

## **Report to the Cabinet**

**Report reference:** C-030-2011/12  
**Date of meeting:** 24 October 2011



**Portfolio:** Finance & Economic Development

**Subject:** Safety of the Bund (adjacent to the M11 motorway) at North Weald Airfield

**Responsible Officer:** Laura MacNeill (01992 564223).

**Democratic Services Officer:** Gary Woodhall (01992 564470).

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### **Recommendations/Decisions Required:**

**(1) That, for the on going assessing of the condition of the bund at North Weald Airfield, District Development Funding be sought in the sums of:**

**(a) £3,000 for 2012/13;**

**(b) £3,000 for 2014/15; and**

**(b) £5,000 for 2015/16.**

### **Executive Summary:**

The stability of the noise bund adjacent to the M11 motorway has been an issue for a number of years. Planning permission for it was granted in 2001. It has now been established that, although there is no immediate concern regarding failure and risk of it sliding onto the M11 motorway hard shoulder, there is a low to moderate risk of it doing so.

The Council's insurance company has assessed the risk and advised that it would be better managed and easier to defend if the Council could prove it took "reasonable and prudent measures" to reduce the Risk. The options for managing that risk available are shown in appendix 1. To balance reasonable cost to risk it is recommended that a planned monitoring regime is put in place comprising of a full topographical survey completed every 5 years (estimated cost £5,000) and a visual survey undertaken every 2 years (estimated cost £3,000).

It is also recommended that when the future of the Airfield is being discussed that part of any infrastructure changes that are included is the re-profiling or removal of the bund thus eliminating the long term risk to the Council.

### **Reasons for Proposed Decision:**

So that the Council can demonstrate that it is managing the present risk within a reasonable cost and that the future risk is deleted by including its consideration in any future strategic decisions.

### **Other Options for Action:**

Six monthly monitoring so any slight movement is detected immediately. This has been considered excessive monitoring bearing in mind the previous findings that it has not caused problems to date.

Re-grading the Sections 11 and 16 so that any slippage would not pass over the EFDC boundary and onto the motorway hard shoulder. This is a very costly option and is thought out of proportion to the risk identified.

### **Report:**

1. Planning Permission was granted around 1988 for the construction of noise bunds along the boundary of the Airfield to screen the site from the M11 motorway. In January 2001 Enviros Aspinwall was commissioned to undertake an environmental assessment of materials forming noise bunds located on the North Weald Airfield site. At that time it was reported that the material did not present a hazard to the local environment.

2. In June 2007, the Council commissioned Robert West Consulting Ltd to undertake a "slope stability assessment" of the bund so as to evaluate the stability of the bund located to the western elevation of the site adjacent to the M11 motorway. The bund in this location stands 3m to 4.5m above the natural ground level with notably steep angles of repose (28°- 35°) on either side, mainly adjacent to the M11 motorway. It spans approximately 1,000m long and varies in width from 3m to 7m. A section of approximately 100m flanks a cutting for the adjacent M11 motorway, such that the slope from the crest of the embankment is continuous to the motorway edge. Because of the proximity to the motorway confirmation of the stability of the bund is necessary to ensure the continued safe operation of the motorway and to discharge the Council's responsibility as owner of the site.

3. Various soil tests and numerical assessments of slope stability were undertaken in 2008/9. It was recommended that further soil samples were tested and slope stability tests especially in the proven vulnerable areas nearest to the motorway in the 2010/11 report the consultants have stated that:

"Although there are a few occurrences where the factor of safety is less than 2.0, the values are high enough to not raise any immediate concerns of failure. Sections 11 and 16 generate a slump which would pass over the kerb of the M11 motorway. In both instances the factor of safety of the bund is greater than 2.0 and it is not felt that the slump would pass beyond the hard shoulder. The risk of failure of the bund is low to moderate. In the event of the bund slipping towards the M11 the risk of causing interference with the running lanes of the motorway is low".

4. Although the bund continues to show no sign of slippage, the Council needs to put into place a plan to ensure that any risk(s) associated with this situation are mitigated to the satisfaction of the Council's insurers, Zurich. The situation has been discussed within the Risk Management Group and Members have agreed to include the risk in the Corporate Risk Register. It is classed at present as D3 (low likelihood and marginal impact). There now needs action to be taken to accomplish ongoing monitoring and/or lessening of the risk. Appendix 1 gives 4 options, an estimated option cost, the work that would be undertaken for that cost and comments. Putting this process into place will meet the requirements of the Council's insurers.

5. Officers recommend that, to prove the Council as landowner is conscious of the need for monitoring due to the possible affect on the M11 motorway, it would be prudent to have a topographical survey every 5 years and routine visual checks every 2 years.

### **Resource Implications:**

The topographical survey will cost £5,000 (at 2010 costs) every 5 years. This will need to be undertaken again in 2015/16 and 2020/21. The visual inspection and report every 2 years will cost £3,000 (at 2010 costs). Thus therefore gives a financial profile as set out in the table below:

	2010/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Year	Consultant Report	1	2	3	4	5	6	7	8	9	10
Topo-graphical Survey						£5,000					£5,000
Visual Survey			£3,000		£3,000			£3,000		£3,000	

It is suggested that this expenditure be met through the District Development Fund since it does not arise in each year and that at this time provision be made only for the first cycle (i.e. up until 2015/16)

### **Legal and Governance Implications:**

As Landowner the Council has a responsibility to ensure that its land/activities are not allowed to compromise the safe operation of the adjoining M11 motorway. Any damage caused to vehicles or people would be covered by the Council's Public Liability Policy.

If the Council did not put anything in place and there was an incident of some type, then there is a risk that negligence on the Council's part would be found which may result in damages as well as reputational damage.

### **Safer, Cleaner and Greener Implications:**

By initiating and acting upon the various Consultants reports the Council has shown its concern and commitment to finding out the make up and stability of the bund and any environmental issues. The bund is stabilised by the grass, shrubs and trees that make up its form, however the rabbits and other wildlife that burrow into it cause concern.

### **Consultation Undertaken:**

Consultants reports – Enviros Aspinwall  
– Robert West Consulting

Zurich Insurance Company

### **Background Papers:**

Enviros Aspinwall report 2001  
Robert West Bund Stability Assessment 2007  
Robert West Bund Stability Sensitivity Analysis 2008  
Robert West Stability Appraisal 2010

### **Impact Assessments:**

#### Risk Management

The issue has been processed through the Corporate Risk Management Group where it has been agreed to include it in the Corporate Risk Register as a D2 risk. By designating funding to undertake ongoing monitoring the Council is taking steps to reduce its risk

#### Equality and Diversity:

*Did the initial assessment of the proposals contained in this report for relevance to the Council's general equality duties, reveal any potentially adverse equality implications?*

No

*Where equality implications were identified through the initial assessment process, has a formal Equality Impact Assessment been undertaken?*

No

*What equality implications were identified through the Equality Impact Assessment process?*  
N/A.

*How have the equality implications identified through the Equality Impact Assessment been addressed in this report in order to avoid discrimination against any particular group?*  
N/A.