

**NORTHAMPTONSHIRE COUNTY COUNCIL MINERALS AND WASTE LOCAL PLAN UPDATE  
EXAMINATION 29<sup>TH</sup> NOVEMBER 2016**

STATEMENT BY DAVID ADAMS OF THE COACH HOUSE, PASSENHAM, MK19 6DH

MY STATEMENT REFERS TO MATTER 2, ISSUE 3, OF THE INSPECTOR'S DRAFT MATTERS AND ISSUES PAPER

I intend to show that allocation M6 Passenham Extension East cannot be delivered without causing adverse harm to the Historic Environment, the Natural Environment and Flood risk, and should be removed from the plan.

I would like to draw the Inspectors attention to document 402, Technical appendix.

Page 66 refers to Air Quality,

There are major omissions in in this section. No mention is made of the prevailing wind, which is South West and my house and other properties are directly downwind of the site which is only 110m away. A mature tree belt is mentioned as a mitigating feature, however there is no mature tree belt in front of the Coach House or the Manor house.

The section mentions various operations that cause dust but omits the restoration by infilling as a dust source. Having experienced gravel workings at Passenham for many years, I have found this particular operation to be the dustiest and most difficult to suppress.

Page 66 also deals with Flood risk and states that site M6 is in zone 3b and the NPPF technical guidance tells us that there should be no net loss of floodplain storage. The council have given no guidance on the method of restoration for this site and therefore we must assume that it would be filled with imported material, which many research projects, indicate a reduced water bearing capacity when this restoration method is used. The DEFRA sponsored paper, "The Influence of Aggregate Quarrying in Floodplains on Flood Risk" promotes either open water or water habitat creation to be most effective at reducing flood risk.

Page 67, deals with Noise and Vibration. The section states once again, that residential properties are only 110 m away and mentions mitigation measures but not in specific detail. The usual mitigation measures in such circumstances are earth bunds but in this case the Environment agency have said that there should be no bunds in the flood plain. Therefore, noise mitigation will be difficult to achieve.

Page 69 deals with the Historic Environment and heritage assets. This section mentions the wealth of historic elements in Passenham but fails to mention the Grade I listed Tithe Barns. The NPPF guidance at 128 and 129 refers to the setting of heritage assets but the Council have not considered the setting of this manorial hamlet in the Great Ouse Valley to be

important. SNC however have recognised the importance of Passenham by designating the village and the surrounding land as a Conservation Area. The designation of the conservation area is described in document 508.

The council concede that there would be a major adverse impact on the Historic Environment and this alone should render site M6 unacceptable.

I therefore contend that Site M6 is unsound and should be removed from the plan.

Attached Appendix: DEFRA sponsored paper "The Influence of Aggregate Quarrying in Floodplains on Flood Risk" Cover page and page 6

**DEFRA**  
Department for  
Environment,  
Food & Rural Affairs

**M·I·S·T**  
Mineral Industry  
Sustainable Technology

**miro**  
Mineral Industry  
Research Organisation

## The Influence of Aggregate Quarrying in River Floodplains on Flood Risk and Biodiversity



**Symonds Group Ltd**

RMC Aggregates  
Lafarge Aggregates

## **EXECUTIVE SUMMARY**

This report has been prepared by Symonds Group Ltd working, in partnership, with RMC Aggregates (UK) Ltd and Lafarge Aggregates Ltd, to investigate the influence of aggregate quarrying in river floodplains on flood risk and biodiversity. It has been funded by the Minerals Industry Research Organisation (MIRO), with funds derived from the Aggregates Levy Sustainability Fund.

River floodplains are important natural landforms, which convey and store water during flood events and provide important corridors recognised for their ecology and habitat value. They are also used for a wide range of human activities including agricultural, industrial, residential, recreational, commercial and aggregate extraction. Increasingly, these human activities are not only affected by flooding, but are also impacting on the natural function of floodplains.

The primary aims of this project have been: to examine the net effects of quarry excavations, spoil tips, overburden mounds and aggregate stockpiles on flood storage capacity and floodplain conveyance; to examine the residual long term effects following different types of restoration; and to assess the effects of different restoration schemes on local biodiversity.

A 2-dimension hydraulic model was developed for a stretch of the River Uck, downstream of Uckfield town, in order to model the influence of a hypothetical quarry on flow discharge, water depth and velocity. A number of model simulations were undertaken to assess the potential impact of factors relating to quarry design and working practices, such as the creation of stockpiles on the floodplain, and the effect of groundwater management and vegetation following restoration.

The modelling results indicate that a quarry located within the floodplain will clearly have a net impact on flood discharge, flow velocities and the extent of flooding. The nature and extent of the modelled impacts will depend on a number of factors, but most importantly the magnitude of the flood event in relation to the size of the quarry. The greatest impact on peak discharge and water levels were identified on lower magnitude flood events. The creation and alignment of bunds and stockpiles were found to obstruct water flow, increasing water velocity around these features. Restoration of a quarry to open water provided some additional storage capacity above the pre-quarrying ground surface, vegetation appeared to have limited impact on flow velocity.

The paucity of base line and comparative ecological surveys has meant that it has not been possible to carry out a quantitative comparison of the different restoration techniques and management strategies on local biodiversity. A comprehensive review of published information and reports has permitted a qualitative assessment to be carried out. The findings of this review indicate that the restoration of worked out quarries can provide a blank canvas on which to create a range of habitats, such as reedbeds and grazing marshland. Some of these habitats have been in decline through the last century, so restoration of quarries can provide opportunities to develop habits for rare or protected species and enhanced biodiversity more generally.

The detailed base line ecological survey is an important first step to designing a sound site restoration plan. This will ensure the site the conditions for habitat creation, such as shallow water margins, channels and islands are designed and constructed. Post-restoration site management will also be important at some sites to ensure that vegetation succession by opportune species does not occur. Active management is most suitable where the restoration plan seeks to attract particular species to the site.