

Proof of evidence of Garrie Tiedeman BA, Dip LA

1.1	I am Garrie Jon Tiedeman and I am a landscape architect employed by the National Park Authority since 1990. I am a qualified landscape architect with a BA in landscape and a Diploma in landscape architecture. I was elected to membership of the Landscape Institute in 1983. In 2007-2009 I was part of the team that carried out and wrote the Landscape Strategy and European Landscape Convention Action Plan for the Peak District National Park. I regularly give landscape advice to planning officers in relation to the landscape impact of proposed developments. I have represented the Authority as an expert witness for several mineral planning appeals. I have recently completed the revision of Section 3 maps (Natural Zone within the Local Development Framework) identifying and agreeing changes to the boundaries.
2.0	Landscape Character
	My evidence is limited to Backdale Quarry as the restoration of this is the main focus of Bleaklow's objections to the Prohibition Order.
2.1	Backdale quarry can be found on the eastern edge of the White Peak Landscape Character area, the B6001 road to the east of the site forming the boundary between the White Peak and the Derwent Valley Landscape Character areas. Specifically the quarry can be found within the Limestone Hills and Slopes landscape character type to which it relates to rather than the adjacent Estate Lands landscape character type of the Derwent Valley Character area.
2.2	<p>Key Characteristics of the Limestone Hills and Slopes character type are:</p> <ul style="list-style-type: none"> • High, undulating, in places steeply sloping topography • Frequent rock outcrops on steeper ground • Rich wildlife habitats including large patches of limestone grassland and limestone heath on the highest ground • A regular pattern of medium to large walled fields • Occasional groups and belts of trees • Prehistoric monuments, often on hilltops • Relict lead mining remains • Wide open views to distant skylines

2.3	Within the Issues of Change section of the White Peak Strategy it states in the Minerals and resources paragraph "There are many landscape impacts associated with these sites (quarries), including visual intrusion, adverse effects on the historic landscapes and cultural heritage features, wildlife habitats, associated infrastructure and transportation of products and tranquillity."
3.0	Backdale Quarry
3.1	Specifically, the quarry is found on the edge of the White Peak on steeply sloping limestone topography. The quarry has a substantial footprint and considerable visual impact by virtue of its scale and location. The boundaries to the site to the southeast and west are defined by mixed broadleaved/coniferous woodland, whilst the remaining sides are either open to walled pastureland (part of the Limestone Plateau Pastures landscape character type), or rough grazing/scrub (the continuation of the Limestone Hills and Slopes LCT and which is also access land). To the north of the site runs the un-bound (loose limestone) surfaced section of Bramley Lane an unclassified highway. This has been diverted several times as the quarry operations extended and from the current line of the lane there are open views to distant skylines. The site comprises high rock faces to the north, extensive tip areas to the east and western parts of the site, an operational industrial unit and outside storage. The site was last worked as a quarry in 2008, since then there have been some minor workings to the north western and eastern areas of the site. There is also evidence that natural erosion is taking place with signs of recent rock falls and that natural regeneration is colonising land that has been left undisturbed for a number of years.
	The quarry as it stands is the base line for the benefit/impact of the current approved restoration works provided by the National Park Authority.
4.0	Viewpoints
4.1	The site is visible from a number of vantage points including Bramley Lane, B6001, the public footpath to the south of the site running through Bramley plantation/Bank Wood and the diverted public footpath that used to run through the site. In addition there are several long distance views of the upper faces from the south and west.
4.2	From the northern section of Bramley Lane (north of the B6001) there are a couple of high-level views looking down into the quarry, but in particular there are views of the eastern

	<p>and western spoil heaps. From the footpath, near to Brightside Cottage, looking eastwards along an old ride in the woodland, the western tip dominates the view. From the B6001 views are filtered through the boundary trees, however it is still possible to see the large western spoil heap and the industrial buildings. These views open up to encompass a visually larger area of the quarry at the vehicular entrance to the site, where the diverted footpath crosses the entrance. From here there are clear views of the eastern and western spoil heaps and the existing industrial buildings. The footpath to the south of the B6001 where it leaves Bramley Plantation/Bank Wood (which is well used by walkers) has extensive views of the quarry from its eastern to western boundaries, including the upper edges of the western spoil heap, the eastern spoil heap, the upper quarry floor and the northern faces.</p>
5.0	Proposed restoration scheme
5.1	<p>Briefly, the approved restoration scheme is to:</p> <ul style="list-style-type: none"> • Remove identified spoil to pre-tipping ground levels, for the western and central tips. • Either to remove spoil to pre-tipping ground levels or infill hollows on the eastern overburden mound. • Using onsite material to create stabilising buttressing to part of the existing rock faces and extending the existing bank across the middle of the site to act as a rock trap and screen views of the upper quarry floor.
5.2	<p>A potential route for the public footpath shown on the restoration plan Plan 2 attached to the Prohibition Order. However, a Footpath Diversion Order has recently approved diversion of the path to the southern boundary of the site.</p>
5.3	<p>The proposed bund, which links into the location of the existing bund, will screen the majority of the upper faces when viewed from the B6001. From the Bramley Planation/Bank Wood footpath the bund will effectively screen the upper quarry floor and the lower edges of the northern faces. Currently it is only possible to see the entire upper quarry floor from this viewpoint. The removal of the western spoil heap will have a visual benefit from all the identified viewpoints by creating a natural looking landform that integrates better into the landscape and offers greater scope for natural re colonisation. The re-grading/removal of part of the eastern overburden mound will visually improve the views from Bramley Lane and from viewpoints to the south.</p>
5.4	<p>The areas of the quarry to the east, where material is suitable, have started to naturally regenerate, producing a wide variety of different habitats, but weed control has not been carried out and the quality of the habitat is reduced because of this. As these habitats are still in their early stages of colonisation and</p>

	<p>have a high level of weeds, I have no objection if these regenerating habitats are lost in the re-grading of overburden and spoil heaps to create the proposed landforms. The re-grading may have a greater benefit for the rarer calcareous grassland, flower and limestone heath species which are slower to colonise, if the final landform is made up of less nutrient rich materials, and appropriate weed control is carried out.</p>
5.5	<p>Mineral sites are regularly restored by natural regeneration either the whole or parts of the site, this produces a wide variety of different habitats, some of which can be ecologically important. Where circumstances require quick establishment this is usually for specific reasons such as grazing or soil stabilisation. With Backdale the site will not be grazed and the proposed landform does not warrant stabilisation by planting. Therefore natural regeneration is an acceptable treatment for the whole site.</p>
5.6	<p>During the first year after restoration, little, if any, vegetation is likely to have naturally established itself on the regraded land. The main impact of this loss of vegetation will be from the Bramley planation/Bank Wood footpath and Bramley lane where it may be noticeable that there are larger areas of bare stone/soil, which also may be lighter in colour to adjacent weathered stone. This change will be insignificant in the context of the quarry as a whole.</p>
5.7	<p>Colonisation rate and species composition will depend upon the depth and nutrient content of the soil in the disturbed areas and suitable weed control. If there are deep, nutrient rich areas of 'soil' type material, then colonisation by herbaceous 'weed' species and pioneer tree species should be fairly rapid. If shallow and nutrient poor soils then colonisation will be much slower but they are likely to be the ecologically rich areas in the longer term.</p>
5.8	<p>In the future, whatever species initially colonises the quarry this will be superseded in the long term by a mixture of trees and shrubs with open areas of bare rock, (there is no management stipulated beyond five years). This is an acceptable outcome and will help to visually integrate the quarry into the local and wider landscape.</p>
5.9	<p>The existing retained rock faces are an attractive visual feature in their own right with a wide variety of different features, which have been enhanced by natural rock falls. The faces are also an ecologically important habitat including a home for breeding peregrines which are afforded the highest legal protection under Schedule 1 of the Wildlife and Countryside Act 1981. Geologically the faces are also important for the different features that show how Longstone Edge was created.</p>

5.10	The proposed restoration works are the minimum necessary, whilst taking into account maximum visual improvement and improving safety of the site. They are not intended to hide or screen the quarry from viewpoints but to recognise that the site was a former vein mineral site and that it is a recognised future historic landscape feature and to help the site become integrated into the wider landscape.
6.0	Conclusion
6.1	The proposed restoration works including re-grading spoil and overburden tips, bund formation and stabilising buttressing are likely to have a medium adverse visual impact during the actual operational restoration phase. On the completion of the restoration works the created landforms will have a slightly adverse/beneficial visual impact depending on the viewpoint and a slight adverse ecological impact due to habitat loss. Within the first five years the quarry will become a positive beneficial impact both visually and with an increasing habitat value, subject to weed control. In the long term the proposed works will have a moderate positive visual impact helping the site to integrate within the immediate and wider landscape.

APPENDICES

1. Backdale Quarry Viewpoints
2. Photographs