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Late Report for 10<sup>th</sup> February 2009 Scrutiny Board (City Development)

Agenda Item 11 – Leeds Flood Alleviation Scheme Design Vision and Guide



# Agenda Item 11



Originator: Richard Mills

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## Report of the Head of Scrutiny and Member Development

**Scrutiny Board (City Development)** 

Date: 10<sup>th</sup> February 2009

Subject: Leeds Flood Alleviation Scheme Design Vision and Guide

Electoral Wards Affected: All in particular City & Hunslet	Specific Implications For:
	Equality and Diversity
	Community Cohesion
	Narrowing the Gap

#### 1.0 Introduction

- 1.1 At the Board's last meeting Members asked for an update report on the progress of a flood alleviation scheme for Leeds.
- 1.2 A report by the Director of City Development on this matter is to be considered by the Executive Board on the 13<sup>th</sup> February 2009. Papers for this meeting will be released and dispatched on the 5<sup>th</sup> February 2009.
- 1.3 In the circumstances this report will be sent to all Members of the Scrutiny Board on the 5<sup>th</sup> February 2009.

#### 2.0 Recommendation

- 2.1 Members are asked to
  - (i) note and consider the report of the Director of City Development which was not available at the time the agenda and papers for today's meeting were dispatched.
  - (ii) consider what, if any, further information or comments the Board wishes to make.
  - (iii) be informed of the decision of the Executive Board after its meeting on 13<sup>th</sup> February 2009.

#### **Background Papers**

None used

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## Agenda Item 15

Originator:	Gary Bartlett
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## Report of the Chief Highways Officer

**Executive Board** 

Date: 13 February 2009

Subject: Leeds Flood Alleviation Scheme Design Vision and Guide

Electoral Wards Affected:	Specific Implications For:
	Equality and Diversity
	Community Cohesion
Ward Members consulted (referred to in report)	Narrowing the Gap
Eligible for Call In X	Not Eligible for Call In (Details contained in the report)

#### **EXECUTIVE SUMMARY**

- 1. The following report updates the Executive Board on the progress of a Flood Alleviation Scheme for Leeds.
- It seeks comments on the latest version of the Design Vision and Guide which is being produced, in conjunction with partners, to minimise the potential detrimental impact of the scheme but also to maximise the opportunities it offers along 19km of the River Aire.
- 3. Importantly, it seeks authorisation to continue the development and refinement of the Design Vision and Guide document, to give approval to participate in comprehensive public consultations, in conjunction with the Environment Agency, in Spring 2009.
- 4. Requests the Environment Agency to continue exploring the feasibility of a hybrid flood defence scheme for Leeds, comprising upstream storage or other said facilities within the scheme, in order to lower the height of the raised "flood defences" in the City Centre.

### 1.0 Purpose Of This Report

1.1 To seek comments from the Executive Board on the latest version of the Design Vision and Guide into the Leeds Flood Alleviation Scheme (FAS) and to seek authorisation for its use in joint public consultations, to be undertaken in conjunction with the Environment Agency (EA), in Spring 2009.

## 2.0 Background Information

- 2.1 Currently there are no formal flood defences along the River Aire in Leeds. In June 2007 and January 2008, the City came very close to experiencing major flooding. It has been estimated by the EA that over 3,000 properties are at risk and approximately £500 million of direct damage would be caused by a major flood in Leeds.
- 2.2 The EA's latest proposals consider the River Aire over a 19km length from Newlay Bridge to Woodlesford. Previous proposals in 2007 were shelved because they did not meet strict criteria for funding. The EA's criteria for scheme approval are based on a cost benefit analysis, where cost is the cost of the scheme, but benefit is measured in terms of the cost of physical flood damage done, and not the consequential economic loss, which is often far greater. Flooding in 2007 and subsequent political pressure resulted in the proposals being resurrected.
- 2.3 The Design Vision and Guide is being developed to assess the potential impact of the Flood Alleviation Scheme for Leeds; to ensure its physical appearance and functional design can be mitigated and where appropriate, enhanced to secure improvements and maximise the potential of the River Aire Waterfront, as a destination and major asset for the City, in line with Council policies. A copy of the full document is appended to the agenda for Executive Board members and can also be obtained from the named clerk on the front of the agenda.
- 2.4 The current methodology for the FAS is based upon a design that provides flood protection for a 1:200 year flood event plus climate change plus freeboard, which is added to protect from potential waves over topping the proposed flood defences. This standard of protection could potentially be reduced overall or in specific locations where lower levels of flood protection are deemed acceptable.

## 3.0 Main Issues

- 3.1 The main area of concern has centred on the fact that Department of Environment, Food and Rural Affairs (DEFRA) funding is only likely to fund a scheme that addresses the potential flooding risk and represents "best value for money"; it can include some level of enhancements but cannot include proposals that do not meet the basic benefit cost rules. Such a scheme therefore has the potential to be regarded by the Council and its partners as sub-optimal. The EA has been consistent in this regard throughout the development of its latest proposals. Any additional measures to enhance the scheme would have to be funded from third parties.
- 3.2 Costs in the region of £75 £100M have been talked about for the "basic" Leeds scheme. An enhanced scheme that develops flood risk solutions for Leeds by implementing a range of measures in the River Aire catchment area as a whole e.g.

upstream storage facilities and/or bypass channels in the city centre, which might be more acceptable to LCC and its partners, could cost in the region of £150-175M. An important rider to these figures is the cost of upgrading bridges along the river. Depending on the outcome of the work which is underway, this has the potential to increase the overall cost of the project significantly.

- 3.3 A Working Group has met on several occasions to guide and influence the work of the EA. Representatives from the EA, their consultants Atkins, Yorkshire Forward, Yorkshire Water, British Waterways Board, Leeds Civic Trust and LCC attend these meetings.
- 3.4 The work of this group is guided by a Steering Group comprising high level representatives from the authorities mentioned above.
- 3.5 Concerns that a more basic scheme would be developed emerged when the EA's Options Appraisal work concluded that 'Raised Flood Defences' were the EA's preferred solution for resolving the flooding risk in Leeds. 'Raised Flood Defences' does not necessarily mean high walls throughout the City; raised embankments, physical alterations to buildings (removing lower floor windows or using reinforced glass in windows) or using the topography of the land with lower height walls away from the river are examples of possible alternatives but the fact remains in some critical areas and at some sensitive sites, significant flood defences upto 4m in height are proposed.
- The conclusion by the EA that upstream catchment storage facilities, bypass channels within the City Centre and / or different land management techniques were seen as not viable under current DEFRA rules of engagement has led to major concerns that much of the waterfront would be made relatively inaccessible by unappealing hard landscape interventions; the latter would significantly undermine the potential future development and achievement of a high quality waterfront. Such a likely scenario would be unacceptable to the City Council and its partners.
- 3.7 Over recent months there has been considerable joint working between the aforementioned partners to limit any adverse impact of the proposals coming forward. This joint working has included a series of working group meetings and site visits with the EA and their consultants Atkins and has resulted in some significant changes to the hard landscape proposals; if implemented on the ground, these should bring substantial benefits to the areas identified for improvement.
- 3.8 Nevertheless, there are still some proposals for some key sites in the City Centre which need to be re-examined and a more satisfactory outcome identified. This work is on-going. At this stage the importance of this work cannot be under estimated. Provided acceptable progress is made during January, a full update on the progress of work at these specific sites, will be given at the Executive Board meeting. In effect, the sites are acting as a proxy for the resolution of other issues across the scheme.
- 3.9 At this juncture, it is worth reiterating the fact that the EA share the Council's aspirations for the City and the Waterfront but are constrained by the rules and processes they are required to work to. The problem is highlighted by the following example. The upstream storage facility that is often mentioned as part of a potential hybrid scheme with raised flood defences is estimated to cost £40M to build but will lead to a lowering of the flood defence height by only 400 700mm in the City

Centre. This may be attractive to LCC and indeed the EA because it would be highly beneficial in improving the quality of public realm and accessibility but is less favourable in cost benefit terms than raised defences alone. Consequently, it does not feature in current proposals. Representations about the scheme and the desire to have some 'freedom and flexibility' around these criteria have been made to Rt. Hon. Rosie Winterton MP. A response is awaited.

- 3.10 In terms of timescales, public consultations in Spring 2009 will enable the proposals to go to the EA's National Review Group Meeting in September 2009. Depending on the outcome, DEFRA / Treasury approval would be sought in 2010 with construction commencing on site in 2010/11. Any delay to this programme runs the risk of funding being diverted to other cities / towns, notably Oxford. Further updates on the progress of these proposals will be given to future meetings.
- 3.10.1 The Design Vision and Guide has been developed as follows. The scheme has been divided into 7 study zones for ease of reference. Each zone contains 3 maps of information:
  - i) A context / setting the scene map showing the predominant land use, key sites, constraints, access and planning policies relevant to the area.
  - ii) EA's draft proposals including the height of the defence (not necessarily a wall) that is required.
  - iii) The vision map bringing together the above to identify areas of potential conflict, design guidance, possible mitigation measures and enhancement opportunities.

## 4.0 Implications For Council Policy And Governance

4.1 The completion of a Leeds FAS, fully approved and supported by Leeds City Council, would be in line with several Strategic Outcomes and Improvement Priorities contained in the Leeds Strategic Plan. In particular it supports the Environment theme through 'undertaking actions to improve our resilience to current and future climate change' as well as 'improving the quality and sustainability of the built and natural environment'; and similarly it supports the Enterprise and the Economy theme through 'investment in high quality infrastructure and physical assets, particularly in the City Centre'.

## 5.0 Legal And Resource Implications

- Liaising with services and teams across City Development, work on developing the Design Vision and Guide document has been prepared by the Landscape Architecture Team from the Strategic Design Alliance and has cost approximately £80,000 to date, which is being funded from central contingencies. It is anticipated that the Landscape Team will need to be further engaged in the refinement of the document as it progresses through public consultations later in the year.
- Once finalised the design guide will provide a useful source of advice for developers proposing schemes along the River Aire. Schemes in flood risk areas will have to address this in accordance with planning policy (PPS25) and the design guide illustrates acceptable ways in which this can be achieved. The design guide clearly deals with matters relevant to planning and as such can be a material consideration

in the determination of planning applications which will have added weight as a result of the proposed public consultation. Consideration to developing a formal Supplementary Planning Document can be given at a later date.

- 5.3 Significant building and engineering operations would be involved in constructing the proposed formal flood defences. The works will require the benefit of full planning permission and Listed Building Consent. The detailed applications will need to be accompanied by supporting information including detailed surveys, plans and elevations, a Design and Access Statement, a Statement of Community Involvement, an economic assessment outlining regeneration benefits, a biodiversity report, a Sustainability Statement, a flood risk assessment, a heritage appraisal, landscaping proposals, together with an Environmental Management statement (including details of site compounds and access for construction traffic).
- 5.4 The nature and magnitude of the proposals are such that an Environmental Statement is also likely to be required to support the planning application. The Environment Agency carried out a scoping exercise during Summer 2008 and officers provided comments on this document in September 2008. In particular, officers stressed the need for the environmental impact assessment to fully consider the range and combination of options that could be pursued, alongside the preferred option of the Environment Agency. We are awaiting a formal response from the EA on our comments.

#### 6.0 Conclusions

6.1 Clearly, this is a vitally important scheme for the City. At present, there seems to be commitment from many authorities and organisations, at a local and national level, to see a scheme implemented. It is important therefore that the current momentum is maintained and work progresses in accordance with the EA's programme. At the same time, it is imperative that the scheme not only delivers the level of flood protection required but also delivers on the various strategies the Council has developed for the River Aire waterfront and its immediate environs. For these reasons, the fourth recommendation below requesting further work be carried out on alternative or complementary solutions is important to ensure no option is ruled out at this stage.

#### 7.0 Recommendations

- 7.1 The Executive Board is requested to:
  - **1.** NOTE the progress on a Flood Alleviation Scheme for Leeds.
  - 2. COMMENT on the latest version of the Design Vision and Guide for the Leeds Flood Alleviation Scheme
  - **3.** APPROVE the continuing development and refinement of the Design Vision and Guide document **AND** to give approval to participate in comprehensive public consultations, in conjunction with the Environment Agency, in Spring 2009...
  - **4.** REQUEST the Environment Agency to continue exploring the feasibility of a hybrid flood defence scheme for Leeds, comprising upstream storage facilities within the scheme, in order to lower the height of the raised 'Flood defences' in the City Centre.

Background Papers
There are no background papers