HILLS QUARRY PRODUCTS LTD

UPWOOD PARK BESSELSLEIGH

ENVIRONMENTAL STATEMENT

NON-TECHNICAL SUMMARY

(Note: The Non-Technical Summary may be read as a stand-alone document. It describes the planning application and the results of the research and technical papers, developed in the Environmental Impact Assessment process, in non-technical language).

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NON TECHNICAL SUMMARY

The Non-Technical Summary

1 All Environmental Impact Assessments are accompanied by a summary of the findings in non-technical language. This Non-Technical Summary forms part of the Environmental Statement prepared by Land & Mineral Management Ltd and other consultants on behalf of Hills Quarry Products Ltd. It accompanies the planning application made under the Town and Country Planning Act 1990 for a new sand quarry to ensure the continuation of soft Corallian sand extraction in Oxfordshire. The non-technical summary on these cream pages bring together the findings of each of the reports into one set of summaries.

Description of the Development

2 Hills Quarry Products Limited ("Hills") seeks permission to extract 1.4 million tonnes of soft sand and intermingled limestone "doggers" from 18.6 hectares at Upwood Park Estate near Besselsleigh. This new Upwood Park Quarry is required to replace Tubney Woods Quarry when that comes to an end in 2010. The extraction programme will be the same as at Tubney Woods and will work the same geological deposit of high quality sand and serve the same markets. Rates of extraction and numbers of traffic movements will be similar. After extraction three of the four fields will be backfilled with inert subsoil type materials to restore the land to agriculture at original ground levels which will consequentially improve the agricultural potential. The largest field will be restored at a low level (i.e. with no infilling) and transferred to BBOWT to manage in perpetuity for nature conservation and habitat bio-diversity. It will complement the ecological interest of the adjoining Sites of Special Scientific Interest and National Nature Reserves.

Location of Upwood Park

3 Upwood Park is located in Marcham Parish only about 500 metres from Tubney Woods Quarry but on the opposite (eastern) side of the A420. Access is gained from the A338 about 200 metres from the junction with the A420. The site is hidden from the main roads by woodland which will remain undisturbed.

Alternatives Sites

4 Various alternatives to the current application proposals have been considered over the years that Tubney Woods Quarry has been operating. It is essential to locate the same quality of sand which Tubney Woods provides and there are no other sites which are known to be both suitable, which the EIA has scientifically proven by assessing the relative impacts of development, and currently available to be quarried.

Description of the Environmental Impacts

5 Detailed environmental research, the Environmental Impact Assessment ("EIA"), has critically examined all potential impacts of the proposed quarry extension over the last two years. In so doing the impact of the development has been understood and the means of mitigation can be determined. The development scheme now incorporates the mitigation measures which have been carried forward into its design. The findings of the EIA are set out in alphabetical order below.

Agriculture

6 The land is in arable production but the soil, being sandy, dries out rapidly during summer months. This droughtiness affects the type of crops grown and also means that from time to time the crop fails completely. The temporary loss of part during extraction before it is returned to agriculture and the permanent loss of part which will become nature conservation land will not have any significant negative impact on the farming business. The ability to restore using moisture retentive soils will enable the restored land to be of a better quality, able to retain more nutrients, and thus capable of growing a wider range of arable crops.

7 The assessments consider the classification of the land according to long term limitations on its use judged by its physical or chemical characteristics. The majority is found to be Agricultural Land Classification Grade 3(b) which is a low average grade. A soil analysis has also been undertaken to determine the use of soils in restoration particularly in the nature conservation area.

Air Quality and Dust

8 The sand quarried at Upwood Park contains a small moisture content and, being inherently damp, will rarely give rise to dust problems in the extractive operations. The main potential dust generation activities at Upwood Park are from the wheels of lorries on dry quarry roads in windy weather. The way in which this can be successfully managed is well known from experience of operations at Tubney Woods Quarry.

9 The management of dust at Upwood Park will be achieved by:

- sweeping and damping hardstandings and road surfaces;
- grading and lightly damping haul roads;
- imposing speed restrictions depending on weather conditions;
- moving soil only when it is in a suitable condition for handling;
- not moving soil in dry and windy weather conditions if dust is likely to be blown beyond the boundary of the site;
- completing soil strips quickly;
- grass seeding soil stockpiles and environmental banks;
- progressive restoration to minimise stripped or unrestored areas.
- sheeting all lorries.

10 In addition, training site operatives to be aware of the likely dust problems in dry, windy weather; visually monitoring dust and weather conditions; and training in mitigation measures and management will ensure that dust will not be problematical at Upwood Park.

Archaeology

11 A “desk-top” assessment of the archaeological potential in the site has concluded that the site is within an area of general archaeological interest, with prehistoric finds from the site itself and known medieval evidence

nearby. The potential of the site to contain archaeological deposits is moderate to high but the possibility of deposits being present which are of national importance is low. To mitigate the impact of development it will be necessary, before extraction commences, to draw up a scheme of evaluation for agreement with the County Archaeological Officer which will enable further information to be gained either before or during the phasing of the development.

Ecology

12 A detailed assessment of the ecology of Upwood Park has been carried out using best practice guidance from the Institute of Ecology and Environmental Management. Consultations have also taken place with, inter alia, Natural England, the Environment Agency and BBOWT. Sites of nature conservation designations were identified and survey work was undertaken in summer 2007 and spring 2008.

13 White Hart Wood which adjoins the site and the majority of hedgerows within the site are likely to be ancient in origin. It is not intended to disturb any hedge or ancient woodland. Within the boundary between fields 1 and 3 there are a small number of Small Leafed Lime which are rare in Oxfordshire and will be retained. The fields are currently intensively managed with a likely intensive input of chemicals. The soils are mildly acidic and may be of use in restoration of the nature conservation areas.

14 Bats have been surveyed to determine if any roosting, foraging or commuting bats will be affected and were surveyed both during the day and at night. The survey identified 6 trees which will be removed which may have high bat potential and will be surveyed prior to felling. Badgers were also sought but no Badger Setts were recorded. Surveying was also not able to record the presence of dormice on site.

15 Two grass snakes were discovered and the ponds were surveyed for newts. Desk-top searches revealed an old record of Great Crested Newts being found in Hitchcopse Pit but no evidence of any were found in the field survey.

16 Breeding birds were surveyed. Most of the species were confined to the hedgerow and woodland areas. Invertebrates were also recorded and it is thought that the presence of the adjacent nature reserves, which are well known for their importance for invertebrates, means it is likely that foraging opportunities for invertebrates are provided by the fields and their margins. In their current state however, the arable fields are of negligible entomological value. The field margins, however, which will in the main be left undisturbed, provide good foraging and nesting habitat for invertebrates.

Mitigation Measures

17 Various mitigation measures have been taken into account and the development is designed to avoid or reduce the loss of valuable habitat features such as ancient woodland and Small Leafed Lime. The majority of the land take will be arable land over which, the ecological impact is small.

Measures to Deliver Positive Impacts

18 It has long been recognised that worked mineral sites can develop into important wildlife habitats. At Upwood Park the opportunity to develop habitats and optimising gains for wildlife has been a fundamental part of the development of the working and restoration scheme. Field 2 will be transferred to and managed by BBOWT as a particular type of parched grassland with a calcareous influence (termed “Breckland” grassland) and one area will be encouraged to develop in a way similar to Hitchcopse Pit. The new habitat creation will help to meet the aims of Oxfordshire’s Biodiversity Action Plan in the long term.

Hydrology

19 The hydrological report has been prepared in substantial detail to demonstrate scientifically that extraction will have no influence on the adjoining important, European and nationally designated nature conservation areas. A range of site investigations and monitoring have been carried out over two years to provide the detailed background information. All legislative guidance has been adhered to and consultations have been held with the Environment Agency and Natural England.

20 The studies have covered the impacts of the local wetland and the underlying groundwater and have identified:

- the existing surface and groundwater baseline conditions;
- potential impacts and effects upon the water environment and resources in terms of operation and restoration of the quarry.
- the need for specific mitigation measures to protect the water environment that can be incorporated in the detailed design.

21 Groundwater monitoring has included manual dip-level readings and continuously logged water levels. This has shown that there is a groundwater divide to the east of which the groundwater flows towards Cothill Fen and Parsonage Moor and to the west of which the flow is south westerly beneath Fields 1, 3 and 4. The majority of the sand to be extracted is west of the divide which would reduce impact on the conservation areas.

22 Further investigations and the monitoring of rainfall were carried out to determine the responsiveness of the groundwater to the rainfall and to examine how sand extraction would affect this. The assessments indicated that all boreholes, irrespective of depth, had similar time lags between rainfall and groundwater recharge which suggested that removal of sand would have little influence on the responsiveness.

23 Groundwater quality has been monitored and there is little difference between the groundwater on both sides of the divide. The groundwater is primarily calcium carbonate dominated but nitrates are present probably as a result of intensive cropping.

24 The potential impacts from sand quarrying have been quantified and include an increase in surface water run-off, contamination, and groundwater flow and recharge issues. There would be no change to surface water run off during the extraction phase but potentially, in the restoration phase, the less permeable nature of the fill material might increase the volume of run-off from the site. This can be managed by constructing perimeter drains which will catch the run-off water and allow it to infiltrate the groundwater. In addition the restoration contours in the east of Field 1 should be designed to encourage

water away from the eastern side of the divide and away from the conservation areas.

25 To protect groundwater quality in the conservation areas, a large buffer in Field 2 adjacent to Cothill Fen will be left unworked. Across the whole of the site 1 metre of sand will be left above the maximum recorded groundwater level. To reduce the small risk of pollution from the site, good working practices will be adopted and any infrastructure and the storage of machinery and oil will be kept to the west of the groundwater divide. Stringent waste acceptance criteria will be adopted to ensure (as occurs in Tubney Woods Quarry) that all waste accepted will be stable and inert and will not pose a risk to water quality. Monitoring of groundwater would also continue throughout the development.

26 It is concluded that the development poses little risk to the surrounding water environment and the adjacent Special Area of Conservation.

Landscape Character Assessment

27 The Landscape Character of the area has been evaluated to describe and assess the application site in the context of county and local character areas and has assessed the potential impact of the proposals. This process has resulted in the conclusion that a slight to moderate potential impact on landscape character will occur. However, this impact can be shown to be positive in respect of new areas of potential ecological benefit that could arise and supplement the existing conservation areas. Ultimately it will provide sustainability, diversity and an increased benefit to those who use the area.

Noise

28 An assessment has been made based on the known noise climate in the existing Tubney Woods Quarry to determine, using appropriate acoustic methodology, the likely noise impact in the local community which will arise from the proposed operations at Upwood Park. From these results the noise mitigation measures were identified to ensure compliance with the appropriate guidelines and to minimise noise impact in the community.

29 The assessment indicated a requirement to reduce noise levels both at nearby dwellings and generally in the locality. To reduce impact noise attenuation bunds are recommended between the noise source and receptor properties and stand-off distances between any operational plant and the property are proposed. With these measures in place working to the boundary of the application site would be practicable without causing unnecessary impact. In addition the crushing of any doggers would be undertaken in a central location as far as possible from any dwelling and always on the floor of the quarry.

Traffic

30 The travel movements related to the proposal will be similar to the well established pattern of movements to and from Tubney Woods Quarry. There are no significant problems associated with this pattern.

31 The access will be improved to provide a safe entrance to modern standards with good visibility sight lines. It is located on to a relatively lightly trafficked highway. The site is located clear of other developments which could be sensitive to disturbance from the use of the access.

Visual Impact Assessment

32 The Visual Impact Assessment was undertaken firstly by consulting local maps to identify all areas which might have views of the application site. These areas include public rights of way, high ground and adjacent properties. As a result of this exercise certain areas were singled out for further on-site investigation. These were all considered and the impacts were objectively quantified.

33 Due to its location within a strong framework of existing woodland / vegetation the potential visual impact of the development is confined to a very localized “zone of visual influence”. The greatest visual impact will be perceived by users of the public rights of way which cross and border the application site, particularly at the cross over points. This impact will be mitigated by the provision of screen bunds around each phase of the extraction area. The overall potential visual impact is assessed at “low”.

34 Once restored to agriculture and to a low level grassland wildlife habitat, the area will be visually more pleasing.

Impact On People

35 Impacts of quarrying upon people are two-fold – adverse and beneficial. Specific impacts such as noise, dust, visual and traffic, have been considered in the individual reports which are outlined above and show that there will be no significant impact or loss of amenity. Any adverse impact can be adequately controlled and managed.

36 The benefits of the quarry in the community relate to local employment and the source of local sand in the Oxford area. Long term benefits relate to nature conservation, visual implications of the restoration and expected public access into nature conservation areas which will eventually result.

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