

East Leake Quarry

Location

East Midlands Airport (EMA) is approximately 10km from the site and so within the 13km radius for statutory aerodrome safeguarding consultation. East Leake Quarry is located within the holding circle for East Midlands Airport where aircraft are approximately 2000-3000ft above the site, and aircraft arriving and departing at a height of approximately 2000ft.



History

Sand and gravel has been extracted at East Leake Quarry since the early 1990s. The site has three permitted planning units known as Lings, Jenks and Burtons. The approved restorations all include an element of wetland landscaping and therefore the further extension of 27.5 hectares would add additional water with potential cumulative effects of further wetland and increase in the overall size of the site .

As part of designing the restoration scheme pre application consultation was undertaken with East Midlands Airport, Nottingham Wildlife Trust, Nottinghamshire Ecologist and Landscape officer.

The key objective of habitat management is to be proactive and prevent potentially hazardous wildlife from being attracted to the site in the first place and thereby reduce reliance on reactive 'active' bird control methods.

Burton's Land

Summary

Burton's sand and gravel extraction is an extension to East Leake Quarry, Nottinghamshire involving restoration to agriculture and nature conservation. Management of the bird species within the proposed restoration scheme is necessary due to the proximity of EMA and the potential bird strike hazard. Restoration will be progressive as the site is worked. The restoration plan is to create conservation grassland, two ponds with fringing reedbeds, wet woodland and native broadleaf planting. The site will then make a valuable contribution towards UK BAP Habitat expansion targets for reedbed, broadleaf woodland and wet woodland. The combined grassland management and fringing reedbeds around the water bodies will significantly reduce the attractiveness of the site for geese and swans and so reduce birdstrike risk.

Management

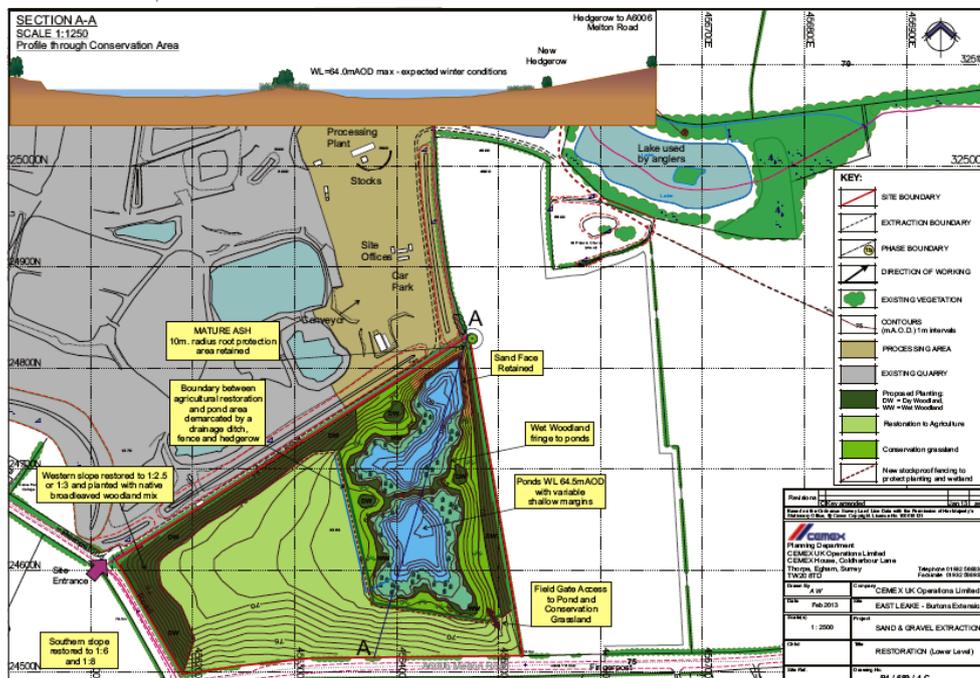
As part of the planning process a bird management plan was developed to satisfy the requirements of the East Midlands Airport (EMA) and Nottinghamshire County Council.

Habitat management will include maintaining a mature low nutrient grass sward on the wildflower and wet grassland to reduce the attractiveness for swans and geese. The reed fringing to water bodies and absence of any walk-up areas from open water to grassland is intended to deter wildfowl. The depth of most of the lake area will be over 3m to deter diving waterfowl.

Tapes will be used as a scaring device that act as a combination of visual and exclusion deterrence and have been found effective with swans and geese. A red fluorescent tape will be suspended from poles surrounding the water bodies during vegetation establishment.

Monitoring will occur while habitats are establishing and once restoration is complete and include weekly recording the bird species, activity, location and numbers. Should total numbers of swans and geese on site rise above a trigger level in a spot count then appropriate mitigation measures shall be agreed upon with stakeholders.

The proposed reedbed habitat has the potential to attract roosting starlings. Monitoring of starlings at through the winter at dusk and dawn will identify their use of the reedbeds and, if trigger levels are reached, scaring measures will be employed following consultation with stakeholders. If increased starling activity i.e. the occurrence of significant flocks, occurs at EMA and there is evidence that these can be traced back to using reedbeds on Trent Farm then this will also represent the triggering of an action level, with the response as detailed below in section 6.0.



Rempstone

Location

Adjacent to the Burton's Land site, Rempstone is also located within the EMA flight path. The design, management and mitigation of the proposed development reflects the need to ensure safety of aircraft.

Mitigation and Habitat Management

During continued extraction at East Leake Quarry it is proposed that only two extraction phases would be open at any one time (excluding silt lagoons) and surface water and ground water shall be pumped into the silt lagoon system to reduce standing water on site. Restoration shall be progressive and seeded and managed appropriately. The extraction faces are normally 1:2 which detracts birds to the water.

Mitigation measures over the whole site shall include;

- Restoration of Lings within 2 years (excluding plant and silt lagoons)
- Reduction of large lake within Lings to conservation silt bed with reed planting
- No dense woodland planting (above 4m density)
- Limited fruit and berry plant species
- Medium size water features 4m in depth
- Medium to small water features instead of one large feature
- No islands, piers or peninsulas
- Small water features within bare gravel to reduce vegetation
- Reduced shorelines
- Long grass
- No fishing
- Progressive mineral extraction only 2 extraction phases open at one time
- Progressive restoration

Wildlife Control Measures

While habitat management is critical for preventing wildlife strikes risk, effective control measures have been considered appropriate to provide a further layer of control to deploy and manage the residual risk and respond to immediate hazards and events including:

- Flags
- Weighted plastic balls on the water
- Bird scaring rockets
- Lures
- Distress call
- Population control

Monitoring

Bird activity over the whole quarry will be monitored for the duration of operations to identify if habitat management is effective and if any further management or mitigation measures need to be deployed to reduce the potential of bird strike.

