
REPORT TO:	HOUSING & COMMUNITY SERVICES COMMITTEE	AGENDA ITEM: 17
DATE OF MEETING:	23RD NOVEMBER 2006	CATEGORY: DELEGATED
REPORT FROM:	DIRECTOR OF COMMUNITY SERVICES	OPEN
MEMBERS' CONTACT POINT:	CHRIS MASON 5794	DOC:
SUBJECT:	MIDWAY FISHPONDS – ENGINEERING SURVEY	REF:
WARD AFFECTED:	SWADLINCOTE	TERMS OF REFERENCE:HCS10

1.0 Recommendations

- 1.1 That Members note the contents of the report
- 1.2 That the short term actions proposed in the report be approved by Members

2.0 Purpose of Report

- 2.1 To make Members aware of the main findings and recommendations contained within the consultant's report.
- 2.2 To sketch out how it is intended to proceed with delivering the main recommendations contained within the report

3.0 Executive Summary

- 3.1 £10,000 has been allocated in this year's budget to undertake an engineering survey of Midway Fishponds. Consultants have now completed their report with the main recommendations divided into two categories, safety and amenity improvement works. This report concentrates mainly on the safety issues identified in the consultant's and particularly on the recommendations, concerning the embankment between the upper and lower ponds. Immediate temporary work has already been commissioned to safeguard the integrity of the embankment in the short-term and the report, in addition to making Members aware of other recommendations, outlines the way forward in terms of the long-term integrity of the embankment.

4.0 Detail

Introduction and Background

- 4.1 Midway Fishponds consist of two ponds in cascade. The lower is formed within natural ground, the upper constructed with a 5m high embankment. Currently approximately 40 mature trees are located on the embankment, which is also well covered with smaller trees and low-level shrub. It is understood the ponds original purpose was that of a sludge lagoon used as part of the coal production process by

local open cast mines. Responsibility for the maintenance and management of the site was at some stage transferred to this Council and it is now a picturesque and well-used location for both formal (angling) and informal recreation. A plan identifying the location of the site is attached at Annexe A

- 4.2 Officers have had concerns about the integrity of the embankment, but more particularly about the high levels of erosion that were taking place to the banks, particularly around the upper pond. New housing development at the Woodlands and off Eureka Road, Swadlincote has also meant that the area, in addition to its use for formal and informal recreation, has become increasingly used as a footway link between the new developments and the Town Centre.
- 4.3 £10,000 was allocated in this year's revenue budget to undertake an engineering survey of the site. Earth Tech consultancy, specialists in this area of work, was commissioned to carry out the survey. This is now fully complete and earlier this month a meeting took place with the company at which they explained and expanded on the main findings of the report.
- 4.4 In considering the report it is important that Members are aware of the Reservoirs Act 1975. This legislation places responsibility on owners of reservoirs that have a capacity of more than 25,000m³ of water above the level of adjacent ground. The upper pond at the Fishponds has an estimated capacity of 8,000m³ to 9,000m³ of water. Theoretically then Midway Fishponds do not fall within the requirements of the Act.

However, the Act identifies good practice for the management of reservoirs and it would be expected that responsible bodies would use the guidance encapsulated within the Act even though they have no legal requirement to adhere to the Act. An important element of the Act is to keep embankments free of undergrowth, grassed and maintained by regular mowing. The principle being that any leakage can be seen and that a well-bound blanket of grass forms a strong seal over embankments. This is opposed to mature tree coverage where if the trees blow over in storms there is a significant risk of embankment failure.

Main Findings

Overtopping of the Embankment

- 4.5 There is currently evidence that during severe storms the upper pond is overtopping the embankment in a number of places. The crest of the embankment needs to be built up and infilled as a matter of urgency. This will have the effect of forcing all of the water to flow where it should flow, down the weir and existing drainage channel. This weir and drainage channel needs to be thoroughly cleared of debris and kept in this condition. These temporary actions will be undertaken as soon as possible and will be funded from this year's budgets. The Consultant's advice is that both of the above actions are essential for securing the integrity of the embankment this winter.

Trees on the Embankment

- 4.6 The Consultants believe that the over topping problems could be exacerbated by the presence of trees on both the crest of the embankment and on the embankment slope itself. If a tree on the crest fell over during extreme weather a breach could concentrate water flow sufficient to cause failure of the embankment. In the same extreme conditions if one of the larger trees fell over on the face of the embankment

the root ball would be large compared to the size of the embankment and hence failure of the embankment could again follow. It is also possible for tree roots to penetrate the embankment sealing membrane and this could also lead to seepage

- 4.7 While the underlying message in the report is that all of the trees on the embankment should be cleared and the bank grassed over they do suggest that because of the sensitive nature of this action pruning the mature trees to 3m could be an initial step. However, the report recognises that the main outcome of pollarding what, in many cases are now 20m high over mature trees, could be that the trees fail anyway. It may be that to avoid what will simply be a cosmetic exercise all of the trees are felled and replaced by other trees at more appropriate locations around the upper pond. Even at an early stage, while suggesting the pollarding of mature trees on the embankment, the report recommends the clearing of the embankment of smaller trees and undergrowth and making a start on grassing the area over.
- 4.8 At this stage it is not intended to do anything about the embankment trees except to continue with the felling of one tree that has already been identified in the progress report on the tree audit considered by Members at the last meeting of this Committee. This will allow time for the necessary finance to be put in place (a service development proposal will be submitted during this year's budget process) and time to undertake the necessary consultation work with users of the site and to procure the work in the most advantageous way. Doing the work during next financial year will also allow time to work with other partners on the undertaking of more detailed ecology / wildlife surveys (see next clause).

Environmental Issues

- 4.9 As part of Earth Tech's work they undertook an ecological walkover study of the site to identify important habitats and / or protected species that could be affected by any works that took place at the site. In summary this identified that the site was small and generally lacking in diversity and not currently managed in anyway to encourage further species and habitat conservation. While no evidence of protected species such as Bats, Water Voles and Great Crested Newts was identified the report recommends that further work be undertaken with local Wildlife Trusts before any significant work at the site is undertaken. The report also makes recommendations on the removal of what are described as 'invasive species' from the site.

Amenity Works

- 4.10 The consultant's report also identifies significant amenity works that could be undertaken at the site that would improve the general maintenance of the ponds and the overall improvement of the site for the local community. The items identified in this section are itemised in Annexe B together with the estimated budget cost for carrying out the work.

5.0 Financial Implications

- 5.1 This report, through necessity, concentrates primarily on what can be described as the safety findings in the consultant's study, which are clearly of a high priority. The total value of these is estimated at £133,500 although this does not include any element for design or site supervision, which is likely to be at least 10% of the total value of the works. The important but lesser priority amenity works identified in the report are estimated at £48,800 although again this does not include an element for

project management. These estimates also do not include for the planting of replacement trees, clearing scrub or the eradicating of evasive species.

6.0 Corporate Implications

6.1 Undertaking the survey is a key task in the Leisure and Community Development Division's Service Plan

7.0 Community Implications

7.1 Midway Fishponds is a well-used community facility.

8.0 Conclusions

8.1 Earth Tech's study identifies two areas of work. High priority safety work, that concentrates specifically on the embankment between the upper and lower ponds. Temporary work will be carried this winter in an attempt to ensure the integrity of the embankment until more permanent work can be undertaken in the next financial year. The report also identifies amenity works that while they are less pressing will make a significant contribution to safeguarding and improving the site for the community.

9.0 Background Papers

9.1 Feasibility Report (G4001) produced Earth Tech dated 13th October 2006