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LIGHTWATER QUARRIES LIMITED

APPLICATION FOR AN ENVIRONMENTAL PERMIT

GEBDYKES QUARRY LANDFILL

NON-TECHNICAL SUMMARY

APRIL 2023

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NON TECHNICAL SUMMARY

APRIL 2023

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DRAWINGS	TITLE	SCALE
NT14621-003	Permit Boundary Plan	1:5,000 @ A3

1 INTRODUCTION

- 1.1.1 Lightwater Quarries Limited has commissioned Wardell Armstrong LLP to prepare an application to the Environment Agency for an Environmental Permit for a proposed inert landfill at Gebdykes Quarry, Halfpenny House Lane, Masham, North Yorkshire.
- 1.1.2 Gebdykes Quarry is an operational limestone quarry. Previous restoration proposals were for a low-level restoration scheme, however this is considered inappropriate for the elevated location. There is now a preference to restore the existing void to original ground level using inert wastes imported to the site and placed within the void, which will form the landfilling activity.
- 1.1.3 The site is located within a rural setting, with agricultural land and farms surrounding the majority of the site. The site location is discussed further in Section 2.
- 1.1.4 The site will be operated in accordance with all relevant legislation and Environment Agency guidance. Section 3 lists the documents that have been provided in support of the application.
- 1.1.5 Clean inert wastes only will be accepted at the site for landfilling. Site operations are detailed in Section 4.
- 1.1.6 The site is designed to provide comprehensive environmental protection. Further information on the environmental risks and mitigation measures is provided in Section 5.

2 THE SITE

- 2.1.1 Gebdykes Quarry is located at Halfpenny House Lane, Masham, North Yorkshire at national grid reference SE 23770 82304. The nearest postcode is HG4 4BT and the site is accessed via the site entrance road off Halfpenny House Lane (B5268). The site location and proposed permit boundary is provided in Drawing NT14621-003.
- 2.1.2 The nearest town to the site is Masham, located 1.5km to the southwest. There are also a number of other small settlements within the surrounding area, including Well approximately 2.5km to the east, Snape 3km to the northeast and Thornton Watlass 3km to the north.
- 2.1.3 The site is bound to the north and northwest by Limekiln Lane, agricultural land to the west and south, and Halfpenny House Lane to the east.
- 2.1.4 The site is located approximately 815m to the east of the River Ure. The nearest designated site is Mar Field Fen SSSI, located 1.2km to the west.
- 2.1.5 Two ancient woodlands are present within 1km of the site. Low Burton Wood is adjacent to the site to the west, and an unnamed ancient, replanted woodland is located 1km to the northwest.
- 2.1.6 The site is underlain by dolostone of the Cadeby Formation. The bedrock underlying the site forms a Principal aquifer.

3 ENVIRONMENTAL PERMIT APPLICATION

3.1.1 The proposed activity for the landfilling of inert waste is classified as a waste operation, requiring a permit under the Environmental Permitting Regulations (England and Wales) 2016.

3.1.2 A number of documents have been prepared to support the application and demonstrate that the environmental impact from the operations is minimised as far as possible. The permit application comprises:

- Application Forms:
 - Part A (About You);
 - Part B2 (General Bespoke Permit);
 - Part B4 (New Bespoke Waste Operation Permit);
 - Part F1 (Charges and Declarations);
- Non-Technical Summary;
- Operating Techniques;
- Amenity and Accident, and Habitats Risk Assessment;
- Environmental Setting and Site Design;
- Stability Risk Assessment;
- Hydrogeological Risk Assessment;
- Dust Management Plan;
- Site Drawings; and
- Financial Provision Spreadsheet.

3.1.3 The documents demonstrate that the site will be operated in accordance with the relevant legislation and Environment Agency guidance.

4 SITE OPERATIONS

- 4.1.1 Lightwater Quarries Ltd propose to accept clean inert wastes for disposal via landfill at Gebdykes Quarry. The waste will be placed in layers and compacted to fill the void that has been created through limestone extraction. This will form a stable landform in accordance with planning conditions requiring the restoration of the site.
- 4.1.2 Landfill operations will be undertaken in five distinct phases in the southern void of the quarry, while limestone extraction will continue within the north void. In the southern void, the total void is estimated to be approximately 1,800,000m³. Approximately 3.6 million tonnes of inert waste will be imported for use in landfilling activities, with the site being backfilled at an approximate rate of 200,000 tonnes a year. The southern void forms the basis of this inert permit application, while the northern void will remain unfilled as part of the wider restoration.
- 4.1.3 In accordance with the Landfill Directive the site will be engineered to provide an engineered liner on basal and side slopes to act as a geological barrier. The liner is proposed to be constructed of crushed and screened dolomite fines (or other suitable imported material) of 650mm thickness, and will be constructed with a permeability of equal to or less than 6.5x10⁻⁸m/s (equivalent to a maximum of 1.0x10⁻⁷m/s for a 1m barrier).
- 4.1.4 Operations at the site will meet the requirements of the Environment Agency's guidance 'Landfill operators: environmental permits'.¹ An Operating Techniques document has been provided in support of this application detailing how the site will be managed.
- 4.1.5 All incoming inert materials will be subject to stringent pre-acceptance and acceptance checks. These checks are designed to ensure that only clean, permitted waste types are accepted for disposal, with any non-conforming materials diverted back to the site of origin or to a suitably permitted facility.
- 4.1.6 Site activities will be undertaken in accordance with an environmental management system developed to align with the Environment Agency's Guidance on Management Systems for permitted sites.
- 4.1.7 A Technically Competent Manager (TCM) with appropriate WAMITAB qualifications and experience will oversee the site operations.

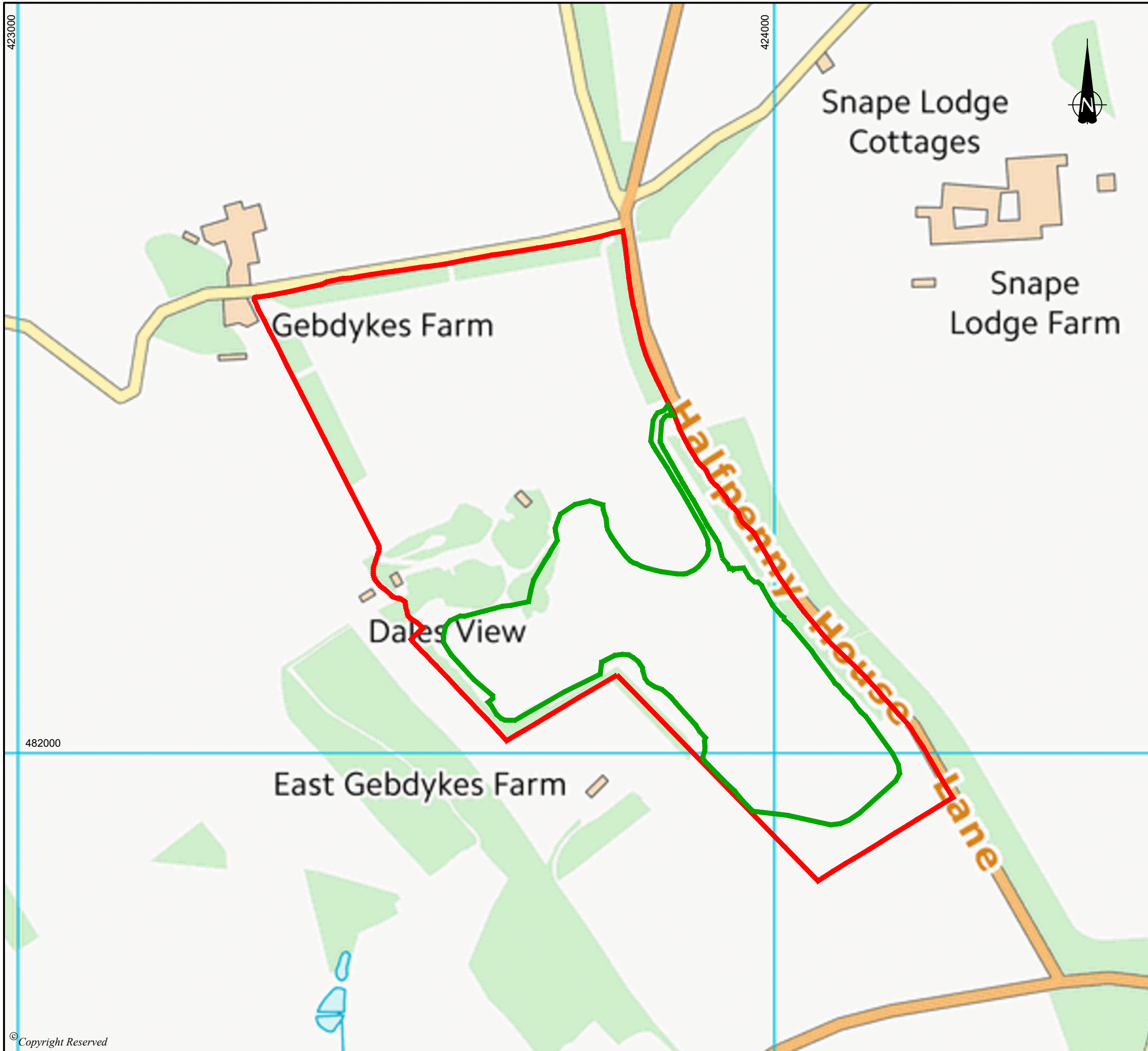
¹ [Landfill operators: environmental permits - Guidance - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/landfill-operators-environmental-permits)

4.1.8 In addition to the landfilling activity, it is proposed to import soils and rubble/rock/brick/concrete onsite for screening and then export. These activities will be covered under a Standard Rules Permit (SR2010 No12) for the treatment of waste to produce soil, soil substitutes and aggregate. This activity will form a separate permit application.

5 ENVIRONMENTAL RISK AND MITIGATION

- 5.1.1 All risks associated with the landfilling activities will be managed through stringent site procedures. The proposed site operations have been subject to scrutiny to ensure that all risks from the activities have been identified.
- 5.1.2 Pro-active operational measures will be implemented to ensure that there is no pollution from fugitive emissions from site activities beyond the site boundary. Regular checks will be made around the site boundary and should fugitive emissions be detected the source will be identified and appropriate remedial action will be taken.
- 5.1.3 The site roads will be swept as necessary to prevent mud or debris being tracked out of the site.
- 5.1.4 The clean inert materials to be accepted at the site are not inherently odorous, and it is unlikely that any litter will be generated.
- 5.1.5 Operations will be restricted to daytime hours. All plant and equipment that is used onsite will be maintained in accordance with the manufacturer's recommendations to ensure that it operates correctly and without producing excessive noise.
- 5.1.6 A Stability Risk Assessment supports the application, demonstrating that the proposed engineering of the void will be structurally and physically stable over the lifetime of the operation.
- 5.1.7 The application is also supported by a Hydrogeological Risk Assessment which details the groundwater monitoring to be implemented at the site. Regular environmental monitoring of groundwater will be undertaken to ensure that site operations are fully compliant with the conditions of the environmental permit. There are no proposed emissions to surface water. Surface water from the operational areas of the landfill is proposed to be captured in a lined lagoon and tested prior to discharge to groundwater.
- 5.1.8 Site staff will be suitably trained for their roles. Contractors working at the site will be inducted by a senior member of staff. Site plant will be operated by authorised staff only.
- 5.1.9 The site will be operated in accordance with an Environmental Management System, which ensures that all necessary procedures are in place to enable the continued identification, assessment and effective management of environmental impacts of the landfill.

DRAWINGS



DO NOT SCALE FROM THIS DRAWING

KEY

—	SITE BOUNDARY
—	PERMIT BOUNDARY

A	FIRST ISSUE	09-02-23	DR	KH	AC
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REVISION	DETAILS	DATE	DRN	CHK'D	APP'D
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CLIENT	LIGHTWATER QUARRIES
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PROJECT	GEBDYKES LANDFILL PERMIT APPLICATION
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DRAWING TITLE	PERMIT BOUNDARY PLAN
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DRG No.	NT14621-003	REV	A	SUIT. CODE
DRG SIZE	A3	SCALE	1:5000	DATE
				10-10-22
DRAWN BY	DR	CHECKED BY	KH	APPROVED BY
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