

Report of Flood Risk Manager

Report to the Chief Officer (Highways and Transportation)

Date: 11 February 2020

Subject: Approval for the development of options to reduce flood risk from Meanwood Beck

Are specific electoral wards affected?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, name(s) of ward(s): Moortown, Weetwood, Headingley & Hyde Park, Chapel Allerton	
Has consultation been carried out?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are there implications for equality and diversity and cohesion and integration?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Will the decision be open for call-in?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the report contain confidential or exempt information?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If relevant, access to information procedure rule number:	
Appendix number:	

Summary

1. Main issues

- Meanwood Beck runs through the north of Leeds from Golden Acre Park through the city centre meeting the River Aire at Crown Point Weir. The beck has a large, steep catchment and has caused widespread flooding to property on several occasions.
- It is expected that flooding to affected properties can be mitigated through flood alleviation works in the area. Appraisal of the options for a scheme is required to determine the most suitable solution.
- The Environment Agency has recently carried out a modelling study to update flood mapping and understand the flood risk in the catchment. This information is available to use for the development of the scheme.
- £60,000 funding for appraisal of a scheme has been secured through local levy funding.
- Likely options for a scheme are to construct a flood storage reservoir within existing green spaces alongside the beck..
- There is £929,000 Grant in Aid funding allocated for the design and construction phases of the project within the Environment Agency medium term plan. The scheme was also included in a recent bid by the West Yorkshire Combined Authority (WYCA) for funding from central government.

- The investigation of a scheme at Meanwood Beck is listed as S19 in the List of Measures (Schemes) in the Leeds Local Flood Risk Management Strategy.

2. Best Council Plan Implications (click [here](#) for the latest version of the Best Council Plan)

- The proposed works will reduce flood risk improving the resilience of the affected communities and the river environment.
- The Council is meeting its responsibility as Lead Local Flood Authority in reducing flood risk.

3. Resource Implications

- The total estimated cost of the Feasibility and Outline Design works necessary to reach Outline Business Case approval is £120,000 including LCC staff time.
- The costs for consultancy and investigation to deliver the appraisal and development of the outline business case will be funded from the £60,000 local levy funding paid by the Environment Agency.
- LCC staff time will be funded from the Leeds City Council capital funds, this has been estimated to be £60,000 to develop the outline business case.

Recommendations

The Chief Officer (Highways and Transportation) is requested to:

- a) Give authority to incur expenditure of £120,000 for a capital scheme to carry out appraisal and develop an Outline Business Case for a flood alleviation scheme at Meanwood Beck including obtaining the necessary permits and approvals for the scheme.
- b) Note that a further report will be submitted for Executive Board review in 2021 to gain approval to submit the Outline Business Case to the Environment Agency and to give authority to incur expenditure for detailed design and construction of the scheme.

1. Purpose of this report

- 1.1 To note the flooding issues within the Meanwood Beck area to be addressed by a flood alleviation scheme.
- 1.2 To request authority to incur expenditure of £120,000 to carry out the project appraisal and produce an Outline Business Case (OBC) for the project for submission to the Environment Agency.

2. Background information

- 2.1 Meanwood Beck (also called Lady Beck) is a watercourse located in North Leeds, which runs through Leeds City Centre and meets the River Aire at Crown Point Weir.
- 2.2 There have been major flooding events in the Meanwood Beck Catchment in 2002, 2007 and 2015. This has affected commercial properties at Sugar Well Road and Meanwood Close and residential properties at Monk Bridge and Boothroyd Drive. In

addition to these the Mill Garth Hospital close to the beck was flooded in 2004 and 2007 affecting vulnerable persons within this facility. There has also been frequent fluvial flooding from Meanwood Beck to highways close to Meanwood Beck.

- 2.3 A hydraulic modelling study of Meanwood Beck was completed in 2017 by the Environment Agency. This updated flood mapping and flood warning areas. There are 110 residential properties and 276 commercial properties within Flood Zone 3 following this update. This model is available for LCC use and is to be further developed as part of the appraisal of the scheme and development of a business case.
- 2.4 The source of flooding to properties to be addressed is flooding from Meanwood Beck. The catchment for the beck is large and steep and responds quickly to heavy rainfall. This flood risk is exacerbated by the high number of hydraulic structures within the urban area.
- 2.5 £60,000 of local levy funding has been allocated to investigate flooding in the area and develop a flood alleviation scheme.
- 2.6 Funding for the design and construction of the scheme will be identified during the project appraisal. There is £929,000 of Grant in Aid allocated within the Environment Agency's Medium Term Plan, the scheme was also included in a recent bid from the West Yorkshire Combined Authority (WYCA) for funding from central government.
- 2.7 There is a separate project being proposed by LCC on this watercourse to reduce the flood risk associated with damage and risk of failure of the beck walls within the Sheepscar and Mabgate areas at the downstream extents of Meanwood Beck.

3. Main issues

- 3.1 As described above, a large number of properties are at flood risk from Meanwood Beck and have been internally flooded in past events. This includes significant flooding to the Mabgate area of the city centre in 2007.
- 3.2 The current programme summary is shown in the table below:

Key Project milestone Summary

Activity	Planned Finish Date (P2)
Start Feasibility Study	01/04/2020
Submit Outline Business Case	01/03/2022
Detailed Design	01/09/2022
Construction Start	01/04/2023
Construction finish	01/03/2024

4. Corporate considerations

4.1 Consultation and engagement

- 4.1.1 Consultation with residents and ward members has been undertaken previously as part of previous investigation into flooding from Meanwood Beck.
- 4.1.2 Flooding from Meanwood Beck occurred during severe weather in February 2020 including storms Ciara and Dennis. The investigation into the impact of these storms is ongoing. This investigation will progress alongside the proposed scheme to improve understanding of flood risk and ensure that the properties at highest risks benefit from the scheme.
- 4.1.3 Regular consultation with the Environment Agency and Yorkshire Water as other Risk Management Authorities (RMAs) will continue throughout the project.
- 4.1.4 Ward members for all affected wards will be engaged throughout the project.
- 4.1.5 As the project progresses and potential options are identified, engagement with local residents affected by the schemes will be carried out through consultation events. This will include community groups within the area including Meanwood Valley Partnership.
- 4.1.6 The scheme is expected to require planning permission with consultation required as part of this.
- 4.1.7 The scheme is included in the Local Strategy for Flood Risk Management for Leeds City Council.

4.2 Equality and diversity / cohesion and integration

- 4.2.1 An EDCI screening has been completed and is attached as Appendix A. This indicates that an Equality Impact Assessment is not required for what is being proposed.
- 4.2.2 By carrying out these works the Council will be ensuring the safety of the local community and in particular more vulnerable residents such as those who are elderly or have a disability and may struggle to get to safety if flooding occurred.

4.3 Council policies and the Best Council Plan

- 4.3.1 The proposed works will provide improvements to the community affected by reducing the risk of flooding to this area. There is thought to be significant potential to improve existing greenspace and water-dependant habitat as part of flood alleviation work in this catchment.
- 4.3.2 The Council is meeting its responsibility as Lead Local Flood Authority in reducing flood risk.
- 4.3.3 This scheme is in accordance with the Councils Local Flood Risk Management Strategy.

Climate Emergency

- 4.3.4 Responding to the threats posed by the predicted future impacts of climate change (such as the increased risk of local flooding) is an important issue for the city and can be seen through the development of the Leeds Flood Alleviation Scheme which

is aiming to achieve a 1 in 200 year standard of protection, to match that of the floods caused by Storm Eva.

- 4.3.5 The proposed scheme at Meanwood Beck will help to reduce the impacts of flooding and therefore deliver managed adaptation to the future impacts of climate change.
- 4.3.6 Meanwood Beck contains Yorkshire's largest remaining population of white-clawed crayfish, this is threatened by expansion of American signal crayfish along the River Aire. The proposed scheme will investigate opportunities to protect native crayfish within Meanwood Beck alongside providing flood risk benefits.
- 4.3.7 Carbon emissions associated with the construction of the scheme will be considered within the project appraisal to identify and promote lower impact solutions.

4.4 Resources, procurement and value for money

- 4.4.1 The total estimated cost of the Feasibility and Outline Design works necessary to reach Outline Business Case approval is £120,000 including LCC staff time.
- 4.4.2 The costs for consultancy and site investigation to deliver the appraisal and development of this outline business case will be funded from the £60,000 local levy funding paid by the Environment Agency.
- 4.4.3 LCC staff time will be funded from the Leeds City Council capital funds, this has been estimated to be £60,000 to develop the outline business case.
- 4.4.4 If the project proceeds to construction the assets will need to be maintained over their design life. The maintenance requirements and post construction costs will be dependent on the design phase of the project and will be considered in the Outline Design.
- 4.4.5 Capital Funding and Cash Flow

Funding Approval :	Capital Section Reference Number :-		32279			
Previous total Authority to Spend on this scheme	TOTAL	TO MARCH	FORECAST			
	£000's	2019 £000's	2020/21 £000's	2021/22 £000's	2022/23 £000's	2023 on £000's
LAND (1)	0.0					
CONSTRUCTION (3)	0.0					
FURN & EQPT (5)	0.0					
DESIGN FEES (6)	0.0					
OTHER COSTS (7)	0.0					
TOTALS	0.0	0.0	0.0	0.0	0.0	0.0
Authority to Spend required for this Approval	TOTAL	TO MARCH	FORECAST			
	£000's	2019 £000's	2020/21 £000's	2021/22 £000's	2022/23 £000's	2023 on £000's
LAND (1)	0.0					
CONSTRUCTION (3)	0.0					
FURN & EQPT (5)	0.0					
DESIGN FEES (6)	60.0		30.0	30.0		
INTERNAL LCC STAFF	60.0		30.0	30.0		
OTHER COSTS (7)	0.0					
TOTALS	120.0	0.0	60.0	60.0	0.0	0.0
Total overall Funding (As per latest Capital Programme)	TOTAL	TO MARCH	FORECAST			
	£000's	2019 £000's	2020/21 £000's	2021/22 £000's	2022/23 £000's	2023 on £000's
LCC Supported Borrowing	60.0		30.0	30.0		
Revenue Contribution	0.0					
Capital Receipt	0.0					
Government Grant	60.0		30.0	30.0		
Any Other Income (Specify)	0.0					
Developer Contribution (S106)	0.0					
Total Funding	120.0	0.0	60.0	60.0	0.0	0.0
5. Balance / Shortfall =	0.0	0.0	0.0	0.0	0.0	0.0

4.5 Legal implications, access to information, and call-in

4.5.1 The aim of the proposed flood alleviation study is to mitigate the flood risk from Meanwood Beck, this is consistent with the Council's statutory duty as the Lead Local Flood Risk Authority and the Council's policy as set out and approved in the Leeds CC Local Flood Risk Management Strategy. The content of the report is subject to Call In.

4.6 Risk management

4.6.1 The appraisal and business case will identify the most suitable option for a scheme in the area. The information collected during this phase will reduce the risk associated with delivery of the scheme. There is a risk that the preferred option will not be affordable and the scheme will not progress until alternative funding can be secured.

4.6.2 Risk to the project will be managed through proactive monitoring and appropriate mitigation. A risk management workshop will be held in the initial phases of the project

5 Conclusions

- 5.1 Options need to be assessed and appraised in order to ensure the best outcomes are achieved to reduce flood risk to properties from Meanwood Beck.
- 5.2 Local levy and Grant in Aid funding provide an opportunity to develop options and construct works to reduce flood risk from Meanwood Beck.

6 Recommendations

6.1 The Chief Officer (Highways and Transportation) is requested to:

- Give authority to incur expenditure of £120,000 for a capital scheme to carry out appraisal and develop an Outline Business Case for a flood alleviation scheme at Meanwood Beck including obtaining the necessary permits and approvals for the scheme.
- Note that a further report will be submitted for Executive Board review in 2021 to gain approval to submit the Outline Business Case to the Environment Agency and to give authority to incur expenditure associated with detailed design and construction of the scheme.

7 Background documents¹

- 7.1 Appendix A – Equality Impact Assessment

¹ The background documents listed in this section are available to download from the council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.

Figure 1: Meanwood Beck Location showing reported flood incidents

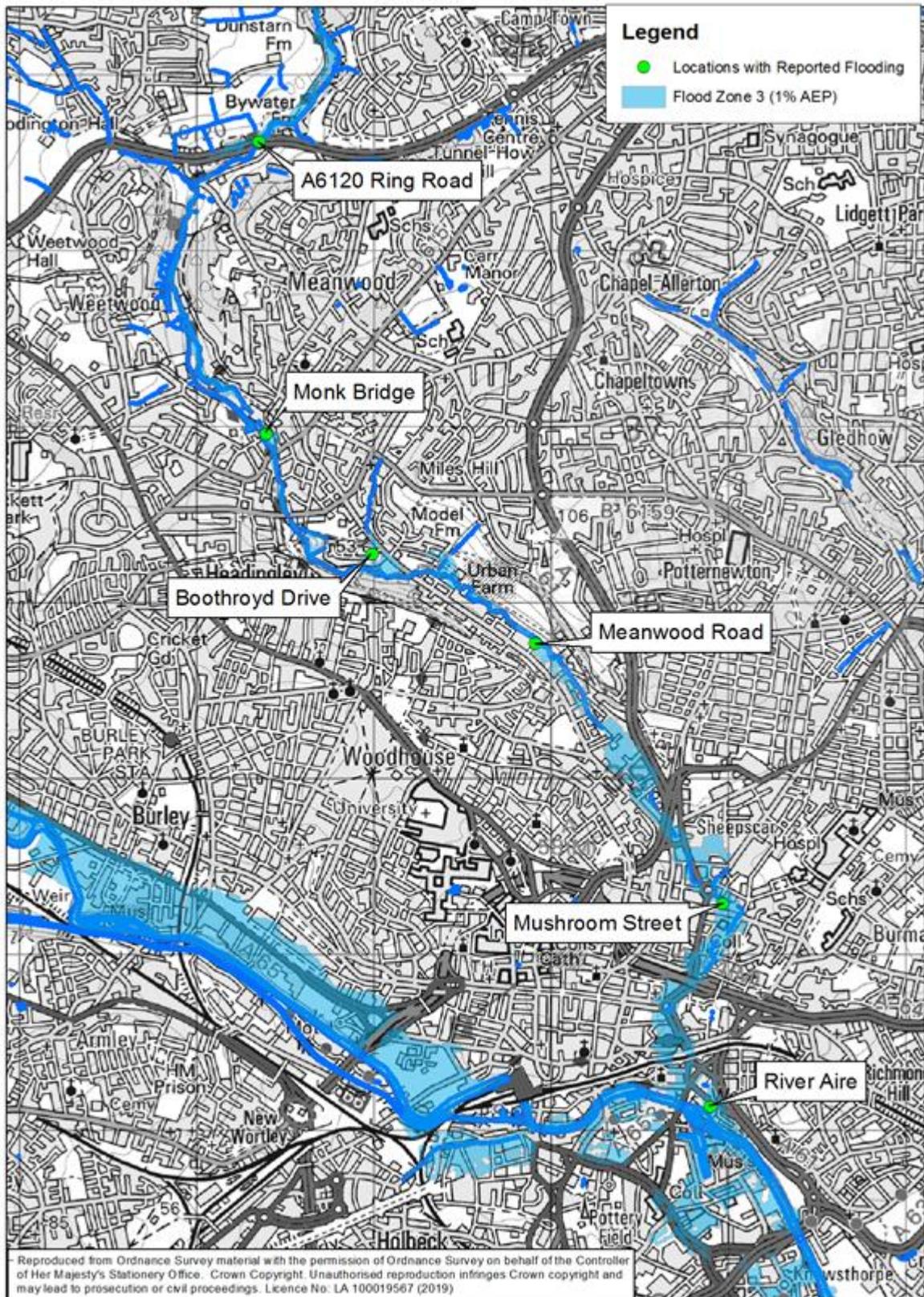


Figure 2: Potential Flood storage site at former Highbury Cricket Ground



Appendix A

Equality, Diversity, Cohesion and Integration Screening



As a public authority we need to ensure that all our strategies, policies, service and functions, both current and proposed have given proper consideration to equality, diversity, cohesion and integration.

A **screening** process can help judge relevance and provides a record of both the **process** and **decision**. Screening should be a short, sharp exercise that determines relevance for all new and revised strategies, policies, services and functions. Completed at the earliest opportunity it will help to determine:

- the relevance of proposals and decisions to equality, diversity, cohesion and integration.
- whether or not equality, diversity, cohesion and integration is being/has already been considered, and
- whether or not it is necessary to carry out an impact assessment.

Directorate: City Development	Service area: Flood Risk Management
Lead person: Ian McCall	Contact number: 0113 378 8012

1. Title: Meanwood Beck Flood Alleviation Scheme
Is this a: <input type="checkbox"/> Strategy / Policy <input checked="" type="checkbox"/> Service / Function <input type="checkbox"/> Other If other, please specify

2. Please provide a brief description of what you are screening
This screening assessment is for the appraisal of flood alleviation works at Meanwood Beck.

3. Relevance to equality, diversity, cohesion and integration

All the council's strategies/policies, services/functions affect service users, employees or the wider community – city wide or more local. These will also have a greater/lesser relevance to equality, diversity, cohesion and integration.

The following questions will help you to identify how relevant your proposals are.

When considering these questions think about age, carers, disability, gender reassignment, race, religion or belief, sex, sexual orientation and any other relevant characteristics (for example socio-economic status, social class, income, unemployment, residential location or family background and education or skills levels).

Questions	Yes	No
Is there an existing or likely differential impact for the different equality characteristics?		x
Have there been or likely to be any public concerns about the policy or proposal?		x
Could the proposal affect how our services, commissioning or procurement activities are organised, provided, located and by whom?		x
Could the proposal affect our workforce or employment practices?		x
Does the proposal involve or will it have an impact on <ul style="list-style-type: none"> • Eliminating unlawful discrimination, victimisation and harassment • Advancing equality of opportunity • Fostering good relations 		x

If you have answered **no** to the questions above please complete **sections 6 and 7**

If you have answered **yes** to any of the above and;

- Believe you have already considered the impact on equality, diversity, cohesion and integration within your proposal please go to **section 4**.
- Are not already considering the impact on equality, diversity, cohesion and integration within your proposal please go to **section 5**.

4. Considering the impact on equality, diversity, cohesion and integration

If you can demonstrate you have considered how your proposals impact on equality, diversity, cohesion and integration you have carried out an impact assessment.

Please provide specific details for all three areas below (use the prompts for guidance).

- **How have you considered equality, diversity, cohesion and integration?**

(**think about** the scope of the proposal, who is likely to be affected, equality related information, gaps in information and plans to address, consultation and engagement activities (taken place or planned) with those likely to be affected)

<ul style="list-style-type: none"> • Key findings <p>(think about any potential positive and negative impact on different equality characteristics, potential to promote strong and positive relationships between groups, potential to bring groups/communities into increased contact with each other, perception that the proposal could benefit one group at the expense of another)</p>
<ul style="list-style-type: none"> • Actions <p>(think about how you will promote positive impact and remove/ reduce negative impact)</p>

5. If you are **not already considering the impact on equality, diversity, cohesion and integration you **will need to carry out an impact assessment.****

Date to scope and plan your impact assessment:	
Date to complete your impact assessment	
Lead person for your impact assessment (Include name and job title)	

6. Governance, ownership and approval

Please state here who has approved the actions and outcomes of the screening

Name	Job title	Date
Ian McCall	FRM Engineer	07/11/2019

7. Publishing

This screening document will act as evidence that due regard to equality and diversity has been given. If you are not carrying out an independent impact assessment the screening document will need to be published.

Please send a copy to the Equality Team for publishing

Date screening completed	07/11/2019
If relates to a Key Decision send to Corporate Governance	
Any other decision please send to Equality Team (equalityteam@leeds.gov.uk)	