



## **Ironmills Park, Dalkeith: Access Route**

**Report by John Blair Director**

### **1 Purpose of Report**

The purpose of this report is to advise the Council on the findings of the consultant engineers report produced by Ironside Farrar regarding the remedial works that are required to halt a landslip and to reopen the access route from Cemetery Road to Ironmills Park, Dalkeith.

### **2 Background**

#### **a) Reason for Closure of Ironmills Steps**

As a result of a landslip on the steps, path and adjacent land in March 2013 the access route to Ironmills Park from Cemetery Road was temporarily closed in the interests of public safety.

The route has remained closed since, this time due to the increasing extent of the landslip and to ensure and maintain public safety.

Unfortunately the closure of this access route was followed shortly by the permanent closure of another access route from Cemetery Road to Ironmills Park via the Penicuik to Dalkeith Walkway viaduct – part of the Borders Railway Project works.

#### **b) Consequence of Closing Ironmills Steps**

The closure of both these routes means that the only firm surfaced access route remaining to Ironmills Park is along Ironmills Road, which is very narrow and has no footway for much of its length.

There is however an informal access route from Lugton Brae to Ironmills Park via woodland, where the surface is beaten earth, and has steep slopes. This route is impractical for most park users – and is not considered to be a suitable alternative to either the Ironmills Steps or Ironmills Road entrance.

The temporary loss of the access route via the steps also means the loss of a historical perspective, as it connects with the Memorial Bridge (Grade B listed). This is a masonry arch footbridge over the River Esk which was built one hundred years ago, as a result of Ironmills Park being gifted to the people of Dalkeith by the Duke of Buccleuch.

A map currently displayed on site provides information as to alternative routes to Ironmills Park from Cemetery Road, during this period of closure. An extract from this public notice is attached as Appendix A to the report.

c) Assessing the Problems of the Landslip

The landslip has since been regularly monitored and during the period since March 2013 considerable movement has been evidenced. The movement is still ongoing. There are now crevasses across the slope and across the lower section of the footpath.

To reopen this route, a 3 stage process has commenced to minimise risk to the Council.

**Stage 1:** Appointment of a Geo-technical Consultant to carry out site investigations, this involves examining options and making costed recommendations on the most cost effective solution.

**Stage 2:** Organise intrusive site investigation works, oversee the works, interpret the results, prepare specifications and drawings, and progress the project to tender stage.

**Stage 3:** Appoint a contractor to carry out the recommended works concluded in the consultant's contractual documents and for the consultant to oversee the complete works.

Stage 3 would only be carried out once the costs could be established and course of action agreed by Council.

d) Findings of the Consultant's Report

The report outlines in detail the nature of the slope which has a sandstone base overlaid with clay and that both these materials are stable. However these are also overlaid with clayey sands and gravels which are not stable and are at a sufficient angle that this layers stability will always be of concern.

Extracts from the Report showing details of landslip are shown in the Appendices:

Appendix B (drawing 8162 113)

Appendix C (Photo 3 – slip at top of slope)

Appendix D (Photo 4 – slip at dog leg of path)

There continues to be some movement in the slope. It had been envisaged that the area would settle and movement would cease.

As the on-site intrusive investigations have progressed it became apparent from meetings with consultants Ironside Farrar that an engineering solution could be costly.

The consultants were therefore also asked to provide some other options for consideration by the council. Furthermore consultants have made clear that these alternatives cannot be guaranteed.

The final report details three options available to the Council.

The options are:

1. Do Nothing.
2. Localised Solution (that is not guaranteed – see 3.2 Risk) estimated cost £37,000.
3. Full Engineered £225,000 - £675,000 Solution (see 3.2 Risk).

Note: Further design works with resultant costs will be required to more accurately forecast the final costs of the Full Engineered Solution (Option 3).

### 3 Report Implications

#### 3.1 Resource

Approval was given by Council on 5 November 2013 to provide £10,000 of funding for this project from the General Services Capital Plan. This figure was based on the estimated amount that it was considered reasonable to be spent on the repair of the footpath. Stages 1 and 2 of this project have been completed and the final consultant report has now been produced. Expenditure to date is £22,000 in consultant's fees and ground investigation works.

The report however outlines that £225,000 – £675,000 would be required to provide a full engineered solution. A full engineered solution would involve soil nails and or soil pins which are driven several metres into the ground. It also involves removal of the soil and vegetation from the area – which includes the large trees.

In summary the Revenue impact of each of the three options is set out in the table below.

Option 1 (Do nothing) additional cost is £12,000 for necessary consultants costs not previously approved.

Option 2 (Localised solution) additional cost £49,000 above the £10,000 already approved.

Option 3 (Full Engineered solution) £237,000 - £687,000.

The additional borrowing costs associated with each of the three options outlined above is shown in the table below.

Option	Details	Additional Capital Expenditure (£)	Revenue Budget Impact 2014/15 (£)	Revenue Budget Impact 2015/16 (£)
1	Do nothing	£12,000	£210	£600
2	Localised solution	£49,000	£860	£2,450
3	Full engineered solution	£237,000 – £687,000	£4,150 – £12,020	£11,850 – £34,350

## 3.2 Risk

### Option 1 Risk – Do Nothing

If Option 1, the do nothing option, is selected there is a potential safety risk caused by members of the public ignoring the safety notices and continuing to access Ironmills Park from Cemetery Road via the steep riverside embankments and climbing over the Heras safety fencing. This risk also exists until Option 2 is complete.

As well as a safety risk, it is currently inconvenient for users from Eskbank and the surrounding area to access Ironmills Park - due to requiring to detour via Eskbank Road and/or Old Edinburgh Road and then Ironmills Road.

For children, this risk is compounded by the fact that the only entrance to the park is via Ironmills Road which is used by vehicles and pedestrians. This is a very narrow road with blind bends and there are stretches with no pavement, or a very narrow pavement, along its length.

If no work is carried out to address the problem of the landslip and re-opening the access route, the public safety risks will continue with the likelihood that this will have a negative impact on the public's perception of Midlothian Council.

Further substantial land slips could potentially affect Dalkeith Cemetery and the made up ground at the top of the slope.

### Option 2 Risk – Localised Solution

The total cost for Option 2 including consultant's fees and contract costs is estimated to be £59,000.

If Option 2 is chosen as the way forward, then there is a risk that this might be only a temporary solution and further costs may be incurred in the future (ie further repairs are necessary to keep the path open).

The consultant's report makes it clear that the success of the repairs completed under Option 2 will depend on amount of land slip movement still occurring. It should be noted that in the last three months smaller movements to the landslip have been recorded.

### Option 3 Risk Full Engineered Solution

The full engineered solution for this option (estimated between £225,000 and £675,000) should minimise the risk of any further expenditure in the near future. However this is substantially beyond the £50,000 initial estimate for the project and aesthetically will look very unsightly.

### **3.3 Single Midlothian Plan and Business Transformation**

Themes addressed in this report:

- Community safety
- 
- Adult health, care and housing
- 
- Sustainable growth

The Consultants Report (stage 1) coupled with the remediation work (stages 2 and 3) required to restore this access route will ensure easy accessibility for all users of Ironmills Park and thus providing continued opportunities to maintain/increase the health and well being of the local community. The current diversion could mean the difference between a short walk and a car journey to access Ironmills Park.

This route provides access to Midlothian's Core Paths Network.

### **3.4 Impact on Performance and Outcomes**

If this project is not undertaken there is a risk that this will have a small negative impact on targets, e.g. walking/cycling.

### **3.5 Adopting a Preventative Approach**

Carrying out remedial works will address the safety implications and enable pedestrian access to be restored.

### **3.6 Involving Communities and Other Stakeholders**

Communities and other stakeholders have been informed (and will continue as the project progresses) by:

- displaying notices on the temporary site safety fencing informing the public of the events as they have been happening – with maps showing diversion routes to Ironmills Park
- press releases
- FOI Requests

### **3.7 Ensuring Equalities**

If this project is not undertaken there is a risk that this will have a negative equalities impact due to the difficulty for children/disabled people to access the park for the reasons described in para 3.2.

### **3.8 Supporting Sustainable Development**

If this project is not undertaken there is a risk that this will have a small negative impact on targets eg reduced walking/cycling.

### **3.9 IT Issues**

4 Not applicable.  
**Summary**

This report describes the extent of the landslide and the three options for consideration by the Council that the access route may be reopened from Cemetery Road to Ironmills Park.

**Option1**

The do nothing approach is likely to be considered unacceptable by residents and users of Ironmills Park due to the fact this is the main pedestrian route into the park from Dalkeith, crossing as it does a historic bridge. Taking no action to repair the path may result in the public using the adjacent embankment with the consequent risk of injury.

**Option 2**

The localised solution would demonstrate a willingness to address this problem within the tight budget constraints the Council faces and the drainage works proposed may well negate any further land slips affecting the cemetery which would be of major concern. However, there are no assurances that this will resolve the land slip issues and result in the path reopening.

**Option 3**

It is likely that the engineered solutions would be too costly (between £225,000 and £675,000) and too intrusive ruining the aesthetics of this location.

5 **Recommendations**

The Council is asked to note the contents of the Consultant's Report and:

- Recommend Option 2, Localised Solutions, is progressed with a further expenditure of £37,000. This will require £49,000 to be added to the General Services Capital Plan for 2014/15. A supplementary estimate of £860 in 2014/15 will be required for revenue borrowing costs and £2,450 will require to be added to the 2015/16 Revenue Budget.
- Option 1, do nothing should be discounted on the basis the public will continue to use this currently dangerous access route (despite Heras safety fencing and warning signs being in place). The do nothing option exposes the Council to the risks and negative publicity as detailed in this Report.
- Option 3, Full Engineered Solution should also be discounted as it would not be seen as financially prudent due to the financial cuts the Council is currently facing.

## **6 Appendices**

**Appendix A** – Extract from Public Notice which is currently displayed on site showing alternative routes to Ironmills Park from Cemetery Road.

**Appendix B** – Extract from Ironside Farrar's Report – Drawing 8162 113.

**Appendix C** – Extract from Ironside Farrar's Report – Photo 3: slip at top of slope.

**Appendix D** - Extract from Ironside Farrar's Report – Photo 3: slip at dog leg of path.

**Date:** 28 August 2014

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**Background Papers:**

- 1    Capital Services Capital Plan: Report to Council 5 November 2013.

## **Declaration Box**

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*I confirm that I have undertaken the following actions before submitting this report to the Council Secretariat (Check boxes to confirm):-*

- ☐ *All resource implications have been addressed. Any financial and HR implications have been approved by the Head of Finance and Human Resources.*
- ☐ *All risk implications have been addressed.*
- ☐ *All other report implications have been addressed.*
- ☐ *My Director has endorsed the report for submission to the Council Secretariat.*

*For Cabinet reports, please advise the Council Secretariat if the report has an education interest. This will allow the report to be located on the Cabinet agenda among the items in which the Religious Representatives are entitled to participate.*

*Likewise, please advise the Council Secretariat if any report for Midlothian Council has an education interest. The Religious Representatives are currently entitled to attend meetings of the Council in a non-voting observer capacity, but with the right to speak (but not vote) on any education matter under consideration, subject always to observing the authority of the Chair.*



**Due to land subsidence investigation work this path is temporarily closed. Alternative routes to Ironmills Park are shown as a red dashed line on map. Apologies for any inconvenience.**



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