

Sophie Mezzetti
Norfolk County Council
Planning & Transportation
County Hall Martineau Lane
Norwich
Norfolk
NR1 2SG

Our ref: AE/2024/129423/01-L01
Your ref: SCO/2024/0001
Date: 02 May 2024

Dear Sophie

**REQUEST FOR EIA SCOPING OPINION: EXTENSION OF QUARRY INTO MIN 200:
MICK GEORGE**

SUMMER LN, THETFORD IP25 6TR

Thank you for the Environmental Impact Assessment (EIA) Scoping consultation dated 11 April 2024. We have reviewed the documents and submitted and would like to make the following recommendations for things to consider at the Environmental Statement stage.

Groundwater and Contaminated Land

Environmental Context of Site

The quarry site is situated on a principal chalk aquifer of the Lewes Nodular Formation which is confined by superficial deposits consisting of sands and gravels (Secondary A aquifer) and boulder clay of varying thickness.

Due to the local variation of the confining layer thickness and permeability, there is the potential for continuity between the chalk aquifer and the overlying superficial deposits. Principal aquifers are geological strata that exhibit high permeability and provide a high level of water storage. They support water supply and river base flow on a strategic scale.

Regional borehole records imply that the superficial geology is comprised of more sandy and silty clay as well as chalk and flint gravel (more permeable) in the south of the MIN200 extension site; in comparison, further north the superficial deposits are stiff blue clay dominated and of lower permeability. This could infer that the surface water features are more likely to be in continuity with the chalk aquifer in large parts of the proposed quarry extension area. The general groundwater flow direction is to the northeast of the site.

The site is in very close proximity to both the East Watton and Carbrooke Anglian Water Services (AWS) public water supplies located <450m to the southwest and 1800m northwest of the site respectively. As a result, the application boundary for the quarry

Environment Agency
Iceni House Cobham Road, Ipswich, IP3 9JD.
Customer services line: 03708 506 506
www.gov.uk/environment-agency

Cont/d..

extension is positioned within both a groundwater source protection zone (SPZ) 1 and SPZ 2.

Recommendations

Based on the information in the Request for Scoping Opinion Report, we consider the proposed activities within the MIN200 extension, which include the extraction of sand and gravel and infilling activities involving utilizing inert material incapable of reuse to be potentially contaminative. As such, potential contamination should be given due consideration, together with any impacts of the development on groundwater and surface water quality during development and operation, in a Hydrogeological Risk Assessment (HRA) as an appendix to the EIA.

Due to the location of the public water supplies mentioned above, there is an emphasis to address and minimise any potential contamination and pollution concerns at the planning stage. This should be reviewed in an extensive site investigation if not already conducted; the investigation should include a desk study, conceptual model of the extension site and initial assessment of risk to ensure that appropriate measures can be implemented.

The Caudlesprings County Wildlife Site (CWS) 1.1km to the northwest of the quarry site is at risk of derogation, with previous data so far proving inconclusive, however it must be considered at risk from quarry operations.

The River Wissey is situated to the north of the site, along with various surface water drains part of the Cam Ely Ouse and South Level catchment located to the north and south of the extension site which must be considered for impacts.

Mineral Extraction

The EIA should also contain a hydrogeological impact assessment (HIA) as an appendix. This should contain groundwater level data, as well as evidence to confirm that the workings are indeed above the water table and as stated in the '240403 Scoping Request' document submitted, and that dewatering will not be required. We would require results from site investigation works confirming the maximum depth of workings to verify this.

Additionally, the HIA should consider the impacts of dewatering on protected rights such as boreholes, abstractions including unlicensed ones, and any identified water features in the vicinity of the site. We would recommend that the applicant consults with the Local Authority for a register of private abstraction boreholes in the area.

Waste Activities

Please provide a comprehensive working and restoration scheme for our review. The infilling plans proposed in section 6 of the '240403 Scoping Request' document would need to be expanded upon in the hydrogeological risk assessment (HRA). The use of inert waste material to infill the site is being proposed as part of the restoration activities, thus, in line with the Environmental Permitting Regulations (2016), an environmental permit may be required.

The HRA would also be required to show that there are minimal risks to controlled waters from any proposed waste activities and to inform the engineering design. We would expect the restoration (infilling) scheme to also include a surface water

management plan. Following the submission of the requested information, we would provide detailed comments on the proposed restoration scheme.

Any restoration plan should also consider the impacts on the groundwater flow regime at and around the site, particularly with likely continuity with the principal chalk aquifer.

Surface Water Drainage

The EIA should carefully consider the implications and impact of potentially contaminated surface water drainage on the quality of controlled waters in the vicinity of the site. Prior to being discharged into any infiltration system, watercourse or surface water sewer, all surface water drainage from areas susceptible to oil contamination should be passed through an oil separator (or equivalent device) with appropriate capacity and performance. Roof water shall not pass through the interceptor/device.

The Lead Local Flood Authority (LLFA) is responsible for approving the design of proposed drainage systems in new developments and redevelopments. On this subject, we would offer the following general advice:

We consider any SuDS greater than 2.0 m below ground level to be a deep system and are generally not acceptable. All infiltration SuDS require a minimum of 1.2 m clearance between the base of infiltration SuDS and peak seasonal groundwater levels. Soakaways must not be constructed in contaminated ground where they could re-mobilise any pre-existing contamination and result in pollution of groundwater.

Soakaways and other infiltration SuDS need to meet the criteria in our Groundwater Protection: Principles and Practice (GP3) position statements G1 and G9 to G13. Only clean water from roofs can be directly discharged to any soakaway or watercourse. Systems for the discharge of surface water from associated hard-standing, roads and impermeable vehicle parking areas shall incorporate appropriate pollution prevention measures and a suitable number of SuDS treatment train components.

Water Resources

The location of this development is in an area of serious water stress (as identified in our report Water stressed areas - final classification (<https://www.gov.uk/government/publications/water-stressed-areas-2021-classification>)). Any water required as part of the construction and its source needs to be considered. Most water related construction activities, including dewatering and dust suppression are licensable activities and as such, early consideration should be given to where the water can be sourced from, if required.

The applicant already holds an existing abstraction licence for water use on the site. Licence 6 33/48/*G/0275/R02 allows abstraction for mineral washing, dust suppression and wheel washing. The applicant should consider whether their current licence offers the water resources quantities, purposes and conditions required to carry out the development.

New developments should not detrimentally affect local water features (including streams, ponds, lakes, ditches, or drains) and this includes both licensed and unlicensed abstractions. Any disruption to surrounding abstraction licences during and after construction must be avoided or mitigated. There are 7 abstraction points within a 3 km radius of the site. These must not be affected by the development.

Certain private and small water supplies do not require a licence to abstract water; therefore we are not necessarily aware of their existence. The locations of private domestic sources may be held by the local authority on the register required by Regulation 14 Private Water Supplies Regulations 2016.

Pollution Prevention And Permitting

Landfill sites

Carbooke Landfill

The access route into the application site off Summer Lane overlies an authorised closed landfill site, namely Carbrooke Landfill (EAWML 70479 / EPR WP3999NZ). Carbrooke Landfill has met the requirements for Definite Closure but is yet to be surrendered. There should be no excavation and/or re-distribution of controlled waste deposited within Carbrooke Landfill as part of this application or for any other purpose.

To secure that any infrastructure associated with the closed landfill cannot be damaged or impacted, the applicant, if not already in place, should instigate an appropriate traffic management system to control vehicular access across the closed landfill site.

We raise no issue to mineral extraction within the area entitled “MIN 200 (mineral extraction site)” subject to appropriate controls being in place. However, we feel that the Location Plan (drawing no. C27B/1/SCOP/01) lacks sufficient detail and could be improved as part of any future or updated application to include:

- a clearly defined phasing plan across the entire quarry site; and,
- environmental permit boundaries (extant or being applied for) across the wider area(s) in which the application relates or overlies.

Current Permits

There are two waste Environmental Permits currently in force at Carbrooke Quarry: EPR/BB3037AR for the deposit of waste for recovery and EPR/RP3898VC for the treatment of waste to produce soil, soil substitutes and aggregate. These permits sit to the west of proposed quarry extension area.

The access route into the application site off Mill Lane appears to fall, in part, within an area that is subject to an ongoing environmental permit application (EPR/DP3142YA) which is yet to be determined by the Environment Agency. The area defined as “Revised restoration contours” including the track as seen on the Location Plan (drawing no. C27B/1/SCOP/01) with the application appears to fall within the environmental permit application boundary for which the Environment Agency is currently considering whether to grant a bespoke waste disposal permit for the permanent deposit of inert waste. However, the area entitled “MIN 200 (mineral extraction site)” shown on the Location Plan (drawing no. C27B/1/SCOP/01) is outside the environmental permitted area being applied for.

The following activities proposed may also require consideration of an Environmental Permit. Please note this is not exhaustive, and others may be required for other proposed activities.

- The handling and management of wastes as a result of the new proposals.

- If any waste activities are associated with the restoration, such as deposit for recovery or landfill.
- The management of inert extractive waste and unpolluted soil resulting from the extraction, treatment and storage of mineral resources and the working of a quarry.

There should be no waste related activities including the importation of controlled waste allowed to take place unless or to the extent authorised under an appropriate environmental permit. Should the applicant intend to undertake any waste related activities within the area entitled “MIN 200 (mineral extraction site)” now or in the future (for example for infilling for restoration), then an appropriate environmental permit from the Environment Agency will need to be applied for and granted before waste activities take place.

The applicant may find the following links useful to help navigate the above:

- <https://www.gov.uk/government/publications/deposit-for-recovery-operators-environmental-permits>
- <https://www.gov.uk/guidance/waste-environmental-permits>
- <https://www.gov.uk/guidance/landfill-operators-environmental-permits>
- <https://www.gov.uk/government/publications/environmental-permitting-guidance-the-mining-waste-directive>
- <https://www.gov.uk/government/publications/sr2009-no8-management-of-inert-wastes-and-unpolluted-soil-at-mines-and-quarries>

The Environment Agency's pre-application advice service can provide free basic advice to the applicant about the type of permit they may need:


<https://www.gov.uk/guidance/get-advice-before-you-apply-for-an-environmental-permit>

We trust this advice is useful.

Yours sincerely



Sustainable Places - Planning Advisor

Direct e-mail: 

Team email: Planning.Eastanglia@environment-agency.gov.uk

Team phone number: 02030 255475

End