for "Shovel Ready" works

"Shovel Ready" delivery process (i.e. the pre-construction works to get projects ready for construction)



# 3b: Reducing flood risk in a timely and "no regrets" manner – possible opportunities

- Looking for opportunities to deliver advanced phases of work in a timely and "no regrets" manner
- These are small to medium scale works that can be constructed to make modest reductions in flood risk within communities, for example:
  - Works to make localised improvements to the flow carrying capacity of small watercourses
  - Works to reduce the risk of debris build up and siltation of small watercourses
  - Short extents of new flood defences alongside the River Don (i.e. in locations where water first escapes from the main river channel)
- Exploring funding opportunities to support this approach





# 3c: Funding position – overview of initial (2020) estimates

£5.8m of RMBC capital funding has been secured for the pre-construction of the 6 Priority FAS projects.

This "Shovel Ready" pre-construction phase will be delivered over three Financial Years (i.e. 2021/22, 2022/23 & 2023/24).

The initial (2020) estimated costs for construction is £46.2m, taking the overall total required to £52m.

Scheme	Initial overall cost estimate (i.e. Pre-construction & construction)	Initial costs to achieve "Shovel Ready" status (i.e. Pre-construction only)
Rotherham Renaissance FAS	£24m	£2m
Parkgate & Rawmarsh FAS	£14m	£2m
Whiston Brook FAS	£4m	£0.5m
Eel Mires Dike FAS	£3m	£0.6m
Catcliffe Pumping Station	£5m	£0.6m
Culvert Renewal Programme	£2m	£0.1m
Total	£52m	£5.8m

### 3c: Funding position – progress on secured funding

£22.5m of funding has been secured against the required £52m (i.e. £29.5m still needed) from several organisations to deliver both the pre-construction process and construction works.

Note: £7.0m of the £22.5m has been secured since the September 2021 update to IPSC. £17.1m has been identified but not secured .

Funding source	Funding secured to date	Priority FAS projects supported by funding secured to date
RMBC Capital Programme	£5.8m	Pre-construction process for all six Priority FAS projects
RMBC Town Centre Investment Fund	£5.7m	<ul> <li>Rotherham Renaissance FAS Phases 2A, 2B and 2C (in Rotherham Town Centre)</li> </ul>
European Regional Development Fund (ERDF)	£4.1m (Original £1.6m plus NEW £2.5m)	<ul> <li>Rotherham Renaissance FAS Phases 2A and 2C (in Rotherham Town Centre)</li> <li>Parkgate &amp; Rawmarsh FAS (in Parkgate area)</li> </ul>
South Yorkshire Mayoral Combined Authority (Local Growth Funds)	£1.3m	<ul> <li>Rotherham Renaissance FAS Phases 2B and 2C (in Rotherham Town Centre)</li> </ul>
Yorkshire Regional Flood and Costal Committee (Administered by the Environment Agency) – Local Levy	£0.7m	<ul> <li>Business case for Rotherham Renaissance FAS         (Rotherham Town Centre, Parkgate and Kilnhurst areas)</li> <li>Pre-construction process for Rotherham Renaissance FAS         Phase 2C (in Rotherham Town Centre)</li> </ul>
Levelling Up Fund	£2.5m (NEW)	Rotherham Renaissance FAS Phase 2C (in Rotherham Town Centre)
South Yorkshire Mayoral Combine Authority (Gainshare)	£2.0m (NEW)	<ul> <li>Rotherham Renaissance FAS Phases 2A, 2B and 2C (in Rotherham Town Centre)</li> </ul>
Network Rail	£0.4m	<ul> <li>Pre-construction process for Rotherham Renaissance FAS Phase 2C, and for construction of Phase 2B (in Rotherham Town Centre)</li> </ul>
Total	£22.5m	Total funding secured to date (leaving £29.5m still to secure, based on initial cost estimates)

### 3d: Work planned for the next year

- Continue communications and engagement work
- Start to make agreements with over 50 landowners, with some agreements to be made via Land Agents
- Ongoing delivery of "Shovel Ready" process for the six Priority Flood Alleviation Scheme projects
- Reducing flood risk in a timely manner where appropriate to do so the "no regrets" approach
- Increasing confidence in programme and cost certainty to set budgets for Business Cases
- Start the preparation of funding bids for the 6 Priority Flood Alleviation Scheme projects

We will provide a further update to IPSC in Autumn 2023

**Questions?**