DEVELOPMENT CONTROL AND REGULATORY BOARD

14th MARCH 2001

REPORT OF THE ACTING DIRECTOR OF PLANNING AND TRANSPORTATION

MIDLAND QUARRY PRODUCTS LTD. – APPLICATION TO AMEND THE APPROVED DETAILS FOR THE ESTABLISHMENT OF A LINK BETWEEN OLD CLIFF HILL AND NEW CLIFF HILL QUARRIES AND TO BRING FORWARD THE RESUMPTION OF QUARRYING AT OLD CLIFFE HILL QUARRY, CLIFFE HILL QUARRY COMPLEX, WEST OF STANTON UNDER BARDON (HINCKLEY AND BOSWORTH BOROUGH AND NORTH WEST LEICESTERSHIRE DISTRICT)

89/1483/04, 89/1568/07, 86/0378/04, 80/1437/04 – 20 December 2001

Background & Planning History

1. New Cliffe Hill Quarry, to the west of Stanton under Bardon, was granted planning permission in 1983 (80/1437/4). Production at the quarry started in 1989 following which quarrying at Old Cliffe Hill Quarry, to the east of Stanton under Bardon, was put on hold until quarrying neared completion at New Cliffe Hill. The planning permissions regulating the operation required that permitted reserves of rock at New Cliffe Hill should be nearing exhaustion before the resumption of quarrying at Old Cliffe Hill.

2. The planning permission granted in 1983 approved, in outline, the formation of a conveyor link between Old Cliffe Hill Quarry and New Cliffe Hill Quarry. The original proposals for the establishment of a link between the two quarries comprised a conveyor set down below ground level in an open cutting with a tunnel being constructed beneath Stanton Lane. Concerns were raised at the time of consideration of the planning application due to the potential environmental disturbance and safety issues that would have been generated by this type of connection. For this, reason whilst the MPA approved the concept of a conveyor link, a condition was attached requiring the details of construction and operation of the link to be submitted to Leicestershire County Council as Mineral Planning Authority for approval.

3. Planning permission for the accelerated development within New Cliffe Hill Quarry was granted in 1996 (86/0374/4). Conditions attached to this permission reaffirmed the requirement for the approval of details relating to the tunnel link as a reserved matter. This permission also included a condition requiring the approval of the Mineral Planning Authority for the re-commencement of quarrying operations within Old Cliffe Hill Quarry once New Cliffe Hill quarry is nearing exhaustion.
4. A submission for the approval of reserved matters for the construction and operation of the link was submitted by the operators, Midland Quarry Products (MQP), in April 1999.

5. Recognising the concerns raised in relation to the original proposal, the submission proposed enclosing the conveyor within a tunnel, thereby reducing the potential impacts on the local community. The tunnel was to be 600 metres long and 6 metres wide by 6.5 metres high and constructed in 3 phases.

6. Phase 1 being approximately 215 metres driven upwards and excavated using conventional cut and loading type tunnelling equipment from the 180 metre AOD level in New Cliffe Hill Quarry beneath the existing screening embankments. It was anticipated that this phase would take approximately 16 weeks to complete.

7. Phase 2 being approximately 170 metres constructed using the cut and cover construction technique. A cutting 9 metres deep would be excavated in the marl allowing the tunnel to be constructed from reinforced tunnel sections with the marl, sub and topsoils being replaced. It was estimated that phase 2 would take approximately 10 weeks to complete and would commence on completion of phase 1.

8. Phase 3 would comprise the remaining 230m of the tunnel and would be driven upwards from the 160 metre AOD level in Old Cliffe Hill Quarry through the granite using conventional drill and blast tunnelling techniques. The tunnel would comprise a concrete tunnel portal of 5 metres length and would be driven at a gradient of 1 in 9. It was estimated that this phase would take approximately 26 weeks to complete. Phase 3 would be undertaken concurrently with Phases 1 and 2 reducing the total construction period to 26 weeks.

9. It was proposed that preparation works at Old Cliffe Hill Quarry and the establishment of the link would be undertaken in 2004 and would consist the stripping of overburden to expose the mineral below. It was calculated that around 374,000 cu metres of overburden from the southern part of the quarry would require removal and proposed that this would be undertaken in one earthmoving contract during 2004.

10. The submission was approved in July 1999 with the requirement for various details to be approved under reserved matters including; a survey of the trees and hedges, dust suppression and monitoring in Phase 2, a restoration scheme for Phase 2, surface water drainage, archaeological assessment, soil and overburden stripping and storage.

**Location of Proposed Development**

11. New Cliffe Hill Quarry is located to the west of Stanton-under-Bardon and is approximately 1km west of the M1. The location of the permitted link corridor as consented under the 1983 planning permission is a 50 metre wide strip of land located to the North of Stanton under Bardon village and south of the former mineral tramway which connects Stanton Lane with Billa Barra Lane.
Description of Proposal

12. There are two elements to this re-submission. The first seeks approval for a variation of the approved details for the method of construction of the tunnel link between Old and New Cliffe Hill Quarries as previously approved under the following conditions:

   Condition No.12 of planning permission 80/1437/4
   Condition No.10 of planning permission 86/0378/4
   Condition No.8 of planning permissions 89/1483/4 & 89/2568/7;

13. The second seeks approval for a variation of the date for re-commencement of quarrying operations at Old Cliffe Hill Quarry, as approved under condition nos. 6 & 7 of planning permission 86/0378/4 in July 1999, from 2004 to 2002.

14. Through the course of this year, the Company has been reviewing the approved proposals for the tunnel construction with consulting engineers with a view to implementation. From this review, the Company has developed an amended proposal and seeks approval for this as a variation to the scheme approved in July 1999.

15. Coincident with the new tunnel proposal, a review of the quantity of rock available at New Cliffe Hill has confirmed that extraction will need to begin at Old Cliffe Hill during the second half of 2003 in order to maintain production at current rates. Prior to extraction commencing at Old Cliffe Hill, quantities of overburden will need to be removed from above the rock and then used to supplement the screening mounds that surround the site. It is therefore proposed that the commencement of tunnelling operations and the reopening of Old Cliffe Hill are brought forward to the spring of this year, rather than 2004 as previously approved.

16. In respect of the redesign of the tunnel, the Company now proposes that this be constructed entirely beneath ground level, wholly within the granite strata. This will have the obvious advantage of avoiding disturbance to the open fields between the Quarries to the north west of Stanton under Bardon and the potential for dust and noise generation in addition to visual impact and the loss of trees during the construction works.

17. The revised tunnel is at a lower level. The portal entrance at New Cliffe Hill is now proposed at a level of 134m AOD and that at Old Cliffe Hill at a level of 150m AOD. The tunnel would be at a constant gradient declining to the west towards New Cliffe Hill and slightly longer at approximately 700m. It is also proposed that the cross-sectioned area would be slightly larger (approximately 8.45 metres wide by 5.75 metres high).

18. The proposed method of construction will be by drilling, blasting and excavating as was previously proposed for Phase 3 of the section of tunnel in rock. Blasting will not be required any closer to residential properties than would have been for the previous design.
19. It is estimated that the construction period would be approximately one year with construction being undertaken from both the Old and New Cliffe Hill ends as previously approved.

20. In response to the concerns raised through the initial consultation process, MQP have supplied additional information regarding the new proposals. The information supplied is detailed below.

**Blasting**

21. Conventional ‘burn cut’ tunnel blasting will be used to drive the tunnel. Blasting will occur approximately daily in the tunnel throughout the construction period depending on cycle times and will normally occur in both the tunnel and the quarry on the same day.

22. A trial tunnel blast was undertaken at New Cliffe Hill on 13th February by Exchem explosives and a technical report produced. MQP state: “…monitoring information has provided for a good fit regression line and it is considered that the trial supports our view, and that of our proposed tunnel contractors, that the vibration resulting from tunnel blasting can be controlled so as to prevent any significant disturbance to local residents. In respect of the proposed tunnel blasting monitoring, I confirm that the company is agreeable to providing an additional ‘roaming’ monitor as well as the previous requirement for a fixed location. I also think it is useful to recall again that the company’s revised tunnel proposals do not require blasting closer to any residential properties than the previously approved proposals. Further, the majority of the extended length of the tunnel proposed within the granite strata is at a distance of over 200 metres from the nearest property. We confirm that we are of the view that, whilst the revised proposals involve a longer section of tunnel requiring construction by drilling and blasting, that the impact from blasting will not be significant.”

**Dust**

23. “We have also discussed the potential impact of noise and dust from the proposed tunnelling and associated ventilation operations and we envisage a forced fan system of ventilation being used. In respect of dust, clearly the revised proposals will be of significant benefit in reducing the potential for dust nuisance as the construction works are underground. The previously approved proposals involved open excavations and earthworks with the associated vehicle movements. In respect of dust suppression within the proposed tunnel, water sprays and curtains will be used to suppress dust at source. Blast doors are also proposed to reduce the potential effects of air overpressure, but these will also help to reduce the potential for fugitive dust.”

**Noise**

24. “In respect of the potential impact from noise, again it is considered that the revised proposals will reduce the potential impact as the construction works are below ground. There will be construction activity at the two portals and a small compound will be formed at each end of the proposed tunnel to contain the
associated plant and machinery as in the previously approved proposal. These portals are, however, at lower levels within both New and Old Cliffe Hill than previously approved. Within New Cliffe Hill, the proposed portal entrance is approximately 70 metres below the level of the screening landform to the west of Stanton under Bardon and in Old Cliffe Hill, the proposed portal entrance is approximately 70 metres below the level of the screening landform to the east of Stanton under Bardon. Where mobile plant, e.g. generators and compressors are utilised, these will be fitted with silencers or acoustically clad to reduce the noise impact. It is therefore considered that there will be less impact from the revised proposals and that there will be no overall increase from activities associated with quarrying."

Timing of operations

25. “In respect to the timing of operations, I can confirm that the tunnel operations are estimated to take twelve months, with tunnelling from both Old and New Cliffe Hill. With regard to our proposal to commence construction of the tunnel this year, I confirm that this is based upon a reassessment of the practically recoverable reserves at New Cliffe Hill which are now estimated to be 14 million tonnes. On this basis, and having regard to the anticipated rate of extraction from Cliffe Hill, it is essential that the tunnel is commenced in the near future. I hope you will appreciate that it is very difficult to extract the last reserves from a quarry of the scale of New Cliffe Hill and it will also take a period of time to re-establish quarrying operations in Old Cliffe Hill. Having regard to condition 11 of your approval letter dated 23rd July 1999, I would advise that, whilst the company has always considered that the 30 month period permitted for extraction operations at both New and Old Cliffe Hill a tight limitation, we consider that this is still a realistic target.”

Consultations

Hinckley and Bosworth Borough Council (Planning)

26. “Hinckley and Bosworth Borough Council has no objection to this amended proposal, in principle, as there would appear to be advantages over the approved scheme in terms of a reduction in the disruption and visual impact at the surface. However, concern is raised regarding the potentially longer duration for the construction of the tunnel, possibly involving a greater amount of blasting and vibration because of its increased length, which may have adverse implications on the amenities of local residents.

It is considered that more information should be provided and assurances given by the company in connection with these concerns before the Mineral planning Authority agree to this amendment.”

Hinckley and Bosworth Borough Council (Environmental Health)

27. No objections.
28. “Concerns raised by the Parish council are:

1. Effect of blasting so close to the village.
2. Will there be more noise with granite blasting than with marl blasting”

29. No objections.

30. The Agency has no objections, in principle, to the proposed development but recommends that if planning permission is granted the following planning conditions are imposed:

Any facilities for the storage of oils, fuels or other chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound shall be at least equivalent to the capacity of the tank plus 10%. If there is multiple tank storage, the compound shall be at least equivalent to the capacity of the largest tank, vessel or the combined capacity of interconnected tanks or vessels plus 10%. All filling points, associated pipework, vents, gauges and sight glasses must be located within the bund or have separate secondary containment. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipework shall be located above ground and protected from accidental damage. All filling points and tank/vessels overflow pipe outlets shall be detailed to discharge into the bund.

There shall be no discharge of foul or contaminated drainage from the site into either groundwater or any surface waters, whether direct or via soakaways.

It is the applicant’s responsibility to ensure that the existing discharge consent conditions are met. Site operators should ensure that there is no possibility of contaminated water entering and polluting surface or underground waters.

31. “I can confirm that there are no objections in principle to the Midlands Quarry Products proposal.

In view of the submitted details of how, where and how deep the tunnel is to be created, it should not affect the structural integrity of Stanton Lane where it passes below it.

From the lack of detail relating to construction access, I assume there would no longer be any requirement for a temporary vehicular access from Stanton Lane as there is no ‘cut and cover’ method being employed. Although it was made clear to the applicant that there would be no objection to such an access for a
Assessment of Proposals

32. This proposal has been discussed at the Cliffe Hill Quarry Liaison Committee meeting on 21st January 2002. In addition, the company made a presentation to Stanton under Bardon Parish Council on the 13th February and held an exhibition to explain the proposed changes to the approved scheme to local residents in Stanton under Bardon Youth Club on 6th March which officers from Leicestershire County Council attended.

33. The environmental impacts of the construction and operation of the tunnel were examined in detail for the earlier tunnel proposal. As the new proposal involves the entire length of the tunnel being driven entirely beneath ground level, wholly within the granite strata, the majority of the impacts envisaged from the previous scheme have been removed.

34. The main remaining impact of the new proposal will be that of vibration from tunnel blasting. Although blasting will not be required any closer to residential properties than the previous design, the duration of tunnel blasting will be increased from approximately 26 weeks estimated for the previously approved details to approximately 52 weeks.

35. As a result of concerns regarding tunnel blasting being expressed through the consultation process, MQP engaged a consultant, Exchem Explosives Ltd, to undertake a trial blast. Through analysis of the resulting data a relationship between blast design parameters and vibration levels was calculated. The results of the trial blast indicate that it will be possible to construct the tunnel whilst complying with the existing planning limit of 6mm/s at a 95% confidence.

42. Although vibrations resulting from tunnel blasting will be perceptible at houses in the vicinity, imposing greater restrictions on vibration levels would result in a significant increase in the time taken to drive the tunnel and thus prolong the disturbance to residents.

43. It has always been intended that quarrying would recommence in Old Cliffe Hill Quarry when reserves are depleted in New Cliffe Hill Quarry and the planning permissions on site allow this to happen. The proposal to drive the tunnel at a lower level is welcomed as this will reduce the potential adverse impact of the link, particularly in respect of noise, dust and visual impact, compared to the original proposal which involved a section of the tunnel (Phase 2) to be constructed at the surface.

44. It is felt that the adverse effects resulting from the increased duration of tunnel blasting activities are outweighed by the elimination of other impacts associated with the previous design.
45. Having regard to the information submitted with the proposals and the comments of consultees it is considered that, subject to the imposition of conditions, the proposal would not result in a significant environmental impact to local residents or other interests. Consequently the recommendation is to approve the variation.

**Recommendations**

That Midland Quarry Products Limited be informed that the submission for the variation of approved details for the construction of the tunnel link between Old and New Cliffe Hill Quarries, and the commencement of overburden stripping and subsequent extraction operations at Old Cliffe Hill Quarry, detailed in their letters dated 20th December 2001 relating to conditions 8 of planning permissions 89/143/4 and 89/1568/7, condition nos.6, 7 and 10 of planning permission 86/0378/4 and condition nos.12 of planning permission 80/1437/4 be APPROVED subject to the following conditions:

1. The details hereby approved are carried out in accordance with the submission accompanying the letter from Midland Quarry Products Ltd. Dated 16 April 1999 as amended by the submissions accompanying their letters dated 20th December 2001 and 22nd February 2002 or as otherwise required by the following conditions.

2. Tunnel construction work shall only take place between 0700 and 1900 hours on Mondays to Fridays. No tunnel construction works shall take place on any public or bank holiday.

3. Tunnel blasting shall only take place between 1000 hours and 1800 hours Mondays to Fridays. No tunnel blasting shall take place on any public or bank holiday.

4. Any emergency tunnel blasting needed to be carried out outside the specified hours shall be notified to the Director of Planning and Transportation within 24 hours of its occurrence together with details of the reasons as to why it was necessary.

5. Ground vibrations resulting from tunnel blasting shall not exceed a peak particle velocity (measured as the maximum of three mutually perpendicular directions taken at the ground surface) of 6.0 mm per second with an upper 95% confidence level, at any building, measured over a period of 1 month and no blast shall exceed 12 mm/s peak particle velocity.

6. Before the commencement of tunnel blasting, blast monitoring measures shall be implemented in accordance with a scheme approved in writing by the Director of Planning and Transportation. The scheme shall include:
   (a) blast monitoring locations and frequency of monitoring;
   (b) the monitoring equipment to be used;
   (c) presentation of results to the MPA;
   (d) procedures to be adopted to reduce vibration in the event that vibration goes above 6mm/s or is considered to be causing significant disturbance in the view of the Director of Planning and Transportation.
7. Noise levels from combined quarry activities and tunnel construction should not exceed 55 dBLAeq measured 1 metre from the most exposed window or door in the facade of any noise sensitive property over any one hour period between 0700 and 1900 hours. The maximum noise level at any such location excluding noise attributable to blasting should not be more than 70dBA.

8. Before the commencement of tunnel construction works, noise and dust monitoring measures shall be implemented in accordance with a scheme approved in writing by the Director of Planning and Transportation. The scheme shall include:-

(a) noise and dust monitoring locations and frequency of monitoring;
(b) the monitoring equipment to be used;
(c) presentation of results to the MPA;
(d) procedures to be adopted if noise or dust goes above a certain level.

9. Written notification of the date of re-commencement of stone extraction in Old Cliffe Hill Quarry shall be sent to the Director of Planning and Transportation at least one week before such re-commencement. Stone extraction at New Cliffe Hill Quarry shall cease within 30 months of the date of re-commencement of extraction in Old Cliffe Hill Quarry.

10. There shall be production blasting at only one quarry (either Old or New Cliffe Hill) each day except in an emergency. Notification of any emergency blasting needed to be carried out in breach of this condition shall be sent to the Director of Planning and Transportation within 24 hours of it occurring together with the reasons as to why it was necessary.

11. No operations for trimming the top edges of Old Cliffe Hill Quarry shall take place until details of a 2 metre high barrier to protect Hillbury Cottage from noise has been submitted to the Director of Planning and Transportation for his approval. No operations for trimming the North Western corner of Old Cliffe Hill Quarry shall take place until a barrier has been erected in accordance with the approved details.

12. Any facilities for the storage of oils, fuels or other chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound shall be at least equivalent to the capacity of the tank plus 10%. If there is multiple tank storage, the compound shall be at least equivalent to the capacity of the largest tank, vessel or the combined capacity of interconnected tanks or vessels plus 10%. All filling points, associated pipework, vents, gauges and sight glasses must be located within the bund or have separate secondary containment. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipework shall be located above ground and protected from accidental damage. All filling points and tank/vessels overflow pipe outlets shall be detailed to discharge into the bund.
13. There shall be no discharge of foul or contaminated drainage from the site into either groundwater or any surface waters, whether direct or via soakaways.

14. There shall be no interruption of the surface water drainage system of the surrounding land as a result of the tunnel link. Provision shall be made to ensure that all existing drainage systems continue to operate effectively and that riparian owners upstream and downstream of the site are not adversely affected.

15. Within one year of the cessation of extraction of mineral from Old Cliffe Hill Quarry a scheme for the closure or treatment of the tunnel between Old and New Cliffe Hill Quarries to ensure it does not pose a safety hazard shall be submitted to the Director of Planning and Transportation for approval and the approved scheme shall be implemented in accordance with an agreed timescale.

16. Unless otherwise required by the conditions attached to this approval the development shall be carried out in accordance with the conditions attached to planning permissions 1980/1437/4, 86/0374/4, 89/1483/4 and 89/1568/7.

**Reasons**

1. To ensure the permission is implemented in all respects in accordance with the submitted details in the interests of the amenities of the area and for the avoidance of doubt.

2, 3. To protect the amenities of local residents.

4, 7. 9,10 &11.

5. To protect the amenities of local residents and the structure of buildings.

6&8. To enable the effects of the development to be adequately monitored during the course of the operations.

9&10. In the interests of the amenities of the residents of Stanton under Bardon such that they are only affected by quarrying operations from one direction for any significant period of time.

12& 13. To prevent pollution of the water environment.

14. To prevent any increased risk of flooding.

15. To ensure the satisfactory ultimate restoration of the tunnel in the interests of amenity and public safety.

16. For the avoidance of doubt.
Policies and Proposals in the Development Plan Relevant to the Decision


Background Papers

1) Planning Permission Nos. 89/1568/7, 89/1483/4, 86/0378 and 80/1437/4.
2) Planning submission from Midland Quarry Products dated 16 April 1999.

Circulation Under Sensitive Issues Procedures

Mr D A Sprayson C.C.
Mr P A Hyde C.C.

Officers to Contact

Miss. J. Kaslik (Tel. 265 7326)
Lonek. Wojtulewicz (Tel. 265 7040)
E-Mail: planningcontrol@leics.gov.uk
DEVELOPMENT CONTROL AND REGULATORY BOARD

The considerations set out below apply to all preceding applications.

EQUAL OPPORTUNITIES IMPLICATIONS

Unless otherwise stated in the report there are no discernible equal opportunities implications.

IMPLICATIONS FOR DISABLED PERSONS

On all educational proposals the Director of Education and the Director of Property will be informed as follows:

Note to Applicant Department


You are advised to contact the County Council’s Assistant Personnel Officer (Disabled People) if you require further advice on this aspect of the proposal.

BACKGROUND PAPERS

Unless otherwise stated in the report the background papers used in the preparation of this report are available on the relevant planning application files.

SECTION 54A OF TOWN AND COUNTRY PLANNING ACT 1990

Members are reminded that Section 54A of the 1990 Act requires that:

“Where, in making any determination under the Planning Acts, regard is to be had to the development plan, the determination shall be made in accordance with the plan unless material considerations indicate otherwise.”

Any relevant provisions of the development plan (i.e. the Structure Plan or any approved Local Plans) are identified in the individual reports.

The circumstances in which the Board is required to “have regard” to the development plan are:

Section 70(2) : determination of applications;
Section 77(4) : called-in applications (applying s. 70);
Section 79(4) : planning appeals (applying s. 70);
Section 81(3) : provisions relating to compensation directions by Secretary of State (this section is repealed by the Planning and Compensation Act 1991);
Section 91(2) : power to vary period in statutory condition requiring development to be begun;
Section 92(6) : power to vary applicable period for outline planning permission;
Section 97(2) : revocation or modification of planning permission;
Section 102(1) : discontinuance orders;
Section 172(1) : enforcement notices (the phrase occurs also in the new s. 172 which is substituted by the Planning and Compensation Act 1991, but not in the new provisions relating to planning contravention notices (new s. 171C) and breach of condition notices (new s. 187A);
Section 177(2) : Secretary of State’s power to grant planning permission on enforcement appeal;
Section 226(2) : compulsory acquisition of land for planning purposes;
Section 294(3) : special enforcement notices in relation to Crown land;
Sched. 9 para (1) : minerals discontinuance orders.