

ESS/45/18/COL

**ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR:
Proposal: CONTINUATION OF USE OF LAND FOR MINERAL
EXTRACTION AND ANCILLARY USE WITHOUT COMPLIANCE WITH
CONDITIONS 1 (APPROVED DETAILS) AND 3 (DURATION) OF
PLANNING PERMISSION ESX/27/92/COL ORIGINALLY GRANTED FOR
"WINNING AND WORKING OF SAND AND GRAVEL, ERECTION OF A
CONCRETE BATCHING PLANT AND ASSOCIATED FACILITIES,
CONSTRUCTION OF A NEW SITE ENTRANCE AND RESTORATION TO
AGRICULTURE AND AMENITY" TO ENABLE A REVISED RESTORATION
SCHEME AND TO ACCOMMODATE AN EXTENSION OF TIME TO
ACHIEVE SITE RESTORATION THROUGH UNTIL 31ST DECEMBER 2029.
LAND AT BIRCH PIT, MALDON ROAD, BIRCH.**

Ref No: ESS/45/18/COL

An Environmental Statement (ES) has been submitted with the application and examines the potential impact of the proposal on the natural and built environment and considers, where necessary, ameliorative measures to reduce and minimise that potential impact. The EIA process has been undertaken with respect to that part of the site where there are proposed changes. The assessment has been undertaken according to the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2017 and through the consultation process the ES has been revised as required and mitigation measures introduced either by amendments to the proposal or as suggested planning conditions. The assessment covers the following:-

Traffic and Transport
Air Quality
Noise
Ecology
Cultural heritage
Hydrology
Landscape and Visual

A summary of the potential effects assessed in the ES are set out below.

Traffic and Transport

The assessment included
an audit of the local highway;

- a seven day traffic survey on the B1022 Maldon Road;
- review of five years' worth of accident data on the highway fronting the development site to determine any existing deficiencies in the network that could be contributed to by the extended operation;
- Clarification of current and proposed traffic levels associated with the operation of the site; and

- Consideration of the suitability of the local highway for the proposed continued operation of the

The assessment proposes that as site activity is already taking place with no issues reported that existing restrictions and management practices be continued.

The assessment does not propose any further mitigation measures and no impact on the existing highway capacity.

Comments: Appropriate conditions could be imposed to address the management and maintenance of the site access provisions.

Air Quality

The assessment addressed:

- potential impacts arising as a result of dust deposition on human receptors and ecological receptors;
- potential human health impacts arising as a result of suspended airborne dust; and
- a review of the existing dust management on Site and recommendations for additional controls, as

Mitigation

- phased working scheme; (only the minimum required area would form part of the operational area at any one time)
- transfer of excavated material to the stockpiling area and processing plant by internal conveyor, significantly reducing the movements of dump trucks on unpaved haulage routes;
- retention of the 250m paved access road for HGVs heading off-site to traverse along following use of the wheelwash;
- maintenance of the existing vegetated soil screening bunds along the southern and south-eastern boundary for the duration of the proposed activities (the material in these will be used for restoration at the end of the life of Birch Pit);
- a minimum stand-off distance of 150m from the excavation area to the residential properties of Palmer's Farm and Palmer Cottage; and
- on-site haul roads (unpaved) designed to be >200m from off-site receptors.

The assessment recommended that no significant adverse air quality effects have been identified subject to the proposed mitigation measures and compliance with the site's Dust Management Plan.

Comments:

Appropriate conditions could be imposed to secure dust management.

Noise

The assessment calculated the predicted noise levels for the proposed development. A noise survey was undertaken to assess the change in noise levels from site activities from the baseline conditions.

A number of surrounding properties identified were taken as being the representative sensitive locations around the application land.

Calculations were undertaken to consider the extraction and processing plant activities against the receptors to determine potential noise impact generation levels.

Mitigation – It was recommended that for one receptor, the noise limit could be exceeded at Palmer's Farm during the removal of the southern screening bund. As a consequence a temporary 3.0m high earth embankment or acoustic fence should be erected at the northern and western boundary of Birch Pit with Palmers Farm. Should such an embankment or acoustic fence be installed and maintained no adverse noise impact is predicted.

Conclusion: No significant adverse noise impacts have been identified on the nearest sensitive receptors.

Comments:

Appropriate conditions could be imposed to address potential noise generation issues.

Ecology

The assessment included an Ecological Impact Assessment (EciA) undertaken on the remaining unworked section of Birch Pit. The EciA provided a baseline assessment of all ecological features

The assessment also included a desk based search for statutory and non-statutory ecological sites and protected and notable species and a review of the main sources of ecological data, an extended Phase 1 Habitat Survey and mapping exercise was carried out.

Desk top results showed that there were no designated and undesignated sites of nature conservation interest at risk.

During fieldwork only one habitat of Principal Importance was recorded, comprising of two overgrown/relict hedgerows located in the eastern part of the site. A notable feature of the site was the presence of several mature oaks, mostly situated along one of these hedgerows with limited potential for

specialist deadwood insects and one of the trees was assessed as having “low” potential to support bat roosts.

A mosaic of scrub and mainly poor semi-improved grassland occurs at the eastern end of the site (enclosed on the north and west by the two relict hedgerows). The grassland is locally diverse in plant species. The eastern boundary comprises of a belt of mostly dense scrub but also included a fine mature oak.

The proximity of waterbodies created during quarrying were assessed as unlikely to have Protected Species interest.

The assessment notes that the scheme would involve the removal of nearly all of the land currently in intensive arable cultivation together with scrub and grassland mosaic.

Mitigation Measures

No formal mitigation is deemed to be required in respect of statutory or non-statutory designated sites. The restoration of the site would seek to reinstate hedgerows and trees and create new areas of ecologically valuable habitats.

To offset the loss of habitat a major habitat creation plan through restoration is proposed that would include the planting of new hedgerows and woodland, creation of open water and the establishment of lowland meadow and reedbed.

The assessment aforementioned mitigation measures are considered to deliver significant gains for biodiversity through habitat creation which when compared to the existing situation would represent net gains for biodiversity.

Comments

Appropriate conditions could be imposed to secure the mitigation and enhancement aspects through long term management plans.

Archaeology and Cultural Heritage

Direct effects have been identified upon a heritage asset, and a high potential for direct impacts upon unknown archaeological features of the prehistoric, Roman, medieval and post-medieval periods.

No identified effects upon the setting of designated heritage assets within the Study Areas were found.

Mitigation recommended that a programme of archaeological strip, map and sample excavation prior to any quarry activities.

Comments: Conditioning the proposal to the proposed working programme and a scheme of archaeological investigation/evaluation could be secured.

Hydrology; Hydrogeology and Flood Risk

The assessment addressed the existing surface water drainage and the overlying hydrological regime.

The assessment considered that the extension of time would not lead to any changes to the working methods. Groundwater and surface water management would remain as per the existing regime with water either discharged to ground via the existing settlement ponds or discharged to the Birch Brook via the existing discharge point.

The overall restoration scheme remains consistent with the currently consented scheme.

Mitigation Measures – The assessment confirmed that given the continued working of the site in accordance with its Environmental Permit, proposed surface water management plan and revised restoration plan, no additional mitigation measures are required.

Conclusion: No adverse water environment or flooding impacts have been identified subject to continued

Comment: Surface water management could be addressed through appropriate conditions.

Landscape and Visual

The assessment took place through a desktop study undertaken to review the relevant publications, maps and plans relating to the area within which the proposed development would occur. This was followed by fieldwork at the application site and the surrounding 2-3km study area (based on desk and field work) in November 2018.

The main landscape and visual components of the proposed development include:

- disturbance and clearance of existing vegetation and soils/overburden from remaining undisturbed mineral extraction areas;
- formation of new landforms (heaps and voids) from sand/gravel extraction areas;
- continued use of the processing plant and access roads; and
- restoration of the final landform and establishment of landcover, habitats and access.

The assessment considered there would result in direct effects upon landscape elements and features within the application site itself. The above changes would also influence the application site's appearance and therefore may also have potential effects on landscape character and also the visual amenity of offsite receptors in the immediate surrounding area. The spatial extent of landscape and visual effects of this proposal are considered to be principally local.

Mitigation –

- A landscape strategy and a number of mitigation measures have been proposed to reduce landscape and visual effects.
- The northern extent of the permitted mineral workings has been reduced and positioning of the advance hedge planting along the northern margin at the outset of the development would provide screening and enclosure.
- The proposed afteruses and character of the restored landscape also seek to reflect the existing permissions, previously restored areas and wider setting.
- The currently approved restoration scheme would result in a waterbody, set down in the landscape and enclosed by species-rich grassland, trees and shrubs.

Comments: Appropriate conditioning could secure landscape and visual interest.