

-Committee(s):	Date(s):	Item no.
Epping Forest & Commons Committee Projects Sub Committee	10 March 2014 02 April 2014	CS 064/14
Subject: Progress Report – Highams Park Lake	Public	
Report of: The City Surveyor	For Decision	

Summary

Dashboard

Project Status – Green
Stage – Detailed Design
Total Estimated Cost - £1,865,000
Spend to Date - £52,720
Overall Project Risk - Green

Brief description of project

Following the last Section 10 Inspection at Highams Park Lake it is necessary to comply with the Inspecting Engineers Recommendations for Safety and reinforce the Dam, to allow overtopping and the passage of the design flood.

In January 2012, members approved, with regret, the option of proceeding with a solution which involved removing the Michael Mallinson Watersports Centre; something which was thought to be unavoidable at Detailed Options Appraisal.

Following further discussions with members and local groups, the project team were asked to look at ways in which the watersports facility could be retained. After further design development, an option was produced where the watersports facility would be protected by a flood wall; negating the need for its demolition as part of the works.

Recommendation

1. That members approve the new option of reinforcing the dam whilst retaining the Michael Mallinson Watersports Centre.
2. That member agree that, subject to planning and the project remaining within the approved budget, the appointment of the contractor for the main project works and Gateway 5 (Authority to Start Work) remains under the Delegated Authority of the City Surveyor so that works can proceed on site within the statutory deadline.

Next report

The next report will be submitted once work has started on site.

Overview

<p>1. Success Criteria</p>	<p>The aim of this project is for the dam of this Category A reservoir to safely pass the design flood and therefore reduce the LLoL and damage to property.</p> <p>This will be confirmed by our Panel Engineer when he issues a certificate to the Environment Agency on completion of the works. These works must be commenced within three years of the S10 Inspection to avoid enforcement by the Environment Agency (EA), by 8 April 2014.</p>														
<p>2. Project Scope and Exclusions</p>	<p>The project will include the construction of a new spillway to allow the reservoir to safely pass the probable maximum flood. The works will also include a new drawdown facility to allow the water level in the reservoir to be reduced in the event of an emergency.</p>														
<p>3. Link to Strategic Aims</p>	<p>This project is to reduce the risks to the downstream community and therefore is linked to the City's strategic aim of "To Provide Valued Services to London and the Nation".</p>														
<p>4. Within which category does the project fit</p>	<p>This reservoir safety project fits the following three categories:-</p> <ol style="list-style-type: none"> 1. Health and Safety 2. Statutory <p>7a Asset enhancement/improvement.</p>														
<p>5. What is the priority of the project?</p>	<p>A. Essential</p>														
<p>6. Governance arrangements</p>	<p>The project is not large enough in scope to appoint a Project Board.</p> <p>Monthly progress meetings are held with the entire project team and Senior Responsible Officers from the City Surveyor's Department and Open Spaces.</p>														
<p>7. Resources Expended To Date</p>	<table border="1" data-bbox="657 1583 1360 1890"> <thead> <tr> <th data-bbox="657 1583 1031 1730"></th> <th data-bbox="1031 1583 1187 1730">Approved Budget £000's</th> <th data-bbox="1187 1583 1360 1730">Spend to Date £000's</th> </tr> </thead> <tbody> <tr> <td data-bbox="657 1730 1031 1793">Works and investigations</td> <td data-bbox="1031 1730 1187 1793">1,400</td> <td data-bbox="1187 1730 1360 1793">21</td> </tr> <tr> <td data-bbox="657 1793 1031 1845">Emergency plan</td> <td data-bbox="1031 1793 1187 1845">10</td> <td data-bbox="1187 1793 1360 1845">0</td> </tr> <tr> <td data-bbox="657 1845 1031 1890">Designers Fee</td> <td data-bbox="1031 1845 1187 1890">210</td> <td data-bbox="1187 1845 1360 1890">30</td> </tr> </tbody> </table>				Approved Budget £000's	Spend to Date £000's	Works and investigations	1,400	21	Emergency plan	10	0	Designers Fee	210	30
	Approved Budget £000's	Spend to Date £000's													
Works and investigations	1,400	21													
Emergency plan	10	0													
Designers Fee	210	30													

	Consultation	35	0
	Panel Engineer Fees	60	2
	Risk money for silt disposal	150	0
	Total	1,865	53

Progress

8. Reporting Period	October 2013 to March 2014
9. Summary of progress since last report	<p>The last report for this project was submitted in January 2012. Since then the following significant milestones have been achieved:</p> <ul style="list-style-type: none"> - Royal Haskoning DHV have been appointed as designers for the scheme. They will also provide site supervision services and administer the contract with the Principal Contractor - Capita have been appointed as Cost Consultants and will also adopt the role of the CDM Coordinator - Balfour Beatty have been appointed as Principal Contractor. They have initially been appointed for pre-construction services. The contract for the works will be awarded following an open book costing exercise of the final design. Balfour Beatty will also become responsible for emergency response flood management for the duration of the contract <p>In December 2013, a local drop in session was held where local groups were invited to make comments about the scheme so that issues could be formally recorded and fed into the design process. The bulk of comments received throughout this process related to the proposed removal of the Michael Mallinson Watersports Centre on the dam and their opposition to such a proposal.</p> <p>Following discussion with members and in light of this feedback, the project team were asked to look at the feasibility of retaining the facility whilst meeting the requirements of the Section 10 Inspection; something which was not initially thought possible due to the width of spillway required.</p> <p>Following further hydraulic calculations, the designers have developed an option where by the watersports facility would be protected by a flood wall; negating the need for its demolition as part of the works. Adopting this</p>

solution would avoid the risk that the re-provision of this facility is imposed upon the City as a condition of the planning approval from the London Borough of Waltham Forest.

To allow this design to work, the new spillway would have to extend further along the dam to the west which may result in increased loss of trees. It would also result in the back slope of the dam becoming less steep which is likely to result in the loss of the four car parking spaces currently on the site.

A planning application reflecting this design development was submitted on 7th February 2014. Planning Permission should be obtained in early April 2014. The general arrangement included within the planning application is included in Appendix 1.

10. Programme	The outline project programme is as follows:	
	Appointment of Consultants	Completed
	Appointment of Contractor (Pre construction Services)	Completed
	Outline Design	Commenced January 2014
	Submit Planning	07 February 2014
	Planning Approval	April 2014
	Gateway 5 – Authority to Start Works (delegated)	April 2014
	Pre-Works (Epping Forest Staff)	March 2014 to April 2014
	Main works	April 2014 to November 2014

11. Budget

An allowance of £150,000 was previously identified for the demolition costs of the Watersports Centre. This budget will now be used to construct the mitigating measures required to allow the facility to be retained, notably the new flood wall.

The total budget approved at Detailed Options Appraisal is £1.865m. Until the detailed design has been costed, there is no change in the anticipated final cost of the project.

<p>12. Risk</p>	<p>Following the appointment of the design team, a Risk Register has been developed. This register is a live document and is constantly evolving with the design</p> <p>A significant number of the higher risk items have been mitigated by the design avoiding the need to remove the Michael Mallinson Watersports Centre.</p> <p>The previously identified contingency sum for silt removal should be retained until further investigations have been carried out.</p>
<p>13. Communications</p>	<p>Since the last report, officers have attended and presented at a number of local meetings, updating local groups with the progress and plans for the project.</p> <p>As mentioned in Section 9 of this report, a Local Insight Drop-in session was held to gather locals' knowledge of the area and inform the design.</p> <p>During the planning consultation process, further information sessions have been held to provide local users and stakeholders the opportunity to view the plans submitted for planning and ask questions directly to the design team.</p>
<p>14. Benefits achievement</p>	<p>Since the last report, an Emergency Action Plan has been developed and a telemetry system has been installed on the lake. This telemetry system allows officers to monitor the water levels and weather conditions remotely.</p>
<p>15. Lessons</p>	<p>This project includes an element of Early Contractor Involvement so that the designers have access to the knowledge and experience of the contractor to be carrying out the work. However, the scope of this work was not very clearly defined which led to significant variance in the contractors' interpretation of what was expected of them. This in turn, resulted in a wide range in the tenders received for pre-construction services, making the assessment of the tenders more difficult. A clearer scope of the pre-construction services would have left less up to interpretation and may have allowed the contractors to be appointed sooner.</p>

Appendices

Appendix 1	General Arrangement (Design for Planning)
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Contact

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TREE NUMBER	SPECIES	TRUNK SIZE
1	ASH	0.45
2	ASH	0.40
3	HOLLY	0.20 x 2
4	YEW	0.70
5	TURKEY OAK	0.30
6	ASH	0.35
7	ASH	0.25
8	FIELD MARPLE	0.25
9	HORNBEAM	0.20
10	HORNBEAM	0.25
11	ASH	0.50
12	OAK	0.80
13	YEW	0.50
14	SYCAMORE	0.25
15	ALDER	0.20 X3
16	OAK	0.7
17	OAK	0.35

- NOTES**
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
 - ALL LEVELS ARE IN METRES RELATIVE TO ORDNANCE DATUM NEWLYN.
 - ALL COORDINATES IN METRES RELATIVE TO ORDNANCE SURVEY NATIONAL GRID.
 - ALL MATERIALS AND WORKMANSHIP WILL BE DEFINED IN THE SPECIFICATION UNLESS NOTED OTHERWISE.
 - THE SERVICES INFORMATION ON THIS DRAWING HAS BEEN OBTAINED FROM STATUTORY RECORDS PROVIDED BY THE RELEVANT SERVICE PROVIDER. THE ACCURACY OF THIS INFORMATION CANNOT BE GUARANTEED.

- LEGEND**
- NEW FOOTPATH
 - AREA TO BE GRASSED AS PART OF SPILLWAY WORKS
 - EXISTING TREES TO BE REMOVED
 - EXISTING TREES TO BE POTENTIALLY REMOVED
 - WILDFLOWER SEED MIX
 - NATIVE SHRUB BEDS (SLOW-GROWING LOW-LEVEL SPECIES)
 - NEW STANDARD TREES



REV	DATE	DESCRIPTION	GG	BR	TB
P1	JAN'14	FOR PLANNING			

REVISIONS

CLIENT

CITY OF LONDON

PROJECT
HIGHAMS PARK LAKE RESERVOIR SAFETY IMPROVEMENTS

TITLE
GENERAL ARRANGEMENT

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 Enhancing Society Together

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DRAWN	GG	CHECKED	BR	APPROVED	TB		
DATE	JAN '14	SCALE	AT A1	1:200	SCALE	AT A3	1:400
DRAWING No.	9Y1197/ 1001				REVISION	P1	