



## Environmental Permit Application

### Longwater Gravel Company Limited

Wymondham Quarry,  
Stanfield Road,  
Wymondham,  
Norfolk,  
NR18 9RL.

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Permit Boundary Plan                      Drawing No. 18/008d 001

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- Appendix 2      Pre-application Advice Letter
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- Appendix 4      Environmental Site & Setting Design Report



## 1. Introduction

- 1.1. Westbury Environmental Limited have been instructed to prepare this bespoke Environmental Permit application on behalf of Longwater Gravel Company Limited.
- 1.2. This Environmental Permit application has been prepared for a new Bespoke Environmental Permit for a deposit for recovery operation at Wymondham Quarry, Stanfield Road, Wymondham, Norfolk, NR18 9RL (Site).
- 1.3. The relevant Environment Agency forms for a bespoke Environmental Permit application and other required information are included within this Environmental Permit application report.
- 1.4. There is a legal obligation for the Site to be restored in accordance with the plans included in Planning Permission C/7/2013/7014, granted by Norfolk County Council on 10<sup>th</sup> January 2014.
- 1.5. A Waste Recovery Plan for the Site has previously been submitted to the Environment Agency, see Appendix 1 Waste Recovery Plan. A Pre-Application Advice Letter was received from the Environment Agency on 3<sup>rd</sup> April 2019 and the activity was deemed as “recovery”, see Appendix 2 Pre-Application Advice Letter. There have been no changes to the proposal since this date.



## 2. Site Location

- 2.1. The Site is located 1.8km southeast of Wymondham. Stanfield Road runs along the northern boundary of the Site. The Site is divided into two by Bridge Road running from southwest to northeast.
- 2.2. The entire Site extends to approximately 23.5 ha, see Permit Boundary Plan, Drawing No. 18/008d 001.
- 2.3. The Site is located within Groundwater Source Protection Zone 3 (Total Catchment). The Site is located on a Secondary A designated superficial deposit aquifer and a Principal designated bedrock aquifer.
- 2.4. The land-use surround the Site is predominantly agricultural fields with associated farmhouses and poultry houses.
- 2.5. Lower Wood, Ashwellthorpe Site of Special Scientific Interest (SSSI) is located 1.6km south of the Site.
- 2.6. The closest area of deciduous woodland is located on the north-western boundary of the Site.
- 2.7. The closest residential building is Hall Farm Cottage, located 160m to the northeast of the Site.



### 3. Operator Details

3.1. Company details, including information regarding the director of the company, are provided below:

#### Company Details

<b>Company Name</b>	Longwater (Gravel) Company Limited (The)
<b>Company Number</b>	00508824
<b>Registered Address</b>	Winnington House, 2 Woodberry Grove, North Finchley, London, N12 0DR
<b>Incorporation Date</b>	13 <sup>th</sup> June 1952

#### Information for Directors

<b>Name</b>	<b>Date of Birth</b>
Beth Campbell	
Elaine Littleboy	
Fenella Littleboy	
William Littleboy	
William Littleboy	
Simon Smith	

Companies House Link: <https://beta.companieshouse.gov.uk/company/00508824>



## 4. Non-Technical Summary of Waste Operations

### Existing operations

- 4.1. Mineral extraction operations are currently undertaken at the Site. No waste operations are currently undertaken on the Site.

### Proposed Operations

- 4.2. This permit application has been prepared for a new Bespoke Environmental Permit for a deposit for recovery operation at the Site.
- 4.3. There is a requirement for 151,500m<sup>3</sup> of waste material to be used in the restoration in order to restore the Site in accordance with the restoration plans included in the planning permission C/7/2013/701. This is described in the Waste Recovery Plan, see Appendix 1.
- 4.4. Strict waste acceptance procedures will be applied on the Site to ensure that only the permitted waste types are accepted, see Appendix 4 Environmental Setting & Site Design (ESSD) Report – App4 Waste Acceptance Procedures. The List of Waste codes are provided, see Section 6 List of Waste Codes.
- 4.5. Waste will be brought onto the Site for use in the restoration of the Site. The waste may be stored temporarily or placed directly into the recovery works.
- 4.6. There will be no tipping of waste into groundwater.
- 4.7. There are no proposed waste treatment operations to be undertaken under the Environmental Permit.



## **5. Operational Processes**

- 5.1. Imported materials will be subject to strict waste acceptance procedures to ensure that only suitable materials are used in the restoration works at the Site, see Appendix 4 ESSD - App4 Waste Acceptance Procedures.
- 5.2. Acceptable wastes will be imported onto the Site and placed directly into the restoration works or placed temporarily in stockpiles for use in the restoration.
- 5.3. There are no proposed treatment operations to take place under the Environmental Permit.



## 6. List of Waste Codes

6.1. The proposed List of Waste codes to be accepted under the Environmental Permit at the Site are listed below.

<b>Exclusions</b>				
Wastes having any of the following characteristics shall not be accepted:				
<ul style="list-style-type: none"> <li>• Consisting solely or mainly of dusts, powders or loose fibres</li> <li>• Wastes that are in a form which is either sludge or liquid</li> </ul>				
<b>Permitted waste types</b>				
<b>Source</b>	<b>Sub-source</b>	<b>Waste code</b>	<b>Description</b>	<b>Additional restrictions</b>
01 Waste resulting from exploration, mining, quarrying and physical and chemical treatment of minerals	01 01 wastes from mineral excavation	01 01 02	Wastes from mineral non-metalliferous excavation	Restricted to waste overburden and interburden only.
	01 04 wastes from physical and chemical processing of non-metalliferous minerals	01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 06	
		01 04 09	Waste sand and clays	
17 Construction and demolition wastes	17 01 concrete, bricks, tiles and ceramics	17 01 01	Concrete	
		17 01 02	Bricks	
		17 01 03	Tiles and ceramics	
		17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	Metal from reinforced concrete must have been removed.
	17 05 soil stones and dredging spoil	17 05 04	Soil and stones other than those mentioned in 17 05 03	Restricted to topsoil, peat, subsoil and stones only.
19 Wastes from waste management facilities	19 12 wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified	19 12 09	Minerals (for example sand, stones) only	Restricted to wastes from treatment of waste aggregates that are otherwise naturally occurring minerals. Does not include fines from treatment of any non-hazardous waste or gypsum from recovered plasterboard





20 Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	20 02 garden and park wastes	20 02 02	Soils and stones	Restricted to topsoil, peat, subsoil and stones only.
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## 7. Site Management

### Environmental Management System

- 7.1. Longwater Gravel Company Limited will operate under an Environmental Management System.
- 7.2. A hard copy of the EMS will be kept on the Site at all times.
- 7.3. The EMS folder shall include a copy of the Environmental Permit and will contain the following sections:

### **Environmental Management System Report**

This report contains a description of the purpose and scope of the EMS, all Site details including the location of the Site, receptors located in close proximity to the Site boundary, waste storage, the plant and equipment that is used on the Site, the different types of waste treatment activities carried out on Site, the Site security measures, information on the competence of the staff working on Site, roles and responsibilities for each member of staff and details for Site closure.

#### Appendix 1 – Authorisations

A copy of the permit and EA Registrations for the site.

#### Appendix 2 - Technical Competence

This section of the EMS includes details of the competence status of the Technical Competent Manager(s) (TCM), the operational hours for the Site, the minimum attendance requirements for the TCM and copies of relevant certificates.

#### Appendix 3 – Assessment of Environmental Impacts and Controls

This assessment provides information on the processes, activities and equipment on site, the potential emissions and impacts that they may have on air, water, energy usage, waste disposal, land contamination, nuisance and resource consumption and how any identified impact may be controlled.

#### Appendix 4 - Environmental Accident Management Plan

This report contains an assessment of the potential accidents that could occur on Site, details of the likelihood of each accident occurring, the preventative measures taken to reduce the risk of each accident occurring, actions to be taken in the case of an accident on Site and an explanation on how to record any accidents that occur on Site. The types of accident included in this report include:

- Leaks or Spillages
- Fire
- Flooding
- Unauthorised Entry
- Failure of Plant and Equipment
- Cross-Contamination
- Failure of Services

#### ***Appendix 4 - Appendix 1 Preventing Accidents / Incidents***

This document contains an assessment of the potential accidents and/or incidents that could occur on site, what the harm could occur, how to reduce the risk of the accident occurring and details on what to do if the accident and/or incident did occur the on Site.



### Appendix 5 - Flood Management Plan

This report contains a brief description of the site, its size, the key contacts to contact in an emergency, whether there are staff employed with any special needs, the locations of any gas, water and / or electric cut off points of Site and ways to keep all plant and computers / files safe in the event of a flood.

### Appendix 6 - Procedures and Forms

The EMS contains a number of procedures that cover its implementation, waste acceptance, operations controls and emergencies. Records to be produced in accordance with these procedures are provided in the EMS as forms. These completed forms provide records that evidence the implementation of the EMS. The following list details procedures that are included in the EMS;

#### Implementation

- Environmental Training, Awareness and Competence
- Compliance with Legal requirements
- Staff Organogram

#### Operational Control

- Housekeeping, litter, pests and vermin
- Noise Control
- Waste storage and Handling
- Site Security
- Reporting and Investigation of Accidents, Incidents and Complaints
- Dust, Fibres and Particulates
- Maintenance

#### Waste Acceptance and Rejection

- Waste Acceptance
- Waste Rejection and Non-compliance
- Waste Reporting
- Duty of Care

#### Environmental Protection

- Dust Fibres and Particulate
- Mud and Debris
- Noise Control
- Odour
- Surface Water Management

#### Emergency Provisions

- Environmental Accidents /Incidents / Complaints and associated forms
- Fire
- Flood
- Spillages
- Utility Failure

#### Reporting

- Waste Returns
- Notifications to the Environment Agency



(This list is not exhaustive.)

### Drawings

The drawings included in the EMS include:

- Site Boundary Plan showing the Site boundaries.
- Site Layout plan detailing all cut off points, areas of operations, stockpiles, spill kits, etc.
- Site Sensitive Receptors Plan.

### **Technically Competent Management**

- 7.4. Registration details for the Technically Competent Manager(s) for the Site will be provided to the Environment Agency upon request.



## **8. Environmental Risk & Condition of the Site**

### **Site Condition**

- 8.1. Part 1 of a Site Condition Report has been produced for this Site as part of the Environmental Setting & Site Design (ESSD) Report. A copy of the Site Condition Report is provided in Appendix 4 ESSD Report - App7 Site Condition Report.

### **Environmental Risk**

- 8.2. An Environmental Risk Assessment has been completed as part of the ESSD Report, see Appendix 4 ESSD Report – App5 Environmental Risk Assessment.
- 8.3. This Environmental Risk Assessment considers the risks associated with the operations carried out on the Site.
- 8.4. The Environmental Risk Assessment considers the potential impacts of the proposed waste operations with regard to the local population, watercourses and protected sites etc.



# Application Forms

## Part A

# Application for an environmental permit Part A – About you



**You will need to fill in this part A if you are applying for a new permit, applying to change an existing permit or surrender your permit, or want to transfer an existing permit to yourself. Please check that this is the latest version of the form available from our website.**

**Please read through this form and the guidance notes that came with it.**

The form can be:

- 1 Saved onto a computer and then filled in. Please note that the form follows a logic that means questions will open or stay closed depending on a previous answer. So you may not be able to enter text in some boxes.
- 2 Printed off and filled in by hand. Please write clearly in the answer spaces.

**Note:** if you believe including information on a public register would not be in the interests of national security you must

tick the box in section 4 of F1 or F3 and enclose a letter telling us that you have told the Secretary of State. We will not include the information in the public register unless directed otherwise.

It will take less than one hour to fill in this part of the application form.

Where you see the term ‘document reference’ on the form, give the document references and send the documents with the application form when you’ve completed it.

## Contents

- 1 About you
- 2 Applications from an individual
- 3 Applications from an organisation of individuals
- 4 Applications from public bodies
- 5 Applications from companies
- 6 Your address
- 7 Contact details
- 8 How to contact us

## 1 About you

Are you applying as an individual, an organisation of individuals (for example, a partnership), a company (this includes Limited Liability Partnerships) or a public body?

An individual

Now go to section 2

An organisation of individuals (for example, a partnership)

Now go to section 3

A public body

Now go to section 4

A registered company or other corporate body

Now go to section 5

## 2 Applications from an individual

### 2a Please give us the following details

Name

Title (Mr, Mrs, Miss and so on)

\_\_\_\_\_

First name

\_\_\_\_\_

Last name

\_\_\_\_\_

Date of birth (DD/MM/YYYY)

\_\_\_\_\_

Now go to section 6

## 3 Applications from an organisation of individuals

### 3a Type of organisation

For example, a charity, a partnership, a group of individuals or a club

\_\_\_\_\_

### 3b Details of the organisation

If you are an organisation of individuals, please give the details of the main representative below. If relevant, provide details of other members (please include their title Mr, Mrs and so on) on a separate sheet and tell us the document reference you have given this sheet.

\_\_\_\_\_

### 3 Applications from an organisation of individuals, continued

Contact name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Date of birth (DD/MM/YYYY)

Now go to section 6

### 4 Applications from public bodies

#### 4a Type of public body

For example, NHS trust, local authority, English county council

#### 4b Name of the public body

#### 4c Please give us the following details of the executive

An officer of the public body authorised to sign on your behalf

Name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Position

Now go to section 6

### 5 Applications from companies or corporate bodies

#### 5a Name of the company

#### 5b Company registration number

Date of registration (DD/MM/YYYY)

If you are applying as a corporate organisation that is not a limited company, please provide evidence of your status and tell us below the reference you have given the document containing this evidence.

Document reference

Now go to section 6

#### 5c Please give details of the directors

If relevant, provide details of other directors on a separate sheet and tell us the reference you have given this sheet.

Document reference

Details of directors

Title (Mr, Mrs, Miss and so on)

First name

Last name

Date of birth (DD/MM/YYYY)





## 6 Your address

### 6a Your main (registered office) address

For companies this is the address on record at Companies House.

Contact name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Address

Postcode

Contact numbers, including the area code

Phone

Fax

Mobile

Email

For an organisation of individuals every partner needs to give us their details, including their title Mr, Mrs and so on. So, if necessary, continue on a separate sheet and tell us below the reference you have given the sheet.

Document reference for the extra sheet

### 6b Main UK business address (if different from above)

Contact name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Address

Postcode

Contact numbers, including the area code

Phone

Fax

Mobile

Email

Now go to section 7

## 7 Contact details

### 7a Who can we contact about your application?

This can be someone acting as a consultant or an 'agent' for you.

Contact name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Address

Postcode

Contact numbers, including the area code

Phone

Fax

Mobile

Email

### 7b Who can we contact about your operation (if different from question 7a)?

Contact name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Address

Postcode

Contact numbers, including the area code

Phone

Fax

Mobile

Email

## 7 Contact details, continued

### 7c Who can we contact about your billing or invoice?

As in question 7a

As in question 7b

Please give details below if different from question 7a or 7b.

Contact name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Address

Postcode

Contact numbers, including the area code

Phone

Fax

Mobile

Email

## 8 How to contact us

If you need help filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 03708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 03702 422 549 (Monday to Friday, 8am to 6pm)

Email: [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)

Website: [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency)

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, or you would like us to review a decision we have made, please let us know. More information on how to do this is available at: [www.gov.uk/government/organisations/environment-agency/about/complaints-procedure](http://www.gov.uk/government/organisations/environment-agency/about/complaints-procedure)

**Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.**

## Feedback

(You don't have to answer this part of the form, but it will help us improve our forms if you do.)

We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.

How long did it take you to fill in this form? \_\_\_\_\_

We will use your feedback to improve our forms and guidance notes, and to tell the Government how regulations could be made simpler.

Would you like a reply to your feedback?

Yes please

No thank you



### For Environment Agency use only

Date received (DD/MM/YYYY)

\_\_\_\_\_

Our reference number

\_\_\_\_\_

Payment received?

No

Yes  Amount received

£ \_\_\_\_\_



# Application Forms

## Part B2

# Application for an environmental permit Part B2 – General – new bespoke permit



**Fill in this part of the form together with parts A and F1 if you are applying for a new bespoke permit. You also need to fill in part B3, B4, B5, B6, or B7 (this depends on what activities you are applying for). Please check that this is the latest version of the form available from our website.**

**Please read through this form and the guidance notes that came with it.**

The form can be:

1 Saved onto a computer and then filled in. Please note that the form follows a logic that means questions will open or stay closed depending on a previous answer. So you may not be able to enter text in some boxes.

2 Printed off and filled in by hand. Please write clearly in the answer spaces.

It will take less than two hours to fill in this part of the application form.

## Contents

- 1 About the permit
  - 2 About the site
  - 3 Your ability as an operator
  - 4 Consultation
  - 5 Supporting information
  - 6 Environmental risk assessment
  - 7 How to contact us
- Appendix 1 – Low impact installation checklist**

## 1 About the permit

### 1a Discussions before your application

If you have had discussions with us before your application, give us the permit reference or details on a separate sheet. Tell us below the reference you have given this extra sheet.

Permit or document reference

### 1b Is the permit for a site or for mobile plant?

Site

Now go to section 2

Mobile plant

Now go to question 1c

Note: The term 'mobile plant' does not include mobile sheep dipping unit.

### Mobile plant

#### 1c Have we told you during pre-application discussions that we believe that a mobile permit is suitable for your activity?

No

Yes

#### 1d Have there been any changes to your proposal since this discussion?

No  Now go to section 3

Yes  You should send us a description of the activity you want to carry out, highlighting the changes you have made since our pre-application discussions.

Document reference

Now go to section 3

## 2 About the site (but not mobile plant)

### 2a What is the site name, address, postcode and national grid reference?

Site name

Address

Postcode

National grid reference for the site  
(for example, ST 12345 67890)

### 2b What type of regulated facility are you applying for?

Note: if you are applying for more than one regulated facility then go to 2c.

Installation

Waste operation

Mining waste operation

Water discharge activity

Groundwater activity (point source)

Groundwater activity (discharge onto land)

What is the national grid reference for the regulated facility (if only one)? (See the guidance notes on part B2.)

As in 2a above

Different from that in 2a  Please fill in the national grid reference below

National grid reference for the regulated facility

### Now go to question 2d

### 2c If you are applying for more than one regulated facility on your site, what are their types and their grid references?

See the guidance notes on part B2.

#### Regulated facility 1

National grid reference

#### What is the regulated facility type?

Installation

Waste operation

Mining waste operation

Water discharge activity

Groundwater activity (point source)

Groundwater activity (discharge onto land)

#### Regulated facility 2

National grid reference

#### What is the regulated facility type?

Installation

Waste operation

Mining waste operation

Water discharge activity

Groundwater activity (point source)

Groundwater activity (discharge onto land)

## 2 About the site, continued

Use several copies of this page or separate sheets if you have a long list of regulated facilities. Send them to us with your application form. Tell us below the reference you have given these extra sheets.

Document reference for the extra sheets \_\_\_\_\_

Now go to question 2d

### 2d Low impact installations (installations only)

Are any of the regulated facilities low impact installations?

No

Yes  If yes, tell us how you meet the conditions for a low impact installation. (See the guidance notes on part B2 – Appendix 1.)

Document reference \_\_\_\_\_

Tick the box to confirm you have filled in the low impact installation checklist in appendix 1 for each regulated facility.

### 2e Treating batteries

Are you planning to treat batteries? (See the guidance notes on part B2.)

No

Yes  Tell us how you will do this, send us a copy of your explanation and tell us below the reference you have given this explanation.

Document reference for the explanation \_\_\_\_\_

### 2f Ship recycling

Is your activity covered by the Ship Recycling Regulations 2015? (See the guidance notes on part B2.)

No

Yes  Tell us how you will do this. Please send us a copy of your explanation and your facility recycling plan, and tell us below the reference numbers you have given these documents

Document reference for the explanation \_\_\_\_\_

Document reference for the facility recycling plan \_\_\_\_\_

### 2g Multi-operator installation

If the site is a multi-operator site (that is there is more than one operator of the installation) then fill in the table below the application reference for each of the other permits.

**Table 1 – Other permit application references**


## 3 Your ability as an operator

If you are only applying for a standalone water discharge or for a groundwater activity, you only have to fill in question 3d.

### 3a Relevant offences (applies to all except standalone surface water discharges and groundwater discharges – see the guidance notes on part B2)

Have you, or any other relevant person, been convicted of any relevant offence?

No  Now go to question 3b

Yes  Please give details below

Name of the relevant person

Title (Mr, Mrs, Miss and so on) \_\_\_\_\_

First name \_\_\_\_\_

Last name \_\_\_\_\_

Date of birth (DD/MM/YYYY) \_\_\_\_\_

Position at the time of the offence \_\_\_\_\_



### 3 Your ability as an operator, continued

Name of the court where the case was dealt with \_\_\_\_\_

Date of the conviction (DD/MM/YYYY) \_\_\_\_\_

Offence and penalty set \_\_\_\_\_

Date any appeal against the conviction will be heard  
(DD/MM/YYYY) \_\_\_\_\_

If necessary, use a separate sheet to give us details of other relevant offences and tell us below the reference number you have given the extra sheet.

Document reference of the extra sheet \_\_\_\_\_

#### 3b Technical ability (relevant waste operations only – see the guidance notes on part B1)

Please indicate which of the two schemes you are using to demonstrate you are technically competent to operate your facility and the evidence you have enclosed to demonstrate this.

##### ESA/EU skills

Please select one of the following:

I have enclosed a copy of the current Competence Management System certificate

or

We will have a certified Competence Management System within 12 months and have enclosed evidence of the contract with an accredited certification body

##### CIWM/WAMITAB scheme

Please select **one** of the following:

● I have enclosed a copy of:

– the relevant qualification certificate/s

or

– evidence of deemed competence

or

– Environment Agency assessment

or

– evidence of nominated manager status under the transitional provisions for previously exempt activities

and, if deemed competent or Agency-assessed or nominated manager, or if the original qualification is over two years old:

I have enclosed a copy of the relevant current continuing competence certificate/s

● I will complete my qualification within four weeks of starting the permitted activities and have enclosed evidence of my registration with WAMITAB or my EPOC booking as appropriate

● **For medium- and high-risk tier activities other than landfill** I will complete the qualification within 12 months and have enclosed evidence of registration with WAMITAB and, where relevant, EPOC booking. I understand I must complete either four specified units of the relevant qualification or an EPOC within four weeks of the permitted activities commencing

For each technically competent manager please give the following information. If necessary, use a separate sheet to give us these details and tell us below the document reference you have given the extra sheet:

Title (Mr, Mrs, Miss and so on) \_\_\_\_\_

First name \_\_\_\_\_

Last name \_\_\_\_\_

Date of birth (DD/MM/YYYY) \_\_\_\_\_

Phone \_\_\_\_\_

Mobile \_\_\_\_\_

Email \_\_\_\_\_

### 3 Your ability as an operator, continued

Please provide the environmental permit number/s and site address for **all** other waste activities that the proposed technically competent manager provides technical competence for, including permits held by other operators. Continue on a separate sheet as required.

Permit number	Site address	Postcode

Document reference of the extra sheet \_\_\_\_\_

Now go to question 3c

#### 3c Finances (for installations, waste operations and mining waste operations only)

Please note that if you knowingly or carelessly make a statement that is false or misleading to help you get an environmental permit (for yourself or anyone else), you may be committing an offence under the Environmental Permitting (England and Wales) Regulations 2016.

Do you or any relevant person or a company in which you were a relevant person have current or past bankruptcy or insolvency proceedings against you?

No

Yes  Please give details below, including the required set-up costs (including infrastructure), maintenance and clean up costs for the proposed facility against which a credit check may be assessed.

We may want to contact a credit reference agency for a report about your business's finances.

#### Landfill, Category A mining waste facilities and mining waste facilities for hazardous waste only

How do you plan to make financial provision (to operate a landfill or a mining waste facility you need to show us that you are financially capable of meeting the obligations of closure and aftercare)?

Bonds

Escrow account

Trust fund

Lump sum

Other

Provide a plan of your estimated expenditure on each phase of the landfill or mining waste facility.

Give the document plan reference \_\_\_\_\_

Now go to question 3d

#### 3d Management systems (all)

You must have an effective, written management system in place that identifies and reduces the risk of pollution. You may show this by using a certified scheme or your own system.

Your permit requires you (as the operator) to ensure that you manage and operate your activities in accordance with a written management system.

You can find guidance on management systems on our website at [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency)

**Tick this box to confirm that you have read the guidance and that your management system will meet our requirements.**

What management system will you provide for your regulated facility?

EC Eco-Management and Audit Scheme (EMAS)

EMAS Easy

ISO 14001

BS 8555 (Phases 1–5)

Acorn

### 3 Your ability as an operator, continued

Green Dragon

Own management system

Please make sure you send us a summary of your management system with your application.

Document reference or references

### 4 Consultation (fill in 4a to 4c for installations and waste operations and 4d for installations only)

Could the waste operation or installation involve releasing any substance into any of the following?

#### 4a A sewer managed by a sewerage undertaker

No

Yes  Please name the sewerage undertaker

#### 4b A harbour managed by a harbour authority

No

Yes  Please name the harbour authority

#### 4c Direct into relevant territorial waters or coastal waters within the sea fisheries district of a local fisheries committee

No

Yes  Please name the fisheries committee

#### 4d Is the installation on a site for which:

4d1 a nuclear site licence is needed under section 1 of the Nuclear Installations Act 1965?

No

Yes

4d2 a policy document for preventing major accidents is needed under regulation 5 of the Control of Major Accident Hazards Regulations 2015, or a safety report is needed under regulation 7 of those Regulations?

No

Yes

### 5 Supporting information

#### 5a Provide a plan or plans for the site (but not any mobile plant)

Clearly mark the site boundary or discharge point, or both – see the guidance notes on part B2.

Document reference or references of the plans

#### 5b Provide the relevant sections of a site condition/baseline report if this applies (see the guidance notes on part B2 for what needs to be marked on the plan)

Document reference of the report

If you are applying for an installation, tick the box to confirm that you have sent in a baseline report.

#### 5c Provide a non-technical summary of your application (see the guidance notes on part B2)

Document reference of the summary

#### 5d Are you applying for an activity that includes the storage of combustible wastes?

This applies to all activities excluding standalone water and groundwater discharges.

Yes  Provide a fire prevention plan (see the guidance notes on part B2). You need to highlight any changes you have made since your pre-application discussions.

No

Document reference of the plan

## 6 Environmental risk assessment

Provide an assessment of the risks each of your proposed regulated facilities poses to the environment. The risk assessment must follow the methodology set out in 'Risk assessments for your environmental permit' at <https://www.gov.uk/government/collections/technical-guidance-for-regulated-industry-sectors-environmental-permitting> or an equivalent method.

Document reference for the assessment \_\_\_\_\_

## 7 How to contact us

If you need help filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 03708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 03702 422 549 (Monday to Friday, 8am to 6pm)

Email: [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)

Website: [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency)

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, please tell us how we can improve it.

**Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.**

## Feedback

(You don't have to answer this part of the form, but it will help us improve our forms if you do.)

We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.

How long did it take you to fill in this form? \_\_\_\_\_

We will use your feedback to improve our forms and guidance notes, and to tell the Government how regulations could be made simpler.

Would you like a reply to your feedback?

Yes please

No thank you



### For Environment Agency use only

Date received (DD/MM/YYYY)

\_\_\_\_\_

Our reference number

\_\_\_\_\_

Payment received?

No

Yes

Amount received

£ \_\_\_\_\_

**Plain English Campaign’s Crystal Mark does not apply to appendix 1.**

**Appendix 1 – Low impact installation checklist (see the guidance notes on part B2)**

Installation reference	Response		Do you meet this?
Condition	Response		Do you meet this?
A – Management techniques	Provide references to show how your application meets A.		Yes <input type="checkbox"/> No <input type="checkbox"/>
	References		
B – Aqueous waste	Effluent created	m <sup>3</sup> /day	Yes <input type="checkbox"/> No <input type="checkbox"/>
C – Abatement systems	Provide references to show how your application meets C.		Yes <input type="checkbox"/> No <input type="checkbox"/>
	References		
D – Groundwater	Do you plan to release any hazardous substances or non-hazardous pollutants into the ground?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
E – Producing waste	Hazardous waste	Tonnes per year	Yes <input type="checkbox"/> No <input type="checkbox"/>
	Non-hazardous waste	Tonnes per year	
F – Using energy	Peak energy consumption	MW	Yes <input type="checkbox"/> No <input type="checkbox"/>
G – Preventing accidents	Do you have appropriate measures to prevent spills and major releases of liquids? (See ‘How to comply’)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
	Provide references to show how your application meets G.		
	References		
H – Noise	Provide references to show how your application meets H.		Yes <input type="checkbox"/> No <input type="checkbox"/>
	References		
I – Emissions of polluting substances	Provide references to show how your application meets I.		Yes <input type="checkbox"/> No <input type="checkbox"/>
	References		
J – Odours	Provide references to show how your application meets J.		Yes <input type="checkbox"/> No <input type="checkbox"/>
	References		
K – History of keeping to the regulations	Say here whether you have been involved in any enforcement action as described in Compliance History Appendix 1 explanatory notes.	Yes <input type="checkbox"/> No <input type="checkbox"/>	



# Application Forms

## Part B4

# Application for an environmental permit Part B4 – New bespoke waste operation permit



**Fill in this part of the form, together with parts A, B2 and F1, if you are applying for a new bespoke permit for a waste operation. Please check that this is the latest version of the form available from our website.**

**Please read through this form and the guidance notes that came with it.**

The form can be:

1 Saved onto a computer and then filled in. Please note that the form follows a logic that means questions will open or stay closed depending on a previous answer. So you may not be able to enter text in some boxes.

2 Printed off and filled in by hand. Please write clearly in the answer spaces.

It will take less than three hours to fill in this part of the application form.

## Contents

- 1 What waste operations are you applying for?
  - 2 Emissions to air, water and land
  - 3 Operating techniques
  - 4 Monitoring
  - 5 How to contact us
- Appendix 1 – Specific questions for waste facilities that accept clinical waste
- Appendix 2 – Specific questions for waste facilities that accept hazardous waste
- Appendix 3 – Specific questions for the recovery to land for agricultural benefit of compost like outputs from the treatment of mixed municipal solid wastes
- Appendix 4 – Specific questions for inert waste landfills and deposit for recovery operations

## 1 What waste operations are you applying for?

Fill in Table 1a below with details of what you are applying for.

Fill in a separate table for each waste operation you are applying for. Use a separate sheet if you have a long list and send it to us with your application form. Tell us below the reference you have given the extra sheet.

Document reference for the extra sheet

### Types of waste accepted

For each line in Table 1a, fill in a separate document to list those wastes you will accept on the site for that operation. Give the List of Wastes catalogue code (search for 'Technical guidance on how to assess and classify waste' at [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency)). If you need to exclude wastes from your activity or facility by restricting the description, quantity, physical nature, hazardous properties, composition or characteristic of the waste, include these in the document. Send it to us with your application form.

**Table 1a – Waste operations which do not form part of an installation**

Name of the waste operation	Description of the waste operation	Annex I (D codes) and Annex II (R codes) and descriptions	Hazardous waste treatment capacity (if this applies). See note 1	Non-hazardous waste treatment capacity (if this applies). See note 1
Add extra rows if you need them. If you do not have enough room go to the line below or send a separate document and give us the document reference here	Use the description from the guidance. Include any extra detail that you think would help to accurately describe what you want to do			
For all waste operations	Total storage capacity (see note 2)			
	Annual throughput (tonnes each year)			

- Notes**
- 1 By ‘capacity’, we mean the total landfill capacity (cubic metres), the total deposit for recovery capacity (cubic metres), the total treatment capacity (tonnes each day) for waste treatment and the total storage capacity (tonnes) for waste storage operations.
  - 2 By ‘total storage capacity’, we mean the maximum amount of waste in tonnes you store on the site at any one time.



## 1 What waste operations are you applying for?, continued

Please provide the document reference for each document. You can use Table 1b as a template.

If you want to accept any wastes with a code ending in 99, you must provide more information and a full description in the document.

Document reference for this document \_\_\_\_\_

**Table 1b – Template example – types of waste accepted and restrictions**

Waste code	Description of waste
Example 02 01 08*	Example Agrochemical waste containing hazardous substances
06 01 02*	Hydrochloric acid

### 1c Deposit for recovery purposes (see Appendix 4 and guidance notes on part B4)

Are you applying for a waste recovery activity involving the permanent deposit of waste on land for construction or land reclamation restoration or improvement?

No  Go to question 2

Yes

Have we advised you during pre-application discussions that we believe the activity is waste recovery?

No  Go to question 2

Yes

Have there been any changes to your proposal since this discussion?

No

Yes

Please send us a copy of your waste recovery plan that complies with our guidance at <https://www.gov.uk/guidance/waste-recovery-plans-and-permits>. You need to highlight any changes you have made since your pre-application discussions. Also give us the reference number of the document with your justification.

**Please note that there is an additional charge for the assessment of a waste recovery plan that must be submitted as part of this application. For the charge see <https://www.gov.uk/topic/environmental-management/environmental-permits>.**

Document reference \_\_\_\_\_

## 2 Emissions to air, water and land

Fill in Table 2 below with details of the emissions that result from the operating techniques at each of your waste operations.

Fill in one table for each waste operation.

**Table 2 – Emissions**

Name of the waste operation				
<b>Point source emissions to air</b>				
Emission point reference and location	Source	Parameter	Quantity	Unit
<b>Point source emissions to water (other than sewers)</b>				
Emission point reference and location	Source	Parameter	Quantity	Unit

## 2 Emissions to air, water and land, continued

Point source emissions to sewers, effluent treatment plants or other transfers off site				
Emission point reference and location	Source	Parameter	Quantity	Unit
Point source emissions to land				
Emission point reference and location	Source	Parameter	Quantity	Unit

### Supporting information

## 3 Operating techniques

### 3a Technical standards

Fill in Table 3a for each operation you refer to in Table 1a above and list the relevant technical guidance note (TGN) or notes you are planning to use. If you are planning to use the standards set out in the TGN, there is no need to justify using them.

You must justify your decisions in a separate document if:

- there is no technical standard;
- the technical guidance provides a choice of standards; or
- you plan to use another standard.

This justification could include a reference to the Environmental Risk Assessment provided in part B2 of the application form.

The documents should summarise the main measures you use to control the main issues identified in your risk assessment (search for 'Risk assessment for your environmental permit' at [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency)) or technical guidance. For each of the activities listed in Table 3a, describe the type of operation and the options you have chosen for controlling emissions from your process.

### Table 3a – Technical standards

Fill in a separate table for each waste operation.

Name of waste operation		
Description of waste operation	Relevant technical guidance note	Document reference (if appropriate)

In all cases, describe the type of facility or operation you are applying for and, if appropriate, use block diagrams to help describe the process. Provide the document references for the description.

Document reference for the description

### 3 Operating techniques, continued

#### 3b General requirements

Fill in a separate Table 3b for each waste operation.

**Table 3b – General requirements**

Name of the waste operation	
If the TGN or your risk assessment shows that emissions of substances not controlled by emission limits are an important issue, send us your plan for managing them	Document reference or references
If the TGN or your risk assessment shows that odours are an important issue, send us your odour management plan <b>If your activity type is listed in the guidance document ‘Control and monitor emissions for your environmental permit’ as needing an odour management plan, or your risk assessment shows that odours are an important issue, you need to send us your odour management plan.</b>	Document reference or references
If the TGN or your risk assessment shows that noise or vibration are important issues, send us your noise or vibration management plan (or both)	Document reference or references

We may need to ask for management plans or risk assessments in other circumstances based on our regulatory experience. If you are unsure as to whether you need to submit a management plan with your application, please discuss this with the Environment Agency prior to submission. Search for ‘Risk assessment for your environmental permit’ at [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency).

#### 3c Information for specific sectors

For some of the sectors, we need more information to be able to set appropriate conditions in the permit. This is as well as the information you may provide in sections 5, 6 and 7. For those activities listed below, you must answer the questions in the related document.

**Table 3c – Questions for specific sectors**

Sector	Appendix
Clinical waste	See the questions in appendix 1
Disposing of and recovering hazardous waste	See the questions in appendix 2
Recovery to land for agricultural benefit of compost like outputs from the treatment of mixed municipal solid wastes	See the questions in appendix 3
Inert waste landfill and deposit of waste on land for construction, land reclamation, restoration or improvement	See the questions in appendix 4

### General information

#### 4 Monitoring

##### 4a Describe the measures you use for monitoring emissions by referring to each emission point in Table 2 above

You should also describe any environmental monitoring. Tell us:

- how often you use these measures;
- the methods you use; and
- the procedures you follow to assess the measures.

Document reference for this information

##### 4b Point source emissions to air only

Provide an assessment of the sampling locations used to measure point source emissions to air. The assessment must use M1. (Search for ‘M1 sampling requirements for stack emission monitoring’ at [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency).)

Document reference for the assessment

## 5 How to contact us

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Textphone: 03702 422 549 (Monday to Friday, 8am to 6pm)

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Website: [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency)

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, please tell us how we can improve it.

**Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.**

## Feedback

(You don't have to answer this part of the form, but it will help us improve our forms if you do.)

We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.

How long did it take you to fill in this form? \_\_\_\_\_

We will use your feedback to improve our forms and guidance notes, and to tell the Government how regulations could be made simpler.

Would you like a reply to your feedback?

Yes please

No thank you



### For Environment Agency use only

Date received (DD/MM/YYYY)

\_\_\_\_\_

Our reference number

\_\_\_\_\_

Payment received?

No

Yes

Amount received

£ \_\_\_\_\_

**Plain English Campaign’s Crystal Mark does not apply to appendices 1 to 4.**

**Appendix 1 – Specific questions for waste facilities that accept clinical waste**

Note: If your procedures are fully in line with the standards set out in ‘Technical guidance for managing clinical waste’ (EPR 5.07) then you should tick the ‘yes’ box and provide the procedure reference from EPR 5.07. There is no need for you to supply a copy of the procedure.

**1 Are pre-acceptance procedures in place that are fully in line with the appropriate measures set out in section 2.2 of EPR 5.07 and which are used to assess a waste enquiry before it is accepted at the installation or waste facility?**

No  Provide justification for departure from EPR 5.07 and submit a copy of your procedures

Document reference

Yes  EPR 5.07 procedure reference

**2 Are waste acceptance procedures in place that are fully in line with the appropriate measures set out in section 2.2 of EPR 5.07, and which are used to cover issues such as loads arriving and being inspected, sampling waste, rejecting waste, and keeping records to track waste?**

No  Provide justification for departure from EPR 5.07 and submit a copy of your procedures

Document reference

Yes  EPR 5.07 procedure reference

**3 Are waste storage, handling and dispatch procedures, and infrastructure in place that are fully in line with the appropriate measures set out in section 3.2 of EPR 5.07?**

No  Provide justification for departure from EPR 5.07 and submit a copy of your procedures

Document reference

Yes  EPR 5.07 procedure reference

**4 Are monitoring procedures in place that are fully in line with the appropriate measures set out in section 3.3 of EPR 5.07?**

No  Provide justification for departure from EPR 5.07 and submit a copy of your procedures

Document reference

Yes  EPR 5.07 procedure reference

**5 Are you proposing to either**

- accept an additional waste not included in Table 2.1 of section 2.1 of EPR 5.07, or
- apply a permitted activity to a waste other than that identified for that waste in Table 2.1?

No

Yes  Provide justification

Document reference

**6 Please provide a summary description of the treatment activities undertaken on the waste facility. This should cover the general principles set out in section 2.1.4 of EPR 5.07**

Document reference for the summary

**7 Please provide layout plans detailing the location of each treatment plant and main plant items and process flow diagrams for the treatment plant**

Document reference

## Appendix 2 – Specific questions for waste facilities that accept hazardous waste

Note: If your procedures are fully in line with the standards set out in ‘Recovery and disposal of hazardous and non-hazardous waste’ (SGN 5.06) then you should tick the ‘yes’ box and provide the procedure reference from SGN 5.06. There is no need for you to supply a copy of the procedure.

### 1 Are pre-acceptance procedures in place that are fully in line with the appropriate measures set out in section 2.1.1 of SGN 5.06, and which are used to assess a waste enquiry before it is accepted at the waste facility?

No  Provide justification for departure from SGN 5.06 and submit a copy of your procedures

Document reference

Yes  SGN 5.06 procedure reference

### 2 Are waste acceptance procedures in place that are fully in line with the appropriate measures set out in section 2.1.2 of SGN 5.06, and which are used to cover issues such as loads arriving and being inspected, sampling waste, rejecting waste, and keeping records to track waste?

No  Provide justification for departure from SGN 5.06 and submit a copy of your procedures

Document reference

Yes  SGN 5.06 procedure reference

### 3 Are waste storage procedures and infrastructure in place that are fully in line with the appropriate measures set out in section 2.1.3 of SGN 5.06?

No  Provide justification for departure from SGN 5.06 and submit a copy of your procedures

Document reference

Yes  SGN 5.06 procedure reference

### 4 Provide a layout plan giving details of where the waste facility is based, the infrastructure in place (including areas and structures for separately storing types of waste which may be dangerous to store together) and capacity of waste storage areas and structures

Document reference

### 5 Provide a summary of the treatment activities carried out on the waste facility. This should cover the general principles set out in section 2.1.4 of SGN 5.06

Document reference for the summary

### 6 Provide layout plans giving details of where each treatment plant is based, the main items at each plant, and process flow diagrams for the treatment plant

Document reference or references

### Appendix 3 – Specific questions for the recovery to land for agricultural benefit of compost like outputs from the treatment of mixed municipal solid wastes

**1 Provide an accurate and reliable characterisation of your compost like outputs (CLO). This should be based on sampling and analysis of the CLO produced by the treatment (MBT) process over a 12 month period and in accordance with section 2 of TGN 6.15**

Document reference \_\_\_\_\_

**2 Provide an agricultural benefit assessment for the use of your CLO. This should be based on section 2 of TGN 6.15 and should be signed and dated by an appropriate technical expert**

Document reference \_\_\_\_\_

**3 Provide a site specific risk assessment of risks to soil and food chain receptors. This should be based on Schedule 2 of TGN 6.15 and include a map with a green outline showing the boundary of the area being treated and include:**

- locations where the waste will be stored and spread;
- any spring, well or borehole used to supply water for domestic or food production purposes that is within 250 metres of the area being treated;
- any spring, well or borehole not being used for domestic or food production purposes that is within 50 metres of the area being treated;
- any European designated sites (candidate or Special Area of Conservation, proposed or Special Protections Area in England and Wales or Ramsar Site) or Sites of Special Scientific Interest (SSSI) which are within 500 metres of the place where waste is to be stored or spread;
- the location of public rights of way;
- any Groundwater Source Protection Zones;
- surface watercourses;
- any buildings or houses within 250 metres of the area being treated;
- land drains within the boundary.

Document reference \_\_\_\_\_

**4 Are the technical standards and measures fully in line with those set out in section 3 of TGN 6.15?**

Yes

No  Provide justification for departure from TGN 6.15 and a copy of the proposed technical standards, measures or procedures.

Document reference \_\_\_\_\_

## Appendix 4 – Specific questions for inert waste landfill and deposit for recovery operations

### 1 Provide your Environmental Setting and Site Design (ESSD) report

Document reference \_\_\_\_\_

Note: You should use the Environment Agency template to help you develop an environmental setting and site design (ESSD) report.

### 2 Provide your Waste Acceptance Procedures (including Waste Acceptance Criteria)

Document reference \_\_\_\_\_

### 3 Have you provided a hydrogeological risk assessment (HRA) for the site?

Yes

No  If no, please refer to the section of your ESSD that explains why this is unnecessary for your site

Document reference \_\_\_\_\_

### 4 Have you completed an outline engineering plan for the site?

Yes

No  If no, please refer to the section of your ESSD that explains why this is unnecessary for your site

Document reference \_\_\_\_\_

### 5 Have you provided a stability risk assessment (SRA) for your site?

Yes

No  If no, please refer to the section of your ESSD that explains why this is unnecessary for your site

Document reference \_\_\_\_\_

### 6 Have you completed a monitoring plan for the site?

Yes

No  If no, please refer to the section of your ESSD that explains why this is unnecessary for your site

Document reference \_\_\_\_\_

### 7 Have you completed a plan for closing the site and procedures for looking after the site once it has closed?

Yes  For inert waste landfill you must provide a closure plan

No  If no for deposit for recovery activities please refer to the section of your ESSD that explains why this is unnecessary for your site

Document reference \_\_\_\_\_

## Spreading waste to support plant growth

### 8a Does the activity involve the deposit of waste to create or treat a growing medium (R10 for land treatment)?

Yes

No

Note: If you are not depositing waste to create or treat a growing medium, you do not need to answer questions 8b and 8c.

### 8b If you answered 'yes' to question 8a, can you meet both of the following criteria?

- waste types to be used for the R10 activity are top soils (EWC 17 05 04 or 20 02 02), peat (EWC 17 05 04 or 20 02 02) and/or soil from cleaning and washing beet (EWC 02 04 01) only, and
- The depth of deposit for the R10 activity will not exceed the final 50cm

Yes

No

### 8c If you have answered 'No' to 8b above, have you completed a benefit statement?

Yes

No  If no, please explain why

Document reference \_\_\_\_\_

Note: Refer to our guidance when completing your statement (including EPR 8.01, section 6)





# Application Forms

## Part F1

# Application for an environmental permit Part F1 – Charges and declarations



**Fill in this part for all applications for installations, waste operations, mining waste operations, water discharges, point source groundwater discharges and groundwater discharges onto land. Please check that this is the latest version of the form available from our website.**

**Please read through this form and the guidance notes that came with it.**

The form can be:

- 1 Saved onto a computer and then filled in. Please note that the form follows a logic that means questions will open or stay closed depending on a previous answer. So you may not be able to enter text in some boxes.
- 2 Printed off and filled in by hand. Please write clearly in the answer spaces.

It will take less than two hours to fill in this part of the application form.

**Contents**

- 1 Working out charges
- 2 Payment
- 3 The Data Protection Act 1998
- 4 Confidentiality and national security
- 5 Declaration
- 6 Application checklist
- 7 How to contact us
- 8 Where to send your application

## 1 Working out charges (you must fill in this section)

You have to submit an application fee with your application. You can find out the charge by searching for ‘Environment Agency charging scheme and guidance: environmental permits’ at [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency).

Please remember that the charges are revised on 1 April each year and that there is an annual subsistence charge to cover the costs we incur in the ongoing regulation of the permit.

**Table 1 Type of application (add number if more than one)**

Installation	Waste	Mining waste	Water discharge/point source discharge to groundwater	Groundwater spreading onto land

**Table 2 Charge type (A)**

Activity description	Activity reference	Percentage charge (see charges tables)						Amount
		100	60	50	30	20	10	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Total A</b>								

**1 Working out charges (you must fill in this section), continued****Table 3 Additional component charges (B)**

Part 1.19 Charges for plans and assessments			Tick appropriate
Reference	Plan or assessment	Charge	
1.19.1	Waste recovery plan	£1,231	<input type="checkbox"/>
1.19.2	Habitats assessment	£779	<input type="checkbox"/>
1.19.3	Fire prevention plan	£1,241	<input type="checkbox"/>
1.19.4	Pest management plan	£1,241	<input type="checkbox"/>
1.19.5	Dust management plan	£1,241	<input type="checkbox"/>
1.19.6	Odour management plan	£1,246	<input type="checkbox"/>
1.19.7	Noise and vibration management plan	£1,246	<input type="checkbox"/>
1.19.8	Ammonia emissions risk assessment	£620	<input type="checkbox"/>
1.19.9	Dust and bio-aerosol management plan	£620	<input type="checkbox"/>
	Advertising	£500	<input type="checkbox"/>
<b>Total B</b>			

Total charges

Total A plus total B

**2 Payment**

Tick below to show how you have paid.

Cheque

Postal order

Cash

Tick below to confirm you are enclosing cash with the application

Credit or debit card

Electronic transfer (for example, BACS)

Remittance number

Date paid (DD/MM/YYYY)

**How to pay****Paying by cheque, postal order or cash**

Cheque details

Cheque made payable to

Cheque number

Amount

£ 

You should make cheques or postal orders payable to 'Environment Agency' and make sure they have 'A/c Payee' written across them if it is not already printed on.

Please write the name of your company and application reference number on the back of your cheque or postal order.

**We will not** accept cheques with a future date on them.

We do not recommend sending cash through the post. If you cannot avoid this, please use a recorded delivery postal service and enclose your application reference details. Please tick the box below to confirm you are enclosing cash.

I have enclosed cash with my application

**Paying by credit or debit card**

If you are paying by credit or debit card, either we can call you or you can fill in the separate form CC1 and enclose it with the application. We will destroy your card details once we have processed your payment. We can accept payments by Visa, MasterCard or Maestro card only.

## 2 Payment, continued

- Please call me to arrange payment by debit or debit card
- I have enclosed form CC1 with my application

### Paying by electronic transfer BACS reference

If you choose to pay by electronic transfer you will need to use the following information to make your payment.

Company name	Environment Agency
Company address	SSCL (Environment Agency), PO Box 797, Newport Gwent, NP10 8FZ
Bank	RBS/NatWest
Address	London Corporate Service Centre, CPB Services, 2nd Floor, 280 Bishopsgate, London EC2M 4RB
Sort code	60-70-80
Account number	10014411
Account name	EA RECEIPTS
Payment reference number	PSCAPPXXXXYYY

You need to create your own reference number. It should begin with PSCAPP (to reflect that the application is for a permitted activity) and it should include the first five letters of the company name (replacing the X's in the above reference number) and a unique numerical identifier (replacing the Y's in the above reference number). The reference number that you supply will appear on our bank statements.

You should also email your payment details and reference number to [ea\\_fsc\\_ar@sscl.gse.gov.uk](mailto:ea_fsc_ar@sscl.gse.gov.uk).

If you are making your payment from outside the United Kingdom, it must be in sterling. Our IBAN number is GB23NWK60708010014411 and our SWIFTBIC number is NWBKGB2L.

If you do not quote your reference number, there may be a delay in processing your payment and application.

Now read section 3 below.

## 3 The Data Protection Act 1998

We, the Environment Agency, will process the information you provide so that we can:

- deal with your application;
- make sure you keep to the conditions of the licence, permit or registration;
- process renewals; and
- keep the public registers up to date.

We may also process or release the information to:

- offer you documents or services relating to environmental matters;
- consult the public, public organisations and other organisations (for example, the Health and Safety Executive, local authorities, the emergency services, the Department for Environment, Food and Rural Affairs) on environmental issues;
- carry out research and development work on environmental issues;
- provide information from the public register to anyone who asks;
- prevent anyone from breaking environmental law, investigate cases where environmental law may have been broken, and take any action that is needed;
- assess whether customers are satisfied with our service, and to improve our service; and
- respond to requests for information under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004 (if the Data Protection Act allows). We may pass the information on to our agents or representatives to do these things for us.

Now read section 4 below.

## 4 Confidentiality and national security

We will normally put all the information in your application on a public register of environmental information. However, we may not include certain information in the public register if this is in the interests of national security, or because the information is confidential.

You can ask for information to be made confidential by enclosing a letter with your application giving your reasons. If we agree with your request, we will tell you and not include the information in the public register. If we do not agree with your request, we will let you know how to appeal against our decision, or you can withdraw your application.

### Only tick the box below if you wish to claim confidentiality for your application

Please treat the information in my application as confidential

## 4 Confidentiality and national security, continued

### National security

You can tell the Secretary of State that you believe including information on a public register would not be in the interests of national security. You must enclose a letter with your application telling us that you have told the Secretary of State and you must still include the information in your application. We will not include the information in the public register unless the Secretary of State decides that it should be included.

You can find guidance on national security in ‘Environmental permitting guidance: core guidance’, published by Defra and available via our website at gov.uk.

You cannot apply for national security via this application.

Now go to section 5.

## 5 Declaration

**If you knowingly or carelessly make a statement that is false or misleading to help you get an environmental permit (for yourself or anyone else), you may be committing an offence under the Environmental Permitting (England and Wales) Regulations 2010.**

**A relevant person should make the declaration (see guidance notes on part F1). An agent acting on behalf of an applicant is NOT a relevant person.**

Each individual (or individual trustee) who is applying for their name to appear on the permit must complete this declaration. You will have to print a separate copy of this page for each additional individual to complete.

**If you are transferring all or part of your permit, both you and the person receiving the permit must make the declaration. You must fill in the declaration directly below; the person receiving the permit must fill in the declaration under the heading ‘For transfers only’.**

**Note: we will issue a letter to both current and new holders to confirm the transfer. If you are changing address we will need to send this letter to your new address; therefore please tell us your new address in a separate letter.**

**If you are unable to trace one or more of the current permit holders please see below under the transfers declaration.**

**I declare that the information in this application is true to the best of my knowledge and belief. I understand that this application may be refused or approval withdrawn if I give false or incomplete information.**

If you deliberately make a statement that is false or misleading in order to get approval you may be prosecuted.

I confirm that my standard facility will fully meet the rules that I have applied for (this only applies if the application includes standard facilities)

Tick this box to confirm that you understand and agree with the declaration above, then fill in the details below (you do not have to provide a signature as well)

Tick this box if you do not want us to use information from any ecological survey that you have supplied with your application (for further information please see the guidance notes on part F1)

Name \_\_\_\_\_

Title (Mr, Mrs, Miss and so on) \_\_\_\_\_

First name \_\_\_\_\_

Last name \_\_\_\_\_

on behalf of (if relevant; for example, a company or organisation and so on) \_\_\_\_\_

Position (if relevant; for example, in a company or organisation and so on) \_\_\_\_\_

Today’s date (DD/MM/YYYY) \_\_\_\_\_

### **For transfers only – declaration for person receiving the permit**

**A relevant person should make the declaration (see guidance notes on part F1). An agent acting on behalf of an applicant is NOT a relevant person.**

**I declare that the information in this application to transfer an environmental permit to me is true to the best of my knowledge and belief. I understand that this application may be refused or approval withdrawn if I give false or incomplete information.**

**Note: If you cannot trace a person or persons holding the permit you may be able to transfer the permit without their declaration as above. Please contact us to discuss this and supply evidence in your application to confirm you are unable to trace one or all of the permit holders.**

If you deliberately make a statement that is false or misleading in order to get approval you may be prosecuted.



## 7 How to contact us

If you need help filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 03708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 03702 422 549 (Monday to Friday, 8am to 6pm)

Email: [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)

Website: [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency)

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, please tell us how we can improve it.

**Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.**

## 8 Where to send your application (for how many copies to send see the guidance note on part F1)

Please send your filled in application form to:

For water discharges by email to [PSC-WaterQuality@environment-agency.gov.uk](mailto:PSC-WaterQuality@environment-agency.gov.uk)

For waste and installations by email to [PSC@environment-agency.gov.uk](mailto:PSC@environment-agency.gov.uk)

Or

Environment Agency Permitting and Support Centre

Environmental Permitting Team

Quadrant 2

99 Parkway Avenue

Parkway Business Park

Sheffield

S9 4WF

**Do you want all information to be sent to you by email?**

Please tick this box if you wish to have all communication about this application sent via email (we will use the details provided in Part A)

## Feedback

(You don't have to answer this part of the form, but it will help us improve our forms if you do.)

We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.

How long did it take you to fill in this form? \_\_\_\_\_

We will use your feedback to improve our forms and guidance notes, and to tell the Government how regulations could be made simpler.

Would you like a reply to your feedback?

Yes please

No thank you



### For Environment Agency use only

Date received (DD/MM/YYYY)

\_\_\_\_\_

Our reference number

\_\_\_\_\_

Payment received?

No

Yes

Amount received

£ \_\_\_\_\_





## Drawings



Permit Boundary Plan

Drawing No. 18/008d 001

# Longwater Gravel

Producers of Quality Aggregates

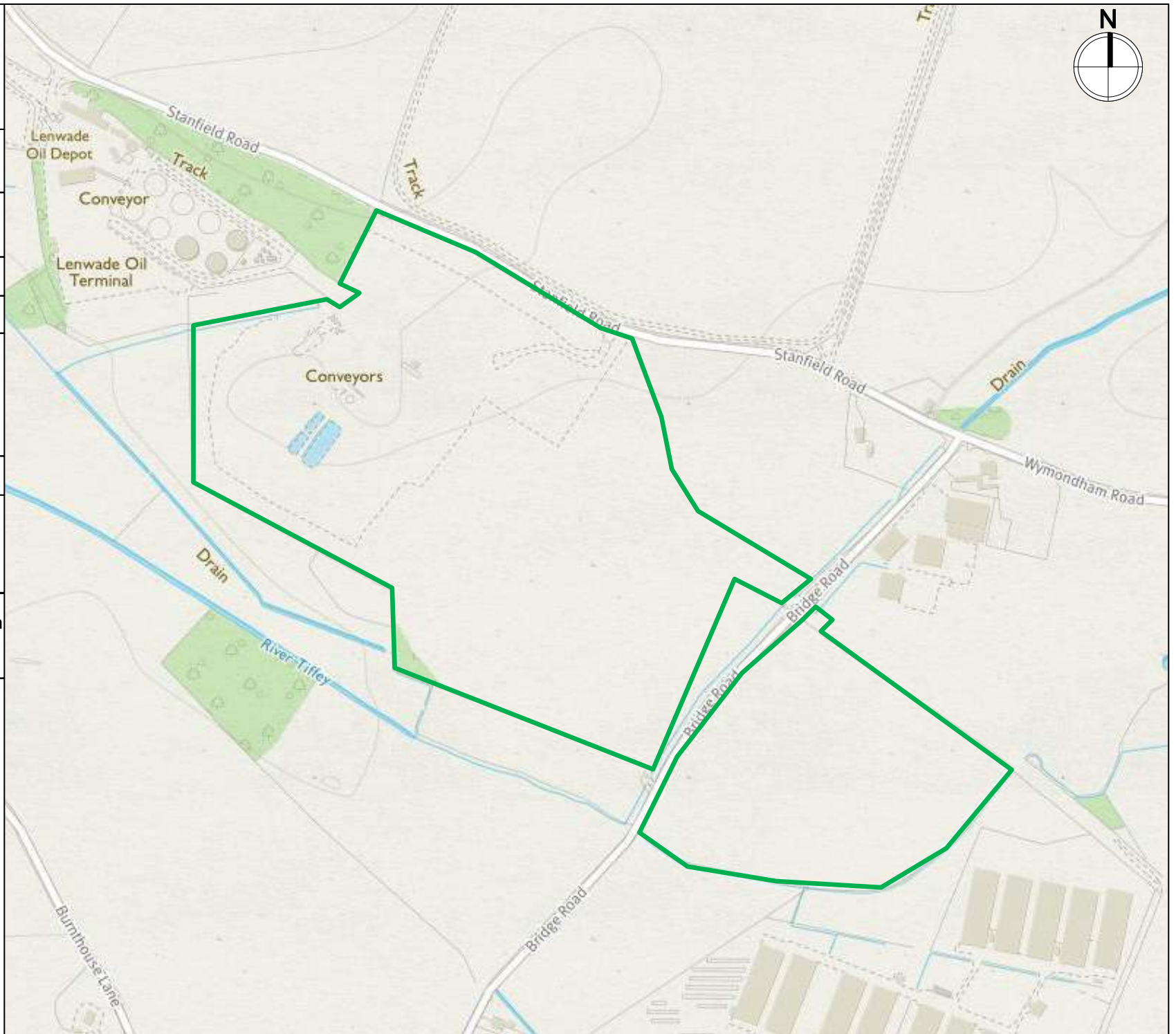
## Wymondham Quarry

Client	Longwater Gravel Company Limited
Title	Permit Boundary Plan
Dwg No.	18/008d 001
Site	Wymondham Quarry, Stanfield Road, Wymondham, Norfolk, NR18 9RL
Date	11/04/2019
Key	 Permit Boundary
Scale	



Providing solutions, ensuring compliance

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## **Appendix 1**

### Waste Recovery Plan



## **Waste Recovery Plan: Wymondham Quarry**

Longwater Gravel Company Limited

Wymondham Quarry,  
Stanfield Road,  
Wymondham,  
Norfolk,  
NR18 9RL.



This Waste Recovery Plan was prepared by  
Westbury Environmental Limited on behalf of  
Longwater Gravel Company Limited.

### Document Control Table

<b>Project Reference</b>	<b>18/008b</b>	
Project Title	Environmental Permit Application for Wymondham Quarry	
Document Title	Waste Recovery Plan	
Document Version No.	1	
Document Issue Date	30 <sup>th</sup> November 2018	
Client	Longwater Gravel Company Limited	
Report Produced By / Date	Georgina Watkins	30 <sup>th</sup> November 2018
Report Checked By / Date	Tracey Westbury	30 <sup>th</sup> November 2018



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[www.westburyenv.co.uk](http://www.westburyenv.co.uk)



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2. Benefits from the restoration .....	3
3. Suitability of the Recovered Waste for the Intended Purpose .....	4
4. Minimal Amount of Waste Being Used to Achieve the Intended Benefit .....	6
5. Proposal Completed to an Appropriate Standard.....	7
6. Conclusion .....	8

## Drawings

Site Context, Plan No. 0812/SC/1.

Illustrative Progress Operations, Plan No. 0812/PO/2 v1.

SLR Proposed SWMP Measures, September 2013.

Change in ground levels, Plan No. 18/008b 001

Site Plan (as existing), Plan No. 0812/S

Illustrative Restoration Plan, Plan No. 0812/R/1d

Illustrative Cross Sections, Plan No. 0812/CS/2

## Appendices

Appendix 1 Planning Permission C/7/2013/7014

Appendix 2 Restoration Scheme, Longwater Gravel Co. Ltd., April 2014.



# 1. Introduction

- 1.1. This Waste Recovery Plan has been prepared in accordance with the Environmental Permitting (England and Wales) Regulations 2012 and guidance from the Environment Agency Website dated 18th October 2016 in support of an application for a Waste Recovery Permit.
- 1.2. This Waste Recovery Plan provides information on the proposed restoration of a sand gravel quarry operated by Longwater Gravel Company Limited at Wymondham Quarry, Stanfield Road, Wymondham, Norfolk, NR18 9RL (Site), see Site Context, Plan No. 0812/SC/1.
- 1.3. The Site is located 1.8km southeast of Wymondham. Stanfield Road runs along the northern boundary of the Site. The Site is divided into two by Bridge Road running from southwest to northeast.
- 1.4. The land use surrounding the Site is predominantly agricultural fields with associated farmhouses and poultry houses.
- 1.5. Quarry operations are currently undergoing at the Site. It is estimated that 600,000 tonnes of mineral will be extracted during the lifetime of the quarry.
- 1.6. Only a part of the Site has been extracted to date. It is planned for phases of the Site to be restored as other areas are undergoing mineral extraction, see Illustrative Progress Operations, Plan No. 0812/PO/2 v1.
- 1.7. The Site extends to approximately 23.8 Hectares, with mineral extraction being undertaken within 20 Hectares, and the restoration works involve the use of up to 151,500 m<sup>3</sup> (approx. 226,750 tonnes) of materials. The objectives of the restoration of the quarry are to:
  - Provide land for agriculture
  - Enable sustainable surface water management
  - Create two ponds in the southern area of the Site
  - Create a landform that is congruous with the surrounding landscape.
- 1.8. The objectives of the restoration described above will provide a number of benefits to the Site and the surrounding area. These benefits are discussed in Section 2 of this report.
- 1.9. It is anticipated that the site will be operated under a bespoke Environmental Permit. The Site was assessment for its suitability for a Standard Rules permit under SR2015 No. 39 “use of waste in a deposit for recovery operation”. The volume of waste required in the restoration works means that a standard rules permit is not suitable for the Site.
- 1.10. Planning permission C/7/2013/7014 for “mineral extraction, processing and associated activities with importation of inert material and restoration to agriculture and two small ponds” was granted on 10<sup>th</sup> January 2014 by Norfolk County Council, see Appendix 1 Planning Permission C/7/2013/7014.
- 1.11. The restoration of the Site is considered to be a legal obligation for the following reasons:
  - Condition 1 of Planning Permission C/7/2013/7014 states that “the development must be carried out in strict accordance with the application form, plans and documents...”. These documents include restorations plans of the Site.



- Condition 2 of Planning Permission C/7/2013/7014 states that “the development to which this permission relates shall cease and the site shall be restored in accordance with condition 19 by 30 March 2026”.
- Condition 19 of Planning Permission C/7/2013/7014 stated that “Within three months of the date of this permission a scheme of restoration in accordance with the principles shown on the Illustrative Restoration Plan, ref 0812/R/1d v2, shall be submitted to the County Planning Authority for its approval in writing...”. Condition 19 was discharged on 11<sup>th</sup> June 2014 after the submission of the Restoration Scheme, see Appendix 2.

1.12. This Waste Recovery Plan describes the works with regard to demonstrating that restoration of the quarry constitutes a waste recovery activity and would therefore not be considered to be a waste disposal operation.





## 2. Benefits from the restoration

- 2.1. There is planning obligation to restore the Site after the mineral extraction has been undertaken in each phase.
- 2.2. There is a population of great-crested newts located at the Site. The earthwork to be undertaken at the Site are likely to directly benefit the great-crested newt population by the creation of new breeding habitats.
- 2.3. Great crested newts are a European protected species. The decline in the overall population in great crested newts is largely due to damage and loss of their habitat. The creation of new ponds at the Site will provide new suitable breeding habitats for the protected species. New broad-leaved woodland and scrub habitats will provide connections between other existing woodlands and provide further refugia and habitat variety for great crested newts thus likely to increase the local great crested newt population. The new areas of woodland, shrub and hedgerows will also provide new nesting sites for a variety of different species of bird.
- 2.4. The restoration proposes a nature conservation area which will include an area of meadow grassland. As well as great crested newts this area should benefit other species such as otters, voles, amphibians, reptiles and ground nesting birds such as skylarks.
- 2.5. The creation of neutral lowland meadow will contribute to the UK Biodiversity Action Plan. There are targets and objectives set out in the UK Biodiversity Action Plan for the re-creation of priority habitats such as neutral lowland meadow.
- 2.6. The transition between aquatic to terrestrial habitats at the pond edges will be enhanced at the Site by introducing a range of plants that will maximise habitat diversity, see Drawing 01 – Detailed Pond Design. The choice of plants to be used includes oxygenators and plants suitable for egg-laying.
- 2.7. The two ponds have been designed to have a maximum depth of 1.5m to 2m. This depth ensures that there will be a permanent water feature even in dry conditions for wildlife.
- 2.8. The restoration of the quarry has been designed to create congruous landforms that contain similar profiles and features to the surrounding landscape.
- 2.9. The restored landform will maintain existing direction of surface drainage towards the southeast of the site. Rainfall will therefore be directed towards the nature conservation and pond area. The banks around the ponds have been made shall to facilitate a wide draw-down area for water.
- 2.10. Infiltration trenches will be installed on the southern boundary of the Site near the ponds to manage high volumes of water draining from the land during periods of high rainfall, as presented in SLR Proposed SWMP Measures September 2013.
- 2.11. As well as the creation of the two ponds and meadow area, the majority of the Site will be restored back to farmland. In order to create an acceptable landform for agricultural purpose, waste material is required to be imported onto the Site.



### 3. Suitability of the Recovered Waste for the Intended Purpose

- 3.1. Environment Agency guidance requires that chemical and physical properties of the waste proposed to be used in this waste recovery operation are suitable for the intended purpose and will not cause pollution.
- 3.2. The assessment of the types of waste that will be suitable for use in this development has been made by Tracey Westbury, Director of Westbury Environmental Limited and is suitably qualified to make this assessment based on:
- Chartered status with the Chartered Institute of Waste Managers.
  - Over 30 years' work experience within the environmental industry including chemical industry waste, contaminated land, waste water treatment and regulation.
  - Qualified person status under the Development of Waste Code of Practice.
  - Over 18 years' work experience acting as an environmental consultant dealing with both landfill and recovery permits.
- 3.3. The types of waste that will be used in the proposed development will include soils, subsoils and minerals. These materials will not be classified as hazardous waste. These wastes will include the waste codes in Table 1 – Waste Types.

**Table 1 – Waste Types**

<b>Exclusions</b>				
Wastes having any of the following characteristics shall not be accepted:				
<ul style="list-style-type: none"> <li>• Consisting solely or mainly of dusts, powders or loose fibres</li> <li>• Wastes that are in a form which is either sludge or liquid</li> </ul>				
<b>Permitted waste types</b>				
<b>Source</b>	<b>Sub-source</b>	<b>Waste code</b>	<b>Description</b>	<b>Additional restrictions</b>
01 Waste resulting from exploration, mining, quarrying and physical and chemical treatment of minerals	01 01 wastes from mineral excavation	01 01 02	Wastes from mineral non-metalliferous excavation	Restricted to waste overburden and interburden only.
	01 04 wastes from physical and chemical processing of non-metalliferous minerals	01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 06	
		01 04 09	Waste sand and clays	
17 Construction and demolition wastes	17 01 concrete, bricks, tiles and ceramics	17 01 01	Concrete	
		17 01 02	Bricks	
		17 01 03	Tiles and ceramics	
		17 01 07	Mixtures of concrete, bricks, tiles and ceramics	Metal from reinforced concrete must have been removed.



			other than those mentioned in 17 01 06	
	17 05 soil stones and dredging spoil	17 05 04	Soil and stones other than those mentioned in 17 05 03	Restricted to topsoil, peat, subsoil and stones only.
19 Wastes from waste management facilities	19 12 wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified	19 12 09	Minerals (for example sand, stones) only	Restricted to wastes from treatment of waste aggregates that are otherwise naturally occurring minerals. Does not include fines from treatment of any non-hazardous waste or gypsum from recovered plasterboard
20 Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	20 02 garden and park wastes	20 02 02	Soils and stones	Restricted to topsoil, peat, subsoil and stones only.

- 3.4. The operator will apply strict waste acceptance procedures as part of the implementation of the Environmental Management System (EMS), in accordance with the requirements of the Environmental Permit for these operations. This will ensure that only suitable waste materials are imported for use in the restoration works.
- 3.5. A Waste Acceptance Procedure will be included in the EMS that will control how waste is accepted to ensure that only suitable waste is deposited in the development. This procedure will be implemented via the EMS.
- 3.6. The proposed waste materials (largely soils) will replace the non-waste materials (largely soils) that would otherwise be used. These materials are largely the same despite one being defined as a waste and another not a waste. Therefore, waste materials will be not chemically different and will have similar engineering properties as non-waste materials that would otherwise be used.
- 3.7. The waste soils imported on to the Site for use in the restoration will be placed as subsoils below the existing topsoil present on the Site. The topsoil (up to 300mm deep) will be stripped from the relevant areas of the Site, stored, then replaced on top of the imported waste to complete the landscaping works. In this way, the imported waste is not used as a surface growing medium.



## 4. Minimal Amount of Waste Being Used to Achieve the Intended Benefit

- 4.1. Plans of the restoration works on the Site have been used to calculate the amount of waste soil that is required to be imported. It is estimated that a total of 151,500m<sup>3</sup> (226,750tonnes) of waste soil will be needed to complete the restoration of the quarry.
- 4.2. The duration of the restoration is predicted to happen over 10 years; therefore, it is estimated that approximately 15,000m<sup>3</sup> of waste will be imported annually.
- 4.3. The density of the waste soil will determine the ultimate tonnage used. A density of 1.5 tonnes per cubic metre has been used in the calculations.
- 4.4. The Site is split into Phases as shown on plan Illustrative Progress Operations, Plan No. 0812/PO/2 v1.
- 4.5. The volume of imported waste to be used in each phase of the Site is shown in Table 2 below. The average depth of imported soil in each phase has been calculated.

**Table 2. Volume of material to be imported for each Phase of the Site**

Phase	Area (Ha)	Volume of imported waste (m <sup>3</sup> )	Average depth of imported waste in Phase (m)
1a	1.3	13,000	1
1b	1.3	0*	0
1c	0.3	0*	0
1d	1.6	16,000	1
2a	2.9	29,000	1
2b	1.7	17,000	1
3a	2.5	12,500**	0.5
3b	2.5	25,000	1
4a	2.1	21,000	1
4b	1.8	18,000	1
		<b>Total volume (m<sup>3</sup>)</b>	<b>151,500</b>

\* This Phase is proposed to be restored using silt from mineral processing on the Site

\*\* This Phase has a lower volume of waste to be imported due to the Phase being restored to ground levels lower than original levels

- 4.6. The drawing Illustrative Progress Operations, Plan No. 0812/PO/2 v1 shows how restoration levels of the Site will vary compared to the original levels of the Site before any mineral extraction took place. The plan was created by comparing original ground levels (Site Plan (as existing), Plan No. 0812/S) to proposed restoration ground levels (Illustrative Restoration Plan, Plan No. 0812/R/1d).
- 4.7. The plan shows that the majority of the levels on the Site are unchanged. There are some areas where ground levels will be increased by up to approximately 1.5m and other areas where ground levels will be reduced by up to approximately 2m. Illustrative Cross Sections, Plan No. 0812/CS/2 demonstrates how different areas will be restored either higher or lower levels than original ground levels.



## **5. Proposal Completed to an Appropriate Standard**

- 5.1. The proposed restoration works will be completed in accordance with the planning permission that has been obtained to date. The local planning authority will regulate the requirements of this planning permission.
- 5.2. The works will follow the restoration scheme prepared by Longwater Gravel Co. Limited, see Appendix 2 Restoration Scheme.
- 5.3. Longwater Gravel Co. Limited has been contracted in by the landowners. It is in the landowners own best interests to ensure that the development is completed and maintained to the highest standards.



## 6. Conclusion

- 6.1. From the information provided within this Waste Recovery Plan, it has been demonstrated that:
- There is a clear benefit from the use of waste in the restoration of the site at Wymondham Quarry including the creation of agricultural land, the formation of two ponds and the associated increase in biodiversity.
  - The type of waste to be used in the restoration is suitable for its intended purpose and will not cause pollution to the environment.
  - The amount of waste proposed to be used is appropriate in order to complete the development works to achieve the intended benefit.
  - The proposed development at the site will be carried out and maintained to an appropriate standard which is enforced through the requirements of the planning permission and any Environmental Permit obtained to permit these works.



## Drawings

Site Context, Plan No. 0812/SC/1.

Illustrative Progress Operations, Plan No. 0812/PO/2 v1.

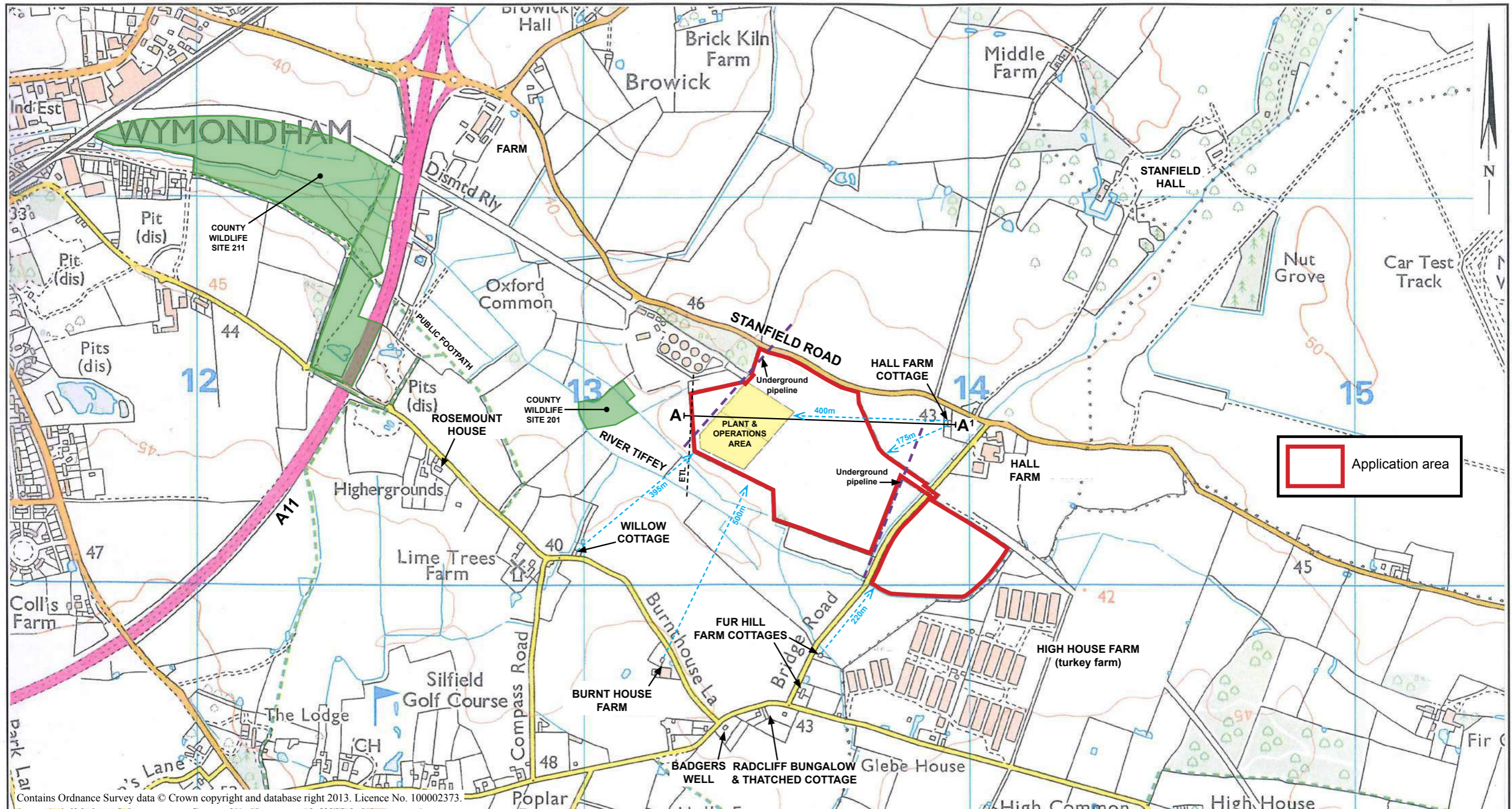
SLR Proposed SWMP Measures, September 2013.

Change in ground levels, Plan No. 18/008b 001

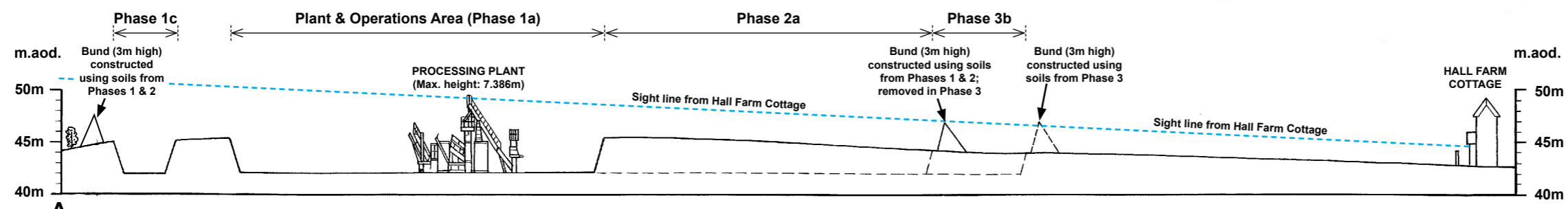
Site Plan (as existing), Plan No. 0812/S

Illustrative Restoration Plan, Plan No. 0812/R/1d

Illustrative Cross Sections, Plan No. 0812/CS/2



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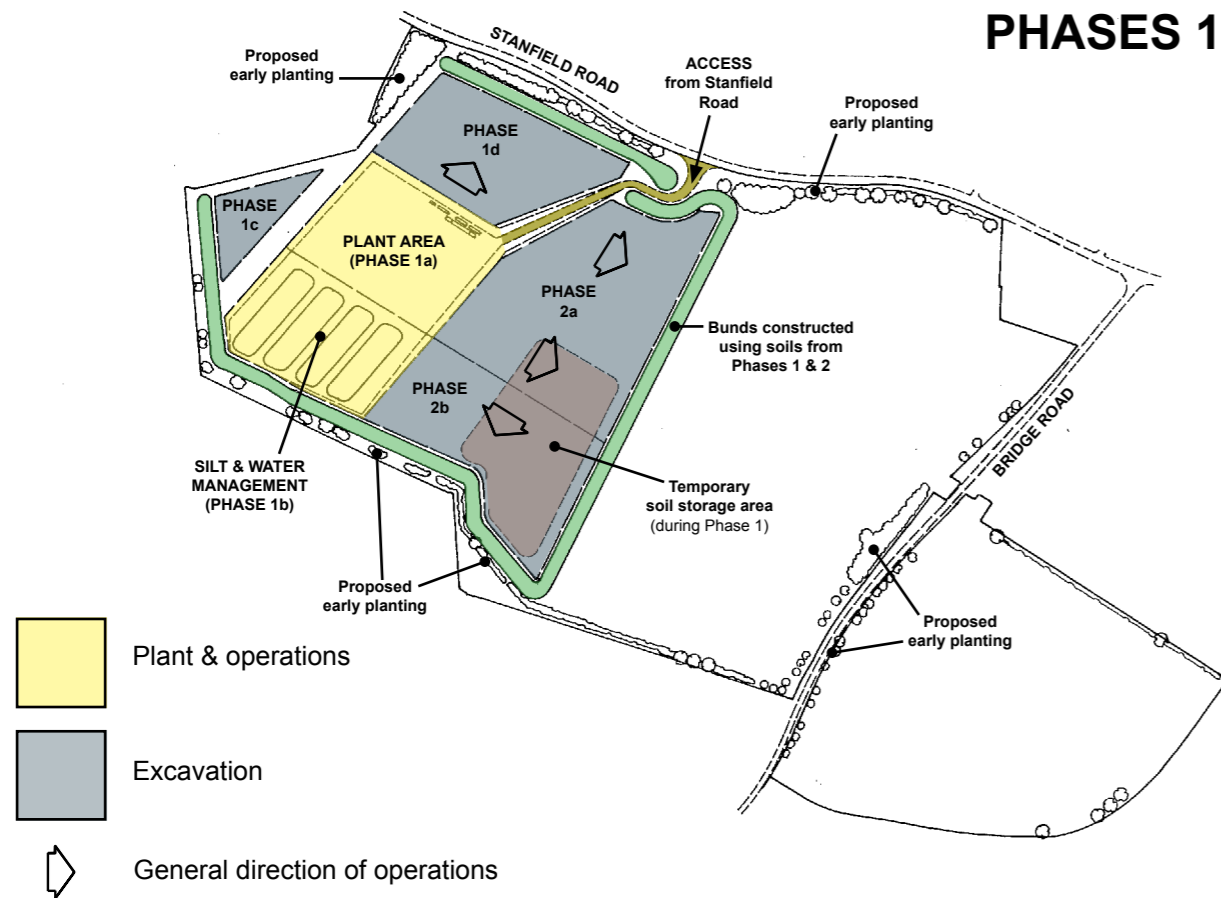
ILLUSTRATIVE CROSS SECTION SHOWING SIGHT LINE FROM HALL FARM COTTAGE TOWARDS PLANT & OPERATIONS AREA

Scale - (Horizontal) 1:2,500; (Vertical) 1:500. Vertical exaggeration 5:1.

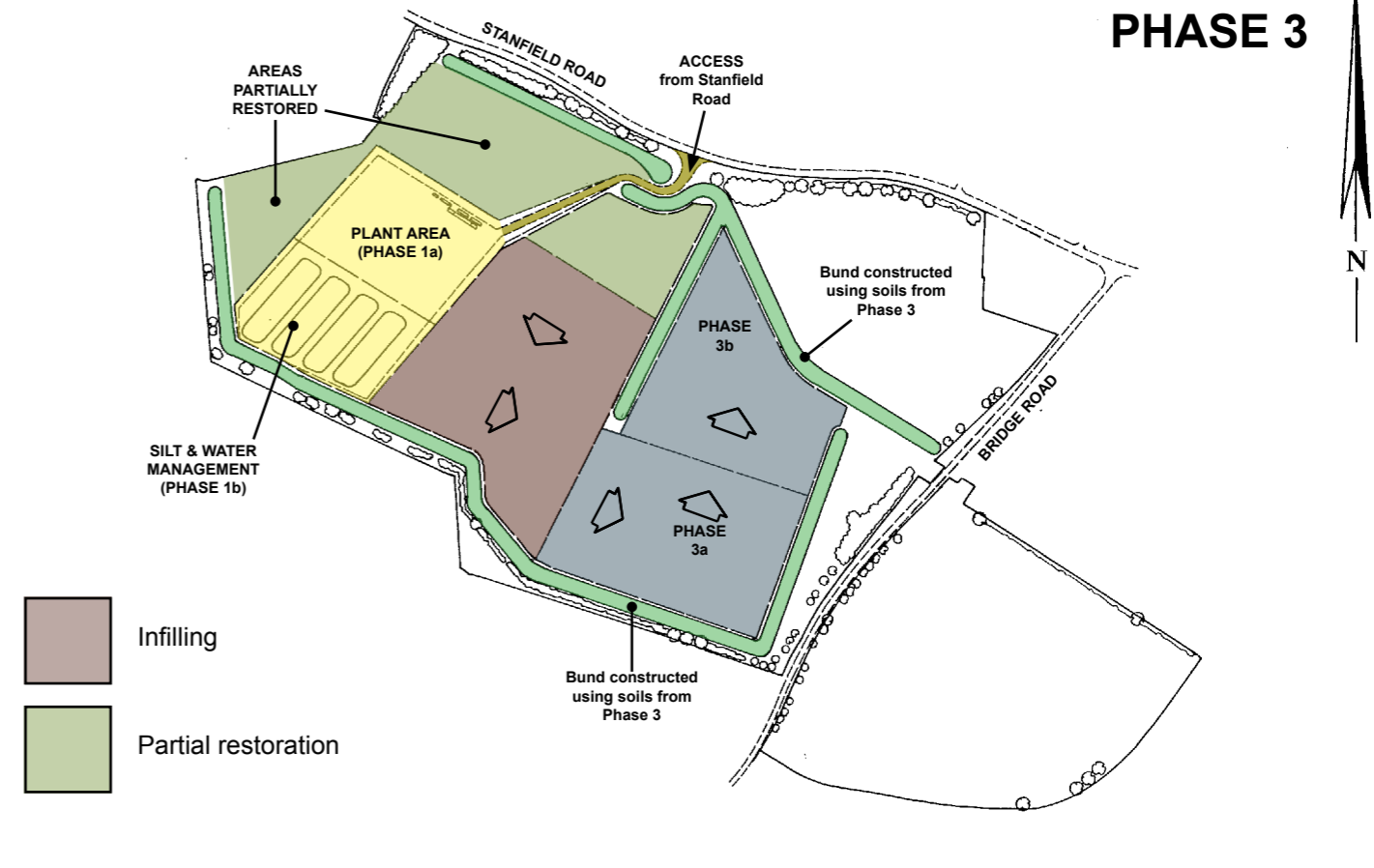
Version / amendment: 0812/SC/1 v3



### PHASES 1 & 2



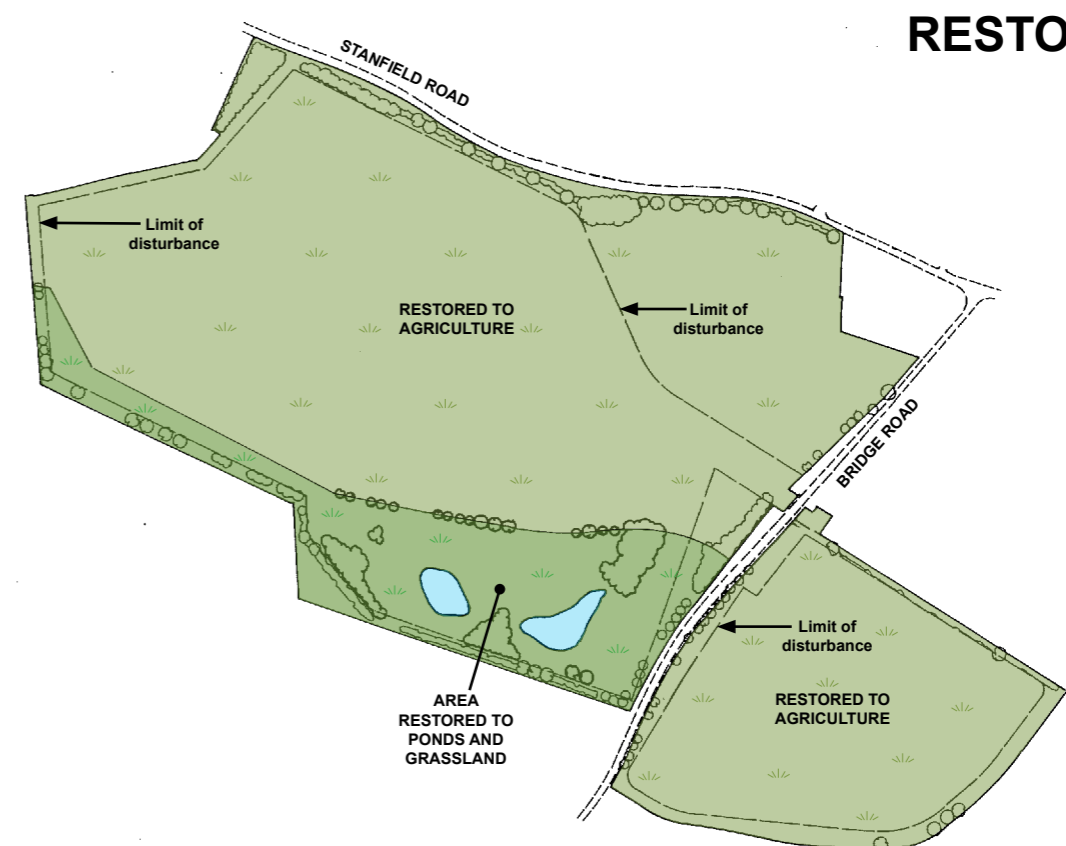
### PHASE 3

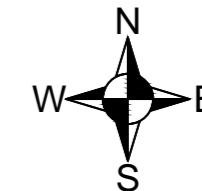


### PHASE 4



### RESTORED



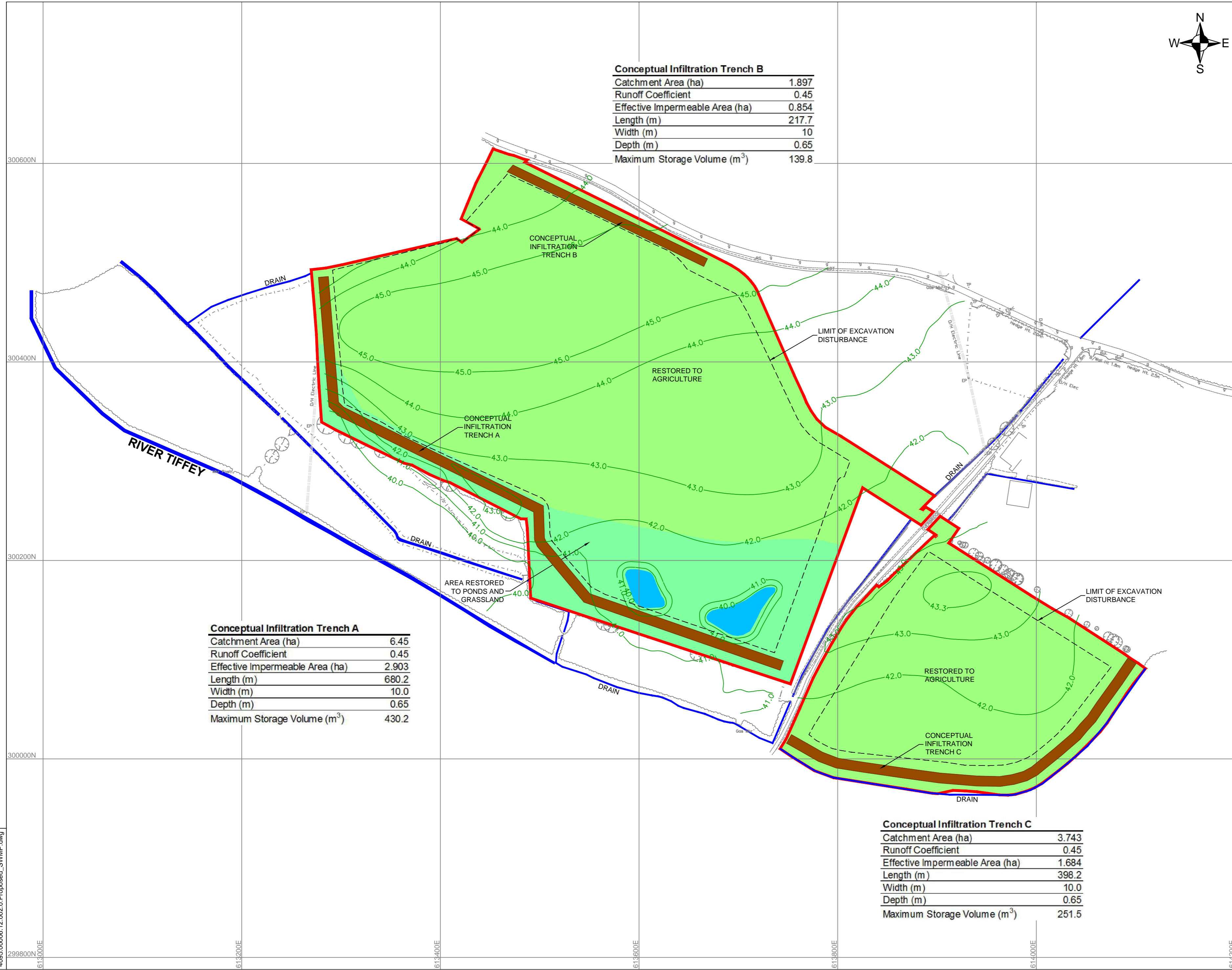


Conceptual Infiltration Trench B	
Catchment Area (ha)	1.897
Runoff Coefficient	0.45
Effective Impermeable Area (ha)	0.854
Length (m)	217.7
Width (m)	10
Depth (m)	0.65
Maximum Storage Volume (m <sup>3</sup> )	139.8

Conceptual Infiltration Trench A	
Catchment Area (ha)	6.45
Runoff Coefficient	0.45
Effective Impermeable Area (ha)	2.903
Length (m)	680.2
Width (m)	10.0
Depth (m)	0.65
Maximum Storage Volume (m <sup>3</sup> )	430.2

Conceptual Infiltration Trench C	
Catchment Area (ha)	3.743
Runoff Coefficient	0.45
Effective Impermeable Area (ha)	1.684
Length (m)	398.2
Width (m)	10.0
Depth (m)	0.65
Maximum Storage Volume (m <sup>3</sup> )	251.5

- LEGEND**
- APPROXIMATE APPLICATION AREA
  - AREA RESTORED TO AGRICULTURE
  - AREA RESTORED TO GRASSLAND
  - POND
  - EXISTING WATER FEATURE
  - PROPOSED CONCEPTUAL INFILTRATION TRENCHES
  - PROPOSED RESTORATION CONTOURS
  - EDGE OF SAND AND GRAVEL WORKING / INERT LANDFILLING

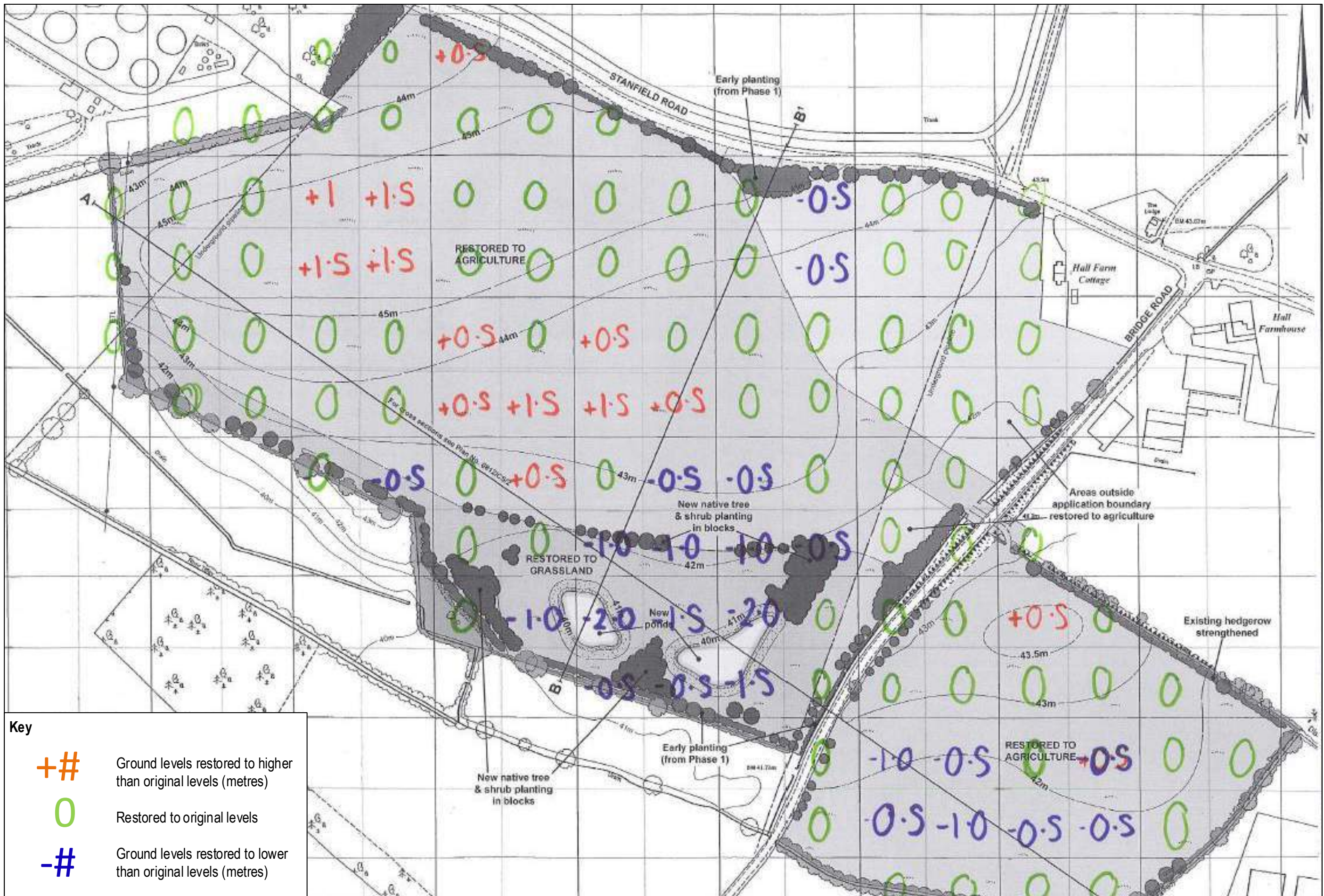



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**Longwater Gravel Co. Ltd.**  
Producers of Quality Aggregates

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WYMONDHAM, NORFOLK  
FLOOD RISK ASSESSMENT/  
SURFACE WATER MANAGEMENT PLAN  
**PROPOSED SWMP MEASURES**



 <b>Westbury Environmental Ltd</b> Providing solutions, ensuring compliance	Produced by Westbury Environmental Limited. Agriculture House, Southwater Way, Telford, TF3 4NR T: 01952 879705 M: 07762 580839 E: info@westburyenv.co.uk www.westburyenv.co.uk	<b>Site</b> Wymondham Quarry, Stanfield Road, Wymondham, Norfolk, NR18 9RL	<b>Client</b> Longwater Gravel Co. Limited	<b>Plan No.</b> 18/008b 001
			<b>Title</b> Change in ground levels	<b>Scale</b> 1:2,500 @ A3
				<b>Date</b> 29/11/18



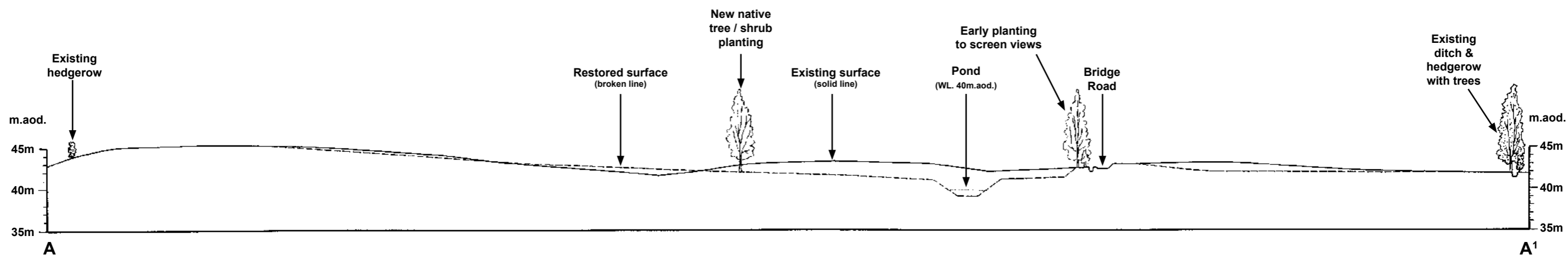
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Version / amendment: 0812/S v3

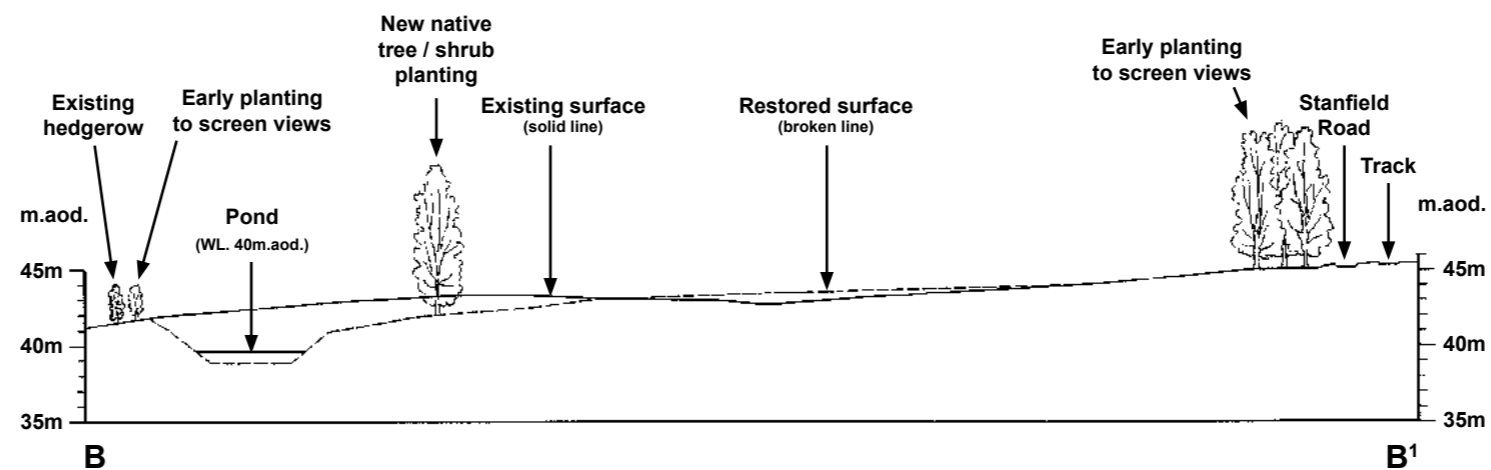


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Version / amendment: 0812/R/1d v2



Scale - (Horizontal) 1:2,500; (Vertical) 1:500  
Vertical exaggeration - 5:1



Scale - (Horizontal) 1:2,500; (Vertical) 1:500  
Vertical exaggeration - 5:1



## **Appendix 1**

Planning Permission C/7/2013/7014

**NORFOLK COUNTY COUNCIL**

**Town and Country Planning Act, 1990**

**Town and Country Planning (Development Management Procedure) Order 2010**

To: Mr Simon Smith  
Longwater Gravel Co. Ltd  
William Frost Way  
Longwater Business Park  
Costessey  
Norwich  
NR5 0JS

Particulars of Proposed Development

Location: Land at Hall Farm, Stanfield Road, Wymondham, Norfolk  
Applicant: Longwater Gravel Co. Ltd  
Agent: Longwater Gravel Co. Ltd  
Proposal: Mineral extraction, processing and associated activities with importation of inert material and restoration to agriculture and two small ponds.

The Norfolk County Council hereby gives notice of its decision to GRANT PLANNING PERMISSION for the development specified in the application received as valid on 3 July 2013, subject to compliance with the conditions set out on the attached sheet.

The reasons for the grant of permission and for the conditions are also set out on the attached sheets.

Signed:  Date: 10 January 2014

For DIRECTOR OF ENVIRONMENT, TRANSPORT AND DEVELOPMENT

Norfolk County Council  
County Hall  
Martineau Lane  
Norwich  
NR1 2SG

**SEE NOTES**



## NOTES

### Appeals to the Secretary of State

- If you are aggrieved by the decision of your local planning authority to refuse permission for the proposed development or to grant it subject to conditions, then you can appeal to the Secretary of State under section 78 of the Town and Country Planning Act 1990.
- If you want to appeal against your local planning authority's decision then you must do so within 6 months of the date of this notice
- If an enforcement notice is served relating to the same or substantially the same land and development as in your application and if you want to appeal against your local planning authority's decision on your application, then you must do so within 28 days of the date of service of the enforcement notice, or within 6 months of the date of this notice, whichever period expires earlier
- Appeals must be made using a form which you can get from the Secretary of State at Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6PN or online at [www.planningportal.gov.uk/pcs](http://www.planningportal.gov.uk/pcs)
- The Secretary of State can allow a longer period for giving notice of an appeal, but will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.
- The Secretary of State need not consider an appeal if it seems to the Secretary of State that the local planning authority could not have granted planning permission for the proposed development or could not have granted it without the conditions they imposed, having regard to the statutory requirements, to the provisions of any development order and to any directions given under the development order.
- In practice, the Secretary of State does not refuse to consider appeals solely because the local planning authority based their decision on a direction given by the Secretary of State.

### Purchase Notices

- If either the local planning authority or the Secretary of State refuses permission to develop land or grants it subject to conditions, the owner may claim that the owner can neither put the land to a reasonably beneficial use in its existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.
- In these circumstances, the owner may serve a purchase notice on the District or Borough Council in whose area the land is situated. This notice will require the Council to purchase the owner's interest in the land in accordance with the provisions of Chapter I of Part VI of the Town and Country Planning Act 1990.

### Byelaws

- Any planning permission is subject to compliance with the byelaws (Local Acts, Orders Regulations) and any general statutory provisions in force.

Location: Land at Hall Farm, Stanfield  
Road, Wymondham, Norfolk

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Conditions and Reasons for Conditions:

1. The development hereby permitted shall commence not later than three years from the date of this permission. Within seven days of the commencement of operations, the operator shall notify the County Planning Authority in writing of the exact starting date.

Reason: Imposed in accordance with Section 91 of the Town and Country Planning Act 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

2. The development to which this permission relates shall cease and the site shall be restored in accordance with condition 19 by 30 March 2026.

Reason: To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

3. The development must be carried out in strict accordance with the application form, plans and documents detailed below:

- a) Location Plan, ref. 0812/A, dated 28/06/13.
- b) Planning Statement, dated June 2013.
- c) Composite Operations Plan, ref. 0812/CO/1c v4, dated 04/11/2013.
- d) Illustrative Progressive Operations Plan, ref. 0812/PO/2 v1, dated 23/5/13.
- e) Site Context, ref. 0812/SC/4a, dated 19/11/2013.
- f) Illustrative Restoration Plan, ref 0812/R/1d v2, dated 24/06/13.
- g) Illustrative Cross Section, ref 0812/CS/2 v1, dated 24/06/13.
- h) Site Context, ref 0812/SC/4a v1, dated 19/11/13.
- i) Cross Sections (B-B1 to E-E1), ref 0812/SC/2 v3, dated 04/11/13.
- j) Cross Sections (F-F1 to H-H1), ref 0812/SC/3 v3, dated 04/11/13.
- k) Cross Sections (D-X to G-X), ref 0812/SC/5a v2, dated 20/11/13.
- l) Illustrative Detail of Plant and Operations Area, ref 0812/P/2 v1, dated 27/06/13.
- m) Illustrative details of Processing Plant, ref. 0812/PP/1 v2, dated 17/07/12.
- n) Details of Office and Weighbridge, ref 0812/OW/1 v2, dated 17/07/12.  
Elevations of Office/Messroom, ref 0812/OM/1 v2, dated 27/06/13.
- o) Elevations of ISO Containers, ref 0812/ISO/1, dated 17/07/2012.
- p) Gas Oil and Waste Storage Tanks, ref 0812/OST/01, dated June 2013.
- q) Supplementary Landscape and Visual Appraisal, dated 21 June 2013.
- r) Ecological Survey, ref 2011/270 (2008/075 and 2010/038), dated March 2012.
- s) Habitat Creation Details for Two Ponds, ref 403.04095.00005, dated June 2013.
- t) Detailed Pond Design, drawing 01, rev 0, dated June 2013.
- u) Detailed Pond Sections, drawing 02, rev 0, dated June 2013.
- v) Tree Survey and Arboricultural Implications Assessment, dated 08/05/2012.

Location: Land at Hall Farm, Stanfield  
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- w) Hydrogeological Impact Assessment, ref 402-04095-00003, dated March 2013.
- x) Flood Risk Assessment and Surface Water Management Plan, ref 405.04095.00006, dated September 2013.
- y) Flood Risk Assessment Phasing Plan, ref 1, dated September 2013.
- z) Flood Risk Assessment Proposed SWMP Measures, ref 2, dated September 2013.
- aa) Dust Assessment, ref 403-04095-00005, dated June 2013.
- bb) Archaeological Desk Based Assessment and Trial Trench Evaluation, ref 3986, dated January 2012.
- cc) Geophysical Survey Report, ref J2967, dated October 2011.
- dd) Lighting Assessment, dated June 2013.
- ee) Agricultural Land Classification, dated May 2011.
- ff) Transport Statement, Revision A, ref MA/CS/P12-446/01/Rev A, dated May 2013.
- gg) Noise Assessment, ref 10923/1, dated 23/11/13.

Reason: For the avoidance of doubt and in the interests of proper planning

4. No operation authorised or required under this permission or under Part 23 of Schedule 2 of the Town and Country Planning (General Permitted Development) Order 1995, including the movement of vehicles and operation of any plant, shall take place on Sundays or public holidays, or other than during the following periods:

07.00 - 18.00 Mondays to Fridays  
07.00 - 13.00 Saturdays.

Reason: To protect the amenities of residential properties and the surrounding area, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

5. No waste materials shall be brought onto the site other than the waste types listed in Appendix A attached to this decision notice.

Reason: To protect the amenities of neighbouring residential properties and the environment, in accordance with Policies DM12 and DM3 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

6. Prior to the first occupation of the development hereby permitted the vehicular access shall be provided and thereafter retained at the position shown on the approved drawing number 03/008 dated 12/2/13 in accordance with the Highway Authority Industrial Access Specification. Arrangement shall be made for surface water drainage to be intercepted and disposed of separately so that it does not discharge from or onto the highway carriageway.

Location: Land at Hall Farm, Stanfield  
Road, Wymondham, Norfolk

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Reason: To ensure satisfactory access into the site and avoid carriage of extraneous material or surface water from or onto the highway, in accordance with Policy DM10 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

7. Prior to the first occupation of the development hereby permitted any access gate(s), bollard, chain or other means of obstruction shall be hung to open inwards, set back, and thereafter retained a minimum distance of 10 metres from the near channel edge of the adjacent carriageway.

Reason: To enable vehicles to safely draw off the highway before the gate(s) or obstruction is opened, in accordance with Policy DM10 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

8. No works shall commence on site until the details of wheel cleaning facilities associated with the proposal have been submitted to and approved in writing by the Local Planning Authority in consultation with the Highway Authority.

Reason: To prevent extraneous material being deposited on the highway, in accordance with Policy DM10 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

9. Prior to the commencement of the use hereby permitted the approved wheel cleaning facilities shall be provided to the written satisfaction of the Local Planning Authority in consultation with the Highway Authority and thereafter maintained and used as appropriate.

Reason: To prevent extraneous material being deposited on the highway, in accordance with Policy DM10 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

10. Prior to the commencement of the extraction phase the sumps shall be designed to accommodate the 1 in 100 year rainfall event including climate change.

Reason: To prevent flooding by ensuring the satisfactory storage and disposal of surface water from the site.

11. An infiltration drainage scheme incorporating infiltration trenches designed to accommodate the 1 in 100 year rainfall event including climate change, sized using infiltration rates locally determined using test pit methods in accordance with BRE365, shall be constructed prior to the completion of the restoration phase.

Reason: To prevent flooding by ensuring the satisfactory storage and disposal of surface water from the site.

12. Within 3 months of the date of this permission a Written Scheme of Archaeological Investigation shall be submitted to the County Planning Authority

Location: Land at Hall Farm, Stanfield  
Road, Wymondham, Norfolk

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for its approval in writing. The scheme shall include an assessment of significance and research questions; and

1. The programme and methodology of site investigation and recording
2. The programme for post investigation assessment
3. Provision to be made for analysis of the site investigation and recording
4. Provision to be made for publication and dissemination of the analysis and records of the site investigation
5. Provision to be made for archive deposition of the analysis and records of the site investigation
6. Nomination of a competent person or persons/organization to undertake the works set out within the Written Scheme of Investigation.

Development shall be carried out in accordance with the approved scheme.

Reason: To ensure adequate time is available to investigate any features of archaeological interest, in accordance with Policy DM9 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

13. No operations shall take place until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme of Investigation approved under condition 12 and the provision to be made for analysis, publication and dissemination of results and archive deposition has been secured.

Reason: To ensure adequate time is available to investigate any features of archaeological interest, in accordance with Policy DM9 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

14. No operations shall take place until a scheme of landscaping has been submitted to and approved in writing by the County Planning Authority. The approved scheme shall be implemented during the first planting season following the date of planning permission or such other period agreed in writing with the County Planning Authority. The scheme shall include details of size, species and spacing of trees, hedges and shrubs, arrangements for their protection and maintenance, and details of the construction and maintenance of the soil bunds. It shall make provision for:

- (a) the screening of the operations by trees, hedges and soil bunds;
- (b) the protection and maintenance of existing trees and hedges which are to be retained on the site;
- (c) re-seeding and re-planting where failures or damage occur within a period of five years from the date of planting; and,
- (d) the replacement of any damaged or dead trees with trees of similar size and species at the next appropriate season.

Reason: To protect the amenities of the surrounding area, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

Location: Land at Hall Farm, Stanfield  
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15. Any drums and small containers used for oil and other chemicals on the site shall be stored in bunded areas which do not drain to any watercourse, surface water sewer or soakaways, and all oil or chemical storage tanks, ancillary handling facilities and equipment, including pumps and valves, shall be contained within an impervious bunded area of a least 110% of the total stored capacity.

Reason: To safeguard hydrological interests, in accordance with Policy DM3 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

16. Any oil storage tanks on the site shall be sited on impervious bases and surrounded by oil tight bund walls; the bunded areas shall be capable of containing 110% of the tank volume and shall enclose all fill and draw pipes.

Reason: To safeguard hydrological interests, in accordance with Policy DM3 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

17. Measures shall be taken to prevent dust nuisance and sand blow caused by the operations, including spraying of road surfaces, plant area and stockpiles.

Reason: To protect the amenities of residential properties and the surrounding area, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

18. No stockpiles of materials shall be stacked or deposited on the site such that its height exceeds 4 metres above its base level.

Reason: To protect the amenities of the surrounding area, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

19. Within three months of the date of this permission a scheme of restoration in accordance with the principles shown on the Illustrative Restoration Plan, ref 0812/R/1d v2, shall be submitted to the County Planning Authority for its approval in writing. The said scheme shall include details of:

- (a) dates for the starting and completion of each phase of restoration;
- (b) a maximum area of disturbed land which at any time is unrestored;
- (c) contours of the restored land shown by plans and sections;
- (d) the provision to be made for drainage of the site;
- (e) areas to be seeded or planted with trees, including provision for re-seeding and re-planting during the following planting season where such action is necessary as a result of any failure which occurs within a period of five years from the date of initial planting;
- (f) details of tree species to be planted;
- (g) bank profiles, batters and shoreline contours.

Location: Land at Hall Farm, Stanfield  
Road, Wymondham, Norfolk

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Reason: To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

20. An even layer of topsoil shall be re-spread on the subsoil layer to an even depth of at least 300mm.

Reason: To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

21. The subsoil shall be crossrippled and any pans and compaction shall be broken up to the satisfaction of the County Planning Authority before replacement of the topsoil.

Reason: To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

22. All stones and deleterious materials in excess of 15cm which arise from the ripping of the subsoil and topsoil shall be removed from the site.

Reason: To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

23. An aftercare scheme specifying such steps as may be necessary to bring the land to the required standard for use for agriculture/wildlife habitat shall be submitted for the written approval of the County Planning Authority in writing not later than 3 months from the date of this permission. The aftercare scheme as may be so approved, shall be implemented over a period of five years following the completion of restoration, or in the case of phased restoration, in stages of five years duration dating from each completed restoration phase.

Reason: To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

24. Noise emitted from operations excluding soil stripping, the construction and removal of baffle mounds, soil storage mounds and spoil heaps shall not exceed the following maximum noise levels at the following properties:

- Hall Farm Cottage, 53dB(A) LAeq, 1h (free field)
- Fur Hill Cottages, 50dB(A) LAeq, 1h (free field)
- Willow Cottage, 51dB(A) LAeq, 1h (free field)

Location: Land at Hall Farm, Stanfield  
Road, Wymondham, Norfolk

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Reason: To protect the amenities of residential properties, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

25. Noise from the approved development at any noise sensitive premises in relation to soil-stripping, the construction and removal of baffle mounds, soil storage mounds and spoil heaps shall not exceed 60dB(A) LAeq 1h (free field).

Reason: To protect the amenities of residential properties, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

Informatives:

1. This development involves works within the public highway that can only be carried out by Norfolk County Council as Highway Authority unless otherwise agreed in writing.

2. It is an OFFENCE to carry out any works within the Public Highway, which includes a Public Right of Way, without the permission of the Highway Authority. Please note that it is the Applicants' responsibility to ensure that, in addition to planning permission, any necessary consents or approvals under the Highways Act 1980 and the New Roads and Street Works Act 1991 are also obtained from the County Council. Advice on this matter can be obtained from the County Council's Highway Development Management Group. Please contact John R Shaw tel 01603 223231

If required, street furniture will need to be repositioned at the Applicants own expense.

3. Public Utility apparatus may be affected by this proposal. Contact the appropriate utility service to reach agreement on any necessary alterations, which have to be carried out at the expense of the developer.

4. If great crested newts or any other protected species are found on the site during the working lifespan of the quarry, appropriate action will have to be taken in line with the Conservation of Habitats and Species Regulations 2010 & Wildlife and Countryside Act 1981, and handling or relocations will require a European Protected Species licence from Natural England.

5. This application is subject to a Section 106 legal agreement relating to visibility splays.

In accordance with the Town and Country Planning (Development Management Procedure) (England) (Amendment No. 2) Order 2012, the local planning authority has entered into discussions with the applicant during the application processing period to ensure that sufficient information has been submitted to demonstrate that the proposal is acceptable.



Location: Land at Hall Farm, Stanfield  
Road, Wymondham, Norfolk

## APPENDIX A – LIST OF WASTE TYPES TO BE ACCEPTED

EWC	Description
<b>01</b>	<b>WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS</b>
<b>01 01</b>	<b>Wastes from mineral excavation</b>
01 01 02	Wastes from mineral non-metalliferous excavation
<b>01 04</b>	<b>Wastes from physical and chemical processing of non-metalliferous minerals</b>
01 04 08	Waste gravel and crushed rocks other than those containing dangerous substances
01 04 09	Waste sand and clays
<b>17</b>	<b>CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)</b>
<b>17 01</b>	<b>Concrete, bricks, tiles and ceramics</b>
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 07	Mixtures of concrete, bricks, tiles and ceramics
<b>17 05</b>	<b>Soil (including excavated soil from contaminated sites), stones and dredging spoil</b>
17 05 04	Soil and stones other than those containing dangerous substances
17 05 06	Dredging spoil other than those containing dangerous substances
17 05 08	Track ballast other than those containing dangerous substances
<b>19</b>	<b>WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE</b>
19 12	<b>Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 09	Minerals (for example sand, stones)
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 02</b>	<b>Park and garden wastes</b>
20 02 02	Soil and stones



## **Appendix 2**

Restoration Scheme, Longwater Gravel Co. Ltd., April 2014.

Longwater Gravel Co. Ltd.  
William Frost Way  
Longwater Business Park  
Costessey  
Norwich NR5 OJS

tel: 01603 743767  
fax: 01603 747302  
e-mail: [simon@longwatergravel.co.uk](mailto:simon@longwatergravel.co.uk)  
[www.longwatergravel.co.uk](http://www.longwatergravel.co.uk)

Application for Discharge of Planning Condition

## **LAND OFF STANFIELD ROAD, WYMONDHAM**

Planning ref. no. C/7/2013/7014

April 2014

## 1.0 **INTRODUCTION**

1.1 Planning permission for sand and gravel extraction with importation of inert material to enable restoration to agriculture and two small ponds on land off Stanfield Road, Wymondham was granted planning permission in January 2014, with planning reference C/7/2013/7014.

1.2 Condition 19 of planning reference C/7/2013/7014 states:

“Within three months of the date of this permission a scheme of restoration in accordance with the principles shown on the illustrative Restoration Plan, ref 0182/R/1d v2, shall be submitted to the County Planning Authority for its approval in writing. The said scheme shall include details of:

- (a) dates for the starting and completion of each phase of restoration;
- (b) a maximum area of disturbed land which at any time is unrestored;
- (c) contours of the restored land shown by plans and sections;
- (d) the provision to be made for the drainage of the site;
- (e) areas to be seeded or planted with trees, including provision for re-seeding and re-planting during the following planting season where such action is necessary as a result of any failure which occurs within a period of five years from the date of initial planting;
- (f) details of tree species to be planted;
- (g) bank profiles, batters and shoreline contours.”

1.3 This restoration scheme has been submitted to provide further details for the timing of extraction and restoration of the quarry and includes a Gantt chart along with extraction and restoration plans.

## 2.0 **ASSUMPTIONS**

2.1 The application area extends to 23.8 hectares with mineral extraction taking place on some 20 hectares with the balance of the site being undisturbed and used for the storage of topsoil in storage/screening bunds, tree and hedgerow root protection areas and oil/gas pipeline protection standoff distance.

2.2 Assuming that mineral is recoverable from at least 90% of total area of the site, the calculations used to determine the timescales for the extraction of sand and gravel and restoration of the site using inert material are based on a surface area of 18.0 hectares. The table below shows the total surface area of each extraction phase:

Phase	Area (Ha)	Phase	Area (Ha)
1a	1.3	2b	1.7
1b	1.3	3a	2.5
1c	0.3	3b	2.5
1d	1.6	4a	2.1
2a	2.9	4b	1.8

- 2.3 The total amount of mineral extracted is estimated to be around 630,000 tonnes.
- 2.4 Silt content is estimated to be around 5% or 31,500 tonnes. All silt produced will be used in the restoration of the site.
- 2.5 The annual amount of inert material to be imported for reclamation of the site is estimated to be 15,000m<sup>3</sup>/year. Over the proposed 10 year lifespan of the quarry, the total amount of inert material to be imported is around 150,000 m<sup>3</sup>.
- 2.6 The area which is proposed to be restored as nature conservation, i.e. Phase 3a will have a reduced amount of inert material tipped as this area will be restored at a lower level with two ponds constructed.
- 2.7 Phases 1c and 1b are proposed to be restored using silt waste from sand and gravel processing.
- 2.8 The table below sets out the remaining areas which are to be restored using inert material:

Phase	Area (Ha)	Volume (m <sup>3</sup> )
1a	1.3	13,000
1d	1.6	16,000
2a	2.9	29,000
2b	1.7	17,000
3a	2.5	12,500
3b	2.5	25,000
4a	2.1	21,000
4b	1.8	18,000
	Total	151,500

- 2.9 Subject to the quantity and quality of material extracted and also sales demand for sand and gravel, extraction and processing operations will commence on 1<sup>st</sup> October 2014 and will be completed by 31<sup>st</sup> March 2025. Subject to the availability of inert material for restoration, importation will commence on 1<sup>st</sup> August 2016 and will be completed by 28<sup>th</sup> February 2026.

### **3.0 PHASED EXTRACTION AND RESTORATION**

- 3.1 A Gaant chart showing timescales for extraction and restoration of the site has been included – see Appendix 1.

3.2 The table below summarises the timescales for extraction of each phase:

Phase	Commences	Completed	Comments
1a	June 2014	July 2014	Sand and gravel extracted from these phases will be stockpiled in Phase 1b ready for processing prior to installation of the plant
1b	June 2014	July 2014	
1c	June 2014	July 2014	
1d	June 2016	May 2017	
2a	June 2017	December 2018	
2b	January 2019	December 2019	
3a	January 2020	May 2021	
3b	June 2021	October 2022	
4a	November 2022	January 2024	
4b	February 2024	March 2025	

3.3 Whilst the site would be progressively restored by infilling with imported inert material and also silt from processing, Phases 1a and 1b would remain un-restored for the duration of operations as these areas are required for processing, stockpiling, water and silt management. The table below summarises the timescales for the infilling of each phase:

Phase	Commences	Completed	Comments
1c	October 2014	August 2016	Infill with silt
1d	August 2016	July 2017	Infill with inert material
1b	September 2016	March 2025	Infill with silt
2a	August 2017	April 2019	Infill with inert material
2b	May 2019	April 2020	Infill with inert material
3a	May 2020	June 2021	Infill with inert material
3b	July 2021	December 2022	Infill with inert material
4a	January 2023	March 2024	Infill with inert material
4b	April 2024	April 2025	Infill with inert material
1a/1b	May 2025	February 2026	Infill with inert material

3.4 On completion of infilling, Phases 1c, 1d and 2a would be restored to agricultural use using soil recovered from the temporary soil storage area. Phases 2b and 3a would be restored using soil recovered from the central soil bund used to screen Phases 1 and 2 from views from the east. Phases 3b, 4a and 4b would be restored using the soil recovered from the screening bunds which surround Phase 3 and Phase 4, with any shortfall made up by using soils recovered from the screening bunds surrounding Phases 1 and 2. Soil from these screening bunds would also be used to restore Phases 1a and 1b.

3.5 The amount of disturbed land will be minimised as far as is practicable. Final restoration of each phase would only take place when topsoil becomes available, i.e. when it is stripped from future extraction phases or recovered from topsoil screening bunds which are no longer required. The reinstatement of topsoil would take place during summer months to ensure this activity is carried out during the best possible weather conditions.

3.6 Appendix 2 includes plans showing a 2 yearly snapshot of quarry development. See plan numbers:

- 0812/OP15/1
- 0812/OP17/1
- 0812/OP19/1
- 0812/OP21/1
- 0812/OP23/1
- 0812/OP25/1

3.7 A copy of Illustrative Restoration Plan (plan number 0812/R/1d v2) which accompanied the planning application is included; see Appendix 2 – Plans.

3.8 Copies of cross sectional drawings (plan number 0812/CS/2 v1) which accompanied the planning application is included; see Appendix 2 – Plans.

#### **4.0 SITE DRAINAGE**

4.1 The profile of the restored level is designed to ensure that any surface water from rainfall is directed to the low lying nature conservation area. This will maintain water levels in the ponds.

4.2 In addition to the restored surface profile, infiltration trenches, designed to accommodate water draining from the land during peak rainfall periods, will be installed along the low lying southern margins of the site. A copy of the plan showing the detail and location of the infiltration trenches (plan title “Proposed SWMP measures”) is included; see Appendix 2 – Plans.

4.3 In line with the discharge of Condition 23, where the surface water drainage from the land is identified as unsatisfactory, additional measures will be implemented to improve drainage. This would include subsoiling and also where necessary, the installation of land drains.

#### **5.0 PLANTING**

5.1 Planting carried out on completion of site restoration and described in this document is limited to the nature conservation area. The management of all other planting on the site (carried out on commencement of the development) is covered by Condition 14 – Scheme for Landscaping.

## 5.0 **PLANTING (Cont.)**

- 5.2 All trees and shrubs will be checked for disease, damage and pests on delivery and rejected if found to be unsatisfactory.
- 5.3 Existing vegetation will be cleared from the planting area in advance of planting and maintained free from weeds.
- 5.4 All trees and shrubs will be planted in pits equal in depth and 50% wider than the root system. Glazed edges to be broken up with a fork where necessary. Hole to be backfilled with friable soil to the height of the root collar in layers, firming gently. Should the soil from the planting pit be difficult to work, imported screened topsoil will be used.
- 5.5 All trees and shrubs will be watered at the time of planting and for the first growing season after planting, depending on weather conditions and soil moisture levels. Under normal weather conditions, 10 litres of water will be applied to the root system of each tree and shrub on a fortnightly basis. During wet weather conditions, watering will not be carried out to avoid waterlogged conditions.
- 5.6 Species of trees and shrubs planted to form the woodland blocks in the nature conservation area will consist of:

<b>Species</b>	<b>Size</b>	<b>Spacing</b>
50% Oak ( <i>Quercus robur</i> )	1.75 - 2.0m bareroot	3.0m
5% Hornbeam ( <i>Carpinus betulus</i> )	1.75 - 2.0m bareroot	3.0m
5% Field maple ( <i>Acer campestre</i> )	1.75 - 2.0m bareroot	3.0m
5% Wild cherry ( <i>Prunus avium</i> )	1.75 - 2.0m bareroot	3.0m
5% Silver birch ( <i>Betula pendula</i> )	1.75 - 2.0m bareroot	1.5m
10% Hawthorn ( <i>Crataegus monogyna</i> )	0.4 - 0.6m bareroot	1.5m
10% Blackthorn ( <i>Prunus spinosa</i> )	0.4 - 0.6m bareroot	1.5m
10% Rowan ( <i>Sorbus aucuparia</i> )	0.4 - 0.6m bareroot	1.5m

- 5.7 The 16 trees planted along the boundary between the areas restored to agriculture and nature conservation will be Oak (*Quercus rober*).
- 5.8 Any failures which occur within 5 years of the date of planting will be replaced at the next appropriate planting season with the same species and specification.

## 6.0 **PONDS**

- 6.1 Copies of the plans Detailed Pond Sections and Detailed Pond Design which accompanied the planning application is included; see Appendix 2 – Plans. These show the bank profiles, batters and shoreline contours of the ponds.



**APPENDIX 1**  
Gantt Chart

**APPENDIX 2**  
Plans

0812/OP15/1: Plan to show quarry development – December 2015

0812/OP17/1: Plan to show quarry development – December 2017

0812/OP19/1: Plan to show quarry development – December 2019

0812/OP21/1: Plan to show quarry development – December 2021

0812/OP23/1: Plan to show quarry development – December 2023

0812/OP25/1: Plan to show quarry development – December 2025

0812/R/1d v2: Illustrative Restoration Plan

0812/CS/2 v1: Illustrative Cross Sections

Proposed SWMP measures

Detailed Pond Sections

Detailed Pond Design

***Longwater Gravel Co. Ltd.***

William Frost Way, Longwater Business Park, Costessey, Norfolk, NR5 0JS



## Appendix 2

Pre-Application Advice Letter (EPR/HB3103XE/A001)

Wymondham Quarry  
Stanfield Road  
Wymondham  
Norfolk  
NR18 9RL

**Our ref: EPR/HB3103XE/A001**  
**Your ref:**

**Date: 03/04/2019**

Dear Ms Watkin

**Environmental Permitting – Recovery or Disposal Operation**  
**Pre-application Reference: EPR/HB3103XE/A001**  
**Proposed Operator: Longwater Gravel Company Limited**  
**Regulated facility: Wymondham Quarry**  
**Site Address : Stanfield Road, Wymondham, Norfolk, NR18 9RL**

As part of our pre-application discussions, you have submitted information to us that includes your assessment that the activity you wish to undertake at your site amounts to a recovery operation.

We have now fully considered your submission and we would like to advise you that:

We agree with your assessment that your activity is a recovery operation. This advice is based on the information you have provided in relation to waste types, amounts and nature of proposal including any proposed landform. If you change any of these between now and when you submit an application form, this advice may no longer apply. **Please also note that following submission of an application, additional assessment will take place (for example, further assessment of the proposed waste types based on the sensitivity of the site location) and therefore agreement that an operation is a recovery activity does not guarantee that a permit will be granted or a variation issued.**

For the sake of clarity, the following documents are considered to form the approved waste recovery plan;

- Waste Recovery Plan: Version 1 dated: 30 November 2018
- Response to Request for Further Information Letter
- Condition 14 Discharge Letter
- Condition 19 Discharge Letter
- Response to 2<sup>nd</sup> Request for Further Information Letter
- Planning Statement

If you have any questions please phone me or email [eunice.abbey@environment-agency.gov.uk](mailto:eunice.abbey@environment-agency.gov.uk)

Yours sincerely

**Eunice Abbey**

**Permitting Officer**



## **Appendix 3**

### Evidence of Technically Competent Management

*Evidence of Technically Competent Management will be provided upon request.*



## **Appendix 4**

### Environmental Setting & Site Design (ESSD) Report





# Environmental Setting and Site Design Report

Longwater Gravel Company Limited

Wymondham Quarry,  
Stanfield Road,  
Wymondham,  
Norfolk,  
NR18 9RL.

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This Environmental Setting and Site Design Report  
was prepared by Westbury Environmental Limited on behalf of  
Longwater Gravel (Company) Limited.

#### Document Control Table

<b>Project Reference</b>	<b>18/008d</b>	
Project Title	Bespoke Environmental Permit Application	
Document Title	Environmental Setting and Site Design Report	
Document Version No.	1	
Document Issue Date	26 <sup>th</sup> June 2019	
Client	Longwater Gravel Company Limited	
Report Produced By / Date	Georgina Watkins	26 <sup>th</sup> June 2019
Report Checked By / Date	Tracey Westbury	26 <sup>th</sup> June 2019



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4. Pollution Control Measures .....	11
5. Monitoring .....	13
6. Site Condition Report .....	15

## Figures

Figure 1	Location and extent of Wymondham Quarry
Figure 2	Wind rose from Norwich Airport Observing Station taken from 11/2000 to 03/2019

## Drawings

Permit Boundary Plan	Drawing No. 18/008d 001
Sensitive Receptors Plan	Drawing No. 18/008d 002
Site Plan (as existing)	Plan No. 0812/S
Illustrative Restoration Plan	Plan No. 0812/R/1d

## Appendices

Appendix 1	Planning Permission C/7/2013/7014
Appendix 2	Waste Recovery Plan
Appendix 3	Pre-application Advice Letter (EPR/HB3103XE/A001)
Appendix 4	Waste Acceptance Procedures
Appendix 5	Environmental Risk Assessment
Appendix 6	Hydrogeological Impact Assessment
Appendix 7	Site Condition Report Part 1



# 1. Introduction

## Report context

- 1.1. This Environmental Setting and Site Design Report (ESSD) supports a Bespoke Environmental Permit Application for deposit for recovery at Wymondham Quarry, Stanfield Road, Wymondham, Norfolk, NR18 9RL (the Site).
- 1.2. This ESSD Report has been produced by Westbury Environmental Limited on behalf of Longwater Gravel Company Limited. Westbury Environmental Limited are an environmental consultancy who assist waste operators with waste regulatory compliance issues.
- 1.3. The current development at the Site consists of mineral extraction works. Planning Permission C/7/2013/7014 for the mineral extraction and restoration of the quarry was granted on 10<sup>th</sup> January 2014 by Norfolk County Council. This Planning Permission places an obligation on the operator to import soils onto the Site in order to restore the land in accordance with the plans included within that planning permission, see Appendix 1 Planning Permission C/7/2013/7014.
- 1.4. A Waste Recovery Plan for the restoration of the Site was submitted to the Environment Agency in November 2018 and was subsequently deemed as “recovery” on 4<sup>th</sup> April 2019, see Appendix 2 Waste Recovery Plan and Appendix 3 Pre-application Advice Letter (EPR/HB3103XE/A001).
- 1.5. The Site will be restored to the ground levels shown on the Illustrative Restoration Plan, Plan No. 0812/R/1d for use as agricultural productive farmland.
- 1.6. The Bespoke Environmental Permit Application that this ESSD Report supports seeks to allow 151,500m<sup>3</sup> of waste to be deposited in the restoration works at the Site.

## Site details

- 1.7. The Site is located 1.8km southeast of Wymondham, Norfolk. Stanfield Road runs along the northern boundary of the Site. The Site is divided into two sections by Bridge Road running from the southwest to the northeast: the Northwest Section and Southeast Section. The national grid reference for the centre of the Site is TG 13652 00357.
- 1.8. The Site extends to an area of approximately 23.5 Hectares. The boundary of the Site is shown in Permit Boundary Plan, Drawing No. 18/008d 001 and in Figure 1: “*Location and extent of Wymondham Quarry*”. Fencing and hedging exists along the boundaries of the Site.
- 1.9. The Northwest Section is comprised of 17.5Ha of land. The Southwest Section comprises 6.0Ha of land.



*Figure 1: Location and extent of Wymondham Quarry*

- 1.10. The Site is accessed via Stanfield Road, which runs along the northern boundary of the Site. The access point to the Site is located at grid reference TG 13687 00508.
- 1.11. Land-uses surrounding the Site include residential areas, agricultural land and protected sites.
- 1.12. Nearby sensitive receptors include the residential dwellings of Hall Farm Cottage and Hall Farm House as well as areas of deciduous woodland and Goff Petroleum. The sensitive receptors in close proximity to the Site are identified in Section 3 (Pathway & Receptor) of this report.



## 2. Source

- 2.1. Quarrying operations are currently undertaken on the Site. Waste recovery operations are proposed to be carried out under a bespoke Environmental Permit in order to restore the quarry to productive agricultural land.

### Historical Development

- 2.2. Planning permission for the restoration of the quarry was granted by Norfolk County Council on 10<sup>th</sup> January 2014, see Appendix 1 Planning Permission C/7/2013/7014. The Waste Recovery Plan for Wymondham Quarry was based on the requirements of the planning permission to import soils on Site in order to restore the land.
- 2.3. Historically, land-uses on the Site have included agricultural activities and mineral extraction operations. Neither of these activities are considered likely to have contaminated the land.
- 2.4. Only part of the quarry has been extracted to date. Quarry operations are currently being undertaken in the north-western part of the Site.
- 2.5. No waste material has been deposited in the restoration of the Site to date. Only overburden from the mineral extraction operations has been deposited in the restoration.

### Proposed Development

- 2.6. The Waste Recovery Plan for the Site was submitted to the Environment Agency in November 2018 and subsequently was deemed by the Environment Agency a “recovery” operation on 4<sup>th</sup> April 2019, see Appendix 2 Pre-application Advice Letter (EPR/HB3103XE/A001).
- 2.7. There is a requirement for 151,500m<sup>3</sup> of waste material to be used in the restoration in order to restore the Site in accordance with the restoration plans included in the planning permission C/7/2013/7014.
- 2.8. The waste types included in Table 2.1 Waste types below are proposed to be used in the restoration of the quarry.

**Table 2.1 – Waste Types**

<b>Exclusions</b>				
Wastes having any of the following characteristics shall not be accepted:				
<ul style="list-style-type: none"> <li>• Consisting solely or mainly of dusts, powders or loose fibres</li> <li>• Wastes that are in a form which is either sludge or liquid</li> </ul>				
<b>Permitted waste types</b>				
<b>Source</b>	<b>Sub-source</b>	<b>Waste code</b>	<b>Description</b>	<b>Additional restrictions</b>
01 Waste resulting from exploration,	01 01 wastes from mineral	01 01 02	Wastes from mineral non-	Restricted to waste overburden and





mining, quarrying and physical and chemical treatment of minerals	excavation		metalliferous excavation	interburden only.
	01 04 wastes from physical and chemical processing of non-metalliferous minerals	01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 06	
		01 04 09	Waste sand and clays	
17 Construction and demolition wastes	17 01 concrete, bricks, tiles and ceramics	17 01 01	Concrete	
		17 01 02	Bricks	
		17 01 03	Tiles and ceramics	
		17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	Metal from reinforced concrete must have been removed.
	17 05 soil stones and dredging spoil	17 05 04	Soil and stones other than those mentioned in 17 05 03	Restricted to topsoil, peat, subsoil and stones only.
19 Wastes from waste management facilities	19 12 wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified	19 12 09	Minerals (for example sand, stones) only	Restricted to wastes from treatment of waste aggregates that are otherwise naturally occurring minerals. Does not include fines from treatment of any non-hazardous waste or gypsum from recovered plasterboard
20 Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	20 02 garden and park wastes	20 02 02	Soils and stones	Restricted to topsoil, peat, subsoil and stones only.

2.9. Waste to be used in the restoration works will be accepted and classified in accordance with the Waste Acceptance Procedures, see Appendix 4 Waste Acceptance Procedures.



- 2.10. The final landform will be a relatively flat landscape to be used for agriculture. Final ground levels will be similar to the original ground levels of the Site before any mineral extraction was undertaken, see Illustrative Restoration Plan, Plan No. 0812/R/1d and Site Plan (as existing), Plan No. 08/12/S.



### 3. Pathway and Receptor

#### Sensitive Receptors

3.1. There are number of sensitive receptors within 500m of the Site boundary. The direction and distances from the boundary of the Site to the sensitive receptors are provided in Table 3.1, Sensitive Receptors. The references 1 – 10 are shown on the Sensitive Receptors Plan, Drawing No. 18/008d 002.

**Table 3.1 - Sensitive Receptors within 500m of the site boundary**

Ref	Receptor	Description	Direction from Site Boundary	Approximate distance from Site Boundary (m)
1	Deciduous woodland	Designated Protected Habitat	Northwest	0
2	Stanfield Road	Main road	North	0
3	Drain	Surface Water Feature	South	0
4	Goff Petroleum	Heating oil supplier	Northwest	70
5	Poultry Farm	Agricultural buildings housing poultry and associated activities	Southeast	90
6	Hall Farm Cottage	Closest residential dwelling to the Site	Northeast	160
7	Hall Farmhouse	Residential dwelling with associated agricultural buildings and land	Northeast	200
8	Deciduous woodland	Designated Protected Habitat	South	270
9	Glebe House	Residential dwelling	South	300
10	Burnthouse Farm	Residential dwelling with associated agricultural buildings and land	Southwest	480

3.2. The Sensitive Receptors identified in Table 3.1 have been considered within the Environmental Risk Assessment completed for the Site (Appendix 5 Environmental Risk Assessment) and are considered in this section of the ESSD Report.

#### Geology

3.3. Bedrock geology is defined on the British Geological Survey website as “a term used for the main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water”.



- 3.4. The Bedrock geology at the Site is classified as Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, Culver Chalk Formation and Portsdown Chalk Formation (undifferentiated) – Chalk. Sedimentary Bedrock formed approximately 72 to 94 million years ago in the Cretaceous Period. Local environment previously dominated by walk chalk seas. These sedimentary rocks are shallow-marine in origin. They are biogenic and detrital, generally comprising carbonate material (coccoliths), forming distinctive beds of chalk. This classification has been obtained from the British Geological Survey Geology Map.
- 3.5. Superficial deposits are defined on the British Geological Survey website as *“the youngest geological deposits forms during the most recent period of geological time, the Quaternary, which extends back about 2.6 million years from the present.”*
- 3.6. The superficial deposit geology at the Site is generally classified as “Lowestoft Formation - Sand and Gravel”. The superficial deposits formed up to 2 million years ago in the Quaternary Period. The local environment was previously dominated by ice age conditions. These sedimentary deposits are glacial in origin. They are detrital, created by the actions of ice and meltwater, they can form a wide range of deposits and geomorphologies associated with glacial and inter-glacial periods during the Quaternary. This classification has been obtained from the British Geological Survey Geology Map.
- 3.7. The superficial deposit geology in parts of the Site is classified as “River Terrace Deposits, 1 - Sand and Gravel”. The superficial deposits formed up to 3 million years ago in the Quaternary Period. The local environment was previously dominated by rivers. These sedimentary deposits are fluvial in origin. They are detrital, ranging from coarse-grained to fine-grained and form beds and lenses of deposits reflecting the channels, floodplains and levees of a river or estuary.
- 3.8. No site investigations were available at the time of writing this ESSD Report.

## Hydrology

- 3.9. The Site falls within the catchment headwaters of the River Tiffey.
- 3.10. Drains are located running parallel along parts of the Site boundary. These drains are linked to the River Tiffey.
- 3.11. The Site is located in Flood Zone 1, where the probability of fluvial flooding is 0.1% in any year. The majority of the Site is considered to be at a very low risk of flooding from surface water. There are isolated areas of the Site that are at high risk of flooding from surface water. This Site is not at risk of flooding from reservoirs.
- 3.12. The Environmental Risk Assessment for the Site has assessed that there is a “low” risk to surface water due to the following reasons:
- Permitted waste types will not include sludges or liquids and accepted waste types are non-hazardous. Strict waste acceptance procedures will ensure that no contaminated waste enters the Site.
  - There will be no point-source emissions to water.
  - All liquids on the Site will be provided with secondary containment.



- 3.13. There are no Drinking Water Safeguard Zones for surface water located on or in close proximity to the Site.

### **Hydrogeology**

- 3.14. The Site is located within a Groundwater Source Protection Zone 3 (Total Catchment).
- 3.15. The Site is located on a Secondary A superficial deposit aquifer and a Principal designated bedrock aquifer. The Groundwater vulnerability of the major aquifers under the Site is classified as “low” in the northern part of the Site and “intermediate” in the southern part of the Site.
- 3.16. There is no evidence of aquicludes at the Site preventing migration of groundwater. There are no aquitards identified by the British Geological Survey in relation to the Site.
- 3.17. Strict waste acceptance procedures will be implemented at the Site to ensure that no contaminated waste types are accepted onto the Site. Only clean waste soils will be placed in the restoration works.
- 3.18. The Environmental Risk Assessment has shown that there is a “low” risk to groundwater due to the nature of wastes being brought onto the Site.
- 3.19. There are no Drinking Water Safeguard Zones for groundwater located on or in close proximity to the Site.
- 3.20. A Hydrogeological Impact Assessment has been completed for the Site, see Appendix 6 Hydrogeological Impact Assessment. The Hydrogeological Impact Assessment concluded that effective groundwater recharge to the underlying Chalk aquifer, together with groundwater baseflow to the River Tiffey, would not be significantly affected by the proposed restoration of the Site using inert waste.

### **Local human population**

- 3.21. There is not a large human population within 500m of the Site. The local human population includes the residents at properties off Stanfield Road (Hall Farm Cottage and Hall Farmhouse located 160m and 200m northeast of the Site respectively) and workers at Goff Petroleum and the poultry farm located 70m northwest and 90m southeast respectively.
- 3.22. The following sources in the Site’s Environmental Risk Assessment are considered to have the potential to cause harm to the local human population.

### Dust and Particulates

- 3.23. Dust and particulates from waste operations have the potential to cause harm to the local population by harming human health by respiratory irritation and to cause nuisance by leading to dust deposition on cars, homes and clothing etc.



- 3.24. The only waste types to be used in the restoration are described in Table 4.1 Waste Types of this ESSD Report. Waste will be accepted onto the Site in strict accordance with the Waste Acceptance Procedures within the Site's EMS.
- 3.25. It is considered that there is the potential of dust production from vehicle movements and from the placement of waste into the restoration. However due to the scale, nature and location of the operations it is not considered that there will be a significant impact from dust.
- 3.26. Due to the size of the dust particles, the majority of dust emissions are likely to be deposited within 50m of the source. Residential dwellings and workplaces are located more than 50m from the Site boundary.
- 3.27. The Environmental Risk Assessment considers that there is a "low" residual risk to nearby receptors from dust and particulates.

#### Noise

- 3.28. Noise has the potential to cause nuisance, loss of amenity and loss of sleep to the local human population.
- 3.29. All of the plant and equipment kept on the Site will be maintained in accordance with the manufacturer's recommendations. This results in a low-likelihood of excessive noise from plant due to malfunction.
- 3.30. It is considered that there is a "low" risk of nuisance to the local human population from noise from the Site's operations.

#### Odour

- 3.31. Waste types accepted onto the Site have a low potential to give rise to odour. They are not putrescible. Strict waste acceptance procedures are applied to incoming loads to ensure that they do not contain malodorous materials.
- 3.32. It is considered that there is a "very low" residual risk of the local human population being caused a nuisance by odour from site operations.

#### Mud & Debris

- 3.33. Local residents can be sensitive to mud and debris on local roads from heavy goods vehicles entering and exiting the Site. The Site will have procedures and mitigation measures in place to ensure that mud and debris on local roads is minimised.
- 3.34. The Site has a long access road. It considered likely that the majority of mud will be deposited on the access road before exiting vehicles reach Stanfield Road.
- 3.35. Waste types to be permitted under the Environmental Permit have a low potential to produce litter.



- 3.36. A road sweeper will be used when necessary to clear local highways including Stanfield Road from litter, mud and waste.
- 3.37. It is considered that there is a “low” residual risk of mud and debris to cause nuisance and loss of amenity to the local population.

#### Pests and vermin

- 3.38. Due to the nature of the waste types used in the restoration, it is considered that the risk to the local human population is “very low”. Pests and vermin are generally attracted to waste sites that accept putrescible wastes.
- 3.39. There is likely to be a naturally-occurring vermin population due to the Site’s surrounding land-use of agricultural fields and woodland.
- 3.40. Housekeeping procedures and strict waste acceptance procedures will ensure that activities and materials that could attract vermin and pests are not undertaken or accepted onto the Site.

#### **Habitats and Protected Sites**

- 3.41. There are areas of deciduous woodland located within 500m of the Site boundary. The closest area of deciduous woodland is located on the north-western boundary of the Site.
- 3.42. The potential harm to these protected sites could be toxic contamination, nutrient enrichment, disturbance and predation.
- 3.43. The implementation of the Site’s EMS procedures should minimise the risk to protected sites within 500m of the Site. Waste types accepted at the Site are non-hazardous and are not degradable.
- 3.44. There is considered to be a “low” risk to the deciduous woodland located to the northwest of the Site.
- 3.45. Lower Wood, Ashwellthorpe Site of Special Scientific Interest and Toll’s Meadow, Wymondham Local Nature Reserve LNR are located 1.6km south and 2km northwest of the Site respectively. Due to their distance from the Site, it considered that they will be at a very low risk from operations at the Site.



## 4. Pollution Control Measures

### Site Engineering

- 4.1. There is no site engineered pollution control measures installed on this site in relation to the waste operations
- 4.2. An outline engineering plan has not been provided. Waste materials will be placed in the restoration following good practice techniques.

### Restoration

- 4.3. The quarry is currently being restored to agricultural land; therefore, the proposed ground levels are relatively flat and similar to the original ground levels of the Site before mineral extraction took place. The original ground levels and proposed levels are shown in the plans Site Plan (as existing), Plan No. 0812/S and Illustrative Restoration Plan, Plan No. 0812/R/1d respectively.
- 4.4. The restoration of the Site has been designed to create a landscape that is congruous with the surrounding area.
- 4.5. The ESSD Report template on the Environment Agency website refers to pre-settlement and post-settlement contours. Settlement is only likely to be significant for sites filled with degradable waste. Waste types to be imported at the Site will be inert and therefore the Site is not anticipated to be subject to significant settlement. Waste materials will be placed in the restoration following good practice techniques. A stability risk assessment has not been provided for this Site due to the scale and nature of the proposed restoration.
- 4.6. The waste types and quantities to be used in the restoration are discussed in the Waste Recovery Plan for the Site, Appendix 2. Once the restoration of the Site is complete it is considered that a total of 151,500m<sup>3</sup> of waste material will have been used.
- 4.7. The waste types to be used in the restoration of the Site are included in Table 2.1 Waste Types of this report.
- 4.8. The Site will operate in accordance with strict waste acceptance procedures to ensure that only acceptable wastes are brought onto the Site.

### Past closure controls (Aftercare)

- 4.9. The proposed after-use of the Site is agricultural fields for productive farming.
- 4.10. The Site is to be restored in accordance with the plans within the Planning Permission obtained for the Site.
- 4.11. The likelihood of differential settlement and structural failure of the Site is considered to be low due to the types of wastes to be used in the restoration. The waste types are not biodegradable; therefore, it is anticipated that there will be no gas or significant settlement.





- 4.12. The Environmental Permit will be surrendered when recovery operations are completed at the Site i.e. when the Site has been restored in accordance with the levels shown on Illustrative Restoration Plan, Plan No. 0812/R/1d



## 5. Monitoring

### Weather

#### Local Wind Speeds and Directions

- 5.1. Wind speed and direction data have been obtained from the Norwich Airport observing station for the period from 11/2000 to 03/2019. Norwich Airport observing station is located approximately 15km to the northeast of the Site. This observing station has wind speed and direction data appropriate for characterisation of the wind climate at the Site, see Figure 2: Wind rose from Norwich Airport Observing Station 11/2000 to 03/2019

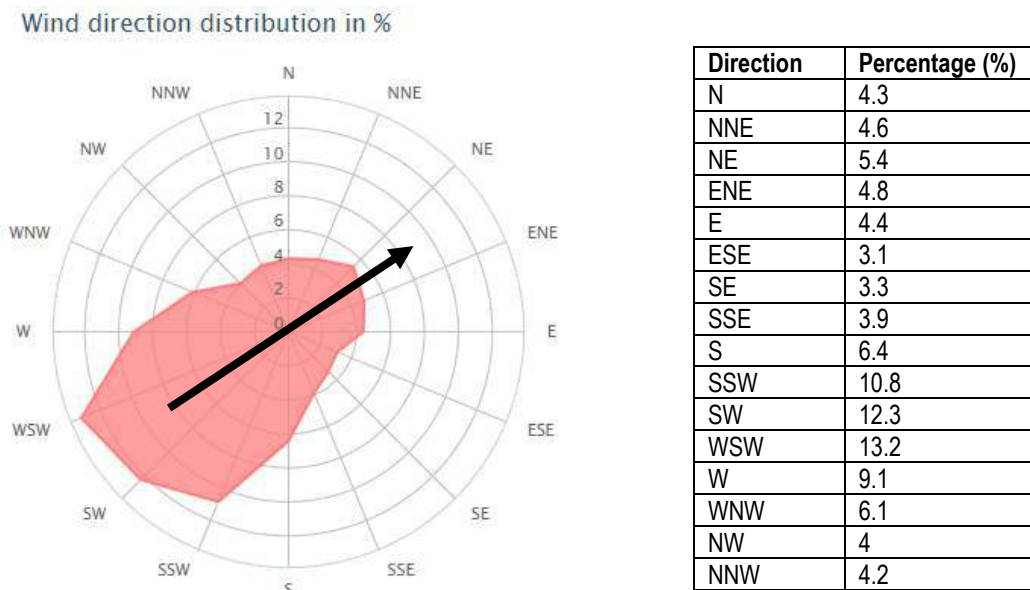


Figure 2: Wind rose from Norwich Airport Observing Station from 11/2000 to 03/2019. Arrow indicates predominant wind direction.

- 5.2. The predominant wind direction blows towards receptors to the north-east of the Site. It is calculated that winds blowing toward this direction account for approximately 36.3% of all winds recorded during the period from 11/2000 to 03/2019.
- 5.3. Examination of the seasonal variations in wind speeds show that these do not change significantly, approximately 5-6ms<sup>-1</sup>. Therefore, seasonal variations in wind speeds have not been separately considered.
- 5.4. Wind direction and speed is not monitored on-site.

#### Rainfall

- 5.5. According to data from the Met Office website, between 1981 and 2010, the average annual rainfall for Wymondham was 600mm to 700mm a year.



- 5.6. Orographic enhancement is the effect that mountains and high-altitude areas have on clouds and winds. Higher altitude areas force the prevailing winds to rise, which cools the air and consequently enhances the formation of clouds. The landscape of Norfolk is very flat and there are no mountainous regions.
- 5.7. Rainfall is not monitored on the Site. Data on rainfall has been obtained from the Met Office website.

### **Gas Monitoring Infrastructure**

- 5.8. There is no existing gas monitoring infrastructure at the Site. Due to the scale and nature of the waste recovery activity there is no proposed gas monitoring infrastructure to be installed within the Site or around the perimeter.
- 5.9. The waste types to be used in the restoration are inert. This waste will not biodegrade and therefore will not generate gas.

### **Gas Monitoring**

- 5.10. Gas monitoring has not been undertaken at the Site.
- 5.11. A monitoring plan is not deemed necessary for the Site due to the nature of the waste types being used in the restoration.
- 5.12. It will be confirmed that no biodegradable waste will be present in the Site through the implementation of strict waste acceptance procedures. Waste Acceptance Procedures will be in place on the Site to ensure that only waste types allowed under the Environmental Permit are accepted for placement in the restoration of the quarry. No putrescible wastes will be accepted on the Site as they will not be allowed under the Environmental Permit.
- 5.13. Any contravening waste types will be identified at the following points:
  - Pre-acceptance checks on incoming soils by way of a Hazardous Waste Assessment in accordance with WM3 Technical Guidance.
  - By checking the accompanying Waste Transfer Note. For example, wastes that have been incorrectly coded on the Waste Transfer Note will not be accepted onto the Site.
  - By carrying out a visual assessment of the load prior to offloading.
  - By visual checks during offloading.
  - By visual checks during the placement of material.
- 5.14. If contravening waste types are discovered during these checks, they will be removed in accordance with the Site's Waste Rejection Procedure.
- 5.15. A Gas Risk Assessment has not been provided. It is considered that implementation of the Waste Acceptance Procedures on the Site will ensure that no biodegradable waste will be used in the restoration works. There is not a potential of the proposed waste types to produce gas even at depth of more than 2m.



## 6. Site Condition Report

- 6.1. A Site Condition Report Part 1 has been submitted with the Bespoke Environmental Permit Application and has been appended to this report, see Appendix 7 Site Condition Report Part 1.
- 6.2. Site Condition Report Part 2 will be completed during the lifetime of the Environmental Permit. Any changes to the Environmental Permit will be included in Site Condition Report Part 2.
- 6.3. On completion of the restoration works, Longwater Gravel Company Limited will undertake a topographical survey to ensure the conditions of the planning permission has been complied with. This information will be included as Part 3 of the Site Condition Report in due course.
- 6.4. A Site Closure Plan has not been provided. Information on the closure of the site will be included as part of the Environmental Management System Report. The Site will be restored in accordance with the plans submitted as part of Planning Permission C/7/2013/7014.
- 6.5. The Environmental Permit will be surrendered when waste recovery operations have been completed on the Site.





## Drawings

Permit Boundary Plan	Drawing No. 18/008d 001
Sensitive Receptors Plan	Drawing No. 18/008d 002
Site Plan (as existing)	Plan No. 0812/S
Illustrative Restoration Plan	Plan No. 0812/R/1d

# Longwater Gravel

Producers of Quality Aggregates

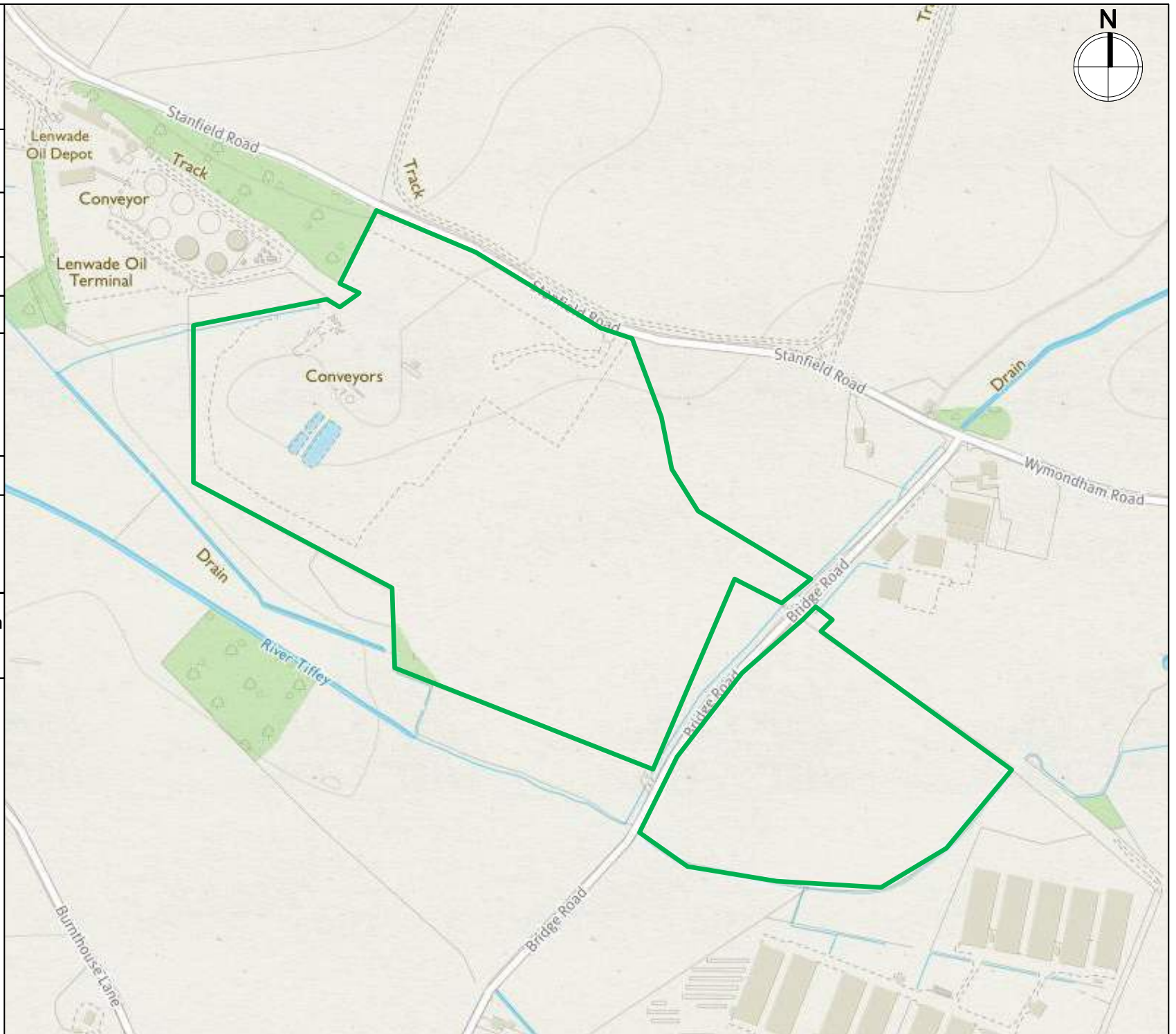
## Wymondham Quarry

<b>Client</b>	Longwater Gravel Company Limited
<b>Title</b>	Permit Boundary Plan
<b>Dwg No.</b>	18/008d 001
<b>Site</b>	Wymondham Quarry, Stanfield Road, Wymondham, Norfolk, NR18 9RL
<b>Date</b>	11/04/2019
<b>Key</b>	 Permit Boundary
<b>Scale</b>	



Providing solutions, ensuring compliance

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# Longwater Gravel

Producers of Quality Aggregates

## Wymondham Quarry

Client	Longwater Gravel Company Limited
Title	Sensitive Receptors Plan
Dwg No.	18/008d 002
Site	Wymondham Quarry, Stanfield Road, Wymondham, Norfolk, NR18 9RL
Scale	See Drawing
Date	09/04/2019

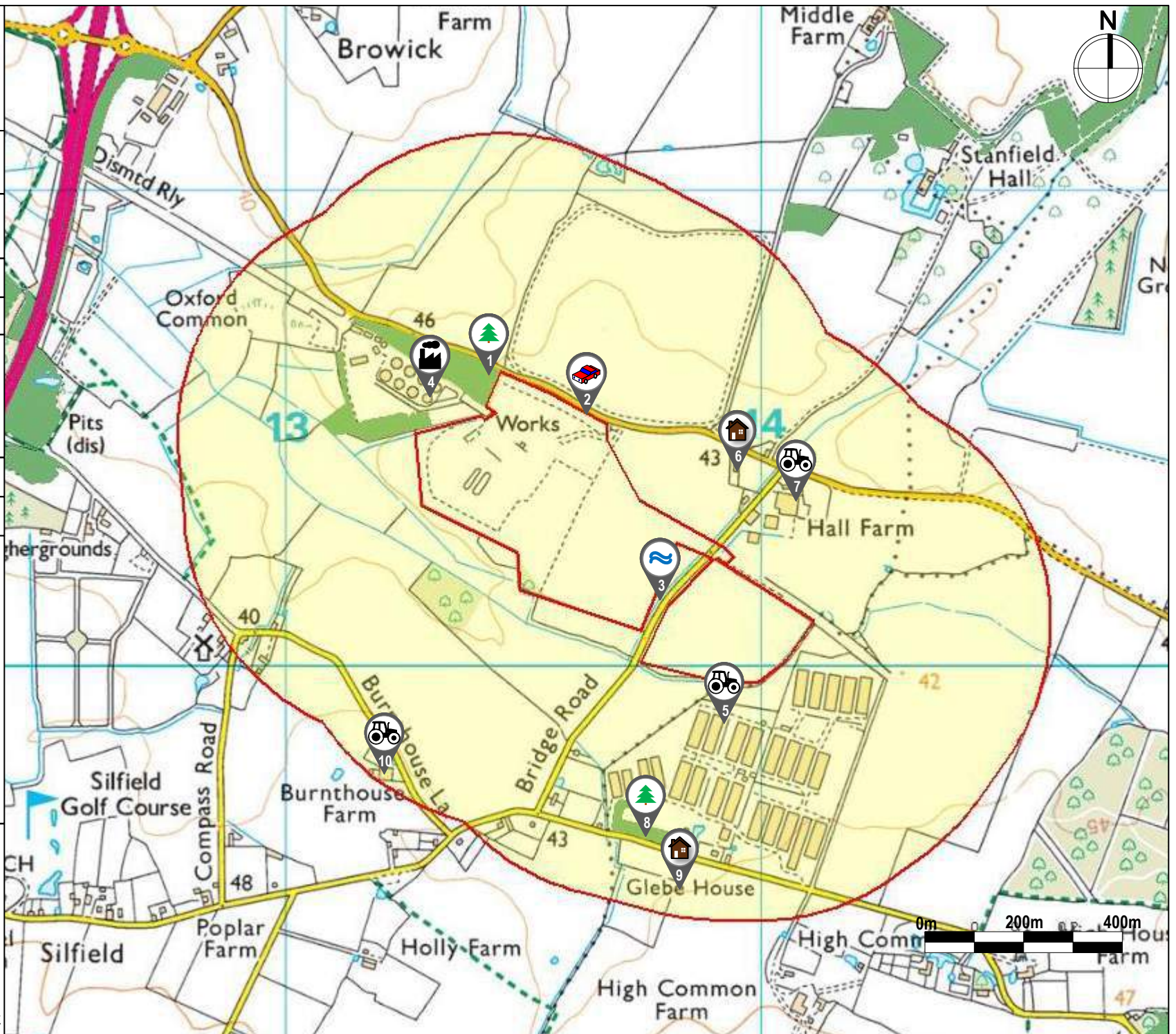
### Key

- 1  Deciduous Woodland
- 2  Stanfield Road
- 3  Drain
- 4  Goff Petroleum
- 5  Poultry Farm
- 6  Hall Farm Cottage
- 7  Hall Farmhouse
- 8  Deciduous Woodland
- 9  Glebe House
- 10  Burnthouse Farm



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Version / amendment: 0812/S v3





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Version / amendment: 0812/R/1d v2



## **Appendices**

### **Appendix 1 Planning Permission C/7/2013/7014**

**NORFOLK COUNTY COUNCIL**

**Town and Country Planning Act, 1990**

**Town and Country Planning (Development Management Procedure) Order 2010**

To: Mr Simon Smith  
Longwater Gravel Co. Ltd  
William Frost Way  
Longwater Business Park  
Costessey  
Norwich  
NR5 0JS

Particulars of Proposed Development

Location: Land at Hall Farm, Stanfield Road, Wymondham, Norfolk  
Applicant: Longwater Gravel Co. Ltd  
Agent: Longwater Gravel Co. Ltd  
Proposal: Mineral extraction, processing and associated activities with importation of inert material and restoration to agriculture and two small ponds.

The Norfolk County Council hereby gives notice of its decision to GRANT PLANNING PERMISSION for the development specified in the application received as valid on 3 July 2013, subject to compliance with the conditions set out on the attached sheet.

The reasons for the grant of permission and for the conditions are also set out on the attached sheets.

Signed:  Date: 10 January 2014

For DIRECTOR OF ENVIRONMENT, TRANSPORT AND DEVELOPMENT

Norfolk County Council  
County Hall  
Martineau Lane  
Norwich  
NR1 2SG

**SEE NOTES**

## **NOTES**

### **Appeals to the Secretary of State**

- If you are aggrieved by the decision of your local planning authority to refuse permission for the proposed development or to grant it subject to conditions, then you can appeal to the Secretary of State under section 78 of the Town and Country Planning Act 1990.
- If you want to appeal against your local planning authority's decision then you must do so within 6 months of the date of this notice
- If an enforcement notice is served relating to the same or substantially the same land and development as in your application and if you want to appeal against your local planning authority's decision on your application, then you must do so within 28 days of the date of service of the enforcement notice, or within 6 months of the date of this notice, whichever period expires earlier
- Appeals must be made using a form which you can get from the Secretary of State at Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6PN or online at [www.planningportal.gov.uk/pcs](http://www.planningportal.gov.uk/pcs)
- The Secretary of State can allow a longer period for giving notice of an appeal, but will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.
- The Secretary of State need not consider an appeal if it seems to the Secretary of State that the local planning authority could not have granted planning permission for the proposed development or could not have granted it without the conditions they imposed, having regard to the statutory requirements, to the provisions of any development order and to any directions given under the development order.
- In practice, the Secretary of State does not refuse to consider appeals solely because the local planning authority based their decision on a direction given by the Secretary of State.

### **Purchase Notices**

- If either the local planning authority or the Secretary of State refuses permission to develop land or grants it subject to conditions, the owner may claim that the owner can neither put the land to a reasonably beneficial use in its existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.
- In these circumstances, the owner may serve a purchase notice on the District or Borough Council in whose area the land is situated. This notice will require the Council to purchase the owner's interest in the land in accordance with the provisions of Chapter I of Part VI of the Town and Country Planning Act 1990.

### **Byelaws**

- Any planning permission is subject to compliance with the byelaws (Local Acts, Orders Regulations) and any general statutory provisions in force.

Location: Land at Hall Farm, Stanfield  
Road, Wymondham, Norfolk

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Conditions and Reasons for Conditions:

1. The development hereby permitted shall commence not later than three years from the date of this permission. Within seven days of the commencement of operations, the operator shall notify the County Planning Authority in writing of the exact starting date.

Reason: Imposed in accordance with Section 91 of the Town and Country Planning Act 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

2. The development to which this permission relates shall cease and the site shall be restored in accordance with condition 19 by 30 March 2026.

Reason: To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

3. The development must be carried out in strict accordance with the application form, plans and documents detailed below:

- a) Location Plan, ref. 0812/A, dated 28/06/13.
- b) Planning Statement, dated June 2013.
- c) Composite Operations Plan, ref. 0812/CO/1c v4, dated 04/11/2013.
- d) Illustrative Progressive Operations Plan, ref. 0812/PO/2 v1, dated 23/5/13.
- e) Site Context, ref. 0812/SC/4a, dated 19/11/2013.
- f) Illustrative Restoration Plan, ref 0812/R/1d v2, dated 24/06/13.
- g) Illustrative Cross Section, ref 0812/CS/2 v1, dated 24/06/13.
- h) Site Context, ref 0812/SC/4a v1, dated 19/11/13.
- i) Cross Sections (B-B1 to E-E1), ref 0812/SC/2 v3, dated 04/11/13.
- j) Cross Sections (F-F1 to H-H1), ref 0812/SC/3 v3, dated 04/11/13.
- k) Cross Sections (D-X to G-X), ref 0812/SC/5a v2, dated 20/11/13.
- l) Illustrative Detail of Plant and Operations Area, ref 0812/P/2 v1, dated 27/06/13.
- m) Illustrative details of Processing Plant, ref. 0812/PP/1 v2, dated 17/07/12.
- n) Details of Office and Weighbridge, ref 0812/OW/1 v2, dated 17/07/12.  
Elevations of Office/Messroom, ref 0812/OM/1 v2, dated 27/06/13.
- o) Elevations of ISO Containers, ref 0812/ISO/1, dated 17/07/2012.
- p) Gas Oil and Waste Storage Tanks, ref 0812/OST/01, dated June 2013.
- q) Supplementary Landscape and Visual Appraisal, dated 21 June 2013.
- r) Ecological Survey, ref 2011/270 (2008/075 and 2010/038), dated March 2012.
- s) Habitat Creation Details for Two Ponds, ref 403.04095.00005, dated June 2013.
- t) Detailed Pond Design, drawing 01, rev 0, dated June 2013.
- u) Detailed Pond Sections, drawing 02, rev 0, dated June 2013.
- v) Tree Survey and Arboricultural Implications Assessment, dated 08/05/2012.

Location: Land at Hall Farm, Stanfield  
Road, Wymondham, Norfolk

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- w) Hydrogeological Impact Assessment, ref 402-04095-00003, dated March 2013.
- x) Flood Risk Assessment and Surface Water Management Plan, ref 405.04095.00006, dated September 2013.
- y) Flood Risk Assessment Phasing Plan, ref 1, dated September 2013.
- z) Flood Risk Assessment Proposed SWMP Measures, ref 2, dated September 2013.
- aa) Dust Assessment, ref 403-04095-00005, dated June 2013.
- bb) Archaeological Desk Based Assessment and Trial Trench Evaluation, ref 3986, dated January 2012.
- cc) Geophysical Survey Report, ref J2967, dated October 2011.
- dd) Lighting Assessment, dated June 2013.
- ee) Agricultural Land Classification, dated May 2011.
- ff) Transport Statement, Revision A, ref MA/CS/P12-446/01/Rev A, dated May 2013.
- gg) Noise Assessment, ref 10923/1, dated 23/11/13.

Reason: For the avoidance of doubt and in the interests of proper planning

4. No operation authorised or required under this permission or under Part 23 of Schedule 2 of the Town and Country Planning (General Permitted Development) Order 1995, including the movement of vehicles and operation of any plant, shall take place on Sundays or public holidays, or other than during the following periods:

07.00 - 18.00 Mondays to Fridays  
07.00 - 13.00 Saturdays.

Reason: To protect the amenities of residential properties and the surrounding area, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

5. No waste materials shall be brought onto the site other than the waste types listed in Appendix A attached to this decision notice.

Reason: To protect the amenities of neighbouring residential properties and the environment, in accordance with Policies DM12 and DM3 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

6. Prior to the first occupation of the development hereby permitted the vehicular access shall be provided and thereafter retained at the position shown on the approved drawing number 03/008 dated 12/2/13 in accordance with the Highway Authority Industrial Access Specification. Arrangement shall be made for surface water drainage to be intercepted and disposed of separately so that it does not discharge from or onto the highway carriageway.

Location: Land at Hall Farm, Stanfield  
Road, Wymondham, Norfolk

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Reason: To ensure satisfactory access into the site and avoid carriage of extraneous material or surface water from or onto the highway, in accordance with Policy DM10 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

7. Prior to the first occupation of the development hereby permitted any access gate(s), bollard, chain or other means of obstruction shall be hung to open inwards, set back, and thereafter retained a minimum distance of 10 metres from the near channel edge of the adjacent carriageway.

Reason: To enable vehicles to safely draw off the highway before the gate(s) or obstruction is opened, in accordance with Policy DM10 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

8. No works shall commence on site until the details of wheel cleaning facilities associated with the proposal have been submitted to and approved in writing by the Local Planning Authority in consultation with the Highway Authority.

Reason: To prevent extraneous material being deposited on the highway, in accordance with Policy DM10 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

9. Prior to the commencement of the use hereby permitted the approved wheel cleaning facilities shall be provided to the written satisfaction of the Local Planning Authority in consultation with the Highway Authority and thereafter maintained and used as appropriate.

Reason: To prevent extraneous material being deposited on the highway, in accordance with Policy DM10 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

10. Prior to the commencement of the extraction phase the sumps shall be designed to accommodate the 1 in 100 year rainfall event including climate change.

Reason: To prevent flooding by ensuring the satisfactory storage and disposal of surface water from the site.

11. An infiltration drainage scheme incorporating infiltration trenches designed to accommodate the 1 in 100 year rainfall event including climate change, sized using infiltration rates locally determined using test pit methods in accordance with BRE365, shall be constructed prior to the completion of the restoration phase.

Reason: To prevent flooding by ensuring the satisfactory storage and disposal of surface water from the site.

12. Within 3 months of the date of this permission a Written Scheme of Archaeological Investigation shall be submitted to the County Planning Authority

Location: Land at Hall Farm, Stanfield  
Road, Wymondham, Norfolk

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for its approval in writing. The scheme shall include an assessment of significance and research questions; and

1. The programme and methodology of site investigation and recording
2. The programme for post investigation assessment
3. Provision to be made for analysis of the site investigation and recording
4. Provision to be made for publication and dissemination of the analysis and records of the site investigation
5. Provision to be made for archive deposition of the analysis and records of the site investigation
6. Nomination of a competent person or persons/organization to undertake the works set out within the Written Scheme of Investigation.

Development shall be carried out in accordance with the approved scheme.

Reason: To ensure adequate time is available to investigate any features of archaeological interest, in accordance with Policy DM9 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

13. No operations shall take place until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme of Investigation approved under condition 12 and the provision to be made for analysis, publication and dissemination of results and archive deposition has been secured.

Reason: To ensure adequate time is available to investigate any features of archaeological interest, in accordance with Policy DM9 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

14. No operations shall take place until a scheme of landscaping has been submitted to and approved in writing by the County Planning Authority. The approved scheme shall be implemented during the first planting season following the date of planning permission or such other period agreed in writing with the County Planning Authority. The scheme shall include details of size, species and spacing of trees, hedges and shrubs, arrangements for their protection and maintenance, and details of the construction and maintenance of the soil bunds. It shall make provision for:

- (a) the screening of the operations by trees, hedges and soil bunds;
- (b) the protection and maintenance of existing trees and hedges which are to be retained on the site;
- (c) re-seeding and re-planting where failures or damage occur within a period of five years from the date of planting; and,
- (d) the replacement of any damaged or dead trees with trees of similar size and species at the next appropriate season.

Reason: To protect the amenities of the surrounding area, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.



Location: Land at Hall Farm, Stanfield  
Road, Wymondham, Norfolk

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15. Any drums and small containers used for oil and other chemicals on the site shall be stored in bunded areas which do not drain to any watercourse, surface water sewer or soakaways, and all oil or chemical storage tanks, ancillary handling facilities and equipment, including pumps and valves, shall be contained within an impervious bunded area of a least 110% of the total stored capacity.

Reason: To safeguard hydrological interests, in accordance with Policy DM3 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

16. Any oil storage tanks on the site shall be sited on impervious bases and surrounded by oil tight bund walls; the bunded areas shall be capable of containing 110% of the tank volume and shall enclose all fill and draw pipes.

Reason: To safeguard hydrological interests, in accordance with Policy DM3 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

17. Measures shall be taken to prevent dust nuisance and sand blow caused by the operations, including spraying of road surfaces, plant area and stockpiles.

Reason: To protect the amenities of residential properties and the surrounding area, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

18. No stockpiles of materials shall be stacked or deposited on the site such that its height exceeds 4 metres above its base level.

Reason: To protect the amenities of the surrounding area, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

19. Within three months of the date of this permission a scheme of restoration in accordance with the principles shown on the Illustrative Restoration Plan, ref 0812/R/1d v2, shall be submitted to the County Planning Authority for its approval in writing. The said scheme shall include details of:

- (a) dates for the starting and completion of each phase of restoration;
- (b) a maximum area of disturbed land which at any time is unrestored;
- (c) contours of the restored land shown by plans and sections;
- (d) the provision to be made for drainage of the site;
- (e) areas to be seeded or planted with trees, including provision for re-seeding and re-planting during the following planting season where such action is necessary as a result of any failure which occurs within a period of five years from the date of initial planting;
- (f) details of tree species to be planted;
- (g) bank profiles, batters and shoreline contours.

Location: Land at Hall Farm, Stanfield  
Road, Wymondham, Norfolk

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Reason: To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

20. An even layer of topsoil shall be re-spread on the subsoil layer to an even depth of at least 300mm.

Reason: To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

21. The subsoil shall be crossrippled and any pans and compaction shall be broken up to the satisfaction of the County Planning Authority before replacement of the topsoil.

Reason: To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

22. All stones and deleterious materials in excess of 15cm which arise from the ripping of the subsoil and topsoil shall be removed from the site.

Reason: To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

23. An aftercare scheme specifying such steps as may be necessary to bring the land to the required standard for use for agriculture/wildlife habitat shall be submitted for the written approval of the County Planning Authority in writing not later than 3 months from the date of this permission. The aftercare scheme as may be so approved, shall be implemented over a period of five years following the completion of restoration, or in the case of phased restoration, in stages of five years duration dating from each completed restoration phase.

Reason: To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

24. Noise emitted from operations excluding soil stripping, the construction and removal of baffle mounds, soil storage mounds and spoil heaps shall not exceed the following maximum noise levels at the following properties:

- Hall Farm Cottage, 53dB(A) LAeq, 1h (free field)
- Fur Hill Cottages, 50dB(A) LAeq, 1h (free field)
- Willow Cottage, 51dB(A) LAeq, 1h (free field)

Location: Land at Hall Farm, Stanfield  
Road, Wymondham, Norfolk

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Reason: To protect the amenities of residential properties, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

25. Noise from the approved development at any noise sensitive premises in relation to soil-stripping, the construction and removal of baffle mounds, soil storage mounds and spoil heaps shall not exceed 60dB(A) LAeq 1h (free field).

Reason: To protect the amenities of residential properties, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

Informatives:

1. This development involves works within the public highway that can only be carried out by Norfolk County Council as Highway Authority unless otherwise agreed in writing.

2. It is an OFFENCE to carry out any works within the Public Highway, which includes a Public Right of Way, without the permission of the Highway Authority. Please note that it is the Applicants' responsibility to ensure that, in addition to planning permission, any necessary consents or approvals under the Highways Act 1980 and the New Roads and Street Works Act 1991 are also obtained from the County Council. Advice on this matter can be obtained from the County Council's Highway Development Management Group. Please contact John R Shaw tel 01603 223231  
If required, street furniture will need to be repositioned at the Applicants own expense.

3. Public Utility apparatus may be affected by this proposal. Contact the appropriate utility service to reach agreement on any necessary alterations, which have to be carried out at the expense of the developer.

4. If great crested newts or any other protected species are found on the site during the working lifespan of the quarry, appropriate action will have to be taken in line with the Conservation of Habitats and Species Regulations 2010 & Wildlife and Countryside Act 1981, and handling or relocations will require a European Protected Species licence from Natural England.

5. This application is subject to a Section 106 legal agreement relating to visibility splays.

In accordance with the Town and Country Planning (Development Management Procedure) (England) (Amendment No. 2) Order 2012, the local planning authority has entered into discussions with the applicant during the application processing period to ensure that sufficient information has been submitted to demonstrate that the proposal is acceptable.

Location: Land at Hall Farm, Stanfield  
Road, Wymondham, Norfolk

## APPENDIX A – LIST OF WASTE TYPES TO BE ACCEPTED

EWC	Description
<b>01</b>	<b>WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS</b>
<b>01 01</b>	<b>Wastes from mineral excavation</b>
01 01 02	Wastes from mineral non-metalliferous excavation
<b>01 04</b>	<b>Wastes from physical and chemical processing of non-metalliferous minerals</b>
01 04 08	Waste gravel and crushed rocks other than those containing dangerous substances
01 04 09	Waste sand and clays
<b>17</b>	<b>CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)</b>
<b>17 01</b>	<b>Concrete, bricks, tiles and ceramics</b>
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 07	Mixtures of concrete, bricks, tiles and ceramics
<b>17 05</b>	<b>Soil (including excavated soil from contaminated sites), stones and dredging spoil</b>
17 05 04	Soil and stones other than those containing dangerous substances
17 05 06	Dredging spoil other than those containing dangerous substances
17 05 08	Track ballast other than those containing dangerous substances
<b>19</b>	<b>WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE</b>
19 12	<b>Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 09	Minerals (for example sand, stones)
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 02</b>	<b>Park and garden wastes</b>
20 02 02	Soil and stones



## **Appendix 2    Waste Recovery Plan**



## **Waste Recovery Plan: Wymondham Quarry**

Longwater Gravel Company Limited

Wymondham Quarry,  
Stanfield Road,  
Wymondham,  
Norfolk,  
NR18 9RL.



This Waste Recovery Plan was prepared by  
Westbury Environmental Limited on behalf of  
Longwater Gravel Company Limited.

### Document Control Table

<b>Project Reference</b>	<b>18/008b</b>	
Project Title	Environmental Permit Application for Wymondham Quarry	
Document Title	Waste Recovery Plan	
Document Version No.	1	
Document Issue Date	30 <sup>th</sup> November 2018	
Client	Longwater Gravel Company Limited	
Report Produced By / Date	Georgina Watkins	30 <sup>th</sup> November 2018
Report Checked By / Date	Tracey Westbury	30 <sup>th</sup> November 2018



Providing solutions, ensuring compliance

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[www.westburyenv.co.uk](http://www.westburyenv.co.uk)



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## Drawings

Site Context, Plan No. 0812/SC/1.

Illustrative Progress Operations, Plan No. 0812/PO/2 v1.

SLR Proposed SWMP Measures, September 2013.

Change in ground levels, Plan No. 18/008b 001

Site Plan (as existing), Plan No. 0812/S

Illustrative Restoration Plan, Plan No. 0812/R/1d

Illustrative Cross Sections, Plan No. 0812/CS/2

## Appendices

Appendix 1 Planning Permission C/7/2013/7014

Appendix 2 Restoration Scheme, Longwater Gravel Co. Ltd., April 2014.





# 1. Introduction

- 1.1. This Waste Recovery Plan has been prepared in accordance with the Environmental Permitting (England and Wales) Regulations 2012 and guidance from the Environment Agency Website dated 18th October 2016 in support of an application for a Waste Recovery Permit.
- 1.2. This Waste Recovery Plan provides information on the proposed restoration of a sand gravel quarry operated by Longwater Gravel Company Limited at Wymondham Quarry, Stanfield Road, Wymondham, Norfolk, NR18 9RL (Site), see Site Context, Plan No. 0812/SC/1.
- 1.3. The Site is located 1.8km southeast of Wymondham. Stanfield Road runs along the northern boundary of the Site. The Site is divided into two by Bridge Road running from southwest to northeast.
- 1.4. The land use surrounding the Site is predominantly agricultural fields with associated farmhouses and poultry houses.
- 1.5. Quarry operations are currently undergoing at the Site. It is estimated that 600,000 tonnes of mineral will be extracted during the lifetime of the quarry.
- 1.6. Only a part of the Site has been extracted to date. It is planned for phases of the Site to be restored as other areas are undergoing mineral extraction, see Illustrative Progress Operations, Plan No. 0812/PO/2 v1.
- 1.7. The Site extends to approximately 23.8 Hectares, with mineral extraction being undertaken within 20 Hectares, and the restoration works involve the use of up to 151,500 m<sup>3</sup> (approx. 226,750 tonnes) of materials. The objectives of the restoration of the quarry are to:
  - Provide land for agriculture
  - Enable sustainable surface water management
  - Create two ponds in the southern area of the Site
  - Create a landform that is congruous with the surrounding landscape.
- 1.8. The objectives of the restoration described above will provide a number of benefits to the Site and the surrounding area. These benefits are discussed in Section 2 of this report.
- 1.9. It is anticipated that the site will be operated under a bespoke Environmental Permit. The Site was assessment for its suitability for a Standard Rules permit under SR2015 No. 39 “use of waste in a deposit for recovery operation”. The volume of waste required in the restoration works means that a standard rules permit is not suitable for the Site.
- 1.10. Planning permission C/7/2013/7014 for “mineral extraction, processing and associated activities with importation of inert material and restoration to agriculture and two small ponds” was granted on 10<sup>th</sup> January 2014 by Norfolk County Council, see Appendix 1 Planning Permission C/7/2013/7014.
- 1.11. The restoration of the Site is considered to be a legal obligation for the following reasons:
  - Condition 1 of Planning Permission C/7/2013/7014 states that “the development must be carried out in strict accordance with the application form, plans and documents...”. These documents include restorations plans of the Site.



- Condition 2 of Planning Permission C/7/2013/7014 states that “the development to which this permission relates shall cease and the site shall be restored in accordance with condition 19 by 30 March 2026”.
- Condition 19 of Planning Permission C/7/2013/7014 stated that “Within three months of the date of this permission a scheme of restoration in accordance with the principles shown on the Illustrative Restoration Plan, ref 0812/R/1d v2, shall be submitted to the County Planning Authority for its approval in writing...”. Condition 19 was discharged on 11<sup>th</sup> June 2014 after the submission of the Restoration Scheme, see Appendix 2.

1.12. This Waste Recovery Plan describes the works with regard to demonstrating that restoration of the quarry constitutes a waste recovery activity and would therefore not be considered to be a waste disposal operation.



## 2. Benefits from the restoration

- 2.1. There is planning obligation to restore the Site after the mineral extraction has been undertaken in each phase.
- 2.2. There is a population of great-crested newts located at the Site. The earthwork to be undertaken at the Site are likely to directly benefit the great-crested newt population by the creation of new breeding habitats.
- 2.3. Great crested newts are a European protected species. The decline in the overall population in great crested newts is largely due to damage and loss of their habitat. The creation of new ponds at the Site will provide new suitable breeding habitats for the protected species. New broad-leaved woodland and scrub habitats will provide connections between other existing woodlands and provide further refugia and habitat variety for great crested newts thus likely to increase the local great crested newt population. The new areas of woodland, shrub and hedgerows will also provide new nesting sites for a variety of different species of bird.
- 2.4. The restoration proposes a nature conservation area which will include an area of meadow grassland. As well as great crested newts this area should benefit other species such as otters, voles, amphibians, reptiles and ground nesting birds such as skylarks.
- 2.5. The creation of neutral lowland meadow will contribute to the UK Biodiversity Action Plan. There are targets and objectives set out in the UK Biodiversity Action Plan for the re-creation of priority habitats such as neutral lowland meadow.
- 2.6. The transition between aquatic to terrestrial habitats at the pond edges will be enhanced at the Site by introducing a range of plants that will maximise habitat diversity, see Drawing 01 – Detailed Pond Design. The choice of plants to be used includes oxygenators and plants suitable for egg-laying.
- 2.7. The two ponds have been designed to have a maximum depth of 1.5m to 2m. This depth ensures that there will be a permanent water feature even in dry conditions for wildlife.
- 2.8. The restoration of the quarry has been designed to create congruous landforms that contain similar profiles and features to the surrounding landscape.
- 2.9. The restored landform will maintain existing direction of surface drainage towards the southeast of the site. Rainfall will therefore be directed towards the nature conservation and pond area. The banks around the ponds have been made shall to facilitate a wide draw-down area for water.
- 2.10. Infiltration trenches will be installed on the southern boundary of the Site near the ponds to manage high volumes of water draining from the land during periods of high rainfall, as presented in SLR Proposed SWMP Measures September 2013.
- 2.11. As well as the creation of the two ponds and meadow area, the majority of the Site will be restored back to farmland. In order to create an acceptable landform for agricultural purpose, waste material is required to be imported onto the Site.



### 3. Suitability of the Recovered Waste for the Intended Purpose

- 3.1. Environment Agency guidance requires that chemical and physical properties of the waste proposed to be used in this waste recovery operation are suitable for the intended purpose and will not cause pollution.
- 3.2. The assessment of the types of waste that will be suitable for use in this development has been made by Tracey Westbury, Director of Westbury Environmental Limited and is suitably qualified to make this assessment based on:
- Chartered status with the Chartered Institute of Waste Managers.
  - Over 30 years' work experience within the environmental industry including chemical industry waste, contaminated land, waste water treatment and regulation.
  - Qualified person status under the Development of Waste Code of Practice.
  - Over 18 years' work experience acting as an environmental consultant dealing with both landfill and recovery permits.
- 3.3. The types of waste that will be used in the proposed development will include soils, subsoils and minerals. These materials will not be classified as hazardous waste. These wastes will include the waste codes in Table 1 – Waste Types.

**Table 1 – Waste Types**

<b>Exclusions</b>				
Wastes having any of the following characteristics shall not be accepted:				
<ul style="list-style-type: none"> <li>• Consisting solely or mainly of dusts, powders or loose fibres</li> <li>• Wastes that are in a form which is either sludge or liquid</li> </ul>				
<b>Permitted waste types</b>				
<b>Source</b>	<b>Sub-source</b>	<b>Waste code</b>	<b>Description</b>	<b>Additional restrictions</b>
01 Waste resulting from exploration, mining, quarrying and physical and chemical treatment of minerals	01 01 wastes from mineral excavation	01 01 02	Wastes from mineral non-metalliferous excavation	Restricted to waste overburden and interburden only.
	01 04 wastes from physical and chemical processing of non-metalliferous minerals	01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 06	
		01 04 09	Waste sand and clays	
17 Construction and demolition wastes	17 01 concrete, bricks, tiles and ceramics	17 01 01	Concrete	
		17 01 02	Bricks	
		17 01 03	Tiles and ceramics	
		17 01 07	Mixtures of concrete, bricks, tiles and ceramics	Metal from reinforced concrete must have been removed.



			other than those mentioned in 17 01 06	
	17 05 soil stones and dredging spoil	17 05 04	Soil and stones other than those mentioned in 17 05 03	Restricted to topsoil, peat, subsoil and stones only.
19 Wastes from waste management facilities	19 12 wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified	19 12 09	Minerals (for example sand, stones) only	Restricted to wastes from treatment of waste aggregates that are otherwise naturally occurring minerals. Does not include fines from treatment of any non-hazardous waste or gypsum from recovered plasterboard
20 Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	20 02 garden and park wastes	20 02 02	Soils and stones	Restricted to topsoil, peat, subsoil and stones only.

- 3.4. The operator will apply strict waste acceptance procedures as part of the implementation of the Environmental Management System (EMS), in accordance with the requirements of the Environmental Permit for these operations. This will ensure that only suitable waste materials are imported for use in the restoration works.
- 3.5. A Waste Acceptance Procedure will be included in the EMS that will control how waste is accepted to ensure that only suitable waste is deposited in the development. This procedure will be implemented via the EMS.
- 3.6. The proposed waste materials (largely soils) will replace the non-waste materials (largely soils) that would otherwise be used. These materials are largely the same despite one being defined as a waste and another not a waste. Therefore, waste materials will be not chemically different and will have similar engineering properties as non-waste materials that would otherwise be used.
- 3.7. The waste soils imported on to the Site for use in the restoration will be placed as subsoils below the existing topsoil present on the Site. The topsoil (up to 300mm deep) will be stripped from the relevant areas of the Site, stored, then replaced on top of the imported waste to complete the landscaping works. In this way, the imported waste is not used as a surface growing medium.



## 4. Minimal Amount of Waste Being Used to Achieve the Intended Benefit

- 4.1. Plans of the restoration works on the Site have been used to calculate the amount of waste soil that is required to be imported. It is estimated that a total of 151,500m<sup>3</sup> (226,750tonnes) of waste soil will be needed to complete the restoration of the quarry.
- 4.2. The duration of the restoration is predicted to happen over 10 years; therefore, it is estimated that approximately 15,000m<sup>3</sup> of waste will be imported annually.
- 4.3. The density of the waste soil will determine the ultimate tonnage used. A density of 1.5 tonnes per cubic metre has been used in the calculations.
- 4.4. The Site is split into Phases as shown on plan Illustrative Progress Operations, Plan No. 0812/PO/2 v1.
- 4.5. The volume of imported waste to be used in each phase of the Site is shown in Table 2 below. The average depth of imported soil in each phase has been calculated.

**Table 2. Volume of material to be imported for each Phase of the Site**

Phase	Area (Ha)	Volume of imported waste (m <sup>3</sup> )	Average depth of imported waste in Phase (m)
1a	1.3	13,000	1
1b	1.3	0*	0
1c	0.3	0*	0
1d	1.6	16,000	1
2a	2.9	29,000	1
2b	1.7	17,000	1
3a	2.5	12,500**	0.5
3b	2.5	25,000	1
4a	2.1	21,000	1
4b	1.8	18,000	1
		<b>Total volume (m<sup>3</sup>)</b>	<b>151,500</b>

\* This Phase is proposed to be restored using silt from mineral processing on the Site

\*\* This Phase has a lower volume of waste to be imported due to the Phase being restored to ground levels lower than original levels

- 4.6. The drawing Illustrative Progress Operations, Plan No. 0812/PO/2 v1 shows how restoration levels of the Site will vary compared to the original levels of the Site before any mineral extraction took place. The plan was created by comparing original ground levels (Site Plan (as existing), Plan No. 0812/S) to proposed restoration ground levels (Illustrative Restoration Plan, Plan No. 0812/R/1d).
- 4.7. The plan shows that the majority of the levels on the Site are unchanged. There are some areas where ground levels will be increased by up to approximately 1.5m and other areas where ground levels will be reduced by up to approximately 2m. Illustrative Cross Sections, Plan No. 0812/CS/2 demonstrates how different areas will be restored either higher or lower levels than original ground levels.



## **5. Proposal Completed to an Appropriate Standard**

- 5.1. The proposed restoration works will be completed in accordance with the planning permission that has been obtained to date. The local planning authority will regulate the requirements of this planning permission.
- 5.2. The works will follow the restoration scheme prepared by Longwater Gravel Co. Limited, see Appendix 2 Restoration Scheme.
- 5.3. Longwater Gravel Co. Limited has been contracted in by the landowners. It is in the landowners own best interests to ensure that the development is completed and maintained to the highest standards.



## 6. Conclusion

- 6.1. From the information provided within this Waste Recovery Plan, it has been demonstrated that:
- There is a clear benefit from the use of waste in the restoration of the site at Wymondham Quarry including the creation of agricultural land, the formation of two ponds and the associated increase in biodiversity.
  - The type of waste to be used in the restoration is suitable for its intended purpose and will not cause pollution to the environment.
  - The amount of waste proposed to be used is appropriate in order to complete the development works to achieve the intended benefit.
  - The proposed development at the site will be carried out and maintained to an appropriate standard which is enforced through the requirements of the planning permission and any Environmental Permit obtained to permit these works.





## Drawings

Site Context, Plan No. 0812/SC/1.

Illustrative Progress Operations, Plan No. 0812/PO/2 v1.

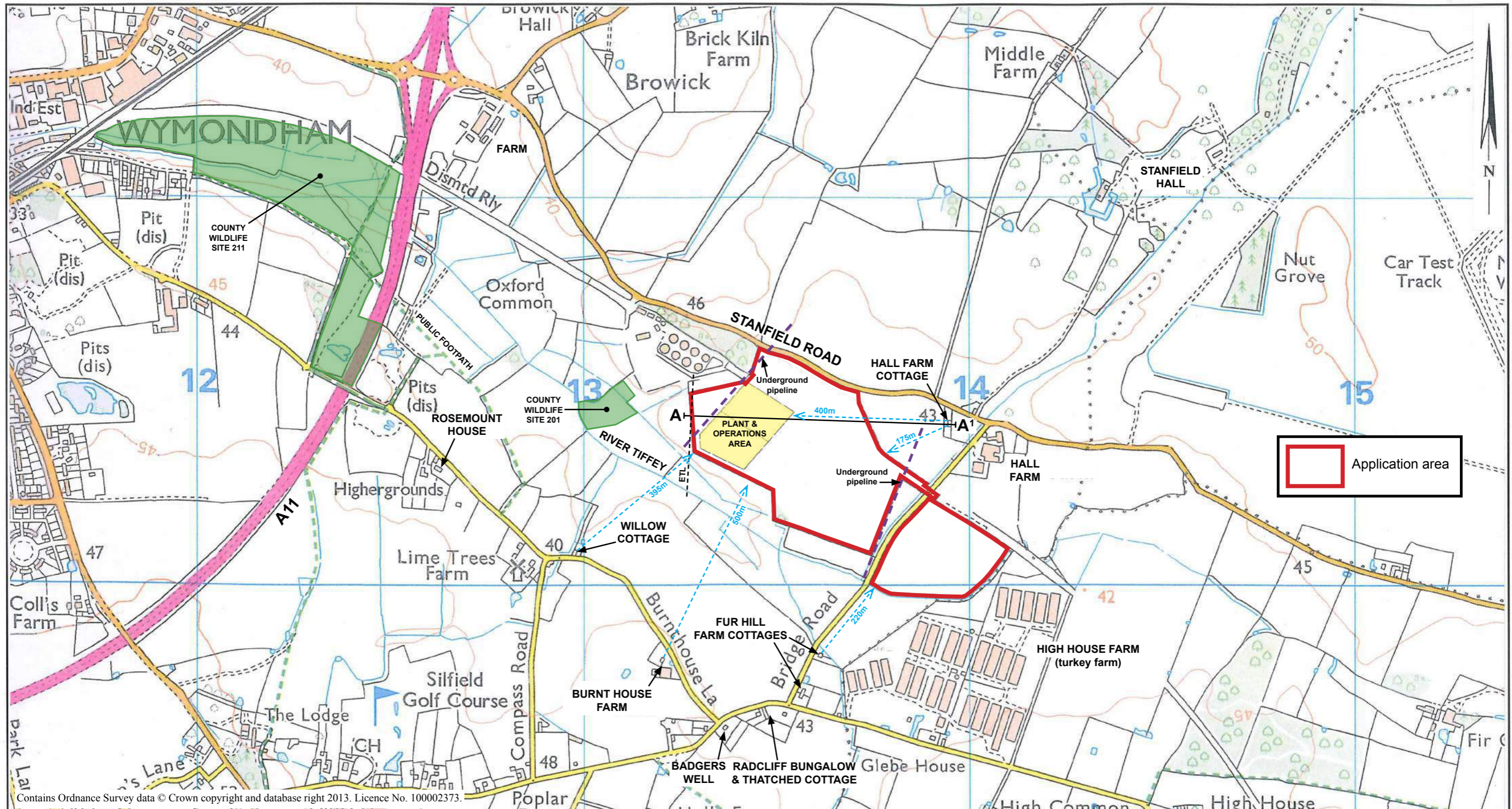
SLR Proposed SWMP Measures, September 2013.

Change in ground levels, Plan No. 18/008b 001

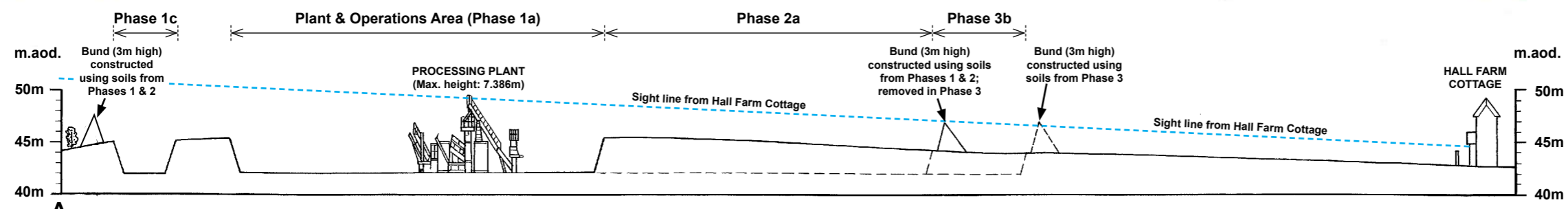
Site Plan (as existing), Plan No. 0812/S

Illustrative Restoration Plan, Plan No. 0812/R/1d

Illustrative Cross Sections, Plan No. 0812/CS/2



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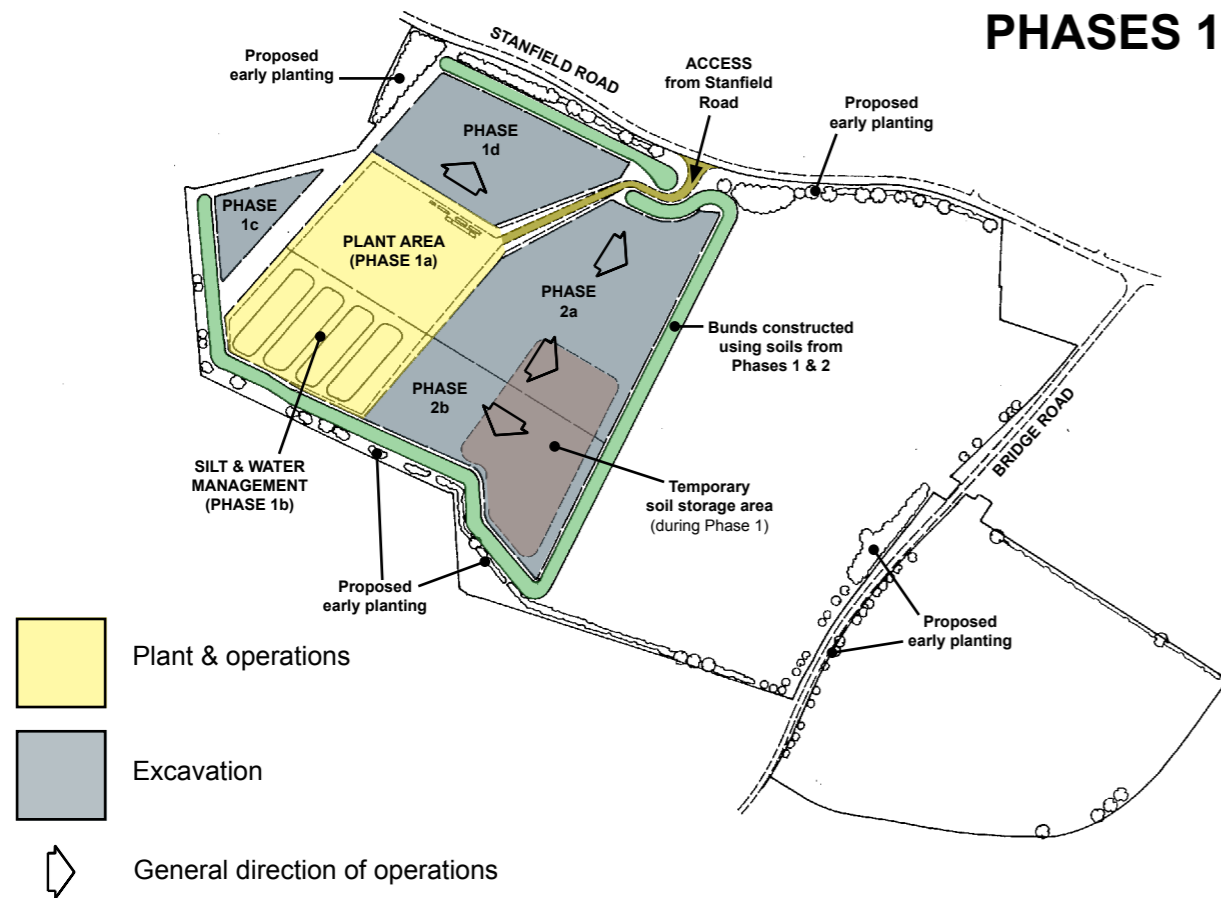


ILLUSTRATIVE CROSS SECTION SHOWING SIGHT LINE FROM HALL FARM COTTAGE TOWARDS PLANT & OPERATIONS AREA

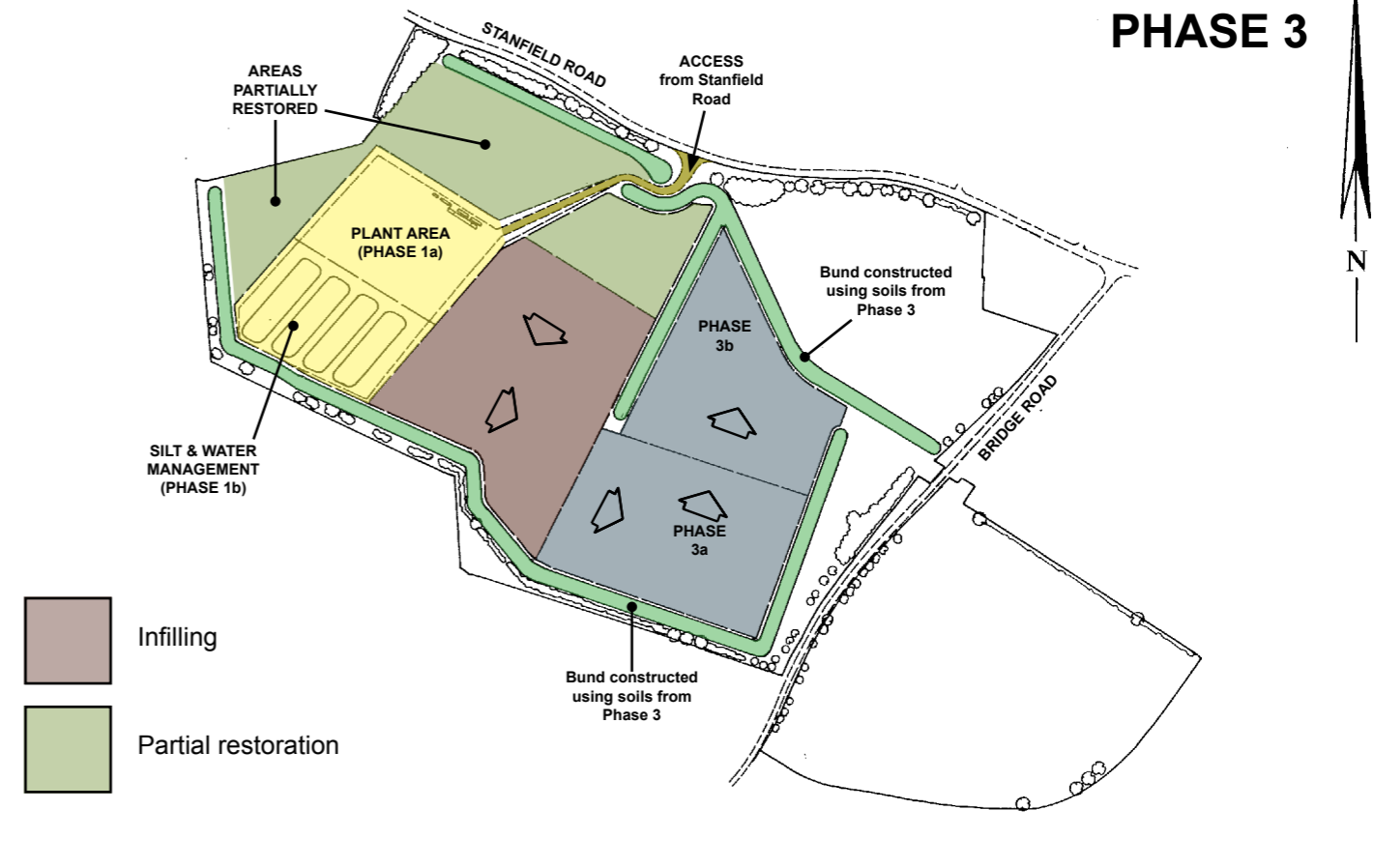
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Version / amendment: 0812/SC/1 v3

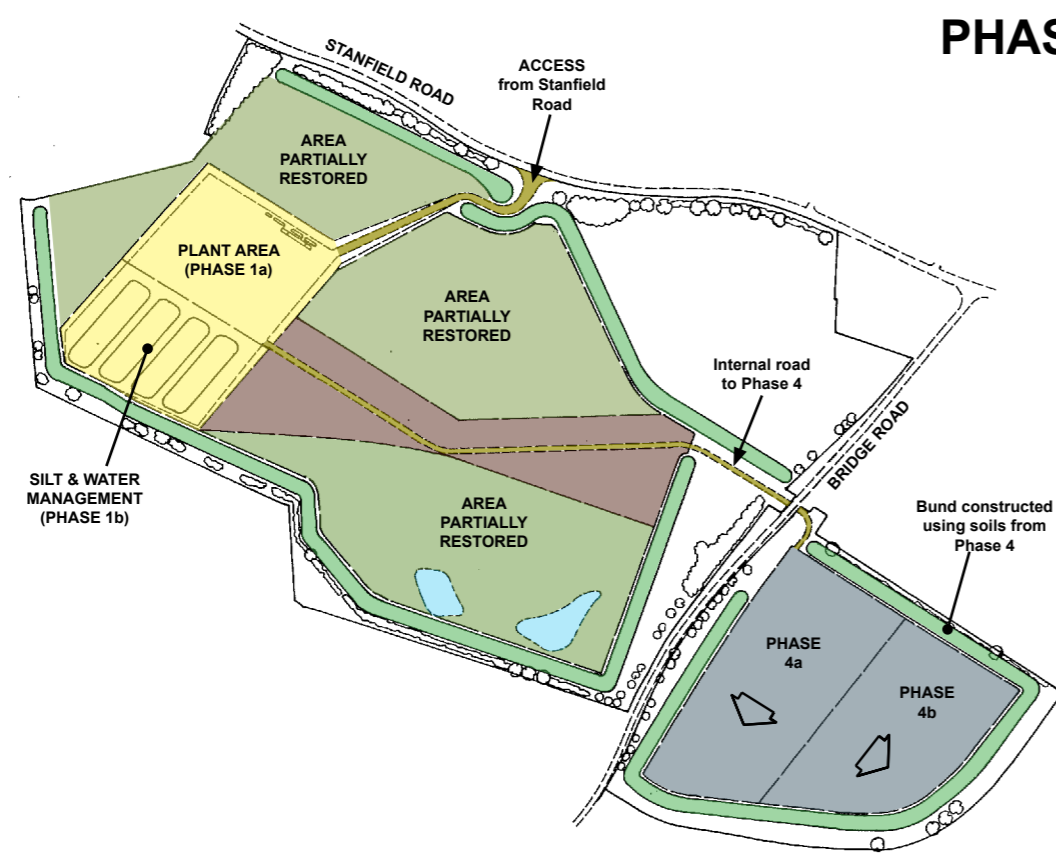
### PHASES 1 & 2



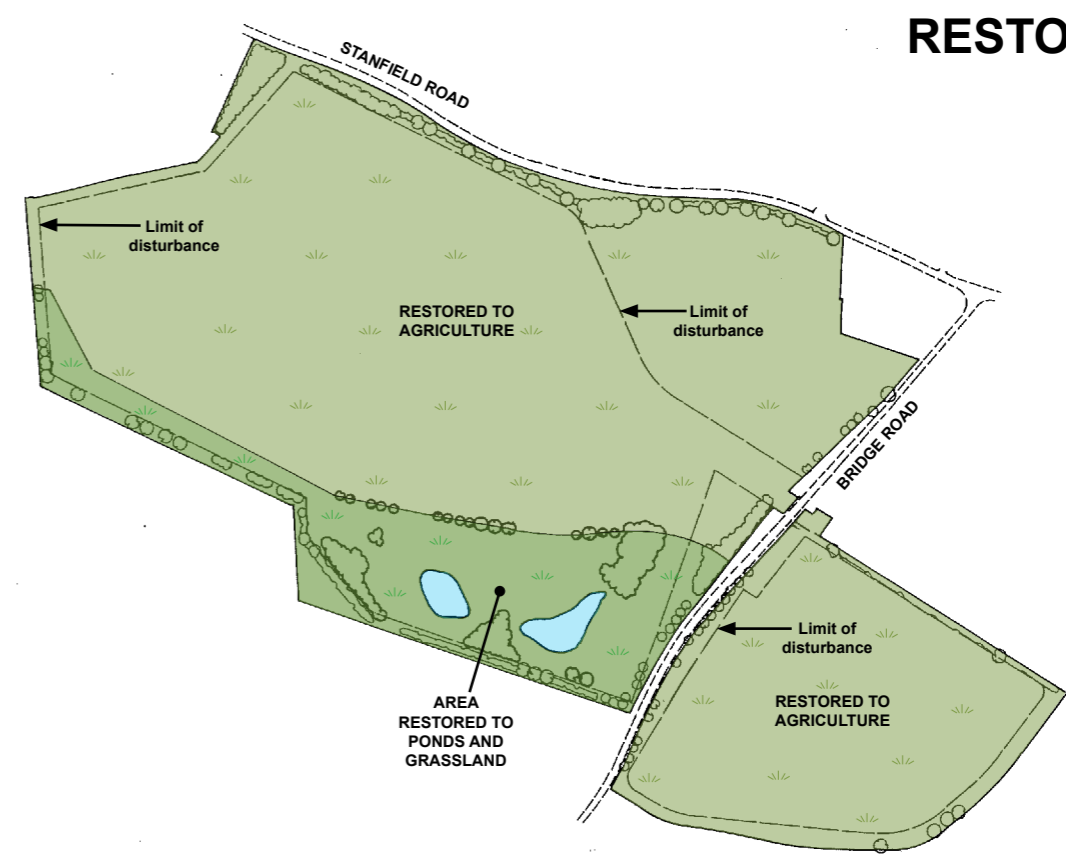
### PHASE 3

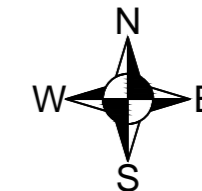


### PHASE 4



### RESTORED



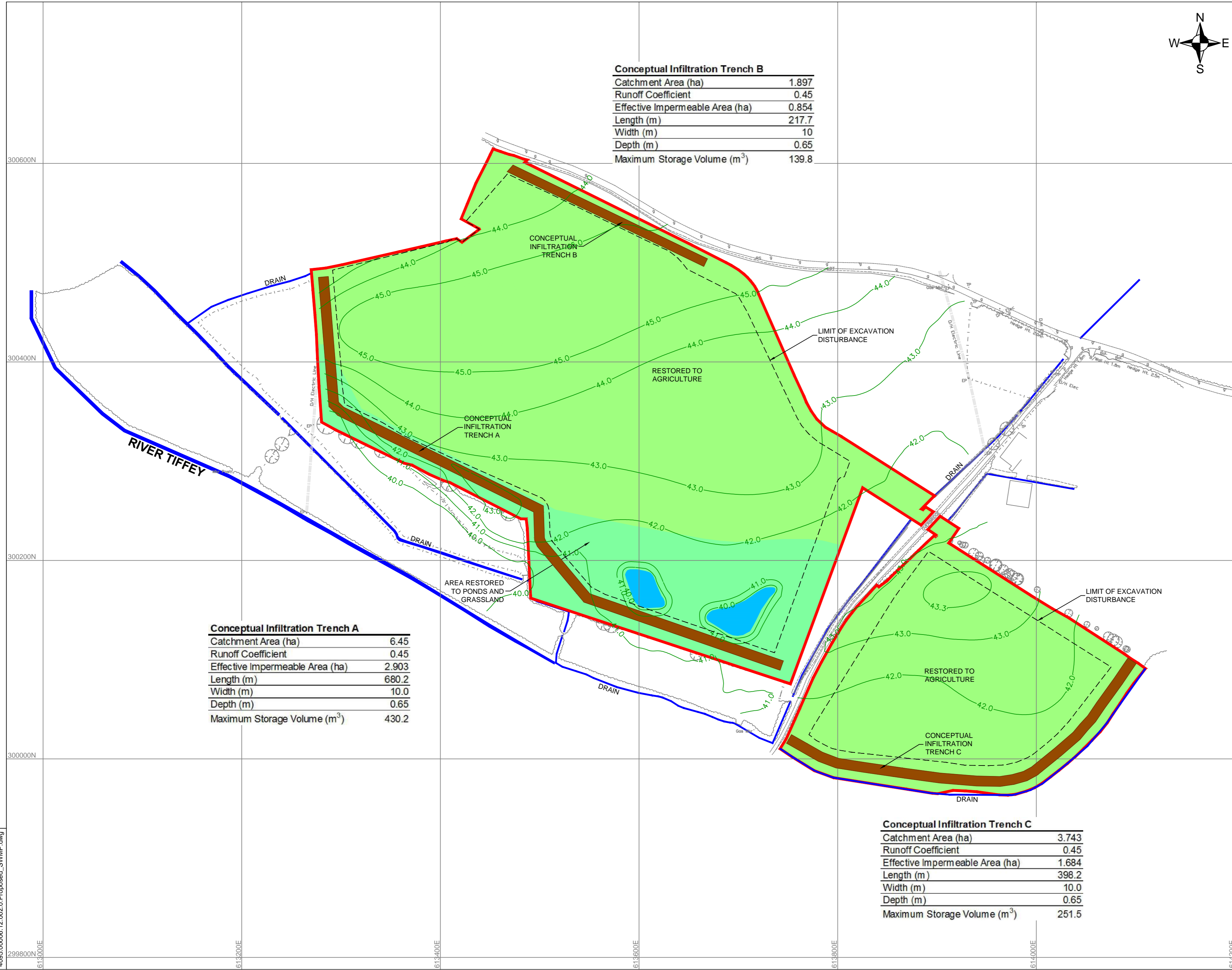


Conceptual Infiltration Trench B	
Catchment Area (ha)	1.897
Runoff Coefficient	0.45
Effective Impermeable Area (ha)	0.854
Length (m)	217.7
Width (m)	10
Depth (m)	0.65
Maximum Storage Volume (m <sup>3</sup> )	139.8

Conceptual Infiltration Trench A	
Catchment Area (ha)	6.45
Runoff Coefficient	0.45
Effective Impermeable Area (ha)	2.903
Length (m)	680.2
Width (m)	10.0
Depth (m)	0.65
Maximum Storage Volume (m <sup>3</sup> )	430.2

Conceptual Infiltration Trench C	
Catchment Area (ha)	3.743
Runoff Coefficient	0.45
Effective Impermeable Area (ha)	1.684
Length (m)	398.2
Width (m)	10.0
Depth (m)	0.65
Maximum Storage Volume (m <sup>3</sup> )	251.5

- LEGEND**
- APPROXIMATE APPLICATION AREA
  - AREA RESTORED TO AGRICULTURE
  - AREA RESTORED TO GRASSLAND
  - POND
  - EXISTING WATER FEATURE
  - PROPOSED CONCEPTUAL INFILTRATION TRENCHES
  - PROPOSED RESTORATION CONTOURS
  - EDGE OF SAND AND GRAVEL WORKING / INERT LANDFILLING

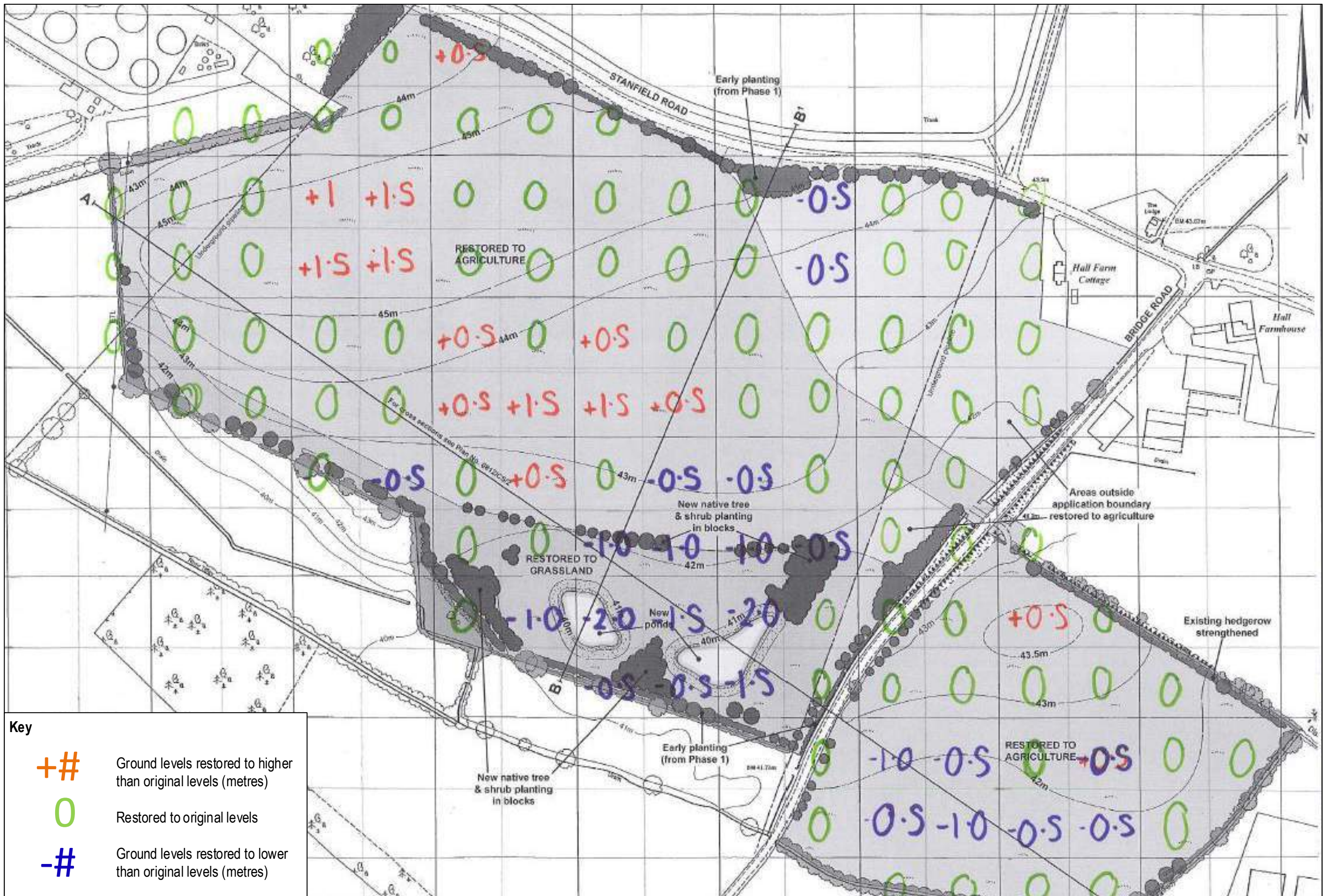


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**Longwater Gravel Co. Ltd.**  
Producers of Quality Aggregates

**SLR**  
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FLOOD RISK ASSESSMENT/  
SURFACE WATER MANAGEMENT PLAN  
**PROPOSED SWMP MEASURES**



**Key**

+ #	Ground levels restored to higher than original levels (metres)
0	Restored to original levels
- #	Ground levels restored to lower than original levels (metres)

<b>Westbury Environmental Ltd</b> Providing solutions, ensuring compliance	Produced by Westbury Environmental Limited. Agriculture House, Southwater Way, Telford, TF3 4NR T: 01952 879705 M: 07762 580839 E: info@westburyenv.co.uk www.westburyenv.co.uk	<b>Site</b> Wymondham Quarry, Stanfield Road, Wymondham, Norfolk, NR18 9RL	<b>Client</b> Longwater Gravel Co. Limited	<b>Plan No.</b> 18/008b 001
			<b>Title</b> Change in ground levels	<b>Scale</b> 1:2,500 @ A3
				<b>Date</b> 29/11/18



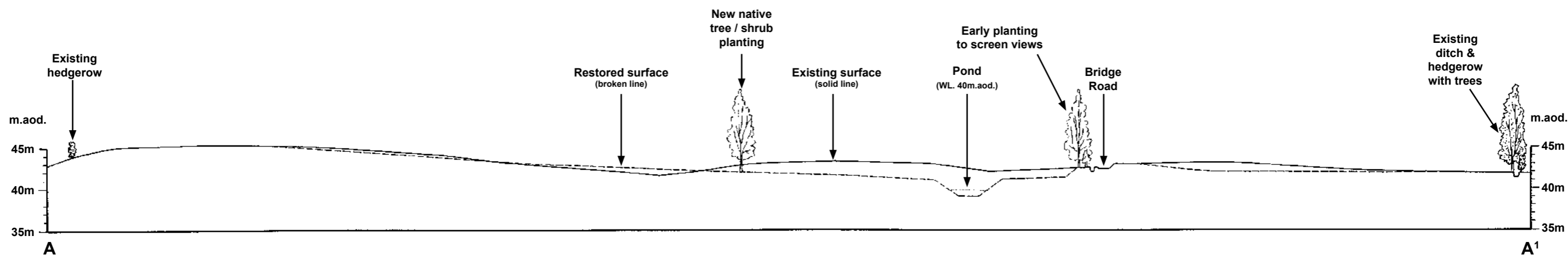
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Version / amendment: 0812/S v3

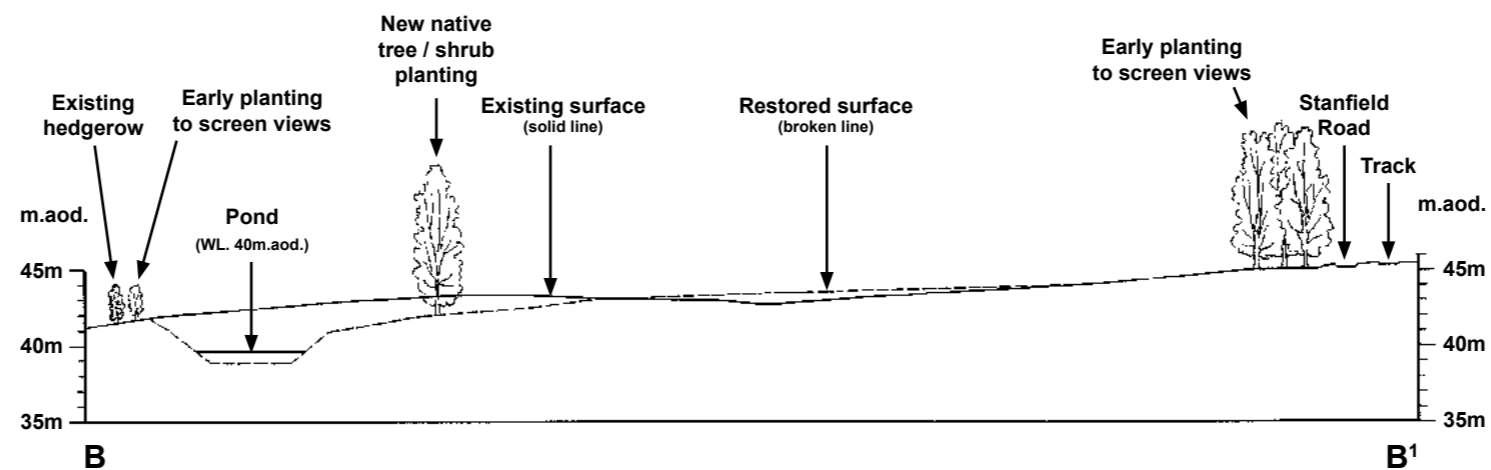


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Version / amendment: 0812/R/1d v2



Scale - (Horizontal) 1:2,500; (Vertical) 1:500  
Vertical exaggeration - 5:1



Scale - (Horizontal) 1:2,500; (Vertical) 1:500  
Vertical exaggeration - 5:1





## **Appendix 1**

Planning Permission C/7/2013/7014



## **Appendix 2**

Restoration Scheme, Longwater Gravel Co. Ltd., April 2014.



### **Appendix 3    Pre-application Advice Letter (EPR/HB3103XE/A001)**

Wymondham Quarry  
Stanfield Road  
Wymondham  
Norfolk  
NR18 9RL

**Our ref: EPR/HB3103XE/A001**  
**Your ref:**

**Date: 03/04/2019**

Dear Ms Watkin

**Environmental Permitting – Recovery or Disposal Operation**  
**Pre-application Reference: EPR/HB3103XE/A001**  
**Proposed Operator: Longwater Gravel Company Limited**  
**Regulated facility: Wymondham Quarry**  
**Site Address : Stanfield Road, Wymondham, Norfolk, NR18 9RL**

As part of our pre-application discussions, you have submitted information to us that includes your assessment that the activity you wish to undertake at your site amounts to a recovery operation.

We have now fully considered your submission and we would like to advise you that:

We agree with your assessment that your activity is a recovery operation. This advice is based on the information you have provided in relation to waste types, amounts and nature of proposal including any proposed landform. If you change any of these between now and when you submit an application form, this advice may no longer apply. **Please also note that following submission of an application, additional assessment will take place (for example, further assessment of the proposed waste types based on the sensitivity of the site location) and therefore agreement that an operation is a recovery activity does not guarantee that a permit will be granted or a variation issued.**

For the sake of clarity, the following documents are considered to form the approved waste recovery plan;

- Waste Recovery Plan: Version 1 dated: 30 November 2018
- Response to Request for Further Information Letter
- Condition 14 Discharge Letter
- Condition 19 Discharge Letter
- Response to 2<sup>nd</sup> Request for Further Information Letter
- Planning Statement

If you have any questions please phone me or email [eunice.abbey@environment-agency.gov.uk](mailto:eunice.abbey@environment-agency.gov.uk)

Yours sincerely

**Eunice Abbey**

**Permitting Officer**



## **Appendix 4    Waste Acceptance Procedures**

**Procedure: Waste Acceptance V.1 April 2019**

**Purpose: To ensure that all waste accepted is permitted under the conditions of the Environmental Permit for Deposit of Waste for Recovery.**

	RESPONSIBLE PERSON	RECORD
<b><u>Environmental Permit &amp; Waste Codes</u></b>		
1. The Environmental Permit contains the list of waste types that are permitted to be accepted at the site for deposit of waste for recovery. A table containing the codes and descriptions of waste types that are permitted for this site for deposit of waste for recovery is included at the end of this procedure, see <u>Table 1 Permitted Waste Types</u> .	All	<u>Table 1 Permitted Waste Types</u>
This list of waste types should be consulted if you are unsure whether a load can be accepted, alternatively the Site Manager should be consulted.		
2. If the waste code on the WTN is not listed in the Environmental Permit / Table 1 in this procedure, the load must be rejected in accordance with the <u>Waste Rejection Procedure</u> .	Site Operative	<u>Procedure: Waste Rejection</u>  <u>Table 1 Permitted Waste Types</u>
3. The maximum amount of waste which can be deposited on the Site for recovery shall not exceed 151,500m <sup>3</sup> .	Site Manager	
<b><u>Waste Pre-Acceptance</u></b>		
4. Following a customer enquiry, information on the waste is requested from the producer, such information could include site investigation reports / laboratory test reports / hazardous waste assessments. This information is recorded on the Waste Information Form and the information reviewed to assess if the waste is acceptable or not.	Site Manager	<u>Form: Waste Information</u>
5. A judgement should be made as to the necessity to obtain comprehensive information at this stage. If the source of the waste is not likely to be contaminated, then it may not be necessary to obtain a full site investigation or hazardous waste assessment. If the source of the waste is likely to be contaminated, then a full site investigation and/or a hazardous waste assessment should be requested.	Site Manager	
6. Review of the information in the Waste Information Form will determine the need for (further) sampling/testing/Hazardous Waste Assessment.	Site Manager	<u>Procedure: Waste Classification</u>  <u>Form: Waste Information</u>
7. Where a Hazardous Waste Assessment based on WM3 Guidance is required this should be completed, in accordance with the Waste Classification Procedure.		<u>Procedure: Waste Classification</u>
8. All associated Waste Information records and Hazardous Waste Assessments will be kept along with Waste Transfer Notes in a secure location. These records will be maintained for a minimum of two years.	Site Manager	<u>Form: Waste Information</u>

**Collection of a Load**

- |     |   |                |
|-----|---|----------------|
| 9.  | A driver arriving at a site to collect waste will: <ul style="list-style-type: none"> <li>• Ensure that the waste type is acceptable as per instructed.</li> <li>• Ensure a Waste Transfer Note is issued with the load and that the description matches the load.</li> </ul> | Site Operative |
| 10. | If a driver collecting a load suspects that the description on the WTN is not accurate then the Site Manager will be contacted. The waste producer will be requested to review/reconsider the information on the WTN so that the description is accurate.                     | Site Operative |

**All Vehicles**

- |     |  |                |
|-----|--|----------------|
| 11. | All vehicles carrying waste on the public highway must be registered as waste carriers and a copy of their certificate should be held on file in the site office. A regular check should be carried out to ensure that registrations are still in date, and where they are found not to be, a copy of the new registration should be obtained immediately. | Site Operative |
|-----|--|----------------|

**Acceptance of Waste onto the Site**

- |     |  |                |                                      |
|-----|--|----------------|--------------------------------------|
| 12. | The driver will provide a WTN to the site operative, who will complete the section relating to transfer of waste, unless a season WTN has been provided. The site operative will then return the WTN to the driver, keeping a copy of the WTN for his own records. A WTN will be generated if one is not provided by the driver.   | Site Operative |                                      |
| 13. | A Waste Transfer Note for every load is obtained from the driver and the Waste Transfer Note is checked to ensure it contains the following: <ul style="list-style-type: none"> <li>• Vehicle registration and driver’s name and signature.</li> <li>• Waste haulier name and valid Waste Carriers registration number.</li> <li>• Name, address (of source site) and signature of the transferor.</li> <li>• Name, address (of destination site) and signature of the person receiving the waste (transferee).</li> <li>• Permit number or exemption reference of person receiving the waste (if applicable).</li> <li>• Description of waste including; waste type, waste source, waste containment and waste quantity.</li> <li>• List of Waste (LoW) code.</li> <li>• SIC Code of the waste holder using SIC Codes (2007).</li> <li>• Date and time of waste transfer and waste transfer note number.</li> <li>• Confirmation that the Waste Hierarchy has been considered.</li> </ul> | Site Operative | Waste Transfer Note                  |
| 14. | Loads not accompanied by a WTN or that do not match the description on the WTN will be rejected in accordance with the Waste Rejection Procedure once the Site Manager has been informed.  | Site Operative | <u>Procedure: Waste Rejection</u>    |
| 15. | Every load is visually inspected prior to being off loaded.  | Site Operative | <u>Table 1 Permitted Waste Types</u> |

If there is any doubt about the waste type delivered, then a message is relayed to the Site Manager.



- |   |                |  |
|---|----------------|--|
| 16. After checking the load and the associated paperwork the vehicle is directed to the offloading area for inspection and stockpiling. A Site Operative will inspect tipped loads.   | Site Operative |  |
| 17. If there is a discrepancy with the load or its paperwork, then the Site Manager shall be informed immediately. If the load is not acceptable under the Environmental Permit then, if possible it should be re-loaded onto the vehicle and rejected from site in accordance with the <u>Waste Rejection Procedure</u> .  | Site Operative | <u>Procedure: Waste Rejection</u>      |
| 18. If it is impossible to load a rejected load back onto the delivering vehicle the load will be put into the quarantine area. Waste will be rejected from the Site in accordance with the <u>Waste Rejection Procedure</u> .  | Site Operative | <u>Procedure: Waste Rejection</u>      |
| <br><b><u>Compliance Testing</u></b>  |                |  |
| 19. Compliance testing will be carried out on waste accepted on to the Site. Samples taken from waste piles will be tested at a laboratory to determine the characteristics of the waste and to ensure that the waste is as described on the WTN.   | Site Manager   | <u>Procedure: Waste Classification</u> |
| 20. An 'Environmental Suite' should be requested from the laboratory for the sample of waste. The tests must be carried out on the waste itself and not in leachate. The Environmental Suite must contain at least the following parameters:  | Site Manager   |  |
| <ul style="list-style-type: none"> <li>• Total Sulphate.</li> <li>• Boron.</li> <li>• Arsenic.</li> <li>• Cadmium.</li> <li>• Metals, including; Chromium III, Chromium VI, Copper, Lead, Mercury, Nickel, Selenium, Zinc.</li> <li>• Acid Soluble Sulphide.</li> <li>• Phenols (Monohydric).</li> <li>• Total Cyanide.</li> <li>• Elemental Sulphur.</li> <li>• pH Value.</li> <li>• PAH (total/speciated).</li> <li>• TPH (total/speciated).</li> <li>• BTEX.</li> <li>• Total Sulphate, Water Soluble Sulphate.</li> </ul> |                |  |
| 21. A Hazardous Waste Assessment, in accordance with WM3 Guidance, will be completed using the testing results received from the laboratory. This Hazardous Waste Assessment will classify the waste as non-hazardous or hazardous.   | Site Manager   | <u>Procedure: Waste Rejection</u>      |
| 22. If a waste sample is found to be hazardous in nature, then the corresponding waste pile will be quarantined and removed from the Site in accordance with the Waste Rejection Procedure.   | Site Operative |  |

**Records**

23. Waste Transfer Notes will be appropriately stored for a minimum of two years.
24. Information from the Waste Transfer Notes will be used to provide the necessary data to complete the Waste Return as required by the Environment Agency.

**Consequences**

25. The consequence of not following this procedure may result in unsuitable waste being accepted on to the site. This may constitute a breach in the conditions of the Environmental Permit, in addition to causing potential contamination of the site.

**Table 1 Permitted Waste Types**

<b>Exclusions</b>				
Wastes having any of the following characteristics shall not be accepted:				
<ul style="list-style-type: none"> <li>• Consisting solely or mainly of dusts, powders or loose fibres</li> <li>• Wastes that are in a form which is either sludge or liquid</li> </ul>				
<b>Permitted waste types</b>				
<b>Source</b>	<b>Sub-source</b>	<b>Waste code</b>	<b>Description</b>	<b>Additional restrictions</b>
01 Waste resulting from exploration, mining, quarrying and physical and chemical treatment of minerals	01 01 wastes from mineral excavation	01 01 02	Wastes from mineral non-metalliferous excavation	Restricted to waste overburden and interburden only.
	01 04 wastes from physical and chemical processing of non-metalliferous minerals	01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 06	
		01 04 09	Waste sand and clays	
17 Construction and demolition wastes	17 01 concrete, bricks, tiles and ceramics	17 01 01	Concrete	
		17 01 02	Bricks	
		17 01 03	Tiles and ceramics	
		17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	Metal from reinforced concrete must have been removed.
	17 05 soil stones and dredging spoil	17 05 04	Soil and stones other than those mentioned in 17 05 03	Restricted to topsoil, peat, subsoil and stones only.
19 Wastes from waste management facilities	19 12 wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified	19 12 09	Minerals (for example sand, stones) only	Restricted to wastes from treatment of waste aggregates that are otherwise naturally occurring minerals. Does not include fines from treatment of any non-hazardous waste or gypsum from recovered plasterboard

20 Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	20 02 garden and park wastes	20 02 02	Soils and stones	Restricted to topsoil, peat, subsoil and stones only.
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**Form: Waste Information**

**V.1 April 2019**

<b>General Information</b>	Waste Producer:		Contact Name:			
	Please tick the box if person completing the form: <input type="checkbox"/>		Telephone No.:			
	Waste Carrier:		Contact Name:			
	Please tick the box if person completing the form: <input type="checkbox"/>		Telephone No.:			
Anticipated Volume of waste:		m <sup>3</sup>		Anticipated Date(s) of delivery:		
Indicate whether estimate is for:		Loose / solid / stockpile				
<b>Information required for Waste Information</b>	Full address of source of waste (including Postcode)					
	Does the waste producer's site accept hazardous waste?		YES		NO	
	Process from which waste arises:					
	Hazardous Waste Assessment (based on WM3) carried out?		YES		NO	
	Description and/or composition of waste:		Type of Waste:		Non-Hazardous <input type="checkbox"/> Hazardous <input type="checkbox"/>	
	Tonnes Per Delivery		Tonnes Per Week			
	Standard Industrial Classification (SIC) Code:		41.1 Construction		41.2 Roads	
					43.1 Demolition & Site Preparation	
			Please circle most appropriate			
	LoW Code:		01 01 02		01 04 08	
			17 01 01		17 01 02	
		17 01 03		17 01 07		
		17 05 04		19 12 09		
		20 02 02		Other:		
Details of existing and/or previous use of site (if known) (identify any known previous potentially polluting uses).						
Has a Site Investigation been carried out? (If YES, attach ALL information e.g. Borehole and trial pit logs)		YES		NO		
Is waste being generated as a result of site decontamination works?		YES		NO		
Does waste contain any biodegradable material? (e.g. wood, paper, vegetation)		YES		NO		
<b>Declaration</b>	<b>Customer Declaration:</b>					
	I/we certify that the above information and attachments are corrected in every respect. Where "YES" is confirming that to the best of our knowledge the samples that have been taken are representative of the waste material to be deposited for recovery and that the chemical analysis have been carried out using accredited analytical methods by a UKAS accredited laboratory.					
Name(s): .....		Signed: .....		Date: .....		

<b>Waste testing and assessment</b>	<b><i>This section is to be completed by the Waste Assessor i.e. Longwater Gravel Company Limited.</i></b>					
	Hazardous Waste Assessment (WM3) Required?		YES		NO	
	Accept the waste?		YES		NO	
	Compliance Testing to be carried out?		YES		NO	
	Frequency of Compliance Testing?					
	Comments:					
Signature of Waste Assessor:				Date returned:		

**Procedure: Waste Classification V.1 April 2019**

**Purpose: To outline the steps to be taken to classify waste in accordance with WM3 Guidance.**

	RESPONSIBLE PERSON	RECORD
1. This procedure describes how Longwater Gravel Company Limited will test and classify waste in accordance with the Waste Classification – Guidance on the Classification and Assessment of Waste – Technical Guidance WM3 (WM3 Guidance) produced by the Environment Agency.		
2. A Hazardous Waste Assessment may be required in the following situations: <ul style="list-style-type: none"> <li>• Waste pre-acceptance.</li> <li>• Compliance testing.</li> <li>• Removal of waste from the Site.</li> </ul> <p>Further information relating to these situations can be found in the sub-sections in this Procedure.</p>		
3. Waste will be classified as non-hazardous or hazardous following an assessment in accordance with WM3 Guidance (Hazardous Waste Assessment). Waste classified as hazardous will need to be dealt with appropriately, as follows: <ul style="list-style-type: none"> <li>• Waste Pre-acceptance – Hazardous waste should not be accepted.</li> <li>• Compliance testing - Hazardous waste should be quarantined and removed from Site accompanied by a Hazardous Waste Consignment Note and sent to a suitably licensed facility.</li> </ul>	Site Manager	
<b><u>Testing of Waste</u></b>		
4. Samples should be sent to a laboratory in order to obtain analysis results.		Site Operative
5. An ‘Environmental Suite’ should be requested from the laboratory for the sample of waste. The tests must be carried out on the waste itself and not in leachate. The Environmental Suite must contain at least the following parameters: <ul style="list-style-type: none"> <li>• Total Sulphate.</li> <li>• Boron.</li> <li>• Arsenic.</li> <li>• Cadmium.</li> <li>• Metals, including; Chromium III, Chromium VI, Copper, Lead, Mercury, Nickel, Selenium, Zinc.</li> <li>• Acid Soluble Sulphide.</li> <li>• Total Phenols (Monohydric).</li> <li>• Total Cyanide.</li> <li>• Elemental Sulphur.</li> <li>• pH Value.</li> <li>• PAH (total/speciated).</li> <li>• TPH (total/speciated).</li> </ul>		Site Operative

- BTEX.
- Total Sulfate, Water Soluble Sulfate.

6. Additional analysis may be required if there is suspicion of specific contaminants, for example pesticides. Site Manager

7. Where there is a suspicion that asbestos may be present this must be tested for: Site Operative

- Testing is required to determine if the waste contains visible pieces of asbestos containing materials. If individual pieces of material are considered to contain asbestos these should be removed from the waste and sent for testing. If these are found to contain 0.1% or more asbestos, then the waste should be classified as hazardous.
- Testing for asbestos is also required where there is suspicion that the waste may contain asbestos fibres. If these are found at 0.1% or more then the waste should be classified as hazardous.

**Waste Classification**

8. A Hazardous Waste Assessment will be completed using the waste analysis results received from the laboratory. This Hazardous Waste Assessment will classify the waste as non-hazardous or hazardous. Site Manager

9. A Hazardous Waste Assessment may be carried out by manual assessment or by using a software package to determine the relevant hazardous properties of the waste. Site Operative

10. A copy of the Hazardous Waste Assessment should be kept with the Duty of Care information for that waste. Site Operative

**Procedure: Waste Rejection V.1 April 2019**

**Purpose: To ensure non-compliant waste is rejected and that associated records of rejected loads are created.**

	RESPONSIBLE PERSON	RECORD
<b><u>Reasons for Rejection</u></b>		
1. A waste may be non-conforming and rejected from the Site for the following reasons: <ul style="list-style-type: none"> <li>• Delivery vehicle is unsuitable for site operations / conditions.</li> <li>• The waste is not acceptable at the Site under the Environmental Permit.</li> <li>• There is a prohibited waste within the load.</li> <li>• The load is not accompanied by the correct documentation.</li> <li>• The waste does not match the description on the accompanying documentation.</li> <li>• The waste contains putrescible waste.</li> </ul> <p>The list is not exhaustive, if you are unsure speak to the Site Manager.</p>	Site Manager	Waste Transfer Notes
2. If a waste is identified as being unacceptable at the Site entrance or at the point of offloading the Site Manager is contacted and a <u>Waste Rejection Form</u> is issued to the driver.	Site Manager	<u>Form No. 2.3a Waste Rejection</u>
3. The driver of the load is informed of the load's rejection. The driver will be informed of the reasons for this and requested to leave the Site.	Site Manager	
4. If the load is being rejected because the description of the waste on the transfer note is incorrect, the driver may be given the opportunity to correct the mistake so long as the waste is acceptable at the Site.		
5. A load will be rejected if the waste is likely to be contaminated and sufficient information e.g. full site investigation and/or a hazardous waste assessment is not provided. A judgement should be made as to the necessity to obtain comprehensive information. If the source of the waste is not likely to be contaminated, then it may not be necessary to obtain a full site investigation or hazardous waste assessment.	Site Manager	
6. In the event of a rejected load the Environment Agency may be contacted by telephone and / or email with details of the rejected load. These details should include information relating to the nature and quantity of waste involved, the time and date, the name and address of the waste producer, the registration number of the vehicle delivering the waste and the name and address of the vehicle driver and haulage contractor.	Site Manager	
7. If the load is not safe to be sent back onto the road, then the vehicle is kept in the Quarantine Area until appropriate arrangements can be for its removal.		



**Waste Rejected after Offloading of the Vehicle**

8. If appropriate, a rejected load should be reloaded onto the delivery vehicle.
9. If waste cannot be reloaded onto the delivery vehicle, the waste will be stored in the quarantine area. The customer will be contacted, arrangements to remove the quarantined waste will be made and a copy of the rejection form containing reasons for the rejection will be supplied. Form No. 2.3a  
Waste Rejection
10. If arrangements for the customer to remove the waste cannot be made, Longwater Gravel Company Limited will make these arrangements themselves. Waste material in the quarantine area will be exported off Site by a licensed waste carrier to an appropriately licensed facility. If necessary, Longwater Gravel Company Limited will contact the EA regarding the rejection of the waste. Site Manager
11. Waste will be stored for a maximum of seven working days in the quarantine area. Site Manager
12. Details of any unauthorised waste and its subsequent removal from Site is recorded and retained on Site. Site Manager Form No. 2.3a  
Waste Rejection

**Form: Waste Rejection V.1 April 2019**

Customer / Haulier:		Producer (if different):	
Contact:		Contact:	
Phone:		Phone:	
Fax:		Fax:	
Email:		Email:	
Transfer Note No:		Date:	
Vehicle Registration:		Time:	
Carriers Certificate:		Driver's Name:	
Reason for Rejection:			
Actions Taken:			
You MUST inform the Site Manager or other member of management before taking any further action.			
Manager Informed:			
Destination for Waste:			
Transfer Note No:		Date:	
Vehicle Registration:		Time:	
Carriers Certificate:		Drivers Name:	
Hazardous:	Yes / No	Consignment Note No:	
Signed		Date	
Name		Position	



## **Appendix 5    Environmental Risk Assessment**



## Environmental Risk Assessment

Data and Information				Judgement			Action (By Permitting)		
Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
Local human population – residents at closest residential dwellings (Hall Cottage and Hall Farmhouse) located 160m and 200m and northeast of the Site respectively and workers at Goff Petroleum (70m northwest) and poultry houses (90m southeast)	Releases of dusts and micro-organisms (bioaerosols)	Harm to human health - respiratory irritation and illness	Air transport then inhalation	Low	Medium	Low	Permitted waste types are inert and non-hazardous and do not include dusts, powders or loose fibres and have a low potential to produce bioaerosols. Movement of waste has the potential to emit dust. There is potential for increased dust generation from permitted activities during prolonged dry periods. The closest residential dwellings (Hall Farm Cottage and Hall Farmhouse) are located 160m and 200m northeast of the Site respectively. Goff Petroleum is located 70m northwest. It is considered that due to the size of the dust particles, the majority of dust is likely to be deposited within 50m of the source. The identified receptors are more than 50m from the permit boundary and therefore are considered unlikely to be exposed to dust from the site.	A number of mitigation measures will be implemented to reduce the risk of dust nuisance. Vehicles entering and exiting the site will be sheeted in order to reduce the likelihood of dust emissions. Strict waste acceptance procedures will also be in place to ensure that excessively dusty loads are not accepted on Site. Water sprays will be used to minimise dust emissions from the movement of the waste.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
		Nuisance - dust on cars, clothing etc.	Air transport then deposition	Low	Low	Low	As above.	As above	Very Low
Local human population (residents at closest residential dwellings (Hall Cottage and Hall Farmhouse) located 160m and 200m and northeast of the Site respectively and workers at Goff Petroleum (70m northwest) and poultry houses (90m southeast)), livestock and wildlife	Litter	Nuisance, loss of amenity and harm to human health	Air transport then deposition	Low	Medium	Medium	Residential dwellings to the northeast and work places to the northwest may be sensitive to litter. Permitted waste types have a low potential to produce litter.	Any litter found will be collected and disposed of regularly to keep the Site tidy.  Strict waste acceptance criteria will be applied within the site's Environmental Management System (EMS) to ensure incoming loads of waste that have a high litter content are rejected.	Low
Local human population – residents at closest residential dwellings (Hall Cottage and Hall Farmhouse) located 160m	Waste, litter and mud on local roads	Nuisance, loss of amenity, road traffic accidents	Vehicles entering and leaving the site	Low	Medium	Low	Local residents often sensitive to waste, litter and mud on roads. Permitted waste types have a low potential to produce litter. The length of the access road to the site is likely to result in the majority of mud/dust	Access roads will be checked regularly, and a road sweeper will be hired to clear local highways from waste, litter and mud as required.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
and 200m and northeast of the Site respectively and workers at Goff Petroleum (70m northwest) and poultry houses (90m southeast)							being deposited on the access road before vehicles reach the main road		
	Odour	Nuisance, loss of amenity	Air transport then inhalation	Low	Low	Low	Local residents often sensitive to odour, however permitted waste types have a low potential to give rise to odour.	Waste imported onto the Site will be checked to ensure that it does not contain malodorous materials.	Very low
	Noise and vibration	Nuisance, loss of amenity, loss of sleep	Noise through the air and vibration through the ground	Low	Medium	Medium	Local residents often sensitive to noise and vibration. Vehicle movements have the potential to produce noise and vibration. There is not a large population in close proximity to the site.	All plant and equipment will be maintained in accordance with the manufacturers' recommendations to minimise noise generation.	Low
Local human population - residents at closest residential dwellings (Hall Cottage and Hall Farmhouse) located 160m and 200m and northeast of the Site respectively and workers at Goff Petroleum (70m northwest) and poultry	Scavenging animals and scavenging birds	Harm to human health - from waste carried off site and faeces. Nuisance and loss of amenity	Air transport and over land	Low	Medium	Low	Permitted waste types unlikely to attract scavenging animals and birds but may become breeding / nesting sites.	Implementation of strict waste acceptance procedures will ensure that materials that could attract scavenging animals are not accepted on to the site. Housekeeping will minimise the risk from scavenging animals.	Very low
	Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity	Air transport and over land	Low	Medium	Low	Permitted waste types unlikely to attract pests. The permitted waste types are not putrescible.	As above.	Very low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
houses (90m southeast)									
Local human population (residents at closest residential dwellings (Hall Cottage and Hall Farmhouse) located 160m and 200m and northeast of the Site respectively and workers at Goff Petroleum (70m northwest) and poultry houses (90m southeast) and local environment	Flooding of site	If waste is washed off site it may contaminate buildings / gardens / natural habitats	Flood waters	Low	Low	Low	Permitted waste types are inert so any waste washed off Site will add to the volume of the local post-flood clean-up workload, rather than the hazard. It is not considered likely that the Site would flood, due to the Site not being located within a flood risk area.	Any liquids shall be provided with secondary containment.	Very low
Local human population and / or livestock after gaining unauthorised access to waste operation	All on-site hazards: wastes, machinery and vehicles	Bodily injury	Direct physical contact	Medium	Low	Low	Permitted waste types are inert therefore a low magnitude of risk is estimated.	The site will be constantly manned during operational hours. Inspections will be carried out to ensure that the plant on the Site is sufficiently maintained, in order to reduce malfunction and accidents. Records will be kept of any accidents / incidents on the site to identify any issues.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
Local human population (residents at closest residential dwellings (Hall Cottage and Hall Farmhouse) located 160m and 200m and northeast of the Site respectively and workers at Goff Petroleum (70m northwest) and local environment	Arson and / or vandalism causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness and nuisance to the local population. Injury to staff, firefighters or arsonists / vandals. Pollution of water or land.	Air transport of smoke. Spillages and contaminate d firewater by direct run-off from site and via surface water drains and ditches	Low	Low	Low	Permitted waste types do not include any flammable materials so a low magnitude of risk is estimated.	Site security measures will be in place to help prevent acts of vandalism and arson.	Very low
Local human population (residents at closest residential dwellings (Hall Cottage and Hall Farmhouse) located 160m and 200m and northeast of the Site respectively and workers at Goff Petroleum (70m northwest) and poultry houses (90m southeast) plus	Accidental fire causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness and nuisance to the local population. Injury to staff or firefighters. Pollution of water or land.	As above.	Low	Low	Low	Permitted waste types do not include any flammable materials so a low magnitude of risk is estimated. Permitted activities do not include the burning of waste.	The EMS will contain procedures and forms relating to accidents and incidents on the Site and what actions to take should one occur.	Very low





Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
local environment									
All surface waters on, close to and downstream of site – There are drains located on the site boundary.	Spillage of liquids, leachate from waste, contaminated run-off from waste e.g. containing suspended solids.	Acute effects: oxygen depletion, fish kill and algal blooms.	Direct run-off from site across ground surface, via surface water drains, ditches etc.	Medium	Low	Low	Permitted waste types will not include sludges or liquids so only a low magnitude risk is estimated. No point source emissions to water are present.  There are drains located on the site boundary.	Any liquids shall be provided with secondary containment. Wastes from potentially contaminated sites require analysis.  Strict waste acceptance procedures will ensure that no contaminated waste will enter the site.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
All surface waters on, close to and downstream of site – There are drains located along the site boundary.	As above	Chronic effects: deterioration of water quality	Direct run-off from site across ground surface, via surface water drains, ditches etc. Indirect run-off via the soil layer.	Medium	Low	Low	Waste types are inert and non-hazardous, so harm is likely to be temporary and reversible.	As above.	Very low
Groundwater – The Site is located in a Groundwater Source Protection Zone 3 (Total catchment).	As above.	Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.	Transport through soil / groundwater then extraction at borehole.	Medium	Low	Low	The Site is located in a Groundwater Source Protection Zone 3 (Total Catchment). Waste types are inert and non-hazardous, so harm is likely to be temporary and reversible	Waste acceptance procedures implemented on the site will ensure that no contaminated waste types are accepted onto the site. Implementation of the EMS will ensure that no substances contaminate the groundwater at the site.	Low
Local human population - (residents at closest residential dwellings (Hall Cottage and Hall Farmhouse) located 160m and 200m and northeast of the Site respectively and workers at	Contaminated waters used for recreational purpose	Harm to human health, skin damage or gastro-intestinal illness	Direct contact or ingestion.	Low	Medium	Low	Unlikely to occur but might restrict recreational use.	Emissions of substances, such as dust, will be minimised by the implementation of procedures within the EMS.	Very low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
Goff Petroleum (70m northwest) and poultry houses (90m southeast)									
Protected sites – There are a number of areas of deciduous woodland in close proximity to the Site, the closest of which located on the northwestern boundary. Lower Wood, Ashwellthorpe Site of Special Scientific Interest (SSSI) and Toll's Meadow, Wymondham Local Nature Reserve (LNR) are located 1.6km south and 2km northwest of the Site respectively.	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Low	Low	Low	Deciduous woodland is located along the northwestern boundary of the Site. The Lower Wood, Ashwellthorpe SSSI is located 1.6km south and the Toll's Meadow, Wymondham LNR is located 2km northwest. The SSSI and LNR are considered not to be at risk from site operations due to their distance from the Site.	Implementation of the Site's EMS procedures should result in the site operations not causing harm to nearby protected sites. It is considered that the management of potential hazards would result in a low residual risk to the deciduous woodland on the northwestern boundary.	Low



## **Appendix 6 Hydrogeological Impact Assessment**



global environmental solutions

Hall Farm  
Stanfield Road  
Wymondham

Hydrogeological Impact Assessment

SLR Ref: 402-04095-00003

March 2013

Longwater Gravel Co. Ltd

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## APPENDICES

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<b>Appendix C</b>	<b>Assessment of Extent of Groundwater Drawdown Cone using the Sichardt method</b>

## 1.0 INTRODUCTION

This Hydrogeological Impact Assessment (HIA) has been completed to support the Planning Application for the proposed sand and gravel quarry at Hall Farm, Stanfield Road, Wymondham, Norfolk. The Environment Agency (EA) requested that the HIA be provided within its letter<sup>1</sup> dated 24<sup>th</sup> December 2013.

The following tasks have been completed in preparing this HIA:

Task 1: Desk Study review of additional hydrogeological information for the application site.

Task 2: Development of a conceptual hydrogeological model for the application site.

Task 3: Completion of a hydrogeological assessment, with specific focus on the following:

- extent of the saturated zone;
- amount of dewatering required;
- degree to which baseflow from the sand and gravel aquifer is important in maintaining flow in the River Tiffey down-gradient of the site;
- the impact on groundwater flow as a result of removing part of the aquifer;
- details of the fill material to be used; and
- extent to which the fill materials might act as an effective aquifer upon restoration.

The following sources of information have been consulted as part of this hydrogeological assessment:

- Planning Application for the site, prepared by DK Symes Associates<sup>2</sup>;
- Environment Agency (EA) website ([www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)) for details of groundwater source protection zones;
- Environment Agency spreadsheets entitled 'Assessing the impacts of dewatering on water resources. Tier 1 Analytical Tools Version';
- British Geological Survey;
- Trial pit logs, groundwater levels, pumping test and abstraction licensing information provided by Longwater Gravel Company Limited; and
- Environment Agency's Catchment Abstraction Management Strategy for the area<sup>3</sup>.

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<sup>1</sup> EA letter to Norfolk County Council, dated 24<sup>th</sup> December 2012 (EA reference: AE/2012/115051/03-L01)

<sup>2</sup> D K Symes Associates (June 2012): *Land at Hall Farm, Wymondham, Norfolk. Application for mineral extraction, processing and associated activities with the importation of inert material and restoration to agriculture and two small ponds*

<sup>3</sup> Environment Agency (March 2006): *The Broadland Rivers Catchment Abstraction Management Strategy*

## 2.0 CONCEPTUAL HYDROGEOLOGICAL MODEL

The geology at the application site comprises the Lowestoft Formation, overlying Chalk bedrock. River Terrace Deposits comprising sand and gravel are also identified on the geological map along the south-western edge of the site.

Trial pits indicate that the superficial strata across the application site are variable in lithology, both vertically and laterally, with the result that sand and gravel horizons have limited lateral extent below the application site, as shown on cross sections A-A' and B-B', included within Appendix A. Glacial till, known locally as 'hoggin', is also identified in the majority of the trial pits.

Trial pit logs and their locations are included within Appendix A. Review of this information indicates the following:

- hoggin thickness ranges between c.1m (Trial Pit 10) and more than 3.2m (Trial Pit 15), although absent at some locations (Trial Pit 1, 2, 3, 4, 5, 20 and 21);
- sand and gravel is present within Trial Pits 1, 2, 3, 4, 5, 7, 11, 12, 16 and 17, with thickness typically ranging between c.0.5 (Trial Pits 12 and 16) and c.2.7m (Trial Pit 2);
- clayey sand / sandy clay with variable fine gravel typically ranges in thickness between 1 and 2m, and is present in the majority of Trial Pits; and
- Chalk is identified within the base of Trial Pits 8, 9, 16 and 26, at elevations ranging between c.38.5 maOD (Trial Pit 8) and c. 41.2 maOD (Trial Pit 16).

Groundwater levels recorded during excavation of the trial pits are summarised in Table 1, below. Groundwater levels were recorded within Trial Pits 1, 5, 8, 9, 10, 12, 16, 20 and 22 to 26 inclusive, at elevations ranging between 37.7 maOD (Trial Pit 5) and 40.9 maOD (Trial Pit 16).

Groundwater elevations within a Chalk abstraction borehole installed at the application site in March 2010 by Panks Engineers Ltd, indicated a static groundwater elevation of 39.5 maOD (1.8m below ground level) upon completion of drilling, and immediately prior to start of pump testing. The pumping test on this abstraction borehole suggested a permeability for the Chalk aquifer of c. $1 \times 10^{-6}$  m/s, with a drawdown response suggesting a recharge boundary and/or leaky confined conditions. This is consistent with the hydrogeological site setting, with the adjacent surface water drainage ditches acting as potential recharge boundaries. The pumping test data and analysis are included within Appendix B.

Review of the Environment Agency's 2011 NEAC groundwater contour and flow model indicates that groundwater levels within the Chalk below the application site range between c.39 maOD and 36 maOD, on the eastern and western sides of the site, respectively. The model indicates that groundwater flow direction within the Chalk aquifer is in a west-north-west direction.

The Chalk is classified as a Principal aquifer by the Environment Agency. The Agency's website confirms that there are no Source Protection Zones in the vicinity of the application site. The superficial deposits at the application site are designated as a Secondary aquifer. This designation is assumed to be based on the published geological mapping which indicates that the site is underlain by sand and gravel. However, it is evident from the site specific trial pit logs that the superficial deposits are represented by significant clay dominated sediments and glacial hoggin, in addition to a localised laterally variable horizon of sand and gravel.



**Table 1**  
**Groundwater Levels at the Application Site**  
**(31<sup>st</sup> January & 1<sup>st</sup> February 2008)**

Trial Pit	Groundwater Level	
	(mbgl)	(maOD)
1	2.4	40.5
2	>3.5	<39.5
3	>3.0	<41.5
4	>3.6	<41.3
5	3.3	37.7
6	>3.5	<39.5
7	>3.0	<39.2
8	3.1	38.4
9	3.4	39.0
10	2.2	38.8
11	>3.6	<38.8
12	4.4	39.5
13	>3.8	<41.1
14	>3.3	<42.1
15	>3.8	<41.4
16	4.2	40.9
17	>3.5	<39.5
18	>3.8	<40.1
19	>3.6	<41.5
20	3.5	39.8
21	>3.0	<40.6
22	3.5	40.0
23	2.9	39.1
24	2.8	39.0
25	3.4	39.5
26	2.9	38.9

Based on the above, the following conceptual hydrogeological model is evident for the site:

- effective infiltration takes place vertically through the superficial deposits via the more permeable pathways which comprise the localised sand and gravel horizon irregularly located within the clay dominated sediments and hoggin deposits;
- the unsaturated zone effectively extends throughout the full depth of the superficial deposits, with the results that there is negligible lateral groundwater flow within the superficial deposits;
- perching of effective infiltration is expected where the sand and gravel deposits are locally underlain by lower permeability clay horizons;
- groundwater baseflow takes place from the Chalk Principal aquifer into the River Tiffey, given their close hydraulic continuity; and
- water levels in the River Tiffey will therefore reflect the seasonal fluctuations in groundwater levels within the Chalk aquifer.

### **3.0 HYDROGEOLOGICAL ASSESSMENT OF POTENTIAL IMPACTS ASSOCIATED WITH THE PROPOSED DEVELOPMENT**

#### **3.1 Extent of the Saturated Zone and Dewatering Requirements**

Given the site specific information and the above noted hydrogeological conceptual model, it is considered that the saturated zone is effectively restricted to the underlying Chalk aquifer. Consequently, the dewatering requirements to allow excavation of the lower sections of the sand and gravel deposit are expected to be minimal.

As indicated by the groundwater elevation data, and assuming the base of the mineral deposit at the application site lies between c.38.5 maOD (Trial Pit 8) and c. 41.2 maOD (Trial Pit 16), it should be possible to excavate the majority of the mineral deposit without dewatering.

As a worst case, an assessment has been completed assuming that localised dewatering may be necessary, with the maximum localised saturated sand and gravel thickness of 2m and an average assumed bulk permeability within the sand and gravel of  $5 \times 10^{-4}$  m/s. The Sichardt method<sup>4</sup> has been used to estimate the radius of influence of the void and the drawdown calculations are presented in Appendix C. The assessment results indicate that the potential maximum radius of influence within the saturated sand and gravel superficial deposits is approximately 135m, based on this assumed dewatering scenario.

Should this drawdown cone extend into the Chalk aquifer, the drawdown cone extent would be restricted by the lower permeability. Assuming a Chalk permeability of  $c.1 \times 10^{-5}$  m/s (an order of magnitude higher than the aquifer test permeability result of  $c.1 \times 10^{-6}$  m/s), and a maximum drawdown also of 2m, the radius of influence would be less than 20m.

It is noted that the radius of drawdown influence would also be reduced due to the leaky confined conditions associated with the superficial deposits under both these scenarios. Given the relatively isolated location of the application site, it is considered very unlikely that there would be any significant impacts on local groundwater or surface water resources within the immediate vicinity of the site.

If localised dewatering is required, the pumped water would be settled within the excavation area and / or operations area before ultimately being discharged into the River Tiffey via the drainage network at the application site. Under these conditions there would therefore be no significant net loss of groundwater baseflow to the River Tiffey.

If required, dewatering would only take place via an appropriate abstraction / transfer licence and discharge permit issued by the Environment Agency, and so additional information would be provided when these applications were being made to the Environment Agency.

#### **3.2 Impact of Mineral Extraction on Groundwater Baseflow to River Tiffey**

The degree to which baseflow from the sand and gravel aquifer is important in maintaining flow in the River Tiffey down-gradient of the site, and impact on groundwater flow as a result of removing part of the aquifer is discussed below.

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<sup>4</sup> As presented within the Environment Agency spreadsheets entitled 'Assessing the impacts of dewatering on water resources. Tier 1 Analytical Tools Version'

The site specific information summarised within Section 2 above indicates that the superficial deposits to be excavated at the application site do not form an effective aquifer. Also, as indicated by the groundwater level observations at the application site, the mineral deposit are likely to be excavated dry.

A worst case assessment of change in groundwater flow rates that could potentially results due to be excavation and removal of the basal saturated superficial deposits, where present within the quarry excavation, is provided below and is based on Darcy's flow equation:

$$\text{Reduction in flow due to aquifer removal (Q)} = K \times i \times W \times B$$

*Assumptions:*

*Worst case width of site parallel to River Tiffey (W): 900m*

*Maximum saturated thickness of sand and gravel horizon above Chalk aquifer (B): 0.5m*

*Assumed bulk permeability of saturated superficial deposits (K):  $5 \times 10^{-4}$  m/s*

*Hydraulic gradient (assumed to be similar to the Chalk Groundwater contours from Environment Agency's 2011 NEAC groundwater contour and flow model) (i):  $2\text{m} / 600\text{m} = 0.0033$*

$$\begin{aligned} \text{Therefore Q} &= 5 \times 10^{-4} \text{ m/s} \times 0.0033 \text{ m/m} \times 900 \text{ m} \times 0.5 \text{ m} \\ &= 0.75 \text{ litres per second} \end{aligned}$$

As noted above, hoggin and clayey sand / sandy clay are typically present across large parts of the application site. Therefore, it is reasonable to assume that the average bulk permeability of the superficial deposits that may provide localised baseflow could be at least an order of magnitude lower than assumed above. If a bulk permeability for the saturated superficial deposits of  $5 \times 10^{-5}$  m/s is used in the above calculation, then the groundwater flows across the site from the upgradient side would be in the order of 0.075 litres per second.

Given the topographic and geological site setting, it is considered very likely that the unsaturated condition of the superficial deposits is also present in the immediate vicinity of the application site. Therefore, it is considered very likely that any reduction of groundwater flow across the site, due to restoration of the site by infilling with imported inert materials, will easily be accommodated by slightly increased groundwater flow rates around the margins of the site, without leading to a significant increase in groundwater levels within the adjacent superficial deposits.

Replacement of the superficial deposits with less permeable infill restoration materials could also lead to a reduction in effective groundwater recharge to the Chalk aquifer underlying the site. An estimate of effective infiltration under current conditions can be made assuming the following assumptions:

$$\text{Effective groundwater recharge (ERg)} = \text{proposed extraction area (A)} \times \text{effective rainfall (ER)} \times \text{infiltration coefficient (Ic)}$$

*Assumptions:*

*A = 20 hectares (taken from Planning Application)*

*ER = 160 mm/year (mean excess winter rainfall for Agroclimatic Area 24, MAFF<sup>5</sup>)*

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<sup>5</sup> Ministry of Agriculture, Fisheries and Food (December 1975): *Climate and Drainage Technical Bulletin 34*)

$I_c = 100\%$  (worst case assumption)

Therefore  $E_{rg} = 32,000 \text{ m}^3/\text{year}$   
 $= c.1 \text{ l/sec}$

If the effective infiltration is reduced across the restored extraction area, then any additional surface water runoff will be diverted to the unlined ponds to be located on site, and allowed to recharge via natural soak-away into the underlying *in situ* superficial deposits, which will ultimately drain to the River Tiffey via the underlying superficals and Chalk aquifer. Under these conditions groundwater baseflows will be effectively retained as under predevelopment conditions.

It is also noted that the site area to be restored with inert fill is small when compared to the overall River Tiffey catchment.

Therefore it is considered that there will be negligible associated impacts on the River Tiffey.

### 3.3 Details of the Fill Material to be Used

The fill material that will be imported to the site for restoration purposes will be derived from suitable locally sourced inert material streams. The hydraulic characteristics of these materials are currently not known, but can reasonably be expected to vary between low permeability clay rich overburden to more permeable granular construction and demolition materials.

Given its inert nature the fill material would have the following characteristics;

- (a) it would not undergo any significant physical, chemical or biological transformations;
- (b) it would not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm to human health; and
- (c) the total leachability, pollutant content and the ecotoxicity of its leachate would be insignificant and would not endanger the quality of any surface water or groundwater.

The inert materials would be imported under the auspices of an appropriate Environmental Permit, which would be issued by the Environment Agency.

### 3.4 Assess the Extent to which the Fill Materials might act as an Effective Aquifer upon Restoration.

For the reasons mentioned in Section 3.3, above, it is not possible at this stage to confirm the extent to which the inert fill materials might act as an effective aquifer upon restoration. However, as discussed in previous sections, it is unlikely that the sand and gravel mineral deposit at the application site forms a significant effective aquifer.

Based on the calculation included within Section 3.2, it can be concluded that effective groundwater recharge to the underlying Chalk aquifer, together with groundwater baseflow to the River Tiffey would not be significantly affected by the proposed restoration of the application site using these inert materials.

#### **4.0 CLOSURE**

This report has been prepared by SLR Consulting Limited with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of Longwater Gravel Co. Ltd; no warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

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## **Appendix 7    Site Condition Report Part 1**



## Site Condition Report, Part 1

<b>1.0 SITE DETAILS</b>	
Name of the applicant	Longwater Gravel (Company) Limited
Activity address	Wymondham Quarry, Stanfield Road, Wymondham, Norfolk, NR18 9RL
National grid reference	TG 13607 00364

Document reference and dates for Site Condition Report at permit application and surrender	Permit Application – SCR Part 1, June 2019
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Document references for site plans (including location and boundaries)	Permit Boundary Plan, Drawing No. 18/008d 001
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<b>2.0 Condition of the land at permit issue</b>		
Environmental setting including:	Geology	<p><u>Bedrock geology</u> “Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, Culver Chalk Formation and Portsdown Chalk Formation (undifferentiated) – Chalk.”</p> <p><u>Superficial deposit geology</u></p> <ul style="list-style-type: none"> <li>- “Lowestoft Formation - Sand and gravel” for the majority of the site.</li> <li>- “River Terrace Deposits, 1 – Sand and gravel” for part of the site.</li> </ul>
	Hydrogeology	The site is located in a Groundwater Source Protection Zone 3 (total catchment). The site is located on a Secondary A superficial deposit aquifer and a Principal designated bedrock aquifer.
	Surface waters	<p>Drains located on site boundaries.</p> <p>Lagoons associated with mineral extraction activities in the north-western part of the site.</p>
Pollution history including:	Pollution incidents that may have affected land	No information of any pollution incidents has been identified which may have affected the state of the land at the site.
	Historical land-uses and associated contaminants	The site has a history of agricultural use. Mineral extraction operations currently being undertaken.





	Any visual/olfactory evidence of existing contamination	No visual or olfactory evidence of existing contamination.
	Evidence of damage to pollution prevention measures	No evidence of damage to pollution prevention measures
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)		No records of historical site investigations, reports or remediation were available for this site.
Baseline soil and groundwater reference data		No baseline soil and groundwater data were available at the time of writing this report.
<b>Supporting information</b>	N/A	

<b>Site Reconnaissance Report</b>	
Access arrangements	The Site is accessed from Stanfield Road.
Site layout including presence and condition of above and below ground buildings/structures etc.	Mineral extraction has taken place in the western part of the site to date. In this area, there are stockpiles of topsoil and mineral extracted from the site, as well as storage bays, lagoons, site offices, a weighbridge and mobile plant.
Evidence of disturbed land, discoloured soil or water, subsidence, above ground deposits etc.	Quarrying activities are currently being undertaken at the Site. Some parts of the site have been disturbed as a results of stripping soils. Mineral and topsoil has been stockpiled on the Site.
Vegetation type and signs of distress or absence where it might be expected	There is an absence of vegetation where quarrying activities are currently being undertaken. Majority of the site (i.e. where mineral extraction has not yet taken place) is covered by bare earth and grass.
Significant odours from the land	No evidence of odours was detected.
Liquid discharges from the site	There are no direct water discharges from the site. Rain water percolates down through the surface of the site.
Direction and flow of surface water run-off and presence of ponding	Surface water runs towards to the southwest of the site. Lagoons located on site associated with mineral extraction.
Land uses in the vicinity of the site	Land-use around the site is predominantly agricultural. Residential properties of Hall Farm Cottage and Hall Farmhouse located to northeast of site. Goff Petroleum located on the northwest of the site. Areas of deciduous woodland are present around the site, the closest of which on the north-western boundary of the site.



Presence and condition of surface water features	Drains located on southern boundary and along Bridge Road. No other surface water features located on the site.
Evidence of any accidental/uncontrolled releases at the site (previous or current)	No visual or other evidence of accidental/uncontrolled releases on the site.
Identify potential access constraints e.g. overhead cables, location of machinery, operations at the site.	No access constraints to the site were identified.
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	There is no evidence of historic contamination available on the site.  No records of historical site investigations, reports or remediation were available at the time of writing this report.
Baseline soil and groundwater reference data	No baseline soil and groundwater data were available at the time of writing this report.

<b>3.0 Permitted activities</b>	
Permitted activities	Currently applying for a bespoke Environmental Permit for deposit of waste for recovery activities in order to restore the quarry.
Non-permitted activities undertaken	Mineral extraction activities are currently being undertaken on the site.
Document references for: <ul style="list-style-type: none"> <li>• Plan showing activity layout; and</li> <li>• Environmental risk assessment.</li> </ul>	<ul style="list-style-type: none"> <li>• Permit Boundary Plan, Drawing No. 18/008d 001</li> <li>• Environmental Risk Assessment</li> </ul>