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CUTACRE OPEN CAST COAL MINE, BOLTON
'CUTACRE PROPOSED TIP RECLAMATION & OPENCAST COAL SITE,
ENVIRONMENTAL & SUPPORTING STATEMENT, MAY 1996'

ADDENDUM

REVISION C

on behalf of



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58/D03A - Restoration and Landscaping Plan (agreed restoration plan)

935-76 Revision G - Restoration and Landscape Plan: Proposed Amendment (proposed restoration plan)

935-144 - Proposed Public Rights of Way for Revised Restoration Plan

1 Introduction

- 1.1 Harworth Estates is proposing to amend the restoration plan for its open cast coal-mining site at Cutacre near Bolton. This report describes the changes and the rationale behind the proposed alterations.
- 1.2 The agreed restoration proposals and the proposed changes are shown in plan form on the following drawings which accompany this report.
- ***'Restoration and Landscaping Plan'***, drawing number 58/D03A. This drawing shows the restoration proposals which are currently agreed with the planning authority;
 - ***'Restoration and Landscape Plan: Proposed Amendment'***, drawing number 935-76 Revision G. This drawing shows the proposed restoration plan by Harworth Estates.
 - ***'Proposed Public Rights of Way for Revised Restoration Plan'***, drawing number 935/144. This plan shows the rights of way for the proposed restoration plan along with a comparison of the total quantities of rights of way on the agreed and proposed restoration plans.
- 1.3 The purpose of the amendment is to further improve the recreational, educational, landscape and ecological qualities of the site in the long-term while making the earthworks operations more efficient to carry out in the shorter term. The alteration also reduces the potential risk of flooding to the proposed industrial area (which features on both the agreed and amended restoration plans). These alterations improve the sustainable credentials of the site by improving the integration of the site with its human, landscape and ecological environment and also reducing the amount of energy required to carry out the site operations.
- 1.4 The amendment seeks to minimise the extent of alterations to the agreed restoration plan. Many of the features of the existing restoration plan are retained in the amendment, for example specification and quantities of new landscape features. This report only highlights the changes rather than the elements which remain unaltered. The paragraph references provided at the end of some of the paragraphs in this report refer to the corresponding paragraph numbers in the original report (Cutacre Proposed Tip Reclamation and Opencast Coal Site, Environmental and Supporting Statement, May 1996' by RJB Mining (UK) Limited).

2 Proposed Amendments

Landform

- 2.1 The amendments to the proposed shape of the landforms have been adjusted to facilitate the recovery of coal and the efficient placing of the spoil material from the current mining operations and Cutacre tip. However, particular attention has been paid to reform the land shapes and contours so that they are broadly similar to the agreed landform.
- 2.2 The main landform to the west of the site in essence remains. However, the new proposal has a number of 'peaks' rather than a single highpoint. This is to provide a more naturalistic mound and a more aesthetically attractive ridge line. Like the agreed scheme, the proposed scheme has the same maximum peak height and rounded, gentle gradients which are sympathetic to key features of the surrounding countryside.
- 2.3 The smaller mound on the agreed scheme to the south of the proposed industrial area is omitted from the proposed scheme. This has been done to reduce the potential risk of flooding to the proposed industrial area. Woodland planting is proposed to the south of the proposed industrial area. As this woodland planting matures it will screen the proposed industrial area from the surrounding countryside. There are no residential properties to the south of the tip in the nearby vicinity with front views of the proposed industrial area. The majority of properties to the south of the site are in Tyldesley at a distance of approximately 1600 metres and these properties generally face away from the site. They also generally have rear garden fences that screen the ground floor rooms at the back of the properties from the proposed industrial area.

Water Features

- 2.4 Table 1 below shows the comparison of the quantities of the water related elements on the approved and the proposed restoration plans. The quantities in this table are discussed in the following sections.

REF.	ITEM	QUANTITY IN APPROVED RESTORATION PLAN	QUANTITY IN PROPOSED RESTORATION PLAN	CHANGE
1	Water course	5,284 lin. m	7,522 lin. m	2,238 lin. m
2	Open water body	56,951 m ²	57,224 m ²	273 m ²
3	Reed and marsh planting	34,289 m ²	41,156 m ²	6,867 m ²
	TOTAL (items 2-3)	91,240 m²	98,380 m²	7,140 m²

Table 1: Comparison of the quantities of water related elements on the approved and proposed restoration plans

Running Water

- 2.5 The Cutacre Brook will be recreated as an open water course through the site and be revised in response to a temporary water diversion application to facilitate the continued operations of the coaling works. The temporary diversion of Wharton Brook off site, required during mining operations to minimise the extent of reworking required, will be permanently continued. Additional water courses and ephemeral wetland corridors, generally running in a west-east direction, have been added to compensate for the loss of, and improve upon, Wharton Brook, which was a poor quality habitat even in its original form. This results in the increase in the length of water courses on site by 42% (2,238 metres). The channels of the brooks will be excavated to a variable profile so that opportunities for colonisation by marginal flora are maximised. The creation of stretches of steep bank of over 1m in height in places will provide suitable conditions for burrowing by water voles. (Paragraph 3.9.39).

Marshland/Open Water

- 2.6 The total quantity of open water bodies and reed/marsh planting in the proposed restoration plan is substantially increased (by 273m² for the open water bodies and 6,867m² for the reed/marsh planting). An additional body of water will be created in the south eastern sector of the site. Generally, the main water bodies remain in the south east sector of the site but in the proposed restoration plan more of them are located towards the southern boundary. The water bodies have been relocated here as mining extraction is taking place in this area

and the holes created by the mining operations will form the main excavation for the creation of water bodies. This reduces the need for further disturbance to the surrounding environment and saves energy. The wetlands will be designed using the same method and principle as set out for the agreed restoration plan. (Paragraph 3.9.40).

Vegetation

Woodland

2.7 Table 2 below shows the comparison of the quantities of the woodland elements on the approved and the proposed restoration plans. The quantities in this table are discussed in the following sections.

REF.	ITEM*	QUANTITY IN APPROVED RESTORATION PLAN	QUANTITY IN PROPOSED RESTORATION PLAN	CHANGE
1	NVC W10a wood	261,334 m ²	264,241 m ²	2,907 m ²
2	Woodland edge	85,461 m ²	86,074 m ²	613 m ²
3	NVC W7b wood	82,407 m ²	82,725 m ²	318 m ²
4	NVC W8 wood	23,696 m ²	38,647 m ²	14,951 m ²
5	NVC W10e wood	41,357 m ²	41,357 m ²	0 m ²
6	NVC W16 wood	26,735 m ²	26,735 m ²	0 m ²
7	NVC W6 carr wood	31,848 m ²	31,987 m ²	139 m ²
	TOTAL	552,838 m²	571,766 m²	18,928 m²

* NVC - National Vegetation Classification

Table 2: Comparison of the quantities of woodland elements on the approved and proposed restoration plans

2.8 The specification for the woodland planting remains as per the agreed restoration plan. The total quantity of woodland planting is substantially increased in the proposed restoration. The quantity of NVC W10e and W16 woodland types remain unaltered. The quantity of NVC W7b and W8 woodland types are considerably increased. The locations of the proposed areas of woodland planting have been amended to enhance the new landform design and increase biodiversity.

2.9 The main changes to the woodland planting are listed below.

- In addition to the overall area of planting being increased, the way in which it is designed in the proposed restoration plan will lead to a greater length of woodland edge. This interfaces with grassland resulting in enhanced habitat creation and ecological benefit. The ecological carrying capacity of the main woodland area on the landform in the western part of the site in the proposed restoration plan is therefore enhanced. It will be more attractive to wildlife whilst creating visual diversity and legibility in terms of physical shape and providing micro-climatic shelter. There is an increase of 0.7% (613m²) of woodland edge planting.
- At its wettest areas, mainly around the wetlands and open water bodies, the most suitable woodland type for the condition will be NVC W6. There is an increase of 0.4% (139 m²) of this woodland type in the proposed restoration plan in comparison to the approved restoration plan.

Grassland

2.10 Table 3 below shows the comparison of the quantities of grassland elements on the approved and the proposed restoration plans. The quantities in this table are discussed in the following sections.

REF.	ITEM	QUANTITY IN APPROVED RESTORATION PLAN	QUANTITY IN PROPOSED RESTORATION PLAN	CHANGE
1	Permanent pasture	2,080,590 m ²	1,892,154 m ²	-188,436 m ²
2	Rough grassland	203,071 m ²	365,439 m ²	162,368 m ²
3	Retained acid grassland scrub	19,306 m ²	19,306 m ²	0 m ²
4	Species rich acidic grassland	26,735 m ²	26,735 m ²	0 m ²
	TOTAL	2,329,702 m²	2,303,634 m²	-26,068 m²

Table 3: Comparison of the quantities of grassland elements on the approved and proposed restoration plans

- 2.11 The specification for the grasslands remains as per the agreed restoration plan. The total quantity of grassland remains substantially as per the agreed restoration plan (marginally reduced in the proposed restoration plan by 26,068m²). The quantity of retained acid grassland scrub and species rich acidic grassland remains unaltered.
- 2.12 The majority of the restored grassland at the site will be permanent pasture suitable for cattle grazing as per the agreed plan. The main change to the grassland in the proposed restoration plan in comparison to the agreed restoration plan is a reduction in the permanent pasture by 9% (188,436m²). This is compensated by an increase in rough grassland of 80.0% (162,588m²). This is substantially located on the landform in the western part of the site and is enclosed by woodland. This augments the ecological carrying capacity of the proposed woodland/grassland habitat.

Hedgerow

- 2.13 The total quantity of hedges remains substantially as per the agreed restoration plan. The proposed restoration scheme seeks to minimise the loss of existing hedgerows and proposed to establish a greater length of higher woody species richness a substantial number of hedgerow trees where appropriate in comparison to pre site operation situation. Hedgerow trees will be planted in hedgerows on the northern slopes of the main landform to visually 'tie' the woodland edge in to the remaining hedgerow network.

Rights of Way and Circulation

- 2.14 The alignment of the proposed bridleways, public footpaths and cycleways are amended to reflect the proposed adjustments to the landscape, in particular the landform and water bodies as shown on drawing number 935/144, 'Proposed Public Rights of Way for Revised Restoration Plan'. The total length of these remains substantially unaltered (increased by 86 metres in the proposed restoration plan in comparison to the agreed restoration plan). (Paragraph 4.7).
- 2.15 Existing public rights of way will be partially diverted. However, the extensive community access will be maintained along existing footpaths linking the eastern edge of Over Hulton with the site and through it to Little Hulton and Tyldesley.
- 2.16 The proposed restoration plan also creates additional links to the surrounding area. The circulation system within the site explores the ridgelines and peaks of the landforms as well as the lower water bodies and valleys providing a continual passage of movement through the site which connects surrounding residential areas with the site.
- 2.17 The routes of footpath will be seeded as rides, a mix will be sown that is tolerant of both variable edaphic and light conditions. Cycleways will be in self binding gravel to satisfy DDA Regulations.
- 2.18 The rights of way have been designed to avoid disturbance to residential properties and areas of high nature conservation value. The provision of an attractive, well designed and comprehensive pedestrian/cycle network will encourage people to use these sustainable forms of transport for commuting and recreational purposes.

2.19 There will be informal public access across the additional area of rough grassland.

Visual Assessment

2.20 The findings of the visual assessment for the agreed restoration plan remain substantially unaltered for the proposed remediation plan as described below. (Paragraph D2.1 of Part D – Assessment of impact)

Viewpoint 1: Public footpath 125 (Bolton MBC) at junction with borough boundary looking northeast

2.21 The impact of restoration on visibility remains a substantial, positive, impact.

Viewpoint 2: Public road by St Andrews C of E primary school

2.22 This viewpoint is no longer attainable due to the growth of the intervening hedge.

Viewpoint 3: Eastern edge of Over Hulton near Fairlyn Road looking southeast along informal, non-dedicated footpath

2.23 The impact of restoration on visibility remains a substantial, positive, impact.

Viewpoint 4: On bridge over railway along public footpath south from Engine Lane

2.24 The impact of restoration on visibility remains a substantial, positive, impact.

Viewpoint 5: A6 Salford Road

2.25 The impact of restoration on visibility remains a substantial, positive, impact.

Viewpoint 6: Public footpath along Shakerly Lane between Over Hulton and Shakerly

2.26 The impact of restoration on visibility remains a moderate, positive, impact.

Viewpoint 7: Mort Lane (A5082) north of Tyldesley and south of Makants

2.27 The impact of restoration on visibility remains a substantial, positive, impact.

Viewpoint 8: Kenyon Way, Little Hulton - looking west

2.28 The impact of restoration on visibility remains a substantial, positive, impact.