

Report of Jonathan Moxon

Report to the Chief Officer (Highways and Transportation)

Date: 06 April 2021

Subject: Approval for a study to assess flood risk from Gledhow Beck and improvements to the management of Gledhow Lake

Are specific electoral wards affected? If yes, name(s) of ward(s): Roundhay	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information? If relevant, access to information procedure rule number: Appendix number:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Summary

1. Main issues

- Gledhow Beck is a watercourse running through the north east of Leeds meeting Meanwood Beck within the city centre. Upstream of the urban area this watercourse passes through Gledhow Valley Woods and Gledhow Lake.
- Gledhow Lake acts to reduce flood risk to properties downstream along Gledhow Beck. There are a large number of properties benefiting from the flood attenuation provided by the lake. Despite this there are records of internal flooding from Gledhow Beck that do not correspond with existing flood mapping information.
- The Environment Agency has recently carried out a modelling study to update flood mapping and understand the flood risk in the catchment. This model focuses on Meanwood Beck itself and there is limited topographic information on Gledhow Beck. This model is to be updated to better represent Gledhow Lake and to model flood flow paths from Gledhow Beck
- The updated flood maps will be used to produce a management plan for the lake and identify any improvements to reduce flood risk here.
- £40,000 funding for appraisal of a scheme has been secured through local levy funding.

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

- The proposed works will improve understanding of flood risk, improve the management of this asset and identify opportunities to 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 managing flood risk.

3. Resource Implications

- The total estimated cost of the Feasibility and Outline Design works necessary to reach Outline Business Case approval is £40,000 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 £40,000 local levy funding paid by the Environment Agency.

Recommendations

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

- a) Give authority to incur expenditure of £40,000 for undertaking of modelling work, appraisal and development of an Outline Business Case for a flood alleviation scheme at Gledhow Beck to facilitate improvements to Gledhow Lake.

1. Purpose of this report

- 1.1 To note the flooding issues within the Gledhow Beck and Gledhow Lake area.
- 1.2 To request authority to incur expenditure of £40,000 to carry out modelling of the lake and project appraisal for a scheme to facilitate alternative maintenance of or improvements to flood management assets here.

2. Background information

- 2.1 Gledhow Beck is a watercourse running through the north east of Leeds meeting Meanwood Beck within the city centre. Upstream of the urban area this watercourse passes through Gledhow Valley Woods and Gledhow Lake, a balancing reservoir owned by Leeds City Council (LCC).
- 2.2 In the most recent flood mapping there are 171 properties downstream of Gledhow Lake which are within Flood Zone 2. These properties are expected to be benefitting from the flood attenuation provided by the lake and would benefit from any improvements carried out following this project. There are 6 properties downstream of the lake which have been internally flooded previously, these properties would be the main beneficiaries of improvements to the lake.
- 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. This model focuses on Meanwood Beck itself and there is limited topographic information on Gledhow Beck. This model is to be updated to better represent Gledhow Lake and to model flood flow paths from Gledhow Beck
- 2.4 The source of flooding to properties to be addressed is flooding from Gledhow Beck. The catchment for the beck is large and steep and responds quickly to heavy

rainfall. This flood risk is currently reduced by the attenuation provided by Gledhow Lake but there is limited information on flood risk here.

- 2.5 Gledhow Beck is culverted for a significant distance downstream of the lake. Removing part of this culvert would have environmental benefits as well as reducing maintenance costs.
- 2.6 £40,000 of local levy funding has been allocated to investigate flooding in the area and develop a flood alleviation scheme.

3. Main issues

- 3.1 Gledhow Lake is a significant flood management asset reducing flood risk to properties along Gledhow Beck. There are a large number of properties benefiting from the flood attenuation provided by the lake however the exact flood benefits provided by the lake are not well understood. This study will identify opportunities to improve the current management of the lake and any viable improvements to assets along Gledhow Beck.

4. Corporate considerations

4.1 Consultation and engagement

- 4.1.1 Regular consultation with the Environment Agency and Yorkshire Water as other Risk Management Authorities (RMAs) will continue throughout the project.
- 4.1.2 Ward members for all affected wards will be engaged throughout the project.
- 4.1.3 There is a community group, Friends of Gledhow Valley Woods, with an interest in improvements to the lake for community and recreational use. This group recent led work to improve the banks of the lake and reduce build up of silt within the lake. This group will be consulted in any proposed improvement work.

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 improve understanding of, and reduce, the risk of flooding to this area. There is also thought to be 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.

Climate Emergency

- 4.3.3 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

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

- 5.1.1 The aim of the proposed flood alleviation study is to better understand and mitigate the flood risk from Gledhow 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 not subject to Call In.

5.2 Risk management

- 5.2.1 The appraisal and business case will identify the most suitable option for improvements in the area. The information collected during this phase will reduce the risk associated with delivery of any works. There is a risk that the preferred option will not be affordable and the scheme will not progress until alternative funding can be secured.
- 5.2.2 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

6. Conclusions

- 6.1.1 Options need to be assessed and appraised in order to ensure the best outcomes are achieved to reduce flood risk to properties from Gledhow Beck. The management of Gledhow Lake is key to managing this risk
- 6.1.2 Local levy and Grant in Aid funding provide an opportunity to develop options and construct works to deliver improvements to the operation of Gledhow Lake.

7. Recommendations

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

- Give authority to incur expenditure of £40,000 for undertaking of modelling work, appraisal and development of an Outline Business Case for a flood alleviation scheme at Gledhow Beck to facilitate improvements to Gledhow Lake.

8. Background documents

- 8.1 None

9 Appendices

- 9.1 Appendix A – Equality Impact Assessment

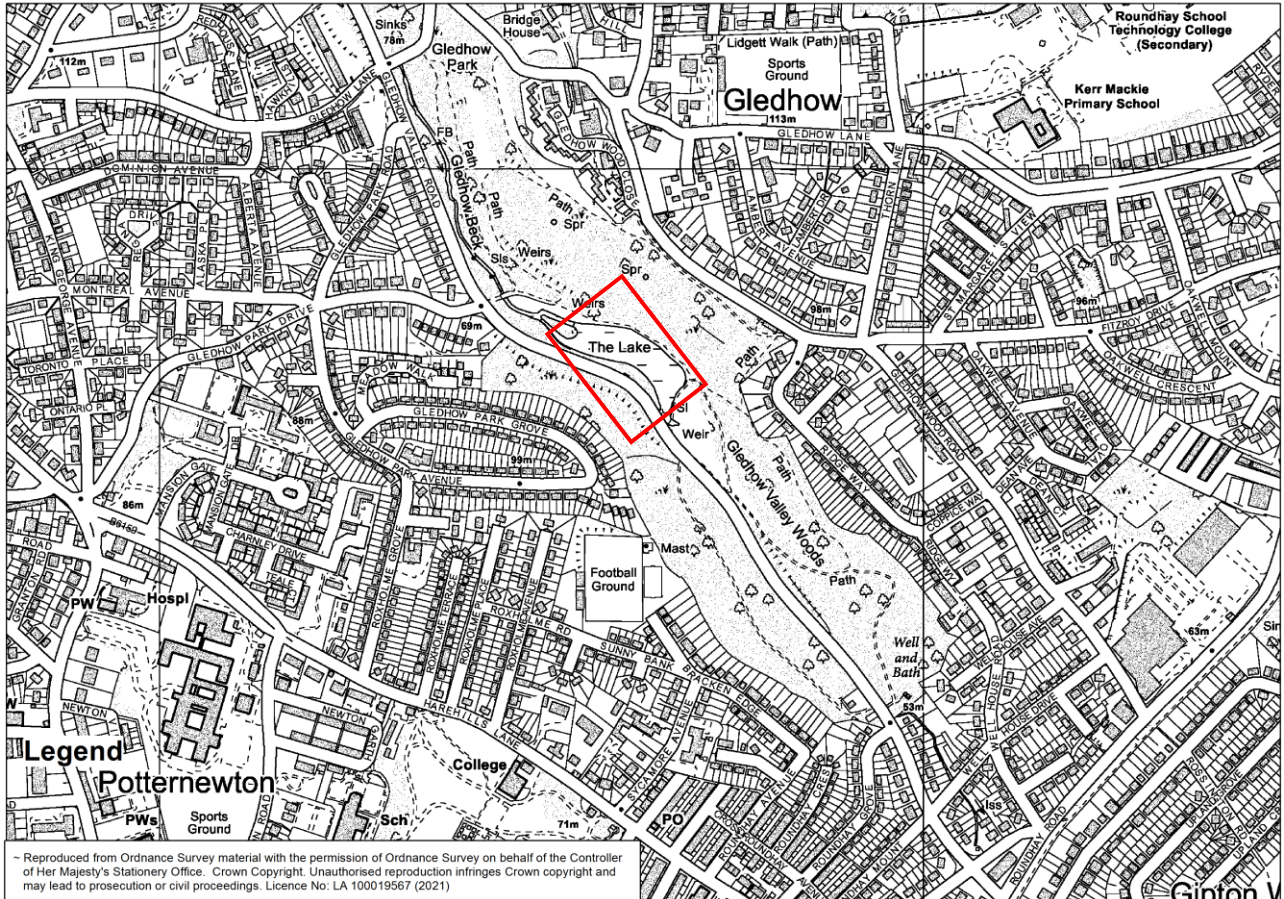
Figure 1: Gledhow Lake



Figure 2: Gledhow Lake outfall



Figure 3: Location of Gledhow Lake



Appendix A

Equality, Diversity, Cohesion and Integration (EDCI) 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 or 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: Gledhow Lake Improvements
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 Gledhow Lake/Gledhow Beck.

3. Relevance to equality, diversity, cohesion and integration

All the council's strategies and policies, service and functions affect service users, employees or the wider community – city wide or more local. These will also have a greater or 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. Also those areas that impact on or relate to equality: tackling poverty and improving health and well-being.

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)

• **Key findings**
(**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)

• **Actions**
(**think about** how you will promote positive impact and remove/ reduce negative impact)

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	22/03/2021
Date screening completed		

7. Publishing	
<p>Though all key decisions are required to give due regard to equality the council only publishes those related to Executive Board, Full Council, Key Delegated Decisions or a Significant Operational Decision.</p> <p>A copy of this equality screening should be attached as an appendix to the decision making report:</p> <ul style="list-style-type: none"> • Governance Services will publish those relating to Executive Board and Full Council. • The appropriate directorate will publish those relating to Delegated Decisions and Significant Operational Decisions. • A copy of all other equality screenings that are not to be published should be sent to equalityteam@leeds.gov.uk for record. <p>Complete the appropriate section below with the date the report and attached screening was sent:</p>	
For Executive Board or Full Council – sent to Governance Services	Date sent:
For Delegated Decisions or Significant Operational Decisions – sent to appropriate Directorate	Date sent:
All other decisions – sent to equalityteam@leeds.gov.uk	Date sent: