

STUDIO STEAD ARCHITECT PRACTICE
at: Barclays Bank House
Baxtergate, Whitby,
N. Yorkshire, YO21 1BW
RIBA

ECOLOGY

PLANNING PORTAL REF: PP-02167589
OUR REF: 052 Aislaby Quarry Log Cabin proposal

NYMNPA
30 AUG 2012

The following Environmental Statement was produced by Dr Lynne Barrett for a previous application to extend the quarry activities. This document is included within this current application for reference to the relevant section that describes the ecology of the site, Section 4.0. Specifically this section describes the Birch scrub that dominates the area where the Log Cabins are proposed.

NYM 2012 / 0612 / FL

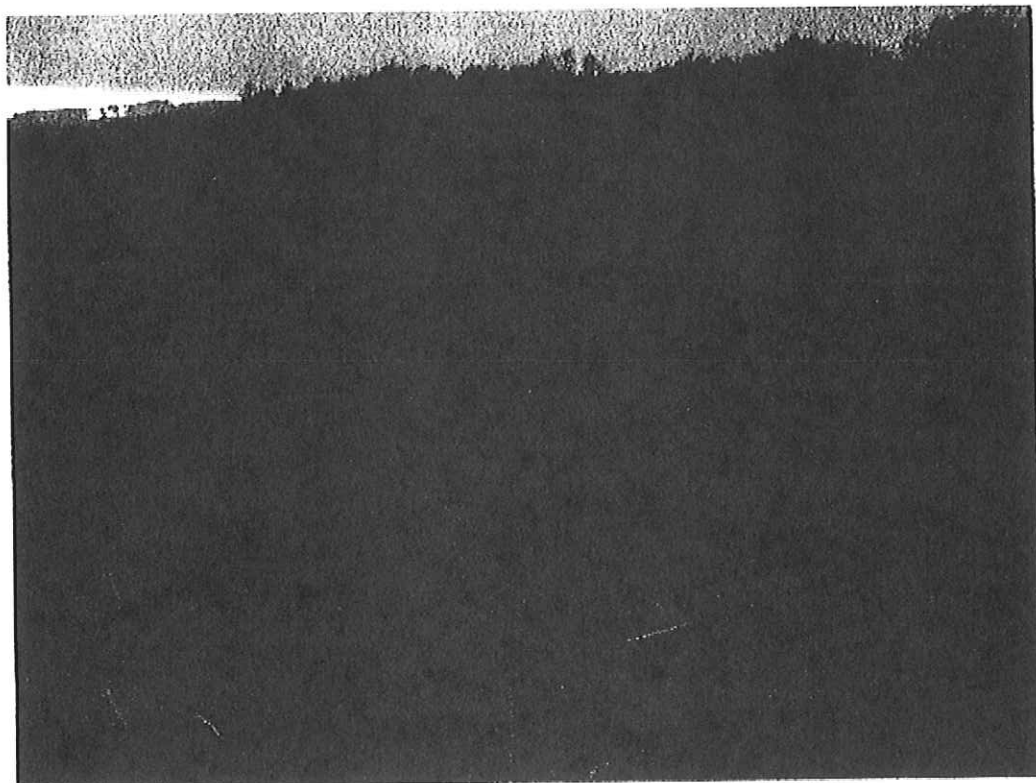
**Aislaby Quarry
Extension to Environmental Statement**

ESKDALE STONE LIMITED

NYM
AISLABY QUARRY

NYMNP
30 AUG 2012

Supplementary Environmental Statement
Application for Extension of the Works



Lynne Barratt

10-Mar-06

**Aislaby Quarry
Extension to Environmental Statement**

1 Introduction

NYMNPA
30 AUG 2012

1.1 Background

This environmental statement (ES) has been prepared to accompany a planning application to extend the existing operation of Aislaby Quarries, near Whitby, North Yorkshire, OS Grid reference NZ 85086 to 854085. The location of the quarries is shown on Figure 1. The quarry was originally granted permission to re-open in 2002 initially to enable stone of suitable type and block size to be supplied to the restoration and repair of the grade II listed Scarborough East Pier. The stone is now required to supply developments within the North Yorkshire Moors National Park, which must be constructed of local stone.

The extension to the ES has been prepared by Dr Lynne Barratt on behalf of the owners, Mr Paul Craven and Mrs Carolyn Craven of Eskdale Stone Limited.

This report should be read in conjunction with the original report prepared by High Point Rendel Ref: R/1532/ES/1 in March 2002. This report covers some additional ecological observations and gives consideration to moving some of the operational aspects of the stone working from the yard at Selly Hill to the quarry itself.

1.2 The Environmental Impact Assessment

The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 introduced new definitions and procedures for development. The proposal to extend the quarry workings would be largely covered by the EIA conducted for the previous submission. However, the North York Moors National Park has requested that an ecological survey was carried out in order to ensure that the proposed workings do not present any major environmental problems.

1.3 The Structure of this Report

The remaining sections of the Environmental Statement are as follows:

Aislaby Quarry
Extension to Environmental Statement

Section 2 summarises the Planning Policy Framework and provides a context within which the proposed extension to the quarry operations may be considered.

Section 3 describes the nature and extent of the extended operation.

Sections 4 & 5 describe the existing environment and provide an assessment of the likely impacts; and

Section 6 summarises the preceding sections and provides some concluding remarks.



Aislaby Quarry Extension to Environmental Statement

2 PLANNING POLICY FRAMEWORK

The national, regional and local planning and environmental policy framework were fully described in the original ES of March 2002. At all policy levels, mineral extraction in sensitive areas is restricted and, where permitted, workings are required to comply with a variety of environmental policies to protect the landscape and areas of nature conservation and archaeological interest. In addition, as with all quarry workings, care is required to control noise, dust and transportation impacts.

However, countryside policies have regard to the need to maintain the economic well-being of rural areas through the development of small-scale businesses and local skills. In the case of this part of the national park, where the use of local stone for buildings and dry stone walling is such a feature of the landscape, it is also desirable to maintain sources of suitable stone for new buildings and restoration work. Indeed the National Park Authority stipulates that only local stone should be used within the Park.

The proposal presented in Section 3 has been developed with these policies in mind.

3 THE PROPOSAL

3.1 Introduction



The proposal is to extend the workings back onto the moor from the existing quarry face. The area affected by the proposal is shown in Figure 2 and extends from the quarry face to the tree line. This should provide enough material to extend the life of the quarry by about 4 to 5 years.

At the same time the owners would like to move the stone cutting operation from the yard at Selly Hill into the quarry bottom. This would involve the erection of temporary structures in the quarry and the extension of the spoil berm to the west so as to prevent access to the quarry from the rear of the site. The location can be seen on Plate 1. This intervention has been partly brought about

Aislaby Quarry Extension to Environmental Statement

by the recent change in ownership of the yard and has some environmental benefits associated with the move.

3.2 Alternatives

One alternative for the operation would be to extent the workings along the quarry face. This would require the removal of part the spoil bund that presently blocks access to the eastern part of the quarry and forms a sound barrier. This bund would need to be reconstructed further east to replace the sound barrier. The vegetation on the quarry floor and on the moor would need to be removed. The moor vegetation is predominantly heather.

An alternative to moving the stone cutting operation into the quarry would be to construct a new access road into the yard at Selly Hill for the exclusive use of Eskdale Stone Ltd. While outline planning permission has been sought for the road this alternative presents a problem because controlling exclusive access could be difficult especially should Eskdale Stone Ltd move on. Also it would mean that the current practice of transporting the uncut stone by tractor to the yard would continue. Already Eskdale Stone Ltd have received some verbal complaints concerning debris on Moor Lane from the Aislaby Parish Council and moving this part of the operation to the quarry bottom would eliminate this problem.

Therefore it is concluded that the operation should extend back from the existing quarry face and that the stone cutting operation should be moved into the quarry bottom. The remainder of this report focuses on the environmental consequences of this proposal.

3.3 Proposed Quarry Operation

NYMNP

30 AUG 2012

The area for the extension is shown on Figure 2. The area would extend approximately 25 metres northwards from the existing face (see photo Plate 2). It is predicted that this would provide enough stone for a further 4 to 5 years working at the current rate. The works would comprise:

stepping back of overburden from above the stone in 1 metre stages to minimise the risk of landslip;

Aislaby Quarry Extension to Environmental Statement

moving back the existing fence line to prevent access to the edge of the quarry by the public;
storage of the overburden by adding to the existing bund and extending this to the west to prevent access to any temporary structures;
erection of temporary structures in the quarry bottom for stone cutting operation; and
use of stone cutting tools in the quarry in addition to those cited in the original ES.

Initially stone would be taken from the upper part of the exposed face, following removal of overburden. Work would continue to the north ending at the present level of the quarry floor.

3.4 Proposed Mitigation

Normal noise and dust suppression measures would be employed within the quarry to prevent nuisance. However, the proposed location within the existing quarry workings would ensure that the operations are well shielded. Noise surveys indicate that the disturbance would be minimal. Transfer of stone cutting to the quarry would minimise deposition of debris on public roads.

Some consideration for landscape and habitat restoration were presented as part of the original ES. Eskdale Stone Ltd. intend to prepare a restoration plan for the quarry in June in collaboration with the National Park Authority.

NYMNPA
30 AUG 2012

Aislaby Quarry Extension to Environmental Statement

4 ECOLOGY

4.1 Introduction

Aislaby Quarry lies within the North York Moors National Park but has no special designation in terms of conservation potential or sensitivity of habitats. The quarry lies to the east of Whitby and immediately south of the A171 Whitby to Guisborough Road. There have been no previous attempts at ecological restoration within the quarry and no management of the accompanying heathland. As a consequence the present day vegetation has developed largely as a result of natural regeneration.

Aislaby Moor also contains a variety of different habitat types most significantly the dry and wet heaths are under threat from the expansion of the birch scrub.

The quarry owners have been operating the quarry for selected removal of stone since 2002. The area in the original planning permission is now reaching exhaustion and the owners wish to extend the workings back into the heath from the newly exposed quarry face.

This section of the report deals with the ecological consequences of the operation on the moorland only. The proposed extension presents no additional impact to other habitats in the quarry bottom and on the quarry face, which have already been modified by the current workings.

4.2 Key Issues

Habitat Removal/Disturbance

There will be approximately 2.5-3 metres of overburden to remove from the quarry area. This will affect an area of around 20 m by 30 meters. All the vegetation in this location will be removed in order to access the stone beneath.

Disposal of the Overburden

Waste material will need to be removed prior to quarrying proper. There is no evidence that there are any contaminants or pollutants in the overburden that could be released into the environment as part of this process. Nevertheless there is a potential impact of the long- and short-term storage, and possible disposal, of this material.

4.3 Methods

4.3.1 Information Review

The Phase 1 Habitat Survey data, completed by the North York Moors National Park in July 1988 was revisited. As the survey was completed in the summer it adds valuable information to the present survey, particularly concerning tree species and annuals,



Aislaby Quarry Extension to Environmental Statement

as these are either not present during the winter or more difficult to identify in the absence of leaves and fruits.

4.3.2 Vegetation Survey

A vegetation survey was carried out on the 7th March in order to further classify the moorland and quarry edge that would be directly affected by the extended workings as they would be removed in entirety. No further survey work was undertaken in the quarry bottom, as the new proposals would have no additional impact.

It should be noted that the field survey was carried out following recent snowfall, which further complicated identification of floral elements.

The community has been mapped at the 1:2500 scale (Figure 3) and an estimate made of the abundance of different species within each community using the DAFOR scale, where D=Dominant, A=Abundant, F=Frequent, O=Occasional and R=Rare.

The methodology allows the observer to gain a broad overview of the distribution of flora in the area, together with the dominant components.

4.4 Community Descriptions

4.4.1 Quarry Edge Community

This forms the main community on the quarry edge although where quarrying activities have already taken place the edge community has already been removed. However, some of this habitat type still remains to the east of the face (see Plate 3), and may be affected by the extension of the works.

The floral diversity is poor and is dominated by gorse and bracken with occasional trees. The majority of this habitat type has already been removed as part of the existing works (see Plate 4).

Note - the section from the centre of the site (in alignment with the sound proofing bund) extending eastwards will not be affected by the extension works.



**Aislaby Quarry
Extension to Environmental Statement**

Quarry Edge Community -- Species Abundance

Latin Name	Common Name	Abundance
Betula pendula	Silver Birch	R
Calluna vulgaris	Heather	O
Ulex europaeus	Gorse	D
	Bracken	F
	Grasses	F

4.4.2 The Open Moor

The area is defined as the land at the top of the quarry, extending from the edge of the old quarry workings to the minor road to Aislaby. The area has been identified by the North York Moors National Park in their Section 3 conservation map as 'moorland important to conserve'. To date there is no recorded management of the area and the birch scrub is increasing to the detriment of the heath species. The area is a mosaic of heather, birch scrub, bracken with the dominant community being birch scrub. The proposed extension works have been selected so as to avoid as much as possible the heather community. However, it should be noted that during the original survey the area was classified as heather moorland. The benefit of conducting a more detailed survey in a small location has allowed the reclassification of part of the original zone H10 (see Figure 3). By electing to work northwards from the existing face, rather than work eastwards along the face, the damage to the moor is limited to a small area defined by the following habitats:

NYM
 30 AUG 2012

Birch - Gorse Community— this community describes a boundary around the proposed extension area. In reality, this will form the edge of the new quarry area and would present a reasonable barrier between the new quarry face and the open moor. The community is not very extensive, effectively being a line of deciduous trees backed by some very mature gorse growing to some 6 metres high. The extension works should not go much beyond the existing security fence line as the heather moor is to

Aislaby Quarry

Extension to Environmental Statement

the east of this line. It is unlikely that this habitat type will be affected by the works (see Plate 5).

Gorse Community – Species Abundance

Latin Name	Common Name	Abundance
<i>Betula pendula</i>	Silver Birch	O
<i>Rubus</i> sp	Bramble	O
<i>Salix caprea</i>	Sallow	O
<i>Cytisus scoparius</i>	Broom	O
<i>Quercus rober</i>	Oak	R
<i>Ulex europaeus</i>	Gorse	D
	Bracken	F
	Grasses	F

Heather Moor Community– the heather moor begins to the east of the proposed extension. The community is basically *Calluna* dominated dry heath with scattered birch and gorse and occasional larches. Occasional patches of wet heath occurs in depressions in the ground and these have *Erica tetralix* associated. Bell heather is scattered liberally throughout the habitat (see Plate 6).

The heather is in good condition outside the influence of the birch scrub and there are a number of opportunities for improved management.

NYMNPA
30 AUG 2012

This habitat will not be affected by the proposed extension

Heather Moor Community– Species Abundance

Latin Name	Common Name	Abundance
<i>Betula pendula</i>	Silver Birch	O
<i>Calluna vulgaris</i>	Heather	D
<i>Deschampsia</i>	Grasses	O
<i>Erica cinerea</i>	Bell Heather	F
<i>Erica tetralix</i>	Cross leaved heather	O

**Aislaby Quarry
Extension to Environmental Statement**

Juncus sp	Rush	O
Larix decidus	European Larch	R
Ulex europaeus	Gorse	O

Gorse-Heather-Bracken Community – the more detailed nature of the observations required for this extension allowed for a more detailed assessment of the limited area that would be directly affected. The area was previously classified as heather moorland (community H10 on Figure 3). However, on closer examination the area appears to be in transition from the heather moorland to the east to the surrounding gorse habitat. This results in a mixture of the two community types with remnants of the heather moorland interspersed with elements of the gorse and bracken communities (see Plate 7). Without management it is inevitable that this area would, in time, be overtaken by the more aggressive floral elements. Therefore, the impact in removing this community would be far less than if there were any damage done to the heather moorland itself. Clearly this entire transitional community will be removed, representing an area approximately 30 m by 20 m. The boundaries are marked thus:

- North – gorse and birch line (Plate 5)
- East – heather moor – in a line extending northwards from the current spoil bund (Plate 8)
- West – gorse and bracken marked by a single Scots Pine tree near the quarry face

NYMNT
30 AUG 2012

Gorse-Heather-Bracken Community– Species Abundance

Latin Name	Common Name	Abundance
Betula pendula	Silver Birch	O
Calluna vulgaris	Heather	F
Erica cinerea	Bell Heather	F
Rubus sp	Bramble	O
Salix caprea	Sallow	O
Ulex europaeus	Gorse	C
Pinus sylvestris	Scots Pine	R

**Aislaby Quarry
Extension to Environmental Statement**

Cytisus scoparius	Broom	O
Cornus sanguinea	Dogwood	R
	Grasses	F
	Bracken	F

However, this is a relatively small area and the impact is considered to be minimal.



4.5 Fauna

No impacts on the fauna are predicted from the extension.

4.6 Mitigation

A series of mitigation measures for the entire operation were set out in the original ES. This proposal aims to minimise the damage caused by the quarry extension in line with the recommended mitigation. These points are presented again for comparison.

Mitigation measures that can be adhered to:

Ensure that the overburden remains in the vicinity of community 6, effectively quarrying a strip at a time. The overburden can then be used to fill in areas following the removal of the stone and allow natural regeneration to commence as soon as possible. This will also minimise the area affected by the works. This remains true as the works will not extend eastwards along the quarry bottom at this time.

Ensure that the bracken and heather mounds remain intact as they will form a barrier to sound penetration to other parts of the quarry. Consider constructing an additional barrier from the quarried waste at the junction of communities 1 and 6 to further minimise noise penetration. This remains true as the works will add to the bund formation.

Avoid extending works to community 1. This remains true as the works will not extend eastwards into the quarry.

Mitigation measures that cannot be adhered to:

Avoid taking back the old quarry face further into the moor, unless required to do so for safety purposes. The extension penetrates

Extension to Environmental Statement

the moor by some 25 metres. However, the site has been selected in order to minimise damage to the heather moorland.

Mitigation measures that still need to be addressed:

Mitigate for any loss of moorland by improving the southwards outlook from the car park by removing some of the birch scrub to open out the vista. Encourage re-growth of heather moor in this location.

Control bracken/gorse (community 11) and encourage heather to expand.

Where heather still survives or the woodland is in mosaic with heathland, periodic cutting back would be worthwhile.

Consider thinning/coppicing some of the birch to allow a more open view, especially from the car-park, and to encourage heath development, and along the access routes.

Control bracken/gorse close to existing heath to improve heath cover.

Encourage a variety of trees, especially oak, by thinning birch appropriately.

Consider planting trees to replace those lost in community 6

Provided that these mitigation measures are taken into account the proposed works will have only a minimal affect on the overall ecology of the area.

The quarry owners will be submitting a restoration plan in June 2006, following consultation with the National Park Management. It is expected that many of the recommendations made above will be included in the plan. Note that natural regeneration of parts of the quarry has already occurred on some of the spoil heaps that have been left alone (see Plate 9).

5 OTHER IMPACTS

5.1 Landscape and Visual Impact

The conclusions from the original ES completed in March 2002 state:

'This assessment has shown that the new quarry workings, on the scale and in the location proposed, would be concealed from view

NYMMS
30 AUG 2012

Aislaby Quarry Extension to Environmental Statement

from most viewpoints in the Esk valley and the main A171 Whitby-Guisborough road. It is likely that the only visual evidence would be occasional vehicle movements on the access road above the quarry and that these would only be visible from the higher part of Moor Lane and from a few, mostly distant, viewpoints on higher ground. Overall, the conclusion is that the visual impact on the Esk Valley and moorland landscape would be negligible.'

The current proposal to extend the workings does change the original analysis and there would be no additional visual impact.

5.2 Noise

The conclusion of the original ES was that quarrying activities carried out at the scale envisaged would not be associated with significant noise impacts or represents a nuisance to residents of properties in the vicinity. Moving the stone cutting operation to the quarry could have an additional impact on noise in the quarry. An additional noise survey has been commissioned and is contained in a separate report. However, the conclusion is that there will be little additional impact in the quarry and there will be a noise reduction at the yard.

NYMNPA
30 AUG 2012

5.3 Cultural Heritage

The original ES highlighted the presence of an earthwork bank through the birch woodland. An independent report commissioned in 2002 recommended that any future works affecting the banks be conditional on a survey to try and gain a further understanding of the earthworks, and retrieve any dating evidence that might be exposed due to excavation.

The proposed extension does not cross the old earthwork banks. Therefore no further impacts are predicted.

5.4 Transport Issues

The proposal will result in reduced traffic impact because the stone cutting operation will now be based in the quarry. This will mean fewer traffic movements along Moor Lane and a reduction in noise, dust and mud on the road.

Aislaby Quarry Extension to Environmental Statement

5.5 Water Quality and Drainage

There will be no impact on water quality or drainage from the extension works.

5.6 Air Quality

There will be no additional air quality problems as a result of the extension works.

6 CONCLUSIONS

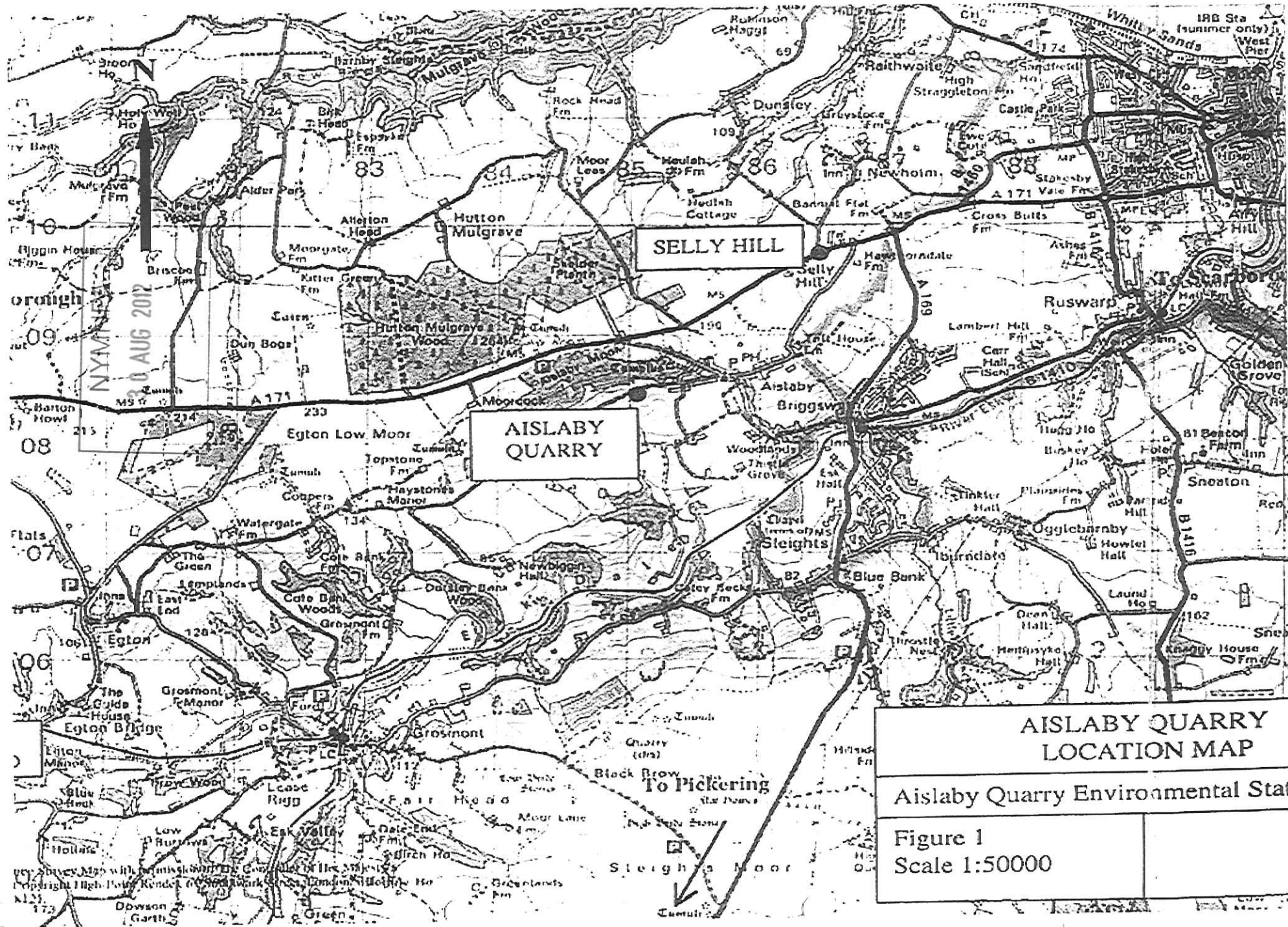
The National Park has adopted planning and sustainable development objectives that seek to ensure that development within the Park enhances its character and special qualities, respects local distinctiveness and, promotes the development of sustainable communities and fosters their economic and social well being.

The current proposal to extend the quarry workings meets the National Park objectives. The requirement for local stone within the park is now the main driver for keeping the quarry operational and the National Park management has expressed a desire to use only local stone within the park. Given that the quarry is already operational the additional damage caused by extending a small way into the moor would be minimal and would be outweighed by the benefits of providing local stone and employment.



NYM / 2012 / 0612 / FL

230 AUG 2012



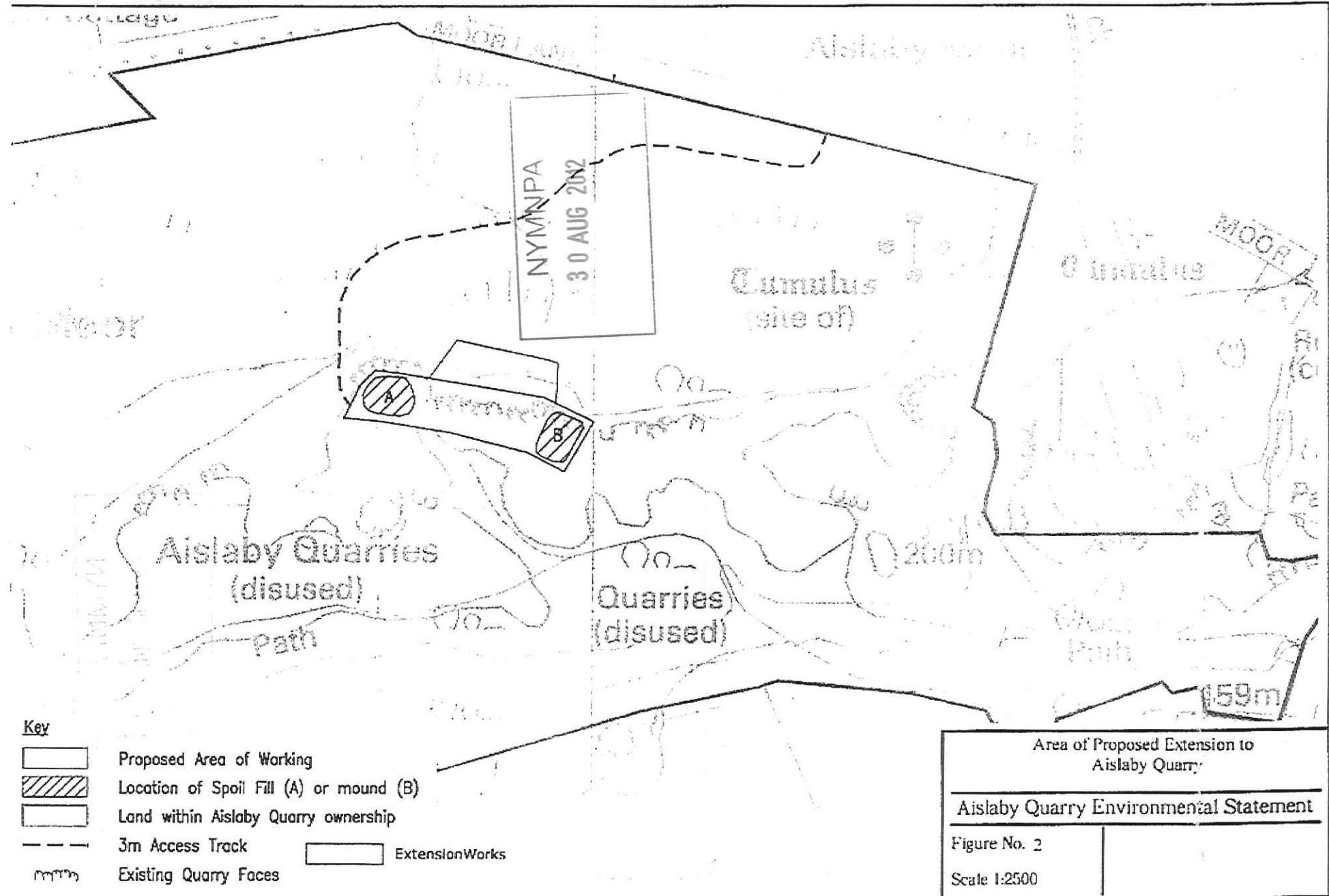
**AISLABY QUARRY
LOCATION MAP**

Aislaby Quarry Environmental Stat







Figure 1
Scale 1:50000

Copyright High Point Records Ltd, 2002. All rights reserved. This map is a reproduction of the original map published by the Ordnance Survey. The Ordnance Survey name is a registered trademark of the Ordnance Survey. The Ordnance Survey name is a registered trademark of the Ordnance Survey.

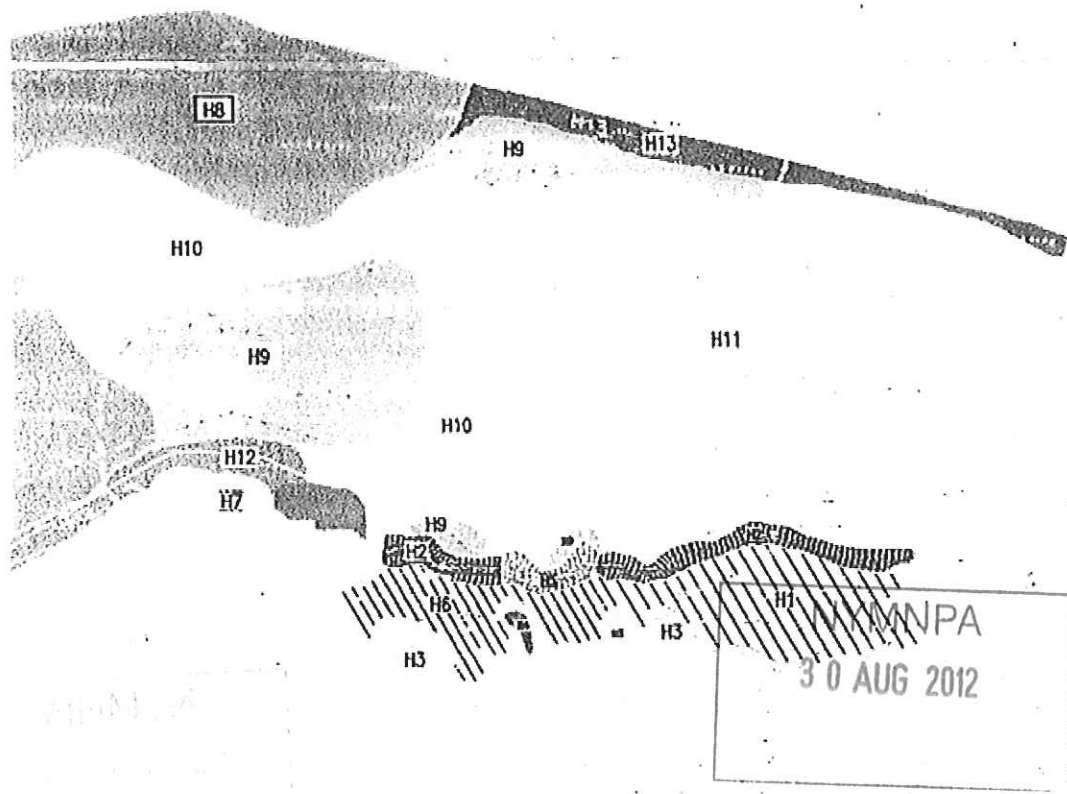
NYM / 2012 / 0612 / FL 1



Key

-  Proposed Area of Working
-  Location of Spoil Fill (A) or mound (B)
-  Land within Aislaby Quarry ownership
-  3m Access Track
-  Existing Quarry Faces
-  Extension Works

Area of Proposed Extension to Aislaby Quarry	
Aislaby Quarry Environmental Statement	
Figure No. 2	
Scale 1:2500	



Key

- | | | | | | |
|----|--|------------------------------|-----|--|------------------------------|
| H1 | | Quarry Floor | H10 | | Heather moor |
| H2 | | Quarry Face 1 | H11 | | Grass/bracken moor |
| H3 | | Spoil mounds - bracken | H12 | | Bracken edge to quarry |
| H4 | | Stone mounds with heather | H13 | | Verge vegetation |
| H5 | | Quarry Face 2 | | | Gorse/Heather/Bracken Mosaic |
| H6 | | Quarry Floor 2 - birch scrub | | | |
| H7 | | Bracken bank | | | |
| H8 | | Birch scrub | | | |
| H9 | | Gorse | | | |

Aislaby Quarry
Ecological Habitats

Aislaby Quarry Environmental Statement

Figure No. 3

Scale 1:500

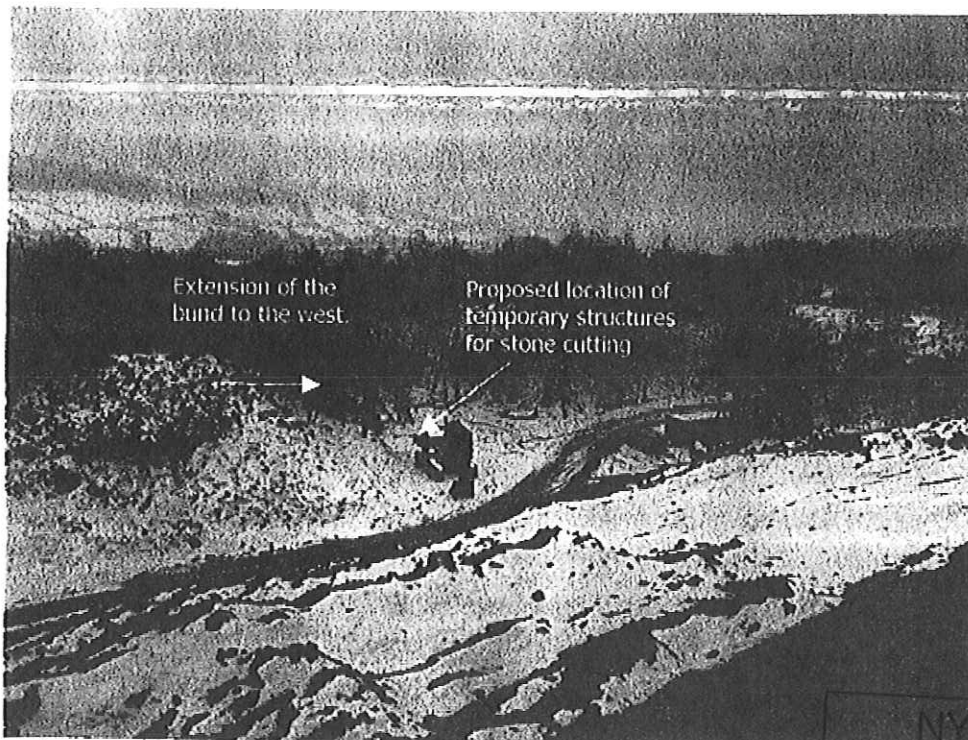


Plate 1: Showing existing bund, direction of extension to bund and location of temporary structures for stone cutting

NYM NPA
30 AUG 2012



Plate 2 : Showing location for proposed extension

NYMNPA
30 AUG 2012

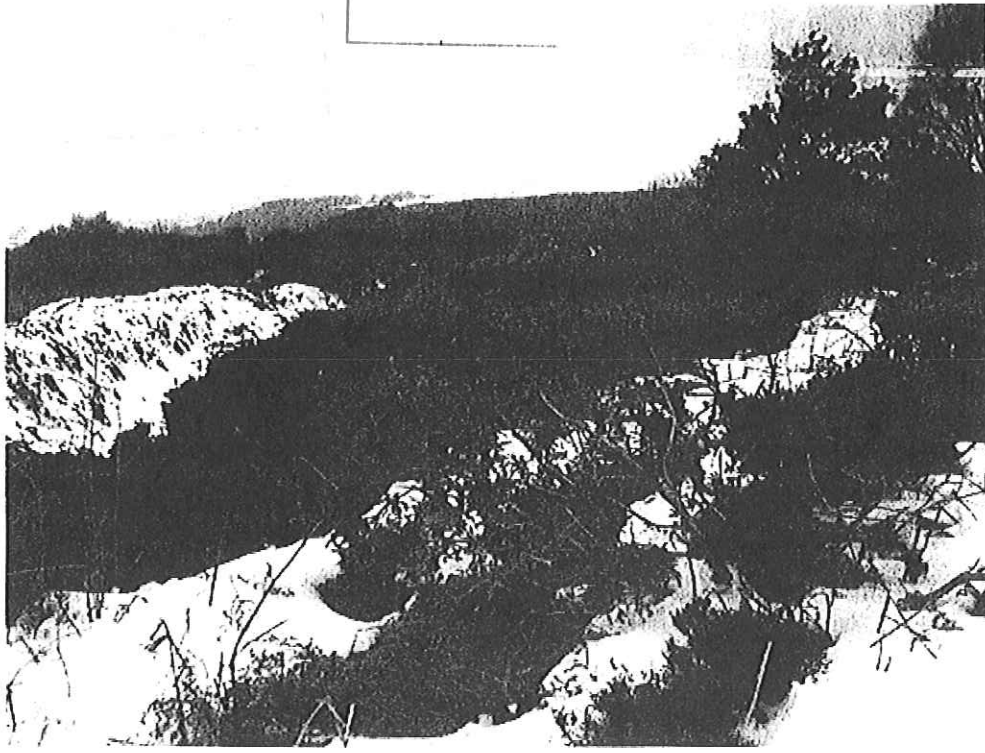


Plate 3 : Undisturbed quarry edge looking west into quarry. This area may be disturbed as part of the proposed extension works.

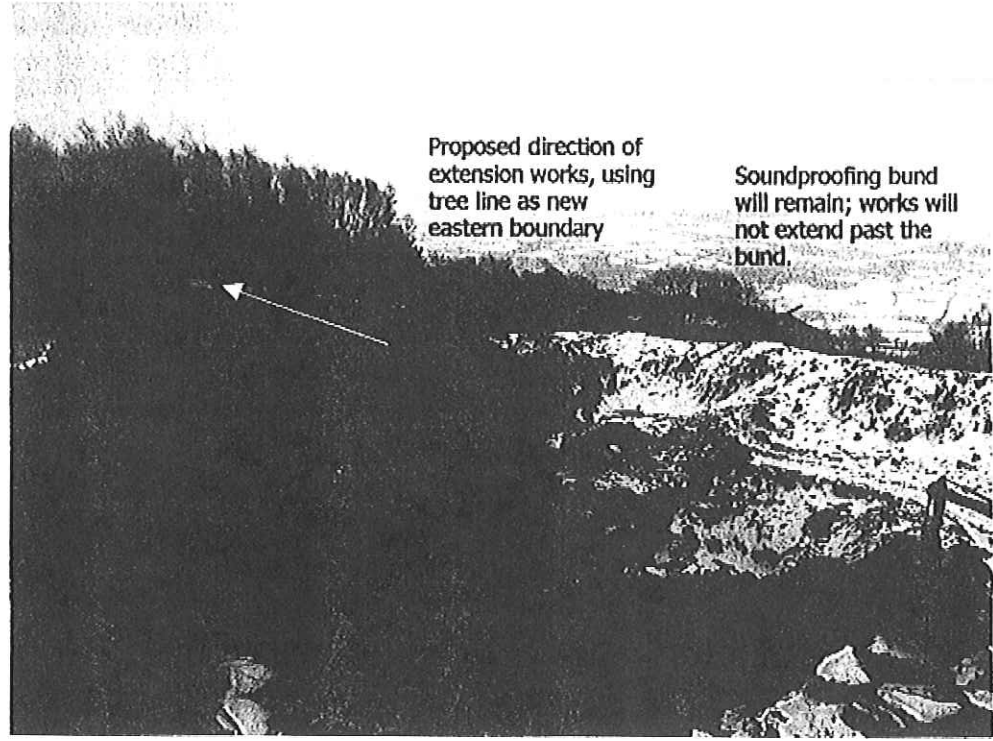


Plate 4: Showing working quarry face, direction of extension and position of sound proofing bund.

NYMNPA
30 AUG 2012

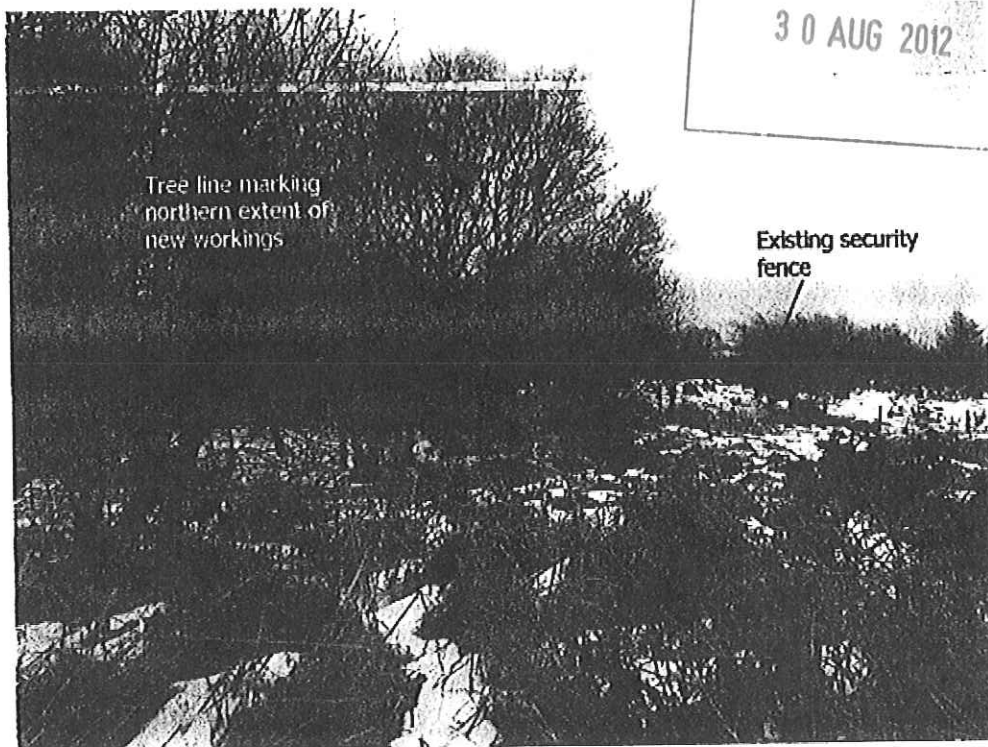


Plate 5: Boundaries of proposed extension works to the east and north of the site.



Plate 6 : Heather moor to the east will not be affected by the proposed extension.

NYMNP / 2012 / 0612 / FL

NYMNP
30 AUG 2012



Plate 7: Showing mixed heather/gorse/bracken community – this will be the main community affected by the proposed extension.

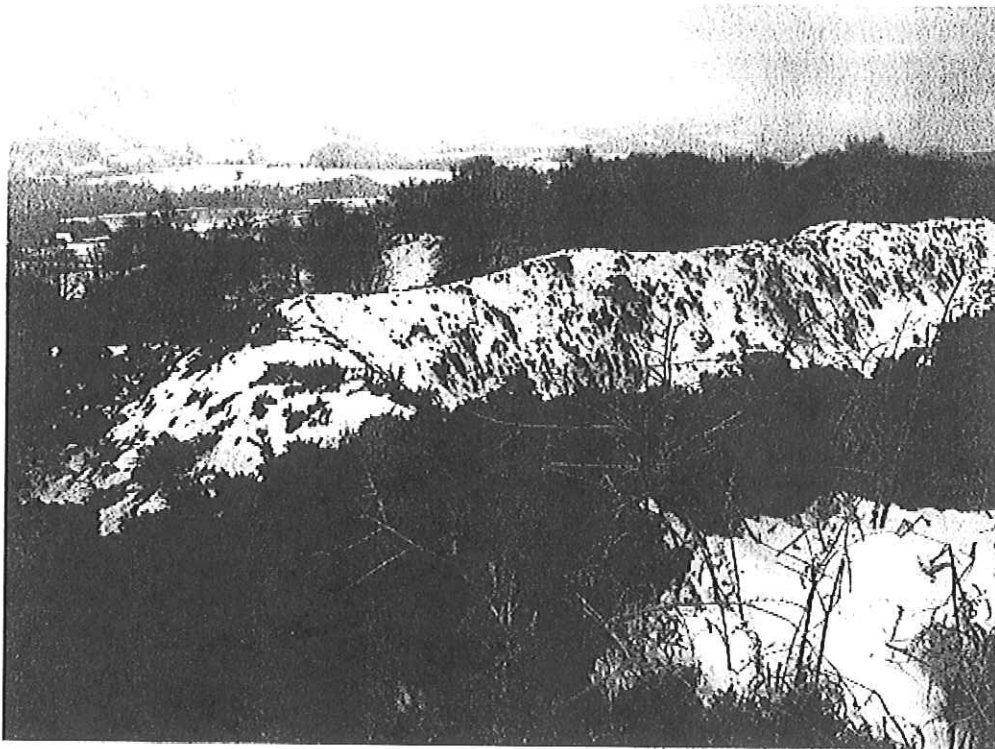


Plate 8: Existing soundproofing bund marks the eastern boundary of the extension.

NYM / 2012 / 0 6:1 27 FL



Plate 9: Natural regeneration in quarry bottom next to access road.

NYMNP
30 AUG 2012