An application for an Environmental Permit to authorise the deposition of waste on land as a recovery activity for the restoration of Escrick Quarry, North Yorkshire

Non-Technical Summary

1.1 MJCA is commissioned by Plasmor Limited (Plasmor) to prepare and submit an application for a bespoke Environmental Permit for the deposition of waste on land as a recovery activity in order to restore Escrick Quarry, North Yorkshire to agriculture and nature conservation interest including waterbodies and wetland habitats.

1.2 Planning permission reference C8/2019/0917/CPO (the planning permission) was granted by North Yorkshire County Council[1] (NYCC) on 29 March 2021 for '*…a new quarry to extract approximately 6 million tonnes of clay by 2053 and restoration of the site to agriculture and nature conservation with the importation of up to 2.67 million tonnes[2] of inert material together with the construction of new internal site access haul road, site compound, car park, site office, wheel washing facility, security fencing and gates and the construction of a temporary bridge crossing over the National Route 65 of the National Cycle Network on land adjacent to and to the west and north of the current Escrick Quarry to the south west of Escrick, North Yorkshire…*'. Numerous schemes have been submitted to NYCC to discharge conditions of the planning permission and make minor changes to the consented development and on 5 January 2023 planning permission reference C8/2021/1133/CPO was granted for the *'…construction of a site reception area comprising of an office building (approx.. 112.5sq.m), vehicle maintenance building (approx.. 49sq.m) and storage area, wheel wash and weighbridge office (approx.12.7sq. m) and car park at Land adjacent to and to the east of the current Escrick Quarry to the south west of Escrick in North Yorkshire…'.* Although the planning permission provided for the provision of a site reception area to serve both the quarrying and restoration operations the design of the site reception area was changed by Plasmor necessitating the application for planning permission reference C8/2021/1133/CPO. Both planning permissions have been implemented.

1.3 A Waste Recovery Plan (WRP) presenting justification that the activity comprises recovery was submitted to the Environment Agency (EA) on 23 June 2022 and in a letter dated 21 December 2022 the EA confirmed that the activity comprises recovery. The approved WRP is presented at Appendix B of the application report. The letter from the EA confirming that the activity comprises recovery is presented at Appendix C of the application report. To provide for the restoration of the site to agriculture and nature conservation interest it will be necessary to import approximately 2.67Mm^3 of inert restoration materials. The total quantity of waste that will need to be deposited to complete the restoration is limited by the final levels shown on the consented restoration scheme. The consented restoration scheme is shown on drawing

[1] On 1 April 2023 North Yorkshire County Council and seven district and borough councils in North Yorkshire became North Yorkshire Council.
[2] Note that this is an error in the title of the planning permission which should state 2.67 million cubic metres.

reference PL/ES/03-20/21229revE presented at Appendix ESSD E to the Environmental Site Setting and Site Design (ESSD) report.

1.4 Escrick Quarry comprises two areas separated by the former route of the East Coast Main Line which ran in a generally north south direction, was diverted in 1983 and is now National Route 65 of the National Cycle Network (NR65) and part of the Trans Pennine Trail (TPT). The two areas which are the subject of the Environmental Permit application are referred to collectively as the site. The eastern area (eastern area) of the site is approximately 9.9ha and is centred on National Grid Reference (NGR) SE 620 407. The western area (western area) of the site is approximately 51.1ha and is centred on NGR SE 615 404. The site location and the site layout are shown on Figures ESSD 1 and ESSD 2 in the ESSD report.

1.5 There are 15 phases of mineral extraction and restoration at the site. Phases 1 to 3 are located in the eastern area and Phases 4 to 15 are located in the western area. The areas of extraction within which waste materials will be deposited in the eastern area and the western area are referred to as the eastern extraction area and western extraction area. The eastern extraction area is approximately 8.2ha and the western extraction area is approximately 40.9 ha. Pursuant to conditions of the planning permission the mineral extraction and restoration operations will be carried out on a progressive basis. The phasing drawings are presented at Appendix ESSD C to the ESSD report.

1.6 Access to the site is from the A19 which runs in a generally north south direction approximately 380m east of the eastern area. The access road from the A19 to the site reception area which is located approximately 280m south-south east of the south eastern corner of the eastern area is surfaced with a combination of tarmac and concrete. Lockable gates are located at the site reception area. The site reception area comprises offices, mess facilities, a weighbridge and wheel cleaning facilities. Areas of the site reception area which are used by road going vehicles have a tarmacadam surface. Hard surfaced internal access roads are and will be constructed from the site reception area to the operational area. The Escrick Environmental Services site which is permitted for the deposition of waste is located directly to the south of the eastern area and between the eastern area and site reception area. Access to the site is along a hard surfaced internal access road which runs in a north south direction adjacent to and east of the Escrick Environmental Services site.

1.7 The majority of the site is currently in agricultural use and is bounded either by the current Escrick Environmental Services site, NR65/TPT or a combination of field boundaries, wooded areas and hedgerows with isolated trees and/or drainage ditches. Mineral extraction operations are ongoing on Phase 1 and soils have been stripped from Phases 2 and 3. The western area is bounded partly to the north by Heron Wood and a wooded area known as Gambles Rush is located adjacent to and south of the western area. Prior to mineral extraction the site was generally flat at a level of between approximately 6mAOD and 7mAOD with the ground levels rising to the north of the site.

1.8 The site is located within a generally rural setting. The site is located approximately 1.4km east south east of Stillingfleet, approximately 1.7km north east of Moor End, approximately 2.3km north east of Kelfield, approximately 1.7km south-south west of Escrick and approximately 1.7km north of Riccall. There are several isolated residential properties which are often associated with farm buildings in the vicinity of the site. The nearest residential property is Mount Farm which is located approximately 100m to the north east of the north eastern boundary of the western extraction area and approximately 105m to the west of the north western corner of eastern extraction area. The residential property at Moor Farm is located approximately 430m west-south west of the south western corner of the western extraction area.

1.9 Escrick Business Park is located directly to the east of the site reception area. The buildings at Escrick Business Park and residential properties adjacent to and north of Escrick Business Park are located at least 380m south east of the eastern extraction area. The former Stillingfleet Mine buildings are located approximately 600m west of the site. Some industrial style buildings remain at the former Stillingfleet Mine but aside from a facility for the generation of electricity from mines gas the remaining buildings are unused and in a poor state of repair.

1.10 There are a number of Public Rights of Way (PROW) in the vicinity of the site as shown on Figure ESSD 2 in the ESSD report. NR65/TPT runs in a generally north to south direction between the eastern area and the western area of the site. Bridleway 35.62/9/1 runs in a generally southerly direction from Hill Farm to the north of the site into the western area of the site. It crosses the western area of the site before turning south westerly and running along the boundary of the site where it forms Bridleway 35.40/11/1 which runs a south-south easterly direction. From this point Bridleway 35.10/11/2 runs a generally west-south westerly direction through Moor Farm and Footpath 35.40/12/1 runs in a generally south-south easterly direction becoming Footpath 35.53/8/1. Bridleway 35.62/9/1 will be diverted round the western site boundary until the site is restored when it will be reinstated along it's original route.

1.11 There are no Scheduled Monuments, World Heritage Sites or Listed Buildings within 500m of the site. The nearest listed buildings are the Garden Temple and the Gate Piers to Escrick Park both of which are Grade II* listed and are located approximately 1.4km east and 1.4km south of the site respectively.

1.12 Based on information from the DEFRA MAGIC website and the EA nature and heritage conservation screen there are no Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPA), Special Areas of Conservation (SACs), Ramsar Sites, National Nature Reserves (NNRs) or Local Nature Reserves (LNR) or Local Wildlife Sites (LWS) located within 2km of the site. The closest designations identified in the vicinity of the site is the Acaster South Ings (SSSI) and the Skipwith Common (SSSI, NNR, and SAC) located approximately 2.9km north west and south east of the site respectively.

1.13 Based on the BGS geological mapping, the site will be excavated through the Quaternary superficial deposits comprising the Skipwith Sand Member of the Beighton Sand Formation and into the underlying Hemingbrough Glaciolacustrine Formation which is dominated by laminated clays and silts with occasional sand layers. The Hemingbrough Glaciolacustrine Formation is subdivided into the upper Thorganby Clay Member, the middle Lawns House Farm Sand Member and the lower Park Farm Clay Member. The superficial deposits overlie bedrock comprising the Triassic Sherwood Sandstone Group. At least 6.8m and generally greater than 9m of the Hemingbrough Glaciolacustrine Formation will remain in place above the Sherwood Sandstone Group forming a significant natural low permeability barrier between the Sherwood Sandstone Group and the base of the site.

1.14 The Skipwith Sand Member is a water bearing unit generally between approximately 2m and 3m thick in the south and west of the western area and between approximately 0.5m and 1.5m thick across the remainder of the site. The Skipwith Sand Member receives recharge from infiltrating rainwater with groundwater supported on the clays of the underlying Hemingbrough Glaciolacustrine Formation. In general groundwater levels in the Skipwith Sand Member fall from the north east and north west of the site to the south of the site. The Skipwith Sand Member is in hydraulic continuity with the surface water drainage system in the area of the site which is managed by the Ouse and Derwent Internal Drainage Board (IDB). Heron Dyke (Drain), Parkhill Dyke (Drain) and Bentley Park Drain are excavated through the Skipwith Sand Member in the area of the site with the base of the drainage ditches in the underlying Hemingbrough Glaciolacustrine Formation in places. Within the Hemingbrough Glaciolacustrine Formation, the Lawns House Farm Sand Member is a groundwater bearing unit, however this unit is discontinuous. Groundwater levels in the Lawns House Farm Sand Member are confined by the overlying Thorganby Clay Member. Groundwater levels within the Sherwood Sandstone Group are confined by the overlying Hemingbrough Glaciolacustrine Formation. In general groundwater levels in the Sherwood Sandstone Group fall slightly towards the south or east across the site.

1.15 Based on information presented on the magic.gov.uk website the Skipwith Sand Member, the Lawns House Farm Sand Member and the lower Park Farm Clay Member are designated as secondary (undifferentiated) aquifers by the EA. Secondary (undifferentiated) aquifers are where it is not possible to apply either a Secondary A or B definition because of the variable characteristics of the rock type but these aquifers have only a minor value. The Thorganby Clay Member is designated as unproductive strata by the EA. Unproductive strata are largely unable to provide usable water supplies and are unlikely to have surface water and wetland ecosystems dependent on them. The Sherwood Sandstone Group is designated as a principal aquifer by the EA. Principal aquifers may support water supply and/or river base flow on a strategic scale.

1.16 Based on information presented on the magic.gov.uk website the site is not located in or in proximity to a groundwater source protection zone (SPZ) of a public water supply abstraction. The nearest SPZ to the site is located approximately 3.1km south south

east of the site. Based on information provided by the EA there are five licensed and no deregulated groundwater abstractions within 2km of the site. Four of the licensed groundwater abstractions are from the Sherwood Sandstone Group and are used either for horticultural or agricultural spray irrigation. The source aquifer of one of the licensed groundwater abstractions is not identified. It is considered likely that the abstraction is from the Sherwood Sandstone Group. The closest licensed groundwater abstraction is located approximately 1.35km south south west of the site. Based on information provided by North Yorkshire Council – Selby Area there are no private groundwater abstractions within 2km of the site.

1.17 The site is located in the catchment of the River Ouse which flows in a generally south direction approximately 3km west of the site before turning south eastwards. At its closest point the River Ouse is approximately 1.85km south west of the site. The River Wharfe joins the River Ouse from the west with the confluence located approximately 4km west south west of the site. The IDB drains in the vicinity of the site ultimately discharge to the River Ouse approximately 2.15km south west of the site.

1.18 During excavation and restoration operations at the site the void will be dewatered to facilitate dry working. Water pumped from the excavations will be discharged following settlement of suspended solids to the IDB drains round the site under a consent to discharge issued by the IDB. The mineral extraction includes the excavation of the overlying Skipwith Sand Member together with any sandy clay in the top of the Hemingbrough Glaciolacustrine Formation above the clay mineral deposit. The imported inert restoration materials will be placed within the void adjacent to the Hemingbrough Glaciolacustrine Formation. Once the inert materials are nearing the base of the excavated Skipwith Sand Member, the void will continue to be restored with naturally occurring materials comprising overburden and quarry reject materials. Given the presence of the Hemingbrough Glaciolacustrine Formation no artificial barriers will be constructed at the site prior to the deposit of the inert waste materials.

1.19 Based on information provided by the EA there are two licensed surface water abstractions within 2km of the site. The closest licensed surface water abstraction is located approximately 0.7km south of the site abstracting water from the Parkhill Dyke (Drain) for spray irrigation storage. The abstraction is located downstream of the site.

1.20 Based on information provided by the EA there are ten Environmental Permits for consents to discharge to surface water and land within 1km of the site. One consent to discharge is recorded as to a ditch to the Heron Dyke (Drain) from a farm upstream of the site. Two consents to discharge are recorded as to ditches to the Bentley Park Drain from the Escrick Environmental Services site to the south of the eastern area of the site or the adjacent Escrick Business Park upstream of and adjacent to the site. Three consents to discharge are recorded as to ditches to the Parkhill Dike from farms and domestic properties upstream of, adjacent to and downstream of the site. The remainder are discharges to land at Hollicarrs Holiday Park to the south east of the site. With the exception of the trade discharge from the adjacent Escrick Environmental Services site, the discharges are all recorded as sewage – not water company.

1.21 Based on the information provided on the GOV.UK Flood Map for planning website the majority of the site is located in Flood Zone 2 which is defined as land having between 1 in 100 and a 1 in 1,000 annual probability of river flooding. The south east of the western area of the site is located in Flood Zone 3 which is defined as having a 1 in 100 or greater annual probability of river flooding. A small area in the south east of the western area of the site is identified as an area benefiting from flood defences. There are areas in the north west of the site which are located in Flood Zone 1 which is defined as land having less than a 1 in 1,000 annual probability of river flooding.

1.22 In the Environmental Risk Assessment (ERA) included with this application consideration is given to the potential for accidents, odour, noise and fugitive emissions having regard to the proposed site operations the subject of the application for the Environmental Permit and the presence and location of sensitive receptors in the vicinity of the site. Operations at the site will be undertaken in accordance with the control measures described in the ERA. It is concluded in the ERA that the operation of the facility has a low or very low risk of adverse impact on the surrounding environment. A programme of environmental monitoring will be carried out to confirm the results of the ERA. The results of the monitoring will be reported to the Environment Agency on a regular basis.

1.23 Based on the results of the Hydrogeological Risk Assessment (HRA) included with the application it is considered that there is no significant risk from the proposed deposition of inert waste to groundwater and surface water quality in the vicinity of the site. Based on the environmental setting and the inert nature of the materials that will be deposited at the site active long-term site management will not be necessary in order to prevent long term groundwater pollution. A programme of environmental monitoring will be carried out to confirm the results of the HRA. The results of the monitoring will be reported to the Environment Agency on a regular basis.

1.24 The inert waste types that will be accepted at the site the subject of the Environmental Permit are presented in the Environmental Permit application. A detailed waste acceptance procedure will be in place to minimise the risk that unacceptable waste materials will be accepted at the site including procedures for the rejection of non-conforming loads. The detailed waste acceptance procedure is presented at Appendix K of the application report. The operations at the site will be the subject of an Environmental Management System (EMS). A summary of the EMS is presented at Appendix I of the application report.

1.25 Plasmor is committed to ensuring that members of its staff are technically competent to undertake waste operations and uses the Chartered Institution of Wastes Management/Waste Management Industry Training and Advisory Board (CIWM/WAMITAB) scheme for these purposes. The training standards set out in the CIWM/WAMITAB scheme, as relevant to the operation of a facility for the deposit of waste on land and waste operations in general, are adopted for training purposes.