

Gore Glen Bing**Report by Ricky Moffat, Head of Commercial Operations****1 Purpose of Report**

The purpose of this report is to advise Council on the current situation and cost of the necessary physical works for making safe the burning bing at Gore Glen located by Gorebridge.

2 Background

- 2.1 Gore Glen comprises of 43.7 hectares of amenity land situated on the west side of Gorebridge and is bisected by the A7 road. The Kirkhill Tip (see Plan as appendix 1) lies to the west of the A7 and comprises around 2 hectares of largely mine waste. The Borders rail line is located around 100m to the west of the burning area.
- 2.2 In 1978, the Gore Glen was redesignated to amenity land by Lothian Region Landscape Development Unit for the purpose of public use and recreation. Trees were planted along with a path network, car park and picnic area. The site was handed to Midlothian District Council in 1985.
- 2.3 Burning of the bing, at the Kirkhill Tip has occurred sporadically over the last twenty years, notably in the period 1997 and in 2003.
- 2.4 In February 2016, burning ground was recorded at a small area of the Kirkhill Tip which forms part of Gore Glen Woodland Park and the Scottish Fire and Rescue Service attended the site along with Council officers. However it was determined that no substantive measures were required at this time.
- 2.5 Measures were taken to protect the public by preventing access. The burning area was monitored by Council officers on a regular basis and there was no increase in the burning. Initial advice was also sought from specialist engineering consultants.
- 2.6 In October 2016 following high winds and heavy rainfall, conditions which can exacerbate burning spoil heaps, it was reported that the burning area had expanded significantly.
- 2.7 Recent advice from Legal Services indicates that the Coal Authority may have some responsibility for the bing's remediation. In this regard officers from Environmental Health have written to the Coal Authority seeking a determination of responsibility.

3 Remediation Options

- 3.1 A report was commissioned by Land and Countryside Service from the Coal Authority's and the principal findings from the report on the burning bing are as follows:

"It was only possible to gauge the extent of the burning area at the surface level of the Kirkhill Tip, as readings at depth could not be undertaken and specialist drilling equipment would be required to probe deeper. However as this would be a hazardous operation it is discounted.

It is clear from the survey of the tip surface that the fire is spreading in multiple directions which is an indicator of sub-surface activity; however, the extent of such activity cannot be defined until major earthworks are carried out.

*Following the survey, the Coal Authority experts are hopeful that the heating is contained within the top 2m or 3m of the spoil heap material, **however it must be emphasised that until general excavation has taken place, the full extent of the heating cannot be fully ascertained**".*

- 3.2.1 Based on the above findings the Coal Authority's report considered five options to be considered to make the site safe.

Option A - Excavation trench	An excavated trench with grout filled curtain surrounding the burning area. Feasibility: The Coal Authority do not consider that this would be achievable due the depths involved.
Option B - Do nothing	Do nothing and let the fire burn itself out - this would probably take many years. Feasibility: There is a risk from this option of a potential safety hazard to the adjacent road. In addition, two coal seam outcrops in this vicinity exist beneath the tip and if the heating was to spread into these, there could be wide reaching effects on the stability of the adjacent railway line. There is potential for ongoing emissions which could have a negative impact on the environment. On-going security of the site and loss of a public amenity would be long-term consideration.
Option C - Inert natural	Smothering the burning area with inert material i.e. clays. Feasibility: In the Coal Authority's experience this would not extinguish the fire completely and would merely smoulder for a long period.
Option D - Grouting	Grout injection to the bing. Feasibility: The Coal Authority do not recommend this course of action due to the explosive nature of the feature when liquids are introduced.
Option E - General excavation	General excavation of the heated area and removal of the material to a prepared location and allowed to cool. Feasibility: This is the only sure method of eliminating the burning and source of the heat which has a degree of confidence. It is, however, to be noted that there is no guarantee that further heating outbreaks can be eliminated at separate locations within Kirkhill Tip, as the cause of the current fire could be attributed to spontaneous combustion as at other tip sites.

- 3.3 The Coal Authority recommends Option E as being the only sure method of eliminating the heating and that the burning area is excavated to determine the extent of the burning material, thus preventing the fire spreading to the underlying coal seams and affecting transport infrastructure, i.e. road and railway.
- 3.4 The Coal Authority advises that Option E will significantly lower the risk of further burning outbreaks in the area and will see the removal of soil to a depth of 2-3 metres. The material will be removed to a remote site where it can be allowed to cool down.

During the earthworks, officers from the Coal Authority will be able to determine if the fire has penetrated deeper into the ground and if further excavations will be required.

The project would be managed by the Coal Authority who will oversee the construction of the works to their completion under the direction of the Council. Due to the nature of the work, a senior member of the Coal Authority Public Safety and Subsidence team will provide the majority of site attendance and Project Management.

The Coal Authority will subcontract the physical works to one of its framework contractors and will manage the internal tender process.

The Coal Authority will liaise with Midlothian Council at regular intervals to provide updates on progress and have allowed for progress to be communicated via regular emails and attendance at meetings by its Project Manager.

- 3.5 Midlothian Council is working closely with the Coal Authority to ensure measures are taken to mitigate the risk to public safety.

4 Report Implications

4.1 Resource

- 4.1.1 The Coal Authority has advised costs below are for budgetary purposes only. Further refinement of costs will only be possible by completing a tender process. However, due to the emergency nature of the works it is inevitable there will be a degree of risk. If appointed to oversee and Project Manage the works, the Coal Authority would seek to obtain best value from its framework suppliers/contractors and provide best value for management of the works. It will include supplying its staff at government-to-government rates.
- 4.1.2 The Coal Authority recommends that a budget of £270,000 be allowed to carry out the works. Whilst there is some contingency in the rate build up this will only cover the works as described above (see Appendix 2).

The time allowed for these works is approximately 7 weeks, if upon completion of this it is discovered that the burning area has reached un-anticipated depths, 2-3m below existing ground level, then further investigative and remedial works would be required. The extent of any such works are unknown at this juncture, therefore cannot be quantified at this stage.

- 4.1.3 Environmental Health Officers have requested that the Coal Authority demonstrate that it has no responsibility for any of the costs of remediation. The issue of their responsibility in this respect is currently being pursued by Environmental Health and the Council's Legal Services. If the Coal Authority is found to be liable for any of costs, the budget would be amended accordingly.
- 4.1.4 Funds of £86,000 remain in the existing provision for Contaminated Land and therefore a further £184,000 will require to be included to the 2016/17 capital plan.

4.2 Risk

- 4.2.1 The Coal Authority recommends Option E is progressed as this option will mitigate against further risks presented by the burning bing. By removing the burning area completely, this will remove the risk of serious injury or death. It should be noted that the Coal Authority cannot guarantee there will be no further outbreaks of burning due to spontaneous combustion at other locations on the bing. Further to this, Option E will minimise any long-term risk to either the Borders Rail and/or the A7 from this burning area. Other considerations are that risk due to ongoing emissions and the loss of amenity at Gore Glen Woodland Park will be minimised.
- 4.2.2 Financial risks will be controlled by adherence to procurement procedures and appropriate project management measures. As outlined in Section 4.1.2, if the burning has reached a depth not anticipated by the Coal Authority a re-evaluation of the budget cost will be required and a further report be presented to Council.
- 4.2.3 The physical risks arising from this project will be managed through risk assessments, safe methods of working and appropriate insurances.

4.3 Single Midlothian Plan and Business Transformation

Themes addressed in this report:

- ☒ Community safety
- ☐ Adult health, care and housing
- ☒ Getting it right for every Midlothian child
- ☐ Improving opportunities in Midlothian
- ☒ Sustainable growth
- ☐ Business transformation and Best Value
- ☐ None of the above

4.4 Key Priorities within the Single Midlothian Plan

The project will contribute to the long-term outcomes under the Single Plan theme of Sustainable Growth which is for, *visitors and residents to benefit from Midlothian's quality of environment* as a consequence of the improvements outlined in the respective plans.

There will also be contributions to LO 24 which seeks to improve aspects of local amenity.

4.5 Impact on Performance and Outcomes

The Corporate Risk Register records the risks presented by the bing and these risks will be reduced to the minimum possible for this site.

4.6 Adopting a Preventative Approach

The risks to public safety from this current area of burning will be reduced to a negligible level following successful implementation of the proposed works. The possible risks to key transport corridors associated with this area of burning would become negligible if Option E, i.e. general excavation is pursued and the bing is not left to burn.

Additionally, remediation of the burning area will restore public access to a greenspace near to where people live without the need to use a car.

4.7 Involving Communities and Other Stakeholders

Council officers have advised the key agencies including Transport Scotland, Network Rail and Scottish Gas Networks and continues to liaise with these bodies as required. The Coal Authority has also had meetings with Transport Scotland and Network Rail

Local elected members were advised of the issues along with local schools and community groups.

The Emergency services are aware of the situation.

4.8 Ensuring Equalities

There are no equalities issues in relation to remediation and reinstatement of an existing site.

4.9 Supporting Sustainable Development

The project supports a component of the Councils Single Plan under the Sustainable Growth theme as described in Section 4.4.

4.10 IT Issues

There are no IT issues associated with any aspect of this project.

5 Recommendations

It is recommended that Council:-

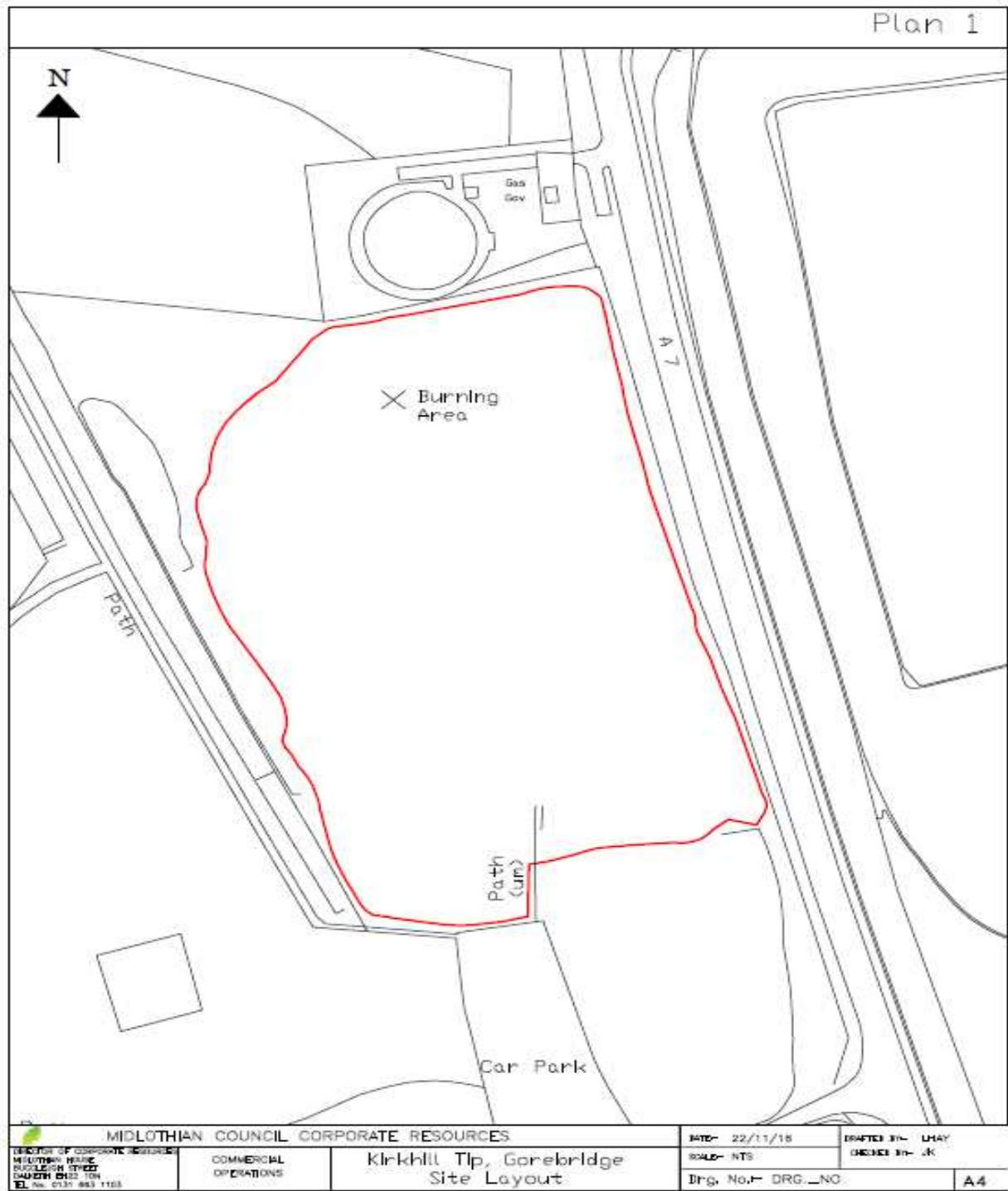
- (a) Note the contents of the report and the project management by the Coal Authority;
- (b) Recommend Council approve the addition of £184,000 to the 2016/17 capital plan (subject to their being no legal obligation on the Coal Authority to contribute to the costs of the works proposed). This would have minimal impact on loan charges in 2016/17 and 2017/18 charges would be adjusted accordingly; and
- (c) Note that further reports will be submitted as required by Director, Resources.

29 November 2016

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**MIDLOTHIAN COUNCIL
RESOURCES DIRECTORATE**

GORE GLEN BING



Costs to Remediate Kirkhill Tip, Gorebridge

APPENDIX 2

Physical Works			Budget Costs	
ITEM	QUANTITY	VOLUME	RATE	AMOUNT
GENERAL ITEMS				8000.00
SECURITY				8000.00
MOBILIZE				1500.00
REMOVE TREES				EXCLUDED
FORM STOCKPILE AREA FOR CLAY				1500.00
FORM HAUL ROAD UP TO THE WORKING AREA	1000	m2	4.00	4000.00
FORM HAUL ROAD FROM WORKING AREA TO LAY DOWN	500	m2	7.00	3500.00
LEVEL OUT LAY DOWN AREA	3600	m2	1.50	5400.00
MAINTAIN HAUL ROAD, BORROW PITS ETC				5000.00
LOAD HAUL & SPREAD CLAY BASE TO LAY DOWN AREA	1080	m3	45.00	48600.00
DEMobilize				1500.00
MOBILIZE inc SLR EXCAVATOR				2000.00
HERAS PANELS WITH DUST SCREEN	50	m	10.00	500.00
EXCAVATE, HAUL AWAY & DOZE BURNING MATERIAL	1500	m3	12.00	18000.00
WATER SPRAYING IN ATTENDANCE				
REINSTATE SLOPE				3000.00
LOAD HAUL AND SPREAD CLAY CAPPING	1080	m3	45.00	48600.00
REINSTATE HAUL ROAD	2500	m2	1.00	2500.00
DEMobilize				2000.00
Sub total				163600.00
Other items				
FEES - COAL AUTHORITY				40000.00
RISK VALUE 20%				32800.00
CONTINGENCY 20%				32800.00
Total				269200.00