

Agenda item 7

Committee:	Development Control Committee
Meeting Date:	18 October 2007
Lead Councillor/s:	
Local Councillor/s:	Councillor Colin Noble
Director:	Lucy Robinson , Director of Environment & Transport
Assistant Director or Head of Service:	David Palk, Head of Development Control
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MINERALS & WASTE PLANNING APPLICATIONS

F/07/0430: Extraction of sand and gravel from eastward extension to Marston's Quarry, with restoration to dry acid grassland integrated into the approved quarry restoration. Land at Marston's Quarry, CAVENHAM.

Applicant: Allen Newport Ltd.

BRIEF SUMMARY OF REPORT

1. The application relates to Site 24 identified in the Draft Site Specific Allocation Preferred Options Document of the Mineral & Waste Development Framework, (MWDF). Application is made now because the approved reserves at the existing quarry are expected to be worked out by 2009, consistent with the duration of the existing planning permission, and the quarry operator wishes to extend working eastwards onto the proposed site, prior to restoring the contiguous area of the quarry.
2. The proposal involves the removal of 800,000 tonnes of sand and gravel over 4.5 years from 2009, working eastwards from the adjacent excavation. Workings would involve de-watering during excavations resulting in a temporary localised lowering of groundwater levels. Restoration would be at the excavated level up to 5 metres lower than existing with a gentle up gradient to the eastern boundary. This would effectively widen the broad valley feature being created at the current workings.
3. Although the site is within the Breckland Farmland Site of Special Scientific Interest (SSSI) and Special Protection Area (SPA), adjacent to the Cavenham & Icklingham Heaths SSSI and Special Area of Conservation (SAC), and adjacent to the Black Ditches Scheduled Ancient Monument rampart, there are no objections to the proposed extraction arrangements and restoration proposals. The workings would remove an area of mainly birch woodland (4.4 ha) and abandoned agricultural land (4.5 ha) and be restored to an extension of the Breck grass heath being recreated at the

adjacent quarry. The integrity of the Black Ditches Ancient Monument would not be affected.

4. The application is supported by an Environmental Impact Assessment which identifies no adverse environmental impacts after mitigation on conservation or amenity aspects and a positive gain from proposed restoration.
5. Restoration has been drawn up in consultation with Natural England and the Royal Society for the Protection of Birds (RSPB). Gradients adjacent to the Black Ditches Ancient Monument have been revised post submission to provide a more shallow gradient adjacent to the Ancient Monument consistent with the average restoration gradient at the adjacent area, to address the concerns of English Heritage.
6. The proposals are supported by Natural England and the RSPB in respect of the contribution of the proposed restoration to extending bird ground nesting habitat.

ACTION RECOMMENDED

7. That a consolidating planning permission be **granted** subject to the following conditions:

(Planning Conditions in **bold** type indicate the need to submit additional information for approval)

Duration of Permission

1. The excavation shall cease by 30 December 2013 and the site restoration shall be completed by 30 June 2014 or within six months of cessation of excavations whichever date is earlier, in accordance with the relevant conditions below unless otherwise approved by the Mineral Planning Authority.

Limits of Extraction

2. No excavations shall be made within 3 metres of the base of trees within Ash Plantation.
3. There shall be no disturbance or machinery operated within 20 metres of the boundary of the Black Ditches Scheduled Ancient Monument. The boundary of the Scheduled Ancient Monument shall be pegged out and marked with 2-metre tall posts at 30 metre intervals along the length of the eastern boundary of the application site prior to the commencement of any works. The marker posts shall be retained in position throughout the period of all approved operations, including restoration, within the eastern extension area.
4. All trees along the eastern boundary of the site shall be retained.
5. No excavation at the eastern or northern limits shall be left unsupported beyond a depth of 3 metres for longer than a period of two months. Where excavations are made deeper than 3 metres they shall be backfilled to 3 metres of the undisturbed land surface within two months with indigenous quarry waste. The angle of slope of backfilled quarry waste prior to restoration shall not exceed 45

degrees.

Archaeology Conservation

6. AR1 Prior Archaeological Investigation

No operations shall take place within the eastern extension area until the applicant has implemented a programme of archaeological investigation and recording in accordance with a written scheme which has been submitted to and approved in writing by the Mineral Planning Authority. The scheme shall provide for trial trench excavations over 5% of the extension site area to establish the character and condition of any surviving archaeology, followed by a controlled topsoil strip using a toothless bucket scraper and full excavation if required.

7. AR2 Advance notice of soil stripping

Not less than five days written notice shall be given to the Mineral Planning Authority of the applicant's intention to commence any soils stripping. The operator shall afford access at all reasonable times to archaeologists nominated by the Mineral Planning Authority who shall be allowed to observe the excavations and to record items of interest and finds.

Soil Handling and Storage

8. Prior to the stripping of any soils from the extension area a revised plan of the position of soil storage along the eastern and north eastern boundary of the site shall be submitted to and approved by the Mineral Planning Authority. The plan shall provide for a soil bund to provide a visual and an acoustic barrier between operations within the northern part of the site and the property, The Hassocks.

9. All identifiable topsoil from the site shall be stripped and stored in accordance with the approved soil storage plan.

10. No soil or soil forming materials shall be stored within 3 metres of the base of trees along the eastern boundary of the site. Control of agricultural weeds shall be undertaken annually over the stored soils.

Hydrology

11. Monitoring of groundwater levels within Ash Plantation shall be carried out throughout the period of extraction in accordance with the Approved Groundwater Monitoring Scheme, approved under permission F97/386.

12. In the event that groundwater levels are recorded at variance to the agreed levels specified in the Approved Groundwater Monitoring Scheme, approved under permission F97/386, in any two of the monitoring boreholes for a continual period of:

- i) two weeks within the period 1 April to 31 October;
- ii) one month within the period 1 November to 31 March;

de-watering shall cease until such time as groundwater levels return to agreed datum levels. The date of such cessation of de-watering as necessary under this condition shall be notified in writing to the Mineral Planning Authority.

13. Immediately following any cessation of de-watering arising from Condition 12 arrangements shall be made to reduce the area subject of de-watering and amended details of the working scheme shall be provided within two months to the Mineral Planning Authority for approval.
14. There shall be no direct discharge from the excavations to any watercourse.

Controls over Operations

15. CM2 Compliance with submitted details

The operator shall at all times carry out the working and restoration and aftercare of this development in accordance with the provisions of section 4 of the supporting statement accompanying the planning application, and the submitted plans listed below, and shall omit no part of the operations or undertake any variation unless otherwise agreed in writing by the Mineral Planning Authority;

Figure 5 - Sequence of working C2(N) and P46 dated April 2007

Figure 11 - Rev 1 - Proposed method of working (eastern extension) dated September 2007

Figure 3 - Approved restoration (P46 and C2(N)) dated April 2007

Figure 10A - Revised proposed restoration contours and sections, dated September 2007.

Figure 6 - Lorry routes to major roads dated April 2007.

16. CM1 Display of permission and plans on site.

A copy of this permission and the approved plans shall be displayed in the operator's site office at all times during the life of the site. Any subsequent amendments approved by the Mineral Planning Authority shall also be displayed.

17. H1 Hours of operation 0700 to 1800 Mon/Fri; 0700 to 1300 Saturdays.

No operations authorised or required under this permission, other than water pumping, servicing, environmental monitoring or plant maintenance, shall be undertaken outside of the following times other than with the prior written agreement of the Mineral Planning Authority;

0700 to 1800 Mondays to Fridays

0700 to 1300 Saturdays

and no such operations other than water pumping or environmental monitoring, shall take place on Sundays or Bank Holidays or National Holidays.

18. Trafficking between the site of excavations and the plant site shall be only along the track adjacent to the field conveyor.
19. Arrangements for the continued disposal of silt shall be in accordance with paragraphs 2.3.16 and 2.3.17 of the Supporting Supplementary

Statement dated August 1997 approved under permission F07/027.

20. Only indigenous quarry waste shall be deposited within the excavations.

21. Only broadband sound reversing alarms shall be employed on plant, including dump trucks, at the site.

22. N4 Effective silencers

No plant, machinery or vehicles shall be used on the site unless fitted with effective silencers.

23. N2 Noise level control

Between 0700 and 1800 on any working day, noise from extraction, de-watering, or restoration operations other than bund removal, shall not exceed a level of 45dB(A) Leq (1 hour) at Mill Farm House and The Hassocks, or representative positions to those locations, measured at a height of 1.2 metres above ground and at least 10 metres from any reflective surface.

(Note: Noise will normally be measured 'FreeField' at positions representative of the properties referred to in this condition. In the event of complaint noise may be measured at the façade(s) of those properties. The facade noise limit would include a +3dB(A) correction for reflective effects and the measurement taken at a point 1.2 metres above ground and 1 metre from the nearest façade of the property towards the noise source. The facade noise limit would take precedence over the FreeField limit in such circumstances.)

24. Between 1800 and 0700 the de-watering pumps shall be baffled such that noise from the pumps shall not exceed a level of 65 dB(A) Leq (5 minutes) at a distance of 10 metres from the installation.

25. The noise emitted at any time from the de-watering pumps shall not contain any of the features described in BS4142:1997 such as any distinguishable, discrete continuous note, (whine, hiss, screech, hum etc), or distinct impulses (bangs, clatters, clicks or thumps).

26. Noise from soil stripping, removal of spoil heaps, bund formation, landforming etc. shall not exceed 70dB (A) Leq (1 hour) freefield at Mill Farm House and The Hassocks, and shall be restricted to the hours of 0800 to 1700 Monday-Friday and 0800 to 1300 Saturday. Work shall be restricted to a maximum of eight weeks/year.

27. PP1 Bunding of oil tanks

Prior to being brought into use, any above ground fuel storage or refuelling facility shall have been bunded to at least 110% of the tank capacity and constructed on an impermeable base with an independent sealed drainage system with no direct discharge to any watercourse, land, or underground strata.

Restoration

28. Prior to the placing of restoration material against the northern edge of the excavations, the excavation face shall be prepared with an even engineered gradient of not steeper than 45 degrees, and a low permeability clay barrier shall be provided against the prepared batter along the full northern edge of excavations. The barrier shall have a permeability factor of 10^{-5} confirmed by

Quality Assurance testing. Such confirmation shall be provided in writing to the Mineral Planning Authority .

29. The area of planning permission F97/027 shall be restored in accordance with paragraphs 4.5.2 to 4.6.4 of the Supplementary Statement dated August 1997, and Figures 3 and 10 dated April 2007. The lake side margins remaining above water level shall be restored using soils stripped from the area identified as site P46 in the Adopted Suffolk Minerals Local Plan 1997 and spread to an even depth not exceeding 15cm. The remainder of the area shall be restored by the spreading, to an even depth not exceeding 15cm, of soils stripped from the area identified in the Adopted Suffolk Minerals Local Plan 1997 as C2 (North).
- 30. Within six months of the commencement of extraction within the eastern extension, details shall be submitted for the approval of the Mineral Planning Authority of the construction of the stream bed shown on approved drawing Figure 3 submitted with the planning application.**
31. The stream bed and reed bed area identified on approved drawing Figure 3 submitted with the planning application, shall be constructed:
 - a) in respect of the stream bed, in accordance with the details approved under Condition 30; and
 - b) in respect of the reed bed, in accordance with paragraph 4.8.3.2.1 of the Supplementary Statement dated August 2007.
32. The eastern extension shall be restored to the profile identified on approved drawing Figure 10A submitted with letter dated 8 September 2007, and in accordance with paragraphs 4.8.3 to 4.8.11 of the Statement supporting the application F2007/0430, as amended by letter dated 8 September 2007.
33. Establishment of grass-heath over the restored areas of permissions F97/027 and F2007/0430 shall be implemented and nurtured in accordance with paragraphs 3.1 to 3.4 of the Landscape Assessment & Proposals Report submitted as Appendix 1 of the Environmental Impact Assessment.

Aftercare

34. Aftercare of the site shall be progressively carried out in accordance with paragraphs 3.5 to 3.10 of the Landscape Assessment & Proposals Report submitted as Appendix 1 of the Environmental Impact Assessment, unless otherwise approved in writing by the Mineral Planning Authority. Aftercare shall commence immediately following the re-spreading of soils stripped from the site over any area larger than 2 ha, or as shall be agreed in writing with the Mineral Planning Authority.

NOTES:

1. This planning permission consolidates planning permission F97/027 relating to the adjacent mineral working.
2. A Licence to Abstract (No. 6/33/37/G/403) covers the water supply to this site for the purpose of sand and gravel washing. This may require

variation to add additional land. The applicant should contact the Environment Agency Water Resources Team for advice.

3. Under the Water Act 2003 de-watering is to become licensable at the earliest with effect from April 2008 although this date is subject to change. The applicant should again contact the Environment Agency Water Resources team for advice prior to commencement of de-watering within the extension area.

REASON FOR RECOMMENDATION

8. The proposals are consistent with the policies of the Approved County Minerals Local Plan, the emerging policies of the Draft Minerals Core Strategy (Submission Document), and is identified for mineral working in the Site Specific Allocations Development Plan Document (Preferred Options) views on which are to be considered by Cabinet on 9 October. There are no over-riding objections regarding environmental impact. The special nature conservation interests of the Breckland Farmland SSSI, and Cavenham and Icklingham Heaths SSSI, and the setting of the Black Ditches Scheduled Ancient Monument, are suitably protected and compensated through the proposals for restoration. The proposals would enable the logical progression of extraction of the mineral resources up to the eastern limits defined by the Black Ditches Ancient Monument, contributing to the forecast demand for primary aggregates for the Plan period 2006 to 2021.

ALTERNATIVE OPTIONS

9. None appropriate.

MAIN BODY OF REPORT

BACKGROUND

10. The site is one of two extensions to the existing approved quarry at Cavenham put forward by the operator for consideration in the MWDF towards the provision of aggregates 2006 – 2021. Public consultation has given rise to no objection to site 24 – the application site, and the site is recommended for inclusion in the Site Specific Allocations Development Plan Document, (Preferred Options version).
11. The existing workings are a preferred mineral working location identified in the 1999 Adopted Minerals Local Plan. Development under the 1997 planning permission commenced in 1997 and is 'on course' to be worked out in 2009. Extraction is complete at the northern end of the quarry where restoration provides for a lake. Workings are progressing southwards back towards the plant site over $\frac{2}{3}$ rds of the remaining approved area.
12. In order to protect groundwater levels in the Ash Plantation woodland to the north west of the application site within the Cavenham & Icklingham Heaths SSSI and National Nature Reserve (NNR), the operator was required to undertake a groundwater monitoring scheme throughout the period of excavation in C2 (North). This was to ensure that plants particularly sensitive to changes in soil conditions arising from a fall in groundwater levels would not be adversely affected by de-watering. In over nine years of working the requirements in the groundwater monitoring scheme for de-watering to cease, because groundwater levels have fallen against defined

criteria, have not been triggered. During this time much of C2 (North) and the adjacent workings were de-watered as one area. The de-watering scheme at that time required recharging of groundwater into ditches adjacent to Ash Plantation. In 2002 permission was granted to remove the ditches which, on the evidence of monitored ground water table levels, were no longer required. The requirement for continued groundwater monitoring and the contingency of cessation of de-watering, if circumstances specified in the scheme are met, remain.

PROPOSAL

13. The site is 9.3 hectares (gross), 8.9 hectares (net) of abandoned agricultural land and birch woodland between the current mineral workings at Cavenham and the Black Ditches Ancient Monument - a defensive rampart passing north/south through the heath. In proportion to the area of the existing quarry, including restored land, the application site represents a 7% extension of area.
14. The aggregate yield is estimated at 800,000 tonnes of sand and gravel above clay and chalk. At a typical production rate of 180,000 tonnes per year the yield would be worked out in 4.5 years. Permission is requested to 2013, on the basis of excavation commencing in 2009 when the adjacent approved reserves are expected to be worked out. Maximum plant processing capacity is 200,000 tonnes per annum.
15. Working would progressively advance eastwards from the adjacent workings along a continuous working face running north to south. Extraction would be via a dragline excavator loading onto a conveyor transporting aggregates back to the long established processing plant complex. Working would extend to 11 metres deep, approximately 3 metres below the water table. Excavations would be worked dry through de-watering as with existing arrangements. A de-silting lagoon would be formed in the first phase of excavation.
16. A 30 metre undisturbed margin would be retained against the Black Ditches Scheduled Ancient Monument. This is outside the application site. Soils stripped from the site would be stored:
 - a) along the eastern site boundary in a continuous bund north to south up to 3 metres tall and 20 metres set back from the Black Ditches boundary. This is to be relied upon as the main acoustic barrier for properties to the east and north-east; Mill Farm House (160 metres), and The Hassocks (340 metres); and
 - b) adjacent to the southern boundary of the extension on restored land.
17. Working hours are currently 0700 to 1800 Monday to Fridays, excluding Bank Holidays, and 0700 to 1300 hours on Sundays. No change is proposed.
18. There is no intended increase in production arising from the proposals, so traffic generation would remain as existing at 90 lorry movements per day.
19. The proposals would result in a loss of 4.4 ha of birch woodland in the southern part of the application site adjacent to the restored margins to the former quarry area. Restoration would increase the dry breckland heath habitat in the area by 9 ha. Restoration is proposed to merge levels and extend the same acid grass habitat with the approved restoration at the

existing quarry currently under excavation to the west of the application site. Trees adjacent to and over the Black Ditches Ancient Monument would be retained. Aftercare is proposed as an extension of the existing aftercare scheme covering the adjacent working which replicates the prescription for acid grass heath management for ground nesting bird habitat and which is the subject of a Defra Environmentally Sensitive Area scheme.

POLICY

20. The current Development Plan context for this application is the Adopted Suffolk Minerals Local Plan. However we are now beyond the end of that Plan period (2006), and significant progress has been made on the replacement of the current Minerals Plan with the Minerals and Waste Development Framework, (MWDF), which plans for the provision of aggregate minerals 2006 - 2021.
21. The programme for completion of the MWDF anticipates:
Minerals Core Strategy Development Plan Document, (Submission stage):
Adopted by Full Council September 2007 to proceed to Public Examination May 2008
Adoption anticipated March 2009

Minerals Site Specific Allocation Development Plan Document, (Preferred Options)
Cabinet consideration of the Draft Document October 2007
Public Consultation on Cabinet approved proposals October to December 2007 Consideration by Full Council July 2008
Examination in Public January 2009.
Adoption September 2009
22. Following approval by Full Council, the policies of the Core Strategy are material considerations in the development control process. Those policies currently carry less weight than the policies of the Adopted Plan but will gain weight as the Development Framework programme moves towards Adoption. As a material planning consideration regard should be had to the emerging policies in determining this application.
23. No objection has been expressed against the site through public consultation on the Plan to date.
24. The relevant policies of the Adopted Development Plans are set out below. The policies of the Draft Minerals Core Strategy Development Plan Document are set out in Appendix A.

Adopted Suffolk Minerals Local Plan - 1999

25. The following policies of the Adopted Minerals Local Plan are relevant to the application:

SMLP 6 The County Council will aim to maintain a reserve of land (a landbank) in Suffolk with planning permission for mineral working, sufficient to supply at least enough sand and gravel to meet the agreed sub- regional apportionment throughout the plan period, subject to other relevant policies of the development plan. Furthermore the Council will aim to provide such a land bank appropriate for at least seven years extraction at the end of the plan period.

SMLP 7 The County Council will grant planning permission for sand and gravel working from within the following sites, as shown on the proposals map, subject to the other relevant policies of the development plan.

P14 Chilton Estate, Chilton

P42 Folly Farm, Tattingstone/Bentley

P44 Pannington Hall, Wherstead

P48 Bay Farm, Worlington/Red Lodge/Freckenham

P58 Lot 9, Bramford

P60 Jacksons, Bramford

P86 Redhouse Farm, Bucklesham

P170 Wangford Common Covert, Wangford with Henham

Planning permission for sand and gravel working outside the specific sites listed above and shown on the proposals map will be granted where at least two of the following criteria, including (d) are satisfied:

- a) the development covers an area of generally less than 5 hectares and forms an extension to, or replacement for, an existing quarry;
- b) it can be demonstrated that working is necessary prior to other permanent forms of development taking place in order to prevent sterilisation of sand and gravel resources;
- c) the proposal is for a borrow pit to serve a major civil engineering or road construction project;
- d) the proposal does not conflict with other relevant policies of the development plan.

Planning permission for sand and gravel working for proposals which do not meet the above criteria may be granted where it can be demonstrated that the site offers significant advantages over those specified above and identified on the proposals map in terms of landscape considerations, environmental and ecological impact, disturbance to residential amenity, access and highway safety, and where the proposal does not conflict with other relevant policies of the development plan.

SMLP 1 When considering planning applications for mineral working and associated development, the County Council will grant permission where:

- a) the proposals are not considered detrimental to designated landscape areas;
- b) satisfactory proposals are made to retain and protect where practical, trees, woodlands, hedgerows and other landscape features;

- c) satisfactory proposals are made for the protection of sites of ecological and geological interest;
 - d) an archaeological field evaluation of the site has been made in cases where important archaeological remains may exist, in order to provide the basis for any necessary conservation strategy including, as appropriate, provision for the recording and/or avoidance and protection of important archaeological remains and their settings;
 - e) satisfactory proposals are made to protect listed buildings and conservation areas, and their settings;
 - f) satisfactory proposals are made which do not adversely affect flood patterns and provide, if necessary, for the construction of additional flood protection works;
 - g) satisfactory proposals are made to protect groundwater and surface water;
 - h) satisfactory proposals are made to prevent disruption to public rights of way, or if this is not practicable satisfactory proposals are made for diversion;
 - i) there is satisfactory evidence to show that measures intended to protect the environment will be effective;
 - j) the cumulative environmental effects of the proposed mineral workings and the existing mineral workings in the vicinity would be acceptable.
26. Other policies SMLP 2-5 deal with detailed aspects of mineral working, transportation and restoration. These are appropriate to any proposal involving new working. Committee should be aware of these policies as a matter of routine. The full text of these policies is now available on line at:

<http://www.suffolk.gov.uk/Environment/MineralsAndWastePlanning/MineralsPlanning/SuffolkMineralsLocalPlan.htm>

AREAS OF NATURE CONSERVATION PROTECTION AFFECTED

27. The quarry lies within the Breckland Farmland SSSI, a component of the Breckland SPA, designated for its habitat for rare birds. The site is within this designated area and adjacent to the Cavenham & Icklingham Heaths SSSI, a component of the Cavenham & Icklingham National Nature Reserve (NNR) and the Cavenham & Icklingham SAC designated for its Breckland grasses and flora. The Cavenham Heaths NNR boundary embraces most of the SSSI and includes Ash Plantation and Fen where the water table is high and where there are patches of flora sensitive to small changes in groundwater levels.
28. As a result of the site lying within the Breckland Farmland SSSI and adjacent to the SAC, the County Council as the Competent Planning Authority under the Conservation (Natural Habitats &c) Regulations 1994 in respect of the promoted development is obliged to prepare an Appropriate Assessment of the impact of the proposals on the nature conservation interests. This is attached as Appendix B to this report, and should be taken into account as a material consideration when determining this planning application.

CONCLUSIONS OF SUBMITTED ENVIRONMENTAL ASSESSMENT

Effect on Ecology & Wildlife

29. The site was subject to Ecological Survey in June 2004, covering plant and animal species. The proposals have also been drawn up with prior consultation with Natural England and the RSPB.
30. The site is currently birch woodland containing former wartime buildings, and abandoned agricultural land. As such the application site is not considered to currently represent the optimum nesting habitat for Stone Curlew for which the SSSI has been designated. Without mitigation the proposals are assessed as having a temporary adverse impact upon the integrity of the SPA through loss of habitat for ground nesting birds, disturbance to nearby ground nesting birds from noise and movement of people. Mitigation is proposed that has been formed in liaison with Natural England and RSPB. These mitigation measures would reduce the adverse effect.
31. The restoration proposals to create dry breckland heath as an extension of the dry acid heath restoration achieved on the former mineral working land to the south, and proposed over the current excavations to the west, provide compensatory additional heath habitat over the application site and therefore a bio-diversity 'gain'.

Archaeology

32. The Ancient Monument comprises a linear earth rampart 1.5 metres high, along the full length of the eastern site boundary. The Rampart, for the length past the site, is enveloped by birch woodland. The proposals provide a 30 metres stand off from the boundary of the Black Ditches Scheduled Ancient Monument. Mineral extraction would destroy any archaeology present within the extraction area.
33. There is potential for further new archaeology to be uncovered during the development and the applicant has invited a condition of any permission requiring a scheme of archaeological investigation to be carried out prior to commencement.
34. Restoration profiles have been modified to provide a slope away from the Black Ditches consistent with the typical gradients achieved on the restored land to the south which are between 1 in 12 and 1 in 16. More of the Black Ditches would be exposed to view from the west resulting from the removal of tree cover over the southern half of the site. These two factors would now result in a landform more in keeping with the setting of the Black Ditches defensive rampart.

Groundwater

35. De-watering would lower the water table by 3 metres across the site itself. Immediately beyond the void the drawdown would be 10 cm at 100 metres away and 6 cm at 300 metres away. Groundwater abstraction points in the locality would experience a maximum lowering of groundwater levels of 2 cm. The impact on groundwater levels in the vicinity of the site, on groundwater abstraction points, and on the groundwater dependent

conservation sites (i.e Ash Plantation and the wet meadows within the SSSI) is considered insignificant by the consultants. Further work has been undertaken to satisfy Natural England regarding the risk to water sensitive plants within the SSSI.

36. The submitted assessment recommends that regular monitoring of the existing boreholes in and around Ash Plantation is continued in order to verify the predictions as the development proceeds.
37. The impact of de-watering and discharge arrangements (via a settlement lagoon to be provided within the excavated void) has been assessed as likely to be insignificant.

Flood Risk Assessment

38. 20% of the northern part of the application site lies within the notified Floodplain (Zone 3b) of the River Lark, where the chance of flooding is estimated by the Environment Agency as 1 in 200 years. To place this in context to the existing levels of the River Lark, the assessment concludes that, if the indicative floodmap is correct in the area of the application site, the river level would need to rise by more than 8 metres.
39. Sand and gravel working in Zone 3b is identified in PPS25 to be 'water compatible'. As such proposals for mineral extraction are compatible with flood alleviation.
40. There is potential for flooding of the northern part of the quarry as a result of the pathway of abstracted groundwater discharged to the river being blocked as a result of the river Lark over topping its banks. This could be minimised by allowing water levels in the restored land to the south to rise temporarily. The impact of flood on the restored dry acid grassland and loss of ground nesting bird habitat would be temporary, soon recovered, and displaced birds could find refuge on the upper restored margins to the land to the south. In the event of flooding, land downstream would benefit from the added flood storage capacity created by the mineral working.

Landscape and Visual Impact

41. The main landscape change arising from the proposals would be the loss of the remainder of the birch plantation, an area of birch with a belt of Scots Pine trees on the south end. The remainder of the site is rough grass arising from abandoned agriculture. The landscape change arising during operations are assessed as 'slight adverse'.
42. Upon restoration the land would develop as dry heathland. As a consequence the long term impact in landscape terms would be 'no notable change' with the land use change to dry heath, given the local designations, seen as a positive benefit.
43. The landscape setting of the Black Ditches defensive rampart would improve as the containment by woodland within the south of the site would be removed and the area incorporated into the wider quarry restoration to dry heath with longer views being created towards the west.
44. No dwelling has a direct view of the site. The only public viewpoint of the site is from a short section of the Cavenham to Icklingham road to the east. The Black Ditches rampart is mostly enclosed by woodland when viewed from the Cavenham to Icklingham road.

45. The visual and landscape impact is accordingly assessed as 'no notable change' for the duration of working and 'slight positive improvement' upon restoration.

Highways

46. The quarry is located 4km east of the A11(T) and 5km north of the A14(T) Primary Routes. The C624/C627/C626 roads over which access to the quarry is obtained are identified on the Suffolk Lorry Route Network as Local Access Lorry Routes. No increase in production is expected to arise from the proposals and therefore existing traffic movements are not expected to change. The mineral working activity generates a daily average of 90 lorry movements, normally about 80% tipper trucks and 20% smaller pick up vehicles. On average 60% of traffic leave and enter via Tuddenham to the west and the remainder through Cavenham to the east.
47. There are no Public Rights of Way affected.

Noise

48. A Noise Impact Assessment has been provided by an Acoustic Consultant and audited by the Council's Noise Engineer.
49. Noise from quarry operations and restoration is controlled at the adjacent workings by planning condition, to 45dB(A) Leq (1 hour) freefield at the two nearest properties, Mill Farm House and The Hassocks, east and north-east of the site. This is based on a level of +10 dB(A) above pre-existing background. (MPS2 advocates that, subject to a maximum of 55dB(A) LAeq (1 hour), a daytime noise limit should not exceed the background level by more than 10dB(A).
50. Worst case scenarios of working were modelled for the purposes of assessment and prediction. The predicted 'worst case' noise levels have been calculated as:
 - 44.4 dB(A) Leq (1 hour) at Mill Farm House, (160 metres)
 - 41.3dB(A) Leq (1 hour) at The Hassocks, (340 metres)
51. The results indicate that the noise generated by the proposed quarrying and restoration would be within the criteria set by Government in MPS 2.

Dust

52. Mill Farm House and The Hassocks are also the nearest dust sensitive properties. Each of these would be separated from working by a tree screen of width between 35 – 70 metres wide.
53. The most significant source of dust from mineral workings is the movement of vehicles and plant on unmade tracks. Sand and gravel haulage would continue to be by field conveyor and the normal use of the haul roads would be for maintenance purposes.
54. Dust disturbance has not previously arisen as a concern and on this basis and the above no dust deposition model has been provided.

Soils

55. A soil resources assessment has been provided.

56. The land is within the agricultural land classification as Grade 4 land. The soil resource is sandy topsoil 30cm thick with poor quality subsoil/overburden underlying with trace iron and aluminium and slight cementation.
57. Soils would be stripped in two phases and stored until required to be spread in final site restoration along the eastern site boundary 30 metres from the Black Ditches and on part of the restored land to the south, in bunds 3 metres tall.
58. There are no issues of soil conservation as part of the national agricultural resource.

REPRESENTATIONS

59. No representations have been received from members of the public.

CONSULTATIONS

Go East

60. No comment on strategic issues. Identifies appropriate soil conservation practices to be employed for Best and Most Versatile land. (Agricultural Grades 1, 2, and 3a).

Natural England

61. The development is not directly connected with or necessary to site management for nature conservation and has potential to have a significant effect on the internationally important interest features of the site, either alone or in combination with other plans and projects. An Appropriate Assessment under Regulation 48 of the Conservation (Natural Habitats &c) Regulations 1994 is required.
62. Natural England does not object to the grant of planning permission.

Ministry of Defence Estates Safeguarding

63. The site lies within statutory consultation distances relating to Mildenhall and Lakenheath airbases. There are no safeguarding objections.

English Heritage

64. *Initial comment:* Suggests that any extraction should include a wider margin away from the earthworks with the temporary earth bund and fencing also at a greater proximity from the site.
65. The post-extraction contouring should be more gradual mirroring the existing topography, so as not to radically alter the landscape context and setting of the monument. This should not be achieved by reshaping the base of the excavation but by using imported material to arrive at a landform with a higher post working level in a graduated band adjacent to the monument. Accordingly EH recommends that permission should not be granted for the current application.

[Head of Development Control: Reply from English Heritage to revised proposals to deal with these concerns is awaited and will be reported. The revisions involving :

- a) no disturbance or soils storage within 30 metres of the Scheduled Ancient Monument (SAM);

- b) retention of trees adjacent to the SAM; and
- c) provision of a shallow restoration gradient adjacent to the Black Ditches consistent with the restored land to the south, i.e 1 in 12 to 1 in 16]

RSPB

66. Confirms that RSPB has been consulted by the applicant at all stages in the development of the application. Providing the proposed mitigation and long term management of the existing and restored area is secured, the development will not adversely effect the Special Protection Area.

Environment Agency

67. Satisfied that the applicant has appropriately considered the impact of de-watering on groundwater and water features.
68. Recommends that conditions be attached that require:
- a) an additional impact assessment to be submitted prior to the commencement of dewatering to identify the drawdown level of groundwater in terms of level Above Ordnance Datum;
 - b) continued monitoring as outlined in section 4.4 of the groundwater impact assessment, with reports submitted annually; and
 - c) a scheme for the provision and implementation of pollution control should be submitted and agreed in writing with the Local Authority for approval, prior to commencement, and pollution control shall be carried out in accordance with the approved scheme.
69. Informatives are provided regarding Licensing of Water Abstraction and Dewatering.

Highways Development Control

70. No objection.

County Archaeological Service

71. Recommends that any permission is conditional that prior implementation of a scheme of archaeological investigation is undertaken.

County Noise and Air Pollution Control Manager

72. Measurements of daytime noise levels taken by the Noise Manager at the nearest residential property (Mill Farm House and The Hassocks) have been found to be in the low to mid 30s dB(A) L90 at Mill Farm House and The Hassocks. The current noise limit of 45 dB(A) Leq (1hour) was set in accordance with MPG 11 Guidance. The revised guidance set out in MPS 2 Annex 2 states that the limit should be set at no more than 10dBA above background. The existing control limit continues therefore to be appropriate.
73. Night-time operation of the de-watering pumps have the propensity to be disturbing to the nearest properties where background noise levels in the area would be low. Conditions are recommended to specifically control noise levels from night-time operation of the pumps.

Suffolk Wildlife Trust

74. No response received.

Lark Valley Association

75. No response received.

Tuddenham Parish Council

76. No response received.

Icklingham Parish Council

77. No response received.

Cavenham Parish Council

78. No objection.

Forest Heath District Council

79. No objection.

COMMENTS OF THE HEAD OF DEVELOPMENT CONTROL

80. The application has been the subject of pre-application consultation with Natural England and RSPB in view of the Nature Conservation designations affecting and close to the site. The proposed working arrangements and restoration reflect the successful re-creation of breck grass heath achieved at the former workings to the south in partnership with the RSPB and with the approved arrangements at the existing working to the west. A Pre-application briefing of the proposals was made to the Cavenham Quarry Community Liaison Group in February this year and an exhibition of the proposals was provided at Cavenham in May.
81. The site is slightly larger than the “generally less than 5 hectares” limit for extensions and exceptions to the sites identified under SMLP 7. However given the identification of the area as a preferred option in the emerging Minerals Development Plan Document, this is not an over-riding factor. The site would otherwise qualify under SMLP 7 as offering a bio-diversity gain in restoring redundant agricultural land and birch woodland to breck acid heath with proven attraction to rare ground nesting birds.
82. The scale of the reserve is not of strategic significance for the landbank which currently is 9.2 years based on the forecast demand set out in the proposed Minerals Core Strategy Policy 1. Prematurity pending the Examination of Site Specific Preferences in the Minerals Development Plan Document is not therefore an issue.
83. The applicant has revised the proposals to deal with the concerns of English Heritage and Natural England and these are reflected in the recommended conditions 2-4 and 11-12.
84. The applicant’s hydrological consultants (Entec) have had direct discussions with the Environment Agency regarding the methodology of the groundwater assessment in the EIA. Latest correspondence suggests that technical differences of opinion regarding the methodology used in the assessment are not expected to alter the conclusions of the assessment. Conditions of the existing permission regarding a requirement to continue

monitoring groundwater in accordance with the current approved scheme and circumstances when de-watering should cease are repeated and should provide sufficient safeguard for the flora within the SSSI. All licensed abstraction points are further distant from the excavations and are estimated not to be significantly affected. The predicted drawdown on groundwater levels at the abstraction points is not expected to exceed 2 cm at any time no time or any of the six locations.

85. The noise assessment predictions assume a component of noise reduction attributable to the soil screen bund at Mill Farm House. It is doubtful whether the soils bund at the eastern boundary as shown on the application drawing will provide much if any attenuation from workings at the northern end of the site to Mill Farm House. The noise engineer is satisfied that the predictions for Mill Farmhouse are acceptable, but has suggested that the soils screen bund be extended further around the north east boundary to cover the noise path from working in the north of the site to Mill Farm House to provide greater assurance that noise limits can still be met when workings are within this area. This is dealt with in recommended conditions 8 and 9.
86. Approval would allow the remaining economic sand and gravel deposits up to the Scheduled Ancient Monument to be extracted consistently and in co-ordination with the adjacent quarry working prior to restoration in the currently approved area. If worked later restored areas would need to be disturbed again to access the area, or the deposits foregone. Approval on the terms recommended would be consistent with the emerging Minerals Development Plan Documents.

SOURCES OF FURTHER INFORMATION

- a) Correspondence and consultation replies held on case file F2007/0430.

This includes documents relating to the subject matter of the report which:

- a) Disclose any facts or matters on which the report, or an important part of the matter is based, and
- b) Have been relied on to a material extent in preparing the report.

As well as any published works or legislation.

Background papers used in preparing

F2007/0430; Proposed extension to mineral working, Cavenham Quarry, CAVENHAM.

Draft Minerals Core Strategy Preferred Options - Policies

The application should also be assessed against the emerging policies of the Minerals Core Strategy Preferred Options relating to the period 2006 to 2021. This document sets out the Strategic 'Vision' for the supply of aggregates over the Plan period and generic development control policies. These are broadly consistent with the policies of the Adopted Plan, but adds a strategic 'vision' defining broad locations for sand and gravel extraction and aggregate handling and recycling facilities. The Cavenham quarry lies just within and at the western end of a corridor of future provision based along the growth zone of the A14 corridor.

The following policies were approved by Full Council on 13 September to proceed to Public Examination.

POLICY 1: The MPA will allocate sites for the extraction of sand and gravel based on the regionally-apportioned figure of 1.73mt per year for the duration of the Plan period (through to 2021).

POLICY 2: Preference will be given to aggregate sites in Suffolk located in the broad belt that follows the A14 stretching from east of Ipswich to the western extremity of the county and other areas identified on the accompanying plan (Map A), where geological information suggests the existence of viable deposits of sand and gravel.

In allocating sites in the Specific Sites Allocation DPD, there will be a presumption in favour of extensions to existing sites over new sites, so long as sufficient reserves can be produced from extended sites to meet the regional apportionment. However, in all cases it must be in accordance with the other policies in the Core Strategy.

POLICY DC1: Proposals that would result in an adverse impact on landscape character and/or historic features of a Suffolk Landscape Character Type (LCT) will not be permitted.

Working and restoration proposals, including advanced planting, should be designed to respect the particular LCT in which the site is situated.

[Head of Development Control; The site lies within the LCT 'Rolling Estate Farmlands' vis an "...area of rolling lowland landscape with a shallow mineral and impoverished soil characterised by large estate farms and tightly clustered settlement." [This is a summary of the field Survey Sheet description of unit 139 of the Suffolk Landscape Character Assessment, held by the Countryside Service of E & T Dept of SCC]

POLICY DC2: Minerals development proposals that would:

- i) harm regionally and locally designated sites of ecological and/or geological/geomorphological interest, or sites which are proposed to be so designated; and/or
- ii) affect adversely natural habitat types and species listed in the Suffolk BAP and/or East of England Plan's bio-diversity targets and which could result in an increase in the fragmentation and/or isolation of natural habitats;

will only be permitted if it can be demonstrated that measures to mitigate harm to the site, habitat(s) and/or species can be put in place. If appropriate mitigation measures cannot practicably be implemented, compensatory habitat or geological exposure of an equivalent standard at a suitable alternative location must be provided.

POLICY DC3: A desk-based archaeological assessment shall be undertaken in advance of the submission of any planning application for mineral working. Where the Suffolk Historic Environment record indicates that there is the high potential for archaeological remains and/or the site is 5 hectares or larger in size, a full evaluation will also be required and will form the basis for any preservation and/or conservation strategy.

POLICY DC6: An outline strategy should be submitted for aftercare of the land to a condition suitable for an appropriate after-use. Preference will be given to after-uses that promote the creation and management of priority habitats listed in the Suffolk BAP and/or that conserve geological and geo-morphological resources highlighted in the Suffolk GAP.

F2007/0430: PROPOSED EXTENSION TO MINERAL WORKING, CAVENHAM QUARRY, CAVENHAM.

Appropriate Assessment of the impact of the proposals on the nature conservation interests of the Breckland Farmland SSSI and adjacent Special Area of Conservation, under the Conservation (Natural Habitats &c) Regulations 1994.

Regulation 48 Appropriate Assessment

Re: Marston's Quarry, Cavenham, Extensions (SCC Site Numbers 23 & 24)

1. Description of Development:

It is proposed to extend the existing minerals/aggregates works at the existing Marston's Quarry, Cavenham, Suffolk by adding two further areas, one to the west and one to the east of existing works. These areas total 18.9 hectares.

These proposed areas are shown in the plan attached and are numbered by Suffolk County Council as Sites 23 and 24 in the Council's Minerals Specific Site Development Plan Consultation Document.

This site is within the recently designated **Breckland Special Protection Area** hence the requirement to carry out this Appropriate Assessment. This area of Suffolk and Norfolk has been designated because, *inter alia*, it provides a habitat for about 75% of the United Kingdom's population of **Stone Curlew** (*Burhinus oedicnemus*).

As to this site, there are confirmed reports of Stone Curlew and the European Protected Species **Woodlark** (*Lullula arborea*) breeding.

Further details of the SPA designation are available on the **Joint Nature Conservation Committee's** website at:

<http://www.jncc.gov.uk/default.aspx?page=2016>.

More information about the **Stone Curlew** can be found here:

http://www.arkive.org/species/ARK/birds/Burhinus_oedicnemus/more_info.html

More information about the **Woodlark** can be found here:

http://www.arkive.org/species/ARK/birds/Lullula_arborea/

Site 24:

Grid Ref: 5762 2722

Hectares: 8.0

Site 24 is a mixture of some smaller areas of open ground and young birch encroachment. It does not currently appear to be either typical or ideal Stone Curlew nesting habitat though, once again, there are reports of these birds visiting parts of this site. Similarly to Site 23, there are no records of nesting activity in this area for the last few seasons.

The Operation

The proposed operation on the ground will involve the removal of topsoil and substrate followed by the removal of aggregates from both areas combined over a period of 8 to 10 years.

The quarrying operation will involve the use of heavy machinery, the installation of conveyor belts and periods of considerable human and mechanical activity, appropriate to large-scale aggregate removal.

The operation will be carried out by: Messrs. Allen & Newport Ltd. (Sand, Gravel & Ready Mixed Concrete Producers) whose Registered Office is at: Walton House, 31, New Path, Fordham, Ely, Cambridgeshire CB7 5JX.

Post Extraction Restoration

Following completion of extraction, it is proposed that the site be restored to typical Breckland grass heathland complementing the existing 47.4 Hectares of restored acid grassland heath adjacent to these sites.

Those areas that have already been restored are subject to a detailed Management Plan (dated November, 2003) drawn up and implemented by the RSPB at the East Anglia Regional Office, Stalham House, 65, Thorpe Road, Norwich, Norfolk NR1 1UD.

That Management Plan is most pertinent to this Appropriate Assessment and a copy is attached.

2. Effects of the Development:

There is no doubt that this proposed site would lead to considerable disturbance and, in the short term, to a loss of habitat for all of the species of interest in this area. Sympathetic and properly managed restoration would, however, provide long term positive improvements in habitat.

Negative Impacts:

- Loss of breeding and foraging habitat as the area will be stripped of soil and quarried.
- Disturbance to any individuals or populations in the vicinity by human and mechanical activity.
- The area being worked will not be able to be managed to the best advantage for species of interest.

Positive Impacts - Short Term:

- Recognition that, post-restoration, this scheme will be of benefit to a European Protected Species.
- Continuation of the policy of not promoting the site, leaving species of interest undisturbed by malicious interest.

Positive Impacts – Long Term:

- By entering into a Management Plan similar to that annexed hereto, there will be a greater area of effectively managed habitat available for the key species in the future.
- The Management Plan should contain the following features in order to be of benefit:
 - Weed Control (e.g. Ragwort).
 - An appropriate mowing/grazing regime.
 - Scrub and tree control and removal.
 - A monitoring programme to measure breeding success.
 - A monitoring programme to measure predation and, if necessary, the institution of control measures.
 - Further research including a suite of further surveys for soil, vegetation, invertebrates and small mammals.
 - Establishment of a Liaison Committee which should include Natural England and the RSPB.

3. Mitigation:

This scheme, which proposes to remove a potential (if not actual) breeding habitat, is likely to cause short term disturbance to a fully protected species but, in the long term, is likely to be of real benefit.

To mitigate against disturbance of potentially breeding birds, the work to prepare the site will take place over winter to strip topsoil. The setting up of heavy equipment (such as conveyor belts) will also take place out of the breeding season. This is so birds using adjoining parts of the site that have already been restored will not be further disturbed by those operations.

The RSPB Management Plan of November, 2003 sets out an agreed series of Objectives and Prescriptions for the existing area of restored heathland. The monitoring and surveying of that area will inform all interested parties of any arising issues that could be avoided during the proposed operations.

4. Effect on Integrity of a European Designated Site:

This proposed operation will remove 19 hectares in total of potential breeding and foraging habitat for at least two European Protected Species, **Stone Curlew** (*Burhinus oedicanus*) and **Woodlark** (*Lullula arborea*) within the European Designated **Breckland Special Protection Area**.

This may well have a short term negative effect upon populations that might otherwise have used this site but, by suitable restoration and drafting, agreeing and implementing a Management Plan similar in scope and effect to that annexed hereto, the long term impacts are highly likely to be positive.

In effect, restoration will improve the integrity of this Special Protection Area.

5. Consultees:

The consultees for this Appropriate Assessment may include the following:

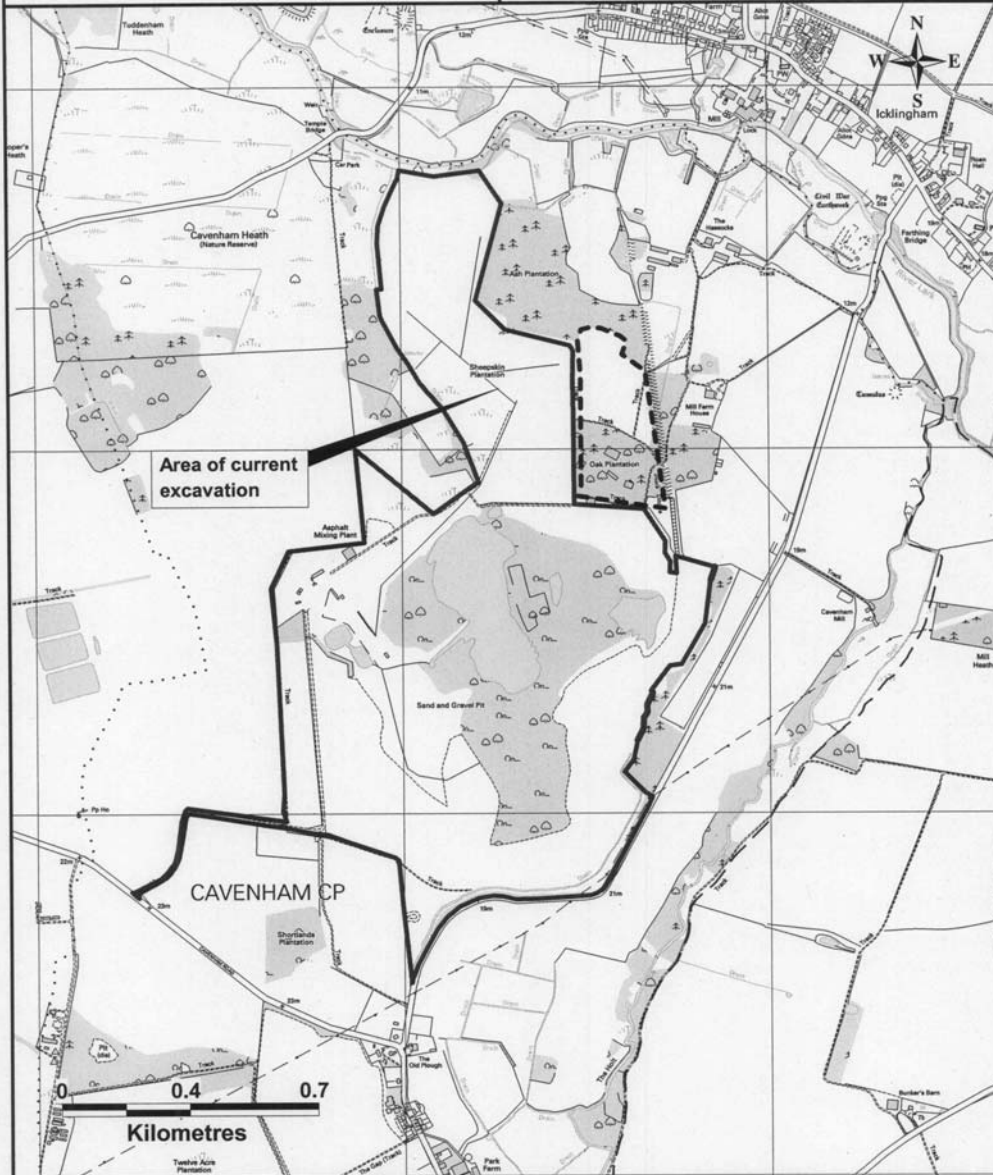
- Natural England
- Messrs. Allen & Newport
- RSPB
- Suffolk Wildlife Trust
- Forest Heath District Council
- Cavenham Parish Council

Dated: 14th February, 2007.

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KEY

Boundary of existing quarry	—
Proposed quarry extension	- - -

**Proposed extension
Marston Pit**



Lucy Robinson
Director of Environment & Transport
Endeavour House, 8 Russell Road, Ipswich, Suffolk. IP1 2BX.

**F07/0430
Cavenham**

