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Annexion 1 – Plans

Drg N° S22/12/01 – Site location plan
Drg N° S22/12/02 Rev A – Schematic site plan
Drg N° S22/12/03 Rev A – Concept restoration plan
Drg N° S22/12/04 – Mineral extraction area

Annexion 2 – Previously submitted and approved Noise impact and mitigation scheme

Dated 07.07.03 (Approved scheme to discharge Condition N° 5 of Consent N° EN/03/00151/FUL)

FRONT COVER PHOTOGRAPH
Partially restored central and western lakes at Stonehill Quarry
1. Introduction

1.1. In 2003, planning consent was granted by East Northamptonshire District Council for the creation of a body of water to the rear of the Rutland Oil Depot to the west of Wansford village, which was located within the unrestored, redundant Stonehill limestone quarry. The water within the lake was required to assist should a major fire incident occur at the depot as there was only limited mains water supply available. The excavation of the lakes begun in 2004 and has continued on an intermittent basis since that date.

1.2. The planning consent permitted the removal of material from the site but excluded the extraction and processing of any mineral. No accurate records were available to confirm the extent of the previous areas of limestone extraction within the former Stonehill Quarry but given the redundant nature of the site it was presumed that all commercially available limestone resource had all been exhausted. However in August 2012, a small band of limestone extending to 0.4ha was found to be present in an area required to form the permitted body of water.

1.3. Accordingly in order to regularise the situation, it is proposed that planning permission is being sought to extract and process a limited volume of limestone from within a small sector of the site. The existing planning consent granted by the District Council required both noise and highways assessments to be undertaken which specified noise levels at the nearest property to the east and limited HGV movements to designated routes by-passing the centre of Wansford and Kings Cliffe villages. The operations relating to the limestone extraction will not require either noise levels or traffic movements agreed with the District Council to be raised above those currently permitted.

1.4. It is envisaged that the mineral extraction operations would be completed within a limited timescale after which time the site will be regraded generally in line with the scheme previously approved by the District Council albeit three separate water bodies will now be formed as opposed to one large single lake.

1.5. There are no soil resources on site to finalise the rehabilitation of the lake margins within the former redundant quarry workings and it is proposed to import up to a 500mm depth of soil materials spread over 19,700m² of lake margins disturbed by the engineering operations associated with the approved development.

1.6. Planning consent is therefore being sought for the following:

- Extraction and processing of limestone from 0.4 ha
- Importation of soils and soil making material to achieve a beneficial restoration of the former Stonehill Quarry.
- Revision to the configuration of previously approved waterbodies.
2. Limestone

2.1. In order to excavate the exposed limestone, a 360° tracked excavator will be employed. The limestone’s structure is such that it will not require blasting and this accordingly significantly reduces the potential impacts of extremely high noise levels, vibration and dust emissions. To load processed limestone into road bourne HGVs, a rubber tyred loading shovel will be used.

2.2. To process the limestone it is proposed to use a mobile crusher and screens that will be located on the quarry pavement. This mobile processing plant and equipment will be less than 5.5m in height and consists of Kleeman crusher 110R, a Pegson 428 impact crusher, a 393 Screener 3 way split, a 683 Screener 3 way split and a 693 Screener 3 way split. A majority of the excavation and processing operations would not be visible outside the confines of the development.

2.3. It is envisaged there is approximately 8,500 tonnes of limestone to be extracted, processed and removed from the site over a 10 week period when suitable conditions prevail at a typical rate of 20 loads per day.

2.4. Upon completion of the limestone extraction, the exposed face of the limestone measure outwith the permitted extent of the waterbody approved by East Northants District Council will be graded top a safe and stable profile.

2.5. Notwithstanding the planning consent granted by East Northamptonshire District Council did not restrict operational hours. Extraction operations would not commence prior to 7am whilst the breaker would not start to be used prior to 7.30 am. No HGV would leave the site prior to 8am and all operations would cease at 6pm during weekdays and 1pm on Saturdays. There would be no working on Sundays or Bank Holidays.

2.6. HGV’s would follow the previously approved routes which confirms that such vehicles will not pass through Kings Cliffe village nor the centre of Wansford.

2.7. With regard to noise, the extant planning consent required (by way of Condition N° 5) a scheme to be submitted and approved. As part of that exercise, an appropriate noise level of 55dBA LAeq (1 hour) was considered appropriate at the nearest property which was some 300m to the south-east of the site. These levels were found to be acceptable in 2003 and remain so today being consistent with the criteria levels identified with the Technical Guidance of the National Planning Policy Framework published by central government in March 2012.
3. Importation of Soils

3.1. In order to achieve a satisfactory restoration scheme around the lakes it is proposed to import approximately 10,000m$^3$ of soils to enable a grass sward to be established to stabilise the slopes disturbed by the engineering operations associated the creation of the approved development since activities started in 2004.

3.2. The importation of soils will consist of arising’s from the dig out of footings and drainage of housing and commercial developments from a 20 mile radius of the site. The soils will be clean in nature and suitable for growing grasses.

3.3. Materials would be imported by HGV’s using the previously approved routing agreement under the provisions of the extant planning consent EN/03/000151/FUL referred to in paragraph 2.6 above.

3.4. Given the nature of the material to be imported which will be derived from ad hoc construction projects in the area it is still envisaged that the importation of such material would be completed within a 12month period although it should be emphasised that there will be extended periods when no activity would take place on site when material is not available.
4. Environmental Controls

Dust

4.1. To minimise the potential impacts, the excavation of material and importation of soils, operations will be conducted in accordance with best practice guidance as detailed within the Technical Guidance of the National Planning Policy Framework. The essence of the central government guidance is that dust emissions can be controlled by effective site management. The measures for the control of dust on site will comply with any conditions which may be specified by the planning authority, including dust management scheme, and will additionally accord with Mick George Ltd’s Environmental Management System (EMS). Consistent with central government advice, Mick George Ltd will apply a pro-active approach to the management of fugitive dust by adopting a Dust Action Plan.

4.2. General matters and the management of the site can affect the likelihood of significant dust emissions. These include:

- provision on site of a pressurised water bowser,
- high standards of house-keeping to minimise track-out and windblown dust,
- a preventative maintenance programme, including readily available spares, to ensure the efficient operation of plant and equipment, including fixed and mobile dust suppression plant, and
- effective staff training in respect of the causes and prevention of dust.

4.3. The Site Manager will carry out daily inspections and log observations of site conditions including any occurrences of dust or the onset of potential dust generating conditions. A graded scale of dust occurrences is proposed within the Dust Action Plan, together with responses, as follows:

<table>
<thead>
<tr>
<th>Score</th>
<th>Condition</th>
<th>Action required</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No visible dust</td>
<td>None</td>
</tr>
<tr>
<td>1</td>
<td>Visible dust travelling up to 5m from the source</td>
<td>Damp surfaces down, review operations and weather conditions, and take further preventative actions as appropriate.</td>
</tr>
<tr>
<td>2</td>
<td>Visible dust travelling reaching the sides of the quarry void, or edge of stripped areas during restoration</td>
<td>Damp down and reduce/relocate any operations causing the release; review operations and weather conditions, and take further preventative actions as appropriate to prevent further releases.</td>
</tr>
<tr>
<td>3</td>
<td>Visible dust crossing the operational area</td>
<td>Carry out emergency damping down and treatment of source areas; carry out inspections to ascertain extent and amount of dust migrations and provide plan for any modification to operations to prevent recurrence.</td>
</tr>
</tbody>
</table>
4.4. The above seeks to identify circumstances when additional dust suppression measures should be considered during site operations. In general, the strategy will require the site manager, to take necessary precautions to prevent adverse dust emissions. Under critical conditions when the wind direction is towards dust sensitive locations then the additional dust suppression measures will be implemented.

4.5. Best available techniques shall be employed to minimise dust during site operations and the following measures will be used in order to minimise and control dust nuisance:

- All active haul roads will be kept damp as required by motorised spraying units during site operations (i.e. water bowsers).
- The direction of exhausts of on-site vehicles will be such that exhaust gases cannot be emitted in a downward direction.
- Observations will be made of the wind direction, by the site Manager during operations, when it appears from visual inspection that the wind direction is towards dust sensitive locations.

4.6. The site access road will be inspected by the site manager on a daily basis, to determine the need for maintenance, cleaning and dust suppression. All vehicles loaded with processed mineral or imported soils will be sheeted in order to minimise spillages or wind whipping of loose material. All departing road transport will be inspected for cleanliness, prior to leaving the site.

4.7. The foregoing standard good working practices and additional mitigation measures are generally accepted by central government and the surface minerals industry as providing effective control against the impact of airborne dust. With the implementation of these measures, the risk of a dust-related impact at the closest residential dwellings will be negligible.

4.8. Overall, with the application of standard good practices, the residual risk of adverse effects outside the site due to dust will be slight or negligible at all receptors. Daily observations and inspections by the site management are required in order to minimise these risks.

**Noise**

4.9. Condition N° 5 of the extant planning consent for the lake creation required a noise impact and mitigation scheme to be submitted and approved. The scheme as submitted (and subsequently approved by East Northamptonshire District Council) is attached at Annexion 2 for information. As noted elsewhere within this current planning application, the relevant and most appropriate guidance to apply is that contained within the Technical Guidance of National Planning Policy Framework published in March 2012. However, the noise criteria levels applicable to the operations are similar in that paragraph 30 of the NPPF, Technical Guidance Note confirms that day time noise levels “should not exceed 55dB(A) LAeq 1 hour (free field).” The scheme to discharge Condition N° 5 recognised that the prevailing guidance in 2003 also identified 55dB(A) LAeq as a desirable maximum level to impose for daytime working.
5. Flood Risk Assessment

5.1. The application site consists of a former operational quarry and is contained within a defined depression. The creation of the lakes has further lowered the levels within the site and will contain any surface water run-off from the surrounding land.

5.2. The site is located within Flood Zone 1 and therefore of low probability of flooding (i.e. less than 1 in 1,000 annual probability of either river or sea flooding) and in any event “mineral extraction” is identified as being “less vulnerable“ within the Technical Guidance of the National Planning Policy Framework.

5.3. The application is not to excavate additional material, simply that in-situ limestone has been encountered where quarry waste was envisaged. The importation of soils will stabilise slopes and therefore reduce surface water run-off.

5.4. The approved lake feature is situated between 20 and 40 metres south of an unnamed tributary of the River Nene and some 1.2km to the west of its confluence with the main river. The development proposals did not involve the construction of any bridges, pipes, ducts or culverts and the modified scheme of working does not either. No streams or culverts cross the site and there will be no additional run-off from the revised scheme of working.

5.5. There are no residential risks associated with the development and predicted impacts from climate change. The previous planning application of 2003 concluded there was no risk of downstream flooding and the creation of the waterbody should be considered as a positive benefit in flood risk terms. The revised scheme of working will not alter that conclusion.
6. Restoration Detail

6.1. The original planning consent for the site issued by East Northants District Council permitted a single body of water extending to 2.1 ha. However, given the engineering constraints of the site, it is now proposed to create three separate water bodies as shown on Drg No S22/12/03 (with a combined surface area of 1.6ha).

6.2. In modifying the site layout this will potentially improve habitat diversity by establishing greater edge and emergent habitat of the three separate water bodies. The revised establishment operations have resulted in a greater length of shallow margins than originally envisaged and any issues with seasonal variation of the water level within a single water body have been minimised by the creation of three separate units two of which have sealed bases which means that the water levels are not so influenced by any fluctuations in groundwater levels. The western lake when completed will extend to 1,800 m², the central lake some 9,600m² whereas the eastern lake (which is completed) is 4,500m².
7. Planning Policy Considerations

Introduction

7.1. Section 38 of the Planning and Compulsory Purchase Act 2004, requires that when in determining any planning application, regard is to be made to the development plan and that determination shall be made in accordance with the development plan unless material considerations indicate otherwise. In the case of the proposed development at Stonehill Quarry, the relevant document to consider is the Northamptonshire Minerals and Waste Development Framework Core Strategy (adopted May 2010), and the North Northamptonshire Core Spatial Strategy which was adopted in June 2008 and relates to an area covered by the administrative districts of Corby, Kettering, Wellingborough and East Northamptonshire Councils.

7.2. In addition the National Planning Policy Framework document (NPPF) was published in late March 2012 and sets out the government’s requirements for the planning system, reiterating the fact that planning law requires that all applications for planning permission must be determined in accordance with the Development Plan unless material considerations indicate otherwise. The guidance has superseded previously published planning policy statements, mineral policy statements and mineral planning guidance notes. The introduction of the document confirms that the Framework does not contain specific policies for national significant infrastructure projects, as these would be determined in accordance with the decision making framework set out within the 2008 Planning Act.

Northamptonshire MWDF

7.3. The minerals and waste development framework or MWDF contains the land use planning strategy for both minerals and waste related development within Northamptonshire. The Core Strategy’s vision for the County envisages sustained growth and development within Northamptonshire up to 2026 and the document is intended to act as a driver for new investment within the County identifying how investment in minerals (and waste) development can be optimised for everyone’s benefit. The MWDF has been prepared in the context of a set of national and regional guidelines and strategies and the strategic context for the Core Strategy is provided by a number of key policy documents.

7.4. The Core Strategy confirms the maintenance of a landbank of at least ten years for crushed rock will be maintained and it is envisaged this provision will come from sites if they meet the spatial strategy for mineral extraction and are assessed as meeting environmental, amenity and other requirements of the MWDF. Policy CSS of the Core Strategy relates to the continued provision of an adequate supply of minerals and states “7.9 million tonnes of crushed rock (limestone) (equivalent to an annual average of 0.39 million tonnes) will be provided from deposits outside unworked river valleys or from sites with old permissions upgraded to modern conditions.”

7.5. The Minerals and Waste Development Framework (MWDF) Location of Minerals Development identifies sites that could supply this limestone and these were Wakerly (Site MA8), Ringstead (Site MA9) and Pury End, South (Site MA10). However, at this moment in
time not all of these sites have planning permission, and none of these are in a position to produce processed aggregate at present.

7.6. The production of a small volume of limestone from the Stonehill Quarry will nevertheless enable a limited supply to contribute to the envisaged annual production of 390,000 tonnes.

7.7. In respect of the final restoration of the site Policy CS13 states that all minerals and waste related development of a temporary nature must ensure that the site is progressively restored to an acceptable condition and stable landform and the after-use of a site will be determined in relation to its land use context, the surrounding environmental character and any specific local requirements, but on the basis that it enhances biodiversity and the local environment. The revised restoration scheme for Stonehill Quarry satisfies the requirements of this policy in that part of the former Stonehill Quarry will be progressively reinstated to a beneficial afteruse. The scheme will still generate bio-diversity gains thereby improving the local environment and satisfying other creative conservation policies and objectives of the County and District Councils.

7.8. The final relevant policy within the Core Strategy is Policy CS14 which relates to requirements to address the potential impacts from proposed minerals development and states “proposals for minerals and waste development must demonstrate that the following matters have been addressed; 

- minimising environmental impact and protecting Northamptonshire’s key environmental designations,
- protecting natural resources or ensuring that any unavoidable loss or reduction is mitigated,
- ensuring built development is of a design and layout that has regard to its visual appearance in the context of the defining characteristics of the local area,
- ensuring that access is sustainable, safe and environmentally acceptable, and
- ensuring that local amenity is protected.”

7.9. In developing the working and restoration scheme at Stonehill Quarry, full regard has been paid to minimising any potential environmental harm or adverse impacts. There are no significant landscape designations to impact upon whilst the closest important ecological designated area lies to the south of the site. Furthermore designated sites of cultural heritage in the immediate vicinity will not be adversely impacted upon.

7.10. With regard to current natural resources, the site will be reinstated with wetlands to integrate into the local landscape delivering a net gain in the environmental capital of the site. In respect of access an existing access point is in constant use by Rutland Oil onto Kings Cliffe Road which is adequate for its purpose. Finally, the scheme of working seeks to limit any harm to the local community as noise and dust control measures will be applied, as will the traffic routing provisions. The landscaping works following the importation of soil will minimise any potential visual impact whilst additionally providing creative conservation at an early stage.
National Planning Policy Framework

7.11. The National Planning policy Framework (NPPF) confirms that the purpose of the planning system is to contribute to the achievement of sustainable development. Paragraph 11 onwards confirms that the planning law requires applications for planning permission must be determined in accordance with the development plan, unless material considerations indicate otherwise whilst paragraph 12 confirms that the National Policy Framework “does not change the statutory status of the development plan as the starting point for decision making. Proposed development that accords with an up to date local plan should be approved” and that “it is highly desirable that local planning authorities should have an up to date plan in place.”

7.12. The government’s objectives within the NPPF are to promote sustainable development and also ensure that biological diversity is conserved and enhanced as an integral part of the environmental and economic development, and additionally to conserve, enhance and restore the diversity of England’s wildlife by sustaining and, where possible, improving the quality and extent of natural habitat sites. As a direct result of the scheme at Stonehill Quarry alternative habitats will be created with a long term gain to biodiversity objectives, whilst making a contribution to sustainable development objectives by maintaining the County’s mineral landbank consistent with central government requirements and up-to-date development plan policies.

7.13. Paragraph 15 emphasises that “policies in local plans should follow the approach of the presumption in favour of sustainable development so that it is clear that development which is sustainable can be approved without delay.” The development at Stonehill Quarry has been considered against policies within the up-to-date Minerals and Waste Development Framework documents and no conflict is found to arise and in many instances they provide positive support for the development. If the limestone were not removed from site (having been excavated to create permitted lakes) this would be contrary to sustainable development principles.

7.14. The scheme can operate with minimal impact and within acceptable criteria levels identified within the development plan policies and the Technical Guidance of the NPPF. It is therefore concluded, that given the predicted limited environmental impacts and the policy support that exists for the quarry development and subsequent restoration proposals which are consistent with recognized sustainable development objectives then planning permission should not be withheld for the extraction of 8,500 tonnes of limestone and the importation of soils on land at Stonehill Quarry.

7.15. On page of the NPPF, Section 13 relates to “Facilities of Sustainable use of Minerals” with Paragraph 142 stating “minerals are essential to support sustainable economic growth and our quality of life, it is therefore important that there is a sufficient supply of material to provide the infrastructure, buildings, energy and goods that the country needs.”

7.16. In respect of the final restoration of quarries, Policy CS13 is consistent with the NPPF in that it states that all minerals and waste related development of a temporary nature must ensure that the site is progressively restored to an acceptable condition and stable
landform and the after-use of a site will be determined in relation to its land use context, the surrounding environmental character and any specific local requirements, but on the basis that it enhances biodiversity and the local environment. The restoration scheme for Stonehill Quarry satisfies the requirements of this NPPF policy objectives in that the project will be progressively reinstated to a beneficial afteruse. The scheme of working seeks to limit any harm to the local community as noise and dust control measures will be applied, as will the traffic routing provisions.

7.17. Importantly, Paragraph 144 states that planning authorities should “give great weight to the benefits of mineral extraction, including to the economy”. The paragraph continues by stating that local planning authorities should ensure that in granting planning permission for mineral development there are no unacceptable adverse impacts upon the natural or historic environment, human health and to ensure that “any unavoidable noise, dust and particle emissions and any blasting vibrations are controlled, mitigated or removed at source and appropriate noise limits are established at residential properties in the vicinity.” The paragraph also recommends that restoration is provided at the earliest opportunity. The submitted planning application makes clear that noise and dust emissions will be mitigated at source and controlled by appropriate planning conditions.

7.18. Paragraphs 186 and 187 relate to the decision making process (for all types of development) and local planning authorities are advised that they should “approach decision taking in a positive way to foster the delivery of sustainable development” and “seek to approve applications for sustainable development where possible”. Notwithstanding the limited volume involved, the recovery of an isolated limestone mineral resource that would otherwise be discarded, is wholly consistent with recognised sustainable development objectives.

7.19. Paragraph 196 confirms that the planning system is plan-led and that “planning law requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise and that the NPPF is a material consideration in the planning process.” Paragraph 197 states “in assessing and determining development proposals, local planning authorities should apply the presumption in favour of sustainable development”. In the case of Stonehill Quarry there is compliance with the development plan and sustainable development objectives and therefore there is a presumption in favour of the development.

North Northamptonshire Core Spatial Strategy

7.20. The North Northamptonshire Core Spatial Strategy was adopted in June 2008 and relates to an area covered by the administrative districts of Corby, Kettering, Wellingborough and East Northamptonshire Councils. Policy 13 relates to General Sustainable Development Principles requiring that “development should meet the needs of residents and businesses without compromising the ability of future generations to enjoy the same quality of life that the present generation aspires to”. This policy primarily relates to build design of new developments but, nevertheless, does consider protection of local amenity and existing assets. (i.e. parts I to G of the policy).
7.21. As detailed within this Supporting Statement, matters such as noise and dust emissions from the development can readily be controlled to acceptable standards consistent with current central government advice documents whilst there will be no adverse impact upon the highway network. The existing landscape character will not be harmed by the working and restoration of the site and the natural biodiversity asset value of the land will be increased following restoration.
8. Summary and conclusions

8.1. In summary the planning consent permitted the removal of material from the former Stonehill Quarry site but excluded processing and export of any mineral. No accurate records were available to confirm the extent of the previous areas of limestone extraction within the former quarry but given the redundant nature of the site it was presumed that all commercially available limestone resource had all been exhausted. However a small band of limestone extending to less than 4,000m² was found to be present in an area required to form the permitted body of water.

8.2. Planning consent was granted in 2003 by East Northamptonshire District Council for the creation of a body of water to the rear of the Rutland Oil Depot. The excavation of the lakes begun in 2004 and has continued on an intermittent basis since that date.

8.3. It is envisaged that the mineral extraction operations would be completed over a limited timescale after which time the site will be regraded generally in line with the scheme previously approved by the District Council albeit three separate water bodies will be formed as opposed to one large single lake. To finally restore the lake margins to a beneficial afteruse it is additionally proposed to import some 10,000m³ of soil resources over a 12 month period.

8.4. No significant impacts have been identified that would warrant refusal of the scheme that is consistent with the sustainable development objectives as contained within the National Planning Policy Framework and therefore planning consent should not be withheld.
Annexion 2 – Previously submitted and approved Noise impact and mitigation scheme

Dated 07.07.03

(Approved scheme to discharge Condition No 5 of Consent No EN/03/00151/FUL)
NOISE (IMPACT AND MITIGATION) - (Condition No. 5)

C1 The planning condition relating to the excavation of the proposed lake requires a noise impact assessment to be carried out and a scheme of mitigation if required.

C2 The nearest occupied residential property is Forest Lodge located on the Wansford to Yarwell road approximately 340 metres to the south east of the proposed lake (at the closest point of the operations).

C3 The proposed area of excavation is located at the base of the former Stonehill Quarry and therefore is approximately 5 metres below original ground level with an exposed rock face situated between the area of excavation and the property in question. Moreover, within the quarry a mound of residual material (up to 4 metres in height) is located between the activity and Forest Lodge.

C4 In order to reduce noise levels whilst carrying out the excavation works, the plant used on the site will be regularly maintained. Particular attention will be paid to the lubrication of gearings and integrity of silencers. Vehicle speeds will be at reduced levels to avoid body slap from empty lorries and tailgates will be kept closed. Engines will not be unnecessarily revved and the internal haul road will be maintained to further minimise vehicle noise.

C5 Planning Policy Guidance note PPG24 'Planning and Noise' provides advice to local planning authorities in England on the use of their planning powers to minimise the adverse impact of noise. The guidance note outlines the considerations to be taken into account in determining planning applications for both noise sensitive developments and for those activities which will generate noise. It introduces the concept of noise exposure categories for residential development and encourages the use and recommends appropriate levels for exposure to different sources of noise and advises on the use of conditions to minimise the impact of noise.

C6 The guidance note seeks to provide advice on how the planning system can be used to minimise adverse impact without placing unreasonable restrictions on developments or adding unduly to the costs and administrative burdens of business (para 1).

C7 Paragraph 2 of the PPG notes that it is generally advisable to ensure that new development involving noise activities is sited away from noise sensitive land uses. In the case of the proposed lake extraction this is located to the rear of the Rutland Oil Depot which operates HGV's for five and a half days per week and is located generally away from a residential property (as noted earlier, the closest residential property is situated over 300 metres to the south east of the development; the next nearest property lies over a kilometre to the west).

C8 Paragraph 10 of the policy guidance note confirms that the Local Planning Authorities must ensure that development does not cause an unacceptable degree of disturbance and that they may wish to consider the use of appropriate conditions. In the case of Stonehill Quarry the Local Authority required a report to be prepared as opposed to imposing specific noise limits.
Annexe 2 of the PPG24 provides useful advice in respect of acceptable noise limits at residential properties and para 4 of the Annexe confirms that general daytime outdoor noise levels of less than 55dB(A) Laeq are desirable to prevent any significant community annoyance. Elsewhere within the guidance document daytime is described as between 0700 hours and 2300 hours although some lowering of levels may be more appropriate in the evening period (it is not however proposed to excavate material after 1800 hours on any day).

Paragraph 12 of the PPG recognises that when Local Planning Authorities are determining planning applications, any new or additional noise of unacceptably high levels would not generally be accepted. Cross reference is made to Annexe 3 of the PPG, giving advice on the appropriate method of assessment of noise. Under the heading 'noise from construction sites' Paragraph 21 confirms that the most appropriate guidance on assessing noise for this type of development is contained in BS5228, parts 1 to 4. The paragraph confirms this is the appropriate British Standard as it not only provides general advice in controlling noise levels but additionally describes a method of predicting noise from such operations.

Using the guidance within the British Standard it is possible to predict the components of the ambient noise that originates from the site operations. In respect of measures that could be taken to minimise overall noise levels paragraph 9.3 of the British Standard offers useful advice including the use of most suitable plant and operating during reasonable hours of the day (e.g. between 0700 hours and 1900 hours).

In respect of estimating the noise generated from site operations Annexe D (of BS5228) provides appropriate advice. It should be recognised that plant employed on the site is both static and mobile and the noise fluctuates as a result of the changing distance between the source and the receiver and the variation in the level of activity in each source. The equivalent continuous sound level or LAeq is specified within BS5228 as the index to use when measuring noise from this type of activity.

It is recognised that the extraction operations will employ items of equipment which will generate varying levels of noise. Each item of plant has a sound power level (SWL) expressed in dB(A) and Annexe C of BS5228 provides sound power levels of various items of plant. This information has been used in predicting the noise levels emanating from the site.

In the prediction methodology it is assumed that a hydraulic excavator will be used and to determine the sound power level the average of plant item reference number 42 to 47 inclusive of Table C3 of the British Standard have been used. The average is 112 dB(A). In respect of lorries, reference number 59 (Table C3) has been used assuming the use of a 35 tonne maximum gross vehicle weight with a sound power level of 105dB(A). For the prediction methodology again it is assumed that a diesel powered pump will be employed with an average sound power level of 103dB(A) (average reference numbers 68 to 74 inclusive of Table C7).
C15 In respect of percentage on time of operational plant in any one hour the following has been assumed:

- Hydraulic Excavator: 80%
- 3 Lorries at assumed: 20% (each)
- Pump assumed: 100%

C16 Although the intervening ground between the operations and the nearest residential property is primarily agriculture or vegetation of some description and only 50% of the soft ground attenuation figures contained within Table D4 have been used. (The remaining 50% assumes hard ground).

C17 The following table Figure 4 summarises the predictions which indicates a level for worst case operations of 49.5dBA (A) (although neither the PPG or BS requires "worst case" to be considered).

C18 This is a simplistic approach using the BS5228 methodology and assumes all operations are carried out the closest location and ignores any barrier attenuation that may be gained by the exposed face of the former quarry. Moreover it is unlikely that the percentage on times will be equivalent to those levels used in the predictive model. A more detailed predictive model using the mobile plant/haul road method is very likely to indicate levels significantly below those predicted in the enclosed table.

Conclusion

C19 PPG24 indicates that it is desirable to maintain levels of below 55dBA (A) to prevent any significant community annoyance. From the enclosed table the "worst case" prediction indicates that the levels will be significantly below the 55 dB (A) level (at 49.5 d B (A)) and therefore it can be safely concluded that there will be no noise impact from the proposed operations at Stonehill Quarry.

C20 With predicted "worst case" noise levels below those which are considered to cause annoyance or nuisance there is no requirement to provide any further mitigation to ensure amenity protection.
## STONEHILL QUARRY (LAKE CONSTRUCTION)

<table>
<thead>
<tr>
<th>Plant</th>
<th>Sound Power Level dB(A)</th>
<th>Percentage on-time</th>
<th>Reduction in dB(A)</th>
<th>Distance</th>
<th>Distance Attenuation</th>
<th>Resultant dB(A) LAeq.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic Excavator</td>
<td>112.1</td>
<td>80%</td>
<td>1.5</td>
<td>340</td>
<td>-62</td>
<td>48.5</td>
</tr>
<tr>
<td>Lorry</td>
<td>105.2</td>
<td>20%</td>
<td>-7.0</td>
<td>340</td>
<td>-62</td>
<td>36.0</td>
</tr>
<tr>
<td>Lorry</td>
<td>105.2</td>
<td>20%</td>
<td>-7.0</td>
<td>340</td>
<td>-62</td>
<td>36.0</td>
</tr>
<tr>
<td>Lorry</td>
<td>105.2</td>
<td>20%</td>
<td>-7.0</td>
<td>340</td>
<td>-62</td>
<td>36.0</td>
</tr>
<tr>
<td>Pump</td>
<td>105.3</td>
<td>100%</td>
<td>0</td>
<td>420</td>
<td>-64</td>
<td>29.0</td>
</tr>
</tbody>
</table>

**Weighted LAeq:** 49.5 dB(A)

### Source
1. BS5228 Table C.3 (Av.Ref. No. 41 to 47)
2. BS5228 Table C.3 (Ref. No.59)
3. BS5228 Table C.7(Av. Ref. No. 60 to 74)
4. BS5228 Figure D.3
5. BS228 Figure D.4 (Assume 50% propagation over soft ground/50% hard ground)

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Rutland Oil

Stonehill Quarry,
Wansbeck

**PREDICTED NOISE LEVELS**

Figure Four
Mr Szymanski
Northamptonshire County Council
Planning Services
Floor 3
Guildhall Road Block
County Hall
Northampton
NN1 1DN

16th November 2012

Dear Mr Szymanski,

Extraction of limestone and restoration to create three lakes at Stonehill Quarry, Wansford Road, Kings Cliffe

Thank you for providing a copy earlier today of the response from Mandy Dennis of the District Council within which there is a reference to a requirement for an updated noise and dust assessment to be provided by way of a pre-commencement planning conditions. The basis of calculating noise (i.e. BS 5228) is essentially unchanged from 2003 to now although we would not disagree with the suggestion that this element could be reconsidered in light of the Technical Guidance accompanying the National Planning Policy Framework (NPPF) published in March earlier this year. Likewise, in respect of dust, the NPPF provides up-to-date guidance (although strangely refers to earlier historic research rather than MPS 2 Guidance that it replaced).

In light of the suggestion of the District Council then the following planning conditions could be imposed to address the amenity issues which are based on those imposed at the Ringstead Grange site.

A. Monitoring of noise from the mineral extraction and restoration operations shall be undertaken at (INSERT NAMES OF PROPERTIES) at intervals to be agreed in accordance with a scheme to be submitted for agreement in writing with the Mineral Planning Authority prior to the commencement of mineral extraction. Unless otherwise agreed in writing by the Mineral Planning Authority the monitoring shall be undertaken for a period of 1 hour during operational phases. The noise monitoring scheme as agreed in writing shall be implemented."
B. No development shall take place until a Dust Action Plan has been submitted to the Mineral Planning Authority for approval in writing. The Dust Action Plan as approved shall thereafter be implemented."

On the matter of the proximity of the historic landfill located to the north, the comments to this issue are noted but we would highlight that the current proposals do not seek to extend the original approved area of extraction beyond that approved by the District Council in 2003; indeed the submitted plans confirm a reduction in the overall area of activity. The extremely limited area of limestone in question lies to the south-east of the permitted lake construction area and is not in continuity with groundwater to the north any differently to the remainder of the development approved by the District Council after consultation with the Environment Agency several years ago.

Finally, the response from the District Council appears to suggest there is some confusion regarding the proposed hours of operation. We believe these are clearly stated within the submission (and wholly consistent with NPPF Guidance) but if you require clarification on this issue then kindly advise.

Yours sincerely

[Signature]

John Gough
Planning Manager

cc Mandy Dennis – ENC (email only)